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UNITED STATES DEPARTMENT OF THE INTERIOR

SURFACE WATER SUPPLY
of the **UNITED STATES**
1936

PART 7
LOWER MISSISSIPPI RIVER BASIN

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

GEOLOGICAL SURVEY WATER-SUPPLY PAPER 807

UNITED STATES DEPARTMENT OF THE INTERIOR

HAROLD L. ICKES, Secretary

GEOLOGICAL SURVEY

W. C. MENDENHALL, Director

Water-Supply Paper 807

SURFACE WATER SUPPLY *of the* UNITED STATES 1936

PART 7

LOWER MISSISSIPPI RIVER BASIN

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Prepared in cooperation with the States of
ARKANSAS, COLORADO, KANSAS, LOUISIANA, MISSOURI
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CONTENTS

	Page
Scope of work.....	5
Definition of terms.....	5
Explanation of data.....	5
Accuracy of field data and computed results.....	6
Publications.....	7
Records of discharge collected by agencies other than the Geological Survey.....	11
Cooperation.....	12
Division of work.....	12
Gaging-station records.....	13
Mississippi River.....	13
Mississippi River at St. Louis, Mo.....	13
Mississippi River at Cape Girardeau, Mo.....	15
Mississippi River at Memphis, Tenn.....	17
Mississippi River near Vicksburg, Miss.....	19
Mississippi River near New Orleans, La.....	22
Meramec River Basin.....	23
Meramec River near Steelville, Mo.....	23
Meramec River near Eureka, Mo.....	24
Bourbeuse River at Union, Mo.....	25
Big River at Byrnesville, Mo.....	26
Headwater Diversion Channel Basin.....	27
Castor River at Zalma, Mo.....	27
Obion River Basin.....	28
South Fork of Obion River near Greenfield, Tenn.....	28
Obion River at Obion, Tenn.....	29
Rutherford Fork of Obion River near Bradford, Tenn.....	30
North Fork of Obion River near Union City, Tenn.....	31
South Fork of Forked Deer River at Jackson, Tenn.....	32
South Fork of Forked Deer River at Chestnut Bluff, Tenn.....	33
Middle Fork of Forked Deer River near Alamo, Tenn.....	34
Hatchie River Basin.....	35
Hatchie River at Bolivar, Tenn.....	35
Hatchie River near Stanton, Tenn.....	36
Wolf River Basin.....	37
Wolf River at Rossville, Tenn.....	37
St. Francis River Basin.....	39
St. Francis River near Patterson, Mo.....	39
St. Francis River at Fisk, Mo.....	40
St. Francis River at Marked Tree, Ark.....	41
St. Francis River floodway near Marked Tree, Ark.....	42
Little River Ditch 81 near Kennett, Mo.....	43
Little River Ditch 1 near Kennett, Mo.....	44
Little River Ditch 66 near Kennett, Mo.....	45
Little River Ditch 66-A near Kennett, Mo.....	46
Little River Ditch 251 near Kennett, Mo.....	47
Little River Ditch 259 near Kennett, Mo.....	48
White River Basin.....	49
White River at Beaver, Ark.....	49
White River at Forsyth, Mo.....	50
White River near Flippin, Ark.....	51
White River at De Valls Bluff, Ark.....	52
James River at Galena, Mo.....	53
Wilson Creek near Springfield, Mo.....	54
Buffalo River near Rush, Ark.....	55
North Fork of White River at Tecumseh, Mo.....	56
North Fork of White River near Henderson, Ark.....	57
Black River at Leeper, Mo.....	58
Current River near Eminence, Mo.....	59
Current River at Van Buren, Mo.....	60
Current River at Doniphan, Mo.....	61
Round Spring at Round Spring, Mo.....	62
Jacks Fork at Eminence, Mo.....	63
Alley Spring at Alley, Mo.....	64
Big Spring near Van Buren, Mo.....	65
Eleven Point River near Bardley, Mo.....	66
Greer Spring at Greer, Mo.....	67
Lagru Bayou near Stuttgart, Ark.....	68
Little Lagru Bayou near Stuttgart, Ark.....	69
Arkansas River Basin.....	70
Arkansas River at Granite, Colo.....	70
Arkansas River at Salida, Colo.....	71
Arkansas River at Canon City, Colo.....	72
Arkansas River near Pueblo, Colo.....	73
Arkansas River near Nepesta, Colo.....	74
Arkansas River at La Junta, Colo.....	75
Arkansas River at Lamar, Colo.....	76
Arkansas River at Holly, Colo.....	77
Arkansas River at Syracuse, Kans.....	78
Arkansas River at Garden City, Kans.....	79
Arkansas River at Larned, Kans.....	80
Arkansas River at Wichita, Kans.....	81
Arkansas River at Arkansas City, Kans.....	82
Arkansas River near Muskogee, Okla.....	83

Gaging-station records--Continued.

	Page
Arkansas River Basin--Continued.	
Arkansas River at Van Buren, Ark.	84
Arkansas River at Little Rock, Ark.	85
South Arkansas River near Salida, Colo.	86
Grape Creek near Westcliffe, Colo.	87
Huerfano River at Manzanares Crossing, near Redwing, Colo.	88
Cucharas River at Boyd ranch, near La Veta, Colo.	89
Purgatoire River at Trinidad, Colo.	90
Purgatoire River at Ninemile Dam, near Higbee, Colo.	91
Purgatoire River at Highland Dam, near Las Animas, Colo.	92
Holly Drain near Holly, Colo.	93
Amazon Canal near Hartland, Kans.	94
South Side Ditch near Hartland, Kans.	95
Great Eastern Canal at Lakin, Kans.	96
Farmers Ditch near Garden City, Kans.	97
Garden City Canal near Garden City, Kans.	98
Pawnee River near Larned, Kans.	99
Little Arkansas River at Valley Center, Kans.	100
Walnut River at Winfield, Kans.	101
Cimarron River at Dilton, Okla.	102
Stillwater Creek at Stillwater, Okla.	103
West Fork of Brush Creek near Stillwater, Okla.	104
Council Creek near Stillwater, Okla.	105
Verdigris River at Independence, Kans.	106
Neosho River near Iola, Kans.	108
Neosho River near Parsons, Kans.	109
Cottonwood River at Cottonwood Falls, Kans.	111
Spring River near Waco, Mo.	112
Turkey Creek at Joplin, Mo.	113
Shoal Creek near Joplin, Mo.	114
Canadian River near Bell Ranch, N. Mex.	115
Canadian River at Logan, N. Mex.	116
Vermejo River near Dawson, N. Mex.	117
Cimarron River at Ute Park, N. Mex.	118
Cimarron River at Springer, N. Mex.	119
Cieneguilla Creek near Eagle Nest, N. Mex.	120
Sixmile Creek near Eagle Nest, N. Mex.	121
Moreno Creek at Eagle Nest, N. Mex.	122
Rayado River at Sauble ranch, near Cimarron, N. Mex.	123
Colmor Intake Canal near Ocate, N. Mex.	124
Mora River at La Cueva, N. Mex.	125
Mora River near Golondrinas, N. Mex.	126
Mora River near Shoemaker, N. Mex.	127
Coyote Creek near Golondrinas, N. Mex.	129
Lee Creek near Van Buren, Ark.	130
Bayou Meto near Stuttgart, Ark.	131
Red River Basin.	132
Red River near Colbert, Okla.	132
Red River at Garland, Ark.	133
Pease River near Crowell, Tex.	133
Washita River near Durwood, Okla.	134
Little River near Horatio, Ark.	135
Sulphur River near Darden, Tex.	136
Cypress Creek near Jefferson, Tex.	137
Quachita River at Rammel Dam, near Malvern, Ark.	138
Mississippi River Delta.	139
Bayou Duplantier at City Lake, Baton Rouge, La.	139
Atchafalaya River at Krotz Springs, La.	142
Miscellaneous discharge measurements.	144
Index.	147

ILLUSTRATION

	Page
Plate 1. Typical river-measurement stations.	6

SURFACE WATER SUPPLY OF THE LOWER MISSISSIPPI RIVER BASIN, 1936

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, 1936. The work was begun in 1888 in connection with special studies relating to irrigation. Measurements of stream flow have been made at about 7,200 points in the United States and also at many points in Alaska and the Hawaiian Islands. In July 1936, 3,180 gaging stations were being maintained by the Geological Survey and the cooperating organizations. Many miscellaneous discharge measurements were made at other points.

In the execution of the work many State and private organizations have cooperated, either by furnishing data or by assisting in collecting data. Acknowledgments for cooperation of the first kind are made in connection with the description of each station affected; cooperation of the second kind is acknowledged on page 11.

DEFINITION OF TERMS

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

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

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

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

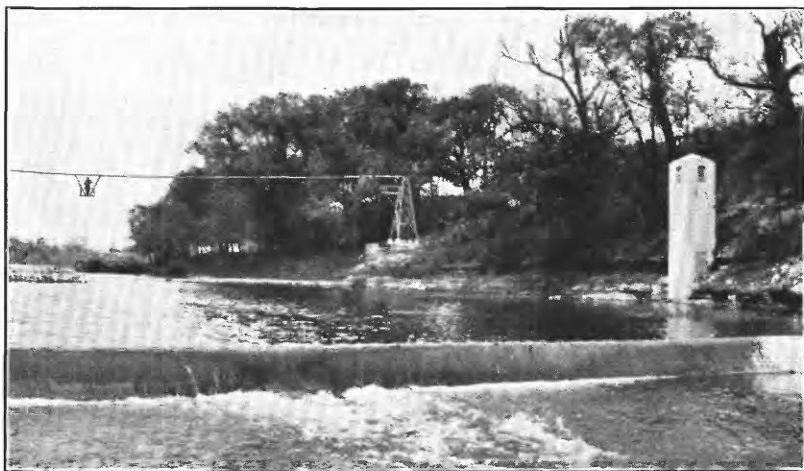
The table of daily discharge gives, for stations equipped with nonrecording gages, the discharge in second-feet corresponding to once-daily or the mean of twice-daily readings of the gage. For stations equipped with water-stage recorders the table gives the discharge corresponding to the mean daily gage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

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

ACCURACY OF FIELD DATA AND COMPUTED RESULTS

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

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



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



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

TYPICAL RIVER-MEASUREMENT STATIONS.

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

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

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

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

PUBLICATIONS

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

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

Water-supply papers and other publications of the 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., 203 Federal Building.
Albany, N. Y., 526 Federal Building.
Trenton, N. J., 228 Federal Building.

Harrisburg, Pa., 490 Education Building.
 Charlottesville, Va., University of Virginia.
 South Charleston, W. Va., Naval Ordnance Plant.
 Asheville, N. C., 220 Post Office Building.
 Columbia, S. C., 119 United States Courthouse.
 Atlanta, Ga., Georgia School of Technology.
 Ocala, Fla., Post Office Building.
 Montgomery, Ala., Post Office Building.
 Chattanooga, Tenn., 442 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., 606 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. 2	.....do.....	1884 to Dec. 31, 1892.
14th A, pt. 2	Monthly discharge (long-time records, 1871-93)....	1886 to Dec. 31, 1893.
B 131.....	Descriptions, measurements, gage heights, and ratings.	1893-94.
16th A, pt. 2	Descriptive information only.....	
B 140.....	Descriptions, measurements, gage heights, ratings, and monthly discharge (also many data covering earlier years).	1895.
W 11.....	Gage heights (also gage heights for earlier years)	1896.
18th A, pt. 4	Descriptions, measurements, ratings, and monthly discharge (also similar data for some earlier years).	1895-96.
W 15.....	Descriptions, measurements, and gage heights, eastern United States, eastern Mississippi River, and Missouri River above junction with Kansas River.	1897.
W 16.....	Descriptions, measurements, and gage heights, western Mississippi River below junction of Missouri and Platte Rivers, and western United States.	1897.
19th A, pt. 4	Descriptions, measurements, ratings, and monthly discharge (also some long-time records).	1897.
W 27.....	Measurements, ratings, and gage heights, eastern United States, eastern Mississippi River, and Missouri River.	1898.
W 28.....	Measurements, ratings, and gage heights, Arkansas River and western United States.	1898.
20th A, pt. 4	Monthly discharge (also for many earlier years).	1898.
W 35 to 39...	Descriptions, measurements, gage heights, and ratings.	1899.
21st A, Pt. 4	Monthly discharge.....	1899.
W 47 to 52...	Descriptions, measurements, gage heights, and ratings.	1900.
22d A, pt. 4.	Monthly discharge.....	1900.
W 65, 66.....	Descriptions, measurements, gage heights, and ratings.	1901.
W 75.....	Monthly discharge.....	1901.

Note.— The reports which contain records after 1901 are given in the table on page 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 1936. 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	13	14
1899 a...	35	b 35, 36	36	36	c 36, 37	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, j 50	50	50	50	50	51	51	51	51	51
1901...	65, 75	65, 75	65, 75	65, 75	66, 75	66, 75	k 65, 66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75
1902...	82, 83	82, 83	83	83	84	84	k 83, 84	84	84	85	85	85	85	85
1903...	97	b 97, 98	98	97	k 98, 99, n 100	99	k 98, 99	99	100	100	100	100	100	100
1904...	126	126	126	126	k 125, 130	130, r 131	k 126, 131	132	132	133, s 134	133	133	133	133
1905...	127	127	128	128	128	128	k 127, 128	128	128	129	129	129	129	129
1906...	205	205	206	206	206	206	k 205, 206	206	206	207	207	207	207	207
1907...	242	242	243	244	245	246	k 240, 247	241, t 211, 212, 213	249	250	251	252	252	252
1908...	261	262	263	264	265	266	267	268	269	270, s 271	271	272	272	272
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	332
1912...	351	352	353	354	355	356	357	358	359	360	361	362	362	362
1913...	381	382	383	384	385	386	387	388	389	390	391	392	392	392
1914...	401	402	403	404	405	406	407	408	409	410	411	412	412	412
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...	501	502	503	504	505	506	507	508	509	510	511	512	512	512
1919-20...	521	522	523	524	525	526	527	528	529	530	531	532	532	532
1921...	541	542	543	544	545	546	547	548	549	550	551	552	552	552
1922...	561	562	563	564	565	566	567	568	569	570	571	572	572	572
1923...	581	582	583	584	585	586	587	588	589	590	591	592	592	592
1924...	601	602	603	604	605	606	607	608	609	610	611	612	612	612
1925...	621	622	623	624	625	626	627	628	629	630	631	632	632	632
1926...	641	642	643	644	645	646	647	648	649	650	651	652	652	652
1927...	661	662	663	664	665	666	667	668	669	670	671	672	672	672
1928...	681	682	683	684	685	686	687	688	689	690	691	692	692	692
1929...	696	697	698	699	700	701	702	703	704	705	706	707	707	707
1930...	711	712	713	714	715	716	717	718	719	720	721	722	722	722
1931...	726	727	728	729	730	731	732	733	734	735	736	737	737	737
1932...	741	742	743	744	745	746	747	748	749	750	751	752	752	752
1933...	756	757	758	759	760	761	762	763	764	765	766	767	767	767
1934...	761	762	763	764	765	766	767	768	769	770	771	772	772	772
1935...	801	802	803	804	805	806	807	808	809	810	811	812	812	812

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

Paper 39, tables of monthly discharge for 1899 in 21st Annual Report, part 4.

b Kings River only.

c Gallatin River.

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

e Mojave River only.

f Kings and Kern Rivers and south Pacific slope basins.

g Rating tables and index to Water-Supply Papers 47-52 and data on precipitation,

well, and irrigation in California and Utah contained in Water-Supply Paper 52.

h Monthly discharges for 1900 in 22nd Annual report, part 4.

i Below junction with Little River.

j Rogue, Umpqua, and St. Lawrence Rivers only.

k Flatte River.

l Flatte River.

m Flatte River.

n Flatte River.

o New England rivers only.

p Hudson River to Delaware River, inclusive.

q Susquehanna River to Yackin River, inclusive.

r Flatte and Kansas Rivers.

s The Great Basin in California.

t Below junction with Little River.

u Rogue, Umpqua, and St. Lawrence 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 water year October 1935 to September 1936 by agencies other than the Geological Survey. The records for these stations are not contained in publications of the Geological Survey.

Records of discharge collected by agencies other than the Geological Survey

Stream	Location	Period	Operated by	Remarks
Arkansas River....	Little Rock, Ark.....	1885-1936	Corps of Engineers, U. S. Army.	(*)
Atchafalaya River.	Morgan City, La.....	1927-36	.....do.....	(*)
Do.....	Simmesport, La.....	1890-1936	.....do.....	(*)
Bayou Courtableau.	Port Barre, La.....	1932-36	.....do.....	Unpublished.
Bayou Dorcheat....	Minden, La.....	1935-36	.....do.....	Do.
Bayou Macon.....	Delhi, La.....	1935-36	.....do.....	Do.
Bayou Teche.....	Charenton, La.....	1933-36	.....do.....	Do.
Do.....	Port Barre, La., above Bayou Courtableau.	1932-36	.....do.....	Do.
Do.....	Port Barre, La., below Bayou Courtableau.	1932-36	.....do.....	Do.
Big Black River...	Bovina, Miss.....	1936	.....do.....	Do.
Black River.....	Black Rock, Ark.....	1921-36	.....do.....	Do.
Do.....	Mengo Bridge, Ark.....	1920-36	.....do.....	Do.
Do.....	Pocahontas, Ark.....	1927-36	.....do.....	Do.
Blue River.....	Blue, Okla.....	1936	.....do.....	Do.
Boggy Creek.....	Soper, Okla.....	1936	.....do.....	Do.
Caddo Creek.....	Ardmore, Okla.....	1936	.....do.....	Do.
Canadian River....	Conchas Dam, N. Mex....	1935-36	.....do.....	Do.
Do.....	Garmes, N. Mex.....	1936	.....do.....	Do.
Do.....	Roy, N. Mex., 11 miles west of.	1936	.....do.....	Do.
Cane Creek.....	Harviell, Mo.....	1936	.....do.....	Do.
Coldwater River...	Coldwater, Miss.....	1928-36	.....do.....	Do.
Do.....	Savage, Miss.....	1936	.....do.....	Do.
Conchas River.....	Variadero, N. Mex....	1936	.....do.....	Do.
Eleven Point River	Eleven Point, Ark.....	1936	.....do.....	Do.
Fourche La Fave River.	Nimrod, Ark.....	1929-36	.....do.....	Do.
Little Black River	Fairdealing, Mo.....	1936	.....do.....	Do.
Little Red River...	Heber Springs, Ark....	1936	.....do.....	Do.
Mineral Creek.....	Gordonville, Tex.....	1936	.....do.....	Do.
Mississippi River.	Arkansas City, Ark....	1928-36	.....do.....	(*)
Do.....	Carrollton, La.....	1879-1936	.....do.....	(*)
Do.....	Columbus, Ky.....	1859-1936	.....do.....	(*)
Do.....	Helena, Ark.....	1879-1936	.....do.....	(*)
Do.....	Mayersville, Miss....	1935-36	.....do.....	(*)
Do.....	Natchez, Miss.....	1935-36	.....do.....	Unpublished.
Do.....	Red River Landing, La.	1861-1936	.....do.....	(*)
Do.....	Tarberts Landing, La..	1929-36	.....do.....	Unpublished.
Ocate River.....	Colmor, N. Mex., 1/2 mile south of.	1936	.....do.....	Do.
Old River.....	Texas & Pacific Rail- way bridge, La.	1851-1936	.....do.....	(*)
Ouachita River....	Arkadelphia, Ark.....	1929-36	.....do.....	Unpublished.
Do.....	Camden, Ark.....	1929-36	.....do.....	Do.
Do.....	Cold Springs Bar, Ark.	1929-36	.....do.....	Do.
Do.....	Monroe, La.....	1929-36	.....do.....	(*)
Petit Jean Creek.	Danville, Ark.....	1929-36	.....do.....	Unpublished.
Red River.....	Alexandria, La.....	1928-36	.....do.....	(*)
Do.....	Arthur City, Tex.....	1936	.....do.....	Unpublished.
Do.....	Gainesville, Tex.....	1936	.....do.....	Do.
Do.....	Index, Ark.....	1936	.....do.....	Do.
Do.....	Shreveport, La.....	1928-36	.....do.....	Do.
St. Francis River.	Chaonia, Mo.....	Fragmentary	.....do.....	Do.
Do.....	Madison, Ark.....	1935-36	.....do.....	(*)
Do.....	Marked Tree, Ark.....	1916-36	.....do.....	Unpublished.
Do.....	Parkin, Ark.....	1928-36	.....do.....	(*)
Do.....	St. Francis, Ark.....	1917-36	.....do.....	Unpublished.
St. Francis Bay River.	Riverfront, Ark.....	1928-36	.....do.....	(*)
St. Francis River floodway.	Marked Tree, Ark.....	1933-36	.....do.....	Unpublished.
Spring River.....	Imboden, Ark.....	1936	.....do.....	Do.
Strawberry River..	Williford, Ark., 12 miles south of.	1936	.....do.....	Do.
Sunflower River...	Sunflower, Miss.....	1935-36	.....do.....	Do.
Tallahatchie River	Lambert, Miss.....	1936	.....do.....	Do.
Do.....	Sardis, Miss.....	1928-36	.....do.....	Do.
Do.....	Swan Lake, Miss.....	1928-36	.....do.....	Do.
Tensas Bayou.....	Tendal, La.....	1935-36	.....do.....	Do.
West Beaver Creek.	Victor, Colo.....	1905-36	Southern Colorado Power Co.	Do.

(*) Records published in reports of the Mississippi River Commission.

DIVISION OF WORK

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

Stream	Location	Period	Operated by	Remarks
White River.....	Clarendon, Ark.....	1879-1936	Corps of Engineers, U. S. Army.	(*)
Wolf River.....	Raleigh, Tenn.....	1936	.....do.....	Unpublished.
Yalobusha River...	Grenada, Miss.....	1928-36	.....do.....	Do.
Yazoo River.....	Greenwood, Miss.....	1928-36	.....do.....	(*)
Yocoma River.....	Enid, Miss.....	1928-36	.....do.....	(*)

(*) Records published in reports of the Mississippi River Commission.

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 State Board of Agriculture, George S. Knapp, chief engineer; in Louisiana, with the Louisiana State University and Agricultural and Mechanical College, L. J. Lassalle, dean, College of Engineering; in Missouri and for the station on White River at Beaver, Ark., with the Missouri Geological Survey, 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. Saunders, commissioner, Department of Streets and Public Improvements, and the city of Springfield, F. F. Edmonds, commissioner, succeeded by Will C. Lohmeyer July 1, 1936, 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, C. S. Clark, chairman, A. H. Dunlap, and J. W. Pritchett.

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

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

DIVISION OF WORK

The data for stations in the several States were collected and prepared for publication under supervision of district engineers as follows: In Arkansas (except White River at Beaver), in Oklahoma, and for Mississippi River at Memphis, Tenn., J. H. Gardiner; in Colorado, Robert Pollansbee, the work being done in collaboration with M. C. Hinderlider, State engineer, and L. T. Burgess, State chief hydrographer; in Kansas, J. B. Spiegel; in Louisiana and Mississippi, D. H. Barber; in Missouri, and 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. 36°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 (general adjustment of 1929) and 379.80 feet above mean Gulf level.

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

Records available.- March 1933 to September 1936. 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, 336,000 second-feet Mar. 1 (gage height, 21.18 feet); minimum, 39,700 second-feet Aug. 27, 28; minimum gage height, -4.11 feet Aug. 27.

1933-36: Maximum discharge, 649,000 second-feet June 7, 1935; maximum gage height, 33.52 feet June 9, 1935; minimum discharge observed, 35,200 second-feet Dec. 29, 1933 (gage height, -4.4 feet).

Maximum stage known, 41.39 feet June 28, 1844.

Remarks.- Records excellent except those for period of ice effect, Feb. 2-26, which were computed on basis of five discharge measurements, gage heights, weather records, and comparison with other stations and are fair. Gage-height records collected in cooperation with U. S. Weather Bureau. Discharge records computed on basis of shifting stage-discharge relation.

Discharge measurements, water year 1935-36

Date	Width (feet)	Area of section (square feet)	Mean velocity (feet per second)	Gage height (feet)	Discharge (second-feet)
Oct. 4	1,535	29,900	2.23	1.24	66,600
8	1,537	29,400	2.24	1.22	66,000
15	1,532	27,400	2.12	.16	58,200
23	1,529	27,300	2.02	-2.28	55,100
29	1,539	30,200	2.24	1.44	67,700
Nov. 5	1,544	31,000	2.37	2.18	73,400
12	1,589	46,000	3.41	11.66	157,000
19	1,566	39,400	2.89	7.34	114,000
25	1,556	36,000	2.72	5.25	97,800
Dec. 2	1,571	38,600	3.01	6.64	116,000
9	1,556	35,000	2.69	4.88	94,200
16	1,556	34,600	2.71	4.45	95,600
Jan. 4	1,526	25,300	2.03	-1.32	51,400
13	1,541	28,600	2.39	.72	68,300
Feb. 18	1,340	33,600	1.42	6.6	47,600
21	1,340	33,400	1.51	5.7	50,500
Mar. 2	1,696	59,700	5.26	20.10	314,000
10	1,631	56,200	4.63	17.32	280,000
16	1,696	59,600	4.90	19.46	292,000
23	1,636	56,400	4.47	17.33	262,000
31	1,646	56,900	4.38	18.02	249,000
Apr. 13	1,627	52,900	4.22	15.90	223,000
22	1,586	46,900	3.59	12.02	168,000
29	1,601	49,300	3.81	13.50	188,000
May 6	1,626	54,200	4.24	16.74	230,000
14	1,588	46,900	3.62	12.00	170,000
19	1,601	48,100	3.65	12.67	184,000
June 1	1,586	45,200	3.45	11.02	156,000
9	1,576	41,600	3.27	8.82	136,000
17	1,561	40,400	3.17	7.91	128,000
24	1,561	37,500	2.85	5.94	107,000
July 2	1,541	33,000	2.57	3.02	84,800
7	1,541	27,700	2.78	2.20	77,100
16	1,501	28,800	2.34	.72	67,500
25	1,511	26,700	2.16	-1.25	56,100
30	1,511	24,600	2.05	-2.10	50,400
Aug. 5	1,511	23,400	1.98	-2.72	46,300
13	1,511	23,300	1.99	-3.06	46,400
19	1,496	22,000	1.91	-3.38	42,100
22	1,501	21,900	1.89	-3.64	41,400
29	1,496	21,400	1.91	-3.76	40,800
Sept. 2	1,496	20,900	1.95	-4.04	40,700
9	1,511	24,600	2.02	-2.84	46,000
15	1,531	25,900	2.25	-1.04	58,400
22	1,526	27,700	2.38	.39	65,800
22	1,561	34,200	2.98	4.83	102,000

MISSISSIPPI RIVER

Gage height, in feet, of Mississippi River at St. Louis, Mo., water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.87	0.50	5.88	-2.53	-1.67	20.96	17.40	12.83	11.05	3.44	-2.18	-3.46
2	1.47	.84	6.66	-2.05	-.43	20.16	17.23	13.01	10.95	3.02	-2.17	-2.84
3	1.12	.96	7.03	-1.70	1.23	18.50	17.27	13.53	10.97	3.04	-2.31	-2.74
4	1.28	1.20	6.35	-1.32	2.34	17.04	17.04	14.48	11.02	2.91	-2.52	-2.57
5	1.59	2.45	5.88	-1.30	4.29	16.28	16.67	*15.53	10.66	2.66	-2.76	-2.00
6	1.61	6.23	5.65	-.84	6.80	15.76	16.40	*16.87	9.96	2.46	-2.95	-1.33
7	1.47	9.72	5.35	-.63	9.03	15.70	16.36	16.53	9.61	2.21	-3.10	-1.01
8	1.22	11.00	5.02	-.70	9.17	15.98	16.34	15.43	9.21	2.01	-3.16	-.96
9	.91	11.42	4.89	-.66	8.52	16.51	16.28	14.43	8.83	2.04	-3.23	-1.04
10	.60	11.72	4.85	-.40	7.58	17.35	16.28	13.70	8.77	2.14	*3.11	-1.16
11	.66	12.14	4.58	.08	7.22	17.92	16.21	12.94	9.31	2.00	-2.88	-1.19
12	.74	11.68	4.69	.48	7.35	18.54	16.07	12.46	9.60	1.68	-2.96	-1.09
13	.62	11.04	4.91	.75	7.72	17.76	16.30	12.14	8.68	1.55	-3.06	-.74
14	.39	10.72	4.79	1.08	7.85	18.27	15.67	12.09	7.82	1.99	-3.15	-.14
15	.15	9.90	4.61	1.24	7.33	19.11	15.48	13.09	7.46	.90	-3.28	**4.42
16	-.09	8.97	4.46	1.15	6.92	19.42	15.29	13.60	*7.52	.72	-3.22	**6.62
17	-.20	8.33	4.43	1.22	7.06	19.31	14.86	13.23	*7.97	.43	-3.27	**3.90
18	-.01	7.22	4.02	1.23	*6.67	18.69	14.59	13.07	7.46	.22	-3.26	*11.64
19	.27	7.33	3.69	.71	*6.15	18.40	13.82	12.86	6.68	.02	-3.44	*12.84
20	.46	6.61	3.38	.93	*5.77	18.34	13.26	12.34	6.72	-.29	-3.62	*13.98
21	.50	6.26	2.35	1.17	5.82	18.15	12.63	12.00	7.52	-.51	-3.67	*14.62
22	.07	6.22	1.21	.82	6.37	17.84	12.00	12.05	7.47	-.66	-3.62	*14.78
23	-.30	5.90	1.68	-.13	6.65	17.39	11.48	12.08	6.73	-.85	-3.56	4.70
24	-.47	5.51	1.65	-.93	6.95	16.89	11.13	11.98	5.85	-1.10	-3.55	4.88
25	-.22	5.23	1.14	-1.07	7.52	16.58	10.81	11.96	5.31	-1.26	-3.60	4.80
26	.38	4.90	.04	-1.12	7.50	16.69	11.31	11.87	4.84	-1.48	-3.61	4.25
27	1.02	4.53	-.05	-1.29	10.48	16.36	13.44	11.57	4.39	-1.62	-4.04	4.04
28	1.38	4.39	-1.82	-1.82	17.76	16.18	13.90	11.29	4.08	-1.79	-4.08	5.96
29	1.39	4.99	-2.65	-1.92	20.88	17.25	13.48	11.04	4.12	-1.94	-4.05	10.91
30	.80	5.53	-2.80	-2.13	-	18.20	12.92	11.02	4.04	-2.10	-4.04	14.22
31	.41	-	-2.81	-2.15	-	18.00	-	11.16	-	-2.17	-3.88	-

*Estimated from graph based on twice-daily staff-gage readings (Market Street gage).

**Computed by comparison with record from U. S. Weather Bureau long-distance water-stage recorder.

Discharge, in second-feet, of Mississippi River at St. Louis, Mo., water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	71,200	61,400	108,000	45,300	51,000	332,000	246,000	180,000	159,000	86,600	49,400	43,000
2	68,400	65,500	116,000	48,300	52,000	317,000	242,000	185,000	159,000	85,400	49,700	46,700
3	65,800	64,900	119,000	50,400	51,000	284,000	244,000	199,000	159,000	82,400	49,800	47,300
4	67,000	66,300	112,000	52,600	51,000	260,000	239,000	202,000	159,000	82,600	47,600	48,500
5	69,100	75,400	106,000	52,800	52,000	247,000	234,000	216,000	156,000	81,200	46,100	51,800
6	69,100	104,000	102,000	55,800	52,000	240,000	230,000	234,000	148,000	79,800	45,000	56,000
7	68,400	140,000	98,800	57,000	53,000	236,000	230,000	231,000	144,000	77,700	44,200	57,800
8	65,600	154,000	96,200	56,400	53,000	241,000	228,000	235,000	139,000	76,300	44,000	57,800
9	63,500	158,000	94,600	57,000	55,000	247,000	225,000	231,000	135,000	76,500	43,400	57,800
10	61,400	160,000	93,800	56,800	53,000	260,000	228,000	192,000	135,000	77,000	44,200	56,500
11	62,100	164,000	93,000	62,100	52,000	270,000	227,000	182,000	140,000	76,300	45,200	56,600
12	62,100	158,000	93,800	64,900	50,000	278,000	225,000	177,000	144,000	74,200	45,000	57,800
13	61,400	149,000	96,200	67,000	50,000	283,000	222,000	172,000	134,000	72,100	44,400	60,200
14	60,000	147,000	95,400	69,100	51,000	284,000	219,000	172,000	128,000	70,000	44,000	63,200
15	58,200	139,000	94,600	69,800	52,000	286,000	216,000	184,000	122,000	68,600	45,200	67,200
16	56,400	129,000	93,800	69,800	52,000	291,000	214,000	190,000	122,000	67,200	43,700	68,600
17	55,800	123,000	93,000	69,800	51,000	290,000	208,000	185,000	126,000	65,100	43,400	70,700
18	57,000	119,000	89,800	69,800	48,000	278,000	201,000	184,000	122,000	63,800	43,000	75,600
19	58,800	114,000	87,400	66,300	47,000	275,000	193,000	182,000	115,000	62,600	42,400	84,200
20	60,000	108,000	85,000	67,000	48,000	270,000	187,000	174,000	115,000	60,800	41,700	93,800
21	60,000	105,000	76,800	69,800	50,000	266,000	178,000	171,000	122,000	59,600	41,400	98,600
22	57,600	105,000	69,100	67,000	62,000	268,000	171,000	171,000	122,000	59,400	41,700	100,000
23	55,200	102,000	72,600	60,700	55,000	254,000	165,000	172,000	115,000	57,800	42,000	100,000
24	54,000	99,700	72,600	55,800	59,000	244,000	160,000	171,000	106,000	56,000	42,000	102,000
25	55,800	97,000	68,400	54,600	65,000	238,000	157,000	171,000	102,000	54,800	41,700	101,000
26	60,000	95,400	60,700	54,600	80,000	238,000	162,000	170,000	97,800	53,600	40,700	96,200
27	64,200	93,000	55,200	55,400	169,000	252,000	168,000	166,000	94,600	55,000	40,000	94,600
28	67,000	93,000	49,800	50,000	274,000	228,000	164,000	162,000	51,800	53,700	40,000	112,000
29	67,000	98,800	44,700	49,800	330,000	242,000	189,000	159,000	92,200	51,200	40,000	162,000
30	65,500	104,000	43,800	48,300	-	258,000	182,000	159,000	91,400	50,000	40,000	204,000
31	60,700	-	43,800	48,300	-	255,000	-	161,000	-	49,700	40,700	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	1,926,100	71,200	54,000	62,150	3,820,000
November.....	3,390,400	164,000	61,400	113,000	6,725,000
December.....	2,624,900	118,000	43,800	84,670	5,206,000
Calendar year 1935.....	66,891,400	649,000	43,800	183,200	131,800,000
January.....	1,822,900	69,800	45,300	58,800	3,616,000
February.....	2,158,000	330,000	47,000	74,310	4,274,000
March.....	8,188,000	332,000	228,000	263,900	16,250,000
April.....	6,206,000	245,000	157,000	206,900	12,330,000
May.....	5,678,000	234,000	159,000	183,200	11,260,000
June.....	3,795,200	159,000	91,400	126,400	7,524,000
July.....	2,080,900	86,600	49,700	67,130	4,127,000
August.....	1,548,700	49,700	39,700	43,510	2,675,000
September.....	2,391,600	204,000	43,000	79,720	4,744,000
Water year 1935-36.....	41,599,700	332,000	39,700	113,700	82,510,000

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 304.65 feet above mean sea level (general adjustment of 1929) and 304.43 feet above mean Gulf level.

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

Records available.- March 1933 to September 1936. 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, 318,000 second-feet Mar. 2 (gage height, 25.19 feet); minimum, 38,700 second-feet Aug. 29 (gage height, 5.62 feet).

1933-36: Maximum discharge, 623,000 second-feet June 10, 1935; maximum gage height, 36.26 feet June 11, 1935; minimum discharge, that of Aug. 29, 1936.

Maximum stage known, 42.53 feet July 4, 1844.

Remarks.- Records excellent October and March to September; others good except those for period of ice effect, Dec. 23 to Feb. 26, which were computed on basis of gage heights, weather records, and comparison with other stations and are fair. Stage-discharge relation occasionally affected by backwater 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 records for auxiliary staff gages furnished by Corps of Engineers, U. S. Army.

Discharge measurements, water year 1935-36

Date	Width (feet)	Area of section (square feet)	Mean velocity (feet per second)	Gage height (feet)	Discharge (second-feet)
Oct. 3	1,845	26,300	2.77	10.20	72,900
10	1,820	25,400	2.74	9.62	69,700
18	1,737	23,700	2.51	8.98	59,400
25	1,702	23,600	2.46	8.78	58,100
30	1,846	25,900	2.69	10.24	69,600
Mar. 31	3,046	65,300	4.07	23.61	266,000
July 31	1,393	19,700	2.62	7.24	51,600
Aug. 23	1,344	18,800	2.17	5.98	40,800
Sept. 3	1,359	19,400	2.37	6.38	45,900

Gage height, in feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	10.27	10.31	12.60	12.78	12.28	24.70	24.06	18.00	16.20	11.45	7.14	5.68
2	10.54	10.21	12.87	12.77	12.30	25.14	23.97	17.88	16.19	11.25	7.12	5.97
3	10.18	10.09	13.24	12.05	12.21	24.67	23.87	17.97	16.17	10.87	7.08	6.42
4	9.92	10.24	13.68	13.69	12.60	23.45	24.03	18.24	16.18	10.70	7.07	6.62
5	9.60	10.62	13.64	16.72	13.00	22.20	24.35	18.77	16.20	10.64	6.97	6.67
6	9.94	11.19	13.27	15.42	13.48	21.42	24.81	19.48	16.13	10.50	6.84	6.80
7	10.04	12.87	13.10	15.17	15.59	20.95	24.80	20.28	15.77	10.36	6.68	7.15
8	10.03	15.20	13.03	14.73	13.58	20.77	24.73	20.58	15.37	10.24	6.55	7.32
9	9.94	16.70	12.85	13.27	13.69	20.94	24.74	20.00	15.10	10.07	6.45	7.71
10	9.81	17.50	12.63	11.29	13.87	21.29	24.76	19.27	14.80	9.99	6.40	7.72
11	9.57	18.20	12.57	9.70	13.92	21.88	24.73	18.66	14.62	9.96	6.38	7.65
12	9.46	18.58	12.50	9.27	13.62	22.39	24.65	18.07	14.75	9.97	6.45	7.56
13	9.48	18.68	12.42	9.47	13.46	22.78	24.58	17.62	15.10	9.87	6.52	7.56
14	9.53	18.22	12.48	9.59	13.87	22.97	24.47	17.24	14.89	9.67	6.45	7.66
15	9.43	17.74	12.50	9.79	14.54	22.99	24.32	17.04	14.22	9.47	6.37	7.95
16	9.27	17.10	12.32	9.90	15.07	23.03	24.07	17.42	13.78	9.31	6.31	8.44
17	9.09	16.38	12.17	9.94	15.43	23.15	23.81	18.03	13.67	9.17	6.30	8.69
18	8.98	15.70	12.08	9.86	15.22	23.12	23.62	18.09	13.82	9.05	6.27	8.80
19	8.99	15.15	11.95	9.79	15.22	22.75	23.05	17.90	13.85	8.91	6.25	9.09
20	9.10	14.70	11.66	9.71	15.18	22.54	22.43	17.74	13.43	8.81	6.20	9.63
21	9.25	14.25	11.38	9.58	14.82	22.48	21.61	17.43	13.12	8.72	6.08	10.43
22	9.37	13.79	10.82	10.38	14.47	22.47	20.63	17.12	13.37	8.49	5.98	11.06
23	9.28	13.59	10.80	10.35	14.33	22.40	19.51	16.97	13.70	8.31	5.95	11.48
24	8.98	13.42	11.48	10.04	14.33	22.25	18.30	16.99	13.46	8.17	5.97	11.65
25	8.77	13.15	11.57	9.27	15.18	21.94	17.26	16.95	12.91	8.04	5.98	11.61
26	8.72	12.90	11.14	8.87	15.90	21.77	16.56	16.92	12.43	7.68	5.98	11.68
27	8.98	12.71	10.42	10.82	14.52	21.94	16.35	16.88	12.07	7.71	5.92	11.54
28	9.64	12.49	9.73	12.43	16.23	22.01	17.37	16.73	11.77	7.60	5.76	11.24
29	9.95	12.19	9.16	12.32	21.73	22.02	18.29	16.48	11.50	7.48	5.67	11.62
30	10.25	12.24	9.83	11.97	-	22.69	18.29	16.28	11.38	7.35	5.65	14.14
31	10.42	-	11.98	12.08	-	23.62	-	16.18	-	7.23	5.65	-

*Computed from graph based on daily staff-gage readings.

MISSISSIPPI RIVER

Discharge, in second-feet, of Mississippi River at Cape Girardeau, Mo., water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	73,300	74,200	101,000	46,000	52,000	314,000	264,000	187,000	161,000	97,000	52,100	39,100
2	73,900	73,100	106,000	48,000	54,000	317,000	258,000	186,000	161,000	94,600	51,900	41,800
3	72,200	71,800	110,000	50,000	54,000	304,000	250,000	187,000	161,000	90,500	51,600	45,700
4	69,400	73,100	116,000	52,000	53,000	278,000	250,000	191,000	161,000	88,500	51,600	47,100
5	68,500	77,500	115,000	54,000	54,000	251,000	251,000	201,000	161,000	87,800	50,400	47,600
6	69,800	83,500	109,000	55,000	55,000	238,000	255,000	213,000	159,000	86,100	49,500	49,100
7	70,500	102,000	107,000	57,000	55,000	229,000	252,000	227,000	154,000	84,900	48,100	52,200
8	70,500	140,000	106,000	59,000	55,000	227,000	247,000	230,000	148,000	85,500	47,000	55,700
9	69,400	165,000	103,000	60,000	56,000	230,000	248,000	220,000	146,000	81,500	45,000	57,600
10	68,100	177,000	101,000	61,000	56,000	237,000	248,000	207,000	141,000	80,800	45,300	57,600
11	65,700	190,000	100,000	62,000	55,000	247,000	247,000	197,000	139,000	80,500	45,600	56,800
12	65,000	196,000	99,400	65,000	54,000	257,000	243,000	188,000	142,000	80,500	45,900	56,100
13	65,400	197,000	98,400	67,000	56,000	263,000	242,000	181,000	147,000	79,500	46,700	56,100
14	65,300	190,000	99,100	67,000	60,000	269,000	238,000	175,000	145,000	77,300	45,900	56,800
15	64,300	181,000	99,400	69,000	64,000	270,000	234,000	173,000	133,000	75,200	45,500	60,000
16	63,300	169,000	97,000	70,000	66,000	274,000	230,000	180,000	128,000	73,300	44,600	64,900
17	61,600	156,000	95,200	70,000	65,000	278,000	225,000	189,000	127,000	71,800	44,600	67,600
18	60,200	145,000	93,900	70,000	62,000	277,000	219,000	189,000	128,000	70,600	44,300	68,500
19	60,500	137,000	91,700	71,000	59,000	267,000	209,000	187,000	129,000	68,900	44,300	71,800
20	61,600	130,000	88,200	70,000	55,000	264,000	202,000	183,000	123,000	68,100	43,600	77,900
21	63,100	124,000	85,200	70,000	55,000	261,000	194,000	179,000	119,000	67,200	42,600	86,900
22	64,000	117,000	78,000	71,000	57,000	258,000	185,000	174,000	123,000	65,000	41,900	93,700
23	62,900	115,000	75,000	70,000	60,000	257,000	177,000	172,000	127,000	62,900	41,800	98,500
24	60,200	112,000	77,000	65,000	64,000	251,000	168,000	172,000	123,000	61,400	41,800	101,000
25	58,500	108,000	76,000	60,000	70,000	245,000	164,000	172,000	115,000	60,200	42,100	99,600
26	58,000	104,000	74,000	58,000	80,000	239,000	159,000	172,000	110,000	58,800	41,900	101,000
27	60,400	102,000	69,000	58,000	126,000	245,000	160,000	172,000	105,000	57,400	41,100	99,300
28	66,400	99,100	63,000	59,000	159,000	240,000	179,000	169,000	101,000	56,100	40,400	94,300
29	70,400	95,300	57,000	55,000	266,000	235,000	193,000	165,000	97,600	55,000	39,100	101,000
30	73,300	96,500	51,000	53,000	-	247,000	192,000	163,000	96,300	54,200	39,100	137,000
31	75,000	-	47,000	52,000	-	265,000	-	161,000	-	52,800	39,100	-
Month	Second-foot-days						Maximum	Minimum	Mean	Run-off in acre-feet		
October.....	2,050,700						75,000	56,000	66,150	4,068,000		
November.....	3,800,900						197,000	71,800	126,700	7,559,000		
December.....	2,786,500						116,000	47,000	89,590	5,527,000		
Calendar year 1935.....	72,819,000						623,000	47,000	199,500	144,400,000		
January.....	1,894,000						71,000	46,000	61,100	3,757,000		
February.....	2,077,000						266,000	52,000	71,620	4,120,000		
March.....	8,034,000						317,000	227,000	259,200	15,940,000		
April.....	6,583,000						264,000	159,000	219,400	13,060,000		
May.....	5,762,000						230,000	161,000	185,900	11,450,000		
June.....	4,008,900						161,000	96,300	133,600	7,952,000		
July.....	2,271,900						97,000	52,600	73,290	4,506,000		
August.....	1,395,100						52,100	39,100	45,000	2,767,000		
September.....	2,141,300						137,000	39,100	71,380	4,247,000		
Water year 1935-36.....	42,805,300						317,000	39,100	117,000	84,910,000		

Mississippi River at Memphis, Tenn.

Location.- Water-stage recorder, lat. 35°7'37", long. 90°4'25", at Memphis, 50 feet below Harahan Bridge, 1.3 miles below Beale Street gage, 1½ miles below mouth of Wolf River, 70 miles above mouth of St. Francis River, 164 miles above mouth of White River and 171 miles above mouth of Arkansas River. Zero of gage is 183.91 feet above mean sea level (general adjustment of 1929), 184.21 feet above mean Gulf level (1912 Mississippi River Commission), and 180.86 feet above mean Gulf level (1881 Mississippi River Commission).

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

Records available.- April 1934 to September 1936. 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 (abandoned) in reports of U. S. Weather Bureau September 1932 to December 1934. Results of discharge measurements made intermittently by Corps of Engineers, U. S. Army, and Mississippi River Commission since 1882 and referred to Beale Street gage, 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, 1,340,000 second-feet Apr. 19-21; maximum gage height, 39.33 feet Apr. 21; minimum discharge, 79,200 second-feet Aug. 25 (gage height, -0.01 foot).

1934-36: Maximum discharge, that of Apr. 19-21, 1936; minimum, that of Aug. 25, 1936.

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

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

Discharge measurements, water year October*1935 to September 1936

Date	Width (feet)	Area of section (square feet)	Mean velocity (feet per second)	Gage height (feet)	Discharge (second-feet)
Sept. 30	1,900	73,800	1.71	4.05	126,000
Oct. 7	1,895	72,800	1.54	3.14	112,000
15	1,890	71,400	1.47	2.50	105,000
21	1,890	70,100	1.44	2.09	101,000
30	1,905	71,800	1.63	3.34	117,000
Nov. 6	1,910	73,600	1.81	4.14	133,000
13	1,945	82,000	2.68	5.83	220,000
20	1,975	92,800	3.88	14.97	360,000
26	1,960	92,000	3.70	13.98	340,000
Dec. 4	1,940	81,100	2.76	8.66	224,000
10	1,935	81,600	2.72	8.70	222,000
18	1,955	93,100	3.36	12.13	286,000
30	1,960	86,000	3.35	11.89	288,000
Jan. 6	1,910	72,500	2.08	4.76	151,000
13	1,997	102,000	5.19	20.08	529,000
21	1,997	112,000	5.73	24.56	642,000
29	1,978	96,200	4.20	16.12	404,000
Feb. 14	1,980	96,400	3.94	14.79	376,000
23	1,967	92,800	3.65	15.44	339,000
26	1,975	93,300	3.91	14.60	365,000
28	1,993	103,000	5.03	19.44	518,000
Mar. 2	2,025	111,000	5.50	22.67	610,000
4	2,030	115,000	5.76	24.70	662,000
11	2,040	117,000	6.14	26.42	718,000
17	2,020	115,000	5.82	25.10	669,000
24	2,030	116,000	6.12	26.17	710,000
26	2,080	119,000	6.49	27.77	772,000
28	2,100	121,000	6.97	29.26	831,000
31	2,430	126,000	7.24	31.06	912,000
Apr. 2	2,430	127,000	7.35	32.25	934,000
4	2,335	131,000	7.71	33.37	1,010,000
6	-	138,000	7.76	35.09	*1,083,000
9	4,660	150,000	7.88	37.14	*1,220,000
11	4,665	155,000	8.07	38.14	*1,297,000
15	4,695	159,000	7.93	38.96	*1,313,000
20	4,680	163,000	7.66	39.25	*1,336,000
23	4,650	162,000	7.72	39.12	*1,303,000
27	4,640	151,000	7.12	36.53	*1,107,000
28	2,350	137,000	6.96	34.62	*970,000
29	2,300	131,000	6.41	31.66	824,000
30	2,000	124,000	5.55	27.44	668,000
May 1	2,000	117,000	4.91	24.14	574,000
7	2,000	110,000	4.56	21.42	501,000
4	1,997	104,000	4.15	19.06	439,000
7	1,973	100,000	3.88	16.10	388,000
18	1,957	93,600	3.28	12.93	307,000
25	1,962	92,800	3.19	12.14	296,000
June 1	1,945	88,800	2.65	10.31	263,000
6	1,945	87,400	2.68	9.18	226,000
12	1,938	85,600	2.46	8.38	211,000
22	1,925	82,200	2.19	6.70	189,000
26	1,925	82,000	2.14	6.48	176,000
July 1	1,915	79,200	1.89	5.07	150,000
10	1,930	84,200	2.39	7.68	201,000
17	1,915	78,600	1.94	4.96	153,000
20	1,900	75,500	1.70	3.68	128,000
28	1,900	75,000	1.74	3.56	131,000
Aug. 7	1,887	70,200	1.46	1.78	105,000
14	1,892	71,900	1.45	1.96	104,000
19	1,880	70,700	1.34	1.16	94,500
22	1,890	69,300	1.22	.78	84,600
25	1,875	68,400	1.16	.00	79,300
28	1,875	69,200	1.20	.35	83,200
Sept. 3	1,900	75,000	1.48	2.38	108,000
5	1,900	74,100	1.62	2.92	120,000
10	1,895	72,800	1.51	2.20	110,000
19	1,885	71,400	1.41	1.50	101,000
25	1,900	75,100	1.70	3.38	128,000
30	1,913	77,200	1.88	4.32	145,000

*Includes overflow of viaducts.

MISSISSIPPI RIVER

Gage height, in feet, of Mississippi River at Memphis, Tenn., water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3.80	3.97	7.77	9.16	15.30	22.12	31.65	25.96	10.33	5.08	2.75	1.08
2	3.69	3.97	7.73	7.75	14.50	22.72	32.28	21.52	9.82	5.18	3.18	1.32
3	3.50	4.05	8.17	6.52	13.32	23.72	32.90	19.54	9.43	5.63	3.08	2.35
4	3.45	4.37	8.68	5.43	11.92	24.75	35.42	18.02	9.28	5.63	2.56	2.77
5	3.43	4.43	9.02	4.75	10.54	26.47	34.23	17.14	9.10	5.72	1.79	2.92
6	3.38	4.12	9.17	4.77	9.42	25.74	35.11	16.52	9.20	5.28	1.60	2.80
7	3.16	3.88	9.47	5.32	8.66	25.97	35.78	16.08	9.24	4.89	1.76	2.85
8	2.83	4.00	9.53	6.63	8.75	25.98	36.48	16.02	9.06	5.28	1.57	2.87
9	2.81	4.40	9.10	8.42	9.61	26.12	37.16	16.24	9.04	6.35	1.52	2.40
10	3.18	4.67	8.70	10.80	10.93	26.27	37.74	16.62	8.95	7.70	1.79	2.20
11	3.11	5.90	8.61	14.03	12.05	26.42	38.14	16.84	8.80	8.60	1.66	2.25
12	2.85	7.52	8.72	17.35	13.04	26.52	38.45	16.80	8.54	8.54	1.45	2.61
13	2.66	8.95	9.02	20.08	13.92	26.52	38.72	16.50	7.81	7.75	1.59	2.69
14	2.55	10.18	9.42	21.82	14.87	26.40	38.92	15.98	7.62	6.60	1.94	2.20
15	2.50	11.06	10.21	22.95	15.50	26.23	38.95	15.35	7.78	5.83	1.61	1.76
16	2.39	12.22	10.88	23.76	16.35	25.80	39.07	14.60	8.12	5.44	1.13	1.54
17	2.38	13.48	11.48	24.35	16.92	25.02	39.14	13.78	7.85	4.95	.86	1.40
18	2.42	14.15	12.14	24.82	16.63	24.10	39.21	12.94	7.62	4.37	.83	1.32
19	2.51	14.53	12.66	25.02	16.11	23.40	39.24	12.58	7.51	3.73	1.16	1.52
20	2.35	14.96	13.08	24.90	15.27	23.25	39.27	12.70	7.54	3.69	1.27	1.96
21	2.09	15.42	13.46	24.52	14.40	23.46	39.30	12.87	7.05	3.99	1.12	1.98
22	2.71	15.62	13.98	23.64	13.76	24.10	39.27	12.97	6.70	4.01	.76	1.82
23	3.50	15.52	14.53	22.32	13.46	25.07	39.10	12.57	6.46	4.05	.53	2.24
24	3.29	15.18	14.88	20.74	13.54	26.18	38.76	12.41	6.35	4.33	.05	2.89
25	3.34	14.70	14.92	19.22	13.98	27.12	38.24	12.14	6.49	4.37	.00	3.38
26	3.17	13.90	14.60	18.00	14.70	27.85	37.50	12.03	6.47	4.01	.09	3.90
27	3.22	12.60	14.12	17.12	16.56	28.65	36.31	11.94	6.24	3.71	.15	4.40
28	3.45	10.74	13.58	16.55	19.53	28.50	34.57	11.73	5.94	3.55	.34	4.65
29	3.40	9.12	12.88	16.10	21.45	30.02	31.28	11.49	5.60	3.69	.44	4.51
30	3.36	8.09	11.88	15.90	-	30.57	27.51	11.05	5.29	3.21	.86	4.32
31	3.67	-	10.65	15.71	-	31.12	-	10.60	-	2.68	1.13	-

Discharge, in thousands of second-feet, of Mississippi River at Memphis, Tenn., water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	122	126	202	229	384	595	923	569	254	150	118	91.7
2	120	126	204	202	363	612	956	497	243	151	123	94.3
3	118	127	212	178	332	659	975	453	234	160	122	107
4	116	134	225	162	298	663	1,010	430	229	160	111	115
5	116	136	232	150	268	697	1,040	411	225	162	103	120
6	115	133	234	151	243	698	1,090	395	227	155	101	118
7	112	130	240	162	225	701	1,130	397	227	148	103	119
8	109	132	240	186	229	704	1,180	397	225	155	101	119
9	109	138	232	223	247	708	1,220	392	225	174	99.5	112
10	112	142	223	277	279	715	1,270	403	223	202	102	110
11	112	162	219	358	305	719	1,300	408	219	221	101	111
12	109	192	219	447	330	722	1,300	406	210	221	98.2	115
13	107	223	223	528	352	719	1,320	398	200	204	99.5	116
14	106	249	232	582	379	715	1,320	384	196	182	103	110
15	105	268	247	615	395	708	1,310	368	200	167	99.5	105
16	103	293	261	639	417	694	1,320	347	206	162	93.0	102
17	103	324	272	653	435	672	1,330	327	202	163	90.4	99.5
18	105	340	286	666	425	636	1,330	307	198	142	90.4	92.2
19	106	347	300	666	411	612	1,340	300	196	130	94.3	101
20	103	350	310	659	387	608	1,340	303	192	127	94.3	107
21	101	373	320	639	363	615	1,340	307	186	133	90.4	107
22	109	379	334	615	347	659	1,350	307	180	134	83.9	107
23	119	379	347	572	340	673	1,300	303	176	134	81.3	111
24	118	358	324	524	340	712	1,270	340	174	129	80.0	120
25	116	358	360	482	350	748	1,230	295	176	142	80.0	127
26	115	337	352	450	368	774	1,180	293	176	136	80.0	136
27	115	307	340	428	425	808	1,090	291	173	133	81.3	145
28	119	265	327	414	521	855	958	286	165	130	82.6	148
29	118	238	312	465	579	926	811	279	160	135	83.9	148
30	118	203	288	398	-	990	690	270	155	125	89.1	145
31	122	-	261	395	-	915	-	261	-	118	93.0	-

Month	Thousands of second-foot-days	Discharge in thousands of second-feet			Run-off in thousands of acre-feet
		Maximum	Minimum	Mean	
October.....	5,476	122	101	112.1	6,895
November.....	7,288	126	126	242.9	14,460
December.....	8,412	360	202	271.4	16,680
Calendar year 1935.....	186,333	1,190	101	524.9	369,600
January.....	13,053	666	150	421.1	25,890
February.....	10,335	579	225	356.4	20,500
March.....	21,992	915	209	709.4	43,620
April.....	13,340	690	1,173	69.78	69,780
May.....	11,064	569	261	356.9	21,950
June.....	6,052	254	155	201.7	12,000
July.....	4,784	221	118	154.3	9,489
August.....	2,972.6	123	80	95.9	5,896
September.....	3,464.7	148	91.7	115.5	6,872
Water year 1935-36.....	128,076.3	1,340	80	349.9	254,000

Mississippi River near Vicksburg, Miss.

Location.- Water-stage recorder, lat. $32^{\circ}18'45''$, long. $90^{\circ}54'25''$, in T. 16 N., R. 3 E., at combined highway and railway bridge of Vicksburg Bridge & Terminal Co., $1\frac{1}{2}$ miles below mouth of Yazoo River and 3 miles southwest of Vicksburg. Zero of gage is 46.16 feet above mean sea level.

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

Records available.- April 1930 to September 1936 (only gage heights prior to June 1931). Daily gage heights from Yazoo Canal gage, $1\frac{1}{2}$ miles upstream, have been published in reports of Mississippi River Commission since November 1871 and 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, 1886 and intermittently since 1903 contained in reports of Mississippi River Commission.

Extremes.- Maximum discharge during year, 1,280,000 second-feet Apr. 28, 29; maximum gage height, 42.54 feet Apr. 29, 30; minimum discharge, 101,000 second-feet Aug. 29, 31, Sept. 1, 2; minimum gage height, -3.52 feet Aug. 31.
1930-35: Maximum discharge, 1,420,000 second-feet Apr. 15, 1935; maximum gage height, 50.27 feet Feb. 29, 1932; minimum discharge, that of Aug. 29, 31, Sept. 1, 2, 1936; minimum gage height, that of Aug. 31, 1936.
Maximum observed discharge (U. S. Engineer Department), 1,828,000 second-feet Apr. 30, 1922 (gage height, 52.9 feet, present gage, after Weecama crevasse); maximum recorded gage height (U. S. Engineer Department), 56.6 feet, present gage, May 4, 1927. Minimum observed discharge (U. S. Engineer Department), 97,000 second-feet Oct. 26, 1895.

Remarks.- Records excellent.

Discharge measurements, water year 1935-36

Date	Width (feet)	Area of section (square feet)	Mean velocity (feet per second)	Gage height (feet)	Discharge (second-feet)	
Oct.	3	2,353	72,700	2.32	3.99	169,000
	5	2,353	71,300	2.22	3.43	158,000
	7	2,343	70,700	2.26	3.07	160,000
	10	2,343	69,900	2.20	2.67	154,000
	12	2,343	68,900	2.15	2.21	148,000
	15	2,343	68,500	2.18	2.04	149,000
	19	2,338	67,300	2.05	1.65	138,000
	23	2,253	67,300	2.10	1.59	141,000
	26	2,343	68,100	2.14	1.86	146,000
	29	2,348	72,000	2.40	3.66	173,000
Nov.	1	2,348	73,500	2.38	4.02	175,000
	4	2,348	74,900	2.47	4.65	185,000
	7	2,353	74,700	2.56	4.66	191,000
	11	2,353	75,400	2.59	4.94	195,000
	14	2,353	78,000	2.86	6.12	223,000
	16	2,395	84,400	3.14	8.60	265,000
	18	2,415	90,500	3.44	10.92	311,000
	20	2,535	96,300	3.79	13.04	365,000
	22	2,535	101,000	4.07	14.86	411,000
	25	2,545	103,000	4.24	15.86	437,000
Dec.	29	2,545	102,000	4.03	15.31	411,000
	2	2,515	94,700	3.62	12.07	343,000
	4	2,505	88,100	3.29	9.59	290,000
	6	2,500	86,000	3.17	8.55	273,000
	9	2,515	89,600	3.52	10.38	315,000
	11	2,525	95,700	3.70	12.47	354,000
	13	2,535	99,800	4.03	14.28	402,000
	16	2,535	98,300	3.87	13.67	381,000
	18	2,535	97,300	3.84	12.91	374,000
	21	2,525	95,500	3.90	13.15	372,000
Jan.	23	2,535	98,600	3.97	13.86	392,000
	26	2,545	102,000	4.16	14.92	424,000
	30	2,545	102,000	4.12	15.23	420,000
	2	2,545	98,600	4.03	13.60	396,000
	4	2,515	92,800	3.63	11.36	337,000
	7	2,485	84,300	3.16	7.77	266,000
	10	2,395	77,900	2.88	5.40	224,000
	13	2,485	84,500	3.27	7.72	276,000
	15	2,535	99,600	4.14	13.50	412,000
	16	2,555	106,000	4.72	16.84	500,000
Feb.	17	2,550	114,000	4.99	19.67	569,000
	18	2,555	121,000	5.15	21.63	621,000
	20	2,565	126,000	5.39	24.06	680,000
	22	2,560	127,000	5.53	25.06	703,000
	24	2,560	128,000	5.40	25.39	691,000
	25	2,560	128,000	5.42	25.21	694,000
	26	2,560	127,000	5.30	24.69	674,000
	28	2,553	122,000	4.95	22.67	604,000
	30	2,545	115,000	4.70	20.40	540,000
	1	2,545	109,000	4.44	18.24	484,000
Feb.	3	2,538	107,000	4.34	17.06	464,000
	7	2,517	101,000	3.95	14.68	399,000
	10	2,515	91,500	3.55	10.98	325,000
	13	2,507	88,800	3.55	10.05	315,000
	14	2,510	90,600	3.71	10.78	336,000
	17	2,522	98,000	4.07	13.74	399,000
	19	2,525	103,000	4.19	15.34	432,000
	21	2,545	105,000	4.38	16.63	460,000
	22	2,545	106,000	4.27	16.68	452,000
	24	2,535	103,000	4.15	15.90	428,000
Feb.	27	2,520	100,000	3.94	14.26	394,000
	29	2,527	98,900	3.99	14.26	395,000

MISSISSIPPI RIVER

Discharge measurements of Mississippi River near Vicksburg, Miss., water year 1935-36--Continued

Date	Width (feet)	Area of section (square feet)	Mean velocity (feet per second)	Gage height (feet)	Discharge (second-feet)
Mar. 2	2,537	106,000	4.49	16.91	476,000
3	2,542	113,000	4.83	19.40	545,000
5	2,550	119,000	5.16	22.04	614,000
9	2,562	128,000	5.61	26.71	719,000
11	2,567	130,000	5.66	26.56	736,000
14	2,570	131,000	5.75	27.27	754,000
18	2,570	133,000	5.61	27.83	746,000
20	2,569	133,000	5.56	27.59	739,000
23	2,562	130,000	5.30	26.26	689,000
25	2,560	128,000	5.30	25.95	679,000
26	2,560	129,000	5.37	26.12	693,000
28	2,565	132,000	5.61	27.29	741,000
30	2,572	134,000	5.86	28.58	785,000
Apr. 2	2,731	142,000	5.98	30.44	850,000
4	2,739	144,000	6.10	31.38	879,000
7	2,757	149,000	6.27	32.94	934,000
10	2,763	154,000	6.49	34.78	1,000,000
14	2,786	159,000	6.86	37.36	1,090,000
17	2,814	166,000	6.99	38.62	1,160,000
20	2,834	169,000	7.04	40.03	1,190,000
22	2,840	170,000	7.24	40.69	1,230,000
25	2,844	173,000	7.22	41.47	1,250,000
27	2,859	172,000	7.39	41.90	1,270,000
29	2,864	172,000	7.39	42.49	1,270,000
May 1	2,864	170,000	7.35	42.43	1,250,000
3	2,858	169,000	7.16	41.94	1,200,000
6	2,804	163,000	6.22	38.94	1,020,000
9	2,754	147,000	5.40	32.65	794,000
12	2,691	128,000	4.88	25.54	625,000
15	2,655	116,000	4.67	21.13	542,000
18	2,636	108,000	4.40	18.14	479,000
21	2,619	101,000	4.06	15.27	410,000
25	2,599	95,000	3.83	12.92	364,000
28	2,550	92,400	3.78	12.18	349,000
June 1	2,525	89,200	3.65	11.04	324,000
4	2,507	86,000	3.48	9.84	299,000
8	2,495	81,700	3.36	8.46	275,000
11	2,495	80,900	3.39	8.38	274,000
15	2,505	81,900	3.58	9.12	293,000
17	2,500	81,000	3.49	8.92	283,000
20	2,500	77,900	3.31	7.70	258,000
23	2,495	75,700	3.17	6.66	240,000
26	2,485	72,500	3.04	5.52	220,000
29	2,490	71,200	2.91	4.76	207,000
July 2	2,490	69,600	2.86	4.18	199,000
5	2,490	68,900	2.92	3.99	201,000
8	2,490	69,500	2.97	4.43	206,000
11	2,490	68,800	2.89	3.92	199,000
14	2,495	73,500	3.18	5.71	234,000
16	2,495	75,500	3.31	6.67	250,000
19	2,490	69,900	3.05	4.72	213,000
22	2,480	65,400	2.82	2.71	185,000
25	2,370	62,000	2.71	1.61	168,000
27	2,278	61,400	2.75	1.58	166,000
30	2,278	61,500	2.74	1.52	168,000
Aug. 2	2,258	59,200	2.64	.78	156,000
6	2,168	57,600	2.59	.04	149,000
8	2,173	57,000	2.47	-.29	141,000
11	2,108	54,900	2.33	-1.37	128,000
13	2,108	54,200	2.25	-1.65	122,000
15	2,108	54,100	2.26	-1.66	122,000
19	2,083	54,400	2.24	-1.74	122,000
25	2,013	52,800	2.18	-2.36	115,000
29	1,992	51,500	1.99	-3.37	102,000
30	1,992	51,100	2.02	-3.47	103,000
Sept. 2	1,964	51,000	1.98	-3.42	101,000
3	1,964	51,200	2.05	-3.25	105,000
9	2,113	56,000	2.41	-1.05	135,000
14	2,118	56,000	2.36	-1.10	132,000
17	2,112	56,300	2.38	-1.01	134,000
19	2,098	55,800	2.33	-1.29	130,000
22	2,018	54,200	2.25	-2.02	122,000
25	2,028	55,500	2.30	-1.80	127,000
28	2,105	56,700	2.40	-1.10	136,000

Gage height, in feet, of Mississippi River near Vicksburg, Miss., water year 1935-36

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4.46	4.05	15.32	14.22	18.22	15.19	29.85	42.43	11.02	4.41	0.92	-3.47
2	4.23	4.31	11.96	13.50	17.48	17.05	30.43	42.27	10.64	4.18	.75	-3.40
3	3.94	4.50	10.76	12.54	17.06	19.14	30.94	41.93	10.23	3.96	.50	-3.24
4	3.61	4.66	9.56	11.47	16.84	20.46	31.59	41.31	9.81	3.80	.16	-2.99
5	3.41	4.81	8.64	10.14	16.28	22.11	31.90	40.52	9.40	4.00	.00	-2.79
6	3.23	4.74	8.57	8.92	15.54	23.18	32.46	38.93	8.97	4.26	.03	-2.58
7	3.09	4.64	8.98	7.69	14.59	24.10	32.94	37.20	8.65	4.42	-.04	-2.11
8	2.96	4.58	9.72	6.69	13.57	24.92	33.45	35.02	8.47	4.42	-.31	-1.54
9	2.79	4.58	10.54	5.85	12.21	25.60	34.17	32.60	8.40	4.36	-.76	-1.09
10	2.65	4.72	11.14	5.41	11.01	26.16	34.76	30.92	8.40	4.14	-1.14	-.54
11	2.45	4.94	12.58	5.55	10.09	26.59	35.38	27.60	8.38	3.91	-1.38	-.79
12	2.20	5.13	13.79	6.49	9.73	26.89	36.03	25.46	8.28	4.00	-1.54	-.77
13	2.03	5.38	14.29	7.93	10.08	27.12	36.71	23.71	8.19	4.60	-1.65	-.91
14	2.00	6.26	14.33	10.37	10.83	27.27	37.53	22.30	8.47	5.76	-1.68	-1.13
15	2.05	7.40	14.07	13.72	11.86	27.47	37.84	21.11	9.14	6.49	-1.69	-1.22
16	1.94	8.70	13.63	17.11	12.78	27.70	38.38	20.03	9.28	6.64	-1.80	-1.14
17	1.77	9.88	13.20	19.75	13.72	27.82	38.83	19.03	8.88	6.24	-1.82	-1.02
18	1.67	10.98	12.91	21.80	14.68	27.83	39.23	18.11	8.35	5.33	-1.72	-1.08
19	1.65	11.99	12.81	23.27	15.39	27.72	39.67	17.23	7.99	4.66	-1.76	-1.31
20	1.68	13.11	12.91	24.02	16.16	27.55	40.03	16.26	7.68	3.95	-2.01	-1.60
21	1.69	14.14	13.15	24.58	16.62	27.17	40.35	15.21	7.33	3.33	-2.29	-1.85
22	1.63	14.79	13.49	25.06	16.66	26.87	40.87	14.38	6.96	2.67	-2.43	-2.03
23	1.60	15.19	13.92	25.37	16.38	26.25	40.93	13.59	6.64	2.11	-2.42	-2.09
24	1.70	15.57	14.15	25.40	15.84	26.03	41.23	13.21	6.29	1.76	-2.53	-1.35
25	1.65	15.85	14.52	25.18	15.22	25.97	41.47	12.93	5.89	1.59	-2.58	-1.77
26	1.90	15.96	14.88	24.63	14.64	26.16	41.70	12.73	5.48	1.55	-2.59	-1.60
27	2.60	15.95	15.22	23.79	14.24	26.69	41.98	12.48	5.12	1.50	-2.87	-1.41
28	3.36	15.75	15.49	22.97	14.10	27.23	42.35	12.15	4.98	1.73	-3.17	-1.06
29	3.74	15.24	15.54	21.49	14.32	27.94	42.44	11.87	4.76	1.74	-3.40	-.49
30	3.79	14.45	15.25	20.35	15.28	28.62	42.52	11.61	4.32	1.50	-3.48	-.24
31	3.85	-	14.81	19.21	-	29.27	-	11.32	-	1.20	-3.50	-

Discharge, in thousands of second-feet, of Mississippi River near Vicksburg, Miss., water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	180	175	368	405	484	424	828	1,250	323	203	159	101
2	175	180	340	394	472	480	850	1,240	315	200	156	101
3	168	183	315	368	463	537	866	1,210	306	196	152	105
4	162	185	290	340	458	572	879	1,170	298	198	147	109
5	159	189	274	312	442	616	896	1,100	292	201	145	112
6	159	191	274	288	421	646	916	1,030	284	206	149	114
7	160	191	252	265	398	672	935	951	278	206	145	121
8	159	189	300	246	373	695	951	873	274	206	140	123
9	156	189	315	231	348	715	977	798	274	206	135	135
10	154	191	329	224	325	728	1,000	728	274	201	131	138
11	152	194	357	230	308	736	1,020	672	274	200	128	138
12	147	200	389	248	304	744	1,040	624	272	203	125	138
13	146	205	405	280	317	749	1,070	589	272	213	122	135
14	147	226	393	336	358	754	1,060	564	280	235	122	136
15	149	244	391	417	357	757	1,110	542	294	248	122	131
16	146	267	380	506	378	757	1,140	518	290	250	121	138
17	143	290	378	572	398	754	1,160	499	282	240	121	133
18	140	312	375	624	417	747	1,170	477	271	224	122	133
19	138	338	371	682	433	744	1,180	456	263	212	122	129
20	139	356	365	679	449	736	1,190	433	257	201	119	126
21	140	394	373	692	460	725	1,210	410	252	195	115	124
22	140	410	382	702	451	705	1,230	391	244	185	114	122
23	140	419	391	705	442	689	1,240	378	240	175	114	124
24	143	430	400	692	426	682	1,250	371	233	170	116	125
25	143	437	412	692	414	682	1,250	364	226	168	115	128
26	146	437	424	672	403	695	1,260	359	219	168	112	129
27	157	430	430	644	394	715	1,270	355	213	169	108	132
28	169	424	433	604	391	741	1,270	348	210	170	105	136
29	174	410	428	572	396	762	1,270	342	205	170	101	146
30	174	394	421	540	-	787	1,260	336	205	168	103	159
31	174	-	414	508	-	807	-	329	-	163	101	-

Month	Total thousands of second-feet of second-1901-1934	Discharge in thousands of second-feet			Run-off in thousands of acre-feet
		Maximum	Minimum	Mean	
October.....	4,779	180	138	154.2	9,479
November.....	8,690	437	175	289.7	17,240
December.....	11,405	433	274	367.9	22,620
Calendar year 1935.....	246,966	1,410	138	676.6	489,800
January.....	14,650	705	224	472.6	29,060
February.....	11,650	484	304	402.1	23,130
March.....	21,551	807	424	596.2	42,750
April.....	32,776	1,270	888	1,093	65,010
May.....	19,702	1,250	329	635.5	39,080
June.....	7,921	323	205	264.0	15,710
July.....	6,147	250	163	198.3	12,190
August.....	3,886	159	101	125.4	7,708
September.....	3,616	159	101	127.2	7,569
Water year 1935-36.....	146,983	1,270	101	401.6	291,600

Mississippi River near New Orleans, La.

Location.- Water-stage recorder, lat. $29^{\circ}57'$, long. $90^{\circ}10'$, 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. Zero of gage is at mean Gulf level.

Drainage area.- 1,243,600 square miles (authority, Mississippi River Commission).

Records available.- November 1934 to September 1936 (gage heights only). Daily gage heights from U. S. Engineer Department gage, $1\frac{1}{2}$ 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, $1\frac{1}{2}$ 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 year, 14.8 feet May 3, 4; minimum, 0.59 foot July 29.

1934-36: Maximum gage height, 17.43 feet July 5, 1935; minimum, that of July 29, 1936.

Maximum observed gage height, 21.3 feet Apr. 25, 1922; minimum, -1.6 feet Dec. 27, 1872. Both maximum and minimum observations were made $1\frac{1}{2}$ 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 for period of missing record, Feb. 6 to Mar. 12, and those for April to July, which are good, and those for period of missing record, Oct. 1-25, Dec. 21 to Jan. 3, which are fair and were computed from graph based on once-daily readings. Tide tables were used as a guide to construct gage-height graph for period Feb. 6 to Mar. 12.

Gage height, in feet, of Mississippi River near New Orleans, La., water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.7	1.62	3.03	3.9	5.66	3.3	9.05	14.46	3.22	1.61	1.82	1.43
2	2.1	1.48	2.89	3.8	5.40	3.3	9.32	14.62	3.07	1.70	1.51	1.50
3	2.3	1.65	2.73	3.55	5.30	3.4	9.44	14.74	2.98	1.58	1.48	1.57
4	2.4	1.74	2.36	3.23	5.44	3.9	9.84	14.73	2.91	1.48	1.29	1.42
5	2.6	1.87	2.09	3.03	5.52	4.7	10.30	14.64	2.80	1.55	1.26	1.34
6	2.5	1.84	2.16	2.97	5.8	5.3	10.70	14.56	2.77	1.52	1.38	1.54
7	2.5	2.19	2.29	2.59	5.4	5.7	10.79	14.45	2.71	1.57	1.68	1.51
8	2.3	1.95	2.47	2.36	4.8	6.2	11.10	14.18	2.60	1.59	1.68	1.56
9	2.1	1.79	2.38	2.16	4.3	6.7	11.40	13.90	2.51	1.68	1.60	1.47
10	1.9	2.07	2.50	2.05	3.9	6.9	11.49	13.37	2.39	1.67	1.41	1.43
11	1.4	1.94	2.64	2.04	3.4	7.1	11.67	12.87	2.52	1.65	1.49	1.46
12	1.5	1.91	2.88	1.86	3.2	7.2	11.87	12.24	2.58	1.65	1.30	1.50
13	1.6	1.62	3.07	1.77	3.4	7.44	12.12	11.51	2.69	1.68	1.32	1.58
14	1.8	1.57	3.16	1.85	3.2	7.79	12.32	10.71	2.92	1.78	1.42	1.58
15	2.1	1.56	3.41	2.04	2.8	8.06	12.58	9.81	2.77	1.71	1.42	1.68
16	2.4	1.43	3.53	2.29	2.7	8.22	12.78	9.18	2.71	1.86	1.61	1.78
17	2.5	1.55	3.50	2.59	2.7	8.12	13.08	8.68	2.43	1.90	1.52	1.85
18	2.3	1.62	3.45	3.93	2.9	8.10	13.27	8.17	2.48	1.87	1.51	1.60
19	2.1	1.72	3.18	4.45	3.2	8.13	13.30	7.59	2.58	1.81	1.47	1.56
20	1.9	1.99	2.92	5.10	3.5	8.17	13.32	7.08	2.51	1.60	1.48	1.36
21	1.7	2.19	2.7	5.74	3.8	8.17	13.36	6.51	2.61	1.54	1.54	1.44
22	1.6	2.46	2.6	6.24	4.0	8.31	13.58	6.11	2.77	1.40	1.52	1.47
23	1.6	2.59	2.6	6.67	3.9	8.47	13.75	5.85	2.57	1.48	1.45	1.59
24	1.6	2.77	2.5	6.76	4.0	8.41	13.92	5.60	2.28	1.47	1.63	1.56
25	1.9	2.86	2.5	6.95	4.3	8.14	13.98	5.30	2.14	1.37	1.70	1.61
26	1.57	2.93	2.7	7.02	4.1	8.06	14.00	4.90	2.16	1.31	1.55	1.61
27	1.68	3.42	2.9	6.90	3.8	8.06	14.08	4.40	1.91	1.86	1.66	1.75
28	1.80	3.57	3.5	6.96	3.9	8.14	14.25	4.17	1.65	1.36	1.60	1.63
29	1.68	3.43	3.7	6.68	3.6	8.16	14.32	4.03	1.53	1.27	1.59	1.66
30	1.64	3.14	3.6	6.40	-	8.36	14.35	3.63	1.57	1.30	1.47	1.58
31	1.61	-	3.8	6.00	-	8.56	-	3.36	-	1.69	1.43	-

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 and San Francisco Railroad bridge and 2½ miles north of Steelville. Zero of gage is 680.45 feet above mean sea level (general adjustment of 1929).

Drainage area.- 830 square miles.

Records available.- December 1922 to September 1936.

Average discharge.- 13 years (1923-36), 586 second-feet.

Extremes.- Maximum discharge during year, 8,160 second-feet Nov. 11 (gage height, 9.96 feet); minimum, 93 second-feet Aug. 31 (gage height, 0.53 foot).
1922-36: Maximum discharge, 47,800 second-feet June 26, 1935 (gage height, 23.39 feet); minimum, 74 second-feet July 22, 1934 (gage height, 0.35 foot).
Maximum stage known, 26.5 feet Aug. 20, 1915 (discharge, about 60,000 second-feet).

Remarks.- Records good except those for Oct. 1-16, Nov. 29 to Dec. 11, Jan. 17 to Feb. 19, Apr. 4-6, May 14, 15, which are poor and were computed on basis of seven gage readings, one discharge measurement, and records for station at Eureka.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	190	402	380	240	165	363	272	184	117	115	97	115
2	185	591	370	240	171	344	272	198	117	119	97	1,510
3	180	985	360	255	170	324	288	212	119	125	97	793
4	180	708	360	255	160	306	300	225	119	125	97	402
5	175	1,480	360	255	160	288	400	212	128	121	97	272
6	175	1,190	365	255	155	272	800	198	125	117	99	212
7	175	793	402	240	155	255	764	198	123	113	101	171
8	160	600	600	240	155	255	575	184	1,040	109	123	154
9	185	552	630	240	155	240	484	184	306	107	134	146
10	198	3,400	540	240	165	225	443	171	212	111	134	139
11	185	5,370	480	240	625	225	422	171	184	109	123	134
12	180	1,920	443	240	1,100	225	382	171	184	107	119	130
13	175	1,260	422	225	950	225	344	166	168	105	115	128
14	175	985	382	225	575	212	324	163	161	107	111	123
15	175	793	363	225	400	212	306	160	154	107	107	121
16	175	678	344	225	288	212	272	156	151	113	105	123
17	171	600	324	225	250	198	255	151	139	119	105	125
18	184	528	324	220	280	198	240	156	130	111	105	125
19	198	506	306	215	220	198	240	156	123	121	103	125
20	212	464	288	210	212	198	225	154	117	128	99	125
21	225	443	272	200	212	198	225	148	115	123	99	123
22	240	402	272	190	212	198	225	142	115	117	97	123
23	225	402	272	180	212	184	212	141	113	115	95	125
24	225	365	272	175	225	198	212	139	111	115	99	212
25	225	344	255	170	240	212	198	139	109	111	99	212
26	225	344	255	165	240	528	198	134	107	111	97	164
27	240	382	240	165	443	422	198	132	107	103	97	168
28	570	464	240	161	443	344	198	125	105	101	97	255
29	1,260	500	240	160	402	324	198	123	105	101	97	464
30	793	430	240	160	-	306	184	119	107	99	97	306
31	528	-	240	160	-	288	-	117	-	97	97	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acres-feet
October.....	8,409	1,260	171	271	0.327	0.38	16,680
November.....	27,877	5,370	344	929	1.12	1.25	55,290
December.....	10,841	630	240	350	.422	.48	21,500
Calendar year 1935.....	372,068	26,300	166	1,019	1.23	16.68	738,000
January.....	6,596	255	160	213	.257	.30	13,080
February.....	9,090	1,100	155	313	.377	.41	18,030
March.....	8,177	528	184	264	.318	.37	16,220
April.....	9,656	800	184	322	.368	.43	19,150
May.....	5,029	625	117	162	.195	.22	9,370
June.....	5,011	1,040	105	167	.201	.22	9,940
July.....	3,482	128	97	112	.135	.16	6,910
August.....	3,239	134	95	104	.125	.14	6,420
September.....	7,123	1,510	115	237	.286	.32	14,130
Water year 1935-36.....	104,530	5,370	95	286	.345	4.69	207,300

MERAMEC RIVER BASIN

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 (general adjustment of 1929).

Drainage area.- 3,800 square miles.

Records available.- August 1903 to July 1906, October 1921 to September 1936.

Average discharge.- 15 years (1921-36), 2,942 second-feet.

Extremes.- Maximum discharge observed during year, 17,400 second-feet Nov. 12 (gage height, 13.22 feet); minimum, 196 second-feet Aug. 27, 31, Sept. 1 (gage height, 0.34 foot).

1921-36: Maximum discharge observed, 64,000 second-feet Apr. 3, 1927, from flood-mark; maximum gage height, 30.89 feet Mar. 14, 1935; minimum discharge, that of Aug. 27, 31, Sept. 1, 1936; minimum gage height, 0.33 foot Oct. 2, 3, 1932, former site and datum.

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

Remarks.- Records good except those for periods of ice effect, Dec. 27 to Jan. 4, Jan. 24 to Feb. 21, which were computed on basis of three discharge measurements, gage heights, and weather records, and those for days of rapidly changing stage, which are poor. Gage read twice daily.

Rating table, water year 1935-36 (gage height, in feet, and discharge, in second-feet) (Shifting-control method used Apr. 7 to May 8)

Oct. 1 to Nov. 12				Nov. 13 to Sept. 30			
1.2	620	5.0	4,150	0.3	179	3.0	2,220
1.4	760	6.5	6,350	.5	267	4.0	3,290
1.6	910	8.0	8,600	.8	423	5.0	4,540
2.0	1,230	9.5	10,900	1.2	673	6.5	6,750
2.5	1,650	11.0	13,400	1.6	965	8.0	9,100
3.0	2,080	13.0	17,000	2.0	1,290	10.0	12,400
4.0	2,980			2.5	1,730		

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,050	2,450	1,920	1,000	673	2,850	1,290	1,040	512	363	235	196
2	810	2,080	1,640	1,000	673	2,420	1,290	1,040	481	352	250	277
3	635	2,610	1,550	1,000	673	2,120	1,290	1,200	481	347	249	262
4	798	4,570	1,460	1,040	673	2,020	1,290	1,200	481	337	239	423
5	720	5,750	1,360	1,120	673	1,820	3,070	1,290	606	358	259	1,000
6	690	8,300	1,200	1,120	673	1,640	10,700	1,290	640	358	249	652
7	720	8,000	1,550	1,200	673	1,550	10,900	1,200	606	368	244	640
8	720	4,850	2,020	1,290	673	1,460	8,940	1,120	574	347	249	574
9	720	5,000	2,220	1,200	673	1,380	4,960	965	542	342	287	542
10	720	6,200	2,320	1,200	708	1,290	4,410	927	779	347	277	542
11	690	12,200	2,320	1,290	708	1,290	4,280	889	852	337	301	512
12	690	17,000	2,220	1,200	815	1,290	3,770	889	840	337	316	481
13	690	12,400	2,020	1,120	1,730	1,200	3,410	652	606	326	311	452
14	690	6,150	1,820	1,120	3,530	1,120	2,950	640	515	316	311	452
15	690	5,100	1,730	1,120	4,260	1,120	2,740	779	542	306	296	423
16	690	3,890	1,640	1,040	3,890	1,120	2,420	743	512	296	326	396
17	690	3,290	1,550	1,000	3,290	1,120	2,220	743	481	287	337	396
18	690	2,960	1,460	1,000	2,530	1,040	2,020	708	452	306	282	358
19	690	2,640	1,360	1,000	1,640	1,040	1,820	708	423	306	272	338
20	690	2,420	1,290	965	1,550	1,040	1,730	673	423	342	258	352
21	720	2,220	1,290	927	1,820	1,040	1,640	640	423	326	249	358
22	796	2,020	1,200	889	2,420	1,040	1,460	673	423	306	230	368
23	950	1,820	1,120	779	2,530	1,000	1,460	640	396	321	230	423
24	910	1,640	1,120	743	2,850	2,120	1,380	606	396	306	213	396
25	892	1,640	1,120	743	2,960	2,020	1,290	606	396	301	213	396
26	892	1,550	1,120	708	2,960	1,820	1,200	574	368	296	208	396
27	950	1,640	1,040	708	3,180	1,820	1,200	574	368	287	196	512
28	1,990	1,550	1,000	708	3,290	1,730	1,200	542	358	287	244	640
29	2,700	1,550	1,000	673	3,770	1,640	1,120	542	347	258	221	852
30	2,880	1,730	1,000	673	-	1,460	1,120	512	342	244	204	743
31	2,980	-	1,000	673	-	1,380	-	512	-	239	196	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acres-feet
October.....	31,425	2,980	690	1,014	0.267	0.31	62,350
November.....	135,200	17,000	1,550	4,507	1.19	1.33	268,200
December.....	46,700	2,320	1,000	1,506	.396	.46	92,630
Calendar year 1935.....	1,620,173	60,600	590	4,987	1.31	17.83	3,610,000
January.....	30,249	1,290	673	976	.257	.30	60,000
February.....	56,508	4,280	673	1,949	.513	.55	112,100
March.....	47,000	2,650	1,000	1,516	.389	.46	93,280
April.....	88,580	10,900	1,120	2,953	.777	.87	175,700
May.....	25,492	1,290	512	822	.216	.25	50,560
June.....	15,090	852	342	503	.132	.16	29,930
July.....	9,949	368	239	319	.084	.10	19,640
August.....	7,920	337	196	255	.067	.08	15,710
September.....	14,546	1,000	196	485	.128	.14	28,850
Water year 1935-36.....	508,559	17,000	196	1,390	.366	5.00	1,009,000

Bourbeuse River at Union, Mo.

Location.- Wire-weight gage, lat. 38°26'45", long. 90°59'30", in SW¼ sec. 28, T. 43 N., R. 1 W., at bridge on U. S. Highway 50, 800 feet above Flat Creek and half a mile east of Union. Zero of gage is 491.95 feet above mean sea level (general adjustment of 1929).

Drainage area.- 767 square miles.

Records available.- June 1921 to September 1936.

Average discharge.- 15 years, 643 second-feet.

Extremes.- Maximum discharge observed during year, 6,290 second-feet Apr. 7 (gage height, 8.90 feet); minimum, 14 second-feet Aug. 31, Sept. 1 (gage height, 0.22 foot).

1921-36: Maximum discharge, 22,500 second-feet Apr. 3, 1927 (gage height, 19.10 feet); minimum discharge and gage height, those of Aug. 31, Sept. 1, 1936.

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

Remarks.- Records good except those for days of rapidly changing stage and those for period of ice effect, Jan. 24 to Feb. 25, which are poor and were computed on basis of two discharge measurements, gage heights, and weather records. Gage read once a day below 8 feet and twice above. Gage-height records collected in cooperation with the U. S. Weather Bureau.

Rating tables, water year 1935-36 except period of ice effect (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used May 19 to July 18, Aug. 1 to Sept. 30)

Oct. 1 to Nov. 4

Nov. 5 to Sept. 30

0.6	40	0.2	14	3.0	835
.8	64	.4	27	4.0	1,520
1.0	95	.6	47	5.0	2,290
1.3	153	.8	59	6.0	3,250
1.6	222	1.2	148	7.0	4,250
2.0	332	1.5	221	8.0	5,300
		2.0	400	9.0	6,400
		2.5	625		

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	113	332	490	96	60	725	138	117	45	28	17	14
2	109	235	360	103	60	535	138	133	43	28	16	26
3	95	222	285	106	54	445	125	135	42	28	16	26
4	89	235	250	106	54	380	125	169	38	26	18	25
5	79	4,150	221	114	54	320	320	283	36	26	19	23
6	72	2,200	208	117	54	283	1,940	250	36	25	20	20
7	64	2,580	283	117	47	266	6,180	208	34	24	19	19
8	59	945	250	121	47	236	2,110	266	34	23	24	103
9	56	625	250	125	47	208	1,060	146	34	24	25	32
10	54	1,190	360	129	47	194	725	133	37	26	30	53
11	51	3,450	468	125	47	182	580	125	35	25	26	83
12	50	3,750	380	125	47	169	580	112	31	24	21	77
13	47	1,520	320	125	182	158	512	103	30	23	22	68
14	49	1,000	266	121	169	158	422	96	30	23	21	52
15	47	675	250	121	250	158	360	89	30	24	19	40
16	47	535	221	119	775	158	320	86	30	26	30	34
17	44	445	208	114	490	158	266	82	37	28	37	29
18	51	360	194	110	266	158	236	83	33	26	28	28
19	49	320	182	106	208	169	208	78	30	25	32	26
20	48	283	169	103	182	169	194	73	31	26	26	27
21	64	266	169	99	158	146	169	67	37	24	22	27
22	49	250	146	86	146	146	158	64	32	24	19	26
23	54	221	146	89	146	146	146	61	34	24	18	24
24	59	208	138	82	158	169	142	59	34	23	17	25
25	54	194	129	74	236	169	133	59	32	21	16	23
26	82	182	103	67	535	169	129	59	31	21	16	21
27	85	194	103	67	775	169	129	60	29	19	16	27
28	275	182	106	67	1,900	169	129	54	29	20	17	32
29	155	221	103	60	1,320	194	125	51	29	20	16	67
30	121	675	103	60	-	182	117	50	27	19	15	80
31	289	-	96	60	-	146	-	47	-	18	14	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acres-feet
October.....	2,558	289	44	82.5	0.108	0.12	5,070
November.....	27,645	4,150	132	922	1.20	1.34	54,830
December.....	6,955	490	96	224	.292	.34	13,800
Calendar year 1935.....	388,338	14,200	41	1,064	1.39	18.83	770,300
January.....	3,124	129	60	101	.132	.15	6,200
February.....	8,414	1,800	47	230	.378	.41	16,680
March.....	7,034	725	146	227	.296	.34	13,950
April.....	17,916	6,180	117	597	.778	.87	35,640
May.....	3,598	283	47	110	.143	.16	6,740
June.....	1,010	45	27	33.7	.044	.05	2,000
July.....	741	28	18	23.9	.031	.04	1,470
August.....	652	37	14	21.0	.027	.03	1,290
September.....	1,257	103	14	41.9	.055	.06	2,490
Water year 1935-36.....	80,704	6,180	14	221	.288	3.91	160,100

MERAMEC RIVER BASIN

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 (general adjustment of 1929).

Drainage area.- 892 square miles.

Records available.- May 1922 to September 1936.

Average discharge.- 14 years, 777 second-feet.

Extremes.- Maximum discharge observed during year, 9,600 second-feet Nov. 11 (gage height, 15.97 feet); minimum, 25 second-feet Aug. 30 (gage height 1.54 feet).
1922-36: Maximum discharge, 28,600 second-feet Mar. 12, 1935 (gage height, 24.65 feet); minimum discharge, that of Aug. 30, 1936; minimum gage height, 1.50 feet Aug. 14, 1934.
Maximum stage known, 30.2 feet in August 1915, from floodmarks (discharge, about 80,000 second-feet).

Remarks.- Records fair except those for period of ice effect, Jan. 25 to Feb. 23, which are poor and were computed on basis of one discharge measurement, gage heights, and weather records. Gage read twice daily. Low flow slightly regulated by gristmills above.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	250	466	359	257	185	632	276	257	91	74	36	27
2	217	391	337	276	185	571	316	296	97	74	36	31
3	202	1,840	337	296	185	541	316	382	116	74	34	38
4	188	720	316	337	185	484	296	359	316	80	34	54
5	175	950	296	337	185	451	2,650	316	185	80	33	91
6	175	5,950	296	359	185	406	3,460	276	144	72	34	85
7	188	1,960	571	382	185	406	1,530	238	130	66	34	80
8	188	1,120	632	512	185	337	945	229	123	64	37	80
9	188	870	794	431	176	337	829	211	116	64	43	80
10	188	3,210	695	484	176	316	1,080	202	116	63	46	74
11	188	9,160	571	457	176	316	1,280	194	110	58	50	70
12	175	5,550	484	431	176	296	990	202	116	56	53	63
13	175	2,200	457	406	185	296	829	194	110	51	51	70
14	175	1,480	431	382	220	296	727	185	104	50	53	63
15	188	1,080	406	359	316	296	632	185	97	45	52	58
16	188	905	406	337	632	276	541	194	97	45	54	61
17	188	794	382	316	601	276	457	176	91	53	50	67
18	188	695	337	296	512	257	406	185	91	63	45	62
19	188	632	337	316	406	238	431	160	91	58	40	65
20	202	571	316	296	382	257	359	160	91	58	34	61
21	217	541	296	276	359	257	337	144	80	52	35	71
22	285	484	276	257	382	276	316	137	80	50	34	85
23	285	457	296	220	484	296	296	123	73	50	35	91
24	250	406	296	202	727	695	296	123	74	50	35	91
25	250	406	276	194	990	541	276	123	70	50	35	91
26	267	406	257	194	829	431	276	123	72	48	53	144
27	267	406	229	185	794	359	257	123	74	43	63	130
28	616	406	238	185	829	337	276	116	74	41	48	257
29	790	406	257	185	727	316	257	110	68	39	43	257
30	790	382	238	185	-	296	238	104	66	38	25	185
31	584	-	257	185	-	276	-	104	-	38	27	-
Month				Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off			
									Inches	Acre-feet		
October.....				8,415	790	175	271	0.304	0.35	16,690		
November.....				44,844	9,160	382	1,495	1.68	1.87	88,950		
December.....				11,676	794	229	377	1.423	.49	23,160		
Calendar year 1935.....				498,082	23,000	138	1,365	1.53	20.77	987,900		
January.....				9,535	512	185	308	.345	.40	18,910		
February.....				11,559	990	176	399	.447	.48	22,950		
March.....				11,345	695	238	366	.410	.47	22,500		
April.....				21,175	3,460	238	706	.791	.88	42,000		
May.....				5,931	382	104	191	.214	.25	11,760		
June.....				3,163	316	66	105	.118	.13	6,270		
July.....				1,747	80	38	56.4	.063	.07	3,470		
August.....				1,282	63	25	41.4	.046	.05	2,540		
September.....				2,682	257	27	89.4	.100	.11	5,320		
Water year 1935-36.....				133,354	9,160	25	364	.408	5.55	264,500		

Castor River at Zalma, Mo.

Location.- Wire-weight gage, lat. $37^{\circ}8'45''$, long. $90^{\circ}4'30''$, in SE $\frac{1}{4}$ 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 (general adjustment of 1929).

Drainage area.- 395 square miles.

Records available.- September 1921 to September 1936.

Average discharge.- 15 years, 504 second-feet.

Extremes.- Maximum discharge observed during year, 1,610 second-feet Nov. 16 (gage height, 9.64 feet); minimum, 16 second-feet Aug. 31 (gage height, 0.81 foot).
1921-36: Maximum discharge, 40,000 second-feet Mar. 11, 1935 (gage height, 28.20 feet); minimum discharge and gage height, those of Aug. 31, 1936.

Remarks.- Records good. Corrected for ice effect Jan. 27, 29, 30, Feb. 4, 5, 9. Gage read once daily.

Rating table, water year 1935-36 except periods of ice effect (gage height, in feet, and discharge in second-feet)
(Shifting-control method used May 27 to Sept. 30)

0.9	16	4.0	541
1.1	24	5.0	513
1.4	38	6.0	704
1.8	64	7.0	940
2.2	94	8.0	1,140
2.6	136	9.0	1,450
3.0	189	10.0	1,720
3.5	262		

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	82	168	189	130	98	513	203	168	60	41	22	21
2	74	168	189	130	98	459	247	154	57	47	24	50
3	71	154	189	142	98	407	247	293	57	44	22	161
4	68	217	175	148	98	373	262	293	54	47	23	277
5	74	175	161	142	98	341	277	136	54	44	25	136
6	74	373	175	154	98	309	1,230	124	54	44	24	103
7	71	357	309	142	98	277	1,060	124	54	41	23	82
8	71	325	793	148	98	247	684	108	54	41	25	74
9	74	293	747	136	94	309	606	98	50	36	25	68
10	74	424	625	136	90	513	1,160	103	50	38	27	64
11	78	965	531	136	86	459	1,020	103	50	36	27	66
12	74	1,610	477	136	90	407	704	94	50	33	25	64
13	74	1,480	424	136	136	373	644	98	47	32	25	57
14	74	687	390	136	247	341	568	108	41	32	24	54
15	74	495	357	130	232	325	495	103	41	28	22	50
16	74	441	325	130	189	309	441	103	38	30	24	47
17	71	390	293	130	175	293	373	103	36	30	24	47
18	71	357	277	136	175	262	341	98	33	30	23	64
19	76	341	247	136	161	262	325	94	30	31	23	74
20	124	325	217	124	148	232	293	86	31	32	23	68
21	142	293	203	118	142	217	262	62	41	32	22	71
22	136	262	203	118	136	232	247	82	36	29	22	68
23	154	217	203	118	136	217	247	74	38	26	20	57
24	142	232	189	118	136	232	203	71	38	30	20	62
25	124	217	175	108	161	232	203	71	36	28	20	113
26	124	217	161	108	175	217	189	68	38	27	20	106
27	130	217	154	103	664	217	189	71	38	25	20	108
28	161	232	136	98	747	217	168	68	36	26	21	90
29	189	217	142	98	606	203	175	64	36	25	19	82
30	189	203	175	98	-	203	168	57	36	24	18	78
31	189	-	142	98	-	203	-	57	-	22	16	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acres-feet
October.....	3,205	189	68	103	0.261	0.50	6,360
November.....	11,952	1,610	154	398	1.01	1.13	23,710
December.....	8,973	793	136	289	.732	.84	17,800
Calendar year 1935.....	265,540	20,800	57	728	1.84	25.00	526,700
January.....	3,921	154	98	126	.319	.37	7,780
February.....	5,510	747	86	190	.481	.52	10,930
March.....	9,401	513	203	303	.767	.98	16,650
April.....	13,291	1,290	168	443	1.12	1.25	26,360
May.....	3,356	293	57	108	.273	.31	6,660
June.....	1,316	60	30	43.9	.111	.12	2,610
July.....	1,035	47	22	33.4	.085	.10	2,050
August.....	698	27	16	22.5	.057	.07	1,350
September.....	2,486	277	21	82.9	.210	.23	4,930
Water year 1935-36.....	65,144	1,610	16	178	.451	6.12	129,200

South Fork of Obion River near Greenfield, Tenn.

Location.- Staff gage, lat. 36°7', long. 88°49', at bridge on State Highway 43 2½ miles south of Greenfield, Weakley County, and 10 miles above confluence with Middle Fork.

Drainage area.- 431 square miles.

Records available.- July 1929 to September 1936.

Extremes.- Maximum discharge observed during year, 7,200 second-feet Mar. 28, 29 (gage height, 14.2 feet); minimum, 94 second-feet Aug. 28 to Sept. 1 (gage height, 2.24 feet).

1929-36: Maximum discharge, 21,100 second-feet Jan. 21, 1935 (gage height, 17.1 feet, from floodmarks); minimum discharge, that of Aug. 28 to Sept. 1 1936; minimum gage height, 1.5 feet several days in August and September 1930.

Remarks.- Records good. Discharge for periods Oct. 31 to Nov. 3, Mar. 17-19, computed on basis of records for North Fork of Obion River near Union City. Gage read twice daily.

Rating tables, water year 1935-36 (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Dec. 8, Mar. 6 to Sept. 30

Dec. 9 to Mar. 5

2.4	106	5.0	464	11.0	1,590	2.0	85	3.5	252
2.6	124	6.0	623	12.0	2,170	2.2	101	4.0	320
2.8	145	7.0	733	13.0	3,400	2.4	119	5.0	406
3.0	170	8.0	943	14.0	6,400	2.6	140	6.0	623
3.5	239	9.0	1,113	14.5	8,460	2.8	163	7.0	783
4.0	314	10.0	1,290			3.0	197	8.0	943

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	105	114	124	151	151	200	495	145	97	97	97	94
2	105	114	124	163	151	200	344	145	97	225	105	170
3	105	114	124	239	175	200	269	134	97	2,030	105	404
4	105	239	124	167	591	200	228	124	164	1,250	105	119
5	105	359	124	187	239	480	299	114	110	751	97	105
6	105	254	129	847	187	284	434	114	97	269	101	97
7	105	124	134	943	175	325	314	114	97	145	97	97
8	105	124	464	895	187	197	225	114	97	134	97	97
9	105	114	306	591	265	183	269	114	97	145	101	197
10	105	329	200	292	187	170	434	110	97	110	97	225
11	105	254	167	239	163	184	284	114	97	105	97	114
12	105	284	175	213	187	284	254	97	105	97	97	97
13	105	359	161	200	559	161	254	197	97	105	97	97
14	114	254	161	200	435	161	225	129	97	105	97	97
15	124	239	161	187	348	254	197	114	97	105	97	97
16	105	269	161	187	239	2,440	183	114	97	105	97	97
17	105	124	161	175	187	1,500	157	114	97	105	97	97
18	105	124	161	175	187	1,740	157	124	97	105	97	97
19	105	124	161	175	175	2,000	161	124	97	105	97	97
20	105	134	161	163	175	2,800	145	114	97	105	97	97
21	114	129	161	163	187	2,250	145	114	97	105	97	97
22	124	124	161	175	239	1,040	145	105	97	145	97	97
23	284	124	161	163	265	404	157	105	97	105	97	97
24	124	124	161	161	320	943	161	105	97	105	97	140
25	114	124	161	161	334	1,190	145	105	97	101	97	110
26	114	124	161	161	292	1,790	145	101	97	97	97	97
27	114	124	161	161	320	2,670	145	97	97	97	97	97
28	170	124	161	140	226	5,600	145	97	97	97	94	97
29	225	124	161	161	200	6,800	145	97	97	170	94	225
30	284	124	161	161	-	4,860	145	97	97	197	94	225
31	170	-	161	161	-	1,610	-	97	-	101	94	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	3,905	254	105	126	0.292	0.34
November.....	5,265	359	114	176	.408	.46
December.....	5,084	464	124	164	.381	.44
Calendar year 1935.....	238,157	20,500	96	652	1.61	20.57
January.....	8,107	943	140	262	.608	.70
February.....	7,372	591	161	254	.589	.64
March.....	41,743	6,800	161	1,547	3.13	3.61
April.....	6,613	495	145	227	.527	.59
May.....	3,746	254	97	121	.281	.32
June.....	2,990	164	97	93.7	.231	.25
July.....	7,526	2,030	97	243	.564	.65
August.....	3,027	105	94	97.6	.226	.26
September.....	3,874	404	94	129	.299	.33
Water year 1935-36.....	99,452	6,800	94	272	.631	6.59

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 1936.

Extremes.- Maximum discharge observed during year, 6,250 second-feet Apr. 1 (gage height, 14.10 feet); minimum, 232 second-feet Sept. 1 (gage height, -0.04 foot).
1929-36: Maximum discharge observed, 47,000 second-feet Jan. 11, 1930; maximum gage height observed, 21.96 feet Jan. 23, 1935; minimum gage height and discharge, those of Sept. 1, 1936.

Remarks.- Records fair. Discharge for Apr. 4 to May 2 when stage-discharge relation was affected by backwater from Mississippi River and for Aug. 15-17 computed on basis of hydrographs of Obion River and its tributaries and stages of the Mississippi River. Gage read twice daily.

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

0	232	3.6	860	8.0	2,056
.4	300	4.0	927	8.5	2,146
.8	378	4.5	1,031	9.0	2,224
1.2	467	5.0	1,163	9.5	2,288
1.6	555	5.5	1,327	10.0	2,356
2.0	632	6.0	1,531	11.0	2,565
2.4	696	6.5	1,711	12.0	2,930
2.8	754	7.0	1,846	13.0	3,540
3.2	805	7.5	1,956	14.0	5,900

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	422	613	555	555	555	1,010	6,250	610	337	444	444	232
2	378	535	535	575	555	891	5,900	600	337	683	337	535
3	378	490	513	667	594	792	4,600	575	337	1,010	318	1,360
4	378	467	513	727	650	767	3,300	555	378	1,360	300	1,610
5	357	513	490	754	860	754	2,500	513	378	1,960	300	1,060
6	357	632	513	831	860	780	2,200	467	378	2,130	300	780
7	357	632	513	1,560	767	831	2,200	467	376	2,180	300	594
8	357	555	683	1,850	713	818	2,300	444	357	2,060	318	422
9	357	535	1,060	2,070	696	767	2,400	444	337	1,450	300	357
10	378	555	1,220	2,130	727	727	2,500	513	357	818	283	337
11	378	741	1,160	2,130	754	683	2,400	490	337	613	283	444
12	378	805	947	2,020	754	650	1,700	535	318	490	300	513
13	378	860	780	1,770	1,190	632	1,200	667	318	378	300	422
14	378	909	696	1,140	1,770	594	1,100	805	318	357	283	357
15	490	891	632	831	2,060	632	970	754	318	337	275	318
16	683	805	613	727	2,040	713	820	632	300	337	270	300
17	555	713	594	683	1,850	1,680	685	513	300	318	260	283
18	444	632	575	667	1,480	2,150	630	467	300	337	249	266
19	422	575	555	650	1,060	2,260	600	444	300	378	249	266
20	422	555	555	632	845	2,430	590	467	300	422	249	266
21	467	555	535	632	727	2,560	590	444	300	337	249	266
22	490	555	513	594	727	3,080	590	422	300	318	249	283
23	555	535	513	555	805	3,640	600	400	283	337	249	283
24	613	513	535	513	909	3,910	610	378	300	422	249	300
25	650	490	555	467	1,030	3,760	610	378	337	422	249	318
26	594	490	555	535	1,160	3,540	590	357	318	378	232	318
27	555	513	535	613	1,330	3,310	580	357	300	318	249	318
28	535	535	535	632	1,400	3,250	570	357	300	300	249	300
29	713	555	535	594	1,220	3,380	570	357	300	300	232	300
30	754	555	594	535	-	4,330	590	337	300	357	232	300
31	683	-	613	535	-	5,550	-	337	-	555	232	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	14,836	754	357	479	0.255	0.29
November.....	18,289	909	467	610	.324	.36
December.....	19,722	1,220	490	636	.338	.39
Calendar year 1935.....	1,092,149	45,900	357	2,992	1.59	21.61
January.....	28,974	2,130	467	935	.497	.57
February.....	30,100	2,060	555	1,038	.552	.60
March.....	60,871	5,550	594	1,964	1.04	1.20
April.....	50,745	6,250	570	1,692	.900	1.00
May.....	15,066	805	337	467	.259	.30
June.....	9,701	378	232	323	.172	.19
July.....	22,106	2,180	300	713	.379	.44
August.....	8,589	444	232	277	.147	.17
September.....	13,708	1,610	232	467	.243	.27
Water year 1935-36.....	292,727	6,250	232	800	.426	5.78

Rutherford Fork of Obion River near Bradford, Tenn.

Location.- Chain gage, lat. 36°4', long. 86°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 1936.

Extremes.- Maximum discharge observed during year, 5,800 second-feet Mar. 27 (gage height, 15.68 feet); minimum, 19 second-feet Aug. 20 to Sept. 1; minimum gage height, 1.21 feet Oct. 6, 18, and 19.
1929-36: Maximum discharge observed, 8,460 second-feet Jan. 21, 1935 (gage height, 19.12 feet); minimum, 13 second-feet several days during October 1931 and August 1934; minimum gage height, 0.83 foot June 22, 28, 1932.

Remarks.- Records good for period Oct. 1 to Mar. 28 and fair thereafter. Gage read twice daily.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	27	29	32	32	46	45	120	40	22	20	25	19
2	26	28	31	46	40	46	98	36	22	151	25	25
3	24	29	31	69	56	43	79	32	22	3,680	24	176
4	24	28	31	58	185	58	69	31	21	2,100	24	26
5	24	47	32	50	96	98	64	29	21	1,480	24	22
6	24	33	32	1,160	64	79	90	28	21	176	23	21
7	23	35	37	512	51	60	75	28	22	84	23	20
8	23	32	81	512	54	50	61	28	21	56	22	20
9	23	30	98	194	61	46	79	26	21	45	22	20
10	24	47	58	127	64	43	105	26	21	38	22	28
11	23	47	45	68	54	43	87	26	20	32	21	26
12	23	120	41	61	84	41	87	35	20	32	21	22
13	24	79	39	59	330	41	72	31	20	31	21	22
14	25	56	43	56	213	39	62	28	20	31	20	20
15	24	46	36	52	127	112	53	27	20	31	20	20
16	24	38	35	49	105	3,320	47	26	20	29	20	20
17	23	33	35	46	87	617	44	24	20	28	20	20
18	23	32	33	45	81	370	42	23	20	28	20	20
19	25	33	32	44	92	176	40	25	20	27	20	21
20	26	33	32	45	48	680	39	24	20	27	19	22
21	27	33	32	41	47	270	38	24	20	27	19	20
22	27	32	33	39	52	159	41	23	20	27	19	20
23	30	32	33	62	59	105	41	23	20	26	19	20
24	30	31	33	74	76	450	40	22	20	26	19	95
25	32	29	34	48	81	310	39	22	20	26	19	25
26	29	31	32	34	95	3,440	36	22	20	25	19	22
27	28	31	31	54	74	5,720	35	22	20	25	19	21
28	112	32	31	36	56	3,210	34	22	20	24	19	20
29	45	31	32	52	48	470	35	22	20	151	19	120
30	33	32	32	56	-	242	38	22	20	28	19	25
31	31	-	32	54	-	151	-	22	-	26	19	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	1,048	112	23	33.7	0.177	0.20
November.....	1,169	120	28	39.0	.205	.23
December.....	1,189	98	31	38.4	.202	.23
Calendar year 1935.....	105,770	8,460	20	290	1.53	20.71
January.....	3,855	1,160	32	124	.653	.75
February.....	2,508	350	40	86.5	.455	.49
March.....	20,534	5,720	39	662	3.49	4.01
April.....	1,790	120	34	59.7	.314	.35
May.....	819	40	22	26.4	.139	.16
June.....	614	22	20	20.5	.108	.12
July.....	8,537	3,680	20	275	1.45	1.67
August.....	646	26	19	20.8	.109	.13
September.....	978	176	19	32.6	.172	.19
Water year 1935-36.....	43,665	5,720	19	119	.626	8.53

North Fork of Obion River near Union City, Tenn.

Location.- Staff gage, lat. 36°24', long. 89°0', 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 1936.

Extremes.- Maximum discharge observed during year, 2,160 second-feet Apr. 6 (gage height, 12.20 feet); minimum, 96 second-feet numerous days in May, June, August, and September; minimum gage height, 4.30 feet Oct. 2-8, 12, 13.
1929-36: Maximum discharge, about 23,800 second-feet Jan. 10, 1930 (gage height, estimated from hydrograph, 19.7 feet); minimum, 85 second-feet Aug. 10, 1931.

Remarks.- Records fair. Gage read once daily.

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

4.0	96	7.0	473
4.2	106	8.0	585
4.4	120	9.0	960
4.6	135	10.0	1,275
4.8	154	11.0	1,645
5.0	180	12.0	2,070
5.5	250	13.0	2,550
6.0	323		

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	120	127	144	154	154	208	208	154	96	135	106	96
2	113	127	135	180	180	180	208	135	96	264	106	591
3	113	127	135	250	180	208	180	135	135	413	106	2,020
4	113	127	135	208	338	180	180	135	120	264	106	208
5	113	338	135	180	208	180	180	127	106	144	96	120
6	113	180	144	1,600	194	180	2,160	127	106	120	96	120
7	113	154	154	762	194	166	990	127	106	120	96	120
8	113	144	990	353	180	154	491	127	106	194	96	120
9	120	127	549	570	180	154	710	127	106	154	106	113
10	120	308	458	308	180	154	509	127	106	135	106	113
11	120	236	353	208	180	154	393	127	106	127	127	113
12	113	458	308	208	222	166	383	180	106	120	106	120
13	113	293	293	194	1,340	154	353	154	106	120	106	96
14	570	278	278	194	710	154	194	135	106	120	106	96
15	323	222	180	194	353	180	180	127	106	120	106	96
16	127	154	166	180	222	293	180	120	106	144	106	96
17	120	144	166	180	208	591	154	120	106	154	106	96
18	120	144	154	166	180	443	154	120	106	180	96	96
19	127	144	154	180	180	353	154	120	106	154	96	96
20	135	144	154	180	180	1,110	154	120	106	127	96	96
21	127	144	154	166	236	1,450	154	127	106	127	96	96
22	135	135	154	166	208	710	180	106	106	127	96	96
23	180	135	154	166	236	323	180	106	106	127	96	96
24	135	144	154	166	458	293	154	106	106	120	96	101
25	127	144	154	166	353	736	135	106	106	120	96	101
26	120	154	154	166	398	473	135	106	106	120	96	96
27	120	154	154	154	685	353	135	106	106	120	96	96
28	135	154	154	154	323	323	135	106	106	120	96	96
29	368	144	144	180	264	293	154	96	106	120	96	96
30	154	144	144	154	-	236	154	96	106	120	96	96
31	135	-	154	154	-	208	-	96	-	180	96	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	4,755	570	113	153	0.312	0.36
November.....	5,426	458	127	181	.369	.41
December.....	6,859	990	135	221	.451	.52
Calendar year 1935.....	307,946	20,300	102	844	1.72	23.37
January.....	8,271	1,600	154	267	.545	.63
February.....	6,924	1,540	154	308	.629	.68
March.....	10,790	1,450	154	348	.710	.82
April.....	9,621	2,160	135	321	.655	.73
May.....	3,801	180	96	123	.251	.29
June.....	3,203	135	96	107	.218	.24
July.....	4,710	413	120	152	.310	.36
August.....	3,127	127	96	101	.206	.24
September.....	5,592	2,020	96	186	.380	.42
Water year 1935-36.....	75,081	2,160	96	205	.418	5.70

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 1936.

Extremes.- Maximum discharge observed during year, 7,110 second-feet July 5 (gage height, 15.90 feet); minimum discharge, 73 second-feet July 1; minimum gage height, 2.88 feet Aug. 31, Sept. 1.
1929-36: Maximum discharge observed, about 35,800 second-feet Jan. 21, 1935; minimum discharge, that of July 1, 1936; minimum gage height, 1.58 feet July 9, 1929.

Remarks.- Records fair. Discharge interpolated Jan. 24, 27, 28, and June 4. Gage read twice daily.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	96	245	215	215	229	293	465	425	102	73	107	87
2	90	229	201	1,540	261	293	485	299	102	209	119	176
3	90	229	201	525	365	293	347	263	102	6,150	107	2,930
4	90	229	201	365	1,880	277	311	245	102	6,620	107	319
5	84	229	201	311	850	405	311	227	102	6,620	102	168
6	84	229	201	3,570	445	347	675	209	102	2,060	102	138
7	84	261	201	1,740	311	309	550	209	102	720	102	131
8	90	293	293	1,160	405	293	329	184	102	381	102	131
9	90	245	261	850	525	277	820	184	97	319	102	131
10	90	261	229	505	329	277	910	176	92	227	102	138
11	90	347	215	425	293	277	465	176	92	209	102	131
12	90	790	215	365	329	261	425	606	87	209	97	125
13	90	600	201	405	311	245	347	245	87	191	97	131
14	90	347	201	365	625	245	293	184	87	176	92	125
15	103	293	201	347	465	575	261	146	87	161	92	119
16	90	261	201	311	365	1,520	229	146	82	154	92	119
17	84	245	201	311	365	1,550	215	138	82	146	92	119
18	84	229	201	293	311	1,130	201	184	82	138	92	119
19	90	229	201	311	293	700	201	450	82	138	87	119
20	548	229	187	293	293	1,130	201	168	77	119	87	119
21	132	215	187	277	329	650	201	138	77	154	92	125
22	270	215	187	311	365	465	201	131	77	184	87	119
23	1,240	201	215	261	365	405	215	126	87	138	87	119
24	940	201	229	250	405	2,700	187	119	87	125	87	184
25	625	201	201	245	465	2,320	187	119	82	119	87	176
26	365	215	187	245	329	2,020	187	119	82	113	87	125
27	293	215	175	245	425	4,750	187	119	77	115	87	125
28	910	293	187	245	329	2,880	163	119	77	107	87	119
29	525	245	201	245	311	2,020	175	102	77	113	87	125
30	293	215	201	245	-	1,340	810	102	77	107	87	125
31	261	-	201	261	-	575	-	102	-	107	87	-
Month				Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches			
October.....				8,101	1,240	84	261	0.455	0.52			
November.....				9,256	790	201	275	.479	.53			
December.....				6,599	293	175	206	.359	.41			
Calendar year 1935.....				314,609	35,200	84	862	1.50	20.39			
January.....				16,837	3,570	215	543	.946	1.09			
February.....				12,707	1,880	229	439	.763	.82			
March.....				30,804	4,750	245	994	1.75	1.99			
April.....				19,554	910	163	352	.613	.68			
May.....				6,129	606	102	198	.345	.40			
June.....				2,650	102	77	83.3	.154	.17			
July.....				26,400	6,620	73	862	1.48	1.71			
August.....				2,944	119	87	95.0	.166	.19			
September.....				6,917	2,930	87	231	.402	.45			
Water year 1935-36.....				138,678	6,620	73	379	.660	8.96			

-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 1936.

Extremes.- Maximum discharge observed during year, 5,020 second-feet Mar. 30, 31 (gage height, 16.21 feet); minimum, 154 second-feet June 30 (gage height, 9.85 feet).
1929-36: Maximum discharge, 33,300 second-feet Jan. 22, 1935 (gage height, 22.3 feet from floodmarks); minimum discharge, 108 second-feet Sept. 11, 1934; minimum gage height, 3.2 feet Aug. 5-13, 1930.

Remarks.- Records fair. Gage read twice daily.

Rating tables, water year 1935-36 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used July 14 to Aug. 23)

Oct. 1 to July 9

July 10 to Sept. 30

9.8	147	13.0	1,970	9.8	78	13.0	1,970
10.0	178	13.5	2,120	10.0	110	13.5	2,120
10.2	212	14.0	2,360	10.2	149	14.0	2,360
10.5	266	14.5	2,730	10.5	219	14.5	2,730
11.0	390	15.0	3,240	11.0	385	15.0	3,240
11.5	760	15.5	3,880	11.5	760	15.5	3,880
12.0	1,220	16.0	4,660	12.0	1,220	16.0	4,660
12.5	1,580	16.5	5,640	12.5	1,580		

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	178	306	276	248	257	356	4,840	1,220	204	162	139	102
2	178	276	266	266	276	328	3,130	870	204	204	139	129
3	178	266	257	815	306	328	1,700	550	204	2,210	139	1,060
4	170	248	257	640	515	328	1,060	410	204	2,360	139	1,860
5	170	266	257	455	1,510	342	815	342	195	2,620	129	1,960
6	170	266	257	1,060	1,300	390	1,140	317	204	3,360	139	1,020
7	170	266	266	1,870	750	373	1,300	342	204	3,610	139	455
8	170	266	266	2,210	515	342	1,060	266	195	3,680	129	327
9	170	266	328	2,260	515	328	1,060	266	195	4,330	129	276
10	170	266	317	1,960	595	317	1,370	266	195	3,680	129	408
11	170	266	306	1,300	430	306	1,510	257	204	2,120	139	345
12	170	480	266	870	373	296	1,060	342	195	1,220	139	276
13	170	920	266	595	700	266	870	430	195	700	139	219
14	170	700	276	515	1,060	276	700	356	186	480	139	194
15	195	430	276	455	870	342	550	306	186	345	129	182
16	186	356	266	410	640	1,700	480	266	178	276	129	171
17	186	328	266	390	480	2,020	410	276	178	246	129	160
18	178	306	257	356	430	2,210	390	266	170	206	129	149
19	178	296	257	356	373	2,020	373	266	170	219	129	139
20	186	276	257	342	356	2,360	356	317	170	206	129	139
21	266	276	248	328	328	2,260	342	276	170	327	120	139
22	257	266	248	328	356	1,920	356	266	162	480	120	139
23	306	257	248	328	390	1,220	356	248	170	309	120	139
24	1,220	257	257	317	390	1,510	356	239	170	232	120	160
25	1,060	248	266	286	410	1,960	342	230	170	171	120	171
26	640	257	257	286	410	3,240	328	230	170	149	120	219
27	390	257	248	286	430	4,020	328	230	162	129	120	171
28	390	266	239	276	455	4,020	328	230	162	120	110	149
29	640	286	239	266	390	4,660	373	221	154	129	110	160
30	480	286	248	266	-	5,020	356	212	154	129	110	149
31	342	-	248	266	-	5,020	-	212	-	139	102	-
Month				Second-foot-days	Maximum	Minimum	Mean	Per square mile		Run-off in inches		
October.....				9,524	1,220	170	307	0.284		0.33		
November.....				9,786	920	248	326	.302		.34		
December.....				8,246	328	239	266	.246		.28		
Calendar year 1935.....				590,551	32,700	138	1,618	1.50		20.33		
January.....				20,626	2,260	248	665	.616		.71		
February.....				16,820	1,510	257	546	.502		.55		
March.....				50,118	5,020	276	1,617	1.50		1.73		
April.....				27,639	4,840	328	921	.853		.96		
May.....				10,519	1,220	212	339	.314		.36		
June.....				5,480	204	154	183	.169		.19		
July.....				36,148	4,330	120	1,134	1.05		1.21		
August.....				3,952	139	102	127	.118		.14		
September.....				11,167	1,960	102	372	.344		.38		
Water year 1935-36.....				208,025	5,020	102	568	.526		7.17		

OBION RIVER BASIN

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 1936.

Extremes.- Maximum discharge observed during year, 6,710 second-feet Mar. 27 (gage height, 13.10 feet); minimum discharge 68 second-feet June 30 and July 1; minimum gage height, 1.46 feet Aug. 17.
1929-36: Maximum discharge observed, 19,500 second-feet Jan. 21, 1935 (gage height, 15.46 feet); minimum discharge, that of June 30 and July 1, 1936; minimum gage height, 1.28 feet July 1, 11, 17, 1931.

Remarks.- Records fair. Gage read twice daily.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	96	99	126	134	117	143	259	229	87	68	96	90
2	96	99	126	162	134	134	249	154	84	93	96	103
3	93	99	117	230	143	134	191	128	84	2,340	103	1,280
4	91	99	117	171	350	134	172	119	86	2,940	103	350
5	91	114	126	152	310	171	154	103	87	2,670	90	310
6	93	114	126	1,900	171	210	210	98	84	3,100	90	90
7	93	114	134	862	143	171	191	97	83	724	90	82
8	91	114	210	1,140	134	143	154	90	81	250	87	78
9	96	106	200	477	190	134	172	87	84	220	90	77
10	99	114	171	220	171	143	309	103	84	143	87	134
11	96	350	143	171	143	134	210	97	86	134	90	126
12	96	230	134	152	134	134	191	457	84	126	87	90
13	96	350	134	152	701	134	191	135	84	117	85	85
14	99	132	134	143	370	134	154	111	84	117	86	82
15	99	134	134	143	310	1,020	154	97	83	117	85	87
16	96	126	126	134	290	2,290	145	90	83	110	85	87
17	93	117	126	134	162	839	136	98	80	110	82	82
18	95	117	126	134	152	499	136	97	80	110	84	81
19	95	134	126	143	143	230	128	154	79	117	85	78
20	99	126	126	134	134	1,070	128	103	79	110	86	82
21	106	117	126	134	134	477	128	93	76	220	85	80
22	273	117	126	134	134	270	119	90	74	134	87	80
23	273	117	126	134	171	190	136	89	73	134	87	87
24	146	126	126	126	171	250	128	87	76	110	87	270
25	106	126	134	126	190	793	119	87	77	103	90	152
26	99	134	134	117	171	4,880	119	89	74	103	90	90
27	99	134	126	117	190	6,710	119	87	73	103	90	87
28	106	134	126	117	171	5,160	119	86	70	103	90	82
29	146	134	134	117	152	1,930	111	84	70	103	87	117
30	106	126	134	117	-	773	681	84	68	103	87	90
31	99	-	134	117	-	330	-	86	-	96	110	-
Month				Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches			
October.....				3,462	273	91	112	0.273	0.31			
November.....				4,183	350	99	139	.339	.38			
December.....				4,188	210	117	155	.329	.38			
Calendar year 1935				248,448	19,500	91	681	1.66	22.52			
January.....				8,244	1,900	117	266	.649	.75			
February.....				5,886	701	117	203	.495	.53			
March.....				29,764	6,710	134	960	2.54	2.70			
April.....				5,413	681	111	180	.439	.49			
May.....				3,637	457	84	117	.285	.33			
June.....				2,397	87	68	79.9	.195	.22			
July.....				15,028	3,100	68	485	1.18	1.36			
August.....				2,777	110	82	89.6	.219	.25			
September.....				4,609	1,280	77	154	.376	.42			
Water year 1935-36.....				89,588	6,710	68	245	.598	8.12			

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 1936.

Extremes.- Maximum discharge observed during year, 8,900 second-feet Apr. 13 (gage height, 14.92 feet); minimum, 114 second-feet Sept. 1 (gage height, 1.08 feet). 1929-36: Maximum discharge observed, 43,400 second-feet Jan. 20, 1935 (gage height, 20.00 feet); minimum, that of Sept. 1, 1936.

Remarks.- Records good. Gage read twice daily.

Rating tables, water year 1935-36 (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Jan. 3 Sept. 8 to Sept. 30				Jan. 4 to Sept. 7			
1.0	104	8.0	1,210	1.0	98	11.0	2,170
1.5	184	9.0	1,390	2.0	254	11.5	2,450
2.0	231	10.0	1,590	3.0	410	12.0	2,820
2.5	303	11.0	1,900	5.0	722	12.5	3,350
3.0	380	12.0	2,370	6.0	880	13.0	3,950
4.0	540	12.5	2,750	7.0	1,060	13.5	4,700
5.0	700	13.0	3,300	8.0	1,260	14.0	5,700
6.0	870	13.5	4,120	9.0	1,490	14.5	7,200
				10.0	1,790	15.0	9,400

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	259	3,170	1,250	700	691	1,160	7,200	1,360	270	160	504	114
2	245	3,050	1,180	1,120	738	1,040	6,210	1,790	254	332	498	129
3	231	2,940	972	1,370	880	952	5,700	1,630	254	1,020	316	816
4	231	2,500	836	2,010	1,850	898	5,070	1,220	285	1,690	254	769
5	217	1,760	751	2,260	2,730	988	4,700	1,020	457	2,090	238	1,340
6	217	1,280	717	3,350	3,450	1,300	4,220	848	722	2,090	223	1,720
7	203	1,040	684	3,570	3,690	1,780	3,950	722	582	1,690	199	1,930
8	203	1,010	700	3,570	3,950	2,090	3,950	597	410	1,020	199	1,500
9	203	1,120	768	3,570	4,220	2,090	4,530	550	394	722	441	1,010
10	203	1,370	1,040	3,570	4,220	1,810	5,700	504	379	441	379	620
11	217	1,500	1,090	3,690	4,220	1,440	7,200	472	332	363	301	476
12	217	1,940	989	3,690	4,220	1,160	8,430	467	348	316	285	412
13	217	2,600	870	3,690	4,220	1,010	8,900	488	348	301	394	364
14	217	2,840	768	3,570	3,690	898	8,900	582	301	379	316	288
15	231	3,050	734	3,110	3,110	916	7,580	644	254	394	236	259
16	348	3,170	700	2,430	2,650	1,390	6,210	550	236	332	199	245
17	572	3,300	684	1,850	2,310	2,650	5,480	457	223	316	153	231
18	444	3,440	652	1,460	2,010	3,330	4,880	379	207	316	145	231
19	318	3,440	636	1,220	1,630	3,570	4,220	410	199	410	160	217
20	303	3,300	620	1,160	1,340	3,950	2,910	519	199	285	332	217
21	572	2,500	604	1,220	1,200	4,080	1,810	800	192	285	394	217
22	1,480	1,700	572	1,240	1,180	4,220	1,320	722	184	379	426	203
23	3,050	1,280	556	1,220	1,260	4,370	1,060	582	176	426	457	203
24	3,580	1,010	572	1,200	1,280	5,070	970	426	184	348	426	700
25	3,300	853	604	1,160	1,260	5,700	934	363	192	301	285	989
26	2,940	768	620	1,010	1,180	5,940	864	332	192	254	192	1,440
27	2,840	734	572	880	1,140	7,200	800	316	192	223	153	1,670
28	3,050	751	556	784	1,140	7,580	753	316	184	192	145	1,670
29	3,170	887	524	722	1,220	8,900	722	301	176	176	137	1,460
30	3,170	1,190	508	691	-	8,430	952	285	168	184	121	1,280
31	3,170	-	636	675	-	7,580	-	285	-	176	114	-
Month				Second-foot-days	Maximum	Minimum	Mean	Per square mile		Run-off in inches		
October.....*				35,618	3,580	203	1,149	0.603		0.93		
November.....				59,393	3,440	734	1,980	1.39		1.54		
December.....				22,965	1,250	508	741	.518		.60		
Calendar year 1935				946,461	41,700	190	2,599	1.82		24.63		
January.....				61,742	3,690	675	1,992	1.39		1.60		
February.....				66,679	4,220	691	2,299	1.61		1.74		
March.....				103,492	8,900	998	3,383	2.33		2.69		
April.....				129,125	8,900	722	4,204	2.94		3.28		
May.....				19,917	1,780	285	642	.449		.52		
June.....				8,496	722	168	283	.193		.22		
July.....				17,611	2,090	160	568	.397		.46		
August.....				8,614	504	114	278	.194		.22		
September.....				22,720	1,930	114	757	.523		.69		
Water year 1935-36				553,372	8,900	114	1,512	1.06		14.39		

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 267.34 feet above mean Gulf level.

Drainage area.- 1,940 square miles.

Records available.- July 1929 to September 1936.

Extremes.- Maximum discharge observed during year, 11,700 second-feet Mar. 28 (gage height, 16.02 feet); minimum, 278 second-feet Sept. 1 (gage height, 1.66 feet). 1929-36: Maximum discharge observed, 59,000 second-feet Jan. 22, 1935 (gage height, 20.35 feet); minimum, that of Sept. 1, 1936.

Remarks.- Records fair. Gage read twice daily.

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

1.6	264	10.0	1,945
1.8	292	11.0	2,275
2.0	321	12.0	2,700
2.5	396	13.0	3,300
3.0	476	13.5	3,740
4.0	641	14.0	4,300
5.0	818	14.5	5,000
6.0	1,015	15.0	6,200
7.0	1,221	15.5	8,400
8.0	1,442	16.0	11,700
9.0	1,675		

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	351	2,610	1,100	746	933	1,440	7,880	1,240	460	306	351	278
2	396	2,700	1,200	800	913	1,420	7,880	1,630	460	396	321	292
3	396	2,750	1,350	913	933	1,400	7,400	2,100	444	1,200	381	412
4	396	2,800	1,400	1,140	1,030	1,350	6,960	2,240	428	1,630	444	641
5	381	2,910	1,350	1,350	1,240	1,260	6,560	2,200	428	1,880	476	818
6	566	2,910	1,200	1,800	1,490	1,220	5,880	1,940	412	2,000	444	973
7	366	2,970	1,070	2,560	1,720	1,220	5,600	1,680	444	2,060	412	993
8	351	2,970	1,010	2,970	1,920	1,310	5,160	1,310	556	2,000	381	1,160
9	351	2,850	1,050	3,030	2,100	1,510	4,850	1,100	641	1,880	366	1,290
10	351	2,560	1,030	3,090	2,280	1,680	4,560	933	607	1,600	351	1,530
11	351	1,860	1,010	3,230	2,360	1,780	4,300	856	692	1,220	366	1,460
12	351	1,800	1,070	3,300	2,660	1,880	4,060	818	540	856	412	1,140
13	351	1,860	1,180	3,300	2,910	1,880	4,060	782	492	875	428	792
14	351	1,920	1,200	3,300	3,160	1,880	4,700	746	476	590	412	658
15	351	1,980	1,140	3,230	3,380	1,530	6,560	710	460	540	412	556
16	412	2,060	1,050	3,230	3,550	1,720	8,400	728	444	508	412	508
17	381	2,200	993	3,230	3,740	2,060	7,880	746	428	508	396	460
18	381	2,320	953	3,230	3,740	2,140	7,400	764	412	508	366	428
19	428	2,440	913	3,160	3,580	2,140	6,560	710	381	492	356	396
20	508	2,610	894	3,090	3,380	2,440	5,880	658	366	556	306	381
21	540	2,750	856	2,800	3,090	2,700	5,360	624	366	556	306	366
22	607	2,850	837	2,240	2,700	2,750	4,850	624	351	524	306	351
23	1,100	2,970	818	1,780	2,280	2,850	4,560	746	336	782	351	351
24	1,940	3,090	800	1,800	1,860	3,090	4,060	875	336	540	366	351
25	2,000	3,090	800	1,460	1,720	3,550	3,380	837	321	524	366	366
26	2,040	3,030	782	1,440	1,650	4,300	2,400	710	321	508	396	492
27	2,140	2,400	782	1,380	1,630	3,840	1,680	607	321	476	396	710
28	2,240	1,680	800	1,290	1,600	11,700	1,350	556	321	444	366	973
29	2,360	1,260	800	1,180	1,510	10,200	1,220	540	321	412	356	1,200
30	2,440	1,120	782	1,070	-	8,400	1,160	508	321	381	321	1,380
31	2,520	-	746	993	-	6,960	-	476	-	366	292	-
Month				Second-foot-days	Maximum	Minimum	Mean	Per square mile		Run-off in inches		
October.....				27,527	2,520	351	888	0.458		0.53		
November.....				75,340	3,090	1,120	2,445	1.26		1.41		
December.....				30,966	1,400	746	999	.515		.59		
Calendar year 1935.....				1,207,400	56,400	321	3,308	1.71		23.17		
January.....				68,232	3,300	746	2,201	1.13		1.30		
February.....				65,029	3,740	913	2,242	1.16		1.25		
March.....				93,400	11,700	1,220	3,013	1.55		1.79		
April.....				152,550	7,880	1,160	5,065	2.62		2.92		
May.....				30,994	2,240	476	1,000	.515		.59		
June.....				12,886	692	321	430	.222		.25		
July.....				26,918	2,060	306	868	.447		.52		
August.....				11,575	476	292	373	.192		.22		
September.....				21,696	1,530	278	723	.373		.42		
Water year 1935-36.....				615,113	11,700	278	1,681	.866		11.79		

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 1936.

Extremes.- Maximum discharge during water year 1934-35, 31,000 second-feet Jan. 20 (gage height, 13.75 feet, from floodmarks); minimum, 130 second-feet Aug. 29 to Sept. 2; minimum gage height, 3.18 feet Oct. 18, 19, 21, 22.
Maximum discharge observed during water year 1935-36, 2,850 second-feet Mar. 28 (gage height, 8.90 feet); minimum, 137 second-feet Aug. 15-18, 25-31, Sept. 1; minimum gage height, 3.16 feet Aug. 30 to Sept. 1.
1929-36: Maximum discharge, that of Jan. 20, 1935; minimum, 125 second-feet Oct. 1-27, 1931; minimum gage height, 2.24 feet Aug. 12-14, 1930.

Remarks.- Records good below and poor above 800 second-feet for period October 1934 to May 1935 and good thereafter. Discharge Jan. 20-22, 1935, computed from stage graph drawn through observer's prior and subsequent readings and elevation of flood crest. Gage read twice daily.

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	452	1,390	558	1,140	964	267	215	283	149	130
2	315	360	418	1,390	452	900	940	244	228	283	144	130
3	270	360	577	1,210	401	558	862	740	885	497	144	505
4	205	420	766	1,210	367	401	740	690	1,050	591	144	765
5	193	375	666	1,090	500	1,290	520	984	935	365	144	670
6	181	360	577	795	317	1,390	1,140	1,140	730	307	144	487
7	181	405	577	486	302	1,390	1,290	1,140	670	237	144	455
8	181	390	557	401	418	1,390	1,530	1,090	615	204	144	332
9	181	330	384	503	984	1,140	1,390	940	295	138	139	215
10	181	244	302	486	1,390	984	1,140	643	295	182	139	226
11	218	218	258	452	1,530	862	964	469	271	171	134	226
12	231	218	244	418	1,930	1,140	766	317	237	166	134	215
13	193	218	231	350	1,710	1,710	538	272	237	166	139	204
14	181	218	231	302	1,530	3,610	469	244	259	160	154	188
15	169	218	231	272	1,290	1,530	452	350	259	160	455	176
16	169	218	231	258	1,090	1,090	350	384	259	154	1,050	166
17	169	218	258	258	940	795	302	350	885	154	455	166
18	169	218	333	258	795	557	287	287	1,050	154	215	160
19	169	218	350	1,090	740	452	287	272	1,050	149	171	160
20	169	231	384	2,500	418	418	287	690	1,050	149	188	160
21	169	436	350	27,200	350	520	384	940	840	149	188	160
22	169	2,020	333	14,900	317	964	418	795	358	160	166	154
23	169	8,510	302	4,880	302	827	418	984	237	248	154	154
24	169	5,340	258	1,830	287	690	435	1,390	237	193	149	154
25	181	2,510	258	1,390	690	520	367	1,290	215	176	144	149
26	181	1,390	503	1,140	862	367	272	670	204	166	139	149
27	181	1,050	469	1,050	984	317	335	295	135	160	144	176
28	181	740	503	940	1,090	302	394	248	215	160	134	204
29	169	486	557	827	-	333	384	226	215	154	134	204
30	181	469	520	740	-	367	350	226	215	149	130	215
31	218	-	666	666	-	900	-	226	-	149	134	-
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.....	28,713		8,510		218		957		1.80		2.01	
December.....	12,746		766		231		411		.774		.89	
Calendar year 1934.....	178,865		8,510		157		490		.923		12.53	
January.....	81,762		27,200		258		2,960		5.57		6.43	
February.....	22,374		1,930		287		799		1.50		1.57	
March.....	28,854		3,610		302		951		1.75		2.02	
April.....	19,003		1,530		272		633		1.19		1.33	
May.....	18,823		1,390		226		607		1.14		1.32	
June.....	14,402		1,050		193		480		.904		1.01	
July.....	6,594		591		149		213		.401		.46	
August.....	6,148		1,050		130		198		.373		.43	
September.....	7,455		765		130		246		.467		.52	
Water year 1934-35.....	282,895		27,200		130		720		1.36		18.41	

Note.- The above records supersede those published in Water-Supply Paper 787.

Wolf River at Rossville, Tenn.

(Continued)

Rating tables, water year 1935-36 (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Mar. 28				Mar. 29 to Sept. 30			
4.5	248	7.0	640	3.0	120	6.5	543
5.0	307	7.5	800	3.5	165	7.0	650
5.5	371	8.0	1,050	4.0	216	7.5	800
6.0	441	8.5	1,650	4.5	272	8.0	1,050
6.5	525	9.0	3,220	5.0	332	8.5	1,650
				5.5	396	9.0	3,220
				6.0	464		

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	193	319	248	237	226	248	766	227	165	155	146	137
2	171	271	248	295	248	248	450	227	155	260	155	409
3	160	248	237	332	319	237	344	227	155	706	155	333
4	160	237	226	358	305	237	308	216	165	736	155	370
5	160	226	226	385	568	259	296	216	155	625	155	370
6	149	226	226	1,050	615	271	320	216	155	525	155	383
7	149	307	237	1,450	700	295	320	205	155	436	155	422
8	149	332	248	1,580	885	307	357	195	165	238	146	464
9	160	307	248	1,050	840	295	605	195	175	205	155	234
10	160	332	248	885	505	259	990	185	175	185	155	249
11	149	470	248	670	385	248	840	185	175	175	146	216
12	160	525	248	591	358	237	561	205	175	175	146	216
13	160	525	237	591	358	237	543	205	165	185	146	216
14	332	505	237	441	358	226	493	195	165	175	146	185
15	285	615	237	332	345	226	370	195	165	175	137	175
16	215	765	226	319	332	283	308	185	155	165	137	175
17	193	765	226	307	332	455	284	185	155	165	137	165
18	182	470	226	295	307	427	260	185	155	165	137	165
19	182	319	226	295	271	427	260	185	155	165	146	165
20	193	285	226	271	259	525	249	185	155	155	165	165
21	193	271	215	271	248	505	238	195	155	155	165	165
22	441	259	215	283	259	427	238	185	155	155	165	165
23	1,380	248	226	271	283	413	238	175	155	175	146	205
24	1,550	248	226	259	283	548	238	175	155	185	146	935
25	1,450	237	226	248	295	730	238	165	155	165	137	990
26	1,380	237	226	248	283	800	238	165	155	155	137	766
27	1,450	237	215	237	283	1,200	238	165	155	155	137	561
28	1,120	248	215	237	271	2,350	227	165	155	155	137	561
29	640	237	215	215	259	1,780	227	165	155	155	137	509
30	345	248	215	226	-	1,550	227	165	155	146	137	561
31	319	-	226	226	-	1,200	-	165	-	146	137	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	13,928	1,550	149	449	0.846	0.98
November.....	10,517	765	226	351	.661	.74
December.....	7,149	248	215	231	.435	.50
Calendar year 1935.....	247,007	27,200	130	677	1.27	17.31
January.....	14,255	1,450	215	450	.866	1.00
February.....	11,190	985	226	366	.727	.78
March.....	17,448	2,350	226	563	1.06	1.22
April.....	11,269	990	227	376	.708	.79
May.....	5,904	227	165	190	.358	.41
June.....	4,790	175	155	160	.301	.34
July.....	7,518	736	146	243	.458	.53
August.....	4,536	165	137	146	.275	.32
September.....	10,732	990	137	358	.674	.75
Water year 1935-36.....	119,226	2,350	137	326	.614	8.36

St. Francis River near Patterson, Mo.

Location.- Wire-weight gage, lat. 37°11'40", long. 90°30'10", in N½ sec. 16, T. 29 N., R. 5 E., at bridge on State Highway 34, 3 miles east of Patterson. Zero of gage is 372.70 feet above mean sea level (general adjustment of 1929).

Drainage area.- 956 square miles.

Records available.- June 1921 to September 1936.

Average discharge.- 15 years, 1,100 second-feet.

Extremes.- Maximum discharge observed during year, 9,600 second-feet Nov. 10 (gage height, 10.75 feet); minimum, 8 second-feet Aug. 30 to Sept. 1; minimum gage height, 0.16 foot Aug. 31, Sept. 1.

1921-36: Maximum discharge, 79,200 second-feet Mar. 11, 1935 (gage height, 28.70 feet); minimum, that of Aug. 30 to Sept. 1, 1936.

Maximum stage known, 31.8 feet in August 1915, from floodmarks.

Remarks.- Records good except those for days of rapidly changing stage and those interpolated for period of ice effect, Jan. 26, 27, which are poor. Gage read once a day below 10 feet and twice daily above.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	68	366	314	202	148	1,180	368	396	47	19	16	8
2	67	316	282	191	148	980	454	424	43	21	14	213
3	69	209	275	202	158	780	520	340	46	23	12	138
4	65	185	262	202	158	662	554	314	41	23	11	89
5	96	4,560	250	424	148	590	590	288	45	20	11	79
6	86	3,760	225	262	138	554	870	262	39	18	12	74
7	80	2,650	590	250	128	554	2,450	237	35	16	11	72
8	70	1,180	2,750	250	128	520	2,060	225	45	22	11	64
9	68	800	2,060	288	124	554	1,280	213	42	20	15	58
10	69	4,440	1,410	314	118	554	3,650	191	39	19	12	50
11	72	5,080	1,060	340	113	590	2,750	191	36	17	12	46
12	68	2,060	870	327	109	554	1,880	213	64	16	12	42
13	70	1,560	740	314	250	554	1,410	202	53	20	14	37
14	67	1,220	662	301	327	520	1,080	191	45	19	12	36
15	63	960	590	288	915	486	960	180	37	17	11	34
16	62	825	520	275	590	424	780	191	33	23	11	30
17	99	700	454	262	368	396	662	169	31	26	14	76
18	151	590	424	250	314	368	590	180	27	24	12	90
19	316	554	396	237	262	327	520	149	30	22	12	78
20	234	486	354	237	250	354	454	138	26	39	11	92
21	162	424	327	225	213	340	424	124	25	31	10	90
22	151	396	314	202	213	327	396	117	24	27	10	79
23	222	368	301	202	213	454	368	106	23	25	10	180
24	185	340	288	191	225	454	327	95	22	24	11	354
25	140	314	262	180	250	424	314	89	21	23	10	590
26	140	314	250	175	237	454	288	84	20	20	10	424
27	154	314	237	170	2,450	454	262	75	17	18	9	298
28	260	327	225	169	2,060	424	237	73	18	16	8	250
29	247	327	213	168	1,280	396	250	66	19	16	8	213
30	287	314	213	148	-	396	368	55	16	16	8	180
31	366	-	202	158	-	354	-	50	-	19	8	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acres-feet
October.....	4,254	366	62	137	0.143	0.16	8,400
November.....	35,919	5,080	185	1,197	1.25	1.40	71,240
December.....	17,326	2,750	202	559	.585	.67	34,370
Calendar year 1935.....	658,610	75,500	40	1,804	1.89	25.59	1,306,000
January.....	7,394	424	148	239	.250	.29	14,670
February.....	12,035	2,450	109	415	.434	.47	23,870
March.....	15,938	1,180	327	514	.538	.62	31,610
April.....	27,096	3,650	237	903	.945	1.05	53,740
May.....	5,630	424	50	182	.190	.22	11,170
June.....	1,009	64	16	33.6	.035	.04	2,000
July.....	659	39	16	21.3	.022	.03	1,310
August.....	348	16	8	11.2	.012	.01	690
September.....	4,054	590	8	135	.141	.16	8,040
Water year 1935-36.....	131,642	5,080	8	360	.377	5.12	261,100

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 (general adjustment of 1929).

Drainage area.- 1,370 square miles.

Records available.- October 1927 to September 1936.

Extremes.- Maximum discharge observed during year, 2,840 second-feet Nov. 12 (gage height, 18.35 feet); minimum discharge, 94 second-feet Aug. 22-28, 30, 31, Sept. 1; minimum gage height, 1.24 feet Aug. 27, 28.

1927-36: Maximum discharge, 41,900 second-feet May 15, 1933 (gage height, 26.89 feet, from flood mark); minimum discharge, that of Aug. 22-28, 30, 31, Sept. 1, 1936; minimum gage height, that of Aug. 27, 28, 1936.

Maximum stage known, 28.0 feet Apr. 18, 1927, from floodmark (discharge, about 50,000 second-feet).

During flood of March 1935, the levee on left bank broke in many places between Wappapello and Fisk; maximum discharge in river channel at Fisk plus overflow between Fisk and Dudley (including additional local drainages of about 186 square miles), approximately 50,000 second-feet as measured by Corp of Engineers, U. S. Army.

Remarks.- Records good except those for days of rapidly changing stage, which are poor. Gage read once a day below 15 feet and twice above.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	243	494	494	395	270	1,470	588	483	181	133	106	94
2	225	505	483	351	280	1,340	600	540	181	133	106	280
3	217	472	472	362	280	1,200	650	600	181	133	106	1,260
4	225	450	450	362	270	1,080	684	576	172	133	106	1,290
5	209	428	439	373	270	965	973	516	164	126	106	1,100
6	217	598	439	384	280	878	2,100	494	164	119	106	852
7	217	696	461	384	280	732	2,100	451	164	119	106	564
8	209	876	790	395	260	732	1,980	439	172	112	106	373
9	209	1,080	1,380	395	260	720	1,840	417	172	112	112	250
10	209	1,200	1,470	406	250	708	1,660	384	164	112	106	230
11	217	1,600	1,530	417	240	756	2,100	362	156	112	106	210
12	217	2,300	1,380	439	240	768	2,410	362	156	119	106	190
13	209	2,570	1,220	439	290	768	2,260	373	148	112	106	156
14	209	2,020	1,100	439	351	744	1,780	384	156	112	106	164
15	209	1,600	965	439	505	720	1,620	384	156	112	100	156
16	201	1,400	876	428	672	696	1,460	351	156	112	100	148
17	201	1,220	804	406	720	660	1,540	351	148	112	100	140
18	209	1,070	744	395	624	624	1,220	340	140	112	100	156
19	234	928	684	384	540	588	1,100	340	140	119	100	164
20	320	640	636	373	461	564	991	330	133	119	100	200
21	450	780	588	362	428	564	1,020	310	133	119	100	200
22	384	720	552	351	395	552	952	290	126	119	94	200
23	364	660	516	340	384	552	756	280	133	119	94	210
24	417	636	505	330	373	624	696	260	126	112	94	240
25	395	588	483	320	395	648	648	250	119	119	94	588
26	373	540	450	310	439	648	600	240	119	119	94	816
27	373	516	417	320	816	660	600	220	119	112	94	756
28	362	516	406	310	1,220	660	648	220	119	112	94	612
29	439	516	395	290	1,520	636	505	200	119	112	100	505
30	483	516	364	290	-	612	494	200	119	112	94	417
31	494	-	362	280	-	576	-	200	-	106	94	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acre-feet
October.....	8,960	494	201	289	0.211	0.24	17,770
November.....	28,323	2,570	428	944	.699	.77	56,180
December.....	21,845	1,530	362	705	.615	.59	43,530
Calendar year 1935.....	757,743	34,600	185	2,076	1.52	20.57	1,503,000
January.....	11,469	439	280	370	.270	.31	22,750
February.....	13,273	1,520	240	458	.334	.36	26,330
March.....	23,503	1,470	552	758	.553	.54	46,820
April.....	36,590	2,410	494	1,220	.821	.99	72,680
May.....	11,157	600	200	360	.265	.30	22,130
June.....	4,436	181	119	148	.108	.12	6,830
July.....	3,634	133	106	117	.085	.10	7,210
August.....	3,136	112	94	101	.074	.09	6,820
September.....	12,521	1,290	94	417	.304	.34	24,840
Water year 1935-36.....	178,847	2,570	94	489	.357	4.65	354,800

St. Francis River at Marked Tree, Ark.

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

Records available.- July 1934 to September 1936. Miscellaneous measurements were made at this point in February 1918 and September 1927 to May 1931.

Extremes.- Maximum daily discharge during year, 1,580 second-feet Apr. 20, 24, 25; maximum gage height, 4.70 feet Apr. 25; minimum daily discharge, 186 second-feet Sept. 2; minimum gage height, 0.58 foot Aug. 31, Sept. 1.
1934-36: Maximum discharge, 4,150 second-feet Mar. 26, 1935 (gage height, 10.56 feet); maximum gage height, 13.19 feet Apr. 7, 1935; minimum discharge, that of Sept. 2, 1936.

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

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	790	1,000	1,220	1,200	1,150	1,180	1,360	1,450	1,110	570	768	190
2	782	1,000	1,180	1,210	1,150	1,180	1,350	1,410	1,120	539	718	186
3	723	1,000	1,180	1,200	1,140	1,220	1,350	1,390	1,120	830	683	239
4	679	1,030	1,170	1,190	1,140	1,210	1,350	1,390	1,100	941	601	239
5	686	1,040	1,180	1,160	1,150	1,240	1,350	1,390	1,100	1,010	572	606
6	650	1,040	1,170	1,170	1,150	1,240	1,350	1,350	1,060	1,060	571	626
7	650	1,050	1,210	1,170	1,140	1,240	1,330	1,320	1,020	1,090	514	655
8	621	1,050	1,210	1,170	1,120	1,240	1,370	1,330	1,020	1,100	485	697
9	614	1,040	1,220	1,170	1,140	1,220	1,360	1,280	1,030	1,100	485	790
10	608	1,060	1,210	1,160	1,150	1,210	1,390	1,280	1,010	1,100	480	1,060
11	614	1,050	1,180	1,190	1,150	1,210	1,410	1,250	995	1,040	451	1,100
12	621	1,090	1,220	1,240	1,140	1,220	1,440	1,240	995	1,020	446	1,100
13	586	1,090	1,220	1,180	1,120	1,280	1,460	1,240	995	1,070	414	1,130
14	592	1,120	1,240	1,190	1,120	1,260	1,510	1,240	985	1,080	385	1,130
15	586	1,110	1,260	1,190	1,120	1,280	1,500	1,240	950	1,070	381	1,130
16	586	1,120	1,250	1,190	1,170	1,290	1,550	1,240	950	1,040	358	1,130
17	557	1,160	1,260	1,210	1,160	1,290	1,540	1,200	924	1,040	335	1,130
18	557	1,160	1,260	1,190	1,170	1,290	1,540	1,160	898	1,040	331	1,130
19	586	1,150	1,260	1,180	1,160	1,310	1,520	1,170	898	1,040	305	931
20	627	1,150	1,240	1,190	1,160	1,330	1,580	1,160	889	1,010	305	722
21	666	1,170	1,260	1,190	1,170	1,310	1,570	1,160	858	1,000	282	703
22	686	1,170	1,280	1,190	1,170	1,280	1,550	1,170	828	1,000	276	662
23	760	1,170	1,260	1,160	1,170	1,310	1,540	1,150	820	1,010	251	662
24	828	1,180	1,260	1,140	1,160	1,280	1,560	1,160	817	1,000	254	676
25	850	1,180	1,250	1,170	1,180	1,290	1,580	1,160	794	959	248	710
26	915	1,240	1,260	1,150	1,170	1,280	1,540	1,150	787	949	231	725
27	942	1,240	1,240	1,150	1,160	1,280	1,500	1,140	745	927	218	703
28	960	1,250	1,210	1,180	1,170	1,320	1,510	1,150	710	918	204	696
29	960	1,220	1,210	1,170	1,180	1,360	1,490	1,150	676	874	202	669
30	960	1,210	1,210	1,180	-	1,370	1,450	1,150	629	847	195	669
31	995	-	1,200	1,150	-	1,320	-	1,110	-	811	190	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						22,237	995	557	717	44,110		
November.....						33,540	1,250	1,000	1,118	66,530		
December.....						37,980	1,280	1,170	1,225	75,290		
Calendar year 1935.....						705,002	4,150	373	1,966	1,398,000		
January.....						36,580	1,240	1,140	1,180	72,560		
February.....						33,430	1,180	1,120	1,153	66,310		
March.....						39,340	1,370	1,180	1,269	78,030		
April.....						43,920	1,580	1,330	1,464	87,110		
May.....						38,380	1,450	1,110	1,258	76,130		
June.....						27,833	1,120	629	928	55,210		
July.....						30,085	1,100	539	970	59,670		
August.....						12,139	768	190	392	24,080		
September.....						22,798	1,130	186	760	45,220		
Water year 1935-36.....						378,242	1,580	186	1,033	750,200		

St. Francis River floodway near Marked Tree, Ark.

Location.- Staff gage, lat. 35°36', long. 90°27', in SE¼ sec. 10, T. 11 N., R. 6 E., at dam of Poinsett County Drainage District No. 7, 3 miles north of Marked Tree.

Records available.- September 1927 to September 1931, July 1934 to September 1936.

Extremes.- Maximum discharge observed during year, 3,400 second-feet Apr. 20-23 (gage height, 23.0 feet); no flow Oct. 1 to Nov. 16, June 13 to July 6, July 23 to Sept. 30. 1927-31, 1934-36: Maximum discharge observed, 36,200 second-feet Mar. 25-27, 1935 (gage height, 29.2 feet); no flow at times each year, 1934-36.

Remarks.- Records good. 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 in the vicinity of Parkin, Ark.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1		0	700	550	120	450	1,250	2,250	350	0		
2		0	650	500	120	450	1,250	2,030	300	0		
3		0	600	500	160	450	1,130	1,860	250	0		
4		0	550	450	200	500	1,130	1,730	200	0		
5		0	500	400	200	550	1,130	1,610	160	0		
6		0	450	400	200	550	1,190	1,550	120	0		
7		0	450	400	160	600	1,190	1,490	80	160		
8		0	450	450	160	650	1,190	1,370	80	400		
9		0	450	400	160	650	1,310	1,250	40	500		
10		0	450	400	160	700	1,490	1,130	40	500		
11		0	450	400	120	750	1,550	1,130	40	500		
12		0	450	400	120	750	1,790	1,010	40	450		
13		0	450	400	120	800	2,030	1,010	0	400		
14		0	450	400	120	800	2,730	1,010	0	350		
15		0	500	350	160	800	2,930	900	0	300		
16		0	600	350	160	850	3,150	900	0	200		
17		40	600	350	200	850	3,150	850	0	200		
18		80	600	350	180	850	3,150	850	0	120		
19		120	600	350	160	800	3,150	800	0	120		
20		200	650	350	200	800	3,400	800	0	40		
21		250	650	350	200	800	3,400	800	0	40		
22		250	700	350	200	700	3,400	800	0	40		
23		300	700	350	200	700	3,400	750	0	0		
24		400	700	300	200	700	3,150	700	0	0		
25		450	700	300	250	750	2,930	650	0	0		
26		500	700	300	300	800	2,730	600	0	0		
27		600	700	200	300	850	2,730	600	0	0		
28		650	700	160	350	900	2,730	550	0	0		
29		700	700	160	350	950	2,550	500	0	0		
30		700	600	160	300	1,070	2,550	400	0	0		
31		-	600	160	-	1,130	-	400	-	0		
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						0	0	0	0	0		
November.....						5,240	700	0	175	10,390		
December.....						18,050	700	450	582	36,800		
Calendar year 1935.....						2,403,550	36,200	0	6,771	4,768,000		
January.....						10,940	550	160	353	21,700		
February.....						5,510	350	120	190	10,930		
March.....						22,950	1,130	450	740	45,520		
April.....						68,890	3,400	1,130	2,300	136,800		
May.....						32,280	2,250	400	1,041	64,030		
June.....						1,700	350	0	56.7	3,370		
July.....						4,320	500	0	139	8,570		
August.....						0	0	0	0	0		
September.....						0	0	0	0	0		
Water year 1935-36.....						169,850	3,400	0	464	336,900		

Little River Ditch 81 near Kennett, Mo.

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

Records available.- October 1926 to September 1936.

Average discharge.- 10 years, 253 second-feet.

Extremes.- Maximum discharge observed during year, 386 second-feet Apr. 7 (gage height, 5.27 feet); minimum, 41 second-feet Aug. 28, 29 (gage height, 2.38 feet).
1926-36: 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 periods of ice effect, Dec. 30, Jan. 24 to Feb. 9, Feb. 19, 20, which are poor and were computed on basis of gage heights and weather records. Gage read once daily.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	64	74	74	69	56	79	94	106	79	84	64	42
2	64	74	69	74	56	79	100	106	79	247	64	64
3	64	69	69	74	56	79	106	106	79	301	64	170
4	64	69	69	74	56	74	100	100	74	234	64	260
5	64	74	69	69	56	64	94	100	74	195	60	170
6	64	69	69	69	52	74	182	94	74	158	59	116
7	64	69	79	69	52	74	366	94	74	140	58	94
8	64	74	94	69	52	74	273	94	74	128	59	89
9	64	69	122	74	52	74	234	94	69	116	58	79
10	69	74	128	74	74	74	234	94	64	111	56	89
11	64	89	111	74	58	74	221	100	69	106	53	84
12	64	84	100	74	56	74	208	100	69	100	52	79
13	64	79	100	69	58	69	182	100	69	94	51	74
14	64	79	84	69	69	74	170	122	69	94	49	74
15	64	79	89	69	74	74	158	111	64	69	48	69
16	64	79	89	64	69	74	152	106	64	89	47	69
17	60	74	84	64	69	74	146	100	64	89	46	69
18	64	74	84	69	57	74	140	100	64	84	46	69
19	69	74	84	69	64	74	140	106	60	84	46	69
20	69	74	84	64	64	84	134	100	58	79	46	69
21	69	74	79	64	64	84	128	94	57	79	44	69
22	69	74	79	64	60	79	134	94	56	79	44	64
23	74	69	79	64	57	84	128	89	60	79	43	69
24	74	69	74	60	69	111	122	89	64	79	43	84
25	69	69	74	60	64	122	122	89	60	74	43	79
26	69	69	74	60	64	116	116	84	60	74	43	74
27	69	74	74	60	79	111	111	84	60	74	43	74
28	79	74	74	60	94	116	111	84	69	69	41	74
29	79	74	74	56	84	111	116	84	56	64	41	74
30	79	74	74	56	-	106	111	84	55	64	43	69
31	74	-	74	56	-	69	-	84	-	64	42	-
Month				Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet				
October.....				2,095	79	60	67.6	4,160				
November.....				2,220	89	69	74.0	4,400				
December.....				2,590	128	69	85.5	5,140				
Calendar year 1935.....				111,885	2,610	56	507	221,900				
January.....				2,060	74	56	66.5	4,090				
February.....				1,835	94	52	63.3	3,640				
March.....				2,599	122	64	63.6	5,160				
April.....				4,653	386	94	155	9,230				
May.....				2,992	122	84	96.5	5,930				
June.....				1,977	79	55	65.9	3,920				
July.....				3,421	301	64	110	6,790				
August.....				1,559	64	41	50.3	3,090				
September.....				2,525	260	42	87.6	5,210				
Water year 1935-36.....				30,629	366	41	83.7	60,760				

Little River Ditch 1 near Kennett, Mo.

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

Records available.- October 1926 to September 1936.

Average discharge.- 10 years, 481 second-feet.

Extremes.- Maximum discharge observed during year, 1,180 second-feet Apr. 7 (gage height, 8.32 feet); minimum discharge, 22 second-feet Aug. 29, 30, Sept. 1; minimum gage height, 2.80 feet Oct. 14-17.

1926-36: Maximum discharge observed, 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. Corrected for ice effect Dec. 26, 27, 29, 30, Jan. 23 to Feb. 2, Feb. 6, 9, 10, 18, 19, on basis of gage heights and weather records. Gage read once a day below 8 feet and twice above.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	30	41	55	63	62	79	104	117	74	61	54	22
2	28	40	54	66	62	79	104	117	72	403	55	31
3	28	40	56	66	63	73	117	117	75	385	55	361
4	27	39	55	64	66	73	110	110	70	317	50	538
5	26	45	55	63	66	72	110	110	70	235	51	421
6	28	40	57	65	62	68	204	110	64	195	47	267
7	27	45	65	65	68	67	1,180	104	64	163	45	171
8	28	47	67	64	57	68	846	104	64	147	49	123
9	28	46	77	64	56	66	476	104	64	131	51	98
10	29	49	85	64	56	66	372	104	63	116	44	102
11	26	59	85	64	58	67	356	104	64	108	44	86
12	26	54	85	59	57	66	324	104	58	105	43	74
13	26	54	78	63	64	65	294	110	56	99	40	67
14	25	55	75	63	64	62	249	124	56	94	40	63
15	25	55	73	63	71	66	234	145	55	91	39	59
16	25	56	72	62	66	68	204	124	51	88	36	59
17	25	54	71	60	69	66	189	110	50	90	35	56
18	23	54	71	60	67	64	174	104	51	87	34	54
19	36	53	71	62	67	67	166	110	50	84	33	52
20	33	52	67	59	66	72	159	110	46	81	31	52
21	35	53	65	62	62	73	166	104	44	78	29	54
22	33	54	67	60	62	73	166	98	44	78	28	54
23	41	54	68	62	59	77	152	91	44	72	28	56
24	39	55	64	62	60	104	145	98	46	72	28	87
25	40	53	65	62	66	131	138	91	41	68	26	72
26	41	55	67	62	62	124	131	94	40	70	24	68
27	41	54	67	62	69	117	131	90	39	65	24	60
28	46	58	66	62	79	124	124	90	40	65	24	68
29	45	55	67	62	85	124	131	81	35	63	22	67
30	43	56	67	62	-	131	124	82	37	59	22	65
31	42	-	65	62	-	110	-	80	-	56	23	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	1,000	46	25	32.3	1,980
November.....	1,525	59	39	50.8	3,020
December.....	2,102	85	54	67.8	4,170
Calendar year 1935.....	220,780	4,800	22	605	437,900
January.....	1,938	66	59	62.5	3,840
February.....	1,861	85	56	64.2	3,690
March.....	2,562	131	62	82.6	5,080
April.....	7,380	1,180	104	246	14,640
May.....	3,241	145	80	105	6,430
June.....	1,627	75	35	54.2	3,230
July.....	3,826	403	56	123	7,590
August.....	1,154	55	22	37.2	2,290
September.....	3,395	538	22	113	6,730
Water year 1935-36.....	31,611	1,180	22	86.4	62,690

Little River Ditch 66 near Kennett, Mo.

Location.- Wire-weight 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 about 4 miles east of Kennett. Zero of gage is about 240 feet above mean sea level (Little River Drainage District benchmarks).

Records available.- October 1926 to September 1936.

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

Extremes.- Maximum discharge observed during year, 1,460 second-feet Apr. 8 (gage height, 11.14 feet); minimum, 7 second-feet Aug. 29 (gage height, 2.33 feet).
1926-36: Maximum discharge, 3,650 second-feet Apr. 25, 1927 (gage height, 17.70 feet, from graph based on gage readings); minimum, that of Aug. 29, 1936.

Remarks.- Records good except those for periods of ice effect, Dec. 28 to Jan. 1, Jan. 24 to Feb. 13, Feb. 18-21, which are poor and were computed on basis of one discharge measurement, gage heights, and weather records. Gage read once a day below 8 feet and twice above. Little River Ditch 66-A is an auxiliary to Ditch 66, the two ditches being separated by a low, narrow bank and inter-connected 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.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	24	86	64	92	70	331	200	179	75	41	25	8
2	24	80	64	97	70	256	200	179	75	158	24	16
3	24	70	63	97	70	214	316	172	70	228	26	70
4	23	64	63	92	70	186	316	158	64	228	27	286
5	23	64	62	97	70	165	256	158	62	172	22	376
6	24	63	63	97	70	145	316	152	61	132	21	242
7	24	62	70	97	70	138	1,330	152	58	120	21	133
8	25	63	75	132	70	132	1,440	138	59	97	20	92
9	24	59	132	108	70	126	1,370	132	58	80	23	70
10	25	64	256	114	70	120	1,240	132	57	75	20	64
11	25	64	242	114	70	120	1,180	132	53	70	19	58
12	24	75	200	114	70	120	920	126	52	61	18	47
13	23	92	172	108	70	126	730	132	48	57	18	41
14	23	97	162	102	92	120	568	132	46	52	18	35
15	23	92	138	102	145	120	470	179	44	50	18	32
16	24	97	132	97	158	120	406	145	42	46	16	31
17	25	92	126	97	152	120	331	132	41	46	15	30
18	27	86	120	97	138	114	301	120	39	45	14	30
19	32	80	114	97	126	114	271	120	37	41	14	32
20	33	80	108	86	120	120	242	120	35	40	12	29
21	37	75	102	86	114	138	242	126	34	36	12	29
22	48	75	97	86	102	152	228	114	32	34	11	27
23	62	70	102	75	97	145	214	108	32	35	10	26
24	75	70	102	70	92	200	214	102	36	34	9	38
25	126	64	97	64	97	271	200	97	34	33	9	35
26	126	70	92	64	97	256	200	97	33	31	9	43
27	97	64	80	64	114	242	186	92	32	29	9	45
28	92	64	80	64	316	256	179	86	29	28	8	49
29	92	70	80	64	422	271	179	80	29	26	7	43
30	108	70	80	64	-	256	172	75	26	26	9	40
31	102	-	80	64	-	228	-	75	-	26	8	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						1,464	126	23	47.2	2,900		
November.....						2,222	97	59	74.1	4,410		
December.....						3,408	256	62	110	6,760		
Calendar year 1935.....						197,341	3,040	18	541	391,400		
January.....						2,802	132	64	90.4	5,560		
February.....						3,232	422	70	114	6,530		
March.....						5,422	331	114	175	10,750		
April.....						14,417	1,440	172	481	28,600		
May.....						3,942	179	75	127	7,820		
June.....						1,393	75	26	46.4	2,760		
July.....						2,177	228	26	70.2	4,320		
August.....						492	27	7	15.9	976		
September.....						2,102	376	8	70.1	4,170		
Water year 1935-36						43,133	1,440	7	118	85,560		

ST. FRANCIS RIVER BASIN

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 about 4 miles east of Kennett. Zero of gage is about 240 feet above mean sea level (Little River Drainage District benchmarks).

Records available.- January 1927 to September 1936.

Extremes.- Maximum discharge observed during year, 230 second-feet Apr. 8 (gage height, 11.00 feet); no flow on many days.

1927-36: Maximum discharge, 2,340 second-feet Apr. 25, 1927 (gage height, 17.6 feet, from graph based on gage readings); no flow on many days.

Remarks.- Records poor. Gage read once a day below 8 feet and twice above. See "Remarks" under Little River Ditch 66.

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

6.4	0	8.0	42
6.5	2	8.4	58
6.6	4	8.8	78
6.8	8	9.2	100
7.0	13	9.6	124
7.2	18	10.0	148
7.4	24	10.5	180
7.6	30	11.0	230

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1							0					
2							0					
3							0					
4							0					
5							0					
6							0					
7							180					
8							220					
9							204					
10							156					
11							136					
12							63					
13							18					
14							4					
15							0					
16							0					
17							0					
18							0					
19							0					
20							0					
21							0					
22							0					
23							0					
24							0					
25							0					
26							0					
27							0					
28							0					
29							0					
30							0					
31							-					
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 1935.....							26,720	885	0	73.2	53,000	
January.....							0	0	0	0	0	
February.....							0	0	0	0	0	
March.....							0	0	0	0	0	
April.....							961	220	0	32.7	1,950	
May.....							0	0	0	0	0	
June.....							0	0	0	0	0	
July.....							0	0	0	0	0	
August.....							0	0	0	0	0	
September.....							0	0	0	0	0	
Water year 1935-36.....							961	220	0	2.7	1,950	

Little River Ditch 251 near Kennett, Mo.

Location.- Wire-weight gage, lat. $36^{\circ}14'10''$, long. $89^{\circ}58'40''$, 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 (Little River Drainage District benchmarks).

Records available.- November 1926 to September 1936.

Extremes.- Maximum discharge observed during year, 2,500 second-feet Apr. 8 (gage height, 11.28 feet); minimum, 72 second-feet Aug. 29, Sept. 1 (gage height, 2.43 feet).

1926-36: 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 except those for periods of ice effect, Dec. 30, 31, Jan. 1, 2, 25-31, Feb. 1-13, 18-21, which are fair and were computed on basis of one discharge measurement, gage heights, and weather records. Gage read once daily below and twice daily above 8.0 feet.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	116	238	198	208	172	706	481	457	208	172	139	72
2	123	218	189	227	172	580	481	457	208	335	179	131
3	116	198	180	238	172	505	655	457	218	706	139	238
4	116	189	189	227	172	457	680	433	208	706	139	630
5	116	198	180	238	172	409	580	409	198	555	131	784
6	123	189	180	238	172	361	680	409	198	457	123	580
7	116	189	198	238	172	338	2,280	409	189	361	123	335
8	123	189	218	258	172	338	2,460	385	189	315	123	280
9	123	180	361	289	172	315	2,360	361	198	280	123	227
10	123	189	530	280	172	315	2,180	351	189	258	116	218
11	123	198	505	280	172	315	2,080	361	189	238	116	198
12	116	208	433	280	172	315	1,740	338	172	227	108	180
13	108	248	385	280	172	315	1,450	361	172	218	108	172
14	116	258	361	289	248	315	1,180	361	164	198	108	155
15	116	248	315	258	361	315	1,030	433	164	198	101	147
16	116	248	292	258	361	315	922	361	164	180	101	139
17	123	248	292	248	338	315	784	338	164	180	94	139
18	123	227	280	248	315	292	732	338	165	180	94	139
19	139	218	269	248	289	280	655	315	165	180	94	139
20	139	218	258	233	258	315	630	333	165	172	88	139
21	147	208	238	238	248	338	605	338	147	164	88	139
22	172	208	248	218	248	385	580	315	139	164	82	131
23	189	198	248	208	238	361	555	292	139	164	82	131
24	218	198	248	218	238	505	555	280	147	164	82	155
25	315	189	233	198	248	706	530	269	139	164	82	155
26	315	189	227	189	258	655	505	258	139	164	82	172
27	258	189	218	180	280	605	505	258	131	164	77	172
28	248	189	227	172	655	605	481	248	131	165	77	172
29	238	198	198	172	838	605	481	238	131	147	72	164
30	280	198	198	172	-	605	457	218	116	147	77	164
31	269	-	198	172	-	555	-	218	-	147	77	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	5,063	315	108	163	10,040
November.....	6,260	258	180	209	12,420
December.....	8,299	530	180	268	16,460
Calendar year 1935.....	364,506	5,010	101	999	722,900
January.....	7,165	280	172	231	14,210
February.....	7,637	838	172	263	15,150
March.....	13,341	706	280	430	26,640
April.....	29,294	2,460	457	976	58,100
May.....	10,614	457	218	342	21,050
June.....	8,016	218	116	187	9,850
July.....	7,910	706	147	255	15,990
August.....	3,185	139	72	103	6,320
September.....	6,647	784	72	222	13,180
Water year 1935-36.....	110,431	2,460	72	302	219,000

Little River Ditch 259 near Kennett, Mo.

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

Records available.- November 1926 to September 1936.

Extremes.- Maximum discharge observed during year, 454 second-feet July 3 (gage height, 7.72 feet); no flow Aug. 3 to Sept. 2; minimum gage height, 1.83 feet Sept. 21, 22, 1926-36; Maximum discharge, 4,140 second-feet Apr. 29, 1927 (gage height, 15.57 feet); no flow Aug. 3 to Sept. 2, 1936; minimum gage height, 1.33 feet Aug. 29, 30, Sept. 4-8, 19, 20, 22, 23, 1930.

Remarks.- Records poor. Gage read once daily.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.6	1.3	1.8	3.7	4.2	14	23	38	3.8	3.6	0.1	0
2	.6	1.2	1.5	3.8	4.4	16	22	40	4.0	178	.1	0
3	.6	1.2	1.2	4.1	4.2	13	21	38	3.5	454	0	.9
4	.6	1.2	1.4	3.7	3.2	12	20	35	2.8	376	0	11
5	.4	1.4	1.4	3.7	3.5	11	16	34	2.4	250	0	24
6	.6	1.1	1.4	3.7	3.0	9	50	32	2.0	166	0	25
7	.6	1.0	3.6	3.0	3.5	8	123	31	2.0	113	0	28
8	.8	1.0	10	3.6	3.8	8	113	28	2.0	80	0	23
9	.6	.9	13	4.2	3.2	8	108	25	1.7	56	0	10
10	.8	1.8	13	4.8	3.5	7	108	26	1.6	40	0	12
11	.6	26	12	5	3.2	7	108	25	1.4	30	0	7
12	.6	11	12	5	3.6	6	108	22	1.1	24	0	4.2
13	.5	9	11	4.8	6	6	98	20	.9	19	0	3.2
14	.5	8	9	4.5	5	6	84	20	.8	16	0	2.7
15	.4	6	8	4.2	5	6	76	18	.8	12	0	2.5
16	.4	5	7	4.4	4.8	6	72	17	.7	10	0	2.1
17	.5	4.8	6	4.2	5	5	64	16	.8	8	0	2.0
18	.6	4.6	6	4.0	3.8	5	60	14	.7	7	0	2.0
19	.9	4.4	5	4.1	4.2	5	56	15	.6	6	0	2.0
20	.8	3.7	4.6	3.5	4.2	8	53	16	.6	5	0	2.0
21	.6	3.5	4.5	3.5	3.8	9	53	16	.5	4.6	0	1.9
22	.8	2.5	4.4	3.7	3.2	12	53	13	.5	4.1	0	1.9
23	1.3	2.4	4.4	3.2	3.3	12	46	12	.4	3.5	0	2.0
24	1.4	2.1	3.6	2.9	3.7	16	46	10	.5	3.0	0	3.1
25	1.5	2.0	3.5	3.7	3.5	40	46	10	.4	2.2	0	2.5
26	1.6	2.2	3.2	3.5	4.1	40	43	9	.4	1.8	0	2.4
27	1.7	2.3	3.1	3.5	12	35	43	9	.3	1.3	0	2.6
28	2.6	2.1	3.5	3.7	13	31	43	8	.3	1.0	0	2.3
29	1.9	1.9	4.0	4.0	16	28	40	7	.3	.8	0	2.0
30	1.6	1.7	3.0	4.0	-	30	40	5	.2	.6	0	2.0
31	1.6	-	3.6	3.7	-	24	-	5	-	.2	0	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						28.6	2.6	0.4	0.92	57		
November.....						117.2	26	.9	3.91	232		
December.....						169.7	13	1.2	5.47	337		
Calendar year 1935.....						49,776.8	1,150	.3	136	98,740		
January.....						121.4	5	2.9	3.92	241		
February.....						143.9	16	3.0	4.96	285		
March.....						443	40	5	14.3	879		
April.....						1,836	123	16	61.2	3,640		
May.....						614	40	5	19.8	1,220		
June.....						38.0	4.0	.2	1.27	75		
July.....						1,876.7	454	.2	60.5	3,720		
August.....						.2	1	0	.01	.4		
September.....						186.3	28	0	6.21	370		
Water year 1935-36.....						5,575.0	454	0	15.2	11,060		

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 above mean sea level (general adjustment of 1929).

Drainage area.- 1,270 square miles.

Records available.- July 1909 to December 1910, May 1923 to September 1936.

Average discharge.- 13 years (1923-36), 1,654 second-feet.

Extremes.- Maximum discharge observed during year, 12,000 second-feet Dec. 8, Sept. 29 (gage height, 12.3 feet); minimum 3.0 second-feet Aug. 31, Sept. 1 (gage height, 2.14 feet).

1909-10, 1923-36: Maximum discharge observed, 65,000 second-feet Apr. 16, 1927 (gage height, 37.0 feet); minimum discharge, that of Aug. 31, Sept. 1, 1936; minimum gage height, 1.55 feet, present datum, Oct. 1-8, 1909.

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

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	73	712	1,020	309	179	390	390	277	234	55	6	3.0
2	73	605	825	305	186	416	363	314	206	48	6	14
3	69	538	675	300	186	445	640	338	186	46	7	33
4	67	605	572	296	186	445	572	166	44	6	53	
5	69	675	506	291	246	474	675	640	788	80	6	33
6	61	445	2,240	296	221	474	712	474	474	61	6	73
7	65	363	7,300	296	206	445	1,470	390	365	51	6	71
8	67	416	10,500	291	217	416	1,300	314	338	43	6	65
9	73	980	5,280	291	206	390	1,020	363	314	39	6	50
10	82	2,600	3,460	291	213	363	862	390	314	35	6	39
11	84	1,830	2,480	291	183	363	788	1,140	268	33	6	33
12	82	1,300	1,920	291	198	338	825	2,130	286	30	6	29
13	128	940	1,650	291	183	314	825	2,960	229	28	6	23
14	122	750	1,380	291	176	300	750	3,710	194	28	6	22
15	106	605	1,220	286	166	286	675	2,480	179	25	6	17
16	94	538	1,060	282	155	268	605	1,740	159	33	6	17
17	91	445	940	277	166	259	538	1,300	140	43	6	17
18	96	390	862	264	137	246	506	1,060	128	35	5	16
19	112	363	750	255	159	242	445	862	117	30	4.2	17
20	125	314	675	242	159	238	416	712	106	28	4.2	21
21	137	296	605	238	146	225	416	640	96	25	4.2	25
22	146	277	572	234	140	221	474	538	89	21	4.0	41
23	146	251	506	221	143	225	445	474	80	20	3.8	314
24	255	242	474	209	140	229	416	390	75	16	3.5	390
25	202	234	445	209	143	605	416	563	67	14	3.8	1,380
26	190	259	416	206	194	1,060	363	390	61	14	4.5	1,220
27	209	363	390	221	273	788	338	363	59	11	4.2	1,220
28	229	1,300	363	183	314	675	314	314	55	10	4.2	4,480
29	234	1,740	338	202	390	572	314	282	51	9	3.8	21,000
30	209	1,380	338	159	-	474	286	259	50	8	3.5	5,420
31	291	-	314	149	-	445	-	251	-	7	3.0	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acre-feet
October.....	3,987	291	61	129	0.102	0.12	7,910
November.....	21,756	2,600	234	725	.571	.64	43,150
December.....	50,076	10,500	314	1,615	1.27	1.46	99,320
Calendar year 1935	942,790	38,100	59	2,583	2.03	27.62	1,870,000
January.....	7,967	309	149	257	.202	.23	15,800
February.....	5,611	390	137	193	.152	.16	11,130
March.....	12,631	1,060	221	407	.320	.37	28,050
April.....	18,412	1,470	286	614	.433	.54	36,520
May.....	26,430	3,710	251	853	.672	.77	52,420
June.....	5,872	788	50	196	.154	.17	11,650
July.....	965	80	7	31.2	.025	.03	1,920
August.....	168.9	7	3.0	5.13	.004	.005	315
September.....	26,136.0	11,000	3.0	871	.696	.77	51,840
Water year 1935-36	180,004.9	11,000	3.0	492	.397	5.27	357,000

WHITE RIVER BASIN

White River at Forsyth, Mo.

Location.- Water-stage recorder, lat. 36°40'55", long. 93°6'5", in SE $\frac{1}{4}$ 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 (general adjustment of 1929).

Drainage area.- 4,610 square miles.

Records available.- January to September 1926, February 1930 to September 1936.

Extremes.- Maximum discharge during year, 28,100 second-feet Sept. 29 (gage height, 12.53 feet); minimum, 30 second-feet Sept. 2, 3 (gage height, 1.55 feet); minimum daily discharge, 34 second-feet Sept. 3.

1926. 1930-36: Maximum discharge, 127,000 second-feet Mar. 11, 1935 (gage height, 35.23 feet); minimum discharge, that of Sept. 2, 3, 1936; minimum gage height, 1.20 feet July 14, 1934; minimum daily discharge, 34 second-feet Sept. 3, 1936.

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

Remarks.- Records good. Flow regulated by hydroelectric plant of Empire District Electric Co. Discharge estimated for Feb. 18-20.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	630	2,410	3,310	503	588	1,610	1,020	1,010	791	2,480	95	66
2	820	2,610	2,660	1,190	248	1,500	1,710	854	943	958	90	43
3	706	2,690	2,700	1,060	695	1,880	1,650	188	1,020	219	86	34
4	751	3,780	2,700	1,180	1,080	1,460	1,700	942	958	166	66	35
5	433	6,040	2,590	275	754	1,880	384	916	940	208	69	39
6	295	5,390	5,490	1,360	905	1,630	1,010	1,210	721	317	72	43
7	561	2,920	9,750	1,500	978	1,810	1,510	1,610	184	407	72	49
8	477	3,090	11,600	1,060	985	680	1,550	1,390	501	444	80	58
9	1,080	5,650	16,200	948	783	1,830	2,510	1,320	1,150	411	80	51
10	709	10,900	10,100	1,300	989	1,560	2,540	1,320	721	349	76	56
11	515	8,830	7,220	895	838	1,570	1,890	1,620	653	164	69	53
12	691	6,690	5,880	574	861	1,450	954	2,120	611	130	72	51
13	153	5,630	5,430	1,260	803	1,330	2,100	4,990	485	140	69	49
14	383	4,620	4,790	1,600	836	1,320	1,910	4,960	209	214	72	69
15	795	5,610	2,960	1,550	847	559	1,690	5,210	747	196	95	62
16	554	3,610	3,440	1,470	644	1,530	1,540	4,420	901	120	182	55
17	495	887	2,870	1,590	735	876	1,710	2,780	916	120	110	62
18	839	2,550	2,640	1,310	700	1,120	1,410	1,170	728	130	95	69
19	1,360	2,600	2,630	217	650	1,040	631	2,340	658	130	194	95
20	358	1,660	2,060	534	800	1,040	1,660	1,780	512	130	95	672
21	1,090	1,720	2,240	809	963	875	1,480	1,960	92	140	86	976
22	1,540	1,620	976	762	828	504	1,740	1,350	485	164	90	1,130
23	1,480	1,460	1,840	553	686	723	1,510	1,500	582	130	83	5,630
24	1,320	592	1,120	356	1,200	968	1,370	781	725	110	83	18,900
25	1,560	2,010	671	459	838	1,180	1,170	1,940	644	110	80	17,100
26	1,420	1,830	2,160	158	848	1,370	304	1,340	183	110	80	8,410
27	1,400	3,340	2,440	679	1,340	1,870	1,500	783	261	100	53	8,130
28	1,020	2,350	2,210	974	1,350	1,940	829	984	144	135	51	20,100
29	1,190	2,250	553	703	1,270	1,750	1,420	924	97	125	49	27,000
30	1,270	3,010	1,620	710	-	1,920	1,570	190	63	105	47	23,500
31	959	-	1,520	655	-	1,200	-	300	-	105	47	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acres-feet
October.....	26,434	1,560	153	853	0.185	0.21	52,430
November.....	106,219	10,900	592	3,541	.768	.86	210,700
December.....	123,170	16,200	353	3,973	.862	.99	244,300
Calendar year 1935	2,922,168	123,000	100	8,006	1.74	23.57	5,796,000
January.....	28,064	1,590	158	905	.196	.23	55,660
February.....	25,053	1,350	248	864	.187	.20	49,690
March.....	41,775	1,940	504	1,348	.292	.34	82,860
April.....	44,772	2,810	304	1,492	.324	.36	88,800
May.....	54,172	5,210	188	1,747	.379	.44	107,400
June.....	17,945	1,150	83	596	.130	.14	35,590
July.....	8,747	2,480	100	282	.061	.07	17,350
August.....	2,588	194	47	83.5	.018	.02	5,130
September.....	132,586	27,000	34	4,420	.959	1.07	263,000
Water year 1935-36	611,525	27,000	34	1,671	.362	4.93	1,213,000

White River near Flippin, Ark.

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

Drainage area.- 6,170 square miles.

Records available.- October 1928 to September 1936.

Extremes.- Maximum discharge observed during year, 27,500 second-feet Sept. 29, 30 (gage height, 14.73 feet); minimum, 105 second-feet Sept. 14, 15 (gage height, 4.15 feet).

1928-36: Maximum discharge observed, 164,000 second-feet Mar. 12, 1935; minimum discharge, that of Sept. 14, 15, 1936; minimum gage height, 4.08 feet Dec. 18, 1932.

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

Remarks.- Records good. Gage read twice daily.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	680	3,900	4,100	1,460	720	2,100	1,940	1,280	1,800	236	152	117
2	680	2,420	4,500	1,940	560	2,100	1,940	1,280	1,520	272	224	120
3	680	3,900	4,100	1,400	600	2,100	1,800	1,400	1,940	1,940	192	120
4	520	4,500	4,900	1,600	600	1,940	2,420	1,220	1,940	960	160	117
5	600	4,100	3,120	1,400	960	2,100	1,940	910	1,160	860	200	117
6	680	9,100	4,300	1,110	640	1,940	2,260	680	1,800	640	164	117
7	640	7,900	21,700	1,010	1,160	2,100	2,260	1,060	1,660	296	196	108
8	660	7,100	16,900	1,660	960	2,100	1,800	1,520	1,110	272	160	114
9	640	4,700	18,700	1,800	960	1,460	1,900	1,400	810	400	192	117
10	600	9,400	19,600	1,220	1,660	1,110	2,760	1,400	720	256	148	108
11	640	19,400	13,100	1,460	910	1,800	2,580	1,460	1,010	460	148	117
12	640	12,400	10,000	1,520	910	1,800	2,940	1,660	1,110	376	160	111
13	640	9,400	7,900	1,460	1,060	2,100	2,100	1,600	640	328	144	117
14	600	7,600	7,100	610	860	1,800	1,800	4,700	600	260	136	111
15	600	7,100	6,350	1,280	720	1,660	2,100	5,860	680	236	156	108
16	560	5,260	6,100	1,460	760	1,660	2,420	6,350	560	232	120	111
17	640	5,600	5,100	1,660	760	1,660	2,100	5,100	430	292	128	180
18	660	4,300	4,700	1,800	960	1,660	1,940	3,700	600	264	120	148
19	680	2,940	2,580	1,460	810	1,400	2,100	2,420	720	292	188	156
20	1,340	2,420	2,940	1,520	640	1,460	1,800	2,100	560	364	168	226
21	1,800	2,420	2,760	600	720	1,660	1,940	2,580	640	256	156	260
22	1,060	2,560	2,260	600	600	1,460	2,100	1,940	660	280	164	260
23	1,060	2,420	2,100	760	810	1,340	2,200	2,100	640	196	152	1,010
24	1,340	2,100	1,280	600	660	860	2,100	2,100	640	224	136	9,400
25	1,500	1,940	2,420	600	910	1,520	1,940	2,100	600	204	120	21,700
26	1,340	1,010	1,940	520	1,660	1,660	1,460	1,460	680	228	144	18,700
27	1,010	3,120	1,520	600	1,520	1,660	1,280	2,100	640	208	124	6,300
28	1,060	4,900	2,580	560	1,400	1,660	1,010	1,940	640	184	120	18,500
29	1,280	5,600	2,760	520	1,940	2,580	1,110	1,860	520	188	120	26,700
30	1,220	4,500	2,420	640	-	2,260	1,220	1,060	266	188	120	27,500
31	1,280	-	810	1,110	-	2,100	-	2,100	-	188	111	-
Month				Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off			
									Inches	Acres-feet		
October.....				27,670	1,800	520	893	0.145	0.17	54,580		
November.....				164,420	19,400	1,010	5,481	.888	.99	326,100		
December.....				190,840	21,700	810	6,156	.998	1.15	376,500		
Calendar year 1935.....				3,887,432	155,000	246	10,650	1.73	23.46	7,711,000		
January.....				36,200	1,940	520	1,168	.189	.22	71,800		
February.....				27,710	1,940	560	956	.155	.17	54,960		
March.....				54,610	2,580	660	1,768	.287	.33	108,700		
April.....				59,060	2,940	1,010	1,969	.319	.36	117,100		
May.....				68,430	6,350	680	2,207	.358	.41	136,700		
June.....				26,718	1,940	268	891	.144	.16	52,990		
July.....				11,602	1,940	184	374	.061	.07	23,010		
August.....				4,703	224	111	152	.028	.03	9,330		
September.....				135,192	27,500	108	4,506	.730	.81	266,100		
Water year 1935-36.....				807,355	27,500	108	2,206	.358	4.87	1,601,000		

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.

Records available.- December 1927 to September 1936.

Extremes.- Maximum discharge during year, 37,100 second-feet Dec. 14, 15 (gage height, 20.4 feet); minimum, 3,200 second-feet Aug. 30 to Sept. 4 (gage height, 1.4 feet)

1927-36: Maximum discharge observed, 140,000 second-feet June 28, 29, 1928 (gage height, 28.5 feet); minimum, that of Aug. 30 to Sept. 4, 1936.

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

Remarks.- Records good. At stages above 27 feet (116,000 second-feet), overflow occurs in the region of Des Arc and Augusta, bypassing some of the flow of White River into Cache River.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	7,480	12,000	12,400	11,300	7,240	11,000	11,400	15,100	7,240	4,540	3,840	3,200
2	7,480	11,900	12,800	11,200	7,120	12,500	11,200	15,600	7,120	5,360	3,840	3,200
3	7,360	11,500	13,400	11,000	7,000	13,100	10,900	15,800	6,880	7,240	3,760	3,200
4	7,000	10,700	13,400	11,000	7,120	13,200	10,700	15,600	6,760	7,120	3,680	3,200
5	6,760	10,700	13,200	10,900	7,240	13,400	10,900	15,300	6,580	6,640	3,600	3,280
6	6,520	10,700	13,000	11,000	7,480	13,200	10,900	14,600	6,400	6,520	3,520	3,360
7	6,280	11,000	12,800	11,200	7,720	13,100	10,700	15,800	6,160	6,400	3,520	3,520
8	6,160	11,000	15,000	11,200	7,960	13,100	12,600	13,100	5,960	6,280	3,520	3,840
9	6,060	11,400	22,700	11,200	7,960	13,100	18,400	12,000	5,860	6,060	3,520	4,180
10	6,060	12,500	28,200	11,000	7,840	12,800	22,100	11,300	6,060	5,860	3,520	4,450
11	5,960	13,600	32,300	11,000	7,720	12,500	23,800	10,600	6,060	5,460	3,520	4,540
12	5,960	14,200	35,000	10,700	7,720	12,200	24,500	10,200	6,280	5,170	3,520	4,630
13	5,960	14,600	36,600	10,700	7,600	11,900	24,500	9,740	6,280	4,980	3,520	4,630
14	5,960	16,900	37,100	10,600	7,480	11,400	24,500	9,600	6,280	4,720	3,520	4,630
15	5,960	19,700	37,100	10,400	7,480	11,200	23,800	9,460	6,060	4,540	3,520	4,540
16	5,860	21,000	36,600	10,300	7,600	10,700	23,100	9,320	6,060	4,450	3,520	4,450
17	5,960	21,200	35,500	10,200	7,840	10,400	22,300	9,320	5,960	4,360	3,520	4,270
18	5,960	20,800	32,700	9,880	8,200	10,300	21,200	9,740	5,960	4,270	3,440	4,090
19	5,960	19,800	30,400	9,600	8,340	10,000	20,200	10,400	5,660	4,270	3,360	3,920
20	5,860	18,600	28,000	9,460	8,340	9,740	19,300	11,000	5,560	4,270	3,360	4,180
21	5,860	17,500	25,700	9,460	8,200	9,600	18,600	11,400	5,460	4,270	3,360	5,360
22	6,280	16,200	23,400	9,320	7,960	9,320	17,900	11,300	5,260	4,270	3,280	6,280
23	7,360	15,000	21,200	9,320	7,720	9,180	17,200	10,900	5,170	4,180	3,280	6,180
24	8,620	14,000	19,300	9,180	7,600	9,740	16,700	10,200	5,080	4,180	3,280	5,860
25	9,320	13,200	17,700	8,900	7,600	10,700	16,200	9,460	5,080	4,270	3,280	5,660
26	9,460	12,800	16,400	8,620	7,600	11,400	15,900	9,040	4,990	4,360	3,280	5,760
27	9,460	12,400	15,300	8,200	7,720	12,500	15,600	8,620	4,900	4,360	3,280	6,880
28	9,460	11,900	14,200	7,960	7,960	12,800	15,300	8,340	4,810	4,180	3,280	10,200
29	9,880	11,800	13,100	7,840	7,720	12,500	14,800	7,960	4,720	4,090	3,280	14,800
30	10,900	11,900	12,400	7,600	-	12,000	14,600	7,720	4,630	4,000	3,200	16,900
31	11,900	-	11,600	7,480	-	11,800	-	7,480	-	3,920	3,200	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						225,060	11,900	5,860	7,260	446,400		
November.....						430,300	21,200	10,700	14,340	853,600		
December.....						688,500	37,100	11,600	22,210	1,366,000		
Calendar year 1935						12,212,900	132,000	5,860	34,400	24,220,000		
January.....						307,720	11,300	7,480	9,926	610,400		
February.....						225,060	8,340	7,000	7,692	442,500		
March.....						360,380	15,400	9,180	11,630	714,800		
April.....						519,800	24,500	10,700	17,330	1,031,000		
May.....						344,000	15,800	7,480	11,100	682,300		
June.....						175,120	7,240	4,630	5,837	347,300		
July.....						164,600	7,240	3,920	4,987	306,600		
August.....						107,120	3,840	3,200	3,465	212,500		
September.....						163,170	16,900	3,200	5,439	323,600		
Water year 1935-36						3,698,860	37,100	3,200	10,110	7,337,000		

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 Ralley Creek. Zero of gage is 923.588 feet above mean sea level (general adjustment of 1929).

Drainage area.- 1,000 square miles.

Records available.- October 1921 to September 1936.

Average discharge.- 14 years (1922-36), 991 second-feet.

Extremes.- Maximum discharge observed during year, 10,300 second-feet Sept. 23 (gage height, 10.85 feet); minimum discharge, 22 second-feet Aug. 26, 27, 29, 30, Sept. 4; minimum gage height, 0.45 foot Aug. 30.
1921-36: Maximum discharge, 80,400 second-feet Mar. 11, 1935 (gage height, 27.05 feet); minimum discharge, that of Aug. 26, 27, 29, 30, Sept. 4, 1936; minimum gage height, that of Aug. 26, 1936.

Remarks.- Records good except those for days of rapidly changing stage, which are poor. Gage read twice daily or oftener.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	134	509	692	264	172	220	150	150	85	855	31	28
2	137	692	630	264	150	208	195	172	82	435	30	31
3	134	596	600	264	161	208	184	161	96	248	32	27
4	152	822	540	248	150	195	172	184	85	172	33	23
5	176	1,270	512	248	195	184	184	172	95	140	36	26
6	204	1,340	630	248	172	172	172	172	109	109	37	29
7	249	1,200	1,060	248	164	172	184	172	130	90	37	30
8	216	990	1,200	234	150	161	172	150	130	82	39	37
9	200	922	1,270	234	150	161	161	172	102	79	37	39
10	168	1,340	1,130	234	208	150	172	195	102	71	34	36
11	173	1,880	1,060	220	208	172	161	195	121	65	31	34
12	162	1,560	922	220	161	161	161	234	109	63	31	33
13	160	1,340	855	220	140	161	161	260	130	61	28	30
14	162	1,130	758	220	161	150	150	234	130	57	28	29
15	149	990	692	208	208	150	150	220	112	55	27	28
16	142	855	630	208	195	150	150	195	99	55	25	41
17	142	760	570	195	150	140	150	184	102	46	26	220
18	142	660	540	208	140	150	140	264	90	44	28	82
19	232	600	512	208	195	140	140	297	88	43	26	107
20	342	570	460	195	150	150	140	248	77	44	26	172
21	536	540	435	195	150	140	150	208	72	42	26	485
22	620	485	412	208	150	140	150	164	67	36	26	314
23	556	435	390	195	140	140	161	172	58	34	25	5,670
24	456	412	390	172	140	140	161	161	55	33	25	6,860
25	385	370	350	220	121	184	140	140	50	36	24	2,130
26	342	460	314	234	161	161	130	121	55	36	22	1,270
27	342	512	297	370	172	150	140	130	55	32	23	3,150
28	342	600	297	248	208	150	130	106	50	35	23	7,750
29	364	725	314	184	220	161	161	102	48	33	23	5,390
30	342	758	280	220	-	140	161	99	46	34	22	3,150
31	342	-	297	208	-	121	-	85	-	53	24	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acre-feet
October.....	8,291	628	132	267	0.267	0.31	16,440
November.....	25,321	1,880	370	644	.844	.94	50,220
December.....	19,039	1,270	280	614	.614	.71	37,760
Calendar year 1935.....	585,723	42,000	122	1,605	1.60	21.79	1,162,000
January.....	7,042	370	172	227	.227	.26	13,970
February.....	4,862	220	121	168	.168	.16	9,640
March.....	4,982	220	121	161	.161	.19	9,860
April.....	4,753	195	130	158	.158	.15	9,390
May.....	5,562	297	88	179	.179	.21	11,030
June.....	2,628	130	46	67.6	.068	.10	5,210
July.....	3,196	855	32	103	.103	.12	6,340
August.....	885	39	22	28.5	.028	.03	1,760
September.....	37,240	7,750	23	1,241	1.24	1.38	73,860
Water year 1935-36.....	123,791	7,750	22	338	.338	4.61	245,500

WHITE RIVER BASIN

Wilson Creek near Springfield, Mo.

Location.- Water-stage recorder, lat. 37°11'35", long. 93°20'20", in NW1/4 sec. 28, T. 29 N., R. 22 W., three-quarters of a mile below Jordan Creek and 2 miles southwest of Springfield. Zero of gage is 1,196.28 feet above mean sea level (general adjustment of 1929).

Drainage area.- 19.4 square miles.

Records available.- May 1932 to September 1936.

Extremes.- Maximum discharge during year, 398 second-feet Sept. 28 (gage height, 3.77 feet); minimum discharge, 2.1 second-feet Sept. 13; minimum gage height, 0.26 foot Jan. 20; minimum daily discharge, 3.2 second-feet Sept. 11, 1932-36: Maximum discharge, about 2,440 second-feet June 27, 1932 (gage height, 7.62 feet); minimum discharge, that of Sept. 13, 1936; minimum gage height, that of Jan. 20, 1936; minimum daily discharge, 3.2 second-feet Oct. 8, 1932, Sept. 11, 1936.

Remarks.- Records fair except those for Oct. 20 to Nov. 1, Jan. 23 to Mar. 1, May 28-29, June 30 to July 4, which were computed on basis of weather records and observer's notes, and 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 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	7.0	20	8.1	7.0	6	15	12.7	8.8	5.3	4.5	5.3	5.6
2	7.0	13.7	8.1	7.0		11.2	6.7	20	10.9		5.1	11.2
3	6.0	11.7	8.1	7.4		9.8	6.7	7.8	6.0		5.4	4.7
4	4.9	23	8.4	8.1		8.8	7.0	7.0	4.9		5.3	5.6
5	23	15	8.4	7.0		8.1	6.4	6.7	14.2		5.3	4.0
6	6.4	13.2	29	8.1	7	7.8	7.4	6.7	24	4.5	6.0	3.6
7	7.0	11.7	15	7.8		7.0	6.7	6.7	5.6	4.5	8.8	4.5
8	5.6	9.8	11.7	7.8		5.6	6.4	5.8	5.6	4.0	5.3	5.8
9	6.0	49	13.2	8.1		6.7	8.8	21	5.3	4.2	5.1	3.6
10	4.9	36	11.7	8.4		6.7	13.2	8.8	9.3	4.2	5.1	3.6
11	6.0	23	11.2	8.1	8	12.9	7.4	16	5.6	4.5	5.3	3.2
12	6.4	19	11.2	7.8		6.4	6.4	10.3	5.1	4.5	5.3	4.0
13	6.4	17	10.3	7.8		6.7	6.7	8.4	4.9	4.2	5.6	4.2
14	6.0	16	10.3	7.4		6.4	7.4	8.4	4.9	4.7	5.1	8.1
15	6.7	14.3	9.3	7.0		5.3	6.7	7.4	5.3	4.7	5.3	8.1
16	6.4	12.7	10.3	6.0	8	6.4	5.6	8.1	5.6	11.4	5.3	13.2
17	6.4	12.2	9.3	5.6		6.0	5.3	11.4	5.1	5.3	6.0	26
18	6.0	13.2	9.8	5.1		6.4	5.3	11.7	5.1	8.1	5.3	7.8
19	28	11.7	9.3	4.7		6.4	5.1	8.1	5.3	6.4	4.9	7.0
20		11.2	8.4	4.5		7.0	5.3	7.8	5.3	6.7	4.9	7.0
21	10	10.8	8.4	4.5	8	7.0	15	6.7	5.1	7.0	4.9	6.0
22		9.8	7.8	4.5		6.4	6.7	8.3	6.4	6.7	5.1	5.1
23		10.3	8.8			24	6.4	7.0	6.0	7.0	5.3	6.0
24		8.8	7.8			8.8	6.0	6.0	6.0	7.0	6.7	8.0
25		11.2	7.0			7.0	6.0	6.4	5.6	6.7	6.0	5.3
26	8	24	8.1	5	8	7.0	5.6		5.6	6.4	5.3	5.3
27		13.7	8.1			6.4	6.0		4.5	6.2	4.7	9.3
28		10.3	7.8			6.0	30	7	5.3	6.0	7.8	72
29		9.3	6.7			5.3	8.4		5.3	6.0	4.9	12.2
30		9.3	7.8			4.9	8.1	6.7	5.0	6.0	4.9	9.3
31		-	7.0			5.6	-	5.3	-	5.6	5.1	-
Month				Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off			
									Inches	Acre-feet		
October.....				266.1	28	4.9	8.58	0.442	0.51	528		
November.....				470.9	49	8.8	15.7	.809	.90	934		
December.....				306.4	29	6.7	9.88	.509	.59	608		
Calendar year 1935.....				10,513.0	422	4.9	28.8	1.48	20.15	20,840		
January.....				194.7	8.4	4.5	6.28	.324	.37	386		
February.....				205	8	6	7.1	.366	.39	407		
March.....				245.0	24	4.9	7.90	.407	.47	486		
April.....				241.4	30	5.1	8.05	.415	.46	479		
May.....				274.3	21	5.3	8.85	.456	.53	544		
June.....				198.1	24	4.5	6.60	.340	.38	393		
July.....				174.7	11.4	4.0	5.64	.291	.34	347		
August.....				171.4	8.8	4.7	5.53	.285	.33	340		
September.....				278.7	72	3.2	9.27	.478	.53	552		
Water year 1935-36.....				3,026.1	72	3.2	8.27	.426	5.80	6,000		

Buffalo River near Rush, Ark.

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

Drainage area.- 1,110 square miles.

Records available.- October 1928 to September 1936.

Extremes.- Maximum discharge observed during year, 13,500 second-feet Dec. 7 (gage height, 9.70 feet); minimum, 15 second-feet Aug. 30 to Sept. 2 (gage height, 0.94 foot).

1928-36: Maximum discharge observed, 82,100 second-feet May 14, 1933 (gage height, 23.9 feet); minimum discharge, that of Aug. 30 to Sept. 2, 1936; minimum gage height, 0.6 foot Sept. 25-30, Oct. 1-3, 7-9, 1929, Sept. 10-22, 1932.

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

Remarks.- Records good. Gage read twice daily.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	91	232	520	220	208	520	344	448	155	85	30	15
2	91	232	456	220	232	520	360	408	145	97	30	16
3	91	220	400	220	292	520	360	408	145	91	26	26
4	91	208	328	220	344	520	424	368	145	85	26	40
5	91	208	278	238	320	520	480	344	140	85	26	32
6	85	208	605	257	299	520	8,240	328	140	76	26	30
7	85	232	13,000	278	313	520	5,150	313	140	76	22	30
8	85	257	6,850	306	328	460	5,420	229	140	70	22	30
9	85	257	3,560	328	306	472	2,320	285	132	70	22	34
10	85	244	2,320	368	278	456	1,940	271	132	64	19	38
11	85	244	1,520	416	257	440	1,700	320	132	64	19	38
12	85	244	1,130	440	244	440	1,700	460	132	58	19	34
13	85	257	930	440	244	424	1,460	520	120	58	19	34
14	85	336	785	440	244	424	1,500	520	120	55	17	30
15	85	328	695	424	244	384	1,130	480	120	55	17	30
16	85	278	605	408	244	336	980	448	120	49	17	26
17	85	257	520	384	244	313	830	416	112	49	17	49
18	85	338	480	352	244	299	740	394	112	49	17	480
19	116	214	432	328	244	285	695	352	104	49	17	336
20	128	196	400	313	244	271	605	320	104	49	17	202
21	120	196	368	299	244	271	560	313	100	40	17	145
22	140	185	336	299	244	257	560	293	100	40	17	136
23	170	175	313	299	226	257	740	264	94	40	17	208
24	185	165	299	285	202	257	740	238	94	40	17	3,420
25	185	165	299	271	202	257	650	220	88	40	17	1,940
26	185	190	278	257	264	257	605	220	88	36	17	980
27	208	220	257	244	328	292	560	208	88	36	17	560
28	264	220	244	232	408	344	520	196	88	36	17	6,780
29	257	448	232	220	520	360	520	185	85	32	17	6,320
30	244	560	232	220	-	344	480	175	85	30	15	2,190
31	232	-	220	208	-	344	-	165	-	30	15	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acre-feet
October.....	3,994	264	85	129	0.116	0.13	7,920
November.....	7,420	560	165	247	.223	.25	14,720
December.....	38,892	13,000	220	1,265	1.13	1.30	77,140
Calendar year 1935	820,996	49,500	85	2,249	2.03	27.50	1,628,000
January.....	9,434	440	208	304	.274	.32	18,710
February.....	8,011	520	202	276	.249	.27	15,690
March.....	11,904	520	257	384	.346	.40	23,610
April.....	40,113	8,240	344	1,337	1.20	1.34	79,560
May.....	10,189	520	165	329	.296	.34	20,210
June.....	3,500	155	85	117	.105	.12	6,940
July.....	1,734	97	30	55.9	.050	.06	3,440
August.....	608	30	15	19.6	.018	.02	1,210
September.....	24,229	6,780	15	808	.728	.81	48,060
Water year 1935-36	160,028	13,000	15	437	.394	5.36	317,400

North Fork of White River at Tecumseh, Mo.

Location.- Wire-weight gage, lat. 36°36'16", long. 92°17'19", in NW 1/4 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 (general adjustment of 1929).

Drainage area.- 1,180 square miles.

Records available.- October 1921 to September 1936.

Average discharge.- 14 years (1922-36), 1,230 second-feet.

Extremes.- Maximum discharge observed during year, 5,300 second-feet Sept. 24 (gage height, 4.75 feet); minimum discharge, 280 second-feet Sept. 16; minimum gage height, 0.74 foot Aug. 16, 30, 31.

1921-36: Maximum discharge observed, 53,000 second-feet June 13, 1928 (gage height, 24.00 feet); minimum discharge, that of Sept. 16, 1936; minimum gage height, that of Aug. 16, 30, 31, 1936.

Maximum stage known, 31.6 feet in July 1905, from floodmarks.

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

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	522	880	880	686	546	695	586	506	406	455	314	290
2	514	880	830	695	562	695	554	514	413	483	314	296
3	522	785	785	722	554	642	530	514	413	413	338	314
4	514	785	785	713	546	626	522	498	413	385	332	308
5	578	1,030	740	695	530	602	570	490	406	371	332	302
6	570	1,200	1,530	695	530	578	594	483	413	326	332	290
7	546	1,030	2,930	668	522	578	678	483	413	357	326	290
8	538	880	2,650	677	522	570	554	476	420	344	332	290
9	538	860	2,110	659	506	570	578	483	406	357	320	326
10	538	3,500	1,720	668	498	554	677	469	427	344	320	302
11	538	2,370	1,470	659	498	554	722	469	455	344	320	302
12	538	1,590	1,360	642	530	546	785	476	427	338	320	302
13	522	1,360	1,250	634	546	530	731	538	413	332	320	290
14	514	1,200	1,140	634	594	538	695	498	399	332	314	290
15	514	980	1,080	626	626	530	686	476	399	326	308	285
16	506	930	1,030	618	562	522	642	462	385	332	290	280
17	506	880	980	610	562	506	602	462	385	332	308	578
18	602	880	930	602	498	498	694	462	378	332	314	469
19	586	830	860	602	506	506	586	462	378	332	314	399
20	626	785	830	594	506	506	570	455	371	399	308	378
21	668	785	830	578	506	506	586	455	364	357	302	469
22	650	731	830	570	530	506	570	462	357	350	302	455
23	610	722	785	570	546	530	554	455	357	338	302	554
24	586	704	765	562	578	785	538	441	357	344	296	4,100
25	570	686	740	570	578	930	522	441	350	338	302	1,470
26	562	740	731	554	650	731	522	441	344	326	290	960
27	634	880	713	530	677	666	522	427	350	326	290	1,060
28	785	1,080	713	530	765	650	522	427	350	326	290	704
29	880	1,030	695	562	722	602	514	413	344	338	290	2,510
30	785	930	666	546	-	586	506	420	344	326	285	1,530
31	731	-	686	514	-	570	-	413	-	314	285	-
Month				Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off			
									Inches	Acres-feet		
October.....				18,293	880	506	590	0.500	0.58	36,280		
November.....				31,943	3,500	686	1,065	.903	1.01	63,560		
December.....				34,104	2,930	686	1,100	.932	1.07	67,640		
Calendar year 1935.....				540,406	38,500	506	1,480	1.25	17.04	1,072,000		
January.....				19,165	722	514	619	.525	.61	38,050		
February.....				16,316	785	498	563	.477	.51	32,360		
March.....				18,426	930	498	594	.505	.58	36,550		
April.....				17,712	765	506	590	.500	.56	35,130		
May.....				14,471	538	413	467	.396	.46	26,700		
June.....				11,637	455	344	388	.329	.37	23,060		
July.....				10,917	483	314	352	.298	.34	21,650		
August.....				9,610	338	285	310	.263	.30	19,060		
September.....				20,433	4,100	280	681	.577	.64	40,530		
Water year 1935-36.....				223,049	4,100	280	609	.516	7.03	442,400		

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 southeast of Henderson, 1 mile below Bennetts Bayou, and 19 miles above mouth.

Drainage area.- 1,640 square miles.

Records available.- July 1909 to December 1910, October 1928 to September 1936.

Extremes.- Maximum discharge observed during year, 10,300 second-feet Dec. 7 (gage height, 7.56 feet); minimum, 312 second-feet Aug. 1-3, 15-17, 23, Sept. 1 (gage height, 1.34 feet).

1928-36: Maximum discharge observed, 62,900 second-feet Mar. 11, 1935 (gage height, 22.2 feet); minimum, that of Aug. 1-3, 15-17, 23, Sept. 1, 1936.

Maximum stage known, 29.5 feet in August 1915.

Remarks.- Records good. Gage read twice daily.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	540	3,340	1,040	715	540	895	680	645	438	438	312	312
2	540	1,200	970	750	610	858	645	645	438	505	312	340
3	540	1,120	895	750	610	820	610	645	438	438	312	351
4	540	970	858	785	575	820	610	610	438	393	345	345
5	575	1,350	820	785	575	750	2,560	610	405	351	340	345
6	610	1,270	2,000	785	540	750	1,620	575	405	381	334	334
7	575	1,200	7,800	750	540	715	1,270	575	438	369	323	334
8	575	1,040	4,260	750	540	680	1,120	575	438	357	323	334
9	540	970	2,980	785	540	680	970	540	438	351	318	323
10	540	1,270	2,140	750	540	680	1,040	540	438	345	318	328
11	540	2,980	1,740	750	505	645	1,270	575	470	345	323	334
12	540	1,860	1,520	715	505	645	1,200	575	438	340	323	334
13	540	1,430	1,350	715	505	610	1,120	610	438	340	323	334
14	540	1,200	1,270	715	645	610	1,120	575	405	345	318	334
15	540	1,120	1,200	715	645	610	970	575	405	345	312	328
16	540	1,040	1,120	715	645	610	970	540	405	345	312	328
17	505	970	1,040	680	610	610	858	540	399	357	312	505
18	715	895	1,040	680	575	575	820	505	393	345	334	540
19	645	895	970	680	575	575	785	505	393	393	345	505
20	645	858	970	680	540	610	785	505	397	351	334	470
21	680	820	895	645	540	575	785	505	381	438	323	505
22	715	820	895	645	540	540	750	505	381	363	318	575
23	680	785	858	610	540	540	715	505	369	351	312	1,200
24	645	750	858	610	575	858	715	470	363	345	323	4,640
25	610	715	820	610	610	970	680	470	357	345	328	1,520
26	610	715	785	610	820	858	680	470	357	340	323	970
27	645	820	785	610	970	750	690	470	351	334	323	970
28	858	1,120	750	610	970	715	645	438	345	323	323	3,020
29	970	1,120	785	575	1,040	715	645	438	345	323	323	2,980
30	895	1,040	750	575	-	680	645	438	345	323	318	2,000
31	820	-	750	540	-	645	-	438	-	323	318	-
Month				Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off			
									Inches	Acre-feet		
October.....				19,453	970	505	628	0.383	0.44	38,580		
November.....				35,885	3,340	715	1,189	.725	.81	70,780		
December.....				44,914	7,800	750	1,449	.884	1.02	89,090		
Calendar year 1935.....				781,650	54,000	505	2,142	1.31	17.71	1,550,000		
January.....				21,290	785	540	687	.419	.48	42,230		
February.....				17,965	1,040	505	619	.377	.41	35,630		
March.....				21,594	970	540	697	.425	.49	42,830		
April.....				27,763	2,360	610	925	.584	.63	55,070		
May.....				16,612	645	438	536	.327	.38	32,950		
June.....				12,041	470	345	401	.245	.27	23,680		
July.....				11,272	505	323	364	.222	.26	22,360		
August.....				10,010	345	312	323	.197	.23	19,860		
September.....				25,743	4,640	312	858	.523	.58	51,060		
Water year 1935-36.....				264,340	7,800	312	722	.440	6.00	524,300		

Black River at Leeper, Mo.

Location.- Chain gage, lat. 37°4'30", long. 90°42'35", in SW¼ 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 (general adjustment of 1929).

Drainage area.- 957 square miles.

Records available.- June 1921 to September 1936.

Average discharge.- 15 years, 941 second-feet.

Extremes.- Maximum discharge observed during year, 8,660 second-feet Nov. 5 (gage height, 8.05 feet); minimum discharge, 160 second-feet July 31, Aug. 1, 2, Aug. 22 to Sept. 1; minimum gage height, 1.32 feet Sept. 1.
1921-36: Maximum discharge, 78,400 second-feet May 14, 1933 (gage height, 20.1 feet); minimum, 133 second-feet Aug. 11, 1934 (gage height, 1.22 feet).
Maximum stage known, about 24.7 feet in March 1904, from floodmarks.

Remarks.- Records good except those for days of rapidly changing stage, which are poor. Gage read once a day below 4 feet and twice daily above. Gage-height record collected in cooperation with U.S. Weather Bureau.

Rating tables, water year 1935-36 (gage heights, in feet, and discharge, in second-feet) (Shifting-control method used Oct. 1 to Nov. 5, July 30 to Sept. 30)

Oct. 1 to Nov. 5				Nov. 6 to Sept. 30			
2.4	275	3.5	910	5.5	3,470	1.40	160
2.6	350	4.0	1,420	6.0	4,250	1.60	192
2.8	445	4.5	2,060	7.0	6,000	1.80	232
3.0	555	5.0	2,750	8.0	8,000	2.2	345
						2.6	525
						3.0	780
						3.5	1,200
						4.0	1,720
						4.5	2,320
						5.0	2,940
						5.5	3,600
						5.8	4,020

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	395	680	475	385	310	780	452	365	232	202	160	160
2	350	648	475	385	328	710	475	365	232	222	160	950
3	350	680	452	408	328	675	525	345	232	232	168	475
4	310	680	430	408	328	640	525	345	232	232	168	365
5	310	3,930	430	385	328	610	525	345	232	222	168	345
6	330	3,600	430	408	328	590	640	328	222	211	168	295
7	310	2,080	560	408	328	525	640	328	232	211	168	268
8	310	1,610	930	408	328	525	640	310	232	211	175	255
9	330	1,300	1,150	430	310	550	640	295	232	202	175	244
10	330	3,740	1,060	408	310	525	745	310	222	202	175	232
11	330	4,020	970	430	295	550	930	310	222	192	175	222
12	310	2,440	890	430	310	525	890	310	211	192	175	222
13	310	1,960	850	430	385	525	850	310	211	194	175	211
14	310	1,500	780	408	452	525	780	328	211	194	168	211
15	292	1,300	745	408	640	525	710	328	211	175	168	211
16	292	1,100	675	408	500	500	675	310	211	202	168	202
17	275	1,010	610	385	475	475	610	295	211	222	175	280
18	310	860	590	395	452	452	590	295	211	222	168	310
19	420	815	560	385	385	452	525	280	202	192	168	310
20	395	745	525	385	385	452	500	280	202	194	168	280
21	472	675	500	365	385	452	475	280	192	184	168	268
22	472	640	500	365	365	452	475	268	192	184	160	255
23	472	580	475	365	365	452	452	268	192	184	160	255
24	445	560	475	345	365	430	430	268	192	175	160	430
25	420	550	452	365	365	430	408	255	192	175	160	760
26	420	525	430	345	430	452	408	255	192	175	160	610
27	395	525	430	328	525	452	385	255	192	175	160	500
28	472	525	408	328	930	430	385	255	192	168	160	430
29	788	525	430	345	650	430	385	244	184	168	160	408
30	955	500	408	345	-	430	365	232	184	168	160	408
31	525	-	385	328	-	430	-	232	-	160	160	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acres-feet
October.....	12,685	955	275	409	0.427	0.49	25,160
November.....	40,353	4,020	500	1,345	1.41	1.57	30,040
December.....	18,510	1,150	385	597	.624	.72	36,710
Calendar year 1935.....	487,160	52,900	275	1,335	1.39	19.11	976,200
January.....	11,911	430	328	384	.401	.46	23,630
February.....	12,018	930	295	414	.433	.47	23,840
March.....	15,941	780	430	514	.537	.62	31,620
April.....	17,025	930	365	568	.564	.66	33,770
May.....	9,181	365	232	296	.309	.36	18,210
June.....	6,307	232	164	210	.219	.24	12,510
July.....	6,012	232	160	194	.203	.23	11,920
August.....	5,161	175	160	166	.173	.20	10,240
September.....	10,312	850	160	344	.359	.40	20,450
Water year 1935-36.....	165,416	4,020	160	452	.472	6.42	328,100

Current River near Eminence, Mo.

Location.- Water-stage recorder, lat. $37^{\circ}11'0''$, long. $91^{\circ}15'30''$, in SW $\frac{1}{4}$ sec. 15, T. 29 N., R. 3 W., 1 mile below Jacks Fork and 8 miles northeast of Eminence. Zero of gage is about 568.8 feet above mean sea level.

Drainage area.- 1,230 square miles.

Records available.- August 1921 to September 1936.

Average discharge.- 15 years, 1,449 second-feet.

Extremes.- Maximum discharge during year, 7,860 second-feet Nov. 10 (gage height, 7.27 feet); minimum discharge, 382 second-feet July 30 to Aug. 2, Aug. 21 to Sept. 1; minimum gage height, 1.15 feet Aug. 28-31.
1921-26: Maximum discharge, 59,600 second-feet Mar. 11, 1935 (gage height, 24.35 feet); minimum discharge, 360 second-feet July 21-25, July 27 to Aug. 13, 1934; minimum gage height, 1.06 feet Aug. 3-10, 1934.

Remarks.- Records good. Discharge Sept. 27-30 computed on basis of records at Van Buren.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	635	920	882	735	604	960	808	635	486	486	382	486
2	635	920	845	770	604	920	882	635	486	514	405	845
3	635	845	845	770	604	845	882	635	486	486	405	770
4	604	1,250	808	770	604	845	845	635	514	458	405	544
5	635	2,750	808	770	604	808	882	635	514	458	405	486
6	635	1,820	882	770	604	770	920	635	514	458	405	458
7	635	1,440	1,620	735	604	735	882	635	770	432	405	458
8	604	1,260	2,520	735	604	735	845	635	604	432	614	432
9	635	1,580	2,120	735	573	770	845	604	573	432	486	458
10	635	6,250	1,720	735	573	770	882	604	544	432	458	458
11	635	4,280	1,530	735	604	770	882	604	668	432	432	432
12	604	2,950	1,350	700	604	770	920	604	604	432	405	432
13	604	2,320	1,260	700	668	770	920	635	573	432	405	432
14	604	1,920	1,170	700	845	770	882	604	514	432	405	405
15	604	1,620	1,170	700	845	770	845	573	514	432	405	432
16	604	1,530	1,080	700	770	735	845	573	486	432	405	432
17	604	1,350	1,000	700	700	735	770	544	486	514	405	514
18	635	1,260	960	668	668	700	735	573	486	544	405	514
19	668	1,170	920	668	668	700	735	573	486	458	405	486
20	668	1,170	882	635	668	700	700	544	458	458	405	486
21	700	1,040	845	635	635	700	700	544	458	432	382	486
22	700	1,000	845	635	635	700	700	514	458	432	382	486
23	668	960	845	635	635	700	700	514	458	432	382	735
24	668	920	808	604	635	882	668	514	458	405	382	1,260
25	635	882	770	635	735	1,080	668	514	458	405	382	1,000
26	635	920	770	604	770	1,000	635	514	458	405	382	808
27	700	960	735	604	1,040	920	635	514	432	405	382	668
28	1,170	960	770	604	1,170	882	635	514	432	405	382	835
29	1,530	960	770	604	1,040	808	668	486	432	405	382	635
30	1,260	920	770	604	-	808	635	486	432	405	382	735
31	1,040	-	735	604	-	770	-	486	-	382	382	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acres-feet
October.....	22,284	1,530	604	717	0.583	0.87	44,080
November.....	48,087	6,250	845	1,603	1.30	1.45	95,380
December.....	33,035	2,520	735	1,068	1.897	1.00	65,520
Calendar year 1935.....	698,287	47,700	604	1,913	1.56	21.12	1,385,000
January.....	21,199	770	604	684	.558	.64	42,050
February.....	20,313	1,170	573	700	.569	.61	40,290
March.....	24,828	1,080	700	801	.651	.75	49,250
April.....	23,561	920	635	785	.638	.71	46,710
May.....	17,715	635	486	571	.464	.53	35,140
June.....	15,242	770	432	508	.413	.46	30,230
July.....	13,687	544	382	441	.359	.41	27,110
August.....	12,549	514	382	405	.329	.38	24,890
September.....	17,408	1,260	405	580	.472	.53	34,530
Water year 1935-36.....	269,818	6,250	382	737	.599	8.14	535,200

WHITE RIVER BASIN

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 445.74 feet above mean sea level (general adjustment of 1929).

Drainage area.- 1,640 square miles.

Records available.- June 1921 to September 1936 in reports of U. S. Geological Survey; September 1912 to June 1921 in reports of Missouri University and Missouri Geological Survey.

Average discharge.- 15 years (1921-36), 1,829 second-feet.

Extremes.- Maximum discharge during year, 6,800 second-feet Nov. 11 (gage height, 5.23 feet); minimum discharge, 490 second-feet Aug. 26-28, 30, 31; minimum gage height, 0.28 foot Aug. 30, 31.

1921-36: Maximum discharge, 86,600 second-feet Mar. 11, 1935 (gage height, 19.84 feet); minimum discharge, that of Aug. 26-28, 30, 31, 1936.
Maximum stage known, 26.0 feet Mar. 26, 1904, from floodmarks.

Remarks.- Records good except those above 1,500 second-feet, which are fair.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	895	1,670	1,300	985	850	1,240	985	765	582	615	520	615
2	850	1,670	1,240	985	850	1,180	1,080	765	582	650	520	1,180
3	895	1,670	1,240	985	850	1,130	1,060	618	615	650	520	1,080
4	850	1,670	1,180	985	850	1,130	1,030	765	615	615	520	895
5	850	2,160	1,180	985	850	1,030	1,080	765	615	582	550	725
6	650	2,290	1,240	985	818	1,030	1,130	765	615	582	550	650
7	850	1,800	1,670	985	850	955	1,130	765	618	582	550	615
8	850	1,670	2,420	985	850	940	1,080	725	618	550	650	615
9	850	1,400	2,540	985	818	985	1,080	725	725	550	725	615
10	850	3,560	2,160	985	765	1,030	1,130	725	685	550	650	615
11	850	5,680	1,920	985	765	1,030	1,130	725	685	550	615	615
12	850	3,580	1,800	985	765	1,030	1,130	725	765	550	582	615
13	850	2,800	1,680	940	850	1,030	1,130	725	725	550	582	615
14	850	2,420	1,670	940	1,030	1,030	1,130	725	685	550	582	582
15	850	2,160	1,460	940	1,130	1,030	1,080	685	650	582	550	582
16	850	2,040	1,460	940	1,030	940	1,080	685	615	550	550	615
17	850	1,800	1,350	940	985	940	985	650	615	582	550	1,080
18	850	1,800	1,550	940	940	940	985	650	615	725	582	818
19	940	1,680	1,300	940	850	940	940	650	615	650	550	765
20	985	1,670	1,240	985	850	940	940	650	582	615	550	685
21	940	1,670	1,180	895	850	940	895	615	582	582	520	685
22	940	1,460	1,180	895	850	895	940	615	582	582	520	685
23	940	1,400	1,180	895	850	895	895	615	582	550	520	1,080
24	940	1,350	1,130	850	850	940	850	615	582	550	520	1,400
25	940	1,300	1,130	850	850	1,080	850	582	550	550	520	1,400
26	940	1,300	1,030	850	985	1,180	850	582	550	550	520	1,130
27	895	1,350	1,030	850	1,180	1,130	818	615	550	520	490	1,030
28	985	1,350	1,030	850	1,400	1,080	818	615	550	550	490	940
29	1,460	1,350	1,030	850	1,350	1,030	818	582	550	520	520	940
30	1,670	1,350	1,030	850	-	985	818	582	550	520	520	1,080
31	1,570	-	985	850	-	940	-	582	-	520	520	-
Month				Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off			
									Inches	Acre-foot		
October.....				29,435	1,670	850	950	0.579	0.67	58,380		
November.....				58,370	5,680	1,300	1,946	1.19	1.33	115,800		
December.....				43,135	2,540	985	1,391	.848	.98	85,560		
Calendar year 1935				874,468	63,000	840	2,396	1.46	19.84	1,735,000		
January.....				28,780	985	850	928	.566	.65	57,080		
February.....				26,711	1,400	765	921	.562	.61	52,980		
March.....				31,625	1,240	895	1,020	.622	.72	62,730		
April.....				29,887	1,130	818	906	.607	.68	59,280		
May.....				21,063	818	582	679	.414	.48	41,760		
June.....				18,860	818	550	628	.383	.43	37,390		
July.....				17,824	725	520	676	.351	.40	35,350		
August.....				17,075	725	490	551	.336	.39	33,670		
September.....				24,947	1,400	582	832	.507	.57	49,480		
Water year 1935-36				347,693	5,680	490	950	.579	7.91	689,700		

Current River at Doniphan, Mo.

Location.— Water-stage recorder, lat. 36°37', long. 90°51', in NW¼NW¼ sec. 27, T. 23 N., R. 2 E., half a mile above State Highway 14, 2½ miles above Briar Creek, and 1 mile west of Doniphan. Zero of gage is 322.20 feet above mean sea level (general adjustment of 1929). Wire-weight gage on highway bridge, with datum 3.07 feet lower, used until July 3, 1936.

Drainage area.— 2,030 square miles.

Records available.— June 1921 to September 1936.

Average discharge.— 15 years, 2,763 second-feet.

Extremes.— Maximum discharge observed during year, 7,400 second-feet Nov. 11 (gage height, 7.45 feet, former site and datum); minimum, 880 second-feet Aug. 30, 31, Sept. 1 (gage height, 1.87 feet).

1921-36: Maximum discharge, 94,400 second-feet Mar. 12, 1935 (gage height, 23.89 feet, former site and datum); minimum discharge, 880 second-feet Aug. 1-14, 16, 1934, Aug. 30, 31, Sept. 1, 1935; minimum gage height, 1.75 feet Aug. 4, 7, 9-11, 1934, former site and datum.

Maximum stage known, 28.8 feet, former site and datum, during March 1904, from floodmarks (discharge about 130,000 second-feet, from rating curve extended above 60,000 second-feet).

Remarks.— Records good prior to July 3; excellent thereafter. Gage read twice daily prior to July 3.

Rating tables, water year 1935-36 (gage height, in feet, and discharge, in second-feet) (Shifting-control method used Feb. 21 to July 3)

Oct. 1 to July 3					July 4 to Sept. 30		
1.9	1,000	4.0	2,850	6.5	6,070	1.8	843
2.1	1,140	4.5	3,440	7.0	6,820	2.0	998
2.5	1,430	5.0	4,060	7.5	7,550	2.4	1,340
3.0	1,850	5.5	4,700			2.8	1,750
3.5	2,320	6.0	5,370			3.2	2,240

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,430	1,940	1,670	1,430	1,210	1,850	1,430	1,360	1,070	1,140	918	918
2	1,430	1,760	1,590	1,430	1,280	1,760	1,430	1,350	1,000	1,070	918	2,110
3	1,430	1,670	1,590	1,430	1,280	1,670	1,510	1,350	1,070	1,070	918	1,740
4	1,350	1,670	1,510	1,430	1,280	1,670	1,510	1,280	1,070	1,080	918	1,540
5	1,430	1,850	1,510	1,430	1,210	1,590	1,280	1,280	1,070	1,040	958	1,340
6	1,430	3,680	1,590	1,430	1,210	1,510	2,520	1,280	1,070	998	958	1,160
7	1,350	2,960	1,940	1,430	1,210	1,510	2,120	1,280	1,070	998	958	1,080
8	1,350	2,420	2,520	1,430	1,210	1,430	1,940	1,280	1,280	998	1,040	1,080
9	1,430	2,220	3,440	1,430	1,210	1,430	1,940	1,210	1,210	998	1,080	1,080
10	1,430	2,120	3,080	1,430	1,210	1,430	2,030	1,210	1,210	998	1,080	1,040
11	1,430	6,650	2,740	1,350	1,210	1,430	2,030	1,210	1,140	958	1,040	1,040
12	1,430	5,650	2,520	1,350	1,210	1,430	2,030	1,210	1,140	958	998	1,040
13	1,350	4,060	2,320	1,350	1,280	1,430	1,940	1,210	1,210	958	998	998
14	1,350	3,320	2,120	1,350	2,220	1,430	1,940	1,210	1,140	958	958	998
15	1,350	2,850	2,030	1,350	1,430	1,430	1,850	1,210	1,140	998	958	998
16	1,350	2,520	1,940	1,350	1,510	1,430	1,760	1,210	1,070	998	958	998
17	1,350	2,320	1,850	1,350	1,430	1,350	1,670	1,140	1,070	998	958	1,340
18	1,430	2,120	1,850	1,350	1,350	1,350	1,670	1,140	1,070	998	918	1,440
19	1,510	2,120	1,760	1,350	1,280	1,350	1,590	1,140	1,070	1,160	958	1,250
20	1,510	1,940	1,670	1,350	1,280	1,350	1,510	1,140	1,000	1,080	918	1,160
21	1,510	1,850	1,670	1,280	1,280	1,350	1,510	1,140	1,000	1,040	918	1,160
22	1,510	1,850	1,590	1,280	1,210	1,350	1,510	1,140	1,000	998	918	1,160
23	1,510	1,760	1,590	1,280	1,210	1,280	1,510	1,140	1,000	998	918	1,340
24	1,430	1,670	1,590	1,280	1,280	1,350	1,430	1,070	1,000	998	918	1,980
25	1,430	1,670	1,590	1,280	1,280	1,350	1,430	1,070	1,000	958	918	1,980
26	1,430	1,670	1,510	1,280	1,350	1,590	1,430	1,070	1,000	958	918	1,860
27	1,510	1,670	1,510	1,280	1,590	1,590	1,350	1,070	1,000	958	918	1,640
28	1,510	1,670	1,510	1,280	1,850	1,510	1,350	1,070	1,000	958	918	1,540
29	1,850	1,670	1,510	1,210	1,940	1,510	1,350	1,070	1,000	958	918	1,440
30	2,220	1,670	1,510	1,280	-	1,430	1,350	1,070	1,000	918	918	1,440
31	2,120	-	1,430	1,210	-	1,430	-	1,070	-	918	880	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acres-Feet
October.....	46,150	2,220	1,350	1,439	0.733	0.85	91,540
November.....	72,980	6,650	1,670	2,433	1.20	1.33	144,800
December.....	56,250	3,440	1,430	1,879	.926	1.07	115,500
Calendar year 1935.....	1,286,040	90,000	1,350	3,523	1.73	23.62	2,551,000
January.....	41,740	1,430	1,210	1,346	.663	.76	82,790
February.....	39,500	2,220	1,210	1,362	.671	.72	78,350
March.....	45,670	1,850	1,280	1,470	.724	.85	90,390
April.....	51,160	2,620	1,560	1,705	.840	.94	101,500
May.....	36,670	1,350	1,070	1,133	.583	.67	72,730
June.....	32,240	1,280	1,000	1,075	.530	.59	63,950
July.....	31,122	1,160	918	1,004	.495	.57	61,730
August.....	29,468	1,080	880	951	.468	.54	58,450
September.....	39,890	2,110	918	1,330	.655	.73	79,120
Water year 1935-36.....	524,740	6,650	880	1,434	.706	9.60	1,041,000

Round Spring at Round Spring, Mo.

Location.- Staff gage, lat. 37°17', long. 91°26', in SE¼ sec. 20, T. 30 N., R. 4 W., inside spring basin at Round Spring. Zero of gage is 665.46 feet above mean sea level (general adjustment of 1929).

Records available.- October 1928 to September 1936.

Extremes.- Maximum discharge during year (estimated), 130 second-feet Nov. 10* (gage height, 3.10 feet during backwater from Current River); minimum, 13 second-feet Aug. 20, 23-29; minimum gage height, 0.96 foot Aug. 7, 20, 23-27, 29.
1928-36: Maximum discharge, 520 second-feet during backwater from Current River May 14, 1933; maximum gage height, 14.59 feet Mar. 11, 12, 1935, from floodmarks; minimum, 12 second-feet Aug. 8-10, 12-15, 20, 28-31, 1934.

Remarks.- Records fair. Gage read once daily.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	22	22	25	24	20	27	33	16	17	16	14	14
2	22	24	23	24	20	27	46	17	17	*16	15	26
3	23	23	22	26	21	27	*42	16	17	17	15	22
4	22	23	22	25	20	24	26	16	17	16	15	18
5	22	60	23	24	19	*22	26	*16	17	16	14	14
6	21	43	24	23	19	21	25	17	20	16	14	14
7	21	34	75	24	20	21	25	19	21	16	14	14
8	21	34	65	23	19	22	21	18	18	16	15	14
9	21	26	53	24	19	28	23	18	21	16	15	14
10	20	*130	45	25	18	28	28	18	21	16	15	14
11	20	*110	40	24	18	33	26	17	19	16	15	14
12	20	66	36	25	20	31	27	17	19	16	14	14
13	20	65	36	24	22	31	25	16	18	*16	14	*14
14	20	53	33	24	22	29	25	16	19	16	15	14
15	20	48	32	23	21	26	23	16	19	16	14	14
16	20	40	32	24	21	25	20	16	21	15	14	15
17	21	37	32	23	20	22	19	16	19	16	14	17
18	21	33	31	23	18	20	19	16	18	16	14	17
19	21	33	29	22	18	21	19	17	18	15	14	16
20	21	32	27	21	18	21	19	16	17	15	13	16
21	21	29	25	21	18	21	18	16	18	15	*14	17
22	20	29	26	22	16	21	19	16	16	15	14	17
23	20	27	25	22	20	22	18	16	16	15	13	64
24	20	26	24	22	20	24	18	16	18	15	13	55
25	20	27	24	21	20	22	18	16	18	15	13	32
26	20	26	24	21	29	25	18	17	16	*15	13	32
27	21	27	23	20	33	25	18	17	16	15	13	26
28	43	26	23	20	33	22	17	17	16	15	*13	26
29	34	25	24	21	29	21	17	17	16	14	13	24
30	29	25	24	20	-	21	17	17	18	15	15	22
31	24	-	23	20	-	20	-	17	-	15	14	-
Month						Second-foot-days	Maximum	Minimum	Mean		Run-off in acre-feet	
October.....						691	43	20	22.3		1,370	
November.....						1,235	130	22	41.1		2,450	
December.....						970	75	22	51.3		1,920	
Calendar year 1935						21,735	450	16	59.5		43,110	
January.....						705	26	20	22.7		1,400	
February.....						613	33	18	21.1		1,220	
March.....						750	33	20	24.2		1,490	
April.....						701	46	17	23.4		1,390	
May.....						516	19	16	18.6		1,020	
June.....						541	21	16	18.0		1,070	
July.....						482	17	14	15.5		956	
August.....						435	15	13	14.0		863	
September.....						630	64	14	21.0		1,250	
Water year 1935-36						8,267	130	13	22.6		16,400	

*Estimated.

Jacks Fork at Eminence, Mo.

Location.- Wire-weight gage, lat. 37°9'15", long. 91°21'30", in W½ sec. 26, T. 29 N., R. 4 W., at bridge on State Highway 19 at Eminence. Zero of present gage is 818.71 feet (revised) above mean sea level (general adjustment of 1929). Datum of chain gage at site 1,400 feet upstream, used prior to July 28, 1934, was 2.11 feet (revised) above present datum.

Drainage area.- About 376 square miles.

Records available.- October 1921 to September 1936.

Average discharge.- 15 years, 443 second-feet.

Extremes.- Maximum discharge observed during year, 2,620 second-feet Nov. 10 (gage height, 5.67 feet); minimum, 64 second-feet Aug. 28 (gage height, 2.38 feet).

1921-36: Maximum discharge observed, about 40,000 second-feet June 13, 1928 (gage height, 16.24 feet, at former site and datum); minimum, that of Aug. 28, 1936.

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

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	152	243	255	189	146	310	193	146	100	115	77	118
2	162	225	225	196	152	290	203	156	100	109	77	196
3	149	207	225	193	152	262	228	156	106	115	77	146
4	146	255	218	193	149	247	218	169	106	106	82	121
5	159	396	214	200	140	232	210	162	103	103	82	106
6	162	419	225	200	149	218	236	152	103	95	84	103
7	162	374	442	196	149	203	240	146	124	95	87	97
8	162	310	935	193	143	196	225	143	106	95	159	92
9	169	310	662	193	130	203	228	140	103	90	127	92
10	165	1,770	517	193	124	203	236	136	109	90	109	92
11	159	1,100	466	189	143	210	255	136	159	87	100	92
12	159	662	396	186	146	225	290	136	132	87	92	87
13	149	544	374	179	176	225	290	152	152	87	87	87
14	149	466	352	179	196	225	270	143	133	84	84	84
15	143	419	331	176	251	214	255	140	124	84	82	87
16	143	374	310	176	210	203	240	130	115	92	79	87
17	143	352	270	176	196	196	221	124	112	100	79	133
18	146	331	266	172	169	193	214	124	109	95	77	152
19	156	310	251	169	176	182	200	121	100	92	77	143
20	156	290	247	166	169	193	196	118	100	90	79	133
21	176	262	243	159	162	182	193	118	100	90	74	169
22	176	255	228	159	159	182	196	112	95	90	74	146
23	176	247	228	159	159	176	189	112	95	84	74	210
24	169	228	218	146	169	186	182	115	95	82	74	374
25	162	225	221	152	182	196	176	109	92	79	77	374
26	159	225	203	159	210	196	162	109	92	79	74	290
27	176	240	200	162	352	196	162	106	92	79	74	225
28	270	255	200	152	396	189	159	103	87	79	69	228
29	419	290	196	149	331	179	159	103	84	74	69	351
30	331	270	196	143	-	179	156	100	90	72	74	351
31	262	-	186	140	-	176	-	100	-	74	74	-
Month	Second-foot-days		Maximum	Minimum	Mean	Per square mile	Run-off					
							Inches		Acres-feet			
October.....	5,557	419	143	179	0.476	0.55	11,020					
November.....	11,954	1,770	207	395	1.05	1.17	23,510					
December.....	9,500	935	186	306	.814	.94	18,840					
Calendar year 1935	202,860	21,600	140	556	1.48	20.08	402,400					
January.....	5,393	200	140	174	.463	.53	10,700					
February.....	5,386	396	124	186	.495	.53	10,680					
March.....	6,467	310	178	209	.556	.64	12,830					
April.....	6,382	290	156	213	.566	.63	12,860					
May.....	4,007	162	100	129	.343	.40	7,950					
June.....	3,268	182	84	109	.290	.32	6,480					
July.....	2,793	115	72	90.1	.240	.28	5,540					
August.....	2,604	159	69	84.0	.223	.26	5,160					
September.....	4,926	374	84	164	.456	.49	9,770					
Water year 1935-36	68,137	1,770	69	186	.495	6.74	135,100					

WHITE RIVER BASIN

Alley Spring at Alley, Mo.

Location.- Staff gage, lat. 37°9'5", long. 91°26'30", in SE¼ sec. 25, T. 29 N., R. 5 W., at Alley, 400 feet below spring outlet. Zero of gage is 664.73 feet (revised) above mean sea level (general adjustment of 1929).

Records available.- October 1926 to September 1936.

Extremes.- Maximum discharge observed during year, 331 second-feet Nov. 10 (gage height, 2.70 feet); minimum, 59 second-feet Sept. 14-16 (gage height, 1.28 feet).
1928-36: Maximum discharge observed, 1,060 second-feet Mar. 11, 1935 (gage height, 4.20 feet); minimum, 54 second-feet Oct. 15-18, 1934 (gage height, 1.21 feet).

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

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	78	88	84	86	82	107	72	63	63	66	63	60
2	78	88	84	84	82	102	76	63	63	66	63	74
3	80	86	84	84	82	96	83	63	63	64	63	72
4	78	83	82	84	84	91	83	63	63	64	63	66
5	76	145	82	84	84	86	83	63	63	64	63	66
6	78	135	82	84	82	86	85	63	63	64	63	65
7	76	117	154	84	82	84	83	63	63	64	63	62
8	76	114	211	86	82	82	80	63	65	64	65	60
9	76	103	173	86	82	79	85	63	65	63	68	60
10	76	351	161	86	79	84	90	63	63	63	68	62
11	76	300	150	86	79	86	93	62	74	63	65	62
12	76	246	137	86	79	89	93	62	72	63	65	62
13	76	216	124	86	82	89	93	62	70	63	65	62
14	76	189	122	86	102	89	88	62	70	62	65	59
15	76	173	110	84	94	84	85	62	66	62	65	59
16	76	154	104	84	91	82	80	62	65	63	65	59
17	76	137	104	84	89	77	76	62	65	65	63	66
18	76	128	99	84	84	77	74	61	65	65	63	75
19	76	122	96	84	82	77	72	61	65	62	62	67
20	76	113	94	84	82	75	72	61	65	62	62	67
21	78	110	94	82	79	74	68	61	63	63	62	96
22	78	102	94	82	79	74	68	61	63	63	62	75
23	78	96	94	82	79	74	66	61	63	63	62	70
24	76	95	89	82	82	74	66	61	63	63	62	191
25	76	94	86	82	82	78	66	61	63	62	62	159
26	76	91	84	82	86	80	66	61	64	62	62	123
27	76	91	84	82	134	80	65	62	64	62	62	95
28	106	91	86	82	118	76	65	62	64	63	62	98
29	120	91	86	82	107	76	65	62	64	63	60	107
30	103	89	86	82	-	76	65	62	64	63	60	104
31	93	-	86	82	-	74	-	62	-	63	60	-
Month				Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet				
October.....				2,496	120	76	80.5	4,950				
November.....				4,017	331	83	134	7,970				
December.....				3,306	211	82	107	6,560				
Calendar year 1935.....				53,615	1,060	66	147	106,300				
January.....				2,598	86	82	83.8	5,150				
February.....				2,531	134	79	87.3	5,020				
March.....				2,558	107	74	82.5	5,070				
April.....				2,311	93	65	77.0	4,580				
May.....				1,923	63	61	62.0	3,810				
June.....				1,946	74	63	64.9	3,860				
July.....				1,962	66	62	63.3	3,890				
August.....				1,968	68	60	63.2	3,880				
September.....				2,403	191	59	80.1	4,770				
Water year 1935-36.....				30,009	331	59	82.0	59,510				

Big Spring near Van Buren, Mo.

Location.- Staff gage, lat. 36°57', long. 91°0', in sec. 6, T. 26 N., R. 1 E., 400 feet below spring outlet and 4 miles southeast of Van Buren. Zero of gage is 429.04 feet above mean sea level (general adjustment of 1929).

Records available.- January to June 1922, April 1923 to September 1936.

Extremes.- Maximum discharge during year (estimated), 600 second-feet during backwater from Current River Nov. 11; minimum, 247 second-feet July 4-6, 12.

1922-36: Maximum discharge (estimated), 1,300 second-feet during backwater from Current River in June 1928; minimum, that of July 4-6, 12, 1936.

Remarks.- Records fair except those for Nov. 10-12, Jan. 21-25, Sept. 6-10, 13-15, which are poor and were computed on basis of records for Greer Spring at Greer, Mo., and Bennett Spring at Brice, Mo. Gage read once daily.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	337	324	310	304	297	308	267	267	252	249	250	249
2	337	320	306	304	297	301	265	267	252	249	250	286
3	332	320	306	308	297	297	265	267	252	250	252	285
4	332	320	306	308	297	294	269	267	252	247	252	274
5	332	463	303	308	299	290	269	267	252	247	253	264
6	332	433	306	308	297	286	269	267	252	247	250	262
7	328	400	303	304	297	286	272	264	258	249	250	262
8	337	368	313	306	297	283	286	264	258	249	255	260
9	332	354	486	306	297	286	288	264	255	249	255	260
10	332	420	406	306	297	286	303	264	255	250	252	260
11	332	600	416	303	295	279	310	264	257	250	253	288
12	332	520	379	303	303	279	310	260	257	247	253	258
13	332	476	352	306	303	279	303	260	257	249	253	258
14	332	426	343	306	299	279	295	260	257	249	255	258
15	332	374	359	303	299	276	288	260	253	250	255	258
16	332	348	335	303	299	276	283	260	253	250	255	288
17	328	339	330	303	294	272	283	260	253	250	253	281
18	328	335	326	303	294	272	283	260	253	249	253	274
19	332	330	326	303	294	270	279	260	250	249	253	267
20	332	326	322	304	295	274	279	260	252	250	253	267
21	332	322	318	303	295	270	276	257	252	250	252	267
22	332	318	314	303	297	270	276	257	252	252	252	265
23	332	314	314	302	297	269	272	257	252	249	252	265
24	328	314	310	302	294	269	269	257	252	250	252	283
25	328	314	310	301	290	272	269	257	252	250	253	312
26	328	314	306	301	294	269	269	257	250	252	250	304
27	328	310	308	301	308	272	265	257	250	249	250	301
28	328	310	304	301	320	270	265	257	250	250	250	294
29	328	310	308	297	312	270	265	257	250	250	250	283
30	324	310	304	297	-	270	269	257	252	249	252	272
31	324	-	304	297	-	267	-	257	-	249	252	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						10,255	337	324	331	20,540		
November.....						10,932	600	310	364	21,680		
December.....						10,213	436	303	330	20,270		
Calendar year 1935						165,579	1,000	279	454	328,400		
January.....						9,404	308	297	303	18,650		
February.....						8,654	320	290	298	17,160		
March.....						8,641	308	267	279	17,140		
April.....						8,361	310	265	279	16,580		
May.....						8,089	267	257	261	16,040		
June.....						7,592	258	250	253	15,060		
July.....						7,729	252	247	249	15,330		
August.....						7,320	255	250	252	15,510		
September.....						8,175	312	249	272	16,210		
Water year 1935-36						105,870	600	247	289	210,000		

Eleven Point River near Bardley, Mo.

Location.- Wire-weight gage, lat. $36^{\circ}38'$, long. $91^{\circ}12'$, in NW $\frac{1}{4}$ 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 (general adjustment of 1929).

Records available.- October 1921 to September 1936.

Average discharge.- 15 years, 753 second-feet.

Extremes.- Maximum discharge observed during year, 900 second-feet Dec. 8 (gage height, 3.08 feet); minimum discharge, 188 second-feet Aug. 30, 31, Sept. 1, 6, 16; minimum gage height, 1.69 feet Sept. 18.
1921-36: Maximum discharge, 27,800 second-feet Apr. 14, 1927 (gage height, 18.74 feet, present datum, from floodmarks); minimum discharge, 180 second-feet Oct. 18, Nov. 17, 18, 1934; minimum gage height, 1.06 feet, present datum, Sept. 6-11, 1925.

Maximum stage known, 19.7 feet, present datum, from floodmarks, in August 1915.

Remarks.- Records good. Gage read twice daily.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	405	430	405	380	290	380	280	310	237	262	198	188
2	405	405	405	380	290	380	272	310	237	228	201	210
3	405	405	380	380	290	355	266	290	237	222	201	185
4	405	405	380	380	290	355	262	290	234	219	201	192
5	430	430	380	380	290	330	310	290	231	219	198	190
6	405	480	430	380	285	330	770	286	231	216	198	188
7	405	490	675	355	286	310	645	283	231	213	195	190
8	405	455	900	355	280	310	535	280	231	210	231	190
9	405	455	770	355	280	310	535	280	231	210	240	201
10	405	505	705	355	280	310	562	276	266	207	213	201
11	380	562	645	355	276	310	590	272	480	207	204	195
12	380	562	618	355	253	310	613	272	310	207	204	192
13	380	555	590	355	290	290	562	280	276	207	198	192
14	380	535	562	380	380	290	535	272	268	207	198	192
15	380	505	535	330	355	290	505	266	252	207	198	190
16	380	480	535	330	330	290	455	266	246	210	198	190
17	380	455	505	330	310	283	430	262	240	210	213	590
18	430	455	480	330	290	283	405	262	234	207	201	355
19	455	455	480	330	286	279	405	258	237	204	198	272
20	430	430	455	330	286	279	380	258	234	280	192	249
21	430	430	455	310	286	276	380	252	231	213	192	231
22	405	405	455	310	286	272	355	249	228	210	192	219
23	405	405	430	310	290	286	355	246	225	207	192	430
24	405	405	430	310	310	279	330	243	222	207	192	535
25	380	405	405	310	310	276	330	243	219	207	190	405
26	380	405	405	310	355	276	330	243	219	207	190	330
27	405	430	380	310	430	276	330	243	219	201	190	290
28	455	430	405	290	430	276	310	240	219	201	190	283
29	480	430	405	290	405	276	310	240	219	201	190	269
30	430	430	380	290	-	276	310	240	219	201	190	262
31	430	-	380	290	-	272	-	237	-	198	188	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acre-feet
October.....	12,655	480	380	408	0.591	0.68	25,100
November.....	13,599	562	405	453	.657	.73	26,970
December.....	15,365	900	380	496	.719	.83	30,480
Calendar year 1935.....	337,541	13,300	240	925	1.34	18.18	669,600
January.....	10,405	380	290	336	.487	.56	20,640
February.....	9,047	430	276	312	.452	.49	17,940
March.....	9,315	380	272	300	.435	.50	18,480
April.....	12,662	770	262	422	.612	.68	25,110
May.....	8,239	310	237	266	.386	.44	16,340
June.....	7,355	490	219	245	.355	.40	14,580
July.....	6,606	280	198	213	.309	.36	13,100
August.....	6,176	240	188	199	.288	.33	12,250
September.....	7,816	590	188	261	.373	.41	15,500
Water year 1935-36.....	119,237	900	188	326	.472	6.41	236,500

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, 1 mile above Eleven Point River, and 1 mile north of Greer. Zero of gage is 564.32 feet (revised) above mean sea level (general adjustment of 1929).

Records available.- August to December 1904, November 1921 to September 1936.

Average discharge.- 14 years (1922-36), 345 second-feet.

Extremes.- Maximum discharge during year, 331 second-feet Dec. 8 (gage height, 0.98 foot); minimum, 116 second-feet Aug. 26-31, Sept. 14-17 (gage height, 0.27 foot). 1921-36: Maximum discharge observed, 903 second-feet May 26, 1927; maximum gage height, 1.83 feet June 17, 1935; minimum discharge and gage height, those of Aug. 26-31, Sept. 14-17, 1936.

Remarks.- Records good. Discharge for Feb. 27 to Mar. 3 was computed on basis of records for Big Spring near Van Buren, Mo., and Bennett Spring at Brice, Mo.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	274	246	240	220	182		170	147	139	128	128	118
2	271	246	233	220	182	190	167	145	156	128	128	118
3	271	246	230	220	182	190	164	147	153	128	128	118
4	268	250	226	217	182	188	164	145	150	126	128	118
5	264	271	223	217	179	185	170	147	150	126	128	118
6	264	271	226	217	179	182	185	147	147	126	126	118
7	260	271	233	210	176	179	185	147	150	123	126	118
8	264	260	327	210	176	179	182	145	150	126	126	118
9	260	257	327	210	176	173	182	145	150	126	126	118
10	257	278	319	210	176	170	194	145	150	126	126	118
11	257	289	308	207	176	170	226	147	159	123	126	121
12	257	289	300	207	176	170	220	147	156	123	126	121
13	257	282	296	207	185	170	210	147	150	126	123	121
14	260	278	283	204	201	170	201	147	145	126	123	118
15	260	241	285	204	196	170	201	147	142	126	123	118
16	257	268	274	201	191	167	198	147	139	126	123	118
17	257	268	271	201	185	164	194	145	136	126	123	147
18	264	264	268	201	179	164	191	145	134	128	123	150
19	264	260	264	198	179	162	186	145	131	128	121	142
20	264	257	257	194	179	162	186	142	131	128	121	136
21	264	264	264	194	176	162	179	139	128	131	121	131
22	250	246	254	194	182	162	176	136	128	126	118	123
23	246	243	250	191	182	159	167	136	128	128	118	142
24	243	243	243	191	185	159	164	136	126	128	118	179
25	243	240	240	191	191	156	162	136	126	131	118	176
26	243	240	236	188	213	159	162	136	128	131	116	167
27	243	246	233	188	220	156	156	136	128	128	116	162
28	254	250	233	185	215	153	156	136	128	128	116	153
29	257	246	233	185	210	150	153	136	128	131	116	156
30	264	243	230	185	-	147	147	136	128	128	116	153
31	250	-	223	185	-	159	-	136	-	128	116	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						7,357	274	243	257	15,760		
November.....						7,773	289	240	259	15,420		
December.....						8,089	327	223	261	16,040		
Calendar year 1935.....						129,083	634	142	354	266,000		
January.....						6,252	220	185	202	12,400		
February.....						5,413	220	176	187	10,740		
March.....						5,227	200	147	169	10,370		
April.....						5,396	226	147	180	10,700		
May.....						4,418	147	136	143	8,760		
June.....						4,194	159	126	140	8,320		
July.....						5,945	131	123	127	7,820		
August.....						3,791	123	116	122	7,520		
September.....						4,014	179	118	134	7,960		
Water year 1935-36.....						66,469	327	116	182	131,600		

WHITE RIVER BASIN

Laguer Bayou near Stuttgart, Ark.

Location.- Staff gage, lat. 34°32', long. 91°21', in NW¼ sec. 17, T. 2 S., R. 3 W., 11 miles east of Stuttgart.

Records available.- August 1935 to September 1936.

Extremes.- Maximum discharge observed during period ending Sept. 30, 1935, 37 second-feet Sept. 10 (gage height, 2.24 feet); minimum, 1 second-foot Aug. 8, 9, 12, 13 (gage height, 0.64 foot).

Maximum discharge observed during year ending Sept. 30, 1936, 1,210 second-feet July 5 (gage height, 11.40 feet); no flow during periods in May, June, and August.

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

Discharge, in second-feet, 1935

Day	Aug.	Sept.	Day	Aug.	Sept.	Day	Aug.	Sept.
1	4	2	11	2	29	21	5	8
2	4	3	12	1	18	22	4	8
3	4	3	13	1	18	23	4	7
4	4	6	14	3	17	24	4	7
5	4	11	15	8	14	25	4	9
6	4	20	16	5	13	26	3	7
7	4	22	17	4	11	27	4	10
8	1	20	18	6	9	28	3	12
9	1	20	19	6	8	29	2	20
10	2	37	20	5	8	30	2	31
						31	2	-

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	37	87	6	1	2	12	148	2	0	3	3	2
2	35	63	5	2	2	10	141	3	0	397	2	2
3	35	55	5	2	6	9	127	2	0	955	2	2
4	37	45	4	2	29	8	108	2	0	1,140	2	2
5	39	37	4	3	55	27	87	1	0	1,210	2	1
6	35	31	3	3	41	82	67	1	0	1,080	1	3
7	27	148	3	3	35	108	47	1	0	955	1	4
8	23	239	3	8	18	87	35	0	0	833	1	4
9	23	248	3	15	18	67	63	0	0	697	1	4
10	20	198	7	22	15	55	67	0	0	560	1	5
11	17	416	10	17	13	45	51	1	0	416	1	7
12	15	530	9	12	9	37	33	3	1	305	1	5
13	13	545	9	9	9	29	23	2	1	230	0	4
14	12	530	8	8	11	18	17	1	1	162	1	6
15	18	470	7	9	13	13	13	1	1	108	1	6
16	55	390	6	10	15	11	10	1	0	67	0	8
17	47	285	5	8	13	9	8	1	0	45	0	8
18	33	198	4	7	14	8	6	1	0	27	0	8
19	23	134	4	6	10	7	6	1	1	17	0	8
20	16	97	3	4	8	9	4	1	0	14	0	5
21	12	72	3	4	7	7	4	1	0	12	0	6
22	13	55	2	3	6	5	4	1	0	10	0	9
23	33	41	2	3	6	5	4	1	0	8	0	15
24	82	20	2	3	5	16	3	0	0	7	0	20
25	87	15	2	2	5	41	2	0	1	8	0	18
26	67	11	2	2	6	67	2	0	1	7	0	16
27	51	9	1	2	9	190	2	0	1	6	0	14
28	148	8	1	2	12	230	1	1	1	5	1	15
29	169	7	1	2	13	190	2	1	1	5	1	13
30	155	6	1	2	-	152	2	0	2	4	1	13
31	114	-	1	2	-	148	-	1	-	3	0	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
August 1935						109	8	1	3.5	216		
September						408	37	2	13.6	809		
October 1935						1,490	169	12	48.1	2,980		
November						4,990	545	6	166	9,900		
December						126	10	1	4.1	250		
January 1936						178	22	1	5.7	353		
February						405	55	2	14.0	803		
March						1,712	230	5	55.2	3,400		
April						1,087	148	1	36.2	2,180		
May						31	3	0	1.0	61		
June						12	2	0	.4	24		
July						9,296	1,210	3	300	18,440		
August						23	3	0	.7	46		
September						233	20	1	7.8	462		
Water year 1935-36						19,583	1,210	0	53.5	38,860		

Little Lagrue Bayou near Stuttgart, Ark.

Location.- Staff gage, lat. 34°31', long. 91°29', in NW¼ sec. 19, T. 2 S., R. 4 W., 4 miles east of Stuttgart.

Records available.- November 1935 to September 1936.

Extremes.- Maximum discharge observed during period, 486 second-feet July 3 (gage height, 4.30 feet); no flow for various periods.

Remarks.- Records poor. Discharge estimated Nov. 1, 2, and corrected for backwater effect July 7-25, on basis of one measurement, rainfall records, and comparison with Bayou Meto near Stuttgart, Ark. Flow affected by diversions for seasonal irrigation. Gage read twice daily.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1		2	1	1	1	0	0			1		0
2		2	1	1	1	0	0			46		0
3		2	1	1	1	0	0			551		0
4		2	1	1	2	0	0			278		0
5		3	1	1	2	2	0			137		0
6		18	1	1	2	4	0			66		0
7		46	1	1	1	5	0			39		0
8		54	3	2	1	3	0			20		0
9		50	2	3	1	2	1			10		0
10		39	2	3	1	1	2			1		0
11		58	2	3	1	1	1			0		0
12		96	2	2	1	1	0			0		0
13		96	2	2	1	0	0			0		0
14		58	2	2	1	0	0			0		0
15		37	1	2	1	0	0			0		0
16		24	1	1	1	0	0			0		0
17		13	1	1	1	0	0			0		0
18		8	1	1	1	0	0			0		0
19		3	1	1	1	0	0			0		0
20		2	1	1	1	0	0			0		0
21		1	1	1	1	0	0			0		1
22		1	1	1	1	0	0			0		1
23		0	1	1	0	0	0			0		3
24		0	1	1	0	1	0			0		7
25		0	1	1	0	2	0			0		8
26		0	1	1	0	2	0			0		8
27		0	1	1	0	8	0			0		8
28		1	1	1	0	10	0			0		7
29		1	1	1	0	4	0			0		5
30		1	1	1	-	1	0			0		5
31		-	1	1	-	0	-			0		-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						-	-	-	-	-		
November.....						618	96	0	20.6	1,230		
December.....						39	3	1	1.3	77		
Calendar year												
January.....						42	3	1	1.4	83		
February.....						25	2	0	.9	50		
March.....						47	10	0	1.6	93		
April.....						4	2	0	.1	7.9		
May.....						0	0	0	0	0		
June.....						0	0	0	0	0		
July.....						949	551	0	30.6	1,890		
August.....						0	0	0	0	0		
September.....						51	8	0	1.7	101		
The period										3,620		

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.- April to October 1895, May 1897 to September 1899, April 1910 to September 1927, October 1933 to September 1936 in reports of U. S. Geological Survey; May 1897 to September 1899, April 1910 to September 1936 in reports of State engineer.

Average discharge.- 26 years (1910-36), 336 second-feet.

Extremes.- Maximum discharge during year, 1,830 second-feet June 26 (gage height, 4.42 feet); minimum daily discharge, 64 second-feet Dec. 17, 19. 1895, 1897-99, 1910-56: Maximum discharge, 2,900 second-feet June 16, 1924 (gage height, 4.57 feet); minimum not determined.

Remarks.- Records good-except those for period of ice effect, Dec. 17 to Mar. 5, which were computed on basis of records at Salida, two discharge measurements, and weather records and are fair. 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; total diversions for 1936, 37,320 acre-feet. Records of diversions furnished by office of State engineer.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	177	83	66	87	79	76	110	1,030	973	1,270	401	496
2	172	90	65	86	80	78	105	1,020	840	1,210	450	491
3	164	85	85	83	80	80	109	1,030	718	1,110	349	430
4	151	83	109	85	78	85	114	1,230	887	1,160	366	358
5	154	76	90	86	72	83	112	1,350	901	1,150	366	250
6	156	83	77	86	71	85	105	1,420	718	1,180	476	223
7	129	90	77	87	68	93	112	1,300	655	1,180	384	223
8	110	82	76	86	72	94	125	1,160	908	630	324	202
9	101	82	73	83	70	96	125	415	1,190	636	301	191
10	101	85	69	86	68	98	132	535	1,540	630	282	191
11	101	77	70	90	70	82	161	649	1,450	785	290	180
12	101	77	69	94	73	83	205	642	853	1,160	286	164
13	103	76	70	92	72	90	233	1,040	880	1,040	384	154
14	101	77	69	92	73	85	264	1,250	1,010	1,100	345	144
15	98	73	67	95	73	79	337	1,400	1,000	1,130	349	138
16	101	74	66	96	73	72	460	1,620	1,210	1,120	397	136
17	101	74	64	96	72	74	529	1,610	1,180	1,110	705	132
18	96	80	65	85	72	80	594	1,590	1,550	1,100	897	132
19	98	77	64	86	70	73	636	1,630	1,640	1,090	996	132
20	103	70	66	86	71	76	673	1,610	1,650	1,040	1,090	127
21	100	73	71	86	72	79	661	1,450	1,500	1,050	1,090	125
22	98	73	70	86	71	80	758	1,490	1,530	959	996	123
23	96	121	74	86	72	96	860	1,450	1,730	518	944	121
24	98	180	78	86	75	101	860	1,060	1,680	541	916	123
25	93	166	84	85	74	100	908	944	1,690	547	880	121
26	98	103	87	85	73	98	937	1,040	1,780	466	894	121
27	101	70	89	84	73	98	944	996	1,700	450	923	123
28	96	72	88	82	74	103	901	966	1,570	507	923	136
29	91	70	88	80	75	103	880	901	1,500	568	894	141
30	94	67	87	76	-	110	633	1,030	1,380	420	853	148
31	85	-	88	78	-	112	-	1,040	-	358	765	-
Month						Second-foot-days	Maximum	Minimum	Mean		Run-off in acre-feet	
October.....						3,468	177	85	112		6,880	
November.....						2,589	180	67	86.3		5,140	
December.....						2,361	109	64	76.2		4,680	
Calendar year 1935						110,077	1,640	62	302		218,400	
January.....						2,686	96	76	86.6		5,330	
February.....						2,116	80	68	73.0		4,200	
March.....						2,742	112	72	88.5		5,440	
April.....						13,763	944	105	459		27,340	
May.....						35,798	1,630	415	1,155		71,000	
June.....						37,613	1,780	655	1,254		74,600	
July.....						27,225	1,270	358	878		54,000	
August.....						19,506	1,090	282	629		38,690	
September.....						5,776	496	121	193		11,460	
Water year 1935-36						155,663	1,780	64	425		308,800	

Arkansas River at Salida, Colo.

Location.- Water-stage recorder, lat. 38°31', long. 106°0', 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 1936 in reports of U. S. Geological Survey; April 1895 to October 1903, November 1909 to September 1936 in reports of State engineer.

Average discharge.- 26 years (1910-36), 632 second-feet.

Extremes.- Maximum discharge during year, 3,900 second-feet June 22 (gage height, 6.90 feet); minimum daily discharge, 180 second-feet Mar. 20.

1895-1903, 1909-36: 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 storage in Clear Creek Reservoir (capacity, 11,444 acre-feet) and as noted under Arkansas River at Granite, Colo.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	414	307	230	227	227	214	230	1,140	2,190	1,750	818	968
2	394	321	227	214	236	212	220	1,160	1,900	1,750	866	908
3	383	314	233	225	236	217	212	1,160	1,630	1,610	1,080	854
4	349	304	254	212	212	230	217	1,470	1,500	1,800	932	794
5	353	281	261	217	214	222	217	1,720	1,610	1,590	1,140	633
6	349	287	263	217	209	220	222	1,810	1,280	1,570	1,080	573
7	353	290	260	222	230	227	214	1,780	1,120	1,660	1,450	538
8	353	290	257	212	214	230	222	1,600	1,450	1,110	1,150	505
9	349	281	251	207	209	230	233	956	1,960	932	1,050	473
10	355	278	242	227	209	230	220	671	2,300	1,610	944	456
11	324	269	242	230	217	212	230	1,050	2,490	980	890	442
12	317	266	242	236	222	207	276	1,050	2,080	1,630	872	456
13	307	275	251	230	220	209	321	1,300	1,920	1,530	932	456
14	304	272	242	230	222	214	346	1,760	2,080	1,390	938	442
15	304	254	222	236	225	207	387	2,070	2,030	1,470	848	379
16	300	251	220	239	222	194	528	2,360	2,150	1,520	798	356
17	314	254	217	233	217	192	588	2,500	2,250	1,440	1,010	364
18	310	263	217	220	209	192	717	2,520	2,420	1,430	1,210	368
19	300	254	220	209	212	192	752	2,490	2,550	1,580	1,410	364
20	314	245	222	220	209	180	872	2,460	2,530	1,390	1,560	331
21	321	245	214	227	214	187	880	2,220	2,330	1,360	1,640	317
22	314	245	220	227	214	197	926	2,340	2,470	1,350	1,570	346
23	324	251	230	227	222	194	1,070	2,280	2,630	920	1,400	342
24	328	321	242	225	220	204	1,060	2,100	2,600	770	1,290	371
25	324	360	245	222	212	225	1,090	1,620	2,530	836	1,240	394
26	324	331	245	222	207	217	1,110	1,880	2,560	758	1,240	406
27	342	251	242	217	204	209	1,140	1,770	2,520	660	1,320	410
28	358	239	245	217	207	225	1,100	1,780	2,380	776	1,350	414
29	331	242	239	220	209	222	1,060	1,570	2,200	908	1,420	430
30	328	242	230	204	-	225	998	1,840	2,060	782	1,300	410
31	317	-	230	212	-	233	-	2,030	-	782	1,260	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						10,317	414	300	333	20,460		
November.....						9,286	360	259	278	16,440		
December.....						7,375	281	214	238	14,630		
Calendar year 1935.....						210,124	3,140	157	576	416,800		
January.....						6,883	239	204	222	13,650		
February.....						6,280	236	204	217	12,480		
March.....						6,569	235	180	212	13,030		
April.....						17,640	1,140	212	588	34,920		
May.....						54,447	2,520	671	1,756	106,000		
June.....						63,720	2,630	1,120	2,124	126,400		
July.....						38,904	1,780	660	1,255	77,160		
August.....						35,988	1,640	788	1,161	71,380		
September.....						14,500	968	317	483	28,760		
Water year 1935-36.....						270,909	2,630	180	740	537,400		

ARKANSAS RIVER BASIN

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 1936 in reports of U. S. Geological Survey; May 1888 to September 1936 in reports of State engineer.

Average discharge.- 49 years (1887-1936), 735 second-feet.

Extremes.- Maximum discharge during year, 6,120 second-feet July 30 (gage height, 5.07 feet); minimum daily discharge, 137 second-feet Mar. 22.
1888-1936: Maximum discharge, 19,000 second-feet Aug. 2, 1921 (gage height, 10.7 feet); minimum daily discharge, 90 second-feet Apr. 7, 1935.

Remarks.- Records good. Corrected for ice effect Feb. 3-19 on basis of record for station at Salida, one discharge measurement, and weather records. Diversions for irrigation above station. Regulation same as noted under Arkansas River at Granite and at Salida.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	605	328	319	319	354	240	218	1,180	2,360	1,740	1,200	1,050
2	541	352	314	306	345	240	205	1,320	2,070	1,630	1,150	922
3	516	359	314	319	286	240	205	1,340	1,800	1,560	1,250	880
4	481	359	328	306	232	255	208	1,460	1,510	1,470	1,270	864
5	436	364	379	306	232	259	212	1,730	1,620	1,460	1,340	761
6	415	364	379	319	240	255	177	1,060	1,390	1,420	2,020	661
7	404	384	354	328	255	198	198	1,900	1,210	1,450	2,670	659
8	404	369	352	328	255	247	195	1,760	1,280	1,360	2,130	626
9	394	364	328	332	270	252	201	1,450	1,690	1,590	1,640	592
10	379	394	328	356	286	232	201	897	2,090	981	1,490	553
11	354	409	323	356	306	225	189	998	2,340	981	1,400	522
12	341	369	323	350	302	215	212	1,150	2,300	1,270	1,310	516
13	336	341	332	356	286	205	278	1,310	1,840	1,540	1,260	510
14	328	354	319	310	262	198	319	1,750	1,900	1,390	1,240	493
15	319	356	298	298	262	215	354	2,090	1,950	1,550	1,090	447
16	314	310	298	294	240	218	409	2,530	1,860	1,430	998	436
17	314	310	298	282	222	183	553	2,780	2,040	1,390	1,020	409
18	345	319	310	274	212	171	632	2,640	1,970	1,380	1,200	431
19	314	319	319	255	229	168	661	2,610	2,200	1,420	1,380	420
20	306	306	328	259	262	157	743	2,590	2,260	1,520	1,430	409
21	314	294	319	290	259	148	751	2,260	2,130	1,300	1,580	364
22	323	290	328	319	274	137	798	2,450	2,140	1,320	1,600	364
23	336	314	341	332	276	177	897	2,460	2,530	1,160	1,560	364
24	384	310	364	310	270	180	981	2,610	2,340	798	1,480	350
25	399	431	379	290	255	166	1,030	2,630	2,280	806	1,380	399
26	379	464	374	310	256	165	1,150	2,130	2,300	806	1,330	415
27	379	404	374	310	236	151	1,180	2,020	2,450	705	1,570	461
28	384	290	345	323	225	157	1,220	1,990	2,310	713	1,280	516
29	359	314	352	314	243	168	1,210	1,780	2,120	1,120	1,280	510
30	354	328	328	332	-	171	1,200	1,970	1,990	1,380	1,310	572
31	336	-	328	336	-	174	-	2,130	-	1,490	1,190	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	11,788	605	306	380	23,380
November.....	10,429	464	290	343	20,690
December.....	10,335	379	298	338	20,500
Calendar year 1935.....	236,315	4,260	90	647	468,800
January.....	9,659	350	285	312	19,160
February.....	7,578	354	212	261	15,030
March.....	6,224	259	137	201	12,350
April.....	16,787	1,220	177	560	33,300
May.....	59,775	2,780	897	1,928	118,600
June.....	60,250	2,530	1,210	2,008	119,500
July.....	39,289	1,740	705	1,267	77,930
August.....	44,828	2,620	998	1,446	88,920
September.....	16,466	1,050	350	649	32,640
Water year 1935-36.....	293,396	2,820	137	802	582,000

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 1936 at present site and June to September 1887 at site 9 miles above Pueblo in reports of U. S. Geological Survey; May 1885 to September 1886, September 1894 to September 1936 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.- 32 years (1894-1924, 1934-36), 775 second-feet; 9 years (1925-34), 824 second-feet (does not include water diverted around station in north side waterworks intake).

Extremes.- Maximum discharge during year, 11,200 second-feet (includes 40 second-feet diverted around station in north side waterworks intake) May 24; minimum daily discharge, 41 second-feet (includes 28 second-feet diverted around station in north side waterworks intake) Mar. 22.

1885-87, 1894-1936: 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, 18 second-feet (includes 13 second-feet diverted around station in north side waterworks intake) Apr. 7, 1935.

Remarks.- Records good except those for periods of ice effect, Dec. 25-27, Jan. 26 to Feb. 21, which are fair and were computed on basis of gage heights and weather records. Diversions for irrigation above station. Regulation (see description for Arkansas River at Salida).

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	400	351	344	172	194	107	63	775	2,060	1,780	1,650	1,120
2	407	351	287	210	158	127	109	934	1,960	1,550	1,470	894
3	386	379	293	210	152	122	69	966	1,580	1,520	1,440	1,040
4	365	437	274	199	156	101	66	1,130	1,430	1,370	2,060	934
5	305	356	274	178	48	113	66	1,400	1,220	1,350	2,360	717
6	274	372	351	172	100	127	69	1,700	1,130	1,310	4,080	605
7	287	356	324	183	122	131	62	2,000	864	1,270	5,060	527
8	268	422	318	210	152	113	48	2,020	746	1,260	2,860	462
9	268	379	311	239	143	109	26	1,600	1,060	775	2,160	404
10	262	379	299	233	222	106	59	894	1,580	707	1,670	333
11	239	400	287	183	227	99	66	696	2,020	785	1,390	333
12	239	400	274	210	237	99	57	1,020	2,150	785	1,210	326
13	239	400	293	172	305	80	78	1,010	1,600	1,230	1,070	349
14	260	422	256	143	239	75	89	1,370	1,510	1,100	1,120	318
15	222	393	233	143	222	66	120	1,650	1,600	1,020	1,010	238
16	216	324	216	152	135	62	127	2,060	1,460	1,050	966	226
17	167	311	256	172	148	44	252	2,630	1,700	1,040	884	205
18	152	365	256	167	167	39	380	2,680	1,750	1,020	996	150
19	152	365	280	150	178	44	596	2,520	2,060	1,030	1,410	209
20	156	358	227	222	268	69	605	2,520	2,150	1,060	2,110	203
21	156	299	239	227	268	37	785	2,390	2,080	1,310	2,000	197
22	210	330	222	239	268	13	678	2,270	1,960	1,220	1,710	127
23	251	330	215	236	263	20	678	2,210	2,540	1,120	1,710	117
24	297	311	227	210	233	53	765	4,430	2,360	698	1,440	120
25	311	330	178	183	188	51	795	2,030	2,280	578	1,270	151
26	287	415	178	161	152	40	834	1,810	2,200	605	1,050	215
27	337	430	178	152	131	39	934	1,910	2,300	1,530	1,020	413
28	365	337	156	143	127	21	814	1,680	2,340	1,370	1,540	544
29	350	280	143	199	111	11	874	1,710	2,200	854	1,020	614
30	290	344	163	194	-	17	874	1,650	2,050	2,460	1,330	596
31	330	-	199	194	-	44	-	1,860	-	1,920	1,200	-

Month	Observed					Diverted by northside 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.....	8,428	407	152	272	16,720	*3,260	19,980	325
November.....	10,986	437	280	366	21,790	2,840	24,630	414
December.....	7,771	351	143	251	15,410	2,360	17,770	289
Calendar year 1935	212,685	4,090	1	583	421,900	29,180	451,100	623
January.....	5,838	239	143	188	11,680	3,220	14,800	240
February.....	5,394	305	48	186	10,700	3,790	14,490	252
March.....	2,179	131	11	70.3	4,320	2,730	7,050	115
April.....	11,078	934	26	369	21,970	*1,960	23,930	402
May.....	55,727	4,430	698	1,798	110,500	*2,460	112,960	1,838
June.....	53,970	2,540	746	1,799	107,000	*2,980	110,000	1,849
July.....	37,457	2,460	578	1,208	74,290	*3,070	77,360	1,258
August.....	52,228	5,060	854	1,685	103,600	*3,070	106,700	1,735
September.....	12,721	1,120	117	424	25,230	*4,210	29,440	495
Water year 1935-36	263,777	5,060	11	721	523,100	35,950	559,200	770

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

*Estimated.

ARKANSAS RIVER BASIN

Arkansas River near Nepesta, Colo.

Location.- Water-stage recorder, lat. 38°11', long. 104°10', in sec. 31, T. 21 S., R. 60 W., at Oxford Farmers Canal Co.'s dam $1\frac{1}{4}$ 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 1936 in reports of U. S. Geological Survey; September 1897 to October 1903, July 1909 to November 1912, January 1914 to September 1936 in reports of State engineer.

Extremes.- Maximum discharge during year, 17,200 second-feet July 28 (gage height, 6.50 feet); minimum daily discharge, 20 second-feet Apr. 13.

1897-1903, 1909-12, 1914-36: 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 good except those for period of ice effect, Dec. 3 to Feb. 24, which are fair and were based on records at Pueblo and diversions for storage. Regulation and diversions for irrigation above station.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	
1	272	338	296	181	184	152	40	965	1,520	1,450	831	736	
2	366	284	276	173	185	156	103	890	1,410	1,090	2,030	863	
3	284	374	292	175	256	224	127	750	1,050	983	2,850	1,070	
4	272	502	323	200	226	204	114	707	1,430	847	4,990	1,300	
5	242	512	299	171	286	193	100	983	3,890	736	6,390	930	
6	216	438	306	113	181	193	94	1,200	965	636	12,900	707	
7	272	422	363	158	218	193	97	1,700	722	557	14,300	896	
8	284	422	350	167	235	183	75	1,900	557	1,260	7,600	608	
9	272	374	340	177	284	165	70	1,170	608	693	4,560	518	
10	278	351	358	177	258	188	58	679	1,260	736	3,020	407	
11	284	374	322	195	357	188	46	328	1,640	736	2,020	344	
12	260	398	310	194	365	178	21	722	4,070	693	1,340	397	
13	248	352	307	195	417	160	20	983	1,090	782	1,220	376	
14	251	324	328	180	400	147	56	1,220	1,070	847	1,660	386	
15	248	284	298	169	326	107	75	1,640	1,110	651	1,610	344	
16	151	350	250	158	302	100	94	1,980	1,090	544	1,260	304	
17	168	401	231	215	188	92	114	2,480	1,480	608	1,040	304	
18	160	381	272	239	226	96	214	2,050	1,790	595	679	276	
19	236	376	274	289	237	72	312	2,200	1,750	665	896	296	
20	177	376	295	277	211	65	470	1,450	2,120	815	1,640	328	
21	196	371	285	314	270	83	651	1,640	1,980	1,240	2,280	344	
22	236	371	307	335	173	80	651	1,610	1,590	679	1,450	276	
23	390	500	279	326	198	51	651	2,120	1,880	622	1,240	236	
24	345	473	256	202	154	49	750	5,720	2,150	595	1,050	224	
25	414	398	209	243	174	72	847	2,250	2,180	459	636	229	
26	414	229	140	246	131	86	799	1,220	2,000	428	693	193	
27	414	320	250	211	174	63	847	1,750	2,200	965	544	276	
28	266	304	236	115	178	51	896	2,180	2,080	10,100	948	531	
29	382	283	172	107	178	35	930	1,820	2,020	1,040	863	766	
30	345	289	128	208	-	24	965	1,320	1,730	5,570	815	570	
31	338	-	158	258	-	22	-	1,370	-	1,820	983	-	
Month						Second-foot-days		Maximum		Minimum		Mean	Run-off in acre-feet
October.....						8,661		414		151		279	17,180
November.....						11,151		512		229		372	22,120
December.....						8,490		363		128		274	16,840
Calendar year													
January.....						6,368		335		107		205	12,630
February.....						6,951		417		131		240	13,790
March.....						3,662		224		22		118	7,260
April.....						10,287		965		20		343	20,400
May.....						48,927		5,720		328		1,578	97,050
June.....						50,422		4,070		557		1,681	100,000
July.....						39,442		10,100		428		1,272	78,230
August.....						84,318		14,300		544		2,720	167,200
September.....						15,035		1,300		193		501	29,820
Water year 1935-36						293,714		14,300		20		802	582,500

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.- May to August 1889, December 1893 to December 1895, January to December 1901, April to October 1903, August to November 1908, April 1912 to December 1913, October 1933 to September 1936 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 1936 in reports of State engineer.

Average discharge.- 24 years (1912-36), 268 second-feet.

Extremes.- Maximum gage height during year, 8.65 feet Aug. 8 (discharge not determined); minimum daily discharge, 6.1 second-feet Mar. 21.
1889, 1893-95, 1901, 1903, 1908, 1912-36: 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 good except those for period of ice effect, Feb. 1-23, which are fair, and were computed on the basis of two discharge measurements and weather records. Discharge Sept. 2-30 includes flow diverted around station in canal. Regulation and diversions above station for irrigation.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	400	194	145	31	50	25	30	352	109	572	186	359
2	398	198	177	34	40	17	24	352	76	512	152	211
3	346	208	169	53	30	16	30	497	68	484	1,330	196
4	312	226	167	45	20	19	27	262	68	512	1,680	327
5	268	257	149	30	19	34	30	279	445	564	2,740	475
6	226	257	194	27	14	27	30	475	141	498	3,600	456
7	149	252	69	31	15	11	24	711	102	315	14,200	477
8	134	221	120	124	20	10	22	5,730	55	715	12,300	515
9	123	216	151	77	20	8.2	25	1,830	32	477	3,250	320
10	124	190	117	56	30	7.5	22	175	37	275	1,490	280
11	95	181	142	66	35	12	19	135	64	250	655	204
12	83	208	114	28	40	18	20	170	720	400	424	183
13	75	185	134	25	50	17	22	264	144	394	291	180
14	53	169	131	25	75	20	28	495	102	364	375	122
15	40	157	181	30	100	17	40	485	62	435	332	62
16	49	173	169	34	80	12	34	385	31	260	282	42
17	40	181	221	36	50	9.6	34	743	51	62	271	60
18	31	161	190	42	30	9.6	36	813	349	44	257	70
19	38	221	161	246	25	9.6	38	570	381	102	288	60
20	38	235	212	198	18	7.5	75	392	666	68	404	82
21	34	131	257	134	25	6.1	104	252	588	470	670	63
22	36	53	257	134	40	12	157	272	458	325	768	60
23	38	56	194	61	60	18	142	508	579	198	475	58
24	72	42	92	27	120	18	107	2,330	563	139	346	42
25	107	69	53	45	58	17	177	1,660	805	82	392	33
26	117	80	38	92	27	18	208	138	588	55	362	38
27	149	92	49	107	17	22	301	99	588	186	368	89
28	177	138	58	128	16	27	352	760	968	10,200	349	178
29	208	157	42	64	13	27	346	345	680	2,190	320	468
30	235	145	77	32	-	28	376	212	671	4,260	400	503
31	203	-	45	66	-	28	-	218	-	910	373	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	4,393	400	31	142	8,710
November.....	5,053	257	42	168	10,020
December.....	4,245	257	38	137	8,420
Calendar year 1935.....	87,122	11,530	9	239	172,800
January.....	2,128	246	25	68.6	4,220
February.....	1,137	120	13	39.2	2,280
March.....	528.1	34	6.1	17.0	1,050
April.....	2,880	376	19	96.0	5,710
May.....	21,912	5,730	99	707	43,460
June.....	10,112	868	31	337	20,060
July.....	26,318	10,200	44	849	52,800
August.....	49,326	14,200	152	1,591	97,540
September.....	6,212	515	33	207	12,320
Water year 1935-36.....	134,244.1	14,200	6.1	367	266,300

Arkansas River at Lamar, Colo.

Location.- Water-stage recorder, lat. 38°6', long. 102°37', in sec. 30, T. 22 S., R. 46 W., at highway bridge 1 mile north of Lamar.

Drainage area.- 19,800 square miles.

Records available.- May to December 1913, October 1933 to September 1936 in reports of U. S. Geological Survey; May 1913 to September 1936 in reports of State engineer.

Average discharge.- 23 years, 298 second-feet.

Extremes.- Maximum discharge during year, 36,300 second-feet May 30 (gage height, 8.90 feet); minimum daily discharge, 0.4 second-foot Mar. 14, 15.

1913-36: Maximum discharge, 165,000 second-feet (slope measurement) June 5, 1921; no flow at times during 1913-15.

Remarks.- Records good except those for period of ice effect, Feb. 10-25, and those for May 14-18, which were estimated and are fair. Diversion and regulation for irrigation above station.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4.8	2.6	2.6	16	3.8	14	1.2	9.6	454	5.8	1,370	31
2	5.1	2.6	2.6	15	3.4	12	1.2	14	406	7.8	481	25
3	2.8	2.8	2.6	15	5.1	19	3.8	15	356	8.3	240	23
4	3.1	2.8	2.6	14	5.1	24	3.8	17	318	10	1,540	22
5	3.4	2.8	2.6	14	6.5	22	1.8	13	296	24	2,960	23
6	3.8	2.8	2.6	8.3	6.5	21	2.3	19	442	20	3,220	21
7	3.8	2.8	2.6	7.8	5.8	21	2.6	18	210	21	10,200	16
8	3.8	2.8	2.6	9.6	15	9.2	2.6	97	51	15	14,400	11
9	3.8	2.8	2.6	12	16	8.8	2.8	11,400	92	24	6,600	20
10	3.1	2.8	2.6	29	15	1.5	3.1	556	52	12	2,530	12
11	3.1	2.8	2.6	131	25	1.2	3.8	205	44	12	1,420	9.2
12	3.1	2.8	2.3	81	40	.9	3.8	46	145	7.4	666	5.1
13	3.1	2.8	2.3	81	56	.7	5.6	33	474	17	350	4.1
14	3.1	2.8	2.3	131	60	.4	3.4	5	110	16	150	4.5
15	3.1	2.8	2.3	145	60	.4	3.4	5	45	4.5	50	3.4
16	3.1	2.8	2.3	64	50	2.6	3.8	4	9.2	4.1	43	4.5
17	2.6	2.8	2.3	12	60	2.8	3.1	4	9.2	3.8	30	5.1
18	2.6	2.8	22	11	50	5.1	3.1	4	12	14	21	4.8
19	2.6	2.8	18	44	50	5.1	4.1	54	12	5.1	25	4.5
20	2.3	2.8	19	23	50	5.1	4.1	454	9.2	8.3	19	4.8
21	2.3	2.8	20	23	50	4.1	4.1	142	12	14	20	4.8
22	2.3	2.8	20	33	50	4.1	7.0	280	7.0	19	36	4.8
23	2.3	2.8	22	23	75	4.1	11	89	7.0	5.1	26	3.8
24	2.3	2.6	46	16	150	1.8	12	3,070	7.0	12	22	4.1
25	2.3	2.6	40	11	200	1.8	22	6,280	9.6	14	24	5.1
26	2.3	2.6	28	11	57	1.8	17	658	12	20	22	4.8
27	2.6	2.6	26	138	77	1.5	20	830	7.4	14	14	5.5
28	2.6	2.8	26	138	47	1.5	12	900	7.4	124	15	5.8
29	2.6	2.8	22	16	22	1.5	15	1,330	12	9,580	20	7.8
30	2.6	2.8	17	11	-	1.8	12	11,200	7.0	14,100	17	7.0
31	2.6	-	16	3.8	-	2.0	-	960	-	3,460	23	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October						93.0	5.1	2.3	3.00	184		
November						82.8	2.8	2.6	2.76	164		
December						364.4	46	2.3	12.4	762		
Calendar year 1935						45,625.2	6,890	1	125	90,500		
January						1,297.5	145	3.8	41.5	2,550		
February						1,281.2	200	3.4	44.2	2,540		
March						202.8	24	.4	6.54	402		
April						195.4	22	1.2	6.51	398		
May						38,711.6	11,400	4	1,249	76,780		
June						3,665.0	474	7.0	122	7,270		
July						27,402.2	14,100	3.8	884	54,350		
August						46,557	14,400	14	1,502	92,340		
September						310.8	31	3.4	10.4	616		
Water year 1935-36						120,173.7	14,400	.4	328	238,300		

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 1936 in reports of U. S. Geological Survey; October 1907 to September 1936 in reports of State engineer.

Average discharge.— 29 years (1907-36), 360 second-feet.

Extremes.— Maximum discharge during year, 22,700 second-feet May 30 (gage height, 6.80 feet); minimum daily discharge, 11 second-feet July 26.

1907-36: 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 1-8, 26-30, July 1-3, 1925.

Remarks.— Records fair. Discharge for the period of no gage-height record, Jan. 28 to Feb. 13, estimated on the basis of the observer's notes. Extensive regulation and diversions for irrigation above station.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	118	17	58	71	40	109	22	16	1,510	31	3,960	17
2	97	19	58	60	35	94	24	16	992	24	1,890	16
3	78	20	58	69	30	91	20	15	2,080	19	1,060	15
4	64	19	58	52	25	86	21	16	1,310	17	968	15
5	46	19	60	60	25	71	23	16	1,050	17	1,630	15
6	40	20	64	37	25	71	20	16	680	17	2,680	14
7	37	22	67	20	30	58	22	17	838	18	4,880	15
8	32	23	69	27	25	44	22	17	690	17	13,300	14
9	30	24	69	36	20	40	25	6,400	569	16	12,600	15
10	31	25	73	44	30	37	21	4,770	536	16	5,950	15
11	28	26	73	56	60	32	19	1,190	378	16	3,300	15
12	28	27	73	78	90	30	19	623	301	16	1,680	14
13	27	29	75	97	95	34	17	448	827	16	872	14
14	25	30	73	105	118	37	17	289	794	135	552	14
15	22	31	71	156	196	40	16	209	466	58	265	15
16	20	34	71	152	170	39	16	149	313	46	122	16
17	19	35	69	149	223	38	16	112	234	26	78	17
18	19	36	69	29	132	56	15	62	183	17	52	19
19	17	37	64	38	115	27	15	36	135	16	37	20
20	17	38	64	51	97	24	14	35	112	14	29	21
21	17	39	64	75	86	25	15	91	80	14	27	22
22	16	42	64	118	139	24	16	109	67	13	27	24
23	16	44	75	196	204	24	15	295	56	13	26	25
24	15	45	97	209	340	26	17	696	48	12	25	27
25	15	46	73	138	362	28	17	4,610	42	12	24	28
26	16	50	64	58	266	29	17	3,920	38	11	23	30
27	16	51	62	48	170	25	16	1,330	37	12	22	32
28	16	54	86	45	196	23	16	884	32	12	22	35
29	16	58	67	45	152	20	17	2,240	30	4,190	22	36
30	15	58	60	40	-	20	17	17,500	39	12,200	22	35
31	16	-	67	40	-	19	-	8,550	-	10,600	23	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						959	118	15	31.3	1,920		
November.....						1,018	58	17	33.9	2,020		
December.....						2,115	97	58	68.2	4,200		
Calendar year 1935.....						86,724	6,410	1	243	176,000		
January.....						2,396	209	20	77.3	4,750		
February.....						3,484	362	20	120	6,910		
March.....						1,301	109	19	42.0	2,580		
April.....						547	25	14	18.2	1,080		
May.....						55,370	17,600	16	1,786	109,800		
June.....						14,457	2,080	30	482	28,680		
July.....						27,671	12,200	11	893	54,880		
August.....						56,168	13,500	22	1,812	111,400		
September.....						610	36	14	20.3	1,210		
Water year 1935-36.....						166,106	17,500	11	454	329,400		

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 1936.

Average discharge.- 15 years (1921-36), 341 second-feet.

Extremes.- Maximum discharge during year, 19,400 second-feet May 31 (gage height, 8.58 feet); minimum discharge, 2 second-feet May 4; minimum gage height, 1.46 feet Sept. 24, 1902-6, 1921-36: 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. Corrected for ice effect Jan. 28 to Feb. 23 on basis of 2 measurements, study of weather, and Amazon canal intake records. A shifting control existed for practically the entire year. Diversions for irrigation above station.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	111	27	65	106		287	18	3	2,210	48	3,550	32
2	100	28	65	90		227	15	3	1,090	41	1,500	28
3	93	28	65	90		204	16	3	2,910	51	811	31
4	88	29	65	93	50	178	16	3	1,800	23	758	32
5	88	31	68	83		160	16	7	1,440	18	1,830	34
6	81	28	70	74		145	15	4	835	17	3,320	25
7	76	26	74	68		158	14	4	827	16	4,920	22
8	74	24	74	76		132	12	4	852	14	13,400	20
9	72	28	70	81		123	13	3,230	660	12	14,800	20
10	68	26	70	96		111	12	4,230	617	12	3,620	20
11	65	22	70	98	60	100	11	903	484	12	1,820	19
12	68	24	72	93		93	11	413	407	12	1,050	19
13	65	26	74	98		83	10	284	668	12	697	16
14	61	24	72	108		74	10	188	958	11	862	17
15	55	21	63	120		68	9	147	610	63	669	15
16	53	20	61	145		55	7	133	454	48	465	14
17	50	20	53	149		42	7	127	352	27	321	13
18	42	20	68	100	70	36	7	114	245	12	252	13
19	36	20	59	123		36	7	106	188	8	202	14
20	44	19	61	152		36	7	99	147	7	162	14
21	44	20	70	183		28	6	83	133	7	137	13
22	34	20	98	200	86	25	5	99	111	7	117	13
23	32	21	96	208	250	21	5	116	101	6	93	13
24	31	24	100	252	422	18	5	332	87	6	78	12
25	29	24	96	252	453	16	5	3,100	76	6	70	14
26	29	32	83	183	416	15	5	5,670	63	6	62	15
27	28	50	88	178	351	14	4	1,730	63	6	53	16
28	27	59	100	130	323	13	4	986	58	7	62	20
29	26	65	100	83	328	14	4	2,300	52	764	57	21
30	26	65	96	54	-	15	3	14,100	50	11,600	48	34
31	26	-	100	42	-	16	-	7,490	-	14,000	38	-
Month	Second-foot-days					Maximum	Minimum	Mean	Run-off in acre-feet			
October.....	1,722					111	26	55.5	3,420			
November.....	571					65	19	29.0	1,730			
December.....	2,366					100	53	76.3	4,690			
Calendar year 1935.....	115,746					9,970	13	317	229,600			
January.....	3,808					252	-	123	7,550			
February.....	3,889					453	-	134	7,710			
March.....	2,523					227	13	81.4	5,000			
April.....	279					18	3	9.3	553			
May.....	45,991					14,100	3	1,494	91,220			
June.....	18,529					2,910	50	618	36,750			
July.....	26,859					14,000	6	866	53,270			
August.....	55,822					14,800	38	1,801	110,700			
September.....	589					84	12	19.6	1,170			
Water year 1935-36.....	163,248					14,800	3	446	323,800			

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 1936.

Average discharge.- 14 years, 242 second-feet.

Extremes.- Maximum discharge during year, 16,600 second-feet May 31 (gage height, 8.56 feet, based on resident engineer's notes); no flow during several periods.
1922-36: Maximum discharge, 21,200 second-feet Aug. 9, 1929; maximum gage height, that of May 31, 1936. Maximum gage height for flood of June 18, 1923, was 7.82 feet (discharge, 19,200 second-feet); it was published erroneously in Water-Supply Papers 607, 627, 647, 667, and 702. No flow during several periods. Bank-full stage, 7.0 feet.

Remarks.- Records fair except those for periods Dec. 3-6, Jan. 20 to Feb. 22, Mar. 10, 16, Apr. 12-14, and Sept. 12, 13, which are poor and were based on resident engineer's notes and a study of weather records and records of upstream station.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	4	1	4	2	10	0	0	5,300	0	3,660	3
2	0	1	0	2		8	0	0	1,970	0	1,680	1
3	0	0	8	3		8	0	0	1,770	0	1,170	6
4	0	0	79	3		3	0	101	2,780	0	665	206
5	0	0	79	4		2	0	30	1,460	0	221	221
6	0	0	69	3	2	2	0	0	1,190	0	601	54
7	0	0	10	3	3	0	15	890	0	1,370	32	32
8	0	2	10	3	4	0	240	654	0	5,160	24	24
9	0	3	32	3	2	0	101	721	0	8,840	20	20
10	0	1	69	2	1	0	5,590	464	0	5,740	16	16
11	0	2	57	4	0	0	1,640	417	0	3,190	13	13
12	0	3	128	12	0	2	384	417	0	2,170	7	7
13	0	2	37	7	0	2	116	397	0	1,400	2	2
14	0	6	10	11	0	1	22	333	0	768	0	0
15	0	10	4	4	0	0	0	562	0	496	0	0
16	0	7	4	5	1	2	0	0	404	0	321	0
17	0	4	4	4		0	0	0	282	0	188	0
18	0	4	3	4		0	0	0	230	0	69	0
19	0	4	3	3		0	0	0	161	0	34	0
20	0	3	3			0	0	0	66	0	24	0
21	0	2	3			0	0	0	22	0	27	0
22	0	4	3			0	0	0	12	0	17	0
23	0	5	4		72	0	0	0	8	0	13	0
24	0	1	4		161	0	0	0	5	0	8	0
25	0	0	4	2	120	0	0	0	3	0	7	0
26	0	0	2		20	0	0	2,020	2	0	6	0
27	0	0	3		72	0	0	1,560	2	0	3	0
28	0	0	2		40	0	0	441	1	0	4	0
29	6	2	2		16	0	0	791	0	0	51	0
30	11	10	3		-	0	0	4,650	0	1,100	15	0
31	S	-	5		-	0	-	14,800	-	6,210	4	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						25	11	0	0.8	50		
November.....						80	10	0	2.7	159		
December.....						645	128	0	20.8	1,280		
Calendar year 1935.....						41,688	5,350	0	114	82,680		
January.....						108	12	-	3.5	214		
February.....						533	161	-	18.4	1,060		
March.....						45	10	0	1.6	29		
April.....						5	2	0	.2	10		
May.....						32,501	14,800	0	1,048	64,460		
June.....						20,543	5,300	0	685	40,750		
July.....						7,310	6,210	0	236	14,500		
August.....						38,122	8,840	3	1,230	75,610		
September.....						604	221	0	20.1	1,200		
Water year 1935-36.....						100,521	14,800	0	275	199,400		

Arkansas River at Larned, Kans.

Location.- Water-stage recorder, lat. 38°10'5", long. 99°5'50", in NE½ 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 1936.

Average discharge.- 14 years, 240 second-feet.

Extremes.- Maximum discharge during year, 5,980 second-feet June 3 (gage height, 7.92 feet); practically no flow during period Feb. 19-22.

1922-36: Maximum discharge, 14,300 second-feet Aug. 25, 1923 (gage height, 9.5 feet); no flow during several periods. Bank-full stage, 8.5 feet.

Remarks.- Records fair except those for period of ice effect, Dec. 28 to Feb. 23, which were based on one discharge measurement and observer's notes, and those for periods Mar. 2-9, Mar. 27 to Apr. 3, Apr. 30 to May 6, May 25-30, June 28 to July 2, July 22-26, 31, Aug. 1, 6-9, 22-26, Sept. 4, 5, 7, 9-11, 13-21, which were based on a study of incomplete gage graphs, observer's and engineers' notes, and weather records, and are poor.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	
1	10	10	24	17	10	39	21	18	1,850	77	162	51	
2	9	10	26	24		47	19	16	5,080	69	2,310	41	
3	7	10	24	26		100	24	14	4,930	73	2,580	36	
4	6	10	26	30		111	22	11	2,580	69	1,620	45	
5	5	10	26	35		84	22	10	2,260	64	982	53	
6	4	9	25	31	5	53	18	8	2,580	56	750	61	
7	4	10	24	32		24	21	7	1,200	53	510	61	
8	4	10	23	35		27	25	16	974	48	360	61	
9	3	11	22	33		40	24	15	950	43	590	60	
10	3	10	24	31		43	26	22	830	38	4,650	60	
11	3	10	24	29	1	39	26	174	750	33	5,380	59	
12	3	10	25	35		41	25	1,790	654	31	4,510	59	
13	3	10	25	42		39	23	1,740	558	28	2,740	57	
14	3	18	25	45		38	21	854	482	25	1,880	55	
15	2	18	24	41		37	17	475	422	24	1,540	53	
16	1	16	28	35	1	37	16	315	368	21	990	51	
17	1	16	29	31		32	16	224	404	20	750	50	
18	1	21	35	27		31	16	180	368	19	566	48	
19	1	22	34	23		28	16	138	305	16	410	46	
20	1	20	28	19		25	14	103	285	15	305	44	
21	2	20	29	19	5	26	10	86	255	12	236	42	
22	2	20	35	16		24	12	77	224	11	210	41	
23	4	20	42	18		24	12	75	192	9	166	41	
24	13	20	41	20		24	11	159	171	8	165	40	
25	13	18	33	20		24	11	162	157	7	146	40	
26	13	28	29	18	15	39	22	16	440	130	6	126	44
27	13	29	29	39		39	21	20	590	118	5	123	43
28	13	26	25	39		39	20	23	760	107	6	98	51
29	12	25	26	40		20	21	1,160	98	6	86	51	
30	11	24	26	-		20	21	830	88	20	73	47	
31	10	-	24	-	-	21	-	702	-	20	59	-	
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet			
October.....						180	13	1	5.8	357			
November.....						493	29	9	16.4	978			
December.....						860	42	22	27.7	1,710			
Calendar year 1935.....						56,740	9,000	0	155	112,500			
January.....						807	45	-	26.0	1,600			
February.....						274	40	-	9.4	543			
March.....						1,162	111	20	37.5	2,300			
April.....						569	26	10	19.0	1,130			
May.....						11,161	1,790	7	360	22,140			
June.....						29,368	5,080	88	979	58,250			
July.....						932	77	5	30.1	1,850			
August.....						34,815	5,380	59	1,123	69,050			
September.....						1,493	61	38	49.8	2,960			
Water year 1935-36.....						62,114	5,380	-	224	162,900			

Arkansas River at Wichita, Kans.

Location.— Water-stage recorder, lat. 37°41'20", long. 97°20'45", in SE¼ sec. 20, T. 27 S., R. 1 E., on Douglas Avenue Bridge, in Wichita, half a mile below mouth of Little Arkansas River.

Drainage area.— 41,600 square miles.

Records available.— July 1934 to September 1936. June 1921 to March 1935 from chain gage 1½ miles above mouth of Little Arkansas River.

Extremes.— Maximum discharge during year, 4,350 second-feet June 4 (gage height, 5.44 feet, from graph based on gage readings); minimum, 11 second-feet Feb. 8 (gage height, 0.51 foot).

1934-36: Maximum discharge, 12,500 second-feet June 3, 1935 (gage height, 9.67 feet); minimum, 3 second-feet Sept. 3, 1934 (gage height, 0.37 foot).

Remarks.— Records fair. Discharge for periods May 16-19, May 28 to June 1, June 3-10, Aug. 4-28 based on graph drawn through U. S. Weather Bureau gage readings.

Rating tables, water year 1935-36 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Aug. 20 to Sept. 30)

Oct. 1-21				Oct. 22 to June 2				June 3 to Sept. 30	
0.7	68	0.6	23	2.0	601	0.7	20	2.8	1,160
.8	89	.8	61	2.2	730	.9	32	3.2	1,530
.9	114	1.0	115	2.4	866	1.1	54	3.6	1,940
1.1	180	1.2	185	2.6	1,010	1.3	105	4.0	2,400
1.4	320	1.4	269	2.8	1,170	1.6	248	4.5	3,060
		1.6	368	3.0	1,340	2.0	514	5.0	3,760
		1.8	479	3.3	1,620	2.4	830	5.5	4,500

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	129	148	181	145	66	174	92	86	1,130	338	23	227
2	166	174	170	163	55	166	89	86	1,130	313	22	195
3	135	181	166	217	57	159	95	86	2,110	289	21	166
4	117	178	159	217	40	159	100	86	4,350	266	161	189
5	112	174	178	189	57	155	95	86	4,050	248	702	125
6	102	209	170	159	55	155	89	86	2,720	227	575	122
7	135	205	163	118	57	155	86	86	2,160	200	507	105
8	117	178	155	95	28	155	86	132	2,110	185	419	93
9	99	170	152	89	40	152	86	159	1,880	166	332	90
10	92	152	148	115	37	152	86	145	1,620	147	176	90
11	89	141	148	141	38	148	86	138	1,480	134	102	64
12	85	135	148	155	40	141	86	132	1,300	122	1,120	64
13	81	132	148	155	35	141	86	128	1,160	105	2,220	64
14	78	125	148	155	28	141	86	755	1,060	96	2,530	64
15	74	122	148	159	32	135	86	1,570	986	86	1,770	68
16	70	118	141	166	28	128	84	1,260	910	77	1,390	80
17	74	115	141	170	28	125	81	838	838	70	1,160	90
18	85	118	135	109	28	122	81	737	782	62	961	83
19	85	118	132	76	28	122	81	710	734	54	814	74
20	120	115	125	81	28	115	81	614	686	50	726	70
21	305	112	125	95	28	115	78	545	654	46	575	68
22	784	106	125	106	28	115	74	479	622	40	447	66
23	515	103	125	98	55	115	74	433	590	38	391	62
24	332	100	115	86	166	109	74	422	552	34	384	60
25	265	103	95	71	201	109	74	433	522	32	364	54
26	225	185	68	66	201	106	92	485	492	30	320	113
27	205	185	66	68	181	103	92	539	455	28	320	161
28	181	197	64	74	174	103	86	832	412	26	326	176
29	163	243	71	68	174	106	86	938	377	25	320	171
30	165	209	78	66	-	103	86	1,010	364	24	283	161
31	174	-	106	66	-	98	-	1,130	-	24	254	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	5,360	764	70	173	10,630
November.....	4,551	243	190	152	9,080
December.....	4,094	181	64	132	8,120
Calendar year 1935.....	281,476	12,100	31	771	558,400
January.....	3,738	217	66	121	7,410
February.....	2,013	201	28	69.4	3,990
March.....	4,082	174	96	132	8,100
April.....	2,568	100	74	85.3	5,070
May.....	15,165	1,570	86	489	30,080
June.....	38,236	4,350	364	1,275	75,840
July.....	3,582	338	24	116	7,100
August.....	19,715	2,530	21	636	39,100
September.....	3,166	227	54	106	6,280
Water year 1935-36.....	106,261	4,350	21	290	210,800

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 1936.

Average discharge.- 15 years (1921-36), 1,214 second-feet.

Extremes.- Maximum discharge during year, 6,440 second-feet June 6 (gage height, 12.15 feet); minimum, 67 second-feet Aug. 5 (gage height, 6.34 feet).

1902-6, 1921-36: Maximum gage height, 25.64 feet June 11, 1923, from floodmarks (discharge not determined); minimum discharge, 1 second-foot (revised) Oct. 9, 1921, owing to diversion by power canal of Kansas Gas & Electric Co., which was washed out June 10, 1923. Minimum discharge after canal washed out, 30 second-feet Aug. 19, 1933. Bank-full stage, 16 feet.

Remarks.- Records good except those estimated for period of ice effect, Jan. 29 to Feb. 24, and those determined for period of missing gage-height record, which are poor.

Rating tables, water year 1935-36, except period of ice effect (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Oct. 1-21, Aug. 25 to Sept. 30)

Oct. 1-21				Oct. 22 to Sept. 30			
6.8	160	6.3	57	7.8	679	10.0	2,880
6.9	210	6.5	108	8.2	994	10.5	3,540
7.0	265	6.7	187	8.6	1,360	11.0	4,280
7.1	325	7.0	274	9.0	1,760	12.5	7,080
		7.4	449	9.5	2,290		

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	195	505	584	383		485	314	259	1,410	511	98	244
2	195	516	505	425		474	322	259	1,460	435	80	218
3	205	578	459			459	322	266	1,460	875	80	207
4	221	659	425			449	327	259	1,680	796	77	184
5	226	*659	411			435	327	266	4,130	569	74	174
6	210	*815	411		170	425	322	278	4,940	527	490	164
7	210	*670	411			411	314	282	5,330	449	505	170
8	210	532	420	*450		401	310	286	2,640	401	490	174
9	248	545	430			401	308	318	2,580	370	474	164
10	248	554	435			401	302	773	2,350	331	444	155
11	226	500	430			401	302	516	2,020	306	411	148
12	221	464	420			449	298	415	1,760	286	374	145
13	210	435	411			388	286	415	1,560	274	672	174
14	205	411	411			378	274	396	1,410	244	1,760	155
15	190	396	401		495	370	266	383	1,270	229	1,760	155
16	180	383	396	495		360	263	1,560	1,170	214	1,610	222
17	175	374	396	485		352	266	1,410	1,050	197	1,360	225
18	180	365	396	449		348	263	1,130	968	177	1,130	251
19	210	360	401	*410		343	266	960	892	167	968	295
20	232	360	401	*370		335	266	818	834	148	818	420
21	265	360	406	335	170	335	270	722	788	152	707	363
22	1,810	356	406	365	240	327	270	646	722	145	601	318
23	2,400	348	406	*315	310	322	270	722	672	136	532	298
24	1,560	339	406	*265	380	314	266	595	626	128	465	280
25	1,020	331	406	222	469	314	259	589	584	125	464	266
26	626	420	374	211	516	310	251	722	549	125	411	322
27	722	693	318	*200	607	302	244	875	511	100	370	435
28	639	743	286	*200	560	298	247	1,030	495	105	339	480
29	584	736	282		511	302	265	1,170	459	98	310	411
30	543	672	302	200	-	306	265	1,310	425	95	290	374
31	522		343		-	310	-	1,360	-	90	266	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						15,088	2,400	175	487	29,950		
November.....						14,977	743	331	496	29,510		
December.....						12,489	584	287	403	24,770		
Calendar year 1935.....						654,825	25,900	107	1,794	1,290,000		
January.....						11,625	-	-	375	23,060		
February.....						6,963	607	-	240	13,810		
March.....						11,452	455	298	369	22,710		
April.....						9,603	327	244	283	16,870		
May.....						21,024	1,560	259	678	41,700		
June.....						44,725	4,940	425	1,491	88,710		
July.....						8,825	875	90	285	17,500		
August.....						18,450	1,760	74	595	36,600		
September.....						7,627	480	148	254	15,130		
Water year 1935-36.....						181,648	4,940	74	496	360,300		

*Discharge computed from flow at Wichita and precipitation data.

Arkansas River near Muskogee, Okla.

Location.— Wire-weight gage, lat. 35°46', long. 95°18', in NW¼ sec. 21, T. 15 N., R. 19 E., 1 mile below confluence of Neosho and Verdigris Rivers and 3½ miles northeast of Muskogee. Zero of gage is 471.38 feet above mean sea level (benchmark of Corps of Engineers, U. S. Army). Prior to Oct. 10, 1935, staff gage 1,600 feet downstream recorded to same datum.

Drainage area.— 96,800 square miles.

Records available.— March 1935 to September 1936.

Extremes.— Maximum discharge observed during year, 98,000 second-feet Sept. 29 (gage height, 19.54 feet); minimum, 340 second-feet Aug. 11-14 (gage height, 3.80 feet). 1935-36: Maximum discharge observed, 243,000 second-feet June 9, 1935 (gage height, 30.8 feet); minimum, that of Aug. 11-14, 1936. Maximum stage known, 34.1 feet in June 1923.

Remarks.— Records good. Gages read twice daily. Gage readings furnished by Oklahoma Gas & Electric Co. Oct. 1-9.

Rating tables, water year 1935-36 (gage height, in feet, and discharge, in second-feet)

Oct. 1-9

Oct. 10 to Sept. 30

4.9	1,800	4.0	430	10.0	20,000	16.0	62,000
5.0	2,000	5.0	1,480	11.0	25,200	17.0	71,800
5.3	2,600	6.0	3,800	12.0	31,000	18.0	82,000
5.6	3,500	7.0	7,050	13.0	37,400	19.0	92,500
6.0	4,700	8.0	11,000	14.0	44,600	20.0	105,500
6.5	6,200	9.0	15,300	15.0	52,800		
7.1	8,050						

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2,600	17,600	47,900	4,400	2,300	6,350	2,080	9,400	6,350	1,680	430	525
2	2,400	16,700	49,500	4,400	2,800	5,650	1,880	6,700	6,350	1,580	430	490
3	2,200	10,600	31,000	5,660	2,190	5,000	1,680	33,600	5,660	11,900	405	560
4	2,000	11,900	17,600	4,700	2,800	4,400	1,780	32,900	6,000	14,400	380	940
5	2,000	19,500	12,700	4,400	3,300	3,800	2,080	19,500	6,350	8,200	360	1,530
6	1,800	41,700	40,300	6,700	3,550	3,550	1,890	8,600	10,200	5,000	360	1,190
7	1,800	49,700	46,400	7,800	2,420	3,300	1,780	6,350	25,300	3,300	360	1,480
8	1,800	43,900	41,700	7,050	2,420	3,300	1,480	6,350	69,900	2,420	360	1,060
9	8,050	36,100	32,900	6,000	2,300	3,300	1,330	7,400	55,600	1,980	360	1,490
10	8,600	24,700	25,800	5,650	1,960	3,300	1,330	13,200	43,200	1,880	360	1,260
11	7,050	15,300	20,000	5,000	1,880	2,920	1,330	15,300	26,900	1,780	360	1,000
12	5,300	17,200	16,200	5,000	1,880	2,920	1,480	11,400	16,700	1,680	340	885
13	3,650	29,700	13,200	4,700	2,300	2,800	1,400	10,600	12,300	1,580	340	640
14	3,300	22,600	11,400	4,400	2,190	2,690	1,400	9,400	10,200	1,330	340	525
15	3,050	14,400	10,200	4,400	1,680	2,420	1,400	8,200	8,200	1,260	360	490
16	2,800	11,000	9,400	4,400	2,300	2,300	1,330	6,350	7,050	1,120	430	490
17	5,500	9,800	8,600	4,400	3,300	2,420	1,190	6,350	6,000	1,060	490	560
18	6,000	5,600	7,800	4,100	2,420	2,420	1,330	5,650	5,300	1,000	490	330
19	4,100	7,400	7,400	3,550	3,300	2,080	1,260	4,700	4,700	885	490	3,800
20	4,400	7,050	6,350	3,800	4,100	2,190	1,260	3,800	5,100	885	640	6,700
21	7,050	6,700	6,350	4,100	3,050	2,080	1,260	3,300	3,550	730	1,120	6,350
22	16,200	6,350	6,350	3,800	2,680	2,080	1,190	3,300	3,300	830	1,000	7,050
23	18,600	5,650	5,650	3,550	2,420	2,080	1,190	3,800	3,050	730	940	9,800
24	14,400	5,300	5,650	3,300	3,050	1,680	1,120	3,900	2,680	640	885	7,800
25	17,600	5,000	5,300	3,050	3,050	1,680	1,000	5,300	2,680	600	830	14,400
26	20,000	6,350	5,000	2,300	3,300	1,780	1,060	3,300	2,300	600	780	10,200
27	18,600	8,600	4,700	1,980	3,300	2,190	1,060	3,800	2,190	560	640	19,100
28	15,300	10,200	4,700	2,080	2,920	2,300	1,190	3,800	1,980	525	640	87,200
29	11,400	32,300	4,100	2,080	6,700	2,300	1,400	5,650	1,780	525	560	98,000
30	9,000	42,400	4,100	2,080	-	2,190	12,700	5,300	1,580	490	525	87,200
31	8,200	-	4,100	2,080	-	1,980	-	6,350	-	460	525	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	235,450	20,000	1,800	7,531	463,000
November.....	542,300	43,700	5,000	18,080	1,076,000
December.....	511,350	49,600	4,100	16,500	1,014,000
Calendar year					
January.....	130,900	7,800	1,990	4,223	259,600
February.....	85,660	6,700	1,680	2,881	165,700
March.....	89,720	6,350	1,780	2,894	178,000
April.....	53,750	12,700	1,000	1,792	108,600
May.....	271,460	33,600	3,500	8,756	538,400
June.....	361,310	69,900	1,680	12,040	716,600
July.....	71,610	14,400	460	2,310	142,000
August.....	16,500	1,120	340	532	32,780
September.....	373,135	98,000	490	12,440	740,100
Water year 1935-36	2,739,035	98,000	340	7,484	4,366,000

Arkansas River at Van Buren, Ark.

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

Drainage area.— 150,300 square miles.

Records available.— October 1927 to September 1936.

Extremes.— Maximum discharge during year, 143,000 second-feet Sept. 30 (gage height, 21.17 feet); minimum, 700 second-feet Aug. 17 (gage height, 2.65 feet).

1927-36: Maximum discharge, 418,000 second-feet June 19, 1935; maximum gage height, 34.1 feet June 19, 1935, just before break in levee; minimum discharge, 216 second-feet Aug. 19, 21, 1934.

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

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

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

2.6	650	5.0	4,100	14.0	52,000
2.8	850	6.0	6,500	16.0	71,000
3.0	1,050	7.0	9,600	18.0	96,000
3.5	1,550	8.0	13,100	20.0	125,000
4.0	2,300	10.0	23,000	21.0	140,000
4.5	3,100	12.0	36,000		

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	8,300	13,400	48,800	8,000	4,500	6,000	4,100	3,800	14,600	3,100	1,140	860
2	7,700	18,200	53,800	8,000	4,880	8,300	4,000	10,300	14,200	2,900	1,100	830
3	7,100	27,200	54,700	8,300	5,000	8,900	3,900	9,250	17,700	2,620	1,050	820
4	6,650	23,600	41,600	8,300	4,880	8,300	3,600	13,800	13,800	2,620	1,050	780
5	6,250	20,000	24,800	8,500	4,100	8,600	3,500	37,600	11,400	11,000	1,000	800
6	6,000	22,400	38,800	8,000	4,200	9,600	3,800	24,800	10,300	11,400	920	820
7	5,750	45,600	104,000	6,500	5,000	9,260	4,300	13,800	13,800	7,400	870	1,030
8	5,500	57,400	116,000	9,950	5,250	8,000	4,100	9,600	49,600	5,500	860	1,290
9	6,120	54,700	104,000	10,600	4,400	6,950	3,900	8,000	86,800	4,400	830	1,320
10	12,000	52,900	84,300	9,950	4,200	6,250	3,700	8,600	69,000	3,600	780	1,400
11	16,200	52,000	63,000	8,900	4,750	5,880	3,500	21,200	52,000	3,100	770	1,370
12	14,600	40,800	42,400	8,900	4,880	5,620	3,500	25,400	40,000	2,820	760	1,390
13	12,800	31,800	31,100	8,600	4,750	5,380	3,400	21,200	27,800	2,750	750	1,270
14	12,000	36,000	26,000	8,300	4,620	5,120	3,400	15,800	17,700	2,600	730	1,120
15	10,300	34,600	21,800	8,000	4,500	5,000	3,200	13,400	14,200	2,450	730	1,130
16	8,300	24,800	19,400	7,700	4,300	4,750	3,200	12,400	12,400	2,220	710	1,130
17	8,000	18,200	17,200	7,400	3,500	4,620	3,100	10,600	11,000	2,000	710	1,140
18	9,250	15,400	15,400	7,400	2,000	4,400	3,000	8,900	9,950	1,920	750	1,160
19	14,600	13,800	14,200	7,250	2,600	4,300	2,820	8,000	9,250	1,620	600	1,300
20	14,600	12,800	13,100	6,950	2,750	4,200	2,820	7,250	8,300	1,730	830	10,300
21	13,100	11,700	12,400	6,650	3,900	4,000	2,680	6,380	6,800	1,610	820	13,400
22	12,800	11,400	11,700	6,800	4,200	3,900	2,680	5,750	5,880	1,540	780	11,700
23	17,700	10,600	11,000	6,800	4,500	4,000	2,750	5,120	5,250	1,780	830	10,600
24	23,600	9,850	10,600	6,500	4,500	5,380	2,750	4,680	4,750	2,680	1,160	10,700
25	23,600	9,600	10,300	6,380	4,500	6,000	2,680	4,880	4,500	2,380	1,190	18,800
26	20,600	9,600	9,600	6,120	4,880	4,880	2,680	4,880	4,300	1,880	1,150	17,200
27	24,200	13,100	9,250	5,880	5,580	4,500	2,600	4,620	4,000	1,600	1,100	24,800
28	26,600	18,200	8,900	5,120	6,000	4,400	2,520	4,500	3,600	1,460	1,040	51,200
29	24,800	18,800	8,900	4,620	6,500	4,400	2,520	5,120	3,500	1,380	970	128,000
30	19,400	33,200	8,600	4,620	-	4,620	2,600	14,200	3,300	1,320	940	140,000
31	15,400	-	8,300	4,400	-	4,400	-	18,200	-	1,210	900	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	413,820	26,600	5,500	13,350	820,800
November.....	761,750	57,400	9,600	25,390	1,511,000
December.....	1,045,950	116,000	8,300	33,680	2,071,000
Calendar year 1935.....	18,569,460	403,000	3,320	50,680	36,830,000
January.....	230,990	10,600	4,400	7,451	468,200
February.....	129,520	6,500	2,000	4,466	256,900
March.....	179,900	9,600	3,800	5,803	356,800
April.....	97,300	4,300	2,520	3,243	193,000
May.....	362,230	37,600	3,800	11,680	718,500
June.....	549,780	86,900	3,500	18,330	1,090,000
July.....	97,190	11,400	1,210	3,135	192,600
August.....	28,020	1,190	710	904	55,580
September.....	458,660	140,000	780	15,290	909,700
Water year 1935-36.....	4,353,110	140,000	710	11,890	8,634,000

Arkansas River at Little Rock, Ark.

Location.—Water-stage recorder, lat. 34°45', long. 92°18', in sec. 3, T. 1 N., R. 12 W., at Little Rock. Zero of gage is 223.61 feet (revised) above mean sea level (general adjustment of 1929).

Drainage area.—157,900 square miles.

Records available.—September 1927 to September 1931; October 1933 to September 1936.

Extremes.—Maximum discharge during year, 144,000 second-feet Dec. 9 (gage height, 18.00 feet); minimum, 1,290 second-feet Sept. 11 (gage height, -1.76 feet).
1927-31, 1933-36: Maximum discharge, 422,000 second-feet June 22, 23, 1935; minimum, 850 second-feet Aug. 23, 1934 (gage height, -4.16 feet).
Maximum stages known, 34.6 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 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	9,650	27,200	21,900	11,300	7,100	11,300	6,950	6,350	5,300	6,350	2,650	1,870
2	10,200	21,900	25,200	10,900	6,800	11,300	6,800	6,500	8,450	6,800	2,550	1,750
3	9,350	17,700	41,900	10,900	6,800	11,300	6,800	6,500	15,500	5,600	2,470	1,690
4	8,450	15,000	52,300	11,300	6,950	11,700	6,500	8,750	15,500	5,300	2,370	1,650
5	7,550	18,900	54,800	11,300	7,550	13,000	6,500	10,200	13,400	5,150	2,250	1,610
6	6,950	25,800	49,900	11,700	7,850	15,500	6,350	11,700	15,500	4,850	2,170	1,550
7	6,350	24,500	68,400	11,700	7,850	17,200	6,200	16,600	14,400	4,450	2,110	1,470
8	6,200	21,900	129,000	11,300	7,550	17,700	6,950	30,000	12,100	6,050	2,010	1,410
9	5,900	30,700	144,000	10,900	7,100	17,200	8,150	24,500	10,600	10,900	1,950	1,350
10	5,750	51,500	138,000	11,300	7,100	16,000	8,150	17,200	25,200	10,200	1,850	1,330
11	5,750	52,300	125,000	12,600	7,550	14,000	7,850	15,000	68,900	8,150	1,790	1,290
12	5,750	50,700	107,000	13,400	7,550	12,100	7,550	10,900	68,900	6,950	1,750	1,350
13	6,800	52,300	87,000	13,400	7,100	10,900	7,100	11,300	57,400	6,050	1,690	1,570
14	12,100	45,900	68,900	12,600	6,950	9,950	6,850	21,900	47,500	5,150	1,650	1,870
15	13,400	38,000	54,000	11,700	7,250	9,350	6,350	28,600	37,500	4,550	1,690	2,050
16	12,100	35,000	45,100	11,300	7,550	9,050	6,050	24,500	27,200	4,150	1,550	2,130
17	10,600	37,300	39,000	10,900	7,250	8,450	5,750	19,500	20,700	3,950	1,510	2,160
18	9,950	32,100	32,100	10,600	7,100	8,150	5,450	15,000	16,600	3,850	1,470	2,050
19	9,650	24,500	28,600	10,200	6,800	7,850	5,150	14,400	14,000	3,650	1,450	1,870
20	9,650	19,500	25,200	9,950	6,500	7,550	5,000	12,600	12,600	3,550	1,430	1,810
21	10,200	16,000	21,900	9,650	5,600	7,250	4,850	10,900	11,300	3,950	1,450	1,810
22	12,800	14,000	15,500	9,650	5,000	7,100	4,850	9,650	10,600	3,750	1,430	1,910
23	18,300	12,600	17,700	9,550	5,000	6,950	4,700	9,050	9,950	5,600	1,430	2,850
24	18,900	11,300	16,600	9,050	5,450	7,100	4,700	8,150	9,350	4,050	1,450	10,500
25	15,500	10,600	15,500	9,050	6,050	7,550	4,700	7,550	8,750	3,550	1,450	13,400
26	17,200	9,950	14,400	8,750	6,550	8,450	4,700	5,800	7,550	3,150	1,470	13,400
27	24,500	9,950	13,400	8,750	7,550	8,750	4,550	6,200	6,950	3,050	1,470	14,000
28	28,600	10,600	13,000	8,450	9,050	9,050	4,550	6,050	6,500	3,350	1,450	18,900
29	31,400	13,400	12,600	8,150	10,900	8,750	5,300	5,900	6,550	3,550	1,550	30,700
30	32,800	18,300	12,100	7,850	—	7,850	6,050	5,750	6,500	3,550	1,790	64,400
31	31,400	—	11,700	7,550	—	7,550	—	5,450	—	2,950	1,910	—
Month	Second-foot-days		Maximum		Minimum		Mean		Run-off in acre-feet			
October.....	413,500		32,800		5,750		13,340		680,200			
November.....	769,400		52,300		9,950		25,650		1,525,000			
December.....	1,504,700		144,000		11,700		48,540		2,985,000			
Calendar year 1935.....	24,482,960		418,000		5,750		67,080		48,560,000			
January.....	325,500		13,400		7,550		10,500		645,600			
February.....	205,800		10,900		5,000		7,068		407,600			
March.....	325,900		17,700		6,950		10,510		646,400			
April.....	181,200		8,150		4,550		6,040		359,400			
May.....	392,450		30,000		5,450		12,560		778,400			
June.....	590,850		68,900		5,300		19,700		1,172,000			
July.....	157,950		10,900		2,950		5,100		313,300			
August.....	55,090		2,650		1,430		1,777		109,300			
September.....	205,790		64,400		1,290		6,860		408,200			
Water year 1935-36.....	5,127,830		144,000		1,290		14,010		10,170,000			

South Arkansas River near Salida, Colo.

Location.— Water-stage recorder, lat. 38°31', long. 106°0', 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 1936 in reports of U. S. Geological Survey; June 1929 to September 1936 and at point half a mile (revised) downstream April 1922 to December 1924 in reports of State engineer.

Extremes.— Maximum discharge during year, 393 second-feet May 18 (gage height, 3.27 feet); minimum daily discharge, 0.5 second-foot July 7-9, 17.
1922-24, 1929-38: Maximum daily discharge, 1,220 second-feet June 17, 1923; no flow at times during 1922, 1931-33, 1935.

Remarks.— Records fair. Corrected for ice effect Dec. 21-27, Jan. 3-6, 8, 9, 16-23, 28-29 on basis of one discharge measurement, gage-heights, and weather records.
Diversions for irrigation above station.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	39	52	64	69	50	42	4.0	38	265	12	127	46
2	52	57	56	60	50	39	14	48	216	10	100	48
3	46	45	57	55	46	42	12	69	167	7.2	106	78
4	39	42	57	58	45	44	9.4	113	133	4.5	107	73
5	34	39	65	54	45	42	7.2	141	117	4.2	200	64
6	34	56	62	52	45	39	5.6	209	96	1.7	329	58
7	26	51	65	50	32	36	3.2	183	94	.5	292	51
8	24	46	67	50	69	32	2.6	160	104	.5	255	44
9	23	50	67	52	67	26	2.3	141	96	.5	214	34
10	20	45	67	54	54	25	2.9	109	104	1.6	180	30
11	19	40	62	60	44	29	7.2	111	115	8.4	167	28
12	19	42	62	73	45	24	11	137	100	11	154	29
13	16	46	60	73	40	20	6.1	169	100	4.0	145	26
14	16	44	54	67	38	16	6.7	188	96	3.7	133	23
15	16	39	46	60	42	16	4.0	228	92	6.7	125	23
16	13	45	52	52	42	15	5.6	298	76	1.1	115	20
17	14	44	45	44	42	15	14	356	67	.5	102	20
18	16	42	45	40	50	8.4	15	359	56	1.0	87	20
19	22	42	45	42	58	5.6	9.4	321	45	6.2	52	19
20	20	44	45	50	60	4.0	12	318	30	6.7	109	15
21	19	42	50	54	60	3.4	14	318	28	2.9	107	12
22	20	36	50	66	60	2.1	16	285	24	1.8	96	9.4
23	36	40	50	54	62	1.8	25	275	20	1.1	86	8.4
24	64	39	45	52	46	2.6	15	265	26	.9	79	5.6
25	71	48	40	46	42	2.1	22	275	18	1.2	65	4.2
26	82	52	45	46	46	5.6	24	292	17	2.1	58	5.6
27	85	45	50	44	46	11	24	262	23	6.7	46	12
28	65	50	51	46	45	5.6	24	258	24	24	33	32
29	58	51	56	46	45	4.5	20	255	22	28	38	46
30	56	60	54	60	-	4.2	26	275	12	51	46	69
31	51	-	64	60	-	4.0	-	295	-	127	45	-
Month							Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet	
October.....							1,115	85	13	36.0	2,210	
November.....							1,376	60	36	45.9	2,730	
December.....							1,698	67	40	54.8	3,570	
Calendar year 1935.....							18,111	617	0	49.6	35,930	
January.....							1,681	73	40	54.2	3,330	
February.....							1,447	69	38	49.9	2,870	
March.....							568.9	44	1.8	18.4	1,130	
April.....							364.2	26	2.3	12.1	722	
May.....							6,711	359	38	216	13,310	
June.....							2,373	285	12	79.1	4,710	
July.....							338.7	127	.5	10.9	672	
August.....							3,826	329	33	123	7,590	
September.....							953.2	78	4.2	31.8	1,890	
Water year 1935-36.....							22,452.0	359	.5	61.3	44,630	

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., 3 miles northwest of Westcliffe.

Drainage area.- 346 square miles.

Records available.- December 1924 to June 1928, October 1933 to September 1936 in reports of U. S. Geological Survey; December 1924 to June 1928, March 1930 to September 1936 in reports of State engineer. No winter records after 1927.

Extremes.- Maximum discharge during year, 710 second-feet Aug. 7 (gage height, 3.35 feet); minimum daily discharge, 0.1 second-foot June 19-22.
1924-28, 1930-36: Maximum discharge, about 1,400 second-feet (revised) July 22, 1930 (gage height, 4.60 feet), computed by weir formula with overflow estimated; minimum daily discharge, that of June 19-22, 1936.

Remarks.- Records good except those for periods of ice effect, Nov. 7-30, Mar. 1-15, and those for June 28, 29 (computed on basis of water commissioner's notes), and those for period of shifting control, Aug. 20 to Sept. 30, which are fair. No records Dec. 1 to Feb. 29. Diversions for irrigation above station.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	24	13				15	18	6.6	12	20	40	66
2	21	13				15	21	6.6	8.0	16	57	65
3	19	13				16	20	7.1	7.6	12	106	65
4	18	12				16	18	6.6	7.6	8.0	182	65
5	16	12				17	19	4.8	6.2	6.6	203	65
6	16		12			18	19	4.0	3.5	4.8	534	56
7	16					18	18	4.0	3.5	4.8	642	47
8	19					18	19	9.2	3.2	4.8	369	41
9	17					18	19	37	3.2	4.4	197	35
10	14					18	18	107	4.4	5.8	131	32
11	12					19	16	146	7.1	5.8	100	33
12	11					19	15	36	7.1	5.8	80	35
13	10					19	15	35	6.2	8.6	64	30
14	9.8					19	15	26	4.0	8.6	66	22
15	8.6		11			19	15	19	2.8	5.8	47	19
16	8.6					20	16	14	2.0	8.0	47	17
17	8.6					19	15	15	1.0	7.1	41	16
18	10					20	15	16	.5	2.2	33	15
19	12					20	15	15	.1	2.2	35	16
20	12					19	15	12	.1	2.2	81	17
21	13					20	28	10	.1	2.2	155	15
22	13					21	26	8.6	.1	5.3	123	14
23	17					21	20	9.2	6.6	4.4	86	13
24	19					19	18	35	197	3.5	62	12
25	19					21	16	31	38	3.5	50	11
26	21					20	16	25	24	5.5	51	30
27	24					20	16	19	41	4.4	46	100
28	29					22	13	18	35	29	36	150
29	26					20	12	17	25	55	52	42
30	19					18	7.6	15	20	56	74	59
31	15					19	-	18	-	43	68	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						497.6	29	8.6	16.1	987		
November.....						330	-	-	11.0	655		
December.....						-	-	-	-	-		
Calendar year												
January.....						-	-	-	-	-		
February.....						-	-	-	-	-		
March.....						583	22	15	18.8	1,160		
April.....						513.6	28	7.6	17.1	1,020		
May.....						732.7	146	4.0	25.2	1,550		
June.....						476.9	197	.1	15.9	946		
July.....						353.3	56	2.2	11.4	701		
August.....						3,858	642	33	124	7,650		
September.....						1,203	150	11	40.1	2,390		
Water year												

Huerfano River at Manzanares Crossing, near Redwing, Colo.

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

Drainage area.— 76 square miles.

Records available.— October 1933 to September 1936 in reports of U. S. Geological Survey; July 1923 to September 1936 in reports of State engineer. No records during winters.

Extremes.— Maximum discharge, 830 second-feet June 23 (gage height, 2.83 feet) from rating curve extended above 80 second-feet; minimum probably occurred during winter. 1923-36: Maximum stage, 4.30 feet July 27, 1934 (discharge not determined); minimum probably occurred during winter.

Remarks.— Records good except those estimated for Oct. 22-31, Mar. 1-6, which are fair. No record Nov. 1 to Feb. 29. Several diversions for irrigation above station.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	30					10	8.8	42	67	46	82	98
2	30					10	11	41	64	44	104	73
3	27		*18	*10		10	12	46	56	40	94	70
4	27					10	10	58	52	36	83	64
5	27					10	10	65	47	33	264	61
6	25					11	14	65	51	26	190	52
7	22					11	9.6	58	49	29	157	46
8	24					12	14	49	52	32	126	42
9	25					12	13	47	56	29	100	40
10	25					10	9.6	43	62	34	91	35
11	21					13	15	40	58	33	89	35
12	23					15	19	43	54	35	80	35
13	23					10	21	46	54	29	65	32
14	20					10	25	51	49	25	62	30
15	21					10	25	62	54	27	62	30
16	22					10	26	74	62	25	55	31
17	21					10	29	77	56	24	52	30
18	21					11	32	72	52	22	54	35
19	22					7.3	33	72	49	23	67	32
20	22					9.6	36	72	49	23	73	28
21	20					11	37	70	47	24	115	24
22	20					11	41	65	51	23	92	23
23	20					6.6	38	67	110	22	75	25
24	20					9.6	40	69	72	21	65	25
25	20					11	41	72	67	20	59	22
26	20					14	40	67	67	18	55	27
27	20					15	40	70	69	44	51	30
28	20					12	40	72	65	31.2	51	28
29	20					10	43	74	65	157	56	29
30	20					8.8	40	87	54	122	72	32
31	20					10	—	77	—	92	106	—
Month	Second-foot-days					Maximum	Minimum	Mean	Run-off in acre-feet			
October.....	696					30	20	22.5	1,580			
November.....	—					—	—	—	—			
December.....	—					—	—	—	—			
Calendar year												
January.....	—					—	—	—	—			
February.....	—					—	—	—	—			
March.....	350.9					15	6.6	10.7	656			
April.....	773.0					43	8.8	25.8	1,550			
May.....	1,914					87	40	61.7	3,800			
June.....	1,760					110	47	58.7	3,490			
July.....	1,471					312	18	47.5	2,920			
August.....	2,750					264	51	86.7	5,450			
September.....	1,160					98	22	38.7	2,500			
Water year												

*Discharge measurement.

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. 69 W., 8 miles south of La Veta.

Drainage area.- 75 square miles.

Records available.- October 1934 to September 1936. Records not comparable with those at former station, Cucharas River near La Veta, Colo., located 2 miles downstream.

Extremes.- Maximum discharge during year, about 375 second-feet May 16 (gage height, 2.40 feet); minimum daily discharge, 5.4 second-feet Apr. 10.

1935-36: Maximum discharge, that of May 16, 1936; minimum daily discharge, 2 second-feet several days November 1934 to February 1935.

Remarks.- Records fair. Discharge estimated Dec. 19-31, Mar. 1-5. No record Jan. 1 to Feb. 29. Diversions for irrigation above station.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	14	9.8	7.8			7.0	8.6	17	48	23	18	14
2	14	10	8.0			7.0	9.5	17	42	22	19	15
3	12	9.8	8.0	*10		7.0	7.3	17	38	23	20	14
4	12	8.9	9.2			7.0	6.2	16	35	22	28	14
5	13	9.5	7.1			7.5	6.2	16	32	21	47	14
6	12	9.8	7.1			7.8	6.7	16	33	19	37	14
7	11	9.5	8.9			8.0	6.0	17	35	18	34	12
8	12	9.2	9.2			7.8	6.0	27	34	18	50	12
9	12	9.5	8.9			7.8	6.0	53	54	18	26	12
10	12	9.2	8.0			7.6	5.4	24	42	18	24	12
11	10	8.3	6.3			8.0	8.3	21	53	18	23	13
12	10	8.3	9.2			8.0	8.0	25	42	18	22	14
13	10	8.6	9.2			7.6	9.2	35	35	14	21	11
14	10	8.3	11			7.3	9.2	67	29	14	19	9.5
15	10	8.3	8.9			7.1	10	179	29	14	18	9.8
16	10	8.9	9.2			7.1	9.8	328	28	12	16	10
17	10	7.8	8.6			6.9	9.2	359	27	13	14	10
18	11	7.8	8.6			7.3	9.5	282	26	12	14	10
19	11	8.6	8.6			7.3	10	214	26	12	16	11
20	11	9.2	8.6			7.1	11	191	26	11	15	10
21	10	8.3	8.6			7.3	14	170	25	11	16	9.5
22	11	8.3	8.6			7.1	14	146	25	12	16	9.8
23	11	8.3	8.6			7.1	15	128	26	12	15	10
24	12	8.6	8.6			7.8	17	123	28	10	14	9.5
25	11	8.3	8.6			8.6	18	107	27	9.8	13	8.9
26	12	8.3	9.0			10	19	94	26	9.8	13	10
27	11	9.2	9.0			11	18	90	26	12	14	14
28	11	9.2	9.0			8.6	17	80	25	16	19	16
29	11	8.3	9.0			8.3	17	70	23	16	20	17
30	11	8.3	9.0			7.8	17	68	23	18	19	17
31	9.5	-	9.0			8.0	-	56	-	17	14	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	347.5	14	9.5	11.2	689
November.....	264.4	10	7.8	8.61	524
December.....	269.4	11	7.1	8.69	534
Calendar year					
January.....	-	-	-	-	-
February.....	-	-	-	-	-
March.....	239.6	11	6.9	7.73	475
April.....	328.1	19	5.4	10.9	651
May.....	3,035	339	16	97.9	6,020
June.....	946	53	23	31.5	1,880
July.....	483.6	23	9.8	15.6	999
August.....	634	47	13	20.5	1,260
September.....	363.0	17	8.9	12.1	720
Water year					

*Discharge measurement.

Purgatoire River at Trinidad, Colo.

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

Drainage area.- 742 square miles.

Records available.- May 1896 to July 1899, August to December 1905, November 1906 to March 1907, October 1907 to November 1912, October 1933 to September 1936 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 1936 in reports of State engineer.

Average discharge.- 24 years (1907-12, 1916-18, 1919-36), 87.0 second-feet.

Extremes.- Maximum discharge during year, about 10,900 second-feet July 30 (gage height, 7.03 feet); minimum daily discharge, 1.2 second-feet Jan. 1, 1896-99, 1905, 1906-12, 1916-36: Maximum discharge, 45,400 second-feet Sept. 30, 1904 (gage height, 16.6 feet, Commercial Street gage); minimum daily discharge, 1.2 second-feet Jan. 1, 1936.

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

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	49	34	22	1.2	21	14	11	58	89	65	79	65
2	48	34	23	13	24	16	11	52	80	53	170	61
3	47	32	24	22	14	16	11	53	76	46	246	59
4	48	32	27	26	21	16	10	58	77	37	208	58
5	47	31	24	5.5	14	15	13	66	77	35	274	54
6	45	33	21	9	11	16	17	60	69	30	542	46
7	46	30	19	13	19	16	14	67	62	27	357	90
8	45	30	16	19	22	16	10	112	52	36	241	55
9	43	30	15	14	22	15	12	160	46	88	212	47
10	43	30	20	10	31	14	13	112	60	36	167	41
11	41	29	20	17	22	15	10	102	143	20	139	36
12	37	28	14	11	17	14	8.5	91	112	15	113	40
13	37	28	14	18	16	13	9.6	73	80	11	96	41
14	37	30	11	15	11	13	14	76	64	11	113	28
15	37	29	7	16	15	14	20	88	53	14	92	30
16	35	27	15	12	44	13	22	125	52	21	78	32
17	37	27	22	10	9.6	12	28	163	49	17	67	43
18	40	26	16	9	15	13	31	151	45	13	59	68
19	41	26	16	22	23	13	34	140	43	12	58	58
20	42	23	13	20	24	12	42	120	40	21	64	50
21	40	24	15	20	19	11	53	110	44	11	102	49
22	40	24	16	31	17	11	43	97	64	17	78	58
23	46	25	16	20	17	13	38	89	102	13	58	57
24	44	24	15	20	14	12	39	110	102	8.5	50	41
25	41	24	16	20	14	11	53	120	84	7.0	43	39
26	41	28	23	19	11	9.6	64	100	65	9.6	41	40
27	40	26	18	22	12	11	58	108	74	22	41	44
28	40	20	5	20	14	12	48	120	78	458	68	59
29	39	22	9	20	14	11	50	110	97	68	78	61
30	37	25	8	30	-	9.6	55	127	74	204	81	65
31	36	-	9	22	-	9.6	-	110	-	96	85	-
Month						Second-foot-days	Maximum	Minimum	Mean		Run-off in acre-feet	
October.....						1,289	49	35	41.6		2,560	
November.....						829	34	20	27.6		1,640	
December.....						514	28	5	16.6		1,020	
Calendar year 1935.....						27,846	574	4	76.3		55,230	
January.....						525.7	31	1.2	17.0		1,040	
February.....						527.6	44	9.6	18.2		1,050	
March.....						406.8	16	9.6	13.1		805	
April.....						842.1	64	8.5	28.1		1,670	
May.....						3,128	163	52	101		6,200	
June.....						2,183	143	40	71.8		4,270	
July.....						1,522.1	458	7.0	49.1		3,020	
August.....						1,100	542	41	132		8,130	
September.....						1,515	90	28	50.5		3,000	
Water year 1935-36.....						17,351.3	542	1.2	47.4		34,400	

Purgatoire River at Ninemile Dam, near Higbee, Colo.

Location.- Water-stage recorder, lat. 37°45', long. 103°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.

Drainage area.- 2,900 square miles.

Records available.- October 1933 to September 1936 in reports of U. S. Geological Survey; October 1924 to September 1936 in reports of State engineer.

Average discharge.- 12 years, 99.1 second-feet.

Extremes.- Maximum discharge during year, 10,800 second-feet Aug. 7 (gage height, 6.78 feet); no flow for several days during April to July.

1924-36: Maximum discharge, 64,500 second-feet Sept. 15, 1934 (gage height, 12.60 feet, present datum) by slope-area method; no flow at times nearly every year.

Remarks.- Records good except those for periods of ice effect, Dec. 10 to Jan. 3, Jan. 6-8, which were estimated on the basis of one discharge measurement and weather records and are fair. Diversions for irrigation above station.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	40	21	24	15	23	9.2	1.0	1.0	98	6.2	400	18
2	27	19	22	15	24	8.8	1.0	0	87	1.0	133	19
3	25	18	20	14	40	8.3	.5	1.0	93	2.9	592	17
4	24	20	20	14	24	10	.5	.5	59	0	1,400	27
5	23	15	19	16	22	9.6	.8	0	58	0	460	9.8
6	20	12	20	16	24	9.2	1.0	0	59	0	1,740	30
7	16	12	17	16	31	8.8	1.0	0	383	0	3,290	26
8	113	10	14	16	30	9.8	1.0	217	182	0	735	12
9	96	11	17	17	27	7.6	3.2	500	85	0	946	22
10	39	12	17	30	26	5.3	3.5	295	42	16	295	48
11	31	12	17	36	27	4.3	1.8	261	34	44	107	26
12	29	12	17	19	34	4.3	.5	111	29	55	64	21
13	25	12	17	18	42	4.1	.2	80	34	64	45	14
14	28	12	17	16	36	3.5	0	75	44	366	37	10
15	27	12	17	17	36	3.3	0	70	29	141	32	4.1
16	23	12	17	19	32	2.6	0	57	16	49	93	2.0
17	20	14	17	18	45	2.3	0	57	14	28	64	1.5
18	19	14	17	12	49	2.6	0	52	5.6	12	37	2.2
19	18	14	17	19	38	3.3	0	787	3.5	0	28	26
20	16	14	17	23	47	3.5	0	295	2.4	0	23	6.0
21	14	15	17	19	46	2.6	0	146	1.5	0	19	2.0
22	23	16	17	24	51	2.0	53	77	.5	0	21	5.1
23	22	16	17	21	30	2.0	40	52	0	0	18	107
24	22	15	17	16	24	4.3	27	839	0	0	30	68
25	23	16	17	17	19	3.5	18	761	3.7	0	23	72
26	29	17	17	23	14	2.0	14	211	19	0	21	36
27	28	21	17	25	14	2.0	11	199	13	26	20	36
28	25	22	17	22	12	1.0	4.5	366	10	1,690	20	37
29	23	23	17	19	10	1.0	3.7	470	9.2	2,100	52	33
30	23	24	17	21	-	1.0	2.4	410	40	1,200	66	39
31	22	-	17	24	-	1.0	-	173	-	1,080	32	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						914	113	14	29.5	1,810		
November.....						463	24	10	15.4	918		
December.....						547	24	14	17.6	1,080		
Calendar year 1935.....						36,765.1	4,010	0	101	72,920		
January.....						597	36	12	19.3	1,180		
February.....						879	51	10	30.3	1,740		
March.....						142.3	10	1.0	4.59	282		
April.....						189.6	53	0	6.32	376		
May.....						6,564.5	839	0	212	13,020		
June.....						1,432.4	383	0	47.7	2,840		
July.....						6,881.1	2,100	0	222	13,650		
August.....						10,843	3,290	18	350	21,510		
September.....						778.7	107	1.5	26.0	1,540		
Water year 1935-36.....						30,231.6	3,290	0	82.6	59,950		

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. 55 W., at Highland Dam, 11 miles southwest of Las Animas.

Drainage area.— 3,320 square miles.

Records available.— October 1933 to September 1936 in reports of U. S. Geological Survey; October 1931 to September 1936 in reports of State engineer.

Extremes.— Maximum discharge during year, 9,200 second-feet Aug. 7 (gage height, 7.05 feet); no flow for several days.

1931-36: Maximum discharge, 33,000 second-feet (slope measurement) Sept. 15, 1934 (gage height, 14.00 feet, from floodmarks); no flow at times during 1932-36.

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

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	44	7.0	22	11	4.0	1.8	0	0	156	31	626	19
2	31	8.5	20	9.1	2.8	1.8	0	0	110	9.1	273	8.8
3	24	10	20	14	4.0	1.2	0	0	136	2.2	445	11
4	17	11	19	11	1.0	2.5	0	0	98	0	1,070	29
5	15	9.7	19	11	.3	6.0	0	0	86	0	750	14
6	15	11	19	4.2	.3	6.4	0	0	68	0	1,340	6.0
7	14	10	19	3.6	.6	6.8	0	0	116	0	5,240	.9
8	13	13	17	4.0	.2	5.4	0	0	505	221	0	959
9	12	13	16	4.0	.4	5.8	0	1,390	116	24	615	12
10	9.4	11	18	4.4	0	3.2	0	455	72	2.7	325	6.6
11	10	11	18	6.0	.6	2.0	3.8	341	116	.5	128	30
12	8.8	11	14	14	.6	1.3	.6	153	286	0	66	19
13	7.6	12	16	15	0	1.0	0	107	125	24	47	10
14	6.6	13	13	13	0	.9	0	88	68	113	40	6.2
15	5.8	14	7.0	8.8	0	.2	0	86	49	182	37	4.2
16	5.0	16	5.6	9.1	0	0	0	79	33	88	34	2.8
17	4.2	15	6.6	7.6	1.8	0	0	62	22	41	46	1.9
18	3.4	15	6.2	4.4	10	0	0	37	15	20	40	1.0
19	3.0	16	5.6	2.7	7.0	.4	0	312	12	20	33	.7
20	2.7	16	5.8	2.4	7.9	.3	0	357	7.9	4.4	33	.9
21	2.4	15	4.6	4.0	11	.2	0	549	4.2	2.8	30	6.2
22	2.9	16	5.4	3.6	20	0	0	249	2.6	1.6	20	5.2
23	3.8	15	7.3	5.4	63	0	0	142	1.8	.3	13	1.9
24	5.2	15	8.5	6.0	50	1.1	.9	435	1.8	0	9.4	53
25	7.3	16	5.0	3.4	24	1.3	12	1,690	1.5	0	7.3	0
26	7.6	17	10	1.8	11	0	7.6	397	1.3	0	11	42
27	6.6	21	7.9	3.4	6.8	0	4.8	249	1.3	.1	5.4	33
28	7.0	21	13	2.9	3.4	0	2.5	445	1.1	1,320	4.6	45
29	8.2	21	13	2.9	2.8	0	1.5	804	0	2,960	3.5	44
30	4.2	22	15	2.8	-	0	0	593	5.4	1,980	24	31
31	4.4	-	6.5	2.9	-	0	-	238	-	868	36	-
Month				Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet				
October.....				311.1	44	2.4						
November.....				422.2	22	7.0	10.0					
December.....				385.0	22	4.6	12.4					
Calendar year 1935.....				34,797.3	6,040	0	95.3	69,020				
January.....				198.4	15	1.8	6.40	394				
February.....				233.5	63	0	8.06	465				
March.....				49.4	6.8	0	1.59	96				
April.....				33.7	12	0	1.12	67				
May.....				9,353	1,690	0	302	18,550				
June.....				1,933.9	286	0	64.5	3,840				
July.....				7,694.9	2,960	0	248	15,260				
August.....				12,291.5	5,240	3.9	396	24,380				
September.....				445.3	53	0	14.8	883				
Water year 1935-36.....				33,351.9	5,240	0	91.1	66,160				

Holly Drain near Holly, Colo.

Location.- Water-stage recorder, lat. 38°3', long. 102°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 1936 in reports of U. S. Geological Survey; January 1924 to September 1936 in reports of State engineer.

Extremes.- Maximum discharge during year, about 540 second-feet Sept. 3 (gage height, 7.23 feet); minimum daily discharge, 1.4 second-feet July 28-28.
1924-36: Maximum discharge, 1,420 second-feet Aug. 28, 1935 (gage height, 10.43 feet); minimum daily discharge, that of July 28-28, 1936.

Remarks.- Records good except those estimated for Oct. 2, 3, 14-20, Feb. 2, 3, 6-10, 12, 14-17, 19-23, Mar. 2, which are fair. After Aug. 28, 1935, records include flow of Wild Horse Creek but do not include that part of Holly Drain west of Wild Horse Creek.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	6.6	7.7	40	9.0	9.5	5.1	11	4.0	34	4.0	14	3.1
2	10	9.5	22	7.9	8.0	6.0	4.7	4.4	40	5.9	12	4.6
3	27	12	13	8.5	8.0	6.3	21	4.6	270	6.5	8.1	66
4	36	11	11	7.2	6.6	7.4	18	7.0	56	4.5	4.8	18
5	36	16	14	6.6	5.7	6.3	12	5.7	30	4.2	9.5	3.5
6	32	19	14	7.0	5.0	5.4	17	4.9	11	4.0	11	2.6
7	37	15	11	5.2	5.0	6.3	8.8	4.9	6.5	3.5	23	3.1
8	37	18	11	5.4	4.0	6.6	5.6	5.6	7.4	3.5	44	7.4
9	24	15	12	6.6	4.0	6.5	4.4	5.6	6.5	4.0	65	10
10	26	12	12	4.9	4.0	9.5	4.9	11	14	4.0	93	8.3
11	23	18	13	4.8	3.9	7.4	4.4	5.9	11	3.1	117	6.5
12	27	32	19	4.4	2.7	3.2	4.9	5.1	8.1	4.3	139	2.8
13	22	30	54	4.7	1.5	3.2	4.4	5.1	26	3.6	103	2.7
14	22	32	41	5.2	2.0	3.1	3.7	5.4	17	2.8	88	3.1
15	22	30	12	5.6	3.0	2.6	3.8	5.2	7.0	2.4	57	2.6
16	22	24	9.0	5.6	4.0	2.1	4.3	4.9	4.2	2.1	49	3.2
17	22	34	16	4.8	5.0	2.9	4.8	4.6	4.2	2.2	43	3.1
18	22	28	24	4.7	5.6	2.5	4.2	4.6	4.3	3.3	34	3.5
19	22	26	29	4.7	5.0	3.9	4.8	4.8	3.5	2.9	24	3.2
20	22	36	30	4.3	4.0	2.7	4.9	6.3	3.3	4.4	12	2.6
21	22	32	26	4.8	3.0	2.4	5.4	5.2	3.9	2.6	9.2	2.5
22	21	35	11	4.9	4.5	4.0	4.6	4.9	3.3	2.7	7.2	4.6
23	21	39	8.8	5.1	6.0	4.7	4.4	6.6	4.0	2.3	2.5	5.1
24	14	41	7.9	4.8	7.2	4.8	4.8	53	4.3	2.0	3.8	8.3
25	13	42	6.8	4.9	7.4	5.2	5.1	19	5.6	1.6	2.6	7.9
26	11	46	12	4.6	6.3	15	5.6	11	7.7	1.4	2.6	4.9
27	8.8	43	10	7.4	6.5	37	4.6	53	4.0	1.4	2.3	6.5
28	7.7	28	11	8.5	5.2	23	3.9	151	3.5	1.4	5.1	23
29	6.5	28	7.0	13	4.9	16	3.6	93	2.8	2.5	2.4	49
30	6.5	38	6.5	2.9	-	23	3.7	238	3.2	12	2.2	44
31	6.1	-	6.6	2.8	-	16	-	46	-	9.5	2.5	-
Month				Second-foot-days		Maximum	Minimum	Mean	Run-off in acre-feet			
October.....				635.2		37	6.1	20.5	1,260			
November.....				787.2		46	7.7	26.6	1,560			
December.....				520.6		54	6.5	16.8	1,030			
Calendar year												
January.....				180.8		13	2.8	5.83	359			
February.....				147.5		9.5	1.5	5.09	293			
March.....				250.1		37	2.1	8.07	498			
April.....				197.5		21	3.7	6.58	392			
May.....				790.5		238	4.0	26.5	1,570			
June.....				610.0		270	2.8	20.3	1,210			
July.....				114.6		12	1.4	3.70	227			
August.....				992.6		139	2.2	32.0	1,970			
September.....				313.7		66	2.5	10.5	622			
Water year 1935-36.....				5,580.5		270	1.4	15.2	11,010			

Note.- See "Remarks" paragraph in station description.

ARKANSAS RIVER BASIN

Amazon Canal near Hartland, Kans.

Location.- Water-stage recorder, lat. 37°53'8", long. 101°22'16", in SE $\frac{1}{4}$ sec. 9, T. 25 S., R. 37 W., 2 $\frac{1}{2}$ miles below head gate and half a mile west of Hartland.

Records available.- Irrigation seasons 1921-24, October 1930 to September 1936 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, 423 second-feet Aug. 27 (gage height, 8.45 feet); no flow during extensive periods.

1921-24, 1930-36: Maximum discharge, 490 second-feet Aug. 28, 1933 (gage height, 8.80 feet); no flow during extensive periods.

Remarks.- Records fair except those for period of ice effect, Dec. 17 to Feb. 27, which are poor and are based on 3 discharge measurements, gage-height trend, and engineer's notes. Canal diverts water from left bank of Arkansas River in sec. 12, T. 25 S., R. 38 W. (revised). Water used for irrigation.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0		0	124	47	86	13	0	0	52	285	0
2	0		0	96	44	0	11	0	24	47	295	0
3	19		0	116	46	0	16	63	6	39	275	29
4	65		0	60	46	131	17	53	128	30	250	0
5	64		0	73	49	126	13	0	152	24	275	0
6	65		0	49	54	118	7	0	188	18	275	0
7	66		0	14	51	118	16	13	220	15	275	0
8	66		0	10	48	113	0	0	240	13	295	14
9	64		0	22	44	109	0	0	265	0	250	33
10	58		0	34	47	101	0	191	255	0	240	30
11	56		55	52	53	91	0	275	255	0	240	28
12	56		73	81	59	78	0	255	255	0	235	28
13	44		78	89	59	78	0	230	250	0	235	30
14	0		79	117	59	66	0	11	250	0	230	27
15	0		70	152	59	60	0	0	265	0	230	22
16	0		58	95	54	54	0	0	255	22	220	9
17	0		65	87	55	45	0	0	250	30	210	0
18	0		78	16	51	36	0	0	235	17	202	0
19	0		69	41	61	35	0	0	215	4	192	0
20	0		53	81	59	30	0	0	202	0	166	0
21	0		48	114	60	32	0	0	170	0	126	0
22	0		58	157	65	24	0	0	138	0	64	0
23	0		71	187	66	23	0	0	122	0	118	0
24	0		80	207	67	19	0	0	106	0	102	0
25	0		37	167	68	19	0	181	88	0	95	0
26	0		35	34	57	18	0	240	78	0	82	0
27	0		32	41	44	18	0	250	72	0	95	0
28	0		58	47	84	18	0	235	75	0	0	0
29	0		81	36	83	15	0	0	64	19	0	0
30	0		80	37	-	13	0	0	56	225	0	0
31	0		93	42	-	9	-	18	-	240	0	-
Month				Second-foot-days		Maximum	Minimum	Mean	Run-off in acre-feet			
October.....				622		66	0	20.1	1,240			
November.....				0		0	0	0	0			
December.....				1,351		95	0	42.9	2,640			
Calendar year 1935.....				12,276		256	0	33.6	24,350			
January.....				2,478		207	10	79.9	4,920			
February.....				1,639		84	44	56.5	3,250			
March.....				1,681		151	0	54.2	3,330			
April.....				93		17	0	5.1	194			
May.....				2,015		275	0	65.0	4,000			
June.....				4,879		265	0	163	9,680			
July.....				795		240	0	25.6	1,580			
August.....				5,557		295	0	179	11,020			
September.....				250		33	0	8.3	496			
Water year 1935-36.....				21,341		295	0	58.5	42,340			

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 $\frac{1}{4}$ miles below diversion from Arkansas River.

Records available.- Irrigation seasons 1921-24, October 1930 to September 1936 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, 224 second-feet July 30 (gage height, 7.88 feet); no flow during extensive periods.
1921-24, 1930-36: Maximum discharge, 306 second-feet Sept. 16, 1934 (gage height, 6.15 feet); no flow during extensive periods.

Remarks.- Records fair. Discharge estimated Aug. 31. 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 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	7	60		0			0	11	0	11	31
2	0	7	61		0			0	3	0	1	30
3	0	11	65		0			10	0	0	0	18
4	0	12	63		0			9	0	0	0	0
5	0	12	66		0			0	0	0	0	0
6	0	15	69		0			0	0	0	0	0
7	0	16	69		0			0	0	0	0	0
8	0	14	67		0			0	0	0	115	0
9	0	13	68		0			0	0	0	141	0
10	0	10	67		0			85	0	0	58	0
11	0	9	34		0			133	0	0	6	0
12	0	17	0		0			78	0	0	0	0
13	0	22	0		0			9	0	0	0	0
14	12	14	0		0			0	0	0	0	0
15	25	16	0		0			0	0	0	0	0
16	30	19	0		0			0	0	0	0	4
17	31	20	0		0			0	0	0	0	7
18	27	22	0		0			0	0	0	0	14
19	23	22	0		0			0	0	0	0	16
20	20	23	0		0			0	0	0	0	16
21	25	20	0		0			0	0	0	0	14
22	24	22	0		0			0	0	0	0	13
23	16	23	0		0			0	0	0	0	12
24	13	24	0		0			0	0	0	0	8
25	13	26	0		0			93	0	0	0	8
26	12	41	0		60			114	0	0	0	8
27	12	59	0		101			89	0	0	0	10
28	10	62	0		106			60	0	0	0	28
29	9	64	0		43			27	0	0	0	16
30	8	60	0		-			44	0	90	0	17
31	7	-	0		-			22	-	115	16	-
Month					Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet			
October.....					317	31	0	10.2	629			
November.....					702	64	7	23.4	1,590			
December.....					689	69	0	22.2	1,370			
Calendar year 1935.....					8,181	199	0	22.4	16,230			
January.....					0	0	0	0	0			
February.....					310	106	0	10.7	616			
March.....					0	0	0	0	0			
April.....					0	0	0	0	0			
May.....					773	133	0	24.9	1,530			
June.....					14	11	0	.5	28			
July.....					205	115	0	6.6	407			
August.....					356	141	0	11.5	706			
September.....					272	31	0	9.1	540			
Water year 1935-36.....					3,636	141	0	9.9	7,220			

ARKANSAS RIVER BASIN

Great Eastern Canal at Lakin, Kans.

Location.- Water-stage recorder, lat. 37°56'9", long. 101°16'17", in NE $\frac{1}{4}$ sec. 28, T. 24 S., R. 36 W., half a mile west of Lakin and 6 miles northeast of Hartland.

Records available.- Irrigation season 1921-24, October 1930 to September 1936 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 gage height during year, 10.50 feet (affected by backwater from highway bridge downstream) May 28 (discharge not determined); maximum daily discharge, 667 second-feet July 31; no flow during extensive periods.
1921-24, 1930-36: Maximum discharge occurred May 28, 1936 (not determined); maximum daily discharge, that of July 31, 1936; no flow during extensive periods.

Remarks.- Records fair. Discharge for Aug. 6-8 based on 2 discharge measurements, engineer's notes, and incomplete gage record. 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 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1					0	182		0	119	0	472	0
2					0	194		0	32	0	244	0
3					0	174		0	189	0	172	59
4					0	81		70	282	0	111	0
5					0	0		0	165	0	137	0
6					0	0		0	144	0	306	0
7					0	0		34	94	0	472	0
8					0	0		0	113	0	598	0
9					0	0		11	115	0	244	0
10					0	0		340	91	0	144	0
11					0	0		357	87	0	78	0
12					0	0		222	59	0	0	0
13					0	0		83	0	0	0	0
14					0	0		252	93	0	0	0
15					0	0		62	158	0	0	0
16					0	0		0	86	0	0	0
17					0	0		0	0	0	0	0
18					0	0		0	0	0	0	0
19					0	0		0	0	0	0	0
20					0	0		0	0	0	0	0
21					0	0		0	0	0	0	0
22					0	0		0	0	0	0	0
23					0	0		0	0	0	0	0
24					74	0		0	0	0	0	0
25					332	0		301	0	0	0	0
26					274	0		394	0	0	0	0
27					172	0		462	0	0	0	0
28					90	0		524	0	0	16	0
29					87	0		146	0	22	0	0
30					-	0		256	0	555	0	0
31					-	0		348	-	667	0	-
Month						Second-foot-days	Maximum	Minimum	Mean		Run-off in acre-feet	
October.....						0	0	0	0		0	
November.....						0	0	0	0		0	
December.....						0	0	0	0		0	
Calendar year 1935.....						13,662	418	0	37.4		27,100	
January.....						0	0	0	0		0	
February.....						1,029	332	0	35.5		2,040	
March.....						631	194	0	20.4		1,250	
April.....						0	0	0	0		0	
May.....						3,844	524	0	124		7,620	
June.....						1,876	282	0	62.5		3,720	
July.....						1,244	667	0	40.1		2,470	
August.....						2,994	598	0	96.6		5,940	
September.....						59	59	0	2.0		117	
Water year 1935-36.....						11,677	667	0	31.9		23,160	

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 season 1921-24, October 1930 to September 1936 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, 278 second-feet Aug. 7 (gage height, 7.88 feet); no flow during extensive periods.
1921-24, 1930-36: Maximum discharge, 317 second-feet Aug. 5, 1933 (gage height, 7.97 feet); no flow during extensive periods.

Remarks.- Records fair except those for July 5, 6, which are estimated, and those for July 30, 31, which are based on one discharge measurement and engineer's notes and which are poor. Ditch diverts water from left bank of Arkansas River in sec. 2, T. 24 S., R. 35 W. Water used for irrigation.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	86				0	20		0	4	9	179	16
2	62				0	8		0	4	7	158	6
3	48				0	0		0	24	5	114	74
4	27				0	0		116	16	3	176	166
5	0				0	0		52	9	2	231	172
6	0				0	0		23	8	1	250	126
7	0				0	0		36	0	0	270	91
8	0				0	0		14	3	0	228	74
9	0				0	0		7	49	0	209	55
10	0				0	0		6	40	0	202	40
11	0				0	0		182	39	0	196	32
12	0				0	0		124	2	0	188	10
13	0				0	3		66	11	0	159	0
14	0				0	0		82	72	0	123	0
15	0				0	0		117	63	0	119	0
16	0				0	0		173	74	0	135	0
17	0				0	2		166	103	0	147	0
18	0				0	2		140	88	0	151	0
19	0				0	9		121	59	0	107	0
20	0				0	8		103	49	0	68	0
21	0				0	6		37	50	0	54	0
22	0				1	6		67	36	0	60	0
23	0				9	5		60	30	0	87	0
24	0				6	0		104	26	0	46	0
25	0				0	0		101	22	0	38	0
26	0				0	0		158	18	0	12	0
27	0				0	0		151	18	0	1	0
28	0				0	0		142	16	0	6	0
29	0				13	0		112	12	0	24	0
30	0							48	12	109	33	0
31	0				-	0		3	-	116	30	-
Month						Second-foot-days	Maximum	Minimum	Mean		Run-off in acre-feet	
October.....						223	86	0	7.2		442	
November.....						0	0	0	0		0	
December.....						0	0	0	0		0	
Calendar year 1935.....						8,849	299	0	24.2		17,560	
January.....						0	0	0	0		0	
February.....						29	13	0	1.0		58	
March.....						69	20	0	2.2		137	
April.....						0	0	0	0		0	
May.....						2,566	182	0	82.8		5,090	
June.....						957	103	0	31.9		1,900	
July.....						252	116	0	8.1		500	
August.....						3,806	270	1	123		7,550	
September.....						862	172	0	28.7		1,710	
Water year 1935-36.....						8,764	270	0	23.9		17,390	

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 seasons 1921-24, October 1930 to September 1936 in reports of U. S. Geological Survey; March 1925 to September 1930 in reports of the Division of Water Resources, State Board of Agriculture.

Extremes.— Maximum discharge observed during year, 70 second-feet Aug. 8 (gage height, 8.84 feet); no flow during extensive periods.
1921-24, 1930-36: Maximum discharge, 80 second-feet Oct. 5, 1930; no flow during extensive periods.

Remarks.— Records fair Oct. 1 to Dec. 6, Sept. 24-30; poor for remainder of year. Discharge Mar. 3-6, May 6-9 estimated; Apr. 17 interpolated; July 30 to Sept. 23 based on seven discharge measurements, resident engineer's constructed gage graph, and the incomplete recorder graph. 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 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	46	1	1			0	5	2		0	19	7
2	39	1	1			0	6	2		0	16	8
3	40	1	1			5	6	2		0	12	
4	35	1	1			8	5	38		0	6	
5	20	1	1			10	2	14		0	3	
6	12	1	1			11	4	2		0	0	
7	10	1	0			11	4	1		0	0	16
8	7	1	0			11	4	1		0	41	
9	5	1	0			11	6	11		0	60	
10	4	1	0			8	12	22		0	49	
11	3	1	0			8	13	10		0	41	
12	3	1	0			9	10	7		0	33	12
13	2	1	0			9	9	6		0	26	
14	2	1	0			8	7	5		0	20	
15	1	1	0			8	2	4		0	17	7
16	3	1	0			7	1	1		0	13	
17	6	1	0			7	3	0		0	10	
18	4	1	0			6	5	0		0	7	
19	3	1	0			7	5	0		0	5	4
20	2	1	0			6	4	0		0	3	4
21	2	1	0			6	3	0		0	2	3
22	4	1	0			6	3	0		0	1	3
23	2	1	0			5	4	0		0	0	3
24	1	1	0			4	3	0		0	0	2
25	1	1	0			4	2	5		0	0	2
26	1	1	0			2	3	24		0	13	2
27	1	1	0			2	5	11		0	35	4
28	1	1	0			4	5	0		0	35	15
29	1	1	0			3	2	0		0	12	9
30	1	1	0			2	1	0		36	9	8
31	1	—	0			2	—	0		27	6	—
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						263	46	1	8.5	522		
November.....						30	1	1	1.0	60		
December.....						6	1	0	.2	12		
Calendar year 1935.....						1,185	51	0	3.2	2,350		
January.....						0	0	0	0	0		
February.....						0	0	0	0	0		
March.....						189	11	0	6.1	375		
April.....						142	13	1	4.7	282		
May.....						168	38	0	5.4	333		
June.....						0	0	0	0	0		
July.....						63	36	0	2.0	125		
August.....						493	60	0	15.9	978		
September.....						290	18	2	9.7	575		
Water year 1935-36.....						1,644	60	0	4.5	3,260		

Pawnee River near Larned, Kans.

Location.- Water-stage recorder, lat. 38°11'0", 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 1936.

Average discharge.- 12 years, 48.2 second-feet.

Extremes.- Maximum discharge during year, 2,060 second-feet May 11; maximum gage height, 19.84 feet May 31; no flow during extensive periods.

1924-36: Maximum discharge (estimated), 20,000 second-feet May 28, 1935 (gage height, 31.96 feet); no flow during periods in 1928, 1930, 1931, 1933, 1935, and 1936. Bank-full stage, 24 feet.

Remarks.- Records fair. Corrected for ice effect Feb. 8-25 with discharge based on 1 discharge measurement and weather record. A shifting control prevailed throughout the year.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	29	7	9	9	7	6	4	4	1,390	7	0	0
2	18	7	9	9	7	6	4	4	247	5	0	0
3	12	7	9	8	7	6	4	4	102	4	0	0
4	9	7	9	8	7	6	4	4	65	3	1	1
5	9	7	9	8	7	6	4	3	88	4	1	0
6	3	7	9	8	7	6	5	3	99	4	0	0
7	8	7	9	7	7	7	5	2	282	3	0	0
8	7	7	9	7	7	6	5	4	158	3	0	0
9	7	7	9	6	7	6	5	158	56	3	0	0
10	7	7	8	7	6	7	5	1,380	33	3	0	0
11	6	7	8	7	5	6	5	2,040	24	2	0	0
12	7	7	9	7	5	6	5	1,460	21	2	0	0
13	6	7	11	8	5	6	5	261	19	2	0	0
14	6	7	11	8	4	6	5	82	16	1	1	0
15	6	7	10	8	4	6	5	50	14	0	1	0
16	6	7	9	8	4	6	4	33	13	0	1	0
17	6	7	8	8	4	6	3	25	12	0	1	0
18	6	8	8	8	4	6	3	20	10	0	0	0
19	7	8	8	7	4	5	3	19	9	0	0	0
20	7	7	8	7	4	5	3	23	8	0	0	0
21	7	7	8	7	4	4	2	17	8	0	0	0
22	8	7	7	7	5	5	1	13	7	0	0	0
23	8	7	8	7	8	5	0	27	6	0	0	0
24	7	7	8	7	12	4	0	512	6	0	1	0
25	7	7	7	7	8	4	0	405	5	1	1	0
26	7	7	8	7	6	4	0	548	4	1	1	0
27	7	9	8	7	6	3	0	489	4	1	1	0
28	7	9	8	7	6	4	1	207	3	1	0	0
29	7	9	8	7	6	4	7	130	3	1	0	0
30	7	9	8	7	-	4	4	762	3	1	0	0
31	7	-	8	7	-	4	-	1,750	-	1	1	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						256	29	6	6.3	508		
November.....						220	9	7	7.3	436		
December.....						264	11	7	8.5	524		
Calendar year 1935.....						68,099	17,000	0	187	135,100		
January.....						231	9	7	7.5	458		
February.....						172	12	-	5.9	341		
March.....						165	7	3	5.3	327		
April.....						101	7	0	3.4	200		
May.....						10,419	2,040	2	336	20,670		
June.....						2,735	1,390	3	51.2	6,420		
July.....						53	7	0	1.7	105		
August.....						11	1	0	.4	22		
September.....						1	1	0	0	2		
Water year 1935-36.....						14,628	2,040	0	40.0	29,010		

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.

Drainage area.- 1,316 square miles.

Records available.- February 1935 to September 1936. June 1922 to February 1935 at station 2 miles downstream, lat. 37°48'50", long. 97°22'30".

Average discharge.- 14 years, 140 second-feet.

Extremes.- Maximum discharge during year, 1,380 second-feet Oct. 21 (gage height, 8.74 feet); minimum discharge, 9 second-feet July 26 to Aug. 6, Aug. 12-16, 19; minimum gage height, 1.77 feet July 28.

1922-36: 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 estimated for period of ice effect, Jan. 18 to Feb. 26, which are poor.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	24	32	44	26		28	20	22	39	16	9	14
2	26	33	40	28		28	20	36	34	16	9	13
3	25	36	37	29		27	20	53	31	16	9	13
4	23	42	35	29		28	20	39	30	15	9	14
5	22	109	35	29		27	20	30	53	14	9	14
6	22	96	33	28		26	20	27	33	13	9	14
7	22	57	31	26		26	22	24	31	14	10	14
8	22	44	32	26		26	22	24	30	14	12	14
9	23	40	31	26		26	22	27	37	13	12	15
10	24	36	30	26		26	23	29	44	13	11	14
11	24	34	30	25		24	23	27	35	13		13
12	24	34	30	26	25	23	23	26	31	13	10	14
13	24	32	30	26		23	23	51	27	12	9	15
14	24	31	30	27		23	23	37	25	12	9	13
15	24	31	30	28		23	23	26	24	11	9	13
16	25	30	29	28		22	22	23	24	11	9	21
17	26	29	28	27		23	22	22	25	11	10	24
18	26	30	28	25		24	22	23	21	11	10	44
19	26	30	28	23		22	21	20	11	9		42
20	32	29	29	22		24	22	19	19	10	10	35
21	796	29	29	24		24	22	17	20	10	10	27
22	716	29	30	27		23	22	16	19	10	11	24
23	214	29	30	27		23	22	17	21	10	11	22
24	114	29	28		27	22	22	24	19	10	11	21
25	67	28	32		29	21	22	50	18	10	12	20
26	49	33	36		31	21	22	76	17	9	12	24
27	41	72	43	25	27	21	22	197	17	9	12	26
28	37	164	24		28	21	22	116	17	9	12	27
29	35	26	24		26	21	22	65	15	9	12	29
30	33	57	24		-	21	22	50	16	9	13	29
31	33	-	24		-	20	-	43	-	9	13	-
Month					Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet			
October.....					2,623	796	22	84.6	5,200			
November.....					1,391	164	28	46.4	2,760			
December.....					962	44	24	51.0	1,910			
Calendar year 1935.....					78,043	5,640	18	214	154,800			
January.....					808	29	-	26.1	1,600			
February.....					745	31	-	25.7	1,480			
March.....					759	26	20	23.8	1,470			
April.....					654	23	30	21.5	1,304			
May.....					1,260	197	16	40.6	2,500			
June.....					770	44	15	25.7	1,530			
July.....					353	16	9	11.7	720			
August.....					322	13	9	10.4	639			
September.....					622	44	13	20.7	1,230			
Water year 1935-36.....					11,259	796	9	30.6	22,340			

Walnut River at Winfield, Kans.

Location.- Water-stage recorder, lat. 37°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.

Drainage area.- 1,894 square miles.

Records available.- November 1921 to September 1936.

Average discharge.- 15 years, 598 second-feet.

Extremes.- Maximum discharge during year, 7,130 second-feet Nov. 27 (gage height, 15.89 feet); no flow July 27 to Sept. 20.

1921-36: Maximum discharge observed (estimated), 94,400 second-feet Nov. 18, 1928 (gage height, 40.61 feet); no flow Nov. 11, 1928, July 27 to Sept. 20, 1936.

Bank-full stage, 30 feet.

Remarks.- Records good except those estimated for period of ice effect, Jan. 24 to Feb. 23, which are poor.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	32	72	482	126	55	76	36	39	76	12		0
2	32	254	365	138		72	36	124	60	12		0
3	30	2,090	323	163		70	38	130	49	9		0
4	25	1,420	283	175		67	39	65	42	7		0
5	25	819	258	168		62	42	39	72	7		0
6	23	596	255	173	40	60	45	30	98	7		0
7	35	330	252	180		57	46	25	67	7		0
8	1,180	226	240	170		57	46	31	48	6		0
9	185	662	223	147		60	46	40	42	6		0
10	89	728	206	132		62	48	324	35	5		0
11	59	662	198	130	30	62	46	796	30	4		0
12	45	424	189	128		64	45	286	25	4		0
13	38	264	160	124		62	45	147	23	3		0
14	48	203	175	122		60	43	101	19	4		0
15	30	163	166	122		57	42	78	18	4		0
16	32	141	158	118	35	57	39	64	15	3		0
17	32	128	152	114		57	36	54	15	3		0
18	57	116	143	109		57	33	48	12	2		0
19	183	110	141	105		57	31	130	12	2		0
20	175	103	138	100		54	29	246	12	2		0
21	827	96	136	69	72	52	29	175	12	2		4
22	3,360	91	136	67		51	29	114	12	3		28
23	1,150	87	138	85		51	24	107	10	2		239
24	334	78	138	62		48	24	100	10	2		440
25	188	75	136	78		89	46	228	10	2		96
26	134	924	130	76	96	45	24	596	8	1		243
27	107	6,570	126	75	94	40	26	444	8	0		337
28	89	5,520	126	73	87	40	30	243	7	0		158
29	76	1,380	122	72	78	40	32	170	6	0		149
30	80	684	116	70	-	38	36	122	6	0		136
31	89	-	116	68	-	36	-	109	-	0		-
Month					Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet			
October.....					8,791	3,360	23	284	17,440			
November.....					25,006	6,570	72	834	49,600			
December.....					5,966	482	116	192	11,650			
Calendar year 1935.....					295,522	21,200	23	810	586,200			
January.....					3,599	180	-	116	7,140			
February.....					1,431	96	-	49.3	2,840			
March.....					1,717	76	36	56.4	3,410			
April.....					1,081	48	24	36.4	2,180			
May.....					5,205	796	25	168	10,520			
June.....					859	98	6	28.6	1,700			
July.....					121	12	0	3.9	240			
August.....					0	0	0	0	0			
September.....					1,830	440	0	61.0	3,630			
Water year 1935-36.....					55,616	6,570	0	152	110,500			

Cimarron River at Oilton, Okla.

Location.— Wire-weight gage, lat. 36°6', long. 96°35', in SW¼ 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 1936.

Extremes.— Maximum discharge observed during year, 30,900 second-feet June 6 (gage height, 12.07 feet); no flow Sept. 8, 13-18.

1934-36: Maximum discharge observed, 72,300 second-feet June 21, 1935 (gage height, 16.8 feet); no flow Sept. 8, 13-16, 1936.

Remarks.— Records fair. Gage read twice daily. Discharge Sept. 16-20 determined from readings of U. S. Weather Bureau gage at Perkins.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	186	680	900	183	132	183	56	120	2,430	192	23	5
2	192	720	850	186	138	177	56	88	2,430	186	22	3
3	192	560	560	189	126	165	61	61	2,760	186	22	3
4	186	530	470	183	124	183	54	1,200	6,400	250	21	3
5	180	530	500	186	116	204	58	1,560	4,130	195	20	2
6	177	470	2,430	180	130	183	54	470	16,300	162	20	1
7	186	440	1,430	177	110	171	50	230	26,300	162	14	1
8	180	470	950	177	56	168	53	270	11,400	150	13	0
9	195	1,430	760	180	118	159	51	440	5,600	146	15	1
10	180	440	560	195	88	140	53	950	3,880	114	14	1
11	168	415	440	230	107	128	55	720	2,980	110	14	1
12	162	365	365	230	112	124	50	560	2,110	142	13	1
13	150	365	290	195	110	118	50	390	1,560	136	11	0
14	138	340	290	195	81	112	49	230	1,250	130	10	0
15	136	340	250	183	81	104	45	315	1,100	122	8	0
16	130	340	250	165	86	105	41	315	900	108	6	0
17	126	340	230	150	110	99	39	365	760	100	4	500
18	440	315	210	142	134	99	38	290	600	93	5	100
19	760	315	204	110	126	99	37	250	530	74	4	4,000
20	800	315	192	83	118	94	38	169	500	69	4	3,400
21	1,430	290	183	150	114	91	34	153	440	66	3	2,430
22	1,300	290	180	159	128	90	38	171	415	61	3	1,690
23	640	290	180	180	165	91	38	142	365	59	3	1,100
24	530	290	168	150	150	86	38	132	340	52	4	1,250
25	600	315	136	142	144	80	38	159	340	48	4	1,150
26	1,000	530	120	138	315	76	36	116	315	44	5	2,110
27	1,050	950	146	90	315	69	36	114	290	36	4	4,380
28	800	800	146	87	230	65	900	159	270	36	3	8,800
29	680	470	122	81	171	66	560	365	270	26	3	5,600
30	640	850	118	94	-	64	201	1,250	250	23	10	2,590
31	640	-	174	94	-	62	-	1,690	-	22	10	-
Month						Second-foot-days	Maximum	Minimum	Mean		Run-off in acre-feet	
October.....						14,174	1,430	126	457		28,110	
November.....						14,795	1,430	290	493		29,350	
December.....						13,804	2,430	118	445		27,380	
Calendar year												
January.....						4,894	230	87	158		9,710	
February.....						3,935	315	56	136		7,800	
March.....						3,655	204	62	118		7,250	
April.....						2,907	900	34	96.9		5,770	
May.....						13,484	1,690	81	435		26,750	
June.....						97,235	26,300	250	3,241		192,900	
July.....						3,302	250	22	107		6,550	
August.....						315	23	3	10.2		625	
September.....						39,122	8,800	0	1,304		77,600	
Water year 1935-36.....						211,622	26,300	0	578		419,800	

Stillwater Creek at Stillwater, Okla.

Location.- Water-stage recorder, lat. $36^{\circ}6'$, long. $97^{\circ}3'$, on line between secs. 25 and 26, T. 19 N., R. 2 E., a mile southeast of Stillwater. Zero of gage is 833.95 feet above mean sea level (general adjustment of 1912).

Drainage area.- 165 square miles.

Records available.- October 1934 to September 1936.

Extremes.- Maximum discharge during year, 546 second-feet June 5 (gage height, 13.25 feet); minimum, 0.21 second-foot Dec. 28, 30, Jan. 20, 24, Mar. 30, Aug. 13, 20, 21 (gage height, 4.15 feet).

1934-36: Maximum discharge, 10,850 second-feet June 21, 1935 (gage height, 26.68 feet); minimum, 0.18 second-foot Apr. 11, 18, 1935 (gage height, 3.78 feet).

Remarks.- Records good. Discharge determined by series of loop curves. Low flow subject to diurnal fluctuations owing to sewage disposal plant half a mile upstream.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.73	0.63	1.3	0.43	0.63	0.53	0.73	0.73	0.83	0.94	0.94	0.63
2	.73	.63	.94	.63	.53	.63	.63	.83	.63	.63	.94	.73
3	.73	.63	.94	.53	.43	.63	.63	.73	.63	.83	.94	1.0
4	.73	.83	.94	.45	.53	.63	.63	.73	1.2	.73	.94	.73
5	.63	1.8	55	.53	.63	.63	.63	.83	319	.63	.63	.63
6	.53	1.5	187	.63	.53	.63	.63	.73	186	.73	.63	.63
7	.63	.94	26	.63	.53	.63	.63	.83	35	.73	.83	.73
8	.63	.73	8.2	.63	.53	.63	.73	15	5.9	.83	.73	.73
9	.63	.63	4.1	.63	.63	.63	.73	34	3.2	.83	.53	.73
10	.83	.63	2.8	.63	.63	.63	.43	18	1.8	.94	.53	.73
11	.63	.43	1.7	.63	.73	.63	.53	5.7	1.2	.94	.43	.73
12	.63	.53	1.3	.53	.73	.63	.53	5.2	.94	.83	.53	.73
13	.63	.53	.94	.53	.73	.73	.53	15	.83	.83	.43	.73
14	.63	.43	.94	.53	.73	.83	.63	4.7	.73	.83	.53	.73
15	.63	.53	.83	.53	.83	.73	.53	2.7	.83	.83	.43	.73
16	.73	.53	.63	.53	.83	.63	.73	1.7	.73	.83	.63	4.6
17	.73	.53	.63	.43	.83	.63	.73	.83	.63	.83	.53	1.8
18	.94	.53	.53	.43	.63	.73	.83	.73	.63	.83	.63	1.4
19	.63	.53	.53	.43	.83	.73	.73	.73	.63	.83	.53	.83
20	1.7	.53	.53	.43	.83	.73	.73	.73	.63	.83	.35	.83
21	8.3	.53	.73	.43	.83	.63	.73	.73	.53	.83	.43	.83
22	2.8	.43	.53	.43	.73	.53	.73	14	.73	.73	.43	1.3
23	1.0	.43	.43	.43	.63	.53	.73	64	.73	.83	.43	3.4
24	.63	.43	.43	.43	.73	.53	.83	8.2	.83	.83	.43	1.1
25	1.4	.83	.43	.53	.73	.53	.83	3.8	.83	.83	.53	.73
26	.83	37	.43	.53	.83	.53	.83	5.6	.73	.94	.43	44
27	.63	59	.43	.53	.73	.53	3.5	11	.83	1.0	.43	75
28	.63	14	.43	.63	.63	.43	1.0	3.0	.73	1.0	.53	27
29	.83	4.3	.43	.63	.73	.53	.83	1.7	.83	1.0	.53	13
30	.63	2.2	.43	.63	-	.53	.83	1.4	.83	1.2	.43	4.7
31	1.8	-	.83	.63	-	.53	-	.94	-	1.0	.53	-
Month						Second-foot-days	Maximum	Minimum	Mean		Run-off in acre-feet	
October.....						34.26	8.6	0.53	1.11		68	
November.....						133.40	59	.43	4.45		265	
December.....						301.31	187	.43	9.72		598	
Calendar year 1935.....						15,140.35	7,880	.3	41.5		30,030	
January.....						16.53	.63	.43	.533		33	
February.....						20.07	.83	.43	.692		40	
March.....						19.13	.83	.43	.617		38	
April.....						23.84	3.5	.43	.795		47	
May.....						224.80	64	.73	7.25		446	
June.....						569.97	319	.53	19.0		1,130	
July.....						26.62	1.2	.63	.859		53	
August.....						18.19	.94	.53	.587		36	
September.....						191.44	75	.63	6.38		380	
Water year 1935-36.....						1,579.56	319	.35	4.31		3,130	

West Fork of Brush Creek near Stillwater, Okla.

Location.- Water-stage recorder, lat. 36°8', long. 96°59', in NW¼ sec. 20, T. 19 N., R. 3 E., 2½ miles east of Stillwater. Zero of gage is 847.10 feet above mean sea level (general adjustment of 1912).

Drainage area.- 13.1 square miles.

Records available.- October 1934 to September 1936.

Extremes.- Maximum discharge during year, 170 second-feet Sept. 26 (gage height, 3.50 feet); no flow during various periods each month.

1934-36: Maximum discharge, 2,050 second-feet June 21, 1935 (gage height, 15.31 feet); no flow during various periods each year.

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

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	0.06	0.04	0.03	0	0.02	0	0.01	0.01			
2	0	.02	.02	.04	0	.01	0	0	0			0
3	0	.01	.01	.03	0	.01	0	0	0			0
4	0	.01	.01	.02	0	.01	0	0	.60			0
5	0	.01	22	.02	0	.01	0	0	29			0
6	0	0	8.7	.02	0	0	0	0	1.3			0
7	0	0	1.1	.01	0	0	0	0	1.9			0
8	0	0	.33	.01	0	.01	0	6.3	.17			0
9	0	.04	.13	.01	0	.01	0	1.0	.04			0
10	0	.04	.07	.01	0	.01	0	.18	.01			0
11	0	.01	.05	.01	0	0	0	.10	.01			0
12	0	.01	.04	.01	0	0	0	.08	0			0
13	0	0	.03	.01	0	0	0	.04	0			0
14	0	0	.02	.01	0	0	0	.01	0			0
15	0	0	.01	.01	0	0	0	.01	0			0
16	0	0	.01	.01	0	0	0	0	0			0
17	0	0	.01	.01	0	0	0	0	0			0
18	0	0	.01	0	0	0	0	0	0			0
19	0	0	.01	0	0	0	0	0	0			0
20	0	0	0	0	0	0	0	0	0			0
21	.01	0	0	0	0	0	0	0	0			0
22	.17	0	0	0	0	0	0	0	0			0
23	.05	0	0	0	0	0	0	0	0			.46
24	.01	0	0	0	.01	0	0	0	0			.06
25	.01	0	0	0	.03	0	0	4.0	0			0
26	0	9.6	0	0	.06	0	0	.97	0			36
27	0	2.4	0	0	.05	0	.58	14	0			16
28	0	.40	0	0	.04	0	.57	.77	0			3.1
29	0	.11	0	0	.03	0	.08	.53	0			.38
30	0	.06	.01	0	-	0	.03	.08	0			.06
31	.13	-	.01	0	-	0	-	.02	-			-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acres-feet
October.....	0.38	0.17	0	0.012	0.00092	0.001	0.75
November.....	12.78	9.6	0	.426	.033	.04	25
December.....	32.62	22	0	1.05	.080	.09	65
Calendar year 1935.....	1,400.42	728	0	3.84	.293	3.96	2,780
January.....	.27	.04	0	.009	.00069	.0008	.54
February.....	.22	.06	0	.008	.00061	.0007	.44
March.....	.09	.02	0	.003	.00023	.0003	.18
April.....	1.26	.58	0	.042	.0032	.004	2.5
May.....	28.10	14	0	.906	.069	.08	56
June.....	33.04	29	0	1.10	.084	.09	66
July.....	0	0	0	0	0	0	0
August.....	0	0	0	0	0	0	0
September.....	56.06	36	0	1.87	.14	.16	111
Water year 1935-36.....	164.82	36	0	.450	.0344	.47	327

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 (general adjustment of 1912).

Drainage area.- 30.2 square miles.

Records available.- March 1934 to September 1936.

Extremes.- Maximum discharge during year, 656 second-feet Sept. 20 (gage height, 4.66 feet); no flow during various periods.
1934-36: Maximum discharge, 2,900 second-feet June 21, 1935 (gage height, 11.92 feet); no flow during various periods of each year.

Remarks.- Records good.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	2.3	0.07	0.75	0.38	0.58	0.22	0.22	0			0
2	0	.38	.13	.78	.22	.58	.13	.22	0			0
3	0	.38	.22	.58	.22	.78	.13	.58	0			0
4	0	1.9	.22	.38	.04	.58	.13	.22	0			0
5	0	.58	.75	.38	.07	.38	.38	.58	20			0
6	0	.07	17	.22	.22	.38	.58	.13	.78			0
7	0	.04	1.9	.13	.38	.38	.22	.04	.07			0
8	0	.02	1.0	.13	.22	.58	.22	7.6	0			0
9	0	.04	.58	.22	.07	.58	.22	2.8	0			0
10	0	.04	.38	.22	.07	.58	.22	.58	0			0
11	0	.02	.38	.22	.13	1.0	.39	1.6	0			0
12	0	0	.22	.22	.58	.22	.22	1.3	0			0
13	0	0	.22	.07	.38	.22	.13	.58	0			0
14	0	.01	.22	.13	.13	.22	.13	.13	0			0
15	0	.07	.07	.38	.13	.13	.13	.04	0			0
16	0	.13	.07	.22	.07	.07	.13	.02	0			27
17	0	.07	.07	.22	.07	.07	.13	0	0			6.6
18	12	.13	.22	.07	.07	.07	.22	0	0			.78
19	.22	.07	.07	.38	.04	.07	.13	0	0			0
20	24	.04	.13	.13	.13	.22	.07	0	0			90
21	7.6	.04	.13	.38	.58	.22	.07	0	0			1.0
22	.13	.02	.13	.38	.78	.07	.07	.14	0			0
23	0	.02	.13	.13	1.0	.07	.07	1.6	0			12
24	0	.04	.07	.07	1.0	.13	.07	.07	0			1.5
25	0	.07	.07	.07	1.0	.07	.07	0	0			0
26	0	51	.07	.07	1.3	.07	.13	.06	0			49
27	0	5.2	.07	.07	.78	.22	7.7	.13	0			10
28	0	.78	.13	.13	.58	.13	3.1	.13	0			3.5
29	0	.38	.22	.22	.58	.07	.78	.13	0			.07
30	0	.22	.22	.13	-	.13	.38	.01	0			0
31	14	-	.58	.13	-	.22	-	0	-			-
Month	Second-foot-days			Maximum	Minimum	Mean	Per square mile	Run-off				
								Inches	Acre-feet			
October.....	57.95			24	0	1.37	0.062	0.07		115		
November.....	65.97			51	0	2.13	.071	.08		127		
December.....	99.90			75	.07	3.22	.107	.12		198		
Calendar year 1935.....	1,987.78			604	0	5.45	.180	2.45		3,940		
January.....	7.79			.78	.07	.251	.0083	.01		15		
February.....	11.16			1.3	.01	.385	.013	.01		22		
March.....	9.09			1.0	.07	.293	.0097	.01		18		
April.....	16.56			7.7	.07	.552	.018	.02		33		
May.....	19.51			7.6	0	.597	.020	.02		37		
June.....	20.85			20	0	.895	.023	.03		41		
July.....	0			0	0	0	0	0		0		
August.....	0			0	0	0	0	0		0		
September.....	201.25			90	0	6.71	.222	.25		399		
Water year 1935-36.....	507.03			90	0	1.39	.046	.62		1,000		

Verdigris River at Independence, Kans.

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

Drainage area.- 2,952 square miles.

Records available.- October 1930 to September 1936. April to September 1904, November 1921 to September 1930 at site three-quarters of a mile upstream.

Average discharge.- 15 years (1921-36), 1,497 second-feet.

Extremes.- Maximum discharge water year 1921-22, 80,600 second-feet (revised) Apr.

10 (gage height, 44.41 feet).

Maximum discharge water year 1922-23, 73,900 second-feet (revised) June 12 (gage height, 44.11 feet).

Maximum discharge water year 1935-36, 22,400 second-feet Nov. 28 (gage height, 31.53 feet); no flow July 25 to Aug. 6, Aug. 18 to Sept. 15.

1904, 1921-36: Maximum discharge (estimated), 124,000 second-feet Oct. 3, 1927 (gage height, 46.04 feet at former site); no flow for periods in 1932, 1934, and 1936.

Remarks.- Records good. Discharge estimated Dec. 30, 31.

Rating tables, water year 1935-36 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Oct. 1-22, Mar. 17 to May 9, July 14-27, Sept. 17-30)

Oct. 1 to Nov. 29					Nov. 30 to Sept. 30				
1.0	1	2.6	271	13.0	5,800	0.6	0	4.0	668
1.2	7	4.0	700	16.0	7,900	.9	3	5.0	1,020
1.4	22	5.0	1,080	19.0	10,400	1.2	10	6.0	1,380
1.6	49	6.0	1,490	22.0	13,100	1.6	40	7.0	1,780
1.8	82	7.0	1,900	25.0	15,800	2.0	107	8.0	2,200
2.0	124	9.0	3,000	28.0	18,800	2.5	220	9.0	2,740
2.3	193	11.0	4,400	31.0	21,800	3.0	352	10.0	3,400

Revised daily discharge, in second-feet, for highwater periods, 1922-23

1922			1922			1923			1923		
Apr. 9	39,600		Apr. 12	27,600		June 10	27,300		June 13	31,000	
10	78,200		July 13	28,700		11	28,100		18	28,300	
11	42,300		14	33,300		12	35,600				

Note.- Daily discharges for the above periods supersede those previously published.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	12	271	1,540	287	145	279	39	40	250	535	0	0
2	21	633	1,220	551	136	240	34	33	171	169	0	0
3	24	4,530	1,050	1,620	129	215	37	46	127	125	0	0
4	10	13,800	945	1,500	115	198	36	171	93	69	0	0
5	11	9,420	875	1,050	121	181	36	131	98	48	0	0
6	7	4,560	2,200	857	121	169	50	82	875	22	0	0
7	8	1,410	2,020	763	119	182	43	65	1,120	15	1	0
8	16	844	1,500	668	115	153	49	89	380	26	1	0
9	27	808	1,190	568	103	149	44	568	185	14	1	0
10	18	8,440	1,080	502	103	153	50	2,540	111	11	1	0
11	12	7,270	875	502	109	162	49	1,580	75	11	1	0
12	9	1,990	770	502	109	145	46	617	57	10	1	0
13	8	1,080	719	518	107	136	50	424	45	6	1	0
14	7	772	668	502	98	125	40	309	34	5	1	0
15	6	633	617	470	89	119	37	235	38	3	1	0
16	5	633	584	439	89	102	37	185	24	2	1	169
17	10	569	535	409	82	111	33	142	29	2	1	1,500
18	26	505	470	366	74	111	30	245	26	2	0	787
19	181	473	439	293	74	87	25	282	16	2	0	212
20	275	413	409	279	75	87	30	668	11	1	0	105
21	1,450	383	380	287	82	82	30	394	9	1	0	57
22	637	355	366	263	84	80	24	235	12	1	0	105
23	3,350	313	352	220	93	72	24	181	12	1	0	84
24	921	299	338	215	113	65	22	200	11	1	0	27
25	383	285	314	205	153	69	19	380	9	0	0	31
26	271	2,810	261	195	380	57	19	2,680	7	0	0	105
27	205	16,200	261	173	325	58	28	1,620	6	0	0	338
28	169	21,600	261	173	454	52	136	756	6	0	0	1,260
29	146	14,400	240	167	341	50	119	454	6	0	0	753
30	124	3,060	256	140	-	48	70	470	17	0	0	454
31	146	-	262	142	-	34	-	439	-	0	0	-

Monthly discharge, in second-feet, of Verdigris River at Independence, Kans., 1921-23, 1935-36

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
1921-22					
November 14-30		13	5.4	9.33	315
December		14	10	11.8	726
January		19	10	13.0	799
February		52	13	29.3	1,680
March	21,100	41		2,809.3	172,000
April	78,200	1,040		11,500	684,000
May	17,900	647		4,310	265,000
June	4,180	131		651	38,000
July	33,300	267		6,920	425,000
August	685	49		235	14,400
September	609	21		93.4	5,560
The period					1,610,000
1922-23					
October		71	10	24.3	1,490
November		662	14	119	7,080
December		65	27	45.3	2,800
January		50	28	37.2	2,290
February		67	27	39.7	2,300
March	2,850	33		361	22,200
April	2,010	72		304	18,100
May	16,400	112		2,150	132,000
June	35,600	424		10,300	613,000
July	3,670	84		616	31,700
August	82	10		33.2	2,040
September	5,210	24		317	18,900
Water year 1922-23		35,600	10	1,180	854,000
1935-36					
October 1935	8,502	3,350	5	274	16,860
November	118,759	21,600	271	3,959	235,600
December	22,937	2,200	240	740	45,490
Calendar year 1935	986,594	62,200	5	2,703	1,957,000
January 1936	14,816	1,620	140	478	29,390
February	4,138	454	74	143	8,210
March	3,751	279	34	121	7,440
April	1,286	136	19	42.9	2,550
May	16,241	2,680	33	524	32,210
June	3,858	1,120	6	129	7,650
July	1,082	535	0	34.9	2,150
August	11	1	0	.4	22
September	5,987	1,500	0	200	11,880
Water year 1935-36	201,368	21,600	0	550	399,500

Note.- Monthly discharge for June and July 1922 and June 1923 supersedes the figures published in Water-Supply Papers 547 and 567. Monthly discharge for the remaining months republished in order to complete the record.

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., half a mile below Elm Creek and 3 miles southwest of Iola.

Drainage area.- 3,795 square miles.

Records available.- August 1895 to November 1903, October 1917 to September 1936.

Average discharge.- 19 years (1917-36), 1,147 second-feet.

Extremes.- Maximum discharge during year, 18,600 second-feet Nov. 27 (gage height, 19.88 feet); no flow Aug. 19 to Sept. 15, Sept. 21, 22.

1895-1903, 1917-36: Maximum gage height, 33.2 feet Sept. 13, 1926 (discharge not determined; previously published estimate of 46,000 second-feet is too low); no flow for several days in September and October 1897, Aug. 19 to Sept. 15, Sept. 21, 22, 1936. Bank-full stage, 27 feet.

Remarks.- Records good except those estimated during periods of ice effect, Dec. 26, 27, Jan. 19, 20, Jan. 23 to Feb. 25, which are poor.

Rating table, water year 1935-36 except periods of ice effect (gage height, in feet, and discharge, in second-feet)
(Shifting control method used Jan. 4-18, 21, 22)

2.4	0	5.0	999
2.6	2	6.5	1,340
2.8	33	6.0	1,740
3.0	89	6.5	2,160
3.3	180	7.0	2,590
3.6	288	8.0	3,550
4.0	458	9.0	4,600
4.5	710	10.0	5,720

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	109	2,590	1,740	277	140	273	69	77	436	26	2	0
2	98	7,000	1,200	938	150	254	60	72	496	46	2	0
3	101	15,700	999	1,340	140	219	63	379	349	49	2	0
4	74	12,300	879	879	150	214	60	579	250	36	2	0
5	136	10,400	793	710	130	207	66	1,420	211	33	2	0
6	477	4,170	793	710	120	174	66	999	177	33	2	0
7	277	2,110	850	625	120	187	49	477	164	33	4	0
8	214	1,270	821	549	120	174	55	312	151	31	4	0
9	190	3,450	765	515	120	174	80	320	139	31	2	0
10	167	8,950	710	467	115	170	69	2,160	159	26	2	0
11	130	2,530	614	492	115	170	63	640	154	26	2	0
12	115	1,030	559	466	110	154	72	1,540	151	22	2	0
13	109	738	539	515	110	158	74	1,990	133	15	1	0
14	158	635	505	579	110	154	66	765	118	10	1	0
15	180	599	477	908	110	145	63	436	109	9	1	0
16	158	621	454	908	110	139	69	559	95	8	1	1
17	118	656	444	683	110	139	66	486	106	8	1	3
18	89	559	418	554	110	136	57	362	104	7	1	1
19	80	510	409	413	105	130	66	332	66	5	0	1
20	130	477	367	396	100	127	72	312	44	8	0	1
21	7,350	444	357	387	100	121	66	211	31	7	0	0
22	15,400	426	345	366	100	119	63	190	26	6	0	0
23	13,600	436	336	357	105	121	63	228	26	4	0	1
24	6,060	409	312	320	110	101	74	254	26	2	0	2
25	1,530	366	296	280	118	83	77	1,150	22	2	0	1
26	850	4,080	260	240	999	101	74	3,340	12	2	0	24
27	1,090	17,200	265	200	646	101	77	2,860	10	1	0	458
28	1,610	17,400	269	180	426	74	80	1,200	10	2	0	500
29	999	10,500	273	170	332	57	74	821	10	4	0	496
30	594	3,760	265	160	-	89	60	534	19	3	0	549
31	683	-	265	150	-	92	-	396	-	2	0	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	50,876	13,600	74	1,641	100,900
November.....	126,816	17,400	366	4,227	251,500
December.....	17,599	1,740	-	563	34,910
Calendar year 1935.....	734,232	25,900	31	2,012	1,456,000
January.....	15,744	1,340	150	506	31,230
February.....	8,311	63	120	153	10,550
March.....	4,555	273	57	147	9,030
April.....	2,033	80	49	67.8	4,030
May.....	25,381	3,340	72	819	50,340
June.....	3,766	496	10	126	7,510
July.....	499	49	1	16.1	990
August.....	34	4	0	1.1	67
September.....	2,038	549	0	67.9	4,040
Water year 1935-36.....	254,672	17,400	0	696	505,100

Neosho River near Parsons, Kans.

Location.- Water-stage recorder, lat. 37°20'20", long. 95°6'30", 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.

Drainage area.- 4,828 square miles.

Records available.- October 1921 to September 1936.

Average discharge.- 15 years, 2,023 second-feet.

Extremes.- Maximum discharge during water year 1921-22, 31,600 second-feet (revised) Apr. 13, 14 (gage height, 24.90 feet).

Maximum discharge during water year 1922-23, 31,600 second-feet (revised) June 18 (gage height, 24.50 feet).

Maximum discharge during water year 1935-36, 20,200 second-feet Nov. 5 (gage height, 21.65 feet); no flow July 31 to Sept. 17.

1921-36: Maximum discharge recorded, 48,100 second-feet Nov. 24, 1928 (gage height, 27.50 feet at former site); no flow Aug. 26-31, Sept. 1-10, 12, 13, 1934, July 31 to Sept. 17, 1936. Bank-full stage, 24 feet.

Remarks.- Records good except those estimated for period of ice effect, Jan. 25 to Feb. 25, which are poor.

Rating table, water year 1935-36 except period of ice effect (gage height, in feet, and discharge, in second-feet)

0.7	0	3.6	715	10.0	5,740
1.0	8.6	4.0	975	12.0	7,850
1.3	27	5.0	1,610	14.0	10,000
1.6	58	6.0	2,310	16.0	12,300
2.0	141	7.0	3,080	18.0	14,800
2.5	297	8.0	3,900	20.0	17,500
3.0	495	9.0	4,790	21.7	20,400

Revised daily discharge, in second-feet, for highwater periods, 1922-23

1922	1922	1922	1923	1923
Mar. 15 24,400	Apr. 8 26,600	Apr. 14 31,600	June 11 23,900	June 17 29,000
16 23,900	9 30,600	15 30,100	12 24,600	18 29,700
27 23,400	10 30,100	16 28,000	13 25,600	19 28,500
28 25,600	11 29,000	July 13 21,900	14 26,900	20 29,000
Apr. 6 23,400	12 30,100		15 26,000	21 24,100
7 22,600	13 31,600		16 28,600	

Note.- Daily discharge for above periods supersedes those previously published.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	110	1,180	8,070	421	206	625	73	73	625	162		0
2	106	3,370	2,850	647	206	491	70	61	516	162		0
3	99	8,350	1,950	1,810	187	413	66	58	603	81		0
4	97	16,500	1,610	2,390	187	373	73	113	581	46		0
5	93	19,500	1,440	1,640	182	330	79	354	446	30		0
6	91	16,200	1,610	1,220	173	308	75	1,250	715	28		0
7	129	8,420	1,810	1,030	167	290	69	1,540	975	29		0
8	474	3,070	1,710	892	170	255	108	865	462	29		0
9	338	2,240	1,510	739	162	259	102	669	290	27		0
10	245	9,610	1,340	647	157	252	93	1,220	218	25		0
11	202	11,000	1,180	603	151	238	83	1,610	182	21		0
12	176	5,540	1,030	647	149	242	85	1,340	164	19		0
13	162	2,160	947	625	149	231	102	892	164	18		0
14	134	1,380	839	647	146	212	93	2,310	167	16		0
15	116	1,090	788	669	141	202	61	1,380	154	16		0
16	124	1,000	739	839	141	196	75	788	134	15		0
17	176	1,280	692	1,150	149	187	66	603	119	13		0
18	255	1,250	669	947	159	179	57	739	104	12		28
19	421	947	647	715	157	167	52	625	89	11		3
20	495	639	625	470	157	162	66	516	83	9		5
21	717	763	581	516	149	164	63	446	81	9		6
22	4,680	715	560	479	136	167	61	397	66	7		9
23	10,700	647	538	491	134	154	77	316	49	5		17
24	12,400	625	516	421	136	136	75	342	39	5		15
25	9,180	625	495	370	141	131	68	397	33	4		117
26	2,160	2,020	393	340	2,460	119	60	647	26	3		630
27	1,220	12,300	357	300	1,440	106	60	3,160	22	2		2,460
28	1,220	16,800	454	270	1,640	119	122	3,570	21	2		4,430
29	1,710	17,600	462	255	839	110	87	1,950	18	1		2,540
30	1,710	16,800	442	235	-	99	75	1,220	16	1		892
31	1,060	-	421	202	-	87	-	839	-	0		-

ARKANSAS RIVER BASIN

Monthly discharge, in second-feet, of Neosho River near Parsons, Kans., 1921-23, 1935-36

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
1921-22					
October 18-31		36	34	35.1	976
November		33	19	24.9	1,480
December		38	18	27.1	1,670
January		44	28	34.8	2,140
February		58	27	35.8	1,990
March	25,600	116	7,600	467,000	
April	31,600	1,700	14,400	857,000	
May	7,490	908	3,000	184,000	
June	2,540	202	672	40,000	
July	21,900	359	5,020	309,000	
August	4,530	101	877	53,900	
September	161	44	84.1	5,000	
The period					1,920,000
1922-23					
October		83	32	53.0	3,260
November	7,390	45	1,010	60,100	
December	234	114	161	9,900	
January	130	90	110	6,760	
February	120	60	91.2	5,060	
March	4,800	79	756	46,500	
April	3,180	112	439	26,100	
May	13,900	171	2,460	151,000	
June	29,700	1,080	12,300	732,000	
July	12,800	422	2,830	174,000	
August	447	126	234	14,400	
September	684	95	195	11,600	
Water year 1922-23		29,700	32	1,710	1,240,000
1935-36					
October 1935	50,794	12,400	91	1,639	100,700
November	183,821	19,500	625	6,127	364,600
December	37,275	8,070	357	1,202	73,930
Calendar year 1935	1,238,508	40,900	37	3,393	2,456,000
January 1936	22,627	2,390	-	730	44,880
February	10,371	2,460	-	358	20,570
March	7,004	625	87	226	13,890
April	2,334	122	52	77.8	4,630
May	30,490	3,570	58	984	60,480
June	7,184	975	18	239	14,210
July	810	162	0	26.1	1,610
August	0	0	0	0	0
September	11,153	4,430	0	372	22,120
Water year 1935-36	363,843	19,500	0	994	721,600

Notes.- Monthly discharge for March, April, July, November 1922 and June 1923, supersedes the figures published in Water-Supply Papers 547 and 567. Monthly discharge for the remaining months republished in order to complete the record.

Cottonwood River at Cottonwood Falls, Kans.

Location.- Water-stage recorder, lat. 38°22'25", long. 96°31'25", in NE¼ sec. 28 (revised), T. 19 S., R. 8 E., 1 mile east of Cottonwood Falls.

Drainage area.- 1,444 square miles.

Records available.- February 1935 to September 1936. April 1932 to February 1935 from chain gage in Cottonwood Falls.

Extremes.- Maximum discharge during year, 3,640 second-feet May 10 (gage height, 6.66 feet); minimum discharge, 1 second-foot Sept. 19-23; minimum gage height, 1.71 feet Sept. 20.

1932-36: Maximum discharge observed, 11,800 second-feet July 6, 1932 (gage height, 20.92 feet, former site and datum); minimum, 1 second-foot Aug. 15 to Sept. 13, 1934, Sept. 19-23, 1936.

Remarks.- Records good except those estimated for period of ice effect, Feb. 3-5, 8, 10, 12-16, and those based on auxiliary gage at former station, Nov. 26-30, which are fair.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	7	43	150	57	38	48	23	28	101	4	6	2
2	6	45	139	67	36	43	23	454	78	5	6	2
3	5	67	120	72	34	43	21	1,890	57	9	6	2
4	6	172	110	72	32	45	20	373	50	9	6	2
5	10	245	103	72	32	43	20	131	46	7	6	2
6	9	192	98	76	33	41	20	80	41	6	7	2
7	11	131	96	67	33	36	20	59	39	4	6	2
8	13	98	96	70	31	39	19	48	38	3	6	2
9	14	50	92	65	31	39	20	178	35	2	5	3
10	15	72	87	65	31	39	23	3,200	28	2	5	3
11	21	65	80	63	31	38	23	1,140	21	2	5	2
12	21	76	78	67	30	36	21	213	20	2	4	3
13	18	70	74	82	30	36	18	286	17	2	4	4
14	15	59	74	80	28	36	17	439	17	2	3	2
15	17	55	74	78	30	36	19	169	19	2	3	2
16	18	57	67	74	33	38	20	101	15	2	2	4
17	20	50	63	72	33	38	17	76	13	2	2	2
18	24	50	61	61	33	33	15	70	12	2	2	2
19	21	46	61	59	36	33	15	63	11	2	2	1
20	63	46	57	57	33	30	18	113	10	3	2	1
21	2,450	41	57	54	35	31	18	85	8	4	2	1
22	1,850	43	55	55	35	30	17	61	9	4	2	1
23	344	41	57	50	45	25	14	70	8	5	2	1
24	134	39	59	46	50	24	12	406	7	5	2	2
25	82	39	54	43	57	21	11	271	6	4	2	2
26	67	135	52	41	61	19	12	782	6	4	2	21
27	55	1,700	50	33	61	19	13	258	6	5	2	55
28	43	485	48	38	55	18	15	153	5	7	2	213
29	36	275	48	39	52	21	18	228	4	7	2	101
30	36	200	46	39	-	21	19	527	5	6	2	128
31	43	-	50	41	-	21	-	182	-	6	2	-
Month						Second-foot-days	Maximum	Minimum		Mean	Run-off in acre-feet	
October.....						5,474	2,450	5		177	10,860	
November.....						4,717	1,700	39		157	9,360	
December.....						2,356	150	46		76.0	4,670	
Calendar year 1935.....						119,168	10,400	4		326	236,300	
January.....						1,853	82	38		59.9	3,690	
February.....						1,099	61	—		37.9	2,180	
March.....						1,018	48	18		32.8	2,020	
April.....						541	23	11		18.0	1,070	
May.....						12,139	3,200	28		392	24,080	
June.....						732	101	4		24.4	1,450	
July.....						129	9	2		4.2	256	
August.....						110	7	2		3.5	218	
September.....						580	213	1		19.3	1,150	
Water year 1935-36						30,753	3,200	1		84.0	61,000	

Spring River near Waco, Mo.

Location.- Water-stage recorder, lat. 37°14'45", long. 94°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 $\frac{1}{2}$ miles east of Waco. Zero of gage is 833.55 feet above mean sea level (general adjustment of 1929).

Drainage area.- 1,160 square miles.

Records available.- April 1924 to September 1936.

Average discharge.- 12 years, 872 second-feet.

Extremes.- Maximum discharge during year, 12,500 second-feet Sept. 28 (gage height, 15.70 feet, from range line on recorder chart); minimum discharge, 13 second-feet Aug. 25; minimum gage height, 0.86 foot Aug. 25, Sept. 1.
1924-36: Maximum discharge, 57,400 second-feet Aug. 17, 1927 (gage height, 28.6 feet, from floodmarks); minimum, 11 second-feet July 24, 1934 (gage height, 0.80 foot).

Remarks.- Records excellent except those estimated June 6, 11, Sept. 28-30, which are poor. Flow slightly regulated by operation of small mills.

Rating table, water year 1935-36 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Oct. 1-18, June 23 to Sept. 15)

0.8	11	3.0	594	8.0	4,250
1.0	22	3.5	848	9.0	5,200
1.2	42	4.0	1,150	10.0	6,150
1.6	106	5.0	1,900	11.0	7,150
2.0	207	6.0	2,550	12.0	8,250
2.5	383	7.0	3,350	13.0	9,350
				14.0	10,500

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	116	691	483	254	149	173	123	269	78	944	30	16
2	110	642	442	254	134	167	106	4,760	92	314	22	24
3	108	548	402	288	123	173	102	1,560	76	562	17	24
4	95	1,303	383	288	141	146	110	846	60	170	24	16
5	106	1,740	364	271	129	134	102	442	71	121	30	16
6	102	1,280	904	254	123	154	97	325	75	101	29	20
7	238	848	1,280	238	121	132	114	254	80	56	29	16
8	175	642	1,220	238	129	121	97	222	68	86	31	16
9	156	571	964	238	99	116	92	198	93	74	28	19
10	154	642	742	222	116	121	101	204	156	70	22	21
11	154	1,030	642	238	110	116	93	271	200	64	28	24
12	129	691	594	222	121	123	85	222	325	55	34	36
13	132	691	548	207	112	116	90	222	151	50	32	40
14	139	571	504	207	116	119	95	222	119	58	35	31
15	154	526	483	198	108	112	86	207	93	53	24	32
16	141	483	462	195	97	92	80	195	99	53	28	37
17	127	462	422	201	99	114	80	170	83	41	20	35
18	139	462	402	187	129	106	80	154	88	45	22	34
19	845	422	402	164	123	106	58	149	73	43	25	40
20	1,310	383	364	187	121	101	60	125	71	28	23	38
21	1,880	383	344	170	110	90	85	125	59	50	22	34
22	964	344	325	167	110	93	63	123	52	49	22	178
23	571	344	325	164	110	88	71	121	58	42	22	173
24	422	325	306	187	125	156	80	99	60	37	20	1,690
25	344	325	298	151	116	254	66	95	52	34	18	1,290
26	306	402	288	156	198	192	68	112	50	28	30	1,080
27	306	964	344	144	344	187	118	101	45	23	28	8,330
28	344	848	288	159	288	164	955	93	48	27	24	10,000
29	383	742	254	156	286	137	526	86	29	34	21	4,000
30	383	548	254	134	-	121	288	85	45	31	25	2,500
31	344	-	254	132	-	139	-	65	-	40	21	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acre-feet
October.....	10,855	1,680	95	350	0.302	0.35	21,530
November.....	19,650	1,740	325	662	.571	.64	39,370
December.....	15,277	1,280	254	493	.425	.49	30,300
Calendar year 1935.....	390,638	16,000	92	1,070	.922	12.52	774,800
January.....	6,271	288	132	202	.174	.20	12,440
February.....	4,089	344	97	141	.122	.13	8,110
March.....	4,143	254	88	134	.116	.13	8,220
April.....	4,191	955	58	140	.121	.14	8,310
May.....	12,144	4,760	65	392	.338	.39	24,090
June.....	2,649	325	29	86.5	.076	.08	5,250
July.....	3,413	944	23	110	.095	.11	6,770
August.....	766	35	17	25.4	.022	.03	1,560
September.....	29,810	10,000	16	994	.857	.96	59,130
Water year 1935-36.....	113,478	10,000	16	310	.267	3.65	225,100

Turkey Creek at Joplin, Mo.

Location.- Water-stage recorder, lat. 37°6'50", long. 94°31'35", in NW¼NW¼ sec. 34, T. 28 N., R. 33 W., 80 feet below bridge on Lone Elm Road, a quarter of a mile below Joplin Creek, and about 1 mile northwest of Joplin. Zero of gage is 903.98 feet (revised) above mean sea level (general adjustment of 1929).

Drainage area.- 33 square miles.

Records available.- July 1932 to September 1936.

Extremes.- Maximum discharge during year, 890 second-feet Sept. 27 (gage height, 7.15 feet); no flow on many days.

1932-36: Maximum discharge, 1,150 second-feet Apr. 20, 1933 (gage height, 7.57 feet); no flow for several days during July and August 1934, July to September 1936.

Remarks.- Records fair except those estimated for Jan. 26 to Feb. 25, which are poor. Considerable diversions around gage by Joplin storm sewers.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4.3	46	15	10	5	6.7	3.5	40	2.8	191	0	0
2	4.2	35	14	12		6.4	3.2	165	2.8	9.0	.1	.1
3	3.9	32	13	11		6.2	3.0	26	2.7	5.6	.1	0
4	3.9	117	12	10		5.8	2.4	16	2.4	4.7	.4	0
5	12	46	18	9.0		5.6	2.3	13	11	3.9	.6	0
6	4.9	31	58	8.4		5.2	2.5	11	22	3.7	.3	0
7	14	27	35	8.0		5.2	2.7	9.4	4.9	3.3	.4	0
8	6.0	23	42	7.7		5.2	2.7	9.0	3.3	3.0	.1	0
9	12	26	28	7.4		5.2	2.7	11	2.8	2.5	.4	0
10	6.7	27	25	6.7		5.2	10	8.2	22	2.5	0	0
11	5.8	21	23	6.2	5	8.0	3.3	9.0	3.7	2.8	0	0
12	5.4	18	21	6.2		5.4	3.2	9.4	2.7	2.4	0	0
13	5.2	17	20	6.2		5.2	2.9	7.4	2.6	2.2	0	0
14	16	16	18	6.2		5.2	2.8	6.7	2.4	2.1	0	0
15	6.7	16	16	6.4		5.1	2.7	6.2	1.9	2.3	0	0
16	6.0	15	15	6.7		5.6	2.5	6.2	1.7	1.8	0	0
17	7.4	14	15	6.7		5.1	2.3	6.0	1.9	1.8	0	2.0
18	60	14	14	6.4		4.7	2.2	7.7	1.5	1.9	0	1.8
19	82	13	13	6.4		4.3	2.2	6.0	1.4	1.7	0	.8
20	48	12	12	6.4		4.2	2.1	5.6	1.4	1.5	0	.3
21	79	11	11	6.4		4.2	4.2	5.1	1.4	1.3	0	.1
22	35	10	11	6.4		4.2	2.4	10	1.1	1.4	0	0
23	28	9.7	11	6.0		6.8	2.1	3.9	1.2	.8	0	7.3
24	23	9.7	9.4	6.0		4.2	1.9	3.6	1.1	.8	0	.5
25	21	9.4	8.7	6.0		3.3	1.8	3.6	.8	.8	0	.4
26	30	42	8.0	6	23	3.2	1.8	3.7	.8	.8	0	95
27	32	29	8.0		8.2	2.9	7.0	3.2	.8	.4	0	385
28	37	21	8.4		7.4	2.9	44	3.2	.9	.3	0	199
29	28	18	8.4		7.0	2.9	8.0	2.9	.8	.8	0	32
30	25	17	8.7		-	2.9	6.2	2.9	.8	.2	0	14
31	57	-	9.0	-	-	2.9	-	2.9	-	0	0	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acre-feet
October.....	709.4	82	3.9	22.9	0.694	0.80	1,410
November.....	742.8	117	9.4	24.8	.752	.84	1,470
December.....	528.6	58	8.0	17.1	.518	.60	1,050
Calendar year 1935.....	10,514.0	528	3.2	28.3	.858	11.61	20,450
January.....	220.8	12	6.0	7.12	.216	.25	438
February.....	170.6	23	5	5.88	.178	.19	338
March.....	149.9	8.0	2.9	4.84	.147	.17	297
April.....	140.6	44	1.8	4.69	.142	.16	279
May.....	423.8	165	2.9	13.7	.415	.48	841
June.....	107.8	22	.8	3.59	.109	.12	214
July.....	257.3	191	0	8.30	.252	.29	510
August.....	2.4	.6	0	.077	.0023	.003	4.8
September.....	738.2	385	0	24.6	.745	.83	1,460
Water year 1935-36.....	4,192.2	385	0	11.5	.348	4.73	8,310

Shoal Creek near Joplin, Mo.

Location.- Water-stage recorder, lat. 37°2'5", long. 94°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 above mean sea level (general adjustment of 1929).

Drainage area.- 458 square miles.

Records available.- April 1924 to September 1936.

Average discharge.- 12 years, 424 second-feet.

Extremes.- Maximum discharge during year, 5,220 second-feet Sept. 27 (gage height, 8.88 feet), from rating curve extended above 2,000 second-feet; minimum, 4 second-feet Aug. 4 (gage height, 0.80 foot); minimum daily discharge, 23 second-feet Aug. 27, 1924-33; Maximum discharge, about 26,800 second-feet Mar. 12, 1935 (gage height, 18.25 feet), from rating curve extended above 2,000 second-feet; minimum, 2.8 second-feet Dec. 15, 1934, during repair of turbines; minimum gage height, that of Aug. 4, 1936; minimum daily discharge, 16 second-feet Aug. 6, 1934.

Remarks.- Records good except those estimated for Feb. 14-22, 24-28, June 11, 12, which are poor. Flow regulated by Grand Falls hydroelectric plant.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	168	280	284	220	142	137	92	254	107	389	44	44
2	155	409	278	221	103	129	103	1,760	126	554	52	141
3	150	357	264	218	125	123	101	770	92	256	44	42
4	152	365	238	216	79	126	96	520	96	166	51	64
5	154	442	246	210	68	119	106	429	102	145	40	49
6	154	459	362	198	126	115	96	372	131	114	35	43
7	151	428	605	189	68	120	102	304	158	104	29	37
8	165	367	556	196	76	113	95	295	167	83	50	44
9	172	368	518	189	57	117	94	261	148	77	29	40
10	162	413	464	182	78	116	106	241	131	84	33	35
11	149	468	454	183	88	120	105	230	128	75	45	36
12	154	402	425	184	106	118	92	242	125	71	40	32
13	143	392	421	170	91	110	96	301	121	69	28	35
14	156	373	385	174	100	106	94	234	101	71	41	26
15	147	346	370	166	100	114	95	229	99	56	30	32
16	137	324	348	171	100	113	88	177	100	70	31	37
17	145	316	319	168	100	103	81	188	90	47	29	94
18	180	297	314	180	100	109	86	163	68	58	30	168
19	316	278	310	162	100	115	84	180	85	53	30	58
20	514	271	286	158	100	102	65	159	74	48	27	109
21	472	264	275	161	100	100	111	144	68	57	30	103
22	518	255	268	148	100	106	108	139	79	58	32	132
23	323	249	266	153	125	108	79	128	71	45	27	118
24	284	238	248	143	125	114	89	134	77	46	30	645
25	250	235	245	146	125	177	94	131	65	50	35	451
26	241	257	240	123	125	133	85	122	69	49	46	228
27	254	302	232	97	125	122	97	116	33	43	23	3,010
28	263	309	232	118	125	117	266	123	45	44	32	2,430
29	249	306	225	152	130	109	382	108	56	40	32	1,820
30	280	290	228	76	-	106	296	97	101	42	30	764
31	245	-	219	101	-	103	-	90	-	41	33	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acre-feet
October.....	6,982	518	137	225	0.491	0.57	13,850
November.....	10,080	468	235	336	.734	.82	19,990
December.....	10,145	606	219	327	.714	.82	20,120
Calendar year 1935.....	203,864	12,000	119	559	1.22	16.53	404,400
January.....	5,155	221	76	166	.562	.42	10,220
February.....	2,987	142	57	103	.255	.24	5,920
March.....	3,620	177	100	117	.255	.29	7,180
April.....	3,486	382	65	116	.253	.28	6,910
May.....	8,351	1,760	90	276	.607	.70	17,120
June.....	2,933	167	33	97.8	.214	.24	5,820
July.....	3,105	554	40	100	.218	.25	6,160
August.....	1,088	52	23	35.1	.077	.09	2,160
September.....	10,867	3,010	26	362	.790	.88	21,550
Water year 1935-36.....	69,079	3,010	23	189	.413	5.60	137,000

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.

Drainage area.- 6,400 square miles.

Records available.- October 1930 to September 1936 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 year, about 4,180 second-feet June 12 (gage height, 5.09 feet); no flow Mar. 14 to May 21, Aug. 21.
1930-36: Maximum discharge, about 49,300 second-feet June 27, 1935 (gage height, 11.7 feet); no flow for several periods.

Remarks.- Records fair except those for periods of ice effect, Dec. 16-20, 22-27, 29, 31, Jan. 2, 4, 7-11, 13, 18-20, 25-31, Feb. 1-9, 12, 18, and those for June 27, July 8, 9, 17-25, which are poor and were computed by a study of the trace, weather records, and comparison with records for station at Logan.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	132	37	35	34	30	9		0	260	79	55	50
2	107	37	37	35	30	8		0	245	51	153	90
3	92	35	31	35	25	7		0	165	44	176	104
4	75	31	31	33	23	6		0	230	26	56	68
5	62	28	38	31	25	6		0	172	16	26	38
6	59	27	33	31	30	5		0	75	13	270	24
7	53	26	33	25	30	4		0	129	22	181	23
8	49	28	30	25	20	2		0	113	30	146	158
9	58	27	30	30	15	3		0	58	50	341	492
10	84	25	26	30	16	2		0	142	5	338	283
11	68	25	26	35	16	2		0	1,160	332	211	135
12	56	25	27	40	20	2		0	1,070	271	146	129
13	44	27	25	40	33	1		0	2,020	126	79	155
14	41	26	22	44	34	0		0	711	463	46	66
15	38	26	20	41	33	0		0	351	344	27	41
16	35	26	17	43	34	0		0	206	172	19	26
17	30	28	14	40	30	0		0	120	80	12	23
18	28	25	10	35	20	0		0	77	40	7	19
19	28	25	11	30	33	0		0	48		4	17
20	80	24	12	30	26	0		0	34		2	14
21	40	23	12	34	25	0		0	27	30	0	27
22	37	23	12	38	28	0		77	20		171	127
23	62	24	16	38	25	0		104	16		172	139
24	79	22	16	31	23	0		28	27		53	73
25	66	24	16	30	19	0		61	14		89	132
26	55	33	15	30	19	0		161	7	27	62	75
27	51	41	17	30	18	0		142	6	13	34	56
28	53	35	28	35	14	0		123	5	12	124	64
29	56	37	31	30	12	0		86	74	9	181	55
30	55	37	34	25	-	0		66	102	14	71	48
31	41	-	34	25	-	0		240	-	75	118	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	1,812	132	28	58.5	3,590
November.....	855	41	22	28.5	1,700
December.....	739	38	10	25.8	1,470
Calendar year 1935.....	105,156	11,300	0	288	208,600
January.....	1,033	44	25	33.3	2,050
February.....	706	34	12	24.3	1,400
March.....	57	9	0	1.8	113
April.....	0	0	0	0	0
May.....	1,089	240	0	35.1	2,160
June.....	7,694	2,020	5	256	15,240
July.....	2,534	463	5	81.7	8,030
August.....	3,370	341	0	109	6,680
September.....	2,761	492	14	92.0	5,480
Water year 1935-36.....	22,639	2,020	0	61.9	44,900

Canadian River at Logan, N. Mex.

Location.— Water-stage recorder, lat. 35°21', long. 103°26', in sec. 15, T. 13 N., R. 33 E., half a mile south of Logan, three-quarters of a mile above Chicago, Rock Island & Pacific Railroad bridge, 5 miles below Ute Creek, and 5 miles above Tucumcari Creek.

Drainage area.— 11,200 square miles.

Records available.— June 1904 to February 1905, December 1908 to May 1914, October 1930 to September 1936 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 65,700 second-feet July 13 (gage height, 13.5 feet); no flow Mar. 12 to May 2, May 6-17.
1930-36: 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 site 1 mile below present station (zero of that gage was 3,651.0 feet above mean sea level).

Remarks.— Records fair for October to May; others poor. Corrected for ice effect Jan. 7 to Feb. 12, Feb. 14, 19, and computed because of missing gage-height record or silt in well Mar. 6-15, May 4-17, 19-21, 27, July 6, 7, 13-26, Aug. 12-18, Aug. 29 to Sept. 5 on basis of weather record, recorder trace, and records for station at Bell Ranch. Diversions for irrigation above station.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	168	24	46	21	14	10		0	51	13	43	45
2	120	24	40	22	18	9		0	107	29	40	30
3	97	23	44	27	18	8		109	134	89	26	25
4	220	21	30	29	15	7		30	107	91	111	20
5	86	21	42	32	14	6		10	78	71	102	20
6	64	19	44	29	16	6		0	168	42	73	21
7	52	16	45	19	15	5		0	139	40	53	24
8	48	16	52	18	10	4		0	68	75	32	19
9	44	16	46	19	10	3		0	38	925	83	14
10	134	14	38	19	15	2		0	102	168	89	24
11	71	14	32	20	17	1		0	197	2,710	151	171
12	29	14	30	21	18	0		0	1,310	9,650	140	136
13	23	12	26	22	20	0		0	918	12,000	100	102
14	30	11	22	23	18	0		0	805	1,200	60	69
15	26	11	20	22	17	0		0	325	500	50	48
16	23	11	18	22	14	0		0	662	300	34	73
17	22	11	16	20	12	0		0	100	100	23	49
18	16	12	16	16	10	0		126	58	50	15	37
19	17	11	16	16	15	0		25	41	30	11	31
20	18	11	17	16	24	0		10	29		9	21
21	16	13	17	17	30	0		20	18		9	31
22	14	13	17	18	36	0		44	11		9	30
23	20	14	16	20	35	0		131	9	20	10	66
24	37	14	16	21	23	0		100	588		9	95
25	30	19	14	20	22	0		33	490		10	82
26	28	52	13	18	11	0		19	181		29	78
27	34	49	13	18	11	0		35	71	19	53	66
28	55	59	13	20	11	0		267	41	71	4,260	76
29	34	66	12	17	10	0		66	29	71	2,040	104
30	38	58	16	15	-	-		164	19	37	540	69
31	30	-	20	12	-	0		128	-	22	100	-
Month						Second-foot-days	Maximum	Minimum		Mean	Run-off in acre-feet	
October.....						1,646	220	14		55.1	5,260	
November.....						869	66	11		22.3	1,336	
December.....						807	52	12		26.0	1,600	
Calendar year 1935						180,025	26,400	0		518	374,900	
January.....						631	32	12		20.4	1,250	
February.....						499	36	10		17.2	990	
March.....						61	10	0		2.0	121	
April.....						0	0	0		0	0	
May.....						1,317	267	0		42.5	2,610	
June.....						6,894	1,310	9		230	13,670	
July.....						28,443	12,000	-		918	56,420	
August.....						8,314	4,260	9		268	16,490	
September.....						1,678	171	14		55.9	3,330	
Water year 1935-36						50,959	12,000	0		139	101,100	

Vermejo River near Dawson, N. Mex.

Location.- Water-stage recorder, lat. $36^{\circ}42'$, long. $104^{\circ}47'$, in Maxwell grant, about T. 28 N., R. 20 E., $2\frac{1}{4}$ miles north of Dawson, Colfax County. On October 3, 1935, station was moved 800 feet upstream to old site used prior to July 31, 1934, and gage was set to datum 0.57 foot higher than that of previous gage at the same site.

Drainage area.- 250 square miles.

Records available.- October 1930 to September 1936 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, about 4,630 second-feet Aug. 7 (gage height, 7.99 feet, new datum); minimum daily discharge, 0.4 second-foot July 25, 28.
1930-36: Maximum discharge, that of Aug. 7, 1936; no flow at times.

Remarks.- Records fair except those for periods of ice effect, Nov. 14-16, 18, 19, Dec. 5, 6, 15, 25, 26, Jan. 5-8, 27, Feb. 2-5, and those for Oct. 1, 2, July 19, 23, 24, 27, Aug. 3-17, Sept. 16, which were computed on basis of records for Rayado River at Sauble ranch, Cimarron River at Springer, gage heights, and weather records, and are poor. Diversions for irrigation above station.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	8.0	7.2	4.1	3.5	3.8	3.0	5.1	13	18	13	29	11
2	7.6	6.3	7.2	2.3	3.5	3.5	4.2	12	16	11	40	10
3	6.7	7.6	4.8	2.9	3.0	3.8	3.8	12	14	5.1	116	17
4	5.8	8.0	4.4	2.9	2.5	3.5	4.2	13	16	3.8	40	19
5	5.8	5.4	5.0	2.5	2.0	4.5	5.4	13	15	2.9	25	14
6	6.3	4.8	4.5	2.0	1.8	3.8	3.5	13	13	2.1	85	12
7	6.3	5.1	3.4	1.5	2.9	4.5	4.2	14	13	1.8	270	11
8	6.7	7.2	2.6	2.5	3.2	4.8	4.2	18	12	1.8	70	33
9	6.3	8.0	2.1	3.2	2.9	3.5	4.8	23	10	16	30	16
10	5.8	7.6	2.6	3.5	3.7	3.8	4.8	23	10	26	20	13
11	5.4	6.3	4.2	4.2	5.0	3.8	4.8	21	22	16	10	12
12	5.1	5.1	4.4	4.5	7.6	2.9	4.5	23	32	27	9	14
13	5.4	5.1	4.5	4.8	7.2	2.9	5.8	23	26	9.8	9.5	17
14	5.1	4.5	3.2	3.5	6.6	4.2	13	29	19	7.2	8	14
15	5.1	4.0	2.0	5.0	5.9	3.8	15	27	15	8.5	7.5	11
16	5.4	5.0	1.8	5.8	5.5	3.8	16	26	13	9.8	7	7
17	5.8	4.5	1.8	4.9	4.6	3.5	17	26	11	8.0	7	2.6
18	5.8	4.5	1.6	3.6	1.4	3.8	17	27	8.9	8.0	7.2	3.5
19	5.8	4.0	1.6	2.5	3.5	4.2	18	26	8.0	49	7.6	6.9
20	8.0	4.4	1.8	2.0	4.1	3.5	17	23	5.1	11	15	7.6
21	8.9	4.0	1.4	2.1	5.3	3.8	16	21	3.5	3.2	40	6.3
22	8.9	4.3	.9	2.9	5.4	4.8	16	20	7.7	4.5	16	53
23	12	6.8	1.1	3.8	6.3	5.1	15	19	11	3.1	10	18
24	12	5.4	1.3	4.5	5.1	4.5	16	19	7.6	1.8	8.5	12
25	11	7.2	1.4	4.8	5.1	3.5	16	20	11	.4	7.6	9.8
26	8.9	9.8	1.2	5.1	2.1	2.9	16	19	8.5	.4	8.0	9.4
27	9.4	6.5	2.0	4.0	1.4	2.6	16	20	52	68	8.0	12
28	8.9	3.4	2.9	4.5	1.8	3.2	15	22	20	58	10	16
29	8.9	3.2	2.1	4.8	3.0	3.5	14	20	55	40	13	16
30	8.5	3.4	3.2	3.8	-	3.5	13	22	15	16	13	16
31	8.0	-	2.6	3.2	-	3.8	-	20	-	38	15	-
Month				Second-foot-days		Maximum	Minimum	Mean	Run-off in acre-feet			
October.....				227.5		12	5.1	7.34	451			
November.....				168.6		9.8	3.2	5.62	334			
December.....				87.7		7.2	.9	2.83	174			
Calendar year 1935				5,234.2		428	.9	14.3	10,380			
January.....				110.9		5.8	1.5	3.58	220			
February.....				116.2		7.6	1.4	4.01	230			
March.....				116.3		5.1	2.6	3.75	231			
April.....				325.3		18	3.5	10.8	645			
May.....				632		29	12	20.4	1,280			
June.....				488.3		55	3.5	16.3	959			
July.....				471.2		69	.4	15.2	935			
August.....				962.9		270	7	31.1	1,910			
September.....				421.1		53	2.6	14.0	835			
Water year 1935-36				4,128.0		270	.4	11.3	8,180			

ARKANSAS RIVER BASIN

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 1936 in reports of U. S. Geological Survey; July 1907 to December 1931 in reports of State engineer.

Extremes.- Maximum discharge during year, 155 second-feet May 29 (gage height, 2.77 feet); minimum daily discharge, estimated, 1.5 second-feet Jan. 18-20.
1930-36: Maximum discharge, 175 second-feet July 4, 1934 (gage height, 2.92 feet); minimum daily discharge, that of Jan. 18-20.

Remarks.- Records good except those for periods of ice effect, Nov. 28, 29, Dec. 1-4, 7-10, 14-27, 29-31, Jan. 2-11, Jan. 13 to Feb. 15, Feb. 18-21, which were computed on basis of record for station at Springer, Rayado River at Sauble ranch, near Cimarron, and weather records and are poor. Flow regulated by storage in Eagle Nest Reservoir. Diversions for irrigation above station.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	6.0	24	5.0	3.4	4.0	5.2	31	52	121	95	24	29
2	5.8	21	4.5	3.5	4.0	5.2	36	49	119	100	13	23
3	5.8	20	4.5	3.5	3.0	5.2	31	38	119	57	29	24
4	5.8	20	5.0	3.5	2.5	5.4	31	57	121	9.4	31	23
5	5.6	19	5.2	3.0	2.5	5.2	30	60	118	47	28	18
6	5.4	19	4.7	2.0	3.0	5.2	30	60	118	83	28	13
7	5.0	21	4.5	2.0	3.5	5.2	27	60	115	92	27	24
8	7.0	25	4.5	2.5	3.5	5.2	27	61	115	108	21	24
9	16	28	4.2	2.5	4.0	5.0	28	44	115	110	12	24
10	13	18	4.0	3.0	3.5	5.2	28	38	119	108	10	24
11	25	15	4.5	3.0	4.0	5.2	30	54	77	68	16	24
12	19	8.7	5.8	2.9	4.5	5.4	36	57	72	60	18	19
13	13	7.4	5.0	3.0	4.5	5.2	44	62	30	90	26	13
14	28	7.0	4.0	3.0	4.0	5.2	44	70	30	83	28	24
15	27	8.4	3.0	3.0	4.0	5.4	44	75	44	82	24	24
16	27	8.0	3.5	2.5	4.1	5.2	40	61	44	83	18	21
17	28	8.0	4.0	2.2	4.1	8.7	44	64	44	84	26	21
18	28	8.4	4.0	1.5	3.0	10	46	88	52	53	28	21
19	29	9.4	4.0	1.5	3.5	11	29	89	52	53	33	19
20	32	12	3.5	1.5	4.0	13	36	88	38	116	35	15
21	30	7.4	3.8	2.0	4.0	22	49	88	42	118	46	18
22	30	6.3	4.0	2.5	4.1	25	50	86	68	118	32	18
23	25	6.3	4.0	2.5	3.9	29	51	60	76	118	26	15
24	9.4	6.0	3.8	3.5	4.3	38	56	68	77	112	47	14
25	9.2	6.3	3.2	3.0	4.1	33	46	121	82	49	47	14
26	23	6.3	3.4	2.5	4.5	35	42	123	84	40	47	13
27	21	5.8	3.5	3.0	5.2	33	54	125	52	68	44	11
28	22	5.4	3.6	3.5	5.2	32	56	126	50	82	44	11
29	21	5.6	3.5	3.5	5.2	31	60	129	86	56	32	11
30	23	6.0	3.5	3.5	-	31	57	127	86	40	26	12
31	24	-	3.5	3.5	-	31	-	118	-	34	33	-
Month	Second-foot-days				Maximum	Minimum	Mean	Run-off in acre-feet				
October.....	567.0				32	5.0	18.3	1,120				
November.....	366.7				26	5.4	12.2	727				
December.....	127.2				5.8	3.0	4.10	252				
Calendar year 1935.....	10,969.5				116	2.5	30.1	21,750				
January.....	86.0				3.5	1.5	2.77	171				
February.....	113.7				5.2	2.5	3.92	226				
March.....	466.3				38	5.0	15.0	925				
April.....	1,213				60	27	40.4	2,410				
May.....	2,388				129	36	77.0	4,740				
June.....	2,366				121	30	76.9	4,690				
July.....	2,424.4				118	9.4	75.2	4,810				
August.....	902				47	10	29.1	1,790				
September.....	564				29	11	18.8	1,120				
Water year 1935-36.....	11,584.3				129	1.5	31.7	22,980				

Cimarron River at Springer, N. Mex.

Location.— Water-stage recorder, lat. $36^{\circ}22'$, long. $104^{\circ}37'$, 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.

Records available.— July 1907 to December 1909, October 1930 to September 1936 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, about 1,040 second-feet June 9 (gage height, 5.12 feet); minimum daily discharge, 0.3 second-foot Aug. 27.
1930-36: Maximum discharge, about 4,310 second-feet Aug. 27, 1935 (gage height, 8.70 feet); minimum daily discharge, 0.1 second-foot Apr. 11, 1933.

Remarks.— Records fair except those for periods of ice effect, Dec. 26, 31, Jan. 3, 6-9, Jan. 18 to Feb. 7, Feb. 9, 10, 18-20, which were computed on basis of Rayado River at Sauble ranch and of weather records and are poor. Diversions for irrigation above station.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.8	2.2	4.0	3.3	3.0	2.5	2.2	1.9	3.7	0.9	0.6	1.0
2	2.5	2.3	3.7	3.0	3.0	2.5	2.5	1.9	3.3	.8	.7	.8
3	2.5	2.5	3.7	3.0	2.0	2.8	3.0	1.9	3.7	.8	.7	.7
4	2.3	2.5	3.5	3.3	1.5	2.8	2.5	1.9	16	.7	.7	104
5	2.2	2.5	3.7	3.0	1.5	2.5	2.3	1.7	6.2	.7	.7	7.5
6	5.0	2.8	3.5	2.5	2.0	2.3	2.8	1.6	4.5	.7	.6	3.0
7	3.7	2.8	3.5	2.0	2.5	2.0	2.5	1.6	3.0	.7	.7	2.0
8	2.5	3.0	3.3	2.5	2.8	2.0	2.3	2.8	2.3	6.4	.8	1.5
9	2.2	3.0	3.0	3.0	3.0	2.0	2.2	4.2	105	1.9	1.6	1.3
10	2.0	2.8	3.0	3.5	2.5	2.0	2.5	2.5	44	.9	.7	.9
11	2.0	2.8	3.3	3.5	3.3	2.0	3.0	2.3	12	.9	.5	.9
12	1.9	3.0	3.0	3.7	3.7	2.0	3.0	2.0	25	2.2	.5	.9
13	1.9	3.0	3.0	3.7	3.3	1.9	2.5	1.9	4.7	2.2	.5	.8
14	2.2	3.0	2.8	3.3	3.0	2.0	2.2	2.0	3.0	1.5	.5	.8
15	2.0	3.0	2.5	3.5	3.0	1.9	2.2	2.2	2.3	.9	.5	.8
16	1.9	3.0	3.0	3.3	2.8	1.9	1.9	2.3	2.0	1.0	.4	.5
17	2.2	3.0	3.0	3.3	2.8	2.0	2.0	2.3	1.9	.9	.4	.8
18	2.3	3.3	3.0	2.0	2.0	2.0	2.3	2.2	1.5	.8	.4	.8
19	3.3	2.5	2.8	1.5	2.5	1.9	2.3	3.0	1.2	.8	.4	.8
20	6.2	2.3	2.5	2.0	2.7	1.9	2.5	2.8	1.2	.8	.4	.7
21	3.7	2.3	2.5	2.5	2.8	1.9	2.5	2.0	1.2	1.3	.5	.8
22	4.0	2.3	2.8	3.0	3.0	1.9	2.3	2.0	1.0	1.0	.5	.8
23	4.7	3.3	2.5	3.3	2.8	1.9	2.0	2.2	1.3	.8	.4	.7
24	4.7	3.5	2.5	3.5	2.5	1.7	2.2	2.5	2.2	.7	.4	.7
25	4.2	4.2	2.2	2.5	2.3	1.9	2.0	3.0	2.3	.7	.4	.6
26	3.5	6.2	2.3	2.0	2.5	1.9	2.2	3.7	1.6	.7	.4	.7
27	2.8	6.6	2.5	2.5	2.5	1.9	2.3	5.3	1.3	1.0	.3	1.2
28	2.5	5.0	2.8	2.5	2.5	1.7	2.3	4.2	1.2	.8	9.5	2.5
29	2.5	4.5	2.8	2.5	2.5	1.6	2.0	46	1.0	.7	4.5	1.5
30	3.0	4.2	2.8	2.5	-	1.7	1.9	9.3	.9	.7	2.8	.9
31	2.2	-	2.8	2.5	-	1.7	-	5.6	-	.6	1.5	-
Month	Second-foot-days					Maximum	Minimum	Mean	Run-off in acre-feet			
October.....	91.4					6.2	1.9	2.95	181			
November.....	97.4					6.5	2.2	3.25	193			
December.....	92.3					4.0	2.2	2.98	183			
Calendar year 1935.....	6,695.7					604	.7	18.3	13,280			
January.....	88.2					3.7	1.5	2.85	175			
February.....	76.3					3.7	1.5	2.63	151			
March.....	62.7					2.8	1.6	2.02	124			
April.....	70.4					3.0	1.9	2.35	140			
May.....	130.8					46	1.6	4.22	259			
June.....	280.5					105	.9	6.55	517			
July.....	35.5					6.4	.6	1.15	70			
August.....	33.5					9.5	.3	1.08	66			
September.....	141.2					104	.6	4.71	280			
Water year 1935-36.....	1,180.2					105	.3	3.22	2,340			

Cieneguilla Creek near Eagle Nest, N. Mex.

Location.- Water-stage recorder, lat. $36^{\circ}30'$, long. $105^{\circ}14'$, 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 1936 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, 65 second-feet Apr. 11 (gage height, 2.85 feet); no flow June 15, 16, 18-23, July 14-27.
1930-36: Maximum discharge, about 310 second-feet Aug. 23, 1935 (gage height, 4.65 feet); no flow June 15, 16, 18-23, July 14-27, 1936.

Remarks.- Records fair except those for period of ice effect, Nov. 17 to Dec. 3, Mar. 14-20, and those for Oct. 1, 20-24, Nov. 5, Mar. 24-27, 29-31, Apr. 1-3, Aug. 15-20, Sept. 29, which were computed on basis of records of Moreno and Sixmile Creeks near Eagle Nest, discharge measurements, and weather records and are poor. Diversions for irrigation above station.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.4	2.7	2.0			-	15	6.8	3.2	1.0	1.0	3.0
2	2.4	2.2	2.2			-	13	6.4	2.4	1.0	3.1	2.4
3	2.4	2.4	2.3			-	10	5.5	2.2	.8	1.3	2.7
4	2.2	2.2	-			-	8.4	4.7	2.4	.7	9.9	3.2
5	2.2	2.3	-			-	8.4	3.5	1.6	.3	4.3	2.4
6	2.2	2.7	-			-	8.4	2.7	1.0	.2	3.0	1.6
7	2.2	1.6	-			-	7.6	2.7	.8	.2	2.4	1.6
8	2.2	2.2	-			-	7.6	9.1	.8	.5	5.8	1.5
9	2.2	1.9	-			-	12	17	1.0	4.7	4.7	1.5
10	1.9	1.9	-			-	22	19	1.6	1.9	2.4	1.6
11	1.9	2.2	-			-	33	24	1.5	1.6	1.9	1.9
12	1.6	2.2	-			-	34	21	1.3	.8	1.3	2.7
13	1.6	2.2	-			-	33	16	.7	.3	.7	1.9
14	1.6	1.6	-			-	18	30	1.5	.2	.7	1.6
15	1.9	2.2	-			-	17	27	1.6	0	.7	1.6
16	1.6	2.4	-			-	16	27	13	0	.7	1.5
17	1.6	2.5	-			-	15	27	11	.2	.7	1.5
18	1.6	2.1	-			-	15	29	10	0	1.5	1.5
19	1.9	2.2	-			-	14	29	9.9	0	2.5	3.8
20	4.5	2.3	-			-	15	29	8.4	0	2.5	2.4
21	3.0	2.3	-			-	16	25	7.2	0	2.4	1.6
22	2.2	2.4	-			-	15	22	6.8	0	1.9	1.6
23	2.0	2.7	-			-	5.5	19	6.8	0	1.5	1.6
24	2.2	2.2	-			-	6	18	6.8	.2	1.3	1.5
25	2.4	2.3	-			-	6	15	6.4	1.2	1.2	1.3
26	3.0	1.9	-			-	7	15	6.4	.5	.8	1.6
27	2.2	1.8	-			-	9	13	5.9	5.7	.8	1.9
28	2.2	2.0	-			-	12	9.4	4.7	3.5	1.2	2.4
29	2.2	2.0	-			-	13	8.4	4.0	2.2	2.4	3.0
30	1.9	2.0	-			-	13	7.2	7.2	1.5	4.9	3.8
31	1.6	-	-			-	20	-	4.0	-	1.9	-
Month						Second-foot-days	Maximum	Minimum	Mean		Run-off in acre-feet	
October.....						67.0	4.5	1.6	2.16		133	
November.....						65.6	2.7	1.6	2.19		130	
December.....						-	-	-	-		-	
Calendar year												
January.....						-	-	-	-		-	
February.....						-	-	-	-		-	
March 1-31						232.5	20	5.5	12.9		461	
April.....						562.4	34	7.2	18.7		1,120	
May.....						287.9	24	2.7	9.29		571	
June.....						35.7	5.7	0	1.19		71	
July.....						21.8	4.9	0	.70		43	
August.....						85.8	13	.7	2.77		170	
September.....						62.2	3.8	1.3	2.07		123	
Water year												

Sixmile Creek near Eagle Nest, N. Mex.

Location.— Water-stage recorder, lat. $36^{\circ}32'$, long. $105^{\circ}16'$, 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 1936 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, 11 second-feet Apr. 5 (gage height, 1.60 feet); no flow at times.

1930-36: 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 poor. Discharges for periods of ice effect, Nov. 16-18, 20-22, 24, 25, Nov. 27 to Dec. 3, and those for missing gage-height record, Oct. 12-15, Nov. 4, 5, 11, 12, Mar. 17-20, Apr. 10, were computed on basis of records for Cieneguilla Creek near Eagle Nest, Moreno Creek at Eagle Nest, and weather records. Diversions for irrigation above station.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.7	2.7	1.6			-	3.3	9.9	2.9	0	0.4	1.6
2	1.6	2.1	1.7			-	3.8	9.9	2.7	0	.2	1.4
3	1.6	1.9	1.8			-	3.8	9.2	2.5	0	.1	1.2
4	1.6	1.8	-			-	4.0	9.2	2.3	.1	.3	1.2
5	1.6	1.7	-			-	5.8	9.2	1.6	0	.6	1.2
6	1.6	2.7	-			-	6.1	8.9	.8	0	.6	1.2
7	1.6	2.5	-			-	6.4	8.3	.6	.1	1.4	1.2
8	1.6	3.1	-			-	5.6	5.3	.7	.3	.6	1.2
9	1.5	2.5	-			-	5.1	5.8	.4	.2	.2	1.0
10	1.6	2.3	-			-	6.7	6.4	.5	.1	.1	.8
11	1.6	2.4	-			-	8.3	5.6	.8	.1	0	.7
12	1.6	2.4	-			-	9.2	5.8	.9	.1	0	.6
13	1.6	2.5	-			-	9.9	5.8	.7	.1	0	.4
14	1.7	1.9	-			6.1	9.9	7.0	.5	0	0	.5
15	1.7	1.6	-			6.1	9.2	7.0	.6	0	0	.4
16	1.7	1.6	-			5.6	9.2	6.7	.3	.1	0	.4
17	1.7	1.8	-			5.2	9.6	6.1	.1	.1	.2	.3
18	1.9	1.6	-			5.4	11	5.6	.1	0	1.1	.2
19	1.9	1.7	-			5.1	10	5.1	.1	0	1.6	1.2
20	3.1	1.7	-			5.0	10	4.8	.1	0	1.4	2.1
21	2.7	1.7	-			5.1	9.9	4.5	.1	0	1.6	1.9
22	2.1	1.7	-			4.5	10	3.8	.1	.1	1.6	1.6
23	1.9	1.6	-			3.8	10	3.8	.1	0	1.4	1.6
24	1.9	1.5	-			3.5	10	3.8	.1	0	1.2	1.6
25	1.4	1.5	-			3.8	11	3.8	.1	0	1.1	1.6
26	2.1	1.6	-			4.3	11	3.8	.1	0	1.1	1.6
27	1.9	1.6	-			4.3	11	3.3	.1	0	1.1	1.4
28	1.9	1.4	-			4.0	10	3.1	.1	.1	1.2	1.6
29	1.9	1.5	-			3.3	10	3.1	0	.1	1.9	1.6
30	1.9	1.5	-			3.5	10	2.9	0	.1	2.5	2.5
31	2.3	-	-			3.8	-	2.9	-	.5	1.9	-
Month						Second-foot-days	Maximum	Minimum	Mean		Run-off in acre-feet	
October.....						56.6	3.1	1.4	1.83		112	
November.....						58.0	3.1	1.4	1.93		115	
December.....						-	-	-				
Calendar year												
January.....						-	-	-	-		-	
February.....						-	-	-	-		-	
March 14-31.....						82.4	6.1	3.3	4.58		163	
April.....						249.8	11	3.3	8.33		495	
May.....						180.8	9.9	2.9	5.83		359	
June.....						19.9	2.9	0	.66		39	
July.....						2.2	.5	0	.07		4.4	
August.....						25.4	2.5	0	.82		50	
September.....						35.8	2.5	.2	1.19		71	
Water year												

Moreno Creek at Eagle Nest, N. Mex.

Location.- Water-stage recorder, lat. 36°34', long. 105°15', in Maxwell grant, at highway bridge 1,000 feet west of Eagle Nest, Colfax County, and half a mile above high-water line of Eagle Nest Reservoir.

Records available.- October 1930 to September 1936 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 115 second-feet Mar. 31 (gage height, 2.75 feet); minimum daily discharge observed, 0.2 second-foot July 24-26.
1930-36: Maximum discharge, 126 second-feet Mar. 4, 1932; maximum gage height, that of Mar. 31, 1936; no flow at times.

Remarks.- Records fair except those for periods of ice effect, Nov. 15 to Dec. 3, Mar. 14-20, 24, 25, and those for Sept. 28 and 29, which were computed on basis of records for Cieneguilla and Sixmile Creeks near Eagle Nest and weather records and are poor. Diversions for irrigation above station.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.1	2.7	1.5			-	54	3.8	3.6	2.3	0.4	0.7
2	1.7	2.1	1.6			-	29	3.8	3.4	3.8	.5	.6
3	1.1	2.1	1.8			-	17	4.1	3.2	3.4	.6	.6
4	1.1	2.3	-			-	9.8	4.7	3.4	3.4	.6	.6
5	1.1	1.9	-			-	7.9	4.7	2.9	2.7	3.8	.5
6	1.1	1.9	-			-	8.7	4.1	2.9	2.5	3.2	.4
7	1.1	1.9	-			-	8.3	5.0	2.9	2.5	1.7	.4
8	1.1	2.1	-			-	9.1	21	2.9	2.7	1.7	.5
9	1.1	1.7	-			-	11	27	2.7	2.5	1.9	.4
10	1.3	1.5	-			-	11	29	2.7	2.3	1.3	.4
11	1.1	1.9	-			-	12	29	2.9	2.5	1.3	.4
12	1.1	2.1	-			-	15	25	2.5	2.1	.9	.9
13	1.3	2.1	-			-	16	20	2.3	1.5	.7	.6
14	1.1	2.1	-			-	12	14	24	2.1	1.5	1.0
15	1.1	2.0	-			-	11	9.5	27	1.9	1.5	.7
16	1.1	1.9	-			10	7.6	27	1.9	1.9	.6	.4
17	1.1	1.7	-			9	6.5	23	1.7	.9	.6	.4
18	1.1	1.6	-			10	6.8	22	1.5	.4	.6	.4
19	1.3	1.6	-			10	6.8	21	1.5	.4	.6	1.3
20	4.1	1.7	-			9	7.9	17	1.5	.4	.7	.9
21	2.5	1.7	-			11	7.6	14	1.5	.4	1.3	.6
22	1.9	1.8	-			9.8	6.8	13	1.5	.4	1.1	.6
23	1.9	1.9	-			9.1	5.9	12	1.5	.4	.6	.7
24	2.1	1.6	-			6	4.1	9.8	1.5	.3	.6	.6
25	3.2	1.7	-			6	3.6	7.6	1.3	.2	.5	.4
26	2.5	1.5	-			6.5	3.4	6.2	1.3	.3	.4	.4
27	2.3	1.3	-			9.1	3.8	6.2	1.1	.4	.4	.6
28	2.3	1.5	-			6.8	3.4	5.3	1.1	.5	.6	1.5
29	2.3	1.5	-			6.8	3.2	5.0	1.0	.5	1.0	2.0
30	2.3	1.5	-			6.8	3.6	4.1	1.0	.4	2.7	2.3
31	2.5	-	-			24	-	3.8	-	.4	1.7	-
Month						Second-foot-days	Maximum	Minimum	Mean		Run-off in acre-feet	
October.....						53.0	4.1	1.1	1.71		105	
November.....						54.9	2.7	1.3	1.83		109	
December.....						-	-	-	-		-	
Calendar year												
January.....						-	-	-	-		-	
February.....						-	-	-	-		-	
March 14-31.....						172.9	24	6	9.61		343	
April.....						313.3	54	3.2	10.4		621	
May.....						429.2	29	3.8	13.8		851	
June.....						63.2	3.6	1.0	2.11		125	
July.....						45.4	3.8	.2	1.46		90	
August.....						37.1	3.8	.4	1.20		74	
September.....						20.9	2.3	.4	.70		41	
Water year												

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

Location.— Water-stage recorder, lat. 36°22', long. 104°58', in Maxwell grant, in T. 25 N., R. 19 E., 10 miles southwest of Cimarron.

Records available.— October 1930 to September 1936, 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, about 105 second-feet July 8 (gage height, 2.40 feet); minimum daily discharge, 1.5 second-feet Jan. 19.
1930-36: Maximum discharge, about 408 second-feet May 17, 1935 (gage height, 3.24 feet); minimum daily discharge, 0.5 second-foot Dec. 8, 1932, and Nov. 22, 1934.

Remarks.— Records good except those for periods of ice effect, Oct. 25, Nov. 2, 6, 7, Nov. 29 to Dec. 4, Dec. 7-10, 14, 15, 21-23, Jan. 2-11, 13-15, 17-23, 26-31, Feb. 3-11, 13, 14, 16, 18-21, 26, 27, Mar. 15-17, 24-27, Apr. 3, which are poor and were computed on basis of two discharge measurements, records for Cimarron River at Springer and Vermejo River near Dawson, and weather records. No diversions above station.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5.6	4.4	4.5	3.8	3.3	4.4	5.6	14	8.8	3.3	7.1	5.4
2	5.4	4.6	4.5	4.0	3.3	4.4	5.6	14	8.1	3.1	6.4	4.8
3	5.1	4.8	4.6	3.5	2.5	5.1	5.0	14	8.1	3.1	6.8	9.2
4	4.8	3.8	4.0	4.0	2.0	5.4	5.6	14	8.5	2.7	9.5	4.8
5	4.6	2.9	4.4	4.0	2.0	5.6	5.4	13	7.8	2.4	7.8	4.0
6	4.6	4.0	5.1	3.5	2.5	5.1	5.4	12	6.6	2.4	6.6	3.5
7	4.8	4.5	4.8	2.5	3.0	4.8	6.1	13	6.4	2.4	6.1	4.6
8	4.4	5.1	4.5	3.0	3.0	4.8	7.1	13	5.8	11	11	5.1
9	4.2	5.4	4.5	3.5	3.5	5.8	9.8	17	5.4	4.4	11	3.8
10	4.2	5.1	4.7	3.8	3.0	7.4	9.8	19	5.8	3.8	5.6	3.5
11	3.8	4.6	5.1	4.0	3.5	6.8	15	25	6.8	3.6	4.8	4.2
12	3.8	4.6	5.4	4.0	3.5	7.1	18	27	6.4	3.8	4.2	6.8
13	3.8	4.8	4.6	3.5	3.5	7.4	18	22	6.4	3.3	4.4	4.2
14	4.0	5.4	4.0	3.5	3.3	7.8	18	22	5.1	2.7	4.0	3.6
15	4.0	3.5	3.0	4.0	3.5	7.5	18	25	4.6	2.9	3.6	3.5
16	4.0	5.4	3.3	4.2	3.3	7.0	18	25	4.6	4.2	3.6	3.3
17	4.0	5.1	3.8	2.5	3.6	7.5	18	25	4.0	3.3	2.9	3.3
18	4.2	4.8	3.3	2.0	2.5	8.1	18	26	3.6	2.7	3.3	3.5
19	4.4	3.8	3.8	1.5	3.0	8.8	18	25	3.5	2.4	3.6	5.8
20	6.8	5.1	3.6	2.5	3.5	8.1	18	23	3.3	2.6	4.8	5.4
21	5.6	5.1	3.5	3.0	3.5	9.1	18	20	3.3	2.4	5.6	4.4
22	4.8	5.4	4.0	3.5	3.5	9.5	19	19	3.1	3.3	4.0	4.0
23	5.4	5.8	4.0	3.5	3.8	7.4	18	18	3.8	2.4	3.3	3.5
24	5.1	4.6	3.5	3.8	4.0	7.0	18	17	4.6	2.2	2.9	3.1
25	5.0	5.4	3.0	3.5	3.6	6.0	18	16	4.4	1.9	2.6	2.7
26	5.6	5.1	3.5	2.5	3.5	5.0	18	15	4.0	1.9	2.3	2.9
27	6.1	3.1	4.0	3.0	3.8	5.0	18	15	3.6	2.0	2.3	4.0
28	5.6	4.2	4.0	3.0	4.2	5.8	17	14	5.8	3.5	3.8	4.8
29	5.6	4.5	4.2	3.0	4.0	5.8	16	13	3.8	4.4	3.8	5.8
30	4.8	5.0	4.0	3.0	-	6.6	15	11	3.5	8.8	13	7.8
31	4.0	-	4.0	3.0	-	7.1	-	10	-	14	7.4	-
Month						Second-foot-days	Maximum	Minimum	Mean		Run-off in acre-feet	
October.....						148.1	6.8	3.8	4.78		294	
November.....						139.9	5.8	2.9	4.66		277	
December.....						127.1	5.4	3.0	4.10		252	
Calendar year 1935.....						5,837.8	266	1.5	16.0		11,570	
January.....						102.1	4.2	1.5	3.29		203	
February.....						95.0	4.2	2.0	3.28		188	
March.....						203.2	9.5	4.4	6.55		403	
April.....						417.4	19	5.0	13.9		822	
May.....						556	27	10	17.9		1,100	
June.....						159.5	8.8	3.1	5.32		316	
July.....						116.9	14	1.9	3.77		232	
August.....						170.1	13	2.3	5.49		337	
September.....						136.3	9.2	2.7	4.54		270	
Water year 1935-36.....						2,371.6	27	1.5	6.48		4,700	

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. 10 E., 130 feet below head gate, 5 miles southwest of Lake Charette, and 10 miles south of Ocate.

Records available.- May 1933 to September 1936.

Extremes.- Maximum discharge during year, about 188 second-feet May 30 (gage height, 3.03 feet); no flow for most of year.

1933-36: Maximum discharge, about 895 second-feet Aug. 26, 1933 (gage height, 5.14 feet); no flow for extended periods.

Remarks.- Records poor. Corrected for ice effect Dec. 24 to Jan. 16, Jan. 18 to Feb. 15, and computed for period of missing gage heights, July 15-24, on basis of weather records, study of trace, and knowledge of local conditions. Diversions for irrigation above station. Colmor Intake Canal diverts water from Ocate Creek to Lake Charette, which is utilized as a storage reservoir by the Colmor Irrigation District.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1			0	0	0			0			0	0
2			0	0	0			0			0	0
3			0	0	0			0			3.8	0
4			0	0	0			0			4.6	0
5			0	0	0			0			0	0
6			0	0	0			0			0	0
7			0	0	0			0			0	2.0
8			0	0	0			0			0	3.9
9			0	0	0			0			0	.4
10			0	0	0			0			0	.1
11			0	0	0			0			0	0
12			0	0	.1			0			0	0
13			0	0	.3			0			0	0
14			0	1	.2			0			0	0
15			0	3	.2			0			0	0
16			0	4	.2			0			0	0
17			0	5.3	.1			0			0	0
18			0	4	0			0			0	0
19			0	2	0			0			0	0
20			0	0	0			0			0	0
21			0	0	0			0			0	0
22			0	0	0			0			0	0
23			.6	0	0			0			0	0
24			0	0	0			0			0	0
25			0	0	0			0			0	0
26			0	0	0			0			0	0
27			0	0	0			0			0	0
28			0	0	0			0			0	0
29			0	0	0			0			0	0
30			0	0	-			69			43	0
31			0	0	-			2.0			.4	-
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.....						.6	.6	0	.02	1.2		
Calendar year 1935.....						579.4	152	0	1.59	1,150		
January.....						19.3	5.3	0	.62	38		
February.....						1.1	.3	0	.04	2.2		
March.....						0	0	0	0	0		
April.....						0	0	0	0	0		
May.....						71.0	69	0	2.29	141		
June.....						0	0	0	0	0		
July.....						0	0	0	0	0		
August.....						51.8	43	0	1.67	103		
September.....						6.4	3.9	0	.21	13		
Water year 1935-36						150.2	69	0	.41	298		

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 1936.

Extremes.— Maximum discharge during year, 1,000 second-feet Sept. 19 (gage height, 6.31 feet) from rating curve extended above 400 second-feet; minimum daily discharge, 2.8 second-feet Aug. 1.

1931-36: Maximum discharge and stage, those of Sept. 19, 1936; no flow at times.

Remarks.— Records fair except those for period of missing gage heights, Oct. 24, 25, 27-31, Nov. 1, 2, 4-8, 10-13, 30, Dec. 1, 2, 21-23, 25-26, Jan. 2-5, Mar. 23-25, '30, 31, Apr. 4-7, 10-14, 16-21, 23-28, May 27 to June 4, July 2, 4-17, 19-22, and for periods of ice effect, Dec. 15-20, 24, 29-31, Jan. 1, 6-11, 13, 14, 16-24, 27, Feb. 3-10, 17, which were computed on basis of records for stations near Golondrinas and Shoemaker, weather records, and gage heights and which are poor. Diversions for irrigation above station.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	20	14	12	8	11	8.5	5.4	13	60	4.4	2.8	5.4
2	19	15	13	8	12	7.4	6.4	16	50	4.4	3.0	5.1
3	18	16	13	9	9	5.8	6.7	25	45	4.4	18	6.7
4	18	15	13	8.5	8	9.2	6	36	45	4	13	7.4
5	18	14	17	9	7	11	6	20	40	4	5.1	6.4
6	17	15	16	8	7	12	5	22	29	4	6.7	6.7
7	20	16	16	6.5	8	11	5	40	21	4	16	23
8	16	16	16	7	9	12	5.1	61	16	5	3.7	11
9	17	15	17	7.5	8.5	12	6.7	68	20	20	3.9	8.3
10	16	15	17	8	8	9.2	6	60	14	15	4.4	9.2
11	14	16	16	10	8.8	14	5	52	20	10	5.1	9.2
12	16	13	17	9.2	7.4	9.7	5	53	18	7	4.8	7.1
13	14	14	17	8	9.2	10	5	57	12	20	4.4	6.1
14	18	13	16	8.5	8.8	13	5	51	14	10	4.4	7.9
15	17	12	12	9.7	10	11	5.1	57	16	5	4.8	7.4
16	17	11	10	8	8.8	12	5	62	12	10	4.1	8.3
17	17	10	10	7	8	11	5	62	9.7	4.5	4.5	5.4
18	16	12	11	6	9.2	9.2	5	61	8.8	3.7	6.1	5.8
19	15	11	10	6	9.2	9.3	5	60	6.1	3.5	5.4	7.3
20	24	11	9.5	7	8.8	5.8	5	60	3.9	3.5	7.1	33
21	20	11	10	8	7.9	5.4	5	60	3.7	4.0	7.9	38
22	18	8.8	9	8.5	7.9	4.4	4.4	60	4.8	3.8	7.4	58
23	23	11	8.5	8	8.8	4.0	4	58	5.1	3.9	5.8	29
24	22	11	8	8	11	4.5	4	56	4.4	3.7	5.1	20
25	22	16	7.5	9.7	8.8	5.0	5	54	4.1	3.9	5.4	17
26	20	13	8	9.2	7.9	5.8	5.5	53	4.4	4.1	4.8	16
27	20	13	8.5	9	7.9	4.4	6	55	4.4	14	4.4	20
28	18	13	9	9.7	6.7	6.4	6.5	60	4.4	7.4	5.1	24
29	16	13	8	9.7	7.9	6.7	6.7	70	5.1	3.7	7.4	24
30	15	12	8	11	-	6	11	75	5.8	3.0	12	22
31	15	-	8.5	11	-	7	-	70	-	16	7.9	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						556	24	14	17.9	1,100		
November.....						395.0	16	8.8	13.2	763		
December.....						371.5	17	7.5	12.0	737		
Calendar year 1935.....						14,701.0	440	.5	40.3	29,160		
January.....						260.7	11	6	8.41	517		
February.....						250.5	12	6.7	8.64	497		
March.....						262.5	14	4.0	6.47	521		
April.....						166.5	11	4	5.55	330		
May.....						1,607	75	13	51.8	3,190		
June.....						506.7	60	3.7	16.9	1,010		
July.....						213.9	20	3.0	6.90	424		
August.....						202.8	18	2.8	6.54	402		
September.....						520.4	73	5.1	17.5	1,030		
Water year 1935-36.....						5,313.5	75	2.8	14.5	10,540		

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 1936 in reports of U. S. Geological Survey; March 1915 to December 1931 in reports of State engineer.

Extremes.- Maximum discharge during year, about 643 second-feet May 28 (gage height, 5.60 feet); minimum daily discharge, 0.5 second-foot July 24-27, Aug. 28, 27. 1930-36: Maximum discharge, 1,220 second-feet May 18, 1935 (gage height, 7.98 feet) from rating curve extended above 500 second-feet; no flow at times.

Remarks.- Records fair except those for periods of ice effect, Nov. 28-30, Dec. 8, 10, 14-31, Jan. 1-12, 14-31, Feb. 1, 3-8, 10-12, 14, 18, 19, 27, Mar. 28, and those for June 22-27, 30, July 23, which were computed on basis of records for stations at La Cueva and near Shoemaker, three discharge measurements, gage heights, and weather records and are poor. Diversions for irrigation above station.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	22	16	14	9	12	11	3.0	1.2	98	0.9	2.0	3.6
2	21	19	19	11	13	8.9	2.8	.7	84	.8	.7	2.4
3	18	18	15	9	10	8.1	2.2	5.1	74	.8	8.1	3.0
4	17	16	13	11	8	7.4	2.1	19	66	.7	27	4.6
5	18	16	15	10	8	7.7	2.0	11	55	.6	4.4	3.0
6	18	16	15	9	9	8.5	1.8	7.4	33	.6	3.2	3.0
7	22	18	16	7	11	11	1.2	14	15	.6	35	47
8	20	17	17	8	12	8.9	1.1	53	14	.6	10	29
9	19	15	18	8.5	11	8.5	1.7	77	5.7	30	2.8	12
10	19	16	17	10	10	7.7	2.0	68	18	26	2.7	8.9
11	16	18	18	12	13	7.7	2.2	63	41	36	3.2	7.7
12	16	14	13	11	11	7.4	1.2	56	19	4.0	3.0	7.7
13	15	15	19	11	8.9	5.7	1.2	62	15	96	2.1	6.8
14	17	13	15	12	10	7.4	1.2	59	12	33	1.0	6.0
15	17	12	12	13	11	8.9	1.1	66	12	4.2	1.0	3.8
16	16	11	10	10	11	8.9	1.2	76	13	22	.8	3.0
17	19	9.8	11	9	10	7.7	1.2	80	8.9	4.2	.6	2.8
18	16	9.3	12	7	10	6.8	2.2	84	5.7	2.1	.6	2.4
19	14	12	11	7	10	6.2	2.1	77	2.8	1.4	.6	18
20	22	11	10	8	11	4.6	2.2	72	2.0	1.4	.6	95
21	22	11	11	9	12	4.2	1.5	59	2.1	4.8	1.2	40
22	21	10	10	10	10	4.0	1.3	52	1.6	1.8	1.4	104
23	23	9.8	9.5	9	10	4.0	1.0	43	1.5	.8	1.2	40
24	23	10	9	9	11	4.2	.9	56	1.8	.5	.8	24
25	25	12	8	10	12	5.1	.9	61	2.0	.5	.6	21
26	22	15	9	8	8.5	5.0	1.0	61	1.8	.5	.5	16
27	22	13	10	9	8.5	5.4	1.2	63	2.0	.5	.5	26
28	22	13	11	9	8.9	5.1	2.0	85	2.5	15	.7	34
29	21	14	10	8	8.9	6.2	1.4	112	3.0	1.2	.6	35
30	18	13	9	9	-	5.4	1.2	101	1.8	.6	10	35
31	18	-	10	11	-	6.0	-	106	-	12	11	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						599	25	14	19.3	1,190		
November.....						412.9	19	9.3	13.8	619		
December.....						402.5	19	8	13.0	798		
Calendar year 1935						17,883.8	793	.4	49.0	35,480		
January.....						293.5	13	7	9.47	582		
February.....						299.7	13	8	10.3	594		
March.....						215.6	11	4.0	6.89	424		
April.....						48.1	3.0	.9	1.80	95		
May.....						1,750.4	112	.7	56.5	3,470		
June.....						614.2	98	1.5	20.5	1,220		
July.....						304.1	96	.5	9.81	603		
August.....						137.9	35	.5	4.45	274		
September.....						644.4	104	2.4	21.5	1,280		
Water year 1935-36						5,720.3	112	.5	15.6	11,350		

Mora River near Shoemaker, N. Mex.

Location.- Water-stage recorder, lat. 35°48', long. 104°48', in sec. 10, T. 18 N., R. 20 E., 5½ miles east of Shoemaker and about 23 miles above confluence with Canadian River.

Drainage area.- 1,160 square miles.

Records available.- October 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 water year ending Sept. 30, 1935, 3,100 second-feet May 15 (gage height, 8.14 feet); no flow Oct. 1-5.
Maximum discharge during water year ending Sept. 30, 1936, 1,120 second-feet Aug. 31 (gage height, 4.34 feet); minimum daily discharge, 0.1 second-foot Sept. 18.
1930-36: Maximum discharge, that of May 15, 1935; no flow at times.

Remarks.- Records fair except those for periods of ice effect, Dec. 17-26, 28-31, 1935, Jan. 1-13, 17-24, 26-31, Feb. 2-10, 17-19, 26, 1936, which were computed on basis of three discharge measurements, gage heights, weather records, and records for stations on Mora River at La Queva and near Golondrinas and Coyote Creek near Golondrinas and are 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	0.6	1.8	2.2	1.6	1.6	1.1	1.1	218	5.0	0.9	92
2	0	.7	1.6	2.2	1.8	1.6	1.1	1.1	192	4.4	5.5	252
3	0	.6	1.6	2.2	1.8	1.6	1.0	2.2	182	4.1	87	77
4	0	.7	1.6	2.3	2.0	1.5	1.1	2.5	172	3.6	968	86
5	0	.7	1.6	2.8	2.0	1.3	1.0	2.3	154	3.6	205	73
6	0	.7	1.8	2.8	2.2	1.3	.8	1.6	140	3.3	116	71
7	0	.8	2.2	4.9	2.0	1.5	1.0	1.8	147	3.3	92	63
8	0	1.0	2.2	3.4	1.8	1.5	1.1	46	134	2.8	72	68
9	.2	1.0	2.3	2.5	1.8	1.5	1.1	48	132	32	59	79
10	.2	.8	2.2	2.3	2.2	1.5	.8	46	123	14	69	74
11	.4	.8	2.0	2.3	2.0	1.5	.7	40	100	3.0	68	61
12	.4	.8	2.0	2.3	2.2	1.6	1.0	56	84	1.0	43	59
13	.3	1.1	2.0	2.2	2.0	1.6	1.0	51	96	2.1	51	54
14	.2	1.3	2.2	2.2	2.0	1.6	.8	45	119	2.1	34	48
15	.2	1.3	2.0	2.0	2.3	1.5	.8	38	119	1.7	26	38
16	.1	1.5	2.2	1.8	2.2	1.1	.8	30	110	1.9	20	35
17	1.0	2.2	2.0	1.8	2.2	1.5	.8	450	98	1.9	16	33
18	.7	1.6	2.0	1.8	2.2	1.5	2.8	1,670	80	1.7	14	28
19	.4	1.3	2.0	1.8	2.2	1.6	2.5	1,200	62	1.9	13	22
20	.2	1.3	2.2	1.5	2.0	1.3	1.8	1,970	51	1.7	12	19
21	.2	2.0	2.2	2.2	1.6	1.1	1.3	1,160	45	1.7	326	19
22	.2	1.6	2.2	2.0	1.6	1.0	1.3	756	38	1.6	168	19
23	.2	1.5	2.2	2.0	1.6	1.0	1.1	656	34	23	62	15
24	.2	1.5	2.2	1.8	1.5	1.1	1.0	750	28	2.5	53	18
25	.2	1.8	2.2	1.8	1.3	1.1	1.0	595	26	1.2	58	20
26	.4	1.5	2.2	1.8	1.8	1.0	1.0	530	20	1.1	144	223
27	.6	1.6	3.4	1.8	1.8	1.1	1.0	448	17	1.1	219	54
28	.7	1.5	2.5	1.6	1.6	1.1	1.1	382	14	1.0	428	50
29	.6	1.6	2.3	1.6	-	1.1	1.3	324	9.2	.9	232	48
30	.6	1.5	2.2	1.6	-	1.1	1.3	255	6.2	.5	568	39
31	1.0	-	2.2	1.6	-	1.1	-	252	-	.8	190	-
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.....				65.3	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.....				53.3	2.3	1.3	1.90	106				
March.....				41.5	1.6	1.0	1.34	82				
April.....				34.5	2.8	.7	1.15	68				
May.....				11,555.6	1,970	1.1	362	23,520				
June.....				2,752.4	218	6.2	51.7	5,460				
July.....				130.8	32	.8	4.22	259				
August.....				4,469.4	968	.9	144	8,860				
September.....				1,840	252	18	61.3	3,660				
Water year 1934-35.....				21,356.2	1,970	0	58.5	42,360				

Note.- The above records supersede those published in Water-Supply Paper 787.

Mora River near Shoemaker, N. Mex.

(Continued)

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	36	20	3.3	30	27	5.2	2.8	1.7	74	1.2	0.8	18
2	34	20	4.1	25	25	4.1	2.6	1.7	58	1.1	.9	4.7
3	32	18	5.5	20	15	3.8	2.8	1.7	47	1.0	2.3	1.1
4	29	20	6.2	25	15	3.6	2.5	1.6	41	1.0	5.0	.6
5	28	18	5.8	20	16	3.8	2.5	1.4	35	.9	3.6	.4
6	29	16	5.8	15	20	4.1	2.8	1.2	28	.8	2.3	.3
7	29	17	7.5	12	25	4.1	2.8	1.6	19	.8	5.5	.3
8	29	19	7.1	15	25	5.2	2.6	1.9	9.2	1.0	24	14
9	25	19	6.6	20	20	5.5	2.5	1.6	6.6	1.0	7.9	8.7
10	22	18	6.6	25	25	5.5	2.5	2.5	12	1.6	1.6	2.3
11	22	18	6.6	30	30	5.2	2.5	3.6	32	5.8	.8	1.0
12	20	19	7.9	25	30	5.0	2.6	3.0	36	8.3	.6	.9
13	18	19	7.9	25	28	4.4	2.5	2.5	14	2.3	.6	.6
14	19	16	8.3	29	24	4.4	2.3	2.5	9.6	34	.5	.4
15	16	15	8.3	26	23	3.8	2.1	2.6	6.2	9.2	.4	.3
16	15	14	7.5	27	26	3.8	2.1	3.0	6.6	2.5	.3	.3
17	14	13	15	15	15	3.6	2.3	3.8	12	1.7	.3	.3
18	14	12	20	13	18	3.6	2.1	5.5	5.0	1.4	.3	.1
19	16	9.6	20	15	22	3.6	2.1	12	3.3	1.1	.2	.2
20	22	10	20	20	26	3.6	2.1	9.6	2.5	1.0	.2	48
21	30	7.1	20	20	25	3.6	2.1	5.8	1.9	1.0	.6	24
22	27	4.7	25	25	24	3.6	1.9	4.1	1.7	2.3	.5	84
23	26	3.0	20	20	22	3.0	1.7	4.4	1.6	1.1	.4	67
24	28	2.8	25	20	13	3.3	1.9	46	1.7	.7	.3	21
25	28	2.8	17	28	11	2.8	2.1	12	1.6	.7	.3	11
26	28	3.8	25	15	10	2.6	2.1	23	1.4	.6	.3	11
27	24	5.0	28	25	11	2.3	2.1	19	1.2	3.0	.5	17
28	24	5.8	25	25	10	2.3	1.9	18	1.2	1.6	.5	23
29	23	5.2	25	15	9.2	2.6	1.9	175	1.2	1.6	.6	28
30	22	3.8	25	20	-	4.1	1.7	219	1.6	1.0	1.0	29
31	21	-	25	25	-	3.6	-	107	-	.9	170	-
Month					Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet			
October.....					750	36	14	24.2	1,490			
November.....					374.6	20	2.8	12.5	745			
December.....					440.0	28	3.3	14.2	875			
Calendar year 1935.....					22,809.2	1,970	.7	62.5	45,240			
January.....					670	30	12	21.6	1,330			
February.....					590.2	30	9.2	20.4	1,170			
March.....					119.7	5.5	2.3	3.88	237			
April.....					68.5	2.8	1.7	2.28	136			
May.....					697.3	219	1.2	22.5	1,380			
June.....					472.1	74	1.2	15.7	936			
July.....					106.6	34	.6	3.44	211			
August.....					232.9	170	.2	7.51	462			
September.....					417.5	84	.1	13.9	828			
Water year 1935-36.....					4,939.4	219	.1	13.5	9,800			

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 1936 in reports of U. S. Geological Survey; April 1926 to December 1931 in reports of State engineer.

Extremes.— Maximum discharge during year, about 3,020 second-feet Aug. 30 (gage height, 10.1 feet) from rating curve extended above 250 second-feet; minimum daily discharge, 1.0 second-foot Apr. 12, 14-16, 18.
1930-36: Maximum discharge, that of Aug. 30, 1936; minimum daily discharge, 0.3 second-foot June 14, 15, July 6, 1934.

Remarks.— Records fair except those for periods of ice effect, Nov. 14, 15, 28-30, Dec. 1, 3-16, 23-25, 27, Jan. 1-3, 5-9, 11-31, Feb. 1-14, 17, June 2-8, which were computed on basis of records for Mora River at La Cueva and near Golondrinas, one discharge measurement, gage heights, and weather records and are poor. Diversions for irrigation above station.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5.0	5.2	5.5	4.0	6.0	6.1	2.1	1.9	4.7	1.9	1.9	12
2	4.7	5.0	6.4	4.0	6.5	6.1	1.8	2.1	4.8	1.9	3.1	8.4
3	4.7	5.2	5.5	4.5	5.0	6.1	1.9	2.4	4.9	1.9	17	8.4
4	4.5	5.0	5.0	5.2	4.5	6.4	1.9	2.1	5.0	1.7	2.9	6.4
5	4.5	5.4	5.5	4.5	4.0	7.4	1.6	2.2	5.2	1.9	1.9	5.4
6	4.5	6.1	5.5	4.0	4.5	8.7	1.7	2.1	5.3	1.5	20	5.2
7	4.5	5.7	5.5	3.5	5.0	11	2.2	2.5	5.4	1.2	46	33
8	4.3	5.2	5.5	4.0	6.0	10	2.1	3.6	4.3	1.2	4.1	16
9	4.3	5.7	5.5	4.5	6.0	9.2	1.9	3.1	10	13	2.2	6.7
10	4.3	5.7	6.0	5.4	6.5	8.4	1.7	2.8	19	12	2.2	5.2
11	4.1	6.1	5.5	6.0	7.0	5.0	1.4	2.8	27	4.5	2.2	6.4
12	3.9	5.4	5.5	6.0	7.0	7.0	1.0	2.9	7.4	2.6	2.2	5.4
13	3.9	5.7	5.0	5.5	6.5	3.4	1.2	2.5	4.7	29	2.2	4.3
14	3.9	5.5	4.5	6.0	6.7	2.8	1.0	2.8	3.6	5.2	2.6	3.9
15	3.6	5.0	3.5	6.0	7.0	2.4	1.0	2.9	3.1	3.6	2.8	3.9
16	3.9	5.4	3.5	5.5	6.7	2.2	1.0	2.9	3.2	3.1	2.8	3.6
17	3.9	5.0	4.3	5.0	5.9	2.4	1.1	2.6	3.1	2.8	2.6	3.6
18	3.9	4.7	4.5	4.0	5.7	2.9	1.0	2.6	2.9	2.6	2.6	3.4
19	3.6	4.7	4.5	3.5	6.4	2.5	1.1	2.6	2.8	1.9	2.6	4.5
20	3.9	4.5	3.9	4.0	4.7	2.4	1.2	2.6	2.8	1.8	2.9	17
21	3.9	5.0	3.9	4.5	4.7	2.5	1.2	2.5	2.8	1.8	3.6	8.4
22	4.1	5.4	3.9	5.5	5.4	2.4	1.4	3.1	2.5	1.6	3.4	140
23	4.1	5.7	4.0	6.0	4.5	2.5	1.4	3.2	2.1	1.6	3.1	20
24	4.5	5.4	3.0	6.5	4.5	2.5	1.2	2.2	1.5	1.7	2.9	12
25	4.5	7.0	3.5	6.0	5.2	2.8	1.2	2.1	1.5	2.1	3.1	10
26	4.5	9.2	4.1	5.0	4.7	2.4	1.2	2.8	1.4	1.7	2.6	9.2
27	4.5	7.7	4.5	5.5	5.4	1.9	1.1	4.1	1.4	1.7	2.8	11
28	4.7	5.5	4.3	6.0	5.2	1.8	1.2	5.0	5.4	1.6	2.8	13
29	4.7	6.0	4.5	5.5	5.4	1.8	1.2	7.0	2.5	1.7	2.6	12
30	5.2	6.0	4.1	5.0	-	1.9	1.2	241	2.2	5.5	279	12
31	5.0	-	4.0	5.5	-	1.9	-	5.7	-	6.6	29	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	133.6	5.2	3.6	4.31	265
November.....	169.1	9.2	4.5	5.64	335
December.....	144.4	6.4	3.0	4.66	286
Calendar year 1935.....	4,013.0	336	.4	11.0	7,960
January.....	156.1	6.5	3.5	5.04	310
February.....	161.7	7.0	4.0	5.56	321
March.....	136.4	11	1.6	4.40	271
April.....	122.2	2.2	1.0	1.41	84
May.....	333.6	241	1.9	10.8	662
June.....	152.6	27	1.4	5.09	303
July.....	121.0	29	1.2	3.90	240
August.....	462.1	279	1.9	14.9	917
September.....	412.3	140	3.4	13.7	816
Water year 1935-36.....	2,425.3	279	1.0	6.65	4,610

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 1936.

Extremes.- Maximum discharge observed during year, 15,100 second-feet Dec. 6 (gage height, 14.5 feet); no flow July 7 to Sept. 23.
1930-36: Maximum discharge observed, 37,900 second-feet June 17, 1935 (gage height, 25.0 feet) from rating curve extended above 10,000 second-feet; no flow Sept. 1-24, 1930, Sept. 8-21, 1932, July 23 to Sept. 1, 1934, July 7 to Sept. 23, 1936.

Remarks.- Records fair. Gage read twice daily.

Rating table, water year 1935-36 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Sept. 29, 30)

0.85	0	3.0	850	6.0	3,360	11.0	9,400
1.0	2	3.5	1,250	7.0	4,320	12.0	10,900
1.5	45	4.0	1,650	8.0	5,400	13.0	12,500
2.0	200	4.5	2,050	9.0	6,650	14.0	14,200
2.5	490	5.0	2,460	10.0	8,000	15.0	16,000

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	6	78	365	93	47	148	176	65	24	1		0
2	5	78	300	120	68	136	266	61	22	1		0
3	4	78	240	132	70	132	335	55	19	1		0
4	4	72	210	140	82	132	261	51	16	1		0
5	4	78	759	140	82	124	256	47	14	1		0
6	3	78	13,500	144	78	124	425	44	13	1		0
7	3	78	4,420	140	78	117	341	40	15	0		0
8	4	82	2,130	140	78	111	278	36	11	0		0
9	57	96	1,350	132	72	105	245	45	10	0		0
10	68	555	1,010	128	68	99	225	278	8	0		0
11	55	425	752	124	65	99	235	323	7	0		0
12	47	311	625	124	63	93	230	1,090	6	0		0
13	38	250	490	117	63	88	200	590	5	0		0
14	32	196	456	117	59	82	184	395	5	0		0
15	29	160	395	111	59	82	180	278	4	0		0
16	26	152	323	105	59	78	166	220	4	0		0
17	34	114	268	99	59	72	144	160	3	0		0
18	625	105	250	93	59	72	124	136	3	0		0
19	395	105	220	93	59	68	117	111	3	0		0
20	215	96	196	88	59	68	106	96	3	0		0
21	458	95	176	88	51	68	105	85	2	0		0
22	253	78	168	82	51	68	105	75	2	0		0
23	200	78	152	78	51	88	105	65	2	0		0
24	140	72	140	78	51	890	105	55	2	0		425
25	105	59	128	70	55	565	88	49	2	0		220
26	90	311	108	72	75	425	88	44	1	0		93
27	184	1,330	105	68	99	341	82	45	1	0		3,520
28	136	890	105	63	140	283	78	42	1	0		6,940
29	105	660	105	59	140	245	72	38	1	0		1,330
30	93	490	95	55	-	215	33	33	1	0		660
31	86	-	93	51	-	192	-	26	-	0		-
Month				Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet				
October.....				3,536	625	3	114	7,010				
November.....				7,220	1,350	59	241	14,320				
December.....				29,620	13,500	93	955	58,760				
Calendar year 1935.....				389,842	29,300	1	1,068	773,200				
January.....				3,152	144	51	102	6,260				
February.....				2,048	140	47	70.6	4,060				
March.....				5,400	890	68	174	10,710				
April.....				5,593	425	72	180	10,710				
May.....				4,676	1,090	26	151	9,270				
June.....				210	24	1	7.0	417				
July.....				6	1	0	.2	12				
August.....				0	0	0	0	0				
September.....				13,188	6,940	0	440	26,160				
Water year 1935-36.....				74,454	13,500	0	203	147,700				

Bayou Meto near Stuttgart, Ark.

Location.- Staff gage, lat. 34°27', long. 91°36', in SE $\frac{1}{4}$ sec. 11, T. 3 S., R. 6 W., at highway bridge $5\frac{1}{2}$ miles southwest of Stuttgart.

Records available.- October 1935 to September 1936.

Extremes.- Maximum discharge observed during year, 844 second-feet July 5 (gage height, 10.00 feet); no flow at times.

Remarks.- Records fair. Discharge determined by slope method; slope obtained from auxiliary gage 4 miles downstream. Flow affected by diversions for irrigation. Gages read twice daily.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	87	29	37	42	55	532	14		0		
2	0	101	25	37	44	63	466	15		121		
3	0	97	22	35	53	70	401	16		610		
4	0	97	20	35	53	80	292	17		797		
5	0	97	18	35	55	110	206	23		844		
6	0	97	17	35	55	134	161	36		804		
7	0	109	21	35	52	163	111	37		737		
8	0	122	20	35	53	198	89	34		668		
9	0	136	21	35	49	216	64	34		587		
10	0	140	21	35	49	227	83	34		525		
11	0	171	21	37	49	222	78	34		437		
12	0	262	24	37	57	210	70	32		371		
13	0	326	44	41	60	166	66	22		322		
14	0	374	117	48	56	172	60	16		212		
15	0	366	121	54	56	148	54	10		94		
16	4	336	114	58	56	135	48	7		64		
17	3	303	108	63	54	122	46	2		42		
18	3	265	106	65	46	114	44	4		29		
19	2	201	94	65	46	104	36	7		16		
20	2	166	94	65	46	92	34	2		5		
21	3	116	90	70	46	81	32	0		9		
22	4	96	84	70	46	71	29	0		4		
23	3	84	79	75	46	67	26	0		4		
24	3	120	75	69	46	72	21	0		1		
25	3	51	62	64	46	200	18	0		0		
26	4	32	52	62	49	364	16	0		0		
27	7	35	46	53	49	491	13	0		4		
28	16	42	42	49	49	532	12	0		2		
29	21	36	42	52	52	587	12	0		0		
30	40	32	39	53	-	588	12	0		0		
31	74	-	37	47	-	562	-	0		0		
Month				Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet				
October.....				192	74	0	6.2	381				
November.....				4,489	374	32	150	8,900				
December.....				1,707	121	17	55.1	3,390				
Calendar year												
January.....				1,551	75	35	50.0	3,080				
February.....				1,460	60	42	50.3	2,900				
March.....				6,438	588	55	208	12,770				
April.....				3,152	532	12	105	6,260				
May.....				395	37	0	12.7	783				
June.....				0	0	0	0	0				
July.....				7,299	844	0	235	14,480				
August.....				0	0	0	0	0				
September.....				0	0	0	0	0				
Water year 1935-36.....				26,683	844	0	72.9	52,950				

Red River near Colbert, Okla.

Location.- Water-stage recorder, lat. 33°49', long. 96°32', in SW¼ sec. 25, T. 8 S., R. 7 E., at Missouri-Kansas-Texas Railroad bridge 2 miles south of Colbert and 10 miles below mouth of Washita River. Zero of gage is 507.36 feet (revised) above mean sea level (general adjustment of 1929).

Drainage area.- 38,700 square miles.

Records available.- October 1923 to September 1936.

Average discharge.- 13 years, 5,065 second-feet.

Extremes.- Maximum discharge during year, 86,600 second-feet Sept. 28 (gage height, 15.30 feet); minimum, 320 second-feet Sept. 4, 5, 8 (gage height, 0.83 foot).

1923-36: Maximum discharge, 201,000 second-feet (revised) May 21, 1935 (gage height, 23.95 feet); minimum, 75 second-feet Aug. 21, 1934 (gage height, 0.05 foot, present datum).

Maximum stage known, 35.5 feet, present datum, May 26, 1908.

Remarks.- Records fair. Gage-height record collected in cooperation with U. S. Weather Bureau. Discharge interpolated for May 24, 25, Aug. 6, 7.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,660	2,720	2,120	1,300	964	865	672	960	22,000	1,480	505	340
2	1,440	2,290	1,810	1,300	986	844	684	1,490	14,300	1,440	490	336
3	1,340	1,810	2,530	1,300	1,000	851	697	9,220	10,800	1,620	480	332
4	1,220	1,620	2,660	1,260	940	872	732	13,300	8,900	1,710	475	324
5	1,140	1,610	2,410	1,300	924	851	718	7,400	7,400	1,710	475	328
6	1,040	1,520	31,700	1,260	988	844	684	6,670	6,670	1,520	462	348
7	1,010	1,440	23,800	1,260	988	837	678	4,870	5,950	1,390	450	340
8	996	1,260	16,000	1,300	964	1,220	648	5,520	7,700	1,390	440	324
9	1,100	1,220	14,300	1,300	900	2,470	642	41,900	20,200	1,300	530	1,500
10	1,020	1,100	9,200	1,300	865	2,020	624	25,200	15,800	1,300	515	3,000
11	1,100	1,570	6,910	1,300	693	1,520	618	21,400	11,200	1,300	475	2,470
12	3,710	2,600	5,070	1,340	972	1,300	606	22,600	9,600	1,300	450	2,180
13	3,710	1,960	3,980	1,300	924	1,260	606	10,000	8,300	1,300	435	1,860
14	2,600	1,760	3,210	1,260	858	1,100	606	6,430	6,910	1,570	420	1,810
15	2,120	1,860	2,790	1,260	851	1,020	594	4,670	6,430	1,810	412	1,620
16	1,760	1,660	2,530	1,220	858	924	570	4,470	6,430	1,710	400	1,340
17	1,620	1,480	2,360	1,180	872	879	560	4,270	5,730	1,520	396	1,300
18	1,520	1,440	2,240	1,140	1,170	844	570	3,600	3,690	1,340	392	3,080
19	1,320	1,300	1,810	1,140	802	865	532	3,290	3,620	1,180	368	25,800
20	1,340	1,220	1,660	1,100	732	872	606	2,930	3,530	1,100	380	25,200
21	1,220	1,180	1,620	1,100	830	837	582	2,530	2,930	1,460	372	31,000
22	1,510	1,100	1,620	1,100	851	823	576	2,470	2,530	1,440	364	35,400
23	1,710	1,100	1,620	1,060	868	1,030	565	2,410	2,290	972	360	17,300
24	1,260	1,030	1,620	1,060	816	1,340	560	2,390	2,120	851	372	20,800
25	1,180	1,020	1,620	1,020	865	980	560	2,370	2,020	795	360	28,000
26	1,180	1,050	1,620	1,000	851	1,260	606	2,350	1,960	711	376	30,400
27	1,390	1,100	1,570	972	823	972	704	2,860	1,960	654	364	45,200
28	1,660	2,860	1,520	972	868	866	830	3,890	1,710	612	352	79,200
29	1,760	3,070	1,440	980	872	844	1,010	8,600	1,620	576	340	79,400
30	1,860	2,470	1,340	964	-	746	1,060	19,000	1,570	560	344	57,200
31	1,860	-	1,300	932	-	690	-	27,300	-	525	344	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	49,426	3,710	996	1,594	98,040
November.....	49,620	3,070	1,020	1,654	98,420
December.....	156,770	31,700	1,300	5,057	310,900
Calendar year 1935.....	3,110,825	201,000	490	8,523	6,170,000
January.....	36,270	1,340	932	1,170	71,940
February.....	26,077	1,170	816	899	51,720
March.....	32,666	2,470	690	1,054	64,790
April.....	19,750	1,060	560	958	39,170
May.....	276,780	41,900	960	8,928	549,000
June.....	206,070	22,000	1,570	6,869	406,700
July.....	38,136	1,810	525	1,230	75,640
August.....	12,938	530	340	417	25,660
September.....	496,832	79,400	324	16,560	985,500
Water year 1935-36.....	1,401,335	79,400	324	3,829	2,779,000

Red River at Garland, 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 208.08 feet above mean sea level (general adjustment of 1929).

Drainage area.- 51,500 square miles.

Records available.- October 1927 to December 1931, June 1934 to September 1936.

Extremes.- Maximum discharge during year, 73,700 second-feet Dec. 11 (gage height, 22.90 feet); minimum, 980 second-feet Aug. 27-29, Sept. 2-16; minimum gage height, 1.82 feet Sept. 16.

1927-31, 1934-36: Maximum discharge, 143,000 second-feet June 25, 1935 (gage height, 34.37 feet); minimum, 400 second-feet Oct. 8-19, 1931 (gage height, 3.2 feet, present datum).

Maximum stage known, 35.4 feet, present datum, in April 1927.

Remarks.- Records fair.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4,970	8,400	10,200	5,480	3,070	6,020	4,150	1,920	5,660	2,620	1,780	1,040
2	5,310	7,560	11,000	5,310	3,070	6,390	3,630	1,920	9,340	2,480	1,640	980
3	6,390	8,400	9,640	5,310	3,070	6,020	3,520	2,200	21,700	2,620	1,640	980
4	6,390	12,200	7,960	5,140	3,070	5,480	3,220	2,540	25,700	2,920	1,500	980
5	5,660	15,900	6,960	4,970	3,070	5,310	2,920	2,540	17,700	3,670	1,430	980
6	4,800	16,700	6,390	4,970	3,220	5,140	2,770	2,480	13,400	3,830	1,360	980
7	4,150	14,000	6,770	4,800	3,370	5,660	2,480	2,770	11,500	3,220	1,290	980
8	3,670	12,200	18,100	4,630	3,370	7,960	2,480	3,070	9,900	2,770	1,290	980
9	3,520	12,500	57,800	4,630	3,370	9,380	2,340	6,770	8,640	2,480	1,290	980
10	3,370	13,400	70,400	4,470	3,370	9,640	2,340	8,180	7,960	2,620	1,290	980
11	3,220	13,400	73,100	4,470	3,220	9,120	2,200	23,700	7,560	2,620	1,290	980
12	3,070	12,200	69,900	4,630	3,220	7,960	2,200	35,400	7,960	2,620	1,220	980
13	2,920	11,000	62,900	4,800	3,220	6,770	2,060	43,000	13,700	2,480	1,220	980
14	2,920	10,700	55,600	4,630	3,220	6,020	2,060	47,500	15,400	2,340	1,220	980
15	2,920	10,200	48,500	4,630	3,070	5,660	2,060	49,000	10,200	2,200	1,160	980
16	2,770	9,380	40,600	4,470	3,070	5,660	2,060	40,100	8,880	2,060	1,160	980
17	2,770	8,180	33,000	4,310	2,920	5,480	1,920	30,200	7,960	1,920	1,160	1,040
18	2,920	7,360	25,400	4,310	2,920	5,140	1,780	22,100	7,360	1,780	1,160	2,480
19	4,150	6,770	18,800	4,310	2,920	4,630	1,780	15,200	6,960	1,760	1,100	2,920
20	4,530	5,840	13,400	3,990	2,920	4,150	1,640	11,000	6,390	1,780	1,100	2,920
21	4,310	5,310	9,900	3,990	2,770	3,830	1,640	8,880	6,390	1,920	1,100	2,770
22	3,830	4,800	9,180	3,830	2,770	3,670	1,640	7,760	6,020	2,200	1,040	1,730
23	3,520	4,310	7,360	3,670	2,620	3,370	1,640	6,960	5,310	2,200	1,040	12,600
24	3,220	3,830	6,960	3,670	2,480	3,370	1,640	6,390	4,530	2,480	1,040	29,400
25	3,220	3,520	6,580	3,670	2,480	3,220	1,640	5,660	4,310	2,480	1,040	35,800
26	3,220	3,370	6,390	3,520	2,620	3,370	1,640	5,140	3,990	2,200	1,040	28,600
27	3,520	3,070	6,200	3,520	2,770	3,990	1,780	4,630	3,830	2,060	980	24,100
28	3,670	2,920	6,020	3,370	2,770	4,310	1,920	4,310	3,570	2,060	980	34,400
29	4,310	3,670	5,840	3,370	3,670	3,990	1,920	3,990	3,070	2,060	980	51,000
30	10,200	7,160	5,660	3,220	-	4,150	1,920	3,930	2,770	2,200	1,040	67,700
31	9,640	-	5,480	3,220	-	4,310	-	3,990	-	1,920	1,040	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	133,180	10,200	2,770	4,296	264,200
November.....	258,150	16,700	2,920	5,605	512,000
December.....	720,990	73,100	5,480	23,256	1,430,000
Calendar year 1935.....	10,869,420	143,000	2,200	29,780	21,560,000
January.....	133,310	5,480	3,220	4,300	264,400
February.....	87,700	3,670	2,480	3,024	174,000
March.....	169,170	9,640	3,220	5,457	355,500
April.....	67,190	4,150	1,640	2,240	135,300
May.....	412,750	49,000	1,920	13,310	818,600
June.....	265,360	23,700	2,770	8,779	522,400
July.....	74,590	3,830	1,780	2,406	147,900
August.....	37,620	1,780	980	1,214	74,620
September.....	313,200	67,700	980	10,440	621,200
Water year 1935-36.....	2,671,190	73,100	980	7,298	5,298,000

Pease River near Crowell, Tex.

Location.- Chain 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, Foard County. Zero of gage is 1,330.44 feet above mean sea level (Texas State Highway Department datum). Prior to Apr. 25, 1936, staff gage 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 1936.

Average discharge.- 11 years (1924-26, 1927-36), 191 second-feet.

Extremes.- Maximum discharge during year, about 86,000 second-feet Sept. 18 (gage height, 13.0 feet, from graph based on gage readings) from rating curve extended above 24,000 second-feet; no flow at times.

1924-36: Maximum discharge, that of Sept. 18, 1936; 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 1935, 373,100 acre-feet. Total run-off for water year ending Sept. 30, 1936, 212,400 acre-feet.

Washita River near Durwood, Okla.

Location.- Wire-weight gage, lat. 34°14', long. 96°58', in sec. 3, T. 4 S., R. 3 E., 3 miles north of Durwood.

Records available.- August 1928 to September 1936.

Extremes.- Maximum discharge observed during year, 24,500 second-feet May 9 (gage height, 31.97 feet); minimum, 98 second-feet Sept. 6 (gage height, 3.18 feet).
1928-36: Maximum discharge observed, 36,400 second-feet May 19, 1935 (gage height, 37.22 feet); minimum, 17 second-feet Aug. 14, 1934 (gage height, 2.77 feet).
Maximum stage known, 38 feet in April and June 1927.

Remarks.- Records good. Discharge interpolated June 30, July 7, 8.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	480	570	635	510	405	430	355	355	3,490	600	240	110
2	430	540	695	510	405	430	355	2,660	3,190	1,010	225	122
3	380	630	600	510	405	430	355	7,700	3,130	630	235	148
4	330	630	540	510	405	430	355	2,710	2,830	540	220	152
5	330	510	480	510	405	430	355	2,600	2,400	480	220	128
6	330	455	12,200	510	405	430	330	2,400	3,240	480	195	98
7	330	455	13,400	510	405	430	300	2,400	4,560	500	200	110
8	330	455	4,900	510	405	940	300	6,980	3,850	520	190	116
9	330	455	2,710	510	405	800	300	22,500	3,430	540	164	110
10	2,230	2,080	1,710	480	405	660	300	11,500	2,770	510	185	116
11	5,460	1,780	1,360	480	405	540	300	4,620	3,240	430	176	285
12	2,950	940	1,220	455	405	510	300	2,770	3,720	355	176	660
13	1,500	660	1,010	455	405	480	300	2,010	4,320	380	180	835
14	905	510	905	455	405	480	300	1,860	4,560	380	164	600
15	870	480	835	455	405	455	300	1,860	4,800	380	164	480
16	835	430	800	455	405	455	300	1,220	3,600	355	172	430
17	835	405	730	455	405	455	305	1,010	2,770	330	148	1,150
18	800	405	660	455	405	455	305	1,010	1,860	330	148	5,960
19	695	380	630	455	405	455	305	940	1,220	320	140	2,650
20	660	355	630	430	405	455	300	940	1,150	310	148	1,220
21	540	355	630	430	405	430	300	835	1,010	295	148	1,860
22	480	330	600	430	405	405	300	800	905	355	160	3,050
23	480	330	600	430	405	630	300	870	835	315	144	2,710
24	455	330	600	430	405	455	295	870	905	280	128	6,240
25	455	330	570	430	405	405	295	870	800	255	128	6,300
26	695	405	540	405	405	405	295	835	660	255	128	3,190
27	765	2,080	540	405	430	405	300	905	660	260	122	9,870
28	660	2,080	510	405	430	405	300	1,150	630	230	131	16,200
29	600	1,640	540	405	430	405	305	3,420	600	280	125	11,100
30	600	1,360	540	405	-	355	330	4,860	600	290	110	5,540
31	570	-	540	405	-	330	-	4,100	-	255	110	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						27,310	5,460	330	881	54,170		
November.....						22,365	2,080	330	746	44,360		
December.....						53,060	13,400	480	1,712	105,200		
Calendar year 1935.....						821,225	35,400	240	2,250	1,629,000		
January.....						14,200	510	405	458	28,170		
February.....						11,820	430	405	408	23,440		
March.....						14,780	940	330	477	29,320		
April.....						9,340	355	295	311	18,530		
May.....						101,760	22,500	355	3,283	201,800		
June.....						71,755	4,800	600	2,391	142,300		
July.....						12,450	1,010	630	402	24,690		
August.....						5,124	240	110	165	10,160		
September.....						81,540	16,200	98	2,718	161,700		
Water year 1935-36.....						425,484	22,500	98	1,163	845,800		

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.

Records available.- December 1930 to September 1936.

Extremes.- Maximum discharge during year, 28,000 second-feet Dec. 8 (gage height, 28.85 feet); minimum, 2 second-feet Aug. 29 to Sept. 28.
1930-36: Maximum discharge, 42,700 second-feet May 6, 1935 (gage height, 34.80 feet); minimum 1 second-foot Aug. 18 to Sept. 1, 1934; minimum stage, 3.09 feet Aug. 25-27, 1934.
Maximum stage known, 38 feet in August 1915.

Remarks.- Records good.

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

3.1	1	10.0	4,000
3.5	5	12.0	5,800
3.5	10	15.0	8,700
3.7	40	18.0	11,900
4.0	100	21.0	15,600
4.5	260	24.0	19,600
5.0	460	27.0	24,400
6.0	980	30.0	30,600
8.0	2,580		

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	340	3,180	4,720	700	460	2,620	750	360	320	50	12	2
2	280	10,100	3,260	700	460	2,240	650	380	280	280	11	2
3	220	9,920	2,460	700	500	1,960	600	400	260	1,470	10	2
4	180	6,800	2,030	700	550	1,960	550	750	220	1,120	10	2
5	150	4,000	1,680	700	650	2,240	500	650	220	700	8	2
6	138	3,340	2,580	650	750	5,980	460	650	200	480	8	2
7	126	4,720	17,200	650	750	6,610	460	650	180	340	8	2
8	123	6,430	27,300	600	750	5,620	440	500	200	260	8	2
9	120	5,260	25,500	600	700	4,180	420	990	180	200	6	2
10	118	3,910	23,000	870	700	3,260	420	7,910	165	165	6	2
11	114	3,740	20,900	1,120	700	2,620	380	12,100	147	165	5	2
12	108	4,450	17,100	1,050	650	2,240	380	11,100	135	180	5	2
13	104	5,530	10,100	990	650	1,890	360	10,400	120	150	5	2
14	100	5,260	4,720	930	650	3,100	340	9,500	116	126	5	2
15	102	4,270	3,180	870	650	1,400	340	7,700	114	112	5	2
16	114	3,340	2,620	810	650	1,260	300	5,080	114	104	5	2
17	123	2,620	2,240	750	600	1,190	280	3,180	106	96	5	2
18	126	2,100	1,890	700	600	1,060	280	2,310	96	84	4	2
19	120	1,820	1,680	700	550	930	240	1,960	90	72	4	2
20	114	1,540	1,470	700	550	810	240	1,680	80	66	4	2
21	114	1,330	1,330	650	500	750	220	1,400	74	58	3	2
22	118	1,120	1,190	650	480	700	220	1,120	66	54	3	2
23	180	990	1,120	600	480	700	220	870	62	72	3	2
24	300	870	1,050	600	480	750	220	750	56	76	3	2
25	300	750	990	550	480	1,260	220	700	56	64	3	2
26	260	700	930	550	500	1,540	280	600	48	52	3	2
27	340	1,400	870	550	1,470	1,330	300	550	40	42	3	90
28	4,690	6,070	810	500	3,340	1,190	280	460	38	32	3	1,058
29	5,890	8,500	750	480	3,180	990	300	420	32	26	2	5,480
30	3,340	6,900	750	460	-	930	300	380	26	19	2	6,900
31	2,100	-	750	460	-	810	-	360	-	16	2	-
Month						Second-foot-days	Maximum	Minimum	Mean		Run-off in acre-feet	
October.....						20,532	5,980	100	662		40,720	
November.....						120,760	10,100	700	4,025		239,500	
December.....						186,170	27,300	750	6,005		369,500	
Calendar year 1935.....						2,271,301	42,200	26	6,223		4,505,000	
January.....						21,540	1,120	460	695		42,720	
February.....						23,430	3,340	460	808		46,470	
March.....						64,110	6,610	700	2,068		127,800	
April.....						10,950	750	220	365		21,720	
May.....						85,860	12,100	360	2,770		170,500	
June.....						3,841	320	26	128		7,620	
July.....						6,731	1,470	16	217		13,550	
August.....						164	12	2	5.3		325	
September.....						13,680	6,900	2	453		26,940	
Water year 1935-36.....						557,668	27,300	2	1,524		1,106,000	

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.

Drainage area.- 2,754 square miles.

Records available.- October 1923 to September 1936.

Average discharge.- 13 years, 1,832 second-feet.

Extremes.- Maximum discharge during year, 14,000 second-feet May 15 (gage height, 26.04 feet); no flow Sept. 9-26.

1923-36: Maximum discharge, 67,200 second-feet May 19, 1930 (gage height, about 32.8 feet, present site, from graph based on gage readings at former site and corrected for slope between sites); no flow at times.

Remarks.- Records good except those for changing stage, which are poor. No diversions. Gage-height record for periods Nov. 13-21, Dec. 22 to Jan. 18, June 14 to July 3 and Aug. 5, 6 computed on basis of graph plotted from daily readings of U. S. Weather Bureau.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	946	772	2,060	90	56	62	28	14	1,100	2.2	7.8	0.6
2	758	818	2,310	84	58	62	27	14	1,100	8.0	6.0	.6
3	543	772	2,040	79	60	96	27	100	794	31	5.1	.4
4	388	690	1,460	74	62	179	26	266	407	58	4.5	.3
5	235	562	1,000	74	62	578	26	293	190	38	3.6	.2
6	136	360	996	72	60	703	24	205	123	30	3.0	.2
7	87	260	1,770	69	60	586	22	133	120	143	2.4	.2
8	60	427	2,190	69	60	944	21	90	164	409	2.0	.1
9	46	1,170	2,610	69	64	1,140	20	80	114	512	1.6	0
10	36	1,860	3,100	69	74	1,050	18	744	102	500	1.5	0
11	30	2,310	3,950	69	76	946	18	1,940	53	370	1.3	0
12	24	2,670	6,030	66	74	866	17	2,720	40	245	1.1	0
13	20	2,970	7,660	74	72	834	17	3,980	31	308	.8	0
14	17	3,140	7,150	102	66	692	15	9,150	24	366	.7	0
15	32	2,670	5,590	105	64	400	15	14,000	19	294	.7	0
16	144	2,120	3,890	90	60	211	14	13,200	16	173	1.0	0
17	117	1,640	2,730	79	58	136	12	11,600	14	90	.7	0
18	76	1,320	1,930	76	54	108	11	8,600	12	74	.6	0
19	58	978	1,180	76	50	87	11	5,620	9.8	56	.8	0
20	41	850	659	72	48	74	10	3,660	18	40	.9	0
21	32	501	354	66	47	64	9.5	2,440	19	28	.7	0
22	27	262	210	64	46	58	10	1,500	16	25	.6	0
23	24	160	152	62	46	54	10	785	13	23	.6	0
24	22	120	130	58	44	50	9.2	433	10	21	.4	0
25	16	96	120	56	43	46	9.0	209	8.0	16	.4	0
26	12	84	111	55	46	42	8.8	116	7.0	10	.4	0
27	90	123	99	53	55	39	8.2	114	5.6	8.5	.4	.2
28	286	148	90	51	58	36	8.2	126	4.9	15	.4	1.0
29	293	556	90	51	62	34	12	105	4.0	22	1.1	331
30	220	1,550	90	53	-	32	14	162	3.2	17	1.1	1,040
31	434	-	90	55	-	30	-	774	-	11	.8	0

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	5,250	946	12	169	10,410
November.....	51,959	3,140	84	1,065	63,590
December.....	61,851	7,650	90	1,995	122,600
Calendar year 1935.....	1,361,079.2	38,500	1.1	3,729	2,700,000
January.....	2,182	105	51	70.4	4,330
February.....	1,685	76	43	58.1	3,340
March.....	10,239	1,140	30	330	20,510
April.....	477.9	28	8.2	15.9	948
May.....	83,173	14,000	14	2,683	165,000
June.....	2,561.5	1,100	3.2	85.4	5,080
July.....	3,942.7	512	2.2	127	7,820
August.....	53.0	7.8	.4	1.71	105
September.....	1,374.6	1,040	0	45.8	2,730
Water year 1935-36.....	204,728.7	14,000	0	559	406,100

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 1936.

Average discharge.- 12 years, 560 second-feet.

Extremes.- Maximum discharge during year, 1,790 second-feet May 19 (gage height, 12.65 feet); minimum, 0.2 second-foot Sept. 30.

1924-36: Maximum discharge, 22,800 second-feet May 20, 1930 (gage height, 25.37 feet, from floodmarks), from rating curve extended above 18,000 second-feet; no flow at times.

Remarks.- Records good. No diversions.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	16	204	302	244	200	235	110	110	110	5.2	21	1.2
2	12	262	322	244	212	262	99	127	106	7.2	17	1.0
3	13	302	332	244	235	272	92	148	96	10	14	1.1
4	14	322	322	235	262	272	86	188	89	37	11	2.1
5	13	376	302	235	272	292	84	221	62	54	9.2	3.8
6	12	400	360	235	262	302	82	244	73	101	7.2	3.3
7	12	352	973	230	262	302	78	262	61	165	6.6	2.5
8	11	272	1,380	226	262	322	73	230	51	253	5.8	2.3
9	10	221	1,410	221	253	364	73	257	44	184	5.4	2.2
10	9.8	221	1,300	226	235	414	73	1,100	39	130	5.1	1.8
11	10	312	1,250	226	221	470	73	1,380	34	113	4.2	1.5
12	9.8	470	1,220	217	208	484	71	1,100	30	85	3.7	1.5
13	8.6	596	1,300	217	200	442	69	828	26	136	3.4	1.3
14	7.9	688	1,430	212	200	364	67	688	24	221	3.2	1.3
15	7.4	728	1,650	208	196	262	64	748	20	244	2.8	1.1
16	7.4	708	1,680	204	188	212	62	1,100	18	204	2.7	1.0
17	7.6	688	1,490	200	184	188	60	1,820	16	184	2.5	.9
18	7.6	614	1,350	196	180	172	56	1,760	14	162	2.2	.8
19	7.4	532	1,170	196	176	168	52	1,790	13	113	2.2	.7
20	19	456	873	192	172	151	49	1,620	12	69	2.2	.6
21	35	376	580	192	169	144	48	1,400	11	45	2.1	.6
22	37	282	400	192	165	136	48	1,080	9.6	34	1.9	.5
23	43	204	332	188	162	134	50	632	8.8	29	1.7	.5
24	83	169	312	188	162	152	54	308	8.3	58	1.5	.6
25	92	148	292	184	162	237	55	173	7.6	74	1.7	.4
26	66	144	282	180	169	217	60	141	6.9	48	1.9	.4
27	67	176	262	176	192	165	60	130	6.2	35	2.2	.4
28	172	230	262	172	212	144	59	127	5.9	32	1.9	.3
29	151	244	253	172	221	130	74	158	5.5	34	1.6	.3
30	113	262	253	180	-	124	103	151	5.2	27	1.3	.3
31	144	-	244	192	-	116	-	120	-	23	1.2	-
Month				Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet				
October.....				1,243.5	172	7.4	40.1	2,470				
November.....				10,859	728	144	365	21,740				
December.....				23,688	1,680	244	764	46,980				
Calendar year 1935.....				228,327.5	12,400	3.8	626	452,900				
January.....				6,424	244	172	207	12,740				
February.....				5,994	272	162	207	11,890				
March.....				7,641	484	116	246	15,160				
April.....				2,084	110	48	69.5	4,130				
May.....				19,821	1,790	110	639	39,310				
June.....				1,033.0	110	5.2	34.4	2,080				
July.....				2,916.4	253	5.2	94.1	5,780				
August.....				150.4	21	1.2	4.85	298				
September.....				36.2	3.8	.3	1.21	72				
Water year 1935-36.....				81,990.5	1,790	.3	224	162,600				

Ouachita River at Remmel Dam, near Malvern, Ark.

Location.— Water-stage recorder, lat. 34°26', long. 92°54', in SW¼ sec. 36, T. 3 S., R. 18 W., 700 feet below Remmel Dam and 9 miles northwest of Malvern. Zero of gage is 247.94 feet above mean sea level (general adjustment of 1912).

Drainage area.— 1,540 square miles.

Records available.— January 1925 to September 1936.

Extremes.— Maximum discharge during year, 13,200 second-feet Dec. 9 (gage height, 12.5 feet); minimum daily discharge, 62 second-feet June 21.

1925-36: Maximum discharge, about 138,000 second-feet Apr. 21, 1927 (gage height, 35.7 feet), from rating curve extended above 50,000 second-feet; minimum daily discharge, 39 second-feet June 22, 1929.

Maximum stage known, 36.3 feet May 16, 1923 (discharge, about 140,000 second-feet).

Remarks.— Records good. Regulation by Remmel Dam. Discharge computed from hydro-electric power output Oct. 13, Jan. 19, 27-31, Feb. 9, 10, 18-20.

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

2.0	60	6.0	2,370	9.5	7,250
2.5	140	6.5	2,970	10.0	8,100
3.0	290	7.0	3,600	10.5	9,050
3.5	550	7.5	4,250	11.0	10,000
4.0	850	8.0	4,900	11.5	11,050
4.5	1,150	8.5	5,650	12.0	12,100
5.0	1,500	9.0	6,400	12.5	13,250
5.5	1,890				

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	532	1,960	1,460	2,700	589	90	1,620	684	126	332	91	375
2	709	1,950	2,160	2,650	297	380	1,670	818	216	262	123	212
3	610	2,020	2,050	2,560	705	273	1,320	100	100	93	115	489
4	1,220	2,560	2,300	2,490	303	626	1,300	415	430	93	240	748
5	692	2,590	2,230	2,290	666	796	263	764	283	79	204	604
6	490	2,650	1,990	2,640	362	1,200	1,530	552	232	111	455	94
7	696	2,620	4,280	2,640	807	479	1,560	686	84	100	233	135
8	690	2,600	11,300	2,630	513	695	1,480	508	348	94	98	376
9	697	2,350	11,400	1,780	365	1,300	1,290	373	452	123	110	904
10	631	2,040	8,050	1,460	459	1,270	1,130	344	244	112	156	626
11	892	2,610	7,070	1,080	532	1,490	964	82	223	109	261	1,250
12	847	2,590	5,970	641	516	1,400	255	88	314	112	192	852
13	761	2,640	4,930	1,070	286	870	1,240	91	195	115	170	74
14	840	2,590	3,130	1,620	687	955	813	107	92	278	275	581
15	1,310	2,540	2,320	966	212	562	544	94	241	128	113	668
16	879	2,410	2,650	1,110	540	1,200	521	89	274	205	91	1,210
17	1,340	2,100	2,660	996	366	934	669	109	246	283	158	365
18	1,460	2,640	2,710	470	102	622	167	63	165	130	179	721
19	979	2,660	2,770	297	427	617	74	95	200	114	164	514
20	529	2,660	2,770	310	311	285	619	169	161	279	184	142
21	827	2,660	2,670	439	180	632	800	260	62	151	206	171
22	993	2,670	2,350	952	100	216	1,110	163	287	325	121	405
23	1,310	2,490	2,610	712	96	581	836	172	132	230	99	192
24	1,060	2,040	2,390	127	273	1,410	645	124	87	102	139	119
25	1,100	2,650	1,190	593	214	753	341	154	111	176	502	113
26	788	2,440	2,000	703	735	863	197	258	100	116	335	125
27	956	2,670	2,530	538	424	792	552	230	104	258	780	135
28	2,010	528	2,700	298	640	92	1,100	156	205	243	657	107
29	1,150	1,760	2,280	461	371	182	868	158	108	264	418	351
30	1,730	1,200	2,550	367	-	1,140	974	75	155	152	69	223
31	1,630	-	2,660	767	-	1,690	-	163	-	86	289	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						30,558	2,010	490	986	60,610		
November.....						69,888	2,670	528	2,330	138,600		
December.....						110,130	11,400	1,190	3,553	218,400		
Calendar year 1935.....						1,324,641	64,900	64	3,629	2,627,000		
January.....						38,349	2,700	127	1,237	76,060		
February.....						12,098	807	96	417	24,000		
March.....						24,287	1,690	90	783	48,170		
April.....						26,464	1,670	74	982	52,490		
May.....						8,154	818	75	263	15,170		
June.....						5,977	452	62	199	11,860		
July.....						5,257	325	79	170	10,430		
August.....						7,227	780	69	233	14,330		
September.....						13,081	1,250	74	436	25,950		
Water year 1935-36.....						351,470	11,400	62	960	697,100		

Bayou Duplantier at City Lake, Baton Rouge, La.

Location.- Water-stage recorder, lat. 30°26', long. 91°11', in T. 7 S., R. 1 W., at triple-box culvert at lower end of City Park Lake in Baton Rouge.

Drainage area.- 0.808 square mile.

Records available.- April 1933 to September 1936.

Extremes.- Maximum discharge during period April to September 1933, 95.6 second-feet Apr. 21 (gage height, 1.053 feet); minimum, 0.14 second-foot June 15.

Maximum discharge during water year 1933-34, 173 second-feet June 16 (gage height, 1.43 feet); minimum, 0.03 second-foot Nov. 17 (gage height, 0.037 foot).

Maximum discharge during water year 1934-35, 159 second-foot Nov. 20 (gage height, 1.366 second-feet); no flow part of Sept. 8, 9.

Maximum discharge during water year 1935-36, 114 second-foot Dec. 12 (gage height, 1.175 feet); no flow at times.

Remarks.- Records good except those for March to September 1936, which are fair, owing to obstruction above control. Flow past station affected by evaporation loss from surface of lake and artificial inflow from outside of drainage area. Net run-off of drainage area obtained by correcting for these factors.

Discharge, in second-feet, April 1933 to September 1936
1933

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1							1.87	0.68	0.42	0.60	1.40	1.52
2							1.00	9.66	.32	.80	1.22	1.14
3							.63	3.28	.30	.80	1.16	.73
4							4.22	1.40	.34	.64	.94	.68
5							16.3	.86	.73	.62	.72	.57
6							3.43	.70	.55	.59	9.25	.44
7							1.14	.62	.45	.59	2.70	2.66
8							.70	.59	.38	.96	.75	3.30
9							1.53	.65	.45	1.20	.70	1.60
10							1.04	.48	.61	1.54	2.24	1.32
11							.73	.43	.58	1.08	1.40	1.18
12							.52	.40	.96	.88	.84	1.04
13							1.00	.35	.62	.72	2.51	.70
14							6.67	.36	.31	.78	.60	.54
15							4.04	.41	.15	.77	.47	.45
16							1.24	.58	.16	4.98	.52	.52
17							.75	.49	.16	4.75	.48	.34
18							.60	.38	.18	1.69	.43	.76
19							.64	.32	.60	1.04	.38	.59
20							8.64	.29	1.80	1.23	.33	.49
21							32.9	.27	2.11	1.50	.25	.32
22							4.59	.27	1.13	1.69	.20	.23
23							1.16	.26	.95	1.60	.15	.20
24							.73	.27	1.62	1.39	.18	.57
25							.65	.28	1.54	1.16	.16	.75
26							4.36	2.50	2.02	1.52	.16	1.00
27							5.36	3.06	1.66	3.49	.16	.72
28							2.60	1.46	1.36	3.94	.20	.57
29							1.56	1.54	.64	2.02	.27	.44
30							.96	.38	.65	1.52	.30	.42
31							-	.62	-	1.46	.67	-

1933-34

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.49	0.38	0.13	4.53	11.0	0.58	0.62	0.70	0.40	0.82	5.55	0.80
2	.67	3.98	.13	1.30	2.66	1.75	.59	.65	.40	.65	1.75	.65
3	.80	1.30	3.79	.70	1.12	11.3	.54	.48	.40	1.08	1.40	2.53
4	.47	.70	1.54	1.12	.70	3.73	.51	.47	.38	1.00	1.60	1.75
5	.36	.50	.68	.68	.48	1.46	1.08	1.26	2.62	.77	1.10	.80
6	.29	.20	7.84	5.93	.39	.74	2.21	2.71	7.13	2.74	.70	.66
7	.27	.20	1.93	4.06	.21	.50	1.69	3.21	7.64	3.08	.50	.48
8	.18	.15	.80	1.01	.54	.36	1.64	3.80	2.08	1.48	.60	.36
9	.14	.12	.49	.51	1.75	1.02	1.32	1.60	1.12	.59	.70	.34
10	.12	.09	.24	.29	1.02	.96	2.00	*1.2	.66	.72	.92	.41
11	.12	.06	.18	.74	8.95	.42	2.60	*3.1	.50	.62	.94	.60
12	.10	.07	.15	1.99	6.14	.29	1.74	*.9	.38	.51	.66	.49
13	.10	.06	.15	.92	1.83	.20	.80	*.8	.32	.41	.60	.46
14	.14	.06	.14	.54	1.00	.20	.71	*7.4	.28	.31	.69	.42
15	.20	.06	.14	.35	.69	.16	16.7	*1.4	.22	.28	.54	.40
16	.20	.04	.14	.26	17.8	.15	5.13	.46	51.4	.21	.62	.31
17	.24	.03	.13	.21	3.92	.13	2.08	.42	29.7	.16	.71	.21
18	.20	.04	.31	.21	21.5	.26	1.30	.73	5.16	2.34	.60	.22
19	.18	.05	.54	.66	9.36	.28	5.15	2.97	1.96	1.63	.54	.27
20	.15	.05	.30	.60	2.15	.21	3.15	2.60	1.14	1.06	.48	.30
21	.15	.10	.20	.41	1.28	.25	1.20	2.68	.74	.69	.41	.32
22	.15	14.8	.18	.30	1.02	.41	.78	2.40	.62	.63	.40	.37
23	.09	2.61	.15	.21	.63	.51	.70	7.18	.45	.42	.48	.40
24	.09	1.02	.13	6.45	.51	.62	.70	6.73	.38	.51	.50	.48
25	.08	.56	.11	8.60	4.08	.66	.70	2.20	.31	.38	.48	.50
26	.07	.31	.12	2.30	5.84	5.59	.70	*1.2	.28	25.6	2.88	.46
27	.07	.16	.07	1.78	1.29	2.85	.70	*1.0	.46	15.7	3.25	.38
28	.07	.12	.10	1.24	.64	1.10	1.60	*.3	3.40	3.61	6.56	.49
29	.06	.12	2.30	.94	-	.75	1.40	.66	3.70	6.94	7.14	.59
30	.05	.13	1.04	.40	-	.72	.90	.62	1.48	14.9	2.20	21.2
31	.05	-	18.8	9.95	-	.67	-	.38	-	14.8	1.30	-

*Estimated.

MISSISSIPPI RIVER DELTA

Discharge, in second-feet, of Bayou Duplantier at City Lake, Baton Rouge, La., for period
April 1933 to September 1936--Continued

1934-35

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	6.11	0.36	1.40	0.41	0.23	0.48	4.98	0.77	*0.3	3.87	0.63	0.25
2	1.56	.48	.60	.18	.20	.39	2.25	.62	*.3	13.9	1.79	.22
3	.76	1.17	1.53	.18	.18	.37	1.50	.60	*.6	8.78	1.40	.15
4	.48	.70	.60	.18	.14	.76	1.36	.60	*7.3	2.32	.80	.14
5	.30	.47	.37	.20	.12	11.0	1.02	.60	*11.8	1.28	.88	.07
6	.15	.30	.41	.20	.13	8.71	10.1	2.48	*3.0	.79	.61	.02
7	.11	.22	.46	.20	.19	3.40	4.64	2.25	.39	.68	.41	.01
8	.09	.21	.35	1.17	.27	8.70	1.60	1.06	.58	.86	.55	0
9	13.4	.20	.26	.75	.73	13.0	1.04	.80	.41	.60	.65	.01
10	14.2	.18	.26	.50	.76	4.72	.96	.74	.80	.38	.42	.30
11	2.81	.14	.16	.44	22.3	2.25	1.10	.50	.51	.30	.42	2.88
12	1.00	.08	.10	.37	4.94	4.24	.51	.36	.34	.49	.74	2.58
13	.57	.07	.10	.33	4.93	1.50	.31	.27	.23	4.00	1.60	1.22
14	.35	.07	.11	.31	18.9	.80	.24	.32	.11	6.59	2.10	.65
15	.22	.08	.10	.26	4.78	.60	.24	.36	*.4	2.70	1.26	.44
16	.18	.08	.13	.24	2.10	.51	.22	.31	*.5	1.26	1.50	.30
17	.15	.08	.24	.33	1.04	.54	.13	.25	*.6	.71	.86	.21
18	.13	.09	1.94	.42	.65	.34	.19	.32	1.1	.48	6.98	.16
19	.12	.33	1.40	.50	.51	.28	20.6	.31	1.50	.70	13.6	.13
20	.12	57.6	.80	.47	.43	.24	29.3	19.6	.73	.68	4.76	.11
21	.11	27.1	.41	47.3	.35	.21	5.60	4.88	.53	.82	2.13	.11
22	.10	7.22	.33	10.9	.39	.22	1.80	1.60	.46	1.50	3.20	.08
23	.12	1.40	.28	2.28	.39	.24	1.00	.77	.38	1.50	2.32	.06
24	.15	.37	.28	.98	.36	.20	.59	.43	.55	2.39	1.14	.03
25	.21	.23	.28	.60	1.56	.16	.50	.25	.40	5.37	.67	.05
26	.24	.33	.33	.50	2.82	.13	.66	.24	.30	5.60	1.28	.13
27	.29	7.35	1.55	.39	.92	.17	1.34	.24	.24	4.90	1.80	.13
28	.30	9.28	2.90	.31	.68	.22	1.02	.46	.23	5.35	.96	.13
29	.31	4.66	1.50	.29	-	.31	1.04	.39	.23	2.70	.53	.05
30	.34	4.04	1.00	.25	-	1.19	1.04	*.4	.25	1.38	.99	.02
31	.24	-	.70	.25	-	8.55	-	*.3	-	.79	.31	-.2

*Estimated.

1935-36

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1		0	0.04	1.72	0.98	0.26	0.09	0.55	0.28	0.18	1.22	0.93
2		0	.04	14.8	1.58	.20	.06	.38	.22	.24	1.00	.50
3		0	.02	4.82	10.1	.20	0	.26	.20	.55	1.50	.33
4		0	.02	1.99	11.1	.41	0	.16	.17	.40	.90	.21
5		0	.02	1.10	2.75	.26	0	.10	.17	.30	.60	10.0
6		0	.04	.96	14.6	.20	0	.07	.46	.56	.41	12.3
7		0	1.26	.75	10.0	.20	0	.04	.32	.59	.33	3.80
8		0	3.92	.73	3.40	.20	8.44	.01	.50	.39	.26	5.14
9		0	1.58	.60	1.81	.20	10.4	0	.37	.52	.22	3.86
10		0	.80	.46	.97	.20	2.72	0	.22	.55	.40	3.30
11		0	9.04	.39	.62	.21	1.29	.02	.15	.38	.45	4.35
12		.17	57.1	.32	2.92	.20	.73	.25	.10	.58	3.06	1.66
13		.10	9.70	.32	3.47	.18	.53	.46	.13	5.65	1.77	.78
14		.07	3.42	.30	2.06	.29	.39	.29	.10	3.32	.97	.61
15		.06	1.69	.51	1.10	.25	.30	.18	.26	1.64	.70	.58
16		.04	.78	.46	.70	.26	.25	.18	.20	.95	.46	.59
17		.03	.50	.39	.41	.11	.16	1.85	.16	.60	.65	.64
18		.02	.35	15.6	.41	.06	.98	2.27	.11	.37	.50	.39
19		.11	.28	19.0	.33	.06	.07	1.87	.10	.30	.35	.28
20		.16	.18	5.24	1.20	.09	.05	.89	.10	.48	.21	.20
21		.14	.13	2.55	1.20	.04	.05	.64	.12	.41	.24	.14
22		.11	.88	1.50	.80	.03	.05	.41	.25	.50	1.97	.11
23		.05	.35	.94	.60	.03	.02	.28	.21	.66	11.5	.08
24		.03	.32	.37	.41	.08	.12	.16	.21	.61	5.08	.06
25		.03	.25	.59	.33	.12	.01	.59	.07	.69	3.55	1.94
26		.05	.20	.51	.26	.12	.01	.80	.08	.68	3.08	3.30
27		.08	.15	.37	.33	.13	0	.72	.27	1.45	1.28	1.37
28		.09	7.78	.22	.26	.09	1.92	1.19	.18	5.21	1.62	.72
29		.06	11.0	2.84	.26	.08	1.80	1.19	.36	2.10	2.76	.56
30		.05	2.64	3.40	-	.09	.89	.61	.27	2.23	2.98	.18
31		-	2.10	1.65	-	.10	-	.36	-	2.35	2.14	-

Discharge, in second-feet, of Bayou Duplantier at City Lake, Baton Rouge, La., for period April 1933 to September 1936--Continued

Month	Observed						Correction for evaporation from lake (inches)	Correction for inflow from outside area (inches)	Net run-off in inches
	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches			
April 1933.....	111.38	32.9	0.52	3.71	4.59	5.12	0.57	0.76	4.93
May.....	34.01	9.66	.26	1.10	1.36	1.57	.84	.79	1.62
June.....	24.02	2.11	.15	.801	.991	1.11	.97	1.45	.63
July.....	47.04	4.88	.59	1.52	1.88	2.17	.68	1.50	1.35
August.....	31.77	9.28	.16	1.02	1.26	1.45	.89	1.14	1.20
September.....	26.31	3.30	.20	.877	1.09	1.22	.84	.76	1.30
October 1933.....	6.05	.60	.05	.195	.241	.28	.72	.79	0.21
November.....	28.27	14.8	.03	.942	1.17	1.30	.47	.15	1.62
December.....	42.75	18.8	.07	1.38	1.71	1.97	.26	.15	2.08
January 1934.....	59.11	9.95	.21	1.91	2.36	2.72	.31	.15	2.88
February.....	109.28	21.5	.21	3.90	4.83	5.03	.32	.14	5.21
March.....	38.84	11.3	.13	1.25	1.55	1.79	.50	.79	1.50
April.....	80.74	16.7	.51	2.02	2.50	2.78	.57	.76	2.60
May.....	60.50	7.4	.38	1.95	2.41	2.78	.62	.79	2.61
June.....	125.73	51.4	.22	4.19	5.19	5.79	.88	.76	5.91
July.....	108.05	25.8	.18	3.49	4.32	4.98	.82	.79	5.01
August.....	48.53	8.59	.40	1.57	1.94	2.24	.77	.79	2.22
September.....	37.55	21.2	.21	1.25	1.55	1.73	.73	.76	1.70
Water year 1933-34..	725.40	51.4	.03	1.99	2.46	33.40	6.97	6.82	35.55
October 1934.....	45.22	14.2	.09	1.46	1.81	2.09	.61	.79	1.91
November.....	124.90	57.6	.07	4.16	5.15	5.75	.48	.15	6.08
December.....	20.82	2.90	.10	.672	.832	.96	.29	.15	1.10
Calendar year 1934..	839.27	57.6	.07	2.30	2.85	38.65	6.90	6.82	38.73
January 1935.....	71.70	47.3	.18	2.31	2.86	3.30	.31	.15	3.48
February.....	70.93	22.3	.12	2.53	3.13	3.26	.33	.14	3.45
March.....	74.43	13.0	.13	2.40	2.97	3.42	.53	.15	3.80
April.....	97.23	29.3	.18	3.24	4.01	4.47	.65	.15	4.97
May.....	43.36	19.6	.24	1.40	1.73	1.99	.84	.44	2.39
June.....	35.07	11.8	.11	1.17	1.45	1.62	.82	.89	1.55
July.....	83.66	13.9	.30	2.70	3.34	3.85	.88	.97	3.76
August.....	56.49	13.6	.31	1.82	2.25	2.59	.66	.91	2.54
September.....	10.66	2.88	0	.355	.439	.49	.78	.23	1.04
Water year 1934-35..	734.47	57.6	0	2.01	2.49	33.79	7.38	5.12	36.05
October 1935.....	0	0	0	0	0	0	.62	.16	0.46
November.....	1.45	.17	0	.048	.059	.07	.44	.16	.35
December.....	116.08	57.1	.02	3.74	4.63	5.34	.30	.16	5.48
Calendar year 1935..	661.06	57.1	0	1.61	2.24	30.40	7.36	4.51	33.25
January 1936.....	85.70	19.0	.22	2.76	3.42	3.94	.30	.16	4.08
February.....	74.96	14.6	.26	2.58	3.19	3.44	.29	.15	3.58
March.....	4.95	.41	.03	.160	.198	.23	.51	.16	.58
April.....	30.32	10.4	0	1.01	1.25	1.40	.74	.16	1.98
May.....	16.85	2.27	0	.544	.673	.78	.78	.40	1.16
June.....	6.29	.50	.07	.210	.260	.29	1.06	1.18	.17
July.....	35.44	5.65	.18	1.14	1.41	1.63	.85	1.08	1.40
August.....	52.16	11.5	.21	1.68	2.08	2.40	.73	.98	2.15
September.....	58.69	12.3	.08	1.96	2.43	2.71	.68	.16	3.23
Water year 1935-36..	482.89	57.1	0	1.32	1.63	22.23	7.30	4.91	24.62

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 (U. S. Engineer Department datum).

Records available.- October 1934 to September 1936.

Extremes.- Maximum discharge during year, 262,000 second-feet May 5; maximum gage height, 30.1 feet May 4; minimum discharge, 17,800 second-feet Aug. 31; minimum gage height, 3.58 feet Sept. 6.

1934-36: Maximum discharge, 345,000 second-feet July 8, 1935 (gage height, 34.42 feet); minimum, that of Aug. 31, 1936; minimum gage height, that of Sept. 6, 1936.

Maximum stage known, 38.5 feet above mean Gulf level May 15, 1927, at Missouri Pacific Railroad bridge half a mile downstream.

Remarks.- Records excellent.

Discharge measurements, water year October 1935 to September 1936

Date	Width (feet)	Area of section (square feet)	Mean velocity (feet per second)	Gage height (feet)	Discharge (second-feet)	Date	Width (feet)	Area of section (square feet)	Mean velocity (feet per second)	Gage height (feet)	Discharge (second-feet)
Oct. 2	792	31,900	1.04	8.18	35,300	Mar. 26	887	42,500	3.54	21.99	142,000
5	782	31,000	1.03	7.87	31,800	27	897	42,700	3.37	21.99	144,000
8	790	31,000	1.33	6.92	28,700	28	887	42,800	3.32	21.96	142,000
11	780	30,400	.95	6.68	28,800	31	888	43,100	3.53	22.64	152,000
14	792	30,400	.89	6.48	27,200	Apr. 3	894	43,900	3.69	23.50	162,000
17	775	30,000	.86	6.18	25,700	6	898	44,400	3.92	24.32	174,000
20	774	30,000	.89	5.96	25,300	9	899	45,400	4.03	25.08	183,000
23	773	29,800	.81	5.81	24,200	12	901	45,800	4.15	25.74	190,000
26	775	30,200	.81	5.76	24,600	15	906	46,900	4.35	26.51	204,000
29	780	30,200	.86	6.54	26,500	18	916	47,500	4.52	27.17	214,000
31	784	30,000	.98	7.06	31,200	21	920	47,400	4.71	27.78	223,000
Nov. 3	785	31,400	1.03	7.36	32,000	23	923	48,500	4.74	28.22	230,000
6	797	31,600	1.11	7.86	35,100	25	924	48,600	4.86	28.52	236,000
9	805	32,100	1.15	8.34	37,000	28	924	49,200	4.98	29.10	245,000
12	836	32,900	1.29	9.42	42,400	29	924	49,900	5.05	29.20	247,000
14	840	33,500	1.35	9.92	45,100	May 2	929	50,200	5.18	29.66	260,000
16	842	33,800	1.45	10.59	47,400	4	931	49,300	5.20	30.05	269,000
18	847	35,000	1.63	11.95	56,900	5	931	50,100	5.23	30.05	262,000
20	856	36,600	1.71	13.19	62,600	8	931	49,700	5.01	29.70	249,000
22	861	37,100	1.95	14.39	72,300	11	924	48,200	4.67	28.14	225,000
25	867	38,500	1.99	15.61	76,500	13	917	46,400	4.18	26.19	194,000
28	869	38,500	2.08	16.01	80,000	15	892	44,800	3.77	23.92	169,000
29	869	38,200	2.11	16.02	80,400	17	881	43,400	3.50	22.46	152,000
Dec. 3	862	37,000	1.81	14.67	67,000	20	871	42,500	3.11	20.59	132,000
6	860	37,000	1.81	14.67	67,000	23	865	42,500	2.86	19.47	106,000
7	850	35,100	1.52	12.31	53,200	26	843	38,600	2.29	16.60	88,300
8	851	35,700	1.53	12.53	54,700	29	842	37,500	2.22	15.63	83,100
11	860	37,000	1.79	14.16	66,300	31	833	37,400	2.02	14.95	75,900
13	873	39,000	2.18	16.32	84,900	June 3	826	36,400	1.85	14.01	67,300
15	874	40,100	2.33	17.87	93,400	6	821	35,600	1.66	12.91	59,200
16	877	40,700	2.37	18.03	96,600	9	816	34,300	1.70	12.30	58,200
17	877	39,600	2.26	17.54	89,600	12	816	34,600	1.62	11.84	54,000
22	872	39,000	2.18	16.98	85,300	14	818	34,200	1.55	11.30	52,000
26	874	38,600	2.13	16.74	82,100	17	813	34,200	1.58	11.37	54,000
29	874	39,300	2.12	16.92	83,100	20	813	33,800	1.56	11.24	52,900
Jan. 1	873	38,900	2.16	16.74	84,100	23	806	33,400	1.46	10.29	48,600
4	869	38,300	1.90	15.75	72,600	26	798	32,700	1.31	9.26	43,000
7	857	36,600	1.66	13.98	60,800	29	803	31,500	1.22	8.42	38,600
9	850	36,800	1.60	13.21	57,500	July 2	801	31,600	1.13	8.00	35,600
12	845	35,200	1.43	12.00	50,400	4	797	31,800	1.16	7.98	37,000
14	847	35,000	1.52	11.97	53,200	7	797	31,700	1.23	8.31	39,000
16	855	36,000	1.84	13.51	66,200	9	798	32,200	1.29	8.52	41,400
18	874	39,300	2.41	16.81	94,600	13	792	31,400	1.21	8.06	38,100
20	880	41,500	2.87	19.47	119,000	18	803	32,100	1.35	9.00	43,300
23	886	42,300	3.07	21.05	130,000	23	789	30,800	1.13	7.46	34,900
26	887	42,800	3.08	21.52	132,000	29	779	30,400	1.02	6.33	31,000
28	887	42,500	3.11	21.16	132,000	3	773	29,700	.92	5.75	28,000
31	886	41,500	2.75	19.93	114,000	7	766	29,200	.87	5.12	25,500
Feb. 3	877	40,100	2.49	18.46	100,000	10	765	28,700	.84	4.96	24,200
4	869	40,600	2.59	18.71	104,000	12	763	29,000	.78	4.66	22,600
5	884	40,700	2.68	18.92	109,000	18	763	28,500	.74	4.19	21,200
7	877	40,800	2.60	18.72	106,000	21	763	28,400	.73	4.07	20,600
10	870	39,100	2.34	17.30	91,400	24	764	28,400	.77	4.25	21,800
13	859	37,700	1.89	15.42	71,500	26	766	28,700	.74	4.49	21,300
16	862	38,000	1.94	14.96	72,000	28	763	28,500	.76	4.43	22,400
19	867	38,100	2.04	15.67	77,700	31	761	28,200	.63	3.87	17,800
22	868	38,400	2.26	16.55	86,900	Sept. 4	761	28,000	.66	3.66	18,600
25	869	38,800	2.32	16.72	90,200	7	761	28,700	.67	3.81	19,300
27	867	38,400	2.15	16.26	82,700	11	764	28,600	.79	4.31	22,500
Mar. 1	863	37,800	2.06	15.69	77,700	12	765	28,900	.80	4.46	23,000
3	866	38,000	2.13	15.84	81,000	15	767	29,800	.85	4.65	23,900
5	871	39,000	2.50	17.35	97,400	17	765	29,600	.82	4.50	23,500
7	875	40,200	2.81	18.97	113,000	20	765	29,600	.78	4.45	22,400
10	886	41,900	3.18	20.79	133,000	22	764	28,900	.73	4.26	21,200
13	887	42,500	3.36	21.90	143,000	25	764	28,200	.71	4.06	20,100
15	887	42,900	3.38	22.31	145,000	27	764	28,400	.70	4.24	20,000
17	887	43,200	3.50	22.58	151,000	28	765	28,400	.78	4.34	22,000
19	887	43,300	3.56	22.71	154,000	29	766	28,700	.82	4.48	23,600
21	887	42,900	3.50	22.67	150,000	30	768	29,500	.93	5.04	27,200
23	887	43,000	3.47	22.60	148,000						

MISSISSIPPI RIVER DELTA

143

Gage height, in feet, of Atchafalaya River at Krotz Springs, La., for water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	8.51	7.13	15.64	16.73	19.33	15.57	22.99	29.73	14.59	8.03	5.98	3.70
2	8.15	7.24	15.20	16.49	18.84	15.58	23.32	29.87	14.26	8.06	5.90	3.68
3	7.93	7.39	14.83	16.12	18.50	15.90	23.55	29.98	13.95	8.07	5.77	3.68
4	7.83	7.55	13.95	15.70	18.73	16.56	23.80	30.03	13.63	7.98	5.62	3.66
5	7.67	7.73	13.23	15.16	18.91	17.42	23.98	30.02	13.28	8.01	5.41	3.61
6	7.46	7.89	12.65	14.55	18.95	18.25	24.36	30.00	12.89	8.14	5.21	3.61
7	7.15	8.11	12.36	13.92	18.70	19.04	24.56	29.94	12.57	8.32	5.11	3.71
8	6.90	8.25	12.57	13.43	18.30	19.73	24.81	29.67	12.40	8.48	5.07	3.90
9	6.76	8.37	13.14	13.40	17.80	20.34	25.09	29.30	12.29	8.52	5.06	4.06
10	6.70	8.61	13.73	12.80	17.23	20.82	25.35	28.90	12.13	8.50	4.94	4.22
11	6.67	8.94	14.24	12.37	16.55	21.29	25.60	28.04	11.99	8.39	4.80	4.34
12	6.65	9.39	15.16	12.00	15.92	21.64	25.78	27.11	11.80	8.23	4.63	4.47
13	6.59	9.71	16.37	11.88	15.37	21.91	25.99	26.00	11.67	8.10	4.45	4.57
14	6.47	9.96	17.33	12.01	15.03	22.16	26.27	24.88	11.50	8.02	4.31	4.64
15	6.34	10.25	17.88	12.57	14.92	22.30	26.55	23.80	11.30	8.16	4.24	4.64
16	6.25	10.65	18.02	13.61	14.98	22.49	26.80	23.00	11.26	8.52	4.20	4.57
17	6.19	11.21	17.98	15.05	15.17	22.60	27.05	22.39	11.38	8.26	4.20	4.80
18	6.16	11.90	17.78	16.93	15.44	22.67	27.22	21.73	11.41	8.99	4.20	4.49
19	6.07	12.60	17.54	18.50	15.69	22.70	27.40	21.14	11.38	8.88	4.16	4.48
20	5.95	13.23	17.31	19.49	15.98	22.73	27.60	20.54	11.19	8.60	4.11	4.45
21	5.88	13.83	17.07	20.24	16.31	22.67	27.80	19.85	10.92	8.24	4.07	4.35
22	5.83	14.44	16.95	20.69	16.37	22.57	28.10	19.13	10.59	7.98	4.05	4.24
23	5.81	14.89	16.83	21.06	16.71	22.45	28.24	18.36	10.24	7.53	4.10	4.15
24	5.74	15.28	16.80	21.36	16.74	22.30	28.37	17.66	9.89	7.80	4.33	4.11
25	5.70	15.53	16.76	21.48	16.66	22.13	28.53	17.09	9.55	6.82	4.53	4.08
26	5.78	15.68	16.74	21.52	16.48	21.97	28.69	16.58	9.22	6.52	4.50	4.14
27	5.88	15.85	16.71	21.40	16.27	21.96	28.81	16.21	8.93	6.36	4.33	4.27
28	6.11	16.01	16.79	21.14	15.99	21.97	29.03	15.80	8.64	6.35	4.21	4.34
29	6.40	16.02	16.92	20.62	15.73	22.12	29.30	15.60	8.37	6.28	4.05	4.15
30	6.71	15.90	16.94	20.39	-	22.35	29.57	15.25	8.15	6.18	3.98	5.10
31	6.97	-	16.89	19.86	-	22.67	-	14.91	-	6.06	3.83	-

Discharge, in second-feet of Atchafalaya River at Krotz Springs, La., for water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	34,300	31,100	75,900	83,900	108,000	77,400	156,000	258,000	72,400	36,200	29,200	18,400
2	33,400	31,500	71,700	80,600	104,000	78,200	160,000	260,000	69,200	36,200	28,900	18,400
3	32,400	32,000	66,700	76,600	100,000	81,400	162,000	260,000	66,700	36,700	27,900	18,400
4	32,400	33,400	61,700	72,400	105,000	88,200	166,000	258,000	64,400	37,200	27,400	18,400
5	32,000	34,300	56,500	68,500	109,000	98,500	168,000	260,000	61,700	37,200	26,500	18,400
6	31,100	35,300	52,900	64,400	109,000	106,000	175,000	260,000	59,100	38,100	25,700	18,400
7	29,700	36,200	53,400	60,700	106,000	114,000	177,000	258,000	58,600	39,100	22,600	18,800
8	28,800	36,700	55,000	58,600	102,000	121,000	180,000	249,000	58,100	41,000	25,200	20,100
9	28,800	37,200	59,100	57,600	96,600	128,000	183,000	242,000	58,100	41,500	25,200	20,900
10	28,800	38,100	63,300	55,000	90,900	134,000	186,000	235,000	57,600	41,000	24,300	21,800
11	28,800	40,000	66,700	52,400	82,300	137,000	188,000	223,000	57,000	40,500	23,500	22,600
12	28,200	42,500	73,700	50,400	75,900	141,000	191,000	208,000	56,000	39,100	22,600	23,000
13	27,900	43,900	84,800	51,400	71,100	145,000	194,000	191,000	55,000	38,600	21,800	23,000
14	27,000	45,400	90,000	53,400	70,400	144,000	200,000	179,000	54,000	38,100	21,800	23,900
15	26,500	46,400	93,700	58,100	70,400	145,000	204,000	167,000	52,900	38,600	21,300	23,900
16	26,100	47,900	96,600	66,700	72,400	149,000	209,000	159,000	52,900	40,500	21,300	23,500
17	25,700	51,900	95,600	77,400	73,700	151,000	212,000	151,000	54,000	42,500	21,300	23,500
18	25,700	57,000	92,800	87,400	75,900	153,000	215,000	144,000	54,000	43,900	21,300	23,500
19	25,700	60,200	90,000	110,000	78,200	154,000	217,000	138,000	54,000	45,500	20,900	23,000
20	25,200	62,800	87,300	119,000	80,600	153,000	220,000	131,000	52,900	41,000	20,900	22,200
21	24,800	67,300	85,600	124,000	83,900	150,000	223,000	122,000	51,400	39,100	20,500	21,800
22	24,300	72,400	84,800	128,000	87,300	149,000	228,000	114,000	49,900	37,200	20,500	20,900
23	24,300	74,400	83,100	130,000	90,000	148,000	230,000	105,000	48,400	35,300	20,900	20,500
24	23,900	75,900	83,100	131,000	90,900	147,000	234,000	98,500	46,400	33,800	22,200	20,500
25	24,300	76,600	82,300	131,000	89,100	144,000	237,000	92,800	44,400	32,400	22,200	20,100
26	24,800	77,400	82,300	132,000	86,500	142,000	239,000	88,200	43,000	31,500	21,300	20,100
27	25,200	79,000	81,400	132,000	83,100	143,000	240,000	86,500	41,000	31,100	21,300	20,500
28	25,700	79,800	82,300	131,000	80,600	142,000	244,000	84,800	39,600	31,100	21,300	22,200
29	27,000	80,600	83,100	127,000	79,000	144,000	249,000	83,100	38,100	30,600	20,100	23,900
30	28,800	79,000	83,900	121,000	-	148,000	255,000	79,000	36,700	30,200	18,800	27,400
31	30,600	-	83,900	113,000	-	153,000	-	75,100	-	29,700	18,000	-
Month					Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet			
October.....					862,800	34,300	23,900	27,830	1,711,000			
November.....					1,606,200	80,600	31,100	53,540	3,186,000			
December.....					2,405,200	96,600	52,900	77,520	4,767,000			
Calendar year 1935.....					61,545,100	342,000	23,900	168,600	122,100,000			
January.....					2,812,700	132,000	50,400	90,750	5,579,000			
February.....					2,551,800	109,000	70,400	87,990	5,061,000			
March.....					4,106,700	154,000	77,400	132,500	8,146,000			
April.....					6,142,000	255,000	156,000	204,700	12,180,000			
May.....					5,260,000	260,000	75,100	169,700	10,430,000			
June.....					1,607,500	72,400	36,700	53,580	3,185,000			
July.....					1,513,000	43,400	29,700	37,150	2,283,000			
August.....					709,200	29,200	18,000	22,880	1,407,000			
September.....					642,500	27,400	18,400	21,420	1,274,000			
Water year 1935-36.....					29,855,600	260,000	18,000	81,570	59,210,000			

MISCELLANEOUS DISCHARGE MEASUREMENTS

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 basin during water year October 1935 to September 1936

Date	Stream	Tributary to-	Locality	Gage height feet	Discharge (sec.-ft.)
Aug. 27	Mint Spring.....	Meramec River....	SE $\frac{1}{4}$ sec. 13, T. 35 N., R. 4 W., about 10 miles north-east of Salem, Mo.	-	0.60
May 18	Brown Spring.....	Dry Fork.....	Sec. 17, T. 35 N., R. 6 W., $\frac{1}{2}$ miles southeast of Hobson, Mo.	-	.14
12	Lake Spring.....	....do.....	SE $\frac{1}{4}$ sec. 3, T. 35 N., R. 7 W., at Lake Spring, Mo.	-	.02
10	Brook Spring.....	....do.....	SW $\frac{1}{4}$ sec. 22, T. 38 N., R. 6 W., $\frac{2}{3}$ miles east of St. James, Mo.	-	.65
Sept. 10	Richart Spring....	Meramec River....	NW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 29, T. 38 N., R. 5 W., 4 miles south of Fanning, Mo.	-	1.25
11	Beaver Spring.....	....do.....	SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 34, T. 38 N., R. 5 W., 6 miles west of Steelville, Mo.	-	.19
11	Elm Spring.....	Prewett Creek....	SW $\frac{1}{4}$ sec. 9, T. 38 N., R. 5 W., 1 mile southwest of Fanning, Mo.	-	.75
11	Indian Spring.....	....do.....	NW $\frac{1}{4}$ sec. 36, T. 38 N., R. 5 W., $\frac{3}{4}$ miles west of Steelville, Mo.	-	.24
10	McIntosh Spring...	Pine Creek.....	NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 13 (revised), T. 38 N., R. 5 W., 3 miles south of Cuba, Mo.	-	.95
Jan. 4	Steelville Spring	Yadkin Creek.....	SE $\frac{1}{4}$ sec. 33, T. 38 N., R. 4 W., in Steelville, Mo.	-	1.5
May 3	....do.....	....do.....	....do.....	-	2.5
July 23	....do.....	....do.....	....do.....	-	.05
Aug. 1	....do.....	....do.....	....do.....	-	0
5	Howes Mill Spring	Huzzah Creek.....	SW $\frac{1}{4}$ sec. 15, T. 34 N., R. 3 W., at Howes Mill, 18 miles east of Cuba, Mo.	-	7.09
May 12	Lost River.....	Meramec River....	In Missouri Caverns (underground), 4 miles south-east of Leasburg, Mo.	0.40	1.92
July 26	....do.....	....do.....	....do.....	.34	1.42
Sept. 4	Roaring Spring...	....do.....	E $\frac{1}{2}$ sec. 19, T. 41 N., R. 1 W., 2 miles east of Stanton, Mo.	-	2.36
4	Kratz Spring....	Spring Creek.....	Sec. 19, T. 41 N., R. 2 W., $\frac{1}{2}$ miles west of Stanton, Mo.	-	10.0
Aug. 10	Blue Spring.....	St. Francis River	Sec. 4, T. 27 N., R. 6 E., 6 miles southeast of Greenville, Mo.	-	42.3
May 22	Mill Spring.....	Asher Creek.....	SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 4, T. 26 N., R. 7 W., 2 miles southwest of Wappapello, Mo.	-	5.21
Jan. 13	Roaring River Spring.	Roaring River....	Sec. 27, T. 22 N., R. 27 W., 7 miles south of Cassville, Mo.	-	29.5
Sept. 24	....do.....	....do.....	....do.....	1.00	60.8
June 5	James River.....	White River.....	Sec. 27, T. 28 N., R. 22 W., $\frac{2}{3}$ miles southeast of Battlefield, Mo.	-	14.7
July 7	....do.....	....do.....	....do.....	-	4.32
13	....do.....	....do.....	....do.....	-	2.98
15	....do.....	....do.....	....do.....	-	2.53
20	....do.....	....do.....	....do.....	-	1.74
23	....do.....	....do.....	....do.....	-	1.45
27	....do.....	....do.....	....do.....	-	1.18
Aug. 31	....do.....	....do.....	....do.....	-	.70
Sept. 28	Sequoiota Spring.	James River.....	Sequoiota State Park, 5 miles southeast of Springfield, Mo.	-	*17.1
Aug. 18	Big Spring.....	North Fork of White River.	NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 26, T. 25 N., R. 11 W., 1 mile south of Roosevelt, Mo.	-	10.2
18	Blue Spring.....	....do.....	SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 14, T. 24 N., R. 11 W., 5 miles southeast of Dora, Mo. Formerly published as Blue Spring at McCabe, Mo.	-	11.3
17	Double Spring...	....do.....	NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 32, T. 24 N., R. 11 W., 6 miles south of Dora, Mo.	-	56.8
17	Wilder Spring...	Spring Creek.....	Sec. 14, T. 23 N., R. 11 W., 5 miles north of Elijah, Mo.	-	5.76
17	Althea Spring...	North Fork of White River.	Sec. 25, T. 23 N., R. 12 W., 5 miles northeast of Tecumseh, Mo.	-	13.3
19	Bryant Spring...	Bryant Creek.....	Sec. 7, T. 27 N., R. 15 W., at Bryant, Mo.	-	.57
19	Crystal Spring..	Hunter Creek.....	Sec. 22, T. 26 N., R. 15 W., 6 miles southeast of Ava, Mo.	-	12.1
18	Rockbridge Spring.	Spring Creek.....	Sec. 5, T. 24 N., R. 13 W., at Rockbridge, Mo.	-	15.2

Miscellaneous discharge measurements in lower Mississippi River basin during water year October 1935 to September 1936 - Continued.

Date	Stream	Tributary to-	Locality	Gage height feet	Discharge (sec.-ft.)
Aug. 18	Hodgson Mill Spring.	Bryant Creek.....	Sec. 34, T. 24 N., R. 12 W., near Sycamore, Mo.	-	28.1
18	Zanoni Spring.....	Pine Creek.....	Sec. 7, T. 23 N., R. 12 W., at Zanoni, Mo.	-	.35
Feb. 11	Black River.....	White River.....	NW $\frac{1}{4}$ sec. 2, T. 24 N., R. 6 E., at Poplar Bluff, Mo.	.22	449
Mar. 30	....do.....	....do.....	....do.....	.84	543
May 26	....do.....	....do.....	....do.....	.11	296
Sept. 14	....do.....	....do.....	....do.....	.95	343
Aug. 5	Reed Spring.....	West Fork of Black River.	Sec. 28, T. 32 N., R. 1 E., half a mile east of Centerville, Mo.	-	6.78
6	Warner Bay Spring.	Black River.....	Sec. 9, T. 31 N., R. 2 E., 8 miles southeast of Centerville, Mo.	-	16.3
6	Amsden Spring.....	Sinking Creek....	Sec. 19, T. 31 N., R. 1 E., 8 miles south of Centerville, Mo.	-	.53
11	Cartar Spring.....	Webb Creek.....	Sec. 34, T. 29 N., R. 2 E., 7 miles west of Piedmont, Mo.	-	.91
11	Brewer Bay Spring.	Black River.....	SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 5, T. 28 N., R. 3 E., 4 miles southwest of Piedmont, Mo.	-	2.09
11	Leeper Spring....	....do.....	Sec. 26, T. 28 N., R. 3 E., in Leeper, Mo.	-	.04
May 21	Mill Spring.....	....do.....	Sec. 36, T. 28 N., R. 3 E., at Mill Spring, Mo.	-	10.6
Aug. 11	....do.....	....do.....	....do.....	-	9.67
11	Markham Spring...	....do.....	Sec. 23, T. 27 N., R. 4 E., 3 miles west of Williamsville, Mo.	-	5.54
10	Lord Spring.....	....do.....	SE $\frac{1}{4}$ sec. 28, T. 27 N., R. 5 E., 3 miles east of Williamsville, Mo.	-	.58
10	Keener Spring....	....do.....	Sec. 9, T. 26 N., R. 5 E., 1 mile southeast of Keener, Mo.	-	13.8
21	Montauk Spring...	Current River....	SE $\frac{1}{4}$ sec. 22, T. 32 N., R. 7 W., half a mile north of Montauk, Mo.	-	48.9
21	Welch Spring.....	....do.....	Sec. 14, T. 31 N., R. 6 W., 3 miles southeast of Cedar Grove, Mo.	-	78.3
6	Highley Spring...	Sinking Creek....	Sec. 33, T. 32 N., R. 3 W., 4 miles southwest of Bunker, Mo.	-	3.84
20	Jacks Fork.....	Current River....	NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 31, T. 28 N., R. 6 W., just above Blue Spring and 7 miles north-east of Mountain View, Mo.	-	8.34
Dec. 3	Clear Spring.....	South Fork of Jacks Fork.	NE $\frac{1}{4}$ sec. 19, T. 28 N., R. 8 W., 12 miles northeast of Willow Springs, Mo.	-	.89
Aug. 20	....do.....	....do.....	....do.....	-	1.15
20	McCubbens Spring.	....do.....	NW $\frac{1}{4}$ sec. 6, T. 27 N., R. 6 W., 5 miles northeast of Mountain View, Mo.	-	.40
20	Blue Spring.....	Jacks Fork.....	NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 31, T. 28 N., R. 6 W., 7 miles north-east of Mountain View, Mo.	-	6.61
20	Ebb and Flow Spring	....do.....	NW $\frac{1}{4}$ sec. 35, T. 27 N., R. 6 W., 6 miles northwest of Birch Tree, Mo.	-	7.66
6	Blue Spring.....	Current River....	NE $\frac{1}{4}$ sec. 21, T. 29 N., R. 2 W., 12 miles east of Eminence, Mo.	-	69.2
7	Gravel Spring....	....do.....	Sec. 4, T. 28 N., R. 1 W., 10 miles northwest of Van Buren, Mo.	-	116
11	Cave Spring.....	....do.....	S $\frac{1}{2}$ lot 2, NW $\frac{1}{4}$ sec. 19, T. 26 N., R. 2 E., $\frac{3}{8}$ miles west of Hunter, Mo.	-	1.17
11	Jordan Spring....	....do.....	W $\frac{1}{2}$ NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 24, T. 26 N., R. 1 E., $\frac{3}{8}$ miles west of Hunter, Mo.	-	7.66
7	Phillips Spring..	....do.....	Sec. 10, T. 25 N., R. 1 E., 12 miles southeast of Van Buren, Mo.	-	9.00
12	Turner Mill Spring.	Eleven Point River.	Sec. 3, T. 24 N., R. 3 W., 10 miles northeast of Alton, Mo.	-	1.85
12	Boze Mill Spring.	....do.....	Sec. 16, T. 23 N., R. 2 W., 12 miles east of Alton, Mo.	-	15.9
13	Thomasson Mill Spring.	....do.....	Sec. 16, T. 22 N., R. 2 W., 14 miles southeast of Alton, Mo.	-	24.3
13	Blue Spring.....	....do.....	Sec. 6, T. 22 N., R. 2 W., 14 miles southeast of Alton, Mo.	-	53.9
Sept. 25	Big Spring.....	Shoal Creek.....	Sec. 15, T. 25 N., R. 32 W., at Neosho, Mo.	-	.66
Mar. 9	Femington Creek.	Washita River...	Tishomingo, Okla.	-	20.1

*Measured after exceedingly heavy rain.

†Measured during ebb or low stage.

‡Does not include large amount of water entering river through gravel bar.

INDEX

	Page		Page
Accuracy of data and computed results.....	6-7	Clear Spring, Mo., discharge measure-	
Acres-foot, definition of.....	5	ments of.....	145
Agencies other than Geological Survey		Colbert, Okla., Red River near.....	132
records by.....	11	Colmor Intake Canal near Ocate, N. Mex.....	124
Alamo, Tenn., Middle Fork of Forked		Computations, results of, accuracy of.....	6-7
Deer River near.....	34	Control, definition of.....	5
Alley Spring at Alley, Mo.....	64	Cooperation, record of.....	12
Althea Spring, Mo., discharge measurement		Cottonwood River at Cottonwood Falls,	
of.....	144	Kans.....	111
Amazon Canal near Hartland, Kans.....	94	Council Creek near Stillwater, Okla.....	105
Amnden Spring, Mo., discharge measurement		Coyote Creek near Golondrinas, N. Mex.....	129
of.....	145	Crowell, Tex., Pease River near.....	133
Arkansas River at Arkansas City, Kans.....	82	Crystal Spring, Mo., discharge measurement	
at Canon City, Colo.....	72	of.....	144
at Garden City, Kans.....	79	Cucharas River at Boyd ranch, near	
at Granite, Colo.....	70	La Veta, Colo.....	89
at Holly, Colo.....	77	Current River at Doniphan, Mo.....	61
at La Junta, Colo.....	75	at Van Buren, Mo.....	60
at Lamar, Colo.....	76	near Eminence, Mo.....	59
at Larned, Kans.....	80	Cypress Creek near Jefferson, Tex.....	137
at Little Rock, Ark.....	85	Darden, Tex., Sulphur River near.....	136
at Salida, Colo.....	71	Data, accuracy of.....	6-7
at Syracuse, Kans.....	78	explanation of.....	5-6
at Van Buren, Ark.....	84	Dawson, N. Mex., Vermajo River near.....	117
at Wichita, Kans.....	81	De Walli Bluff, Ark.....	52
near Muskogee, Okla.....	83	Doniphan, Mo., Current River at.....	61
near Nepesta, Colo.....	74	Double Spring, Mo., discharge measurement	
near Pueblo, Colo.....	73	of.....	144
Arkansas River Basin, Colo.-Kans.-Okla.-		Durwood, Okla., Washita River near.....	134
Ark.-Mo.-N. Mex., gaging-station		Eagle Nest, N. Mex., Cieneguilla Creek	
records.....	70-131	near.....	120
Atchafalaya River, Springs, La.....	142-143	Moreno Creek at.....	122
Bardley, Mo., Eleven Point River near.....	86	Sixmile Creek near.....	121
Baton Rouge, La., Bayou Duplantier at.....	139-141	Ebb and Flow Spring, Mo., discharge	
Bayou Duplantier at City Lake, Baton		measurement of.....	145
Rouge, La.....	139-141	Eleven Point River near Bardley, Mo.....	86
Bayou Meto near Stuttgart, Ark.....	131	Elm Spring, Mo., discharge measurement of.....	144
Beaver, Ark., White River at.....	49	Eminence, Mo., Current River near.....	59
Beaver Spring, Mo., discharge measurement		Jacks Fork at.....	63
of.....	144	Burke, Mo., Moramee River near.....	24
Bell Ranch, N. Mex., Canadian River near.....	115	Farmers Ditch near Garden City, Kans.....	97
Big River at Byrnesville, Mo.....	26	Fisk, Mo., St. Francis River at.....	40
Big Spring, Mo. (tributary to Shoal Creek),		Flippin, Ark., White River near.....	51
discharge measurement of.....	145	Forked Deer River, Middle Fork of, near	
Big Spring, Mo. (White River Basin), dis-		Alamo, Tenn.....	34
charge measurement of.....	144	South Fork of, at Chestnut Bluff, Tenn.....	35
near Van Buren, Mo.....	85	at Jackson, Tenn.....	32
Black River at Leeper, Mo.....	58	Forsyth, Mo., White River at.....	50
discharge measurements of.....	145	Galena, Mo., James River at.....	53
Blue Spring, Mo. (tributary to Current		Garden City, Kans., Arkansas River at.....	79
River), discharge measurement of.....	145	Farmers Ditch near.....	97
Blue Spring, Mo. (tributary to Eleven		Garden City Canal near.....	98
Point River), discharge measurement of.....	145	Garland, Ark., Red River at.....	135
Blue Spring, Mo. (tributary to Jacks Fork),		Golondrinas, N. Mex., Coyote Creek near.....	129
discharge measurement of.....	145	Mora River near.....	128
Blue Spring, Mo. (tributary to North Fork		Granite, Colo., Arkansas River at.....	70
of White River), discharge measurement		Grape Creek near Westcliffe, Colo.....	87
of.....	144	Gravel Spring, Mo., discharge measurement	
Blue Spring, Mo. (tributary to St. Francis		of.....	145
River), discharge measurement of.....	144	Great Eastern Canal at Lakin, Kans.....	96
Bolivar, Tenn., Hatchie River at.....	35	Greenfield, Tenn., South Fork of Obion	
Boubeuse River at Union, Mo.....	26	River near.....	28
Boze Mill Spring, Mo., discharge measure-		Greer Spring at Greer, Mo.....	67
ment of.....	145	Hartland, Kans., Amazon Canal near.....	94
Bradford, Tenn., Rutherford Fork of Obion		South Side Ditch near.....	95
River near.....	30	Hatchie River at Bolivar, Tenn.....	35
Brewer Bay Spring, Mo., discharge measure-		near Stanton, Tenn.....	36
ment of.....	145	Headwater Diversion Channel Basin, Mo.,	
Brook Spring, Mo., discharge measurement		gaging-station record.....	27
of.....	144	Hendon, Ark., North Fork of White River	
Brown Spring, Mo., discharge measurement of		near.....	57
Brush Creek, West Fork of, near Stillwater,		Higbee, Colo., Purgatoire River near.....	91
Okla.....	104	Highley Spring, Mo., discharge measure-	
Bryant Spring, Mo., discharge measurement		ment of.....	145
of.....	144	Hodgson Mill Spring, Mo., discharge	
Buffalo River near Rush, Ark.....	55	measurement of.....	145
Byrnesville, Mo., Big River near.....	116	Holly, Colo., Arkansas River at.....	77
Canadian River at Logan, N. Mex.....	115	Holly Drain near.....	93
near Bell Ranch, N. Mex.....	115	Horatio, Ark., Little River near.....	135
Canon City, Colo., Arkansas River at.....	72	Howes Mill Spring, Mo., discharge measure-	
Cape Girardeau, Mo., Mississippi River at.....	15-16	ment of.....	144
Carter Spring, Mo., discharge measurement		Huerfano River at Manzanares Crossing,	
of.....	145	near Redwing, Colo.....	88
Castor River at Zalma, Mo.....	27	Independence, Kans., Verdigris River at.....	106-107
Cave Spring, Mo., discharge measurement		Indian Spring, Mo., discharge measure-	
Chestnut Bluff, Tenn., South Fork of Forked		ment of.....	144
Deer River at.....	33	Iola, Kans., Neosho River near.....	108
Cieneguilla Creek near Eagle Nest, N. Mex.....	120	Jacks Fork at Eminence, Mo.....	63
Cimarron, N. Mex., Rayado River near.....	123	discharge measurement of.....	145
Cimarron River at Oilton, Okla.....	102	Jackson, Tenn., South Fork of Forked	
at Springer, N. Mex.....	119	Deer River at.....	32
at Ute Park, N. Mex.....	118	James River at Galena, Mo.....	53

	Page		Page
James River, Mo., discharge measurements of.....	144	Pueblo, Colo., Arkansas River near.....	73
Jefferson, Tex., Cypress Creek near.....	137	Purgatoire River at Highland Dam, near.....	92
Joplin, Mo., Shoal Creek near.....	114	Las Animas, Colo.,	91
Turkey Creek at.....	113	at Ninemile Dam, near Higbee, Colo.....	91
Jordan Spring, Mo., discharge measurement of.....	145	at Trinidad, Colo.,	90
Keener Spring, Mo., discharge measurement of.....	145	Rayado River at Sauble ranch, near.....	123
Kennett, Mo., Little River Ditch 1 near.....	44	Cimarron, N. Mex.,	133
Little River Ditch 66 near.....	45	Red River at Garland, Ark.,	132
Little River Ditch 66-A near.....	46	near Colbert, Okla.,	132
Little River Ditch 81 near.....	45	Red River Basin, Okla.-Ark.-Tex., gaging-station records in.....	132-138
Little River Ditch 251 near.....	43	Redwing, Colo., Huerfano River at.....	88
Little River Ditch 259 near.....	48	Reed Spring, Mo., discharge measurement of.....	145
Kratz Spring, Mo., discharge measurement of.....	144	Richart Spring, Mo., discharge measurement of.....	144
Krotz Springs, La., Atchafalaya River at.....	142-143	Roaring River Spring, Mo., discharge measurements of.....	144
La Cueva, N. Mex., Mora River at.....	125	Roaring Spring, Mo., discharge measurement of.....	144
La Junta, Colo., Arkansas River at.....	75	Rockbridge Spring, Mo., discharge measurement of.....	144
La Veta, Colo., Cucharas River near.....	89	Rossville, Tenn., Wolf River at.....	37-38
Lagrué Bayou near Stuttgart, Ark.,	68	Round Spring at Round Spring, Mo.,	62
Lake Spring, Mo., discharge measurement of.....	144	Run-off in inches, definition of.....	5
Lakin, Kans., Great Eastern Canal at.....	96	Rush, Ark., Buffalo River near.....	56
Lamar, Colo., Arkansas River at.....	76	St. Francis River at Ask, Mo.,	49
Larned, Kans., Arkansas River at.....	80	St. Francis River at Ask, Mo.,	49
Pawnee River near.....	99	near Patterson, Mo.,	31
Las Animas, Colo., Purgatoire River near.....	92	St. Francis River Basin, Mo., gaging-station records in.....	39-48
Lee Creek near Van Buren, Ark.,	130	St. Francis River floodway near Marked Tree, Ark.,	42
Leeper, Mo., Black River at.....	58	St. Louis, Mo., Mississippi River at.....	13-14
Leeper Spring, Mo., discharge measurement of.....	145	Sealwater Creek near Joplin, Mo.,	114
Little Arkansas River at Valley Center, Kans.,	100	Shoemaker, N. Mex., Mora River near.....	127-128
Little Lagrué Bayou near Stuttgart, Ark.,	69	Sixmile Creek near Eagle Nest, N. Mex.,	121
Little River Ditch 1 near Kennett, Mo.,	44	South Arkansas River near Salida, Colo.,	86
Little River Ditch 66 near Kennett, Mo.,	46	South Side Ditch near Hartland, Kans.,	95
Little River Ditch 81 near Kennett, Mo.,	43	Spring River near Waco, Mo.,	112
Little River Ditch 251 near Kennett, Mo.,	47	Springer, N. Mex., Cimarron River at.....	119
Little River Ditch 259 near Kennett, Mo.,	48	St. Francis River at Wilson Creek near.....	54
Little River near Horatio, Ark.,	135	Stage-discharge relation, definition of.....	5
Little Rock, Ark., Arkansas River at.....	85	Stanton, Tenn., Hatchie River near.....	36
Logan, N. Mex., Canadian River at.....	116	Steelville, Mo., Meramec River near.....	23
Lord Spring, Mo., discharge measurement of.....	144	Steelville Spring, Mo., discharge measurements of.....	144
Lost River, Mo., discharge measurements of.....	144	Stillwater, Okla., Council Creek near.....	103
McCubbens Spring, Mo., discharge measurement of.....	145	Sealwater Creek at.....	105
McIntosh Spring, Mo., discharge measurement of.....	144	West Fork of Brush Creek near.....	104
Malvern, Ark., Ouachita River near.....	138	Stuttgart, Ark., Bayou Moto near.....	131
Marked Tree, Mo., St. Francis River at.....	41	Lagrué Bayou near.....	88
St. Francis River floodway near.....	42	Little Lagrué Bayou near.....	69
Markham Spring, Mo., discharge measurement of.....	145	Sulphur River near Darden, Tex.,	136
Memphis, Tenn., Mississippi River at.....	17-18	Syracuse, Kans., Arkansas River at.....	78
Meramec River near Eureka, Mo.,	24	Tecumseh, Mo., North Fork of White River near.....	56
Meramec River near Steelville, Mo.,	23	Terms definition of.....	5
Meramec River Basin, Mo., gaging-station records in.....	23-26	Thomason Mill Spring, Mo., discharge measurement of.....	145
Mill Spring, Mo. (tributary to Asher Creek), discharge measurement of.....	144	Trinidad, Colo., Purgatoire River at.....	90
Mill Spring, Mo. (tributary to Black River), discharge measurements of.....	145	Turkey Creek at Joplin, Mo.,	113
Mint Spring, Mo., discharge measurement of.....	144	Turner Mill Spring, Mo., discharge measurement of.....	145
Mississippi River at Cape Girardeau, Mo.,	15-16	Union, Mo., Bourbeuse River at.....	25
at Memphis, Tenn.,	17-18	Union City, Tenn., North Fork of Obion River near.....	31
at St. Louis, Mo.,	13-14	Ute Park, N. Mex., Cimarron River at.....	118
near New Orleans, La.,	22	Valley Center, Kans., Little Arkansas River at.....	100
near Vicksburg, Miss.,	19-21	Van Buren, Ark., Arkansas River at.....	84
Mississippi River Delta, La., gaging-station records in.....	139-143	Walton, Mo., Big Spring near.....	65
Montauk Spring, Mo., discharge measurement of.....	145	Current River at.....	60
Mora River at La Cueva, N. Mex.,	125	Verdigris River at Independence, Kans.,	106-107
near Golondrinas, N. Mex.,	126	Vermajo River near Dawson, N. Mex.,	117
near Shoemaker, N. Mex.,	127-128	Vicksburg, Miss., Mississippi River near.....	19-21
Morono Creek at Eagle Nest, N. Mex.,	122	Waco, Mo., Spring River near.....	112
Muskogee, Okla., Arkansas River near.....	83	Walton River at Wildfield, Kans.,	101
Neosho River near Tola, Kans.,	108	Warner Bay Spring, Mo., discharge measurement of.....	145
near Parsons, Kans.,	109-110	Washita River near Durwood, Okla.,	134
Nepeseta, Colo., Arkansas River near.....	74	Welch Spring, Mo., discharge measurement of.....	145
New Orleans, La., Mississippi River near.....	22	Westcliffe, Colo., Grape Creek near.....	87
Obion River at Obion, Tenn.,	29	White River near.....	49
North Fork of, near Union City, Tenn.,	31	at Do Valls Bluff, Ark.,	52
Rutherford Fork of, near Bradford, Tenn.,	30	at Forsyth, Mo.,	50
South Fork of, near Greenfield, Tenn.,	28	near Flippin, Ark.,	51
Obion River Basin, Tenn., gaging-station records in.....	28-34	North Fork of, at Tecumseh, Mo.,	56
Ocate, N. Mex., Colimor Intake Canal near.....	124	near Henderson, Ark.,	57
Oilton, Okla., Cimarron River at.....	102	White River Basin, Ark.-Mo., gaging-station records in.....	49-69
Ouachita River at Rammel Dam, near Malvern, Ark.,	138	Wichita, Kans., Arkansas River at.....	81
Parsons, Kans., Neosho River near.....	109-110		
Patterson, Mo., St. Francis River near.....	39		
Pawnee River near.....	99		
Pease River near Crowell, Tex.,	135		
Pennington Creek, Okla., discharge measurement of.....	145		
Phillips Spring, Mo., discharge measurement of.....	145		
Publications, information concerning.....	7-10		
obtaining or consulting of.....	7-8		
on stream flow, lists of.....	8-9, 10		

INDEX

149

	Page		Page
Wilder Spring, Mo., discharge measurement		Work, division of.....	12
of.....	144	scope of.....	5
Wilson Creek near Springfield, Mo.....	84	Zalma, Mo., Castor River at.....	27
Winfield, Mass., Walnut River at.....	101	Zanoni Spring, Mo., discharge measure-	
Wolf River at Rossville, Tenn.....	37-38	ment of.....	145



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