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SURFACE WATER SUPPLY of the UNITED STATES
1945

PART 8
WESTERN GULF OF MEXICO BASINS

Prepared by
WATER RESOURCES BRANCH
DIVISION OF SURFACE WATER

In cooperation with the States of
COLORADO, LOUISIANA, NEW MEXICO, AND TEXAS
and other agencies

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Figure 1. Gaging-station structures: A, Sabine River near Gladewater, Tex.; B, Pecos River at Red Bluff, N. Mex.; C, Colorado River at San Saba, Tex... 3

SURFACE WATER SUPPLY OF WESTERN GULF OF MEXICO BASINS, 1945

SCOPE OF WORK

This volume is one of a series of 14 reports presenting results of measurements of stage and flow made on streams, lakes, and reservoirs in the United States during the water year ending September 30, 1945. The work was begun in 1888 in connection with special studies relating to irrigation. Measurements of the flow of streams and of the stage and contents of lakes and reservoirs have been made at about 10,300 gaging stations in the 48 States and also at many in the Territories of Alaska and Hawaii. In July 1945, 5,600 gaging stations, including those in Hawaii, were being maintained by the Geological Survey and cooperating organizations. Miscellaneous discharge measurements were made during the water year at many other points.

In the execution of the work many State and private organizations have cooperated, either by furnishing data or by assisting in collecting data. Cooperation of the first kind is acknowledged in connection with the description of each station affected; cooperation of the second kind is acknowledged, under the heading "Cooperation," in the introductory matter that precedes the gaging-station records in each volume. In the present volume, the section on cooperation of the second kind appears on page 13.

DEFINITION OF TERMS

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

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

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

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

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

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

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

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

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

EXPLANATION OF DATA

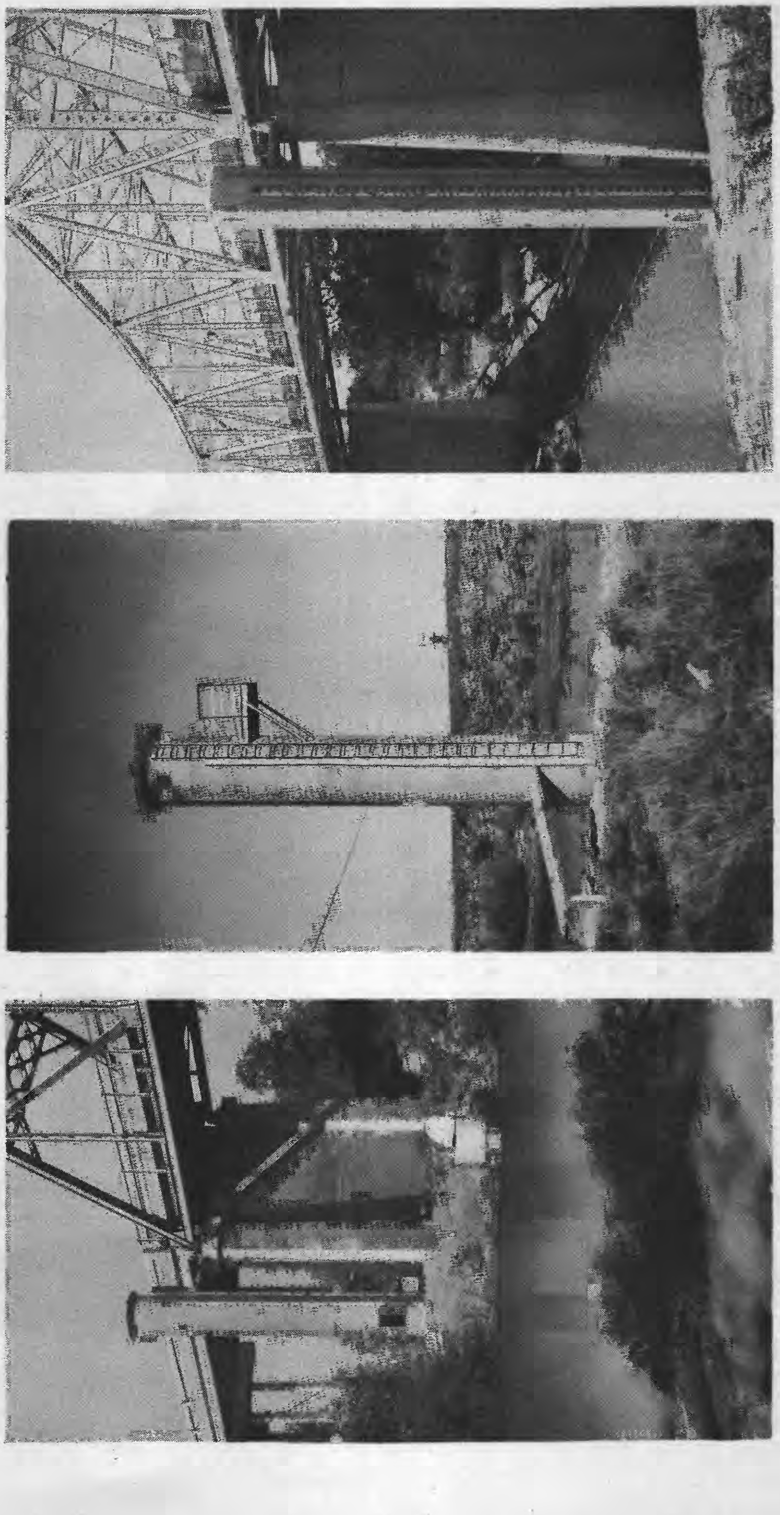
The base data collected at gaging stations consist of records of stage, measurements of discharge, and general information used to supplement the records of stage and discharge measurements in determining the daily flow. The records of stage are obtained either from direct readings on a nonrecording gage or from a water-stage recorder that gives a continuous record of the fluctuations. Measurements of discharge are made with a current meter by the general methods outlined in standard textbooks on the measurement of river discharge. Typical structures in use at gaging stations are shown in figure 1.

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

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

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

For most of the gaging stations on streams in the area covered by this report the data presented comprise a description of the station, a table showing the daily discharge of the stream, and a table of monthly and yearly discharge and runoff. Skeleton rating



A. SABINE RIVER NEAR GLADEWATER, TEX.

B. PECOS RIVER AT RED BLUFF, N. MEX.

C. COLORADO RIVER NEAR SAN SABA, TEX.

FIGURE 1.—GAGING-STATION STRUCTURES.

tables are published for all stations except those at which the daily discharge for the greater part of the year was determined by the shifting-control method, the slope method, or other special methods.

The description of the station gives the type of gage, its latitude and longitude as 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. Under "Extremes" are given the maximum discharge and gage height; the minimum discharge if there is little or no regulation; the minimum daily discharge if there is extensive regulation (also the minimum discharge if useful); and the minimum gage height (unless it is of no importance). Unless otherwise qualified, the maximum discharge corresponds to the crest stage, obtained by use of a water-stage recorder or a nonrecording gage read at the time of the crest. Likewise the minimum discharge represents the lowest stage, unless otherwise qualified. Selected peak discharges with the times of their occurrence are given, below the table of monthly discharge, for some stations. This supplementary information is generally omitted for a station at which the drainage area of the stream is less than 10 or more than 10,000 square miles or at which, on most days, the peak discharge exceeds the mean discharge by less than 10 percent.

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

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

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

TIME BASIS

At 2 a.m., on February 9, 1942, as an emergency measure, the Nation shifted from standard time to "war time," and clock time in the several zones of the country was moved ahead 1 hour, or to 3 a.m. At 2 a.m., war time, on September 30, 1945, a change was made back to standard time and clock time was moved back 1 hour, or to 1 a.m. This made September 30 a 25-hour day. Time given herein for the water year 1945 prior to the change on September 30 refers to war time; time after the change refers to standard time. To convert war time to standard time, subtract 1 hour. Records of daily discharge prior to February 9, 1942, were computed, and those subsequent to September 30, 1945, will be computed on the basis of standard time; records between those dates were computed on the basis of war time. The discharge given for September 30, 1945, is the mean for 25 hours. The mean discharge and runoff for the month of September have been computed from the total second-foot-days for the month without adjustment for the fact that September 30 was a 25-hour day. The small error resulting from this procedure has been disregarded.

ACCURACY OF FIELD DATA AND COMPUTED RESULTS

The accuracy of stream-flow data depends primarily on (1) the permanency of the stage-discharge relation or, if the control is unstable, the frequency of discharge measurements and (2) the accuracy of observations of stage, measurements of flow, and interpretation of records.

The station description gives a statement in regard to the general accuracy of the records. "Excellent" indicates that, in general, the error in the daily records is believed to be less than 5 percent; "good," less than 10 percent; "fair," less than 15 percent; and "poor," probably more than 15 percent. The records of monthly and yearly mean discharge and runoff are, in general, more accurate than the daily records.

Yield at some stations as indicated by monthly means may vary widely from natural yield, owing to diversion, consumption, regulation by storage, increase or decrease in evaporation due to artificial causes, or other factors. For such stations figures of "second-feet per square mile" and "runoff in inches" are not published unless storage or diversion records are included indicating the extent of the regulation or diversion or unless satisfactory adjustments can be made for changes in contents or reservoirs or for other changes incident to use and control. Evaporation from a reservoir is not included in the adjustments for changes in reservoir contents, unless its inclusion is indicated. Figures of second-feet per square mile and runoff in inches are also omitted if the drainage area includes large noncontributing areas or if the average annual rainfall over the drainage area is less than 20 inches.

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

The table of monthly discharge presents in summary the distribution of the flow past the station. The table of daily discharge affords opportunity for more detailed studies of the variation in flow. As further observations in each succeeding year may be expected to throw new light on data previously published, it should be borne in mind that such data are subject to revision in succeeding water-supply papers.

PUBLICATIONS

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

Part 1. North Atlantic slope basins (St. John River to York River).
2. South Atlantic and eastern Gulf of Mexico basins (James River to Mississippi River).
3. Ohio River Basin.
4. St. Lawrence River Basin.

Part 5. Hudson Bay and upper Mississippi River Basins.
6. Missouri River Basin.
7. Lower Mississippi River Basin.
8. Western Gulf of Mexico basins.
9. Colorado River Basin.
10. The Great Basin.
11. Pacific slope basins in California.
12. Pacific slope basins in Washington and upper Columbia River Basin.
13. Snake River Basin.
14. Pacific slope basins in Oregon and lower Columbia River Basin.

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

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

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

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

East of the Mississippi River:
Albany, N. Y., 528 Federal Building.
Asheville, N. C., 220 Post Office Building.
Atlanta, Ga., 410 Grand Theater Building.
Augusta, Maine, Statehouse.
Baton Rouge, La., 124 Geology Building, Louisiana State University.
Boston, Mass., 939 Post Office Building.
Charleston, W. Va., 408 Union Building.
Charlottesville, Va., House G, Dawson Row, University of Virginia.
Chattanooga, Tenn., 442 Post Office Building.
College Park, Md., 105 Engineering Building, University of Maryland.
Columbia, S. C., 207 Creason Building.
Columbus, Ohio, 404 Engineering Experiment Station, Ohio State University.
Harrisburg, Pa., 490 Education Building.
Hartford, Conn., 203 Federal Building.
Indianapolis, Ind., 205 Underwriters Building.
Jackson, Miss., 208 Millsaps Building.
Knoxville, Tenn., 337 Post Office Building.
Louisville, Ky., 531 Federal Building.
Madison, Wis., 666 State Office Building.
Montgomery, Ala., 507 Post Office Building.
Morgantown, W. Va., 406 Mineral Industries Building.
New Philadelphia, Ohio, Muskingum Watershed Conservancy District Building.
Ocala, Fla, 304 Post Office Building.
Pittsburgh, Pa., 515 Plaza Building.
Raleigh, N. C., 242 Education Building.
St. Paul, Minn., 1427 New Post Office Building.
Trenton, N. J., 228 Federal Building.
Urbana, Ill., 14 Post Office Annex, Elm Street.
Washington, D. C., Federal Works Agency Building.
Williamsburg, Ky., Kentucky Highway Building.

West of the Mississippi River:
Albuquerque, N. Mex., 723 North Second Street.
Austin, Tex., 302 West Fifteenth Street.
Bismarck, N. Dak., 7 Eltinge Building.
Boise, Idaho, 429 Federal Building.
Denver, Colo., 310 Denham Building.
Fort Smith, Ark., 6 Post Office Building.
Helena, Mont., 408 Federal Building.
Honolulu, Hawaii, 225 Federal Building.
Idaho Falls, Idaho, 204 Federal Building.
Iowa City, Iowa, 508 Hydraulic Laboratory, University of Iowa.
Lincoln, Nebr., 619 Rudge-Guenzel Building.
Los Angeles, Calif. 429-F United States Post Office and Courthouse.
Oklahoma City, Okla., 535 State Capitol.
Pierre, S. Dak., City Hall.
Portland, Oreg., 606 Post Office Building.
Rolla, Mo., Ramsey Building.
St. Louis, Mo., 1004 New Federal Building.
Salt Lake City, Utah, 303 Federal Building.
San Francisco, Calif., 625 Market Street Building.
Santa Fe, N. Mex., 204 United States Courthouse.
Tacoma, Wash., 207 Federal Building.
Topeka, Kans., 305 Federal Building.
Tucson, Ariz., 210 Post Office Building.

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

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

Stream-flow data for the years 1884-1901, in reports of the Geological Survey

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

Report	Character of data	Year
10th A, pt. 2	Descriptive information only.	
11th A, pt. 2	Monthly discharge and descriptive information	1884 to September 1890.
12th A, pt. 2	....do	1884 to June 30, 1891.
13th A, pt. 3	....do	1884-92.
14th A, pt. 2	Monthly discharge	1888-93.
B 131	Descriptions, measurements, gage heights, and ratings	1893-94.
16th A, pt. 2	Descriptive information only.	
B 140	Descriptions, measurements, gage heights, ratings, and monthly discharge.	1895.
W 11	Gage heights	1896.
18th A, pt. 4	Descriptions, measurements, ratings, and monthly discharge	1895-96.
W 15	Descriptions, measurements, and gage heights of streams east of the Mississippi River, and Missouri River and tributaries above Kansas River.	1897.
W 16	Descriptions, measurements, and gage heights of streams west of the Mississippi River, except Missouri River and tributaries above Kansas River.	1897.
19th A, pt. 4	Descriptions, measurements, ratings, and monthly discharge.	1897.
W 27	Measurements, ratings, and gage heights of streams east of the Mississippi River, and Missouri River and tributaries.	1898.
W 28	Measurements, ratings, and gage heights of streams west of the Mississippi River, except Missouri River and tributaries.	1898.
20th A, pt. 4	Monthly discharge	1898.
W 35 to 39	Descriptions, measurements, gage heights, and ratings	1899.
21st A, pt. 4	Monthly discharge	1899.
W 47 to 52	Descriptions, measurements, gage heights, and ratings	1900.
22d A, pt. 4.	Monthly discharge	1900.
W 65, 66	Descriptions, measurements, gage heights, and ratings	1901.
W 75	Monthly discharge	1901.

Papers on surface water supply containing records from 1899 to date, grouped by years and drainage basins, are listed by number on page 8. The data for any particular gaging station will, in general, be found in the reports covering the years during which the station was maintained. For example, the data for 1910 to 1920 for any station in the area covered by part 3 are published in Water-Supply Papers 283, 303, 323, 353, 403, 433, 453, 473, and 503, which contain records for the Ohio River Basin for those years.

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

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

Numbers of water-supply papers containing result~ of stream measurements, 1899-1945
(For basins included see pp. 5-6).

Year	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1899 a...	35	b35, 36	36	36	36	c36, 37	37	37	d37, 38	38, e39	38, f39	38	38	38
1900 g...	47, h48	48	48, i49	49	49	49, j50	50	50	50	51	51	51	51	51
1901.....	55, 75	65, 75	65, 75	65, 75	k65, 66, 75	66, 75	k65, 66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75
1902.....	82	b82, 83	83	m82, 83	k83, 85	84	k83, 84	84	85	85	85	85	85	85
1903.....	97	b97, 98	98	97	k98, 99, n100	99	k98, 99	99	100	100	100	100	100	100
1904.....	o124, p125, q126	q126, 127	128	129	k128, 130	130, r131	k128, 131	132	133	133, s134	134	135	135	135
1905.....	o165, p166, q167	q167, 168	169	170	171	172	k169, 173	174	175, t177	176, s177	177	178	178	u177, 178
1906.....	o201, p202, q203	q203, 204	205	206	207	208	k205, 209	210	211, t213	212, s213	213	214	214	214
1907-8...	241	242	243	244	245	246	247	248	249	250, s251	251	252	252	252
1909.....	261	262	263	264	265	266	267	268	269	270, s271	271	272	272	272
1910.....	281	282	283	284	285	286	287	288	289	290	291	292	292	292
1911.....	301	302	303	304	305	306	307	308	309	310	311	312	312	312
1912.....	321	322	323	324	325	326	327	328	329	330	331	332-A	332-B	332-C
1913.....	351	352	353	354	355	356	357	358	359	360	361	362-A	362-B	362-C
1914.....	381	382	383	384	385	386	387	388	389	390	391	392	393	394
1915.....	401	402	403	404	405	406	407	408	409	410	411	412	413	414
1916.....	431	432	433	434	435	436	437	438	439	440	441	442	443	444
1917.....	451	452	453	454	455	456	457	458	459	460	461	462	463	464
1918.....	471	472	473	474	475	476	477	478	479	480	481	482	483	484
1919-20..	501	502	503	504	505	506	507	508	509	510	511	512	513	514
1921.....	521	522	523	524	525	526	527	528	529	530	531	532	533	534
1922.....	541	542	543	544	545	546	547	548	549	550	551	552	553	554
1923.....	561	562	563	564	565	566	567	568	569	570	571	572	573	574
1924.....	581	582	583	584	585	586	587	588	589	590	591	592	593	594
1925.....	601	602	603	604	605	606	607	608	609	610	611	612	613	614
1926.....	621	622	623	624	625	626	627	628	629	630	631	632	633	634
1927.....	641	642	643	644	645	646	647	648	649	650	651	652	653	654
1928.....	661	662	663	664	665	666	667	668	669	670	671	672	673	674
1929.....	681	682	683	684	685	686	687	688	689	690	691	692	693	694
1930.....	696	697	698	699	700	701	702	703	704	705	706	707	708	709
1931.....	711	712	713	714	715	716	717	718	719	720	721	722	723	724
1932.....	726	727	728	729	730	731	732	733	734	735	736	737	738	739
1933.....	741	742	743	744	745	746	747	748	749	750	751	752	753	754
1934.....	756	757	758	759	760	761	762	763	764	765	766	767	768	769
1935.....	781	782	783	784	785	786	787	788	789	790	791	792	793	794
1936.....	801	802	803	804	805	806	807	808	809	810	811	812	813	814
1937.....	821	822	823	824	825	826	827	828	829	830	831	832	833	834
1938.....	851	852	853	854	855	856	857	858	859	860	861	862	863	864
1939.....	871	872	873	874	875	876	877	878	879	880	881	882	883	884
1940.....	891	892	893	894	895	896	897	898	899	900	901	902	903	904
1941.....	921	922	923	924	925	926	927	928	929	930	931	932	933	934
1942.....	951	952	953	954	955	956	957	958	959	960	961	962	963	964
1943.....	971	972	973	974	975	976	977	978	979	980	981	982	983	984
1944.....	1001	1002	1003	1004	1005	1006	1007	1008	1009	1010	1011	1012	1013	1014
1945.....	1031	1032	1033	1034	1035	1036	1037	1038	1039	1040	1041	1042	1043	1044

a Rating tables and index to Water-Supply Papers 35-39 contained in Water-Supply Paper 39. Tables of monthly discharge for 1899 in 21st Annual Report, part 4.

b James River only.

c Gallatin River.

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

e Mojave River only.

f Kings and Kern Rivers and south Pacific slope basins.

g Rating tables and index to Water-Supply Papers 47-52 contained in Water-Supply Paper 52. Monthly discharge for 1900 in 22d Annual Report, part 4.

h Wissahickon and Schuylkill Rivers to James River.

i Scioto River.

j Loup, Platte, and Elkhorn Rivers and tributaries below Platte River.

k Tributaries of Mississippi River from east.

m Lake Ontario and tributaries to St. Lawrence River proper.

n Hudson Bay only.

o New England rivers only.

p Hudson River to Delaware River, inclusive.

q Susquehanna River to Yadkin River, inclusive.

r Platte and Kansas Rivers.

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

t Below mouth of Gila River.

u Rogue, Umpqua, and Siletz Rivers only.

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

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

Report	Period	Water-Supply Paper
STATE		
Alabama, Water powers of, with an appendix on stream measurements in Mississippi.	1895-1903	107
California, Water resources of, part 1, Stream measurements in Sacramento River Basin.	1887-1912	298
California, Water resources of, part 2, Stream measurements in San Joaquin River Basin.	1878-1912	299
California, Water resources of, part 3, Stream measurements in the Great Basin and Pacific Coast river basins.	1891-1912	300
California, southern, Surface water supply of Pacific slope of	1890-1918	447
California, Surface water supply of Sacramento River Basin	1895-1927	597-E
California, Surface water supply of San Joaquin River Basin	1895-1927	636-D
California, southern, Surface water supply of Pacific slope basins in	1894-1927	636-E
California, Surface water supply of minor San Francisco Bay, northern Pacific, and Great basins in.	1895-1927	637-A
Colorado, Water resources of	1884-1900	74
Georgia, Water resources of	1895-1905	197
Massachusetts, Surface waters of	1845-1915	415
Nebraska, Surface water supply of	1894-1906	230
Oregon, Surface water supply of	1878-1910	370
Texas, Summary of records of surface waters of	1898-1937	850
Vermont, Surface waters of	1875-1916	424
Washington, Summary of hydrometric data in	1878-1919	492
Washington, Summary of records of surface waters of	1919-35	870
Wisconsin, northern, Water power of	1895-1905	156
Wyoming, Surface waters of, and their utilization	1894-1921	469
DRAINAGE BASIN		
Colorado River (Ariz., Colo., N. Mex., Utah, Wyo.) and its utilization	1888-1914	395
Colorado River, upper (Colo., Utah), and its utilization	1897-1927	617
Colorado River Basin (Ariz., Calif., Colo., Utah, Wyo.), Surface waters at base stations in.	1891-1938	918
Columbia River Basin, upper (Mont., Idaho), Surface waters of	1898-1938	916
Great Salt Lake Basin, Water powers of	1889-1920	517
Green River (Colo., Utah, Wyo.) and its utilization	1894-1926	618
Kennebec River Basin (Maine), Water resources of	1890-1906	198
Milk River. See St. Mary and Milk Rivers		
Missouri and St. Mary River Basins (Mont.), Surface waters of	1881-1938	917
New-Kanawha River Basin (N. C., Va., W. Va.), Surface water supply of	1895-1920	536
Penobscot River Basin (Maine), Water resources of	1904-9	279
Potomac River Basin (D. C., Md., W. Va.)	1895-1906	192
Rio Grande Basin (Colo., N. Mex., Tex.), Water resources of	1888-1913	358
St. Mary and Milk Rivers (Mont., Canada), Water supply of	1898-1917	491
St. Mary River. See St. Mary and Milk Rivers; Missouri and St. Mary River Basin.		
Susquehanna River Basin (Pa., Md.), Hydrography of	1890-1904	109

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

State reports containing compilations of records of discharge

State	Period	Report	Issued by
Alabama	1895-1915	Bull. 17, Water powers of Alabama	Geological Survey of Alabama.
Arkansas	1857-1928	Stream-gaging Rept. 1	Arkansas Geological Survey.
Colorado	1881-1938	Water resources of Colorado, Appendix 2, Data on stream-gaging stations of Colorado.[1]	State Planning Commission, Water Conservation Board, State engineer.
Do	1881-1938	Water resources of Colorado, Appendix 3, vols. 1 and 2, Stream-flow data of Colorado.	Do.
Connecticut	1900-1927	Bull. 44, Water resources of Connecticut	State Geological and Natural History Survey.
Do	1912-33	5th biennial report[2]	State Water Commission.
Georgia	1895-1906	Bull. 16, Water powers of Georgia	Geological Survey of Georgia.
Do	1907-19	Bull. 38, Water powers of Georgia	Do.
Illinois	1908-11	Water resources of Illinois	Rivers and Lakes Commission.
Do	1900-1934	Stream-flow data of Illinois	Division of Waterways.
Indiana	1923-27	Pub. 72, Surface water supply of Indiana	Department of Conservation.
Do	1927-30	Pub. 112, Surface water supply of Indiana.	Do.
Iowa	1873-1932	Stream-flow records of Iowa	State Planning Board.
Do	1873-1940	Water-Supply Bull. 1, Summaries of yearly and flood flow relating to Iowa streams.	Iowa Geological Survey.
Do	1941-42	Water-Supply Bull. 2, Surface water resources of Iowa.	Do.

[1] Contains records of yearly discharge only.
[2] Contains records of monthly discharge in second-feet per square mile.

State reports containing compilations of records of discharge--Continued

State	Period	Report	Issued by
Kansas........	1895-1919	Surface waters of Kansas..................	Kansas Water Commission.
Do........	1919-24	....do....................................	Do.
Do........	1924-28	Report of Division of Water Resources.....	State Board of Agriculture.
Do........	1928-35	Stream-flow data of Kansas................	Do.
Do........	1935-39	....do....................................	Do.
Kentucky.....	1910-20	Surface waters of Kentucky................	Kentucky Geological Survey.
Louisiana....	1903-38	Geol. Bull. 16, Surface water supply of Louisiana.	Department of Conservation.
Maine........	1887-1920	1st annual report[2]......................	Maine Water Power Commission.
Maryland.....	1929-37	Flow data and draft storage curves for major streams in Maryland.	State Planning Commission and Water Resources Commission.
Do........	1892-1943	Bull. 1, Summary of records of surface waters of Maryland and the Potomac River Basin.	Department of Geology, Mines, and Water Resources.
Minnesota....	1909-12	Water-resources investigation of Minnesota.	State Drainage Commission.
Missouri.....	1857-1926	Vol. 20, 2d series, Water resources of Missouri.	Missouri Bureau of Geology and Mines.
Do........	1927-39	Vol. 26, 2d series, Surface waters of Missouri.	Missouri Geological Survey and Water Resources.
Montana......	1889-1911	5th biennial report.......................	Office of the State Engineer.
Do........	1881-1938	Special Rept. 10, vols. 1-4, Water resources of Montana.	Montana Agricultural Experiment Station.
Nebraska.....	1894-1914	1st hydrographic report...................	Bureau of Water Power, Irrigation, and Drainage.
Do........	1914-28	2d hydrographic report....................	Do.
New Hampshire	1889-1922	Annual and statistical report, vol. 12[2]...	Public Service Commission.
New Jersey...	1892-1928	Bull. 33, Surface water supply of New Jersey.	Department of Conservation and Development.
Do........	1928-34	Special Rept. 5, Surface water supply of New Jersey.	State Water Policy Commission.
Do........	1934-40	Special Rept. 9, Surface water supply of New Jersey.	Do.
New Mexico...	1888-1925	Surface water supply of New Mexico........	Office of the State Engineer.
North Carolina.	1889-1923	Bull. 34, Discharge records of North Carolina streams.[3]	Department of Conservation and Development.
Do........	1889-1936	Bull. 39, Discharge records of North Carolina streams.[4]	Do.
North Dakota.	1919-21	Report to Governor of North Dakota on flood control.	State chief engineer.
Do........	1882-1938	Surface water in North Dakota.............	State Planning Board.
Do........	1882-1944	Supplement B, 4th biennial report.........	State Water Conservation Commission.
Ohio.........	1898-1921	Bull. 73, Ohio stream flow................	Engineering Experiment Station, Ohio State University.
Do........	1902-39	Bull. 200, Compilation of stream-flow records of Ohio.	Department of Agriculture, Division of Conservation and Natural Resources.
Do........	1898-1939	Bull. 111, Ohio stream-drainage areas and flow-duration tables.	Engineering Experiment Station, Ohio State University.
Oregon.......	1878-1914	Bull. 4, Water resources of the State of Oregon.	Office of the State Engineer.
Do........	1914-24	Bull. 7, Water resources of the State of Oregon.	Do.
Do........	1924-30	Bull. 8, Water resources of the State of Oregon.	Do.
Do........	1930-36	Bull. 9, Water resources of the State of Oregon.	Do.
Pennsylvania.	1890-1911	Report of the Water Supply Commission of Pennsylvania.	Water Supply Commission of Pennsylvania.
Do........	1928-32	Stream-flow records of Pennsylvania.......	Department of Forests and Waters.
Rhode Island.	1929-41	7th annual report.........................	Department of Public Works.
Tennessee....	1874-1924	Bull. 34, Water resources of Tennessee....	Department of Education.
Do........	1920-30	Bull. 40, Surface waters of Tennessee[3]....	Do.
Utah.........	1889-1905	5th biennial report.......................	Office of the State Engineer.
Do........	1906-10	7th biennial report.......................	Do.
Do........	1911-16	10th biennial report......................	Do.
Virginia.....	1895-1927	Bull. 31, Water resources of Virginia.....	Virginia Geological Survey.
Do........	1927-42	Bull. 4, Surface water supply of Virginia (Potomac, Rappahannock, and York River Basins).	Virginia Conservation Commission.
Do........	1927-42	Bull. 5, Surface water supply of Virginia (James River Basin).	Do.
Do........	1927-42	Bull. 6, Surface water supply of Virginia (Roanoke and Chowan River Basins).	Do.
Do........	1927-42	Bull. 7, Surface water supply of Virginia (New, Tennessee, and Big Sandy River Basins).	Do.
Washington...	1878-1933	Bull. 5, Monthly and yearly summaries of hydrometric data.	Department of Conservation and Development.
Wisconsin....	1888-1914	1st report of Railroad Commission of Wisconsin to Legislature on water powers.	Railroad Commission of Wisconsin.
Do........	1914-23	2d report of Railroad Commission of Wisconsin to Legislature on water powers.	Do.

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[2] Contains records of monthly discharge in second-feet per square mile.

[3] Contains records of weekly discharge.

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

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

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

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

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 1944 to September 1945 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	Collected by	Remarks
Alamito Creek.....	Near Presidio, Tex.....	1932-45	International Boundary Commission.	Published in bulletins of International Boundary Commission.
Arrey Canal.......	Near Arrey, N. Mex.....	1918, 1920-45	Bureau of Reclamation.	Unpublished.
Carlsbad project main canal.	Near Carlsbad, N. Mex..	1941-45	....do................	Do.
Devils River......	Near Del Rio, Tex......	†1931-45	International Boundary Commission.	Published in bulletins of International Boundary Commission.
El Paso sewage outfall.	Near El Paso, Tex......	1936-45	....do................	Do.
East Side Canal...	At Mesilla Dam, near Mesilla Park, N. Mex.	1916-18, 1920-45	Bureau of Reclamation.	Unpublished.
Fort Sumner Canal.	Near Fort Sumner, N. Mex.	1940-45	....do................	Do.
Goodenough Springs.	Near Comstock, Tex.....	†1931-45	International Boundary Commission.	Published in bulletins of International Boundary Commission.
Hagerman Canal....	Near Roswell, N. Mex...	1942-45	Hagerman Irrigation Co.	Unpublished.
Las Vacas Arroyo..	Near Villa Acuna, Coahuila, Mexico.	1938-45	International Boundary Commission.	Published in bulletins of International Boundary Commission.

† Records for earlier years published in Geological Survey water-supply papers.

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

Stream	Location	Period	Collected by	Remarks
Leasburg Canal....	At head, near Fort Selden, N. Mex.	1917-18, 1920-45	Bureau of Reclamation....	Unpublished.
Pecos River.......	Near Comstock, Tex....	†1931-45	International Boundary Commission.	Published in bulletins of International Boundary Commission.
Pinto Creek.......	Near Del Rio, Tex.....	†1931-45	....do..................	Do.
Rio Alamo.........	Mier, Tamaulipas, Mexico.	1923-45	....do..................	Do.
Rio Escondido.....	At Villa de Fuente, Coahuila, Mexico.	1922-45	....do..................	Records for 1923-24 and 1928 published in H. Doc. 359, 71st Cong., 2d sess., as Rio San Antonio above Fuente; records for 1932-45 published in bulletins of International Boundary Commission.
Rio Grande........	Below American Dam, near El Paso, Tex.	1938-45	....do..................	Published in bulletins of International Boundary Commission.
Do............	Below Brownsville, Tex	1934-45	....do..................	Do.
Do............	Buenos Aires station near Donna, Tex.	1943-45	....do..................	Do.
Do............	County-line station near El Paso, Tex.	1938-45	....do..................	Do.
Do............	Del Rio, Tex..........	†1931-45	....do..................	Do.
Do............	Eagle Pass, Tex.......	†1931-45	....do..................	Do.
Do............	Near El Paso, Tex.....	†1931-45	....do..................	Do.
Do............	Below old Fort Quitman, Tex.	†1931-45	....do..................	Do.
Do............	Hildalgo, Tex.........	†1931-45	....do..................	Do.
Do............	At island station, near El Paso, Tex.	1938-45	....do..................	Do.
Do............	At Johnson Ranch, Tex.	1936-45	....do..................	Do.
Do............	Cuidad Juarez, Chihauhau, Mexico.	1938-45	....do..................	Do.
Do............	Langtry, Tex..........	†1931-45	....do..................	Do.
Do............	Laredo, Tex...........	†1926-45	....do..................	Do.
Do............	Leasburg Dam, at Fort Selden, N. Mex.	1919-45	Bureau of Reclamation....	Unpublished.
Do............	Matamoros, Tamaulipas, Mexico.	‡1926-45	International Boundary Commission.	Published in bulletins of International Boundary Commission.
Do............	Above Presidio, Tex...	†1926-45	....do..................	Do.
Do............	Below Presidio, Tex...	†1926-45	....do..................	Do.
Do............	Rio Grande City, Tex..	1932-45	....do..................	Do.
Do............	Roma, Tex.............	†1925-28, 1931-45	....do..................	Do.
Do............	Zapata, Tex...........	1932-45	....do..................	Do.
Rio Salado........	Near Guerrero, Tamaulipas, Mexico.	†1923-45	....do..................	Do.
Rio San Diego.....	Jimenez, Coahuila, Mexico.	1924-45	....do..................	Records for 1924-1928 published in report of International Water Commission, United States and Mexico, U. S. Section; records for 1932-45 published in bulletins of International Boundary Commission.
Rio San Juan......	Santa Rosalia, Tamaulipas, Mexico.	†1923-45	....do..................	Published in bulletins of International Boundary Commission.
Rio San Rodrigo...	Near El Moral, Coahuila, Mexico.	1922-45	....do..................	Records for 1923-24 and 1927-28 published in H. Doc. 359, 71st Cong., 2d sess.; records for 1932-45 published in bulletins of International Boundary Commission.
San Felipe Creek..	Near Del Rio, Tex.....	1931-45	....do..................	Published in bulletins of International Boundary Commission.
Terlingua Creek...	Near Terlingua, Tex...	1932-45	....do..................	Do.
West Side Canal...	At Mesilla Dam, near Mesilla Park, N.Mex.	1916-18, 1920-45	Bureau of Reclamation....	Unpublished.

† Records for earlier years published in Geological Survey water-supply papers.

‡ Records for earlier years published in Geological Survey water-supply papers as Rio Grande near Brownsville, Tex.

Note.- In addition to the gaging stations listed above, the International Boundary Commission collect and publish records of discharge in floodways in the lower Rio Grande Valley and records of diversions from the Rio Grande for irrigation and municipal use.

The Soil Conservation Service of the United States Department of Agriculture has been collecting records of runoff from selected areas in the western Gulf of Mexico basins as follows: In Texas, from 6 areas of less than 100 acres each near Mesquite (beginning in 1938) and from 3 areas of less than 200 acres each near Waco (beginning in 1938); in New Mexico, from 3 areas of less than 800 acres each near Santa Fe (beginning in 1938) and 3 areas of less than 190 acres each near Albuquerque (beginning in 1939). These records are in the files of the Soil Conservation Service.

COOPERATION

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

Colorado: Office of the State engineer, M. C. Hinderlider.

Louisiana: State Department of Public Works, D. L. Pyburn, director.

New Mexico: Office of the State engineer, T. M. McClure; Interstate Stream Commission, T. M. McClure, secretary; New Mexico State Highway Department, F. G. Healy, State highway engineer; and Board of County Commissioners, Colfax County, E. M. Swope, chairman.

Texas: State Board of Water Engineers, consisting of C. S. Clark, chairman, J. W. Pritchett, and E. V. Spence; Red Bluff Water Power Control District; San Jacinto River Conservation and Reclamation District; Nueces River Conservation and Reclamation District; and city of Dallas.

Financial assistance was furnished by the Corps of Engineers, United States Army, in the operation of 70 gaging stations, of which 4 were in Louisiana, 7 in New Mexico, and 59 in Texas.

Financial assistance was also furnished by the Office of Indian Affairs of the United States Department of the Interior in the operation of gaging stations on the Indian Pueblo lands in New Mexico.

Acknowledgments are due the Bureau of Reclamation of the United States Department of the Interior and the Weather Bureau of the United States Department of Commerce for assistance in collecting the records published herein.

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

New Mexico: Agua Pura Co., Alamogordo Community ditch, town of Alamogordo, New Mexico Power Co., and Middle Rio Grande Conservancy District.

Texas: Dallas County, the cities of Abilene, Corpus Christi, and Houston, Coleman Chamber of Commerce, San Antonio City Service Board, Tarrant County Water Control and Improvement District No. 1, West Texas Utilities Co., Lower Colorado River Authority, Brazos River Conservation and Reclamation District, Pecos County Water Improvement District No. 1, Reeves County Water Improvement District No. 1, Dow Chemical Co., Lower Neches Valley Authority, and Salt Water Disposal Committee.

DIVISION OF WORK

The stream-gaging work was conducted by the water resources branch of the Geological Survey -- Glenn L. Parker, chief Hydraulic engineer, Carl G. Paulsen, assistant chief hydraulic engineer, and Rudolph G. Kasel, chief of the division of surface water (until June 14, 1945). The data for the stations in the several States were collected and prepared for publication under the supervision of district engineers as follows: In Colorado, Robert Follansbee, the work being done in collaboration with M. C. Hinderlider, State engineer, and L. T. Burgess, State chief hydrographer; in Louisiana (except for Sabine River at Logansport), R. E. Marsh prior to Oct. 14, 1944, and E. B. Rice thereafter; in New Mexico (except for Delaware River near Red Bluff and Pecos River at Red Bluff), Berkeley Johnson; in Texas and for Sabine River at Logansport, La., Delaware River near Red Bluff, N. Mex., and Pecos River at Red Bluff, N. Mex., C. E. Ellsworth.

The records were reviewed and the manuscript prepared for publication under the direction of B. J. Peterson, hydraulic engineer in charge, and F. J. Flynn, associate engineer, section of reports.

MERMENTAU RIVER BASIN

Bayou Nezpique near Basile, La.

Location.- Wire-weight gage, lat. 30°28'50", long. 92°37'55", in NE¼NW¼ sec. 1, T. 7 S., R. 3 W., at bridge on U. S. Highway 190, a quarter of a mile downstream from Missouri Pacific Railroad bridge and 2 miles west of Basile. Datum of gage is 3.60 feet above mean sea level, datum of 1929 (levels by Corps of Engineers, U. S. Army).

Records available.- October 1938 to September 1945.

Extremes.- Maximum discharge during year, 4,490 second-feet Feb. 9 (gage height, 21.3 feet); minimum, 0.9 second-foot Nov. 3, June 12 (gage height, 1.55 feet).
1938-45: Maximum discharge, 22,900 second-feet Aug. 11, 1940 (gage height, 31.08 feet); minimum, 0.1 second-foot June 7-13, 1943; minimum gage height, 1.16 feet June 6, 1940.

Remarks.- Records fair. Gage read twice daily. Diversions above and below station for irrigation.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	40	1.5	654	3,260	82	92	1,810	152	29	63	1,140	179
2	54	1.5	398	3,520	63	102	2,580	87	14	40	968	201
3	54	1.0	240	3,420	87	97	3,140	63	6.1	24	770	173
4	50	1.7	154	3,350	222	72	3,690	44	4.6	24	412	143
5	44	1.3	110	3,000	1,660	54	3,940	29	3.8	22	206	118
6	118	1.1	180	2,940	2,550	48	3,720	19	2.4	46	135	102
7	72	1.1	364	3,070	3,340	37	3,460	13	1.7	42	170	97
8	132	32	610	3,100	4,020	31	3,060	11	1.3	31	177	92
9	425	213	682	3,010	4,380	27	2,710	10	1.5	27	193	87
10	441	400	552	2,910	4,250	40	2,180	8.4	1.1	50	283	82
11	278	278	377	2,500	3,830	35	1,500	6.1	1.0	107	151	77
12	179	296	243	2,260	3,650	24	792	5.1	.9	142	107	97
13	129	178	167	1,820	3,390	22	344	20	22	258	82	146
14	87	113	129	1,350	3,180	35	125	108	350	275	87	273
15	59	72	97	796	2,870	80	54	113	643	502	315	244
16	44	46	72	413	2,540	258	42	980	641	1,050	226	157
17	31	33	59	194	2,230	391	31	1,560	504	1,170	129	102
18	21	24	46	129	1,880	464	26	1,820	426	898	107	72
19	15	44	38	409	1,660	480	21	1,850	366	539	113	68
20	14	113	31	830	1,370	691	16	1,670	573	355	149	72
21	10	166	87	935	1,110	978	21	1,290	634	326	331	68
22	6.8	260	113	753	906	1,130	17	1,160	425	417	590	77
23	7.0	230	97	621	659	1,120	118	1,430	295	470	640	92
24	5.9	158	77	559	434	998	592	1,310	240	352	640	87
25	5.1	946	68	456	278	857	1,070	918	584	265	618	87
26	3.8	1,310	234	320	179	759	1,310	542	717	197	710	107
27	2.5	1,490	1,260	203	135	842	1,360	308	775	460	641	193
28	2.4	1,490	1,780	155	102	750	1,280	187	640	812	430	263
29	2.2	1,350	2,350	129	-	563	901	113	279	1,090	269	235
30	2.0	1,010	2,920	118	-	460	359	72	118	1,160	189	235
31	1.7	-	3,040	102	-	800	-	54	-	1,190	163	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	2,336.4	441	1.7	75.4	4,630
November	10,404.2	1,490	1.0	347	20,640
December	17,229	3,040	31	556	34,170
Calendar year 1944	293,284.6	7,270	.5	801	581,700
January	46,632	3,520	102	1,504	92,490
February	51,067	4,380	63	1,823	101,300
March	12,337	1,130	22	398	24,470
April	40,269	3,940	16	1,342	79,870
May	15,952.6	1,850	5.1	515	31,640
June	8,299.4	775	.9	277	16,460
July	12,404	1,190	22	400	24,600
August	11,141	1,140	82	359	22,100
September	4,026	273	68	134	7,990
Water year 1944-45	232,087.6	4,380	.9	636	460,400

Note.- Discharge above about 150 second-feet computed by using rate of change of stage as a factor.
Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Bayou des Cannes near Eunice, La.

Location.- Water-stage recorder, lat. 30°29'00", long. 92°29'25", in SW¼SE¼ sec. 32, T. 6 S., R. 1 W., Louisiana meridian, at bridge on U. S. Highway 190, 3 miles downstream from Missouri Pacific Railroad bridge and 4 miles west of Eunice. Datum of gage is 14.84 feet above mean sea level, datum of 1929 (Louisiana Geodetic Survey bench mark; levels by Corps of Engineers, U. S. Army). Auxiliary staff gage 1.8 miles downstream.

Records available.- October 1938 to September 1945.

Extremes.- Maximum discharge during year, 2,740 second-feet Feb. 7 (gage height, 16.41 feet); minimum, 0.3 second-foot Nov. 1, 2 (gage height, 1.37 feet).
1938-45: Maximum discharge, 9,520 second-feet Aug. 10, 1940 (gage height, 21.13 feet); no flow May 7, 10-18, July 10, 1939.

Remarks.- Records good except those below 10 second-feet and those for period of no gage-height record, which are fair. Discharge above about 100 second-feet computed by using fall as determined by twice-daily readings of auxiliary staff gage as a factor. Diversions above station for irrigation. Some regulation May to October by small irrigation diversion dams.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	36	0.3	97	984	29	9.8	919	37	4.1	77	671	140
2	28	.3	42	747	21	8.5	1,220	26	2.7	88	485	98
3	23	.6	27	630	36	7.9	2,260	18	2.4	30	255	80
4	19	.8	19	464	95	7.3	1,890	11	2.4	41	142	67
5	16	.7	16	174	962	6.6	1,300	6.6	2.6	27	90	63
6	83	.6	232	413	1,430	6.3	862	3.8	2.2	17	77	63
7	222	.6	548	839	2,630	7.6	311	3.0	2.2	32	61	59
8	192	1.0	679	1,140	1,920	8.1	75	2.6	2.1	59	61	63
9	206	12	723	1,440	1,240	6.9	31	2.3	1.8	45	141	59
10	a190	114	597	1,190	816	5.7	20	2.2	1.3	74	63	44
11	a140	226	246	737	266	5.5	14	1.7	1.1	187	41	34
12	a90	160	98	223	116	5.2	9.6	1.7	1.5	293	32	40
13	a50	82	52	90	299	4.9	7.3	24	10	329	38	161
14	a20	38	34	53	465	5.7	5.7	237	129	432	158	282
15	a10	21	25	39	398	35	4.9	267	316	578	137	303
16	a7	13	20	27	173	34	11	727	278	595	77	211
17	5.1	12	16	21	77	24	8.3	1,030	122	567	59	119
18	4.8	8.5	13	24	72	16	4.8	2,110	51	410	56	61
19	4.6	63	12	110	164	14	3.6	1,630	184	284	112	42
20	3.5	231	11	204	152	127	3.0	1,150	432	450	140	41
21	3.1	254	9.6	197	101	228	3.5	606	484	538	167	53
22	2.7	160	22	155	61	287	5.9	151	269	489	276	39
23	2.1	84	27	151	44	211	14	91	323	334	228	48
24	1.5	42	19	146	34	101	116	87	238	297	252	55
25	1.2	394	15	90	25	63	142	59	129	479	415	162
26	.9	579	96	51	19	84	314	47	92	483	442	176
27	.8	708	392	34	15	92	688	32	122	595	303	119
28	.6	767	803	47	12	74	479	21	57	692	158	57
29	.5	685	1,090	70	-	47	209	14	45	841	113	34
30	.5	322	1,300	72	-	44	70	7.9	32	933	271	24
31	.4	-	1,180	45	-	233	-	5.0	-	867	176	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	1,364.3	222	0.4	44.0	2,710
November	4,980.4	767	.3	166	9,880
December	8,460.6	1,300	9.6	273	16,780
Calendar year 1944	87,979.7	3,540	.2	240	174,500
January	10,607	1,440	21	342	21,040
February	11,671	2,630	12	417	23,150
March	1,810.0	287	4.9	58.4	3,590
April	11,001.6	2,260	3.0	367	21,820
May	8,411.8	2,110	1.7	271	16,680
June	3,339.4	484	1.1	111	6,620
July	11,163	933	17	360	22,140
August	5,696	671	32	184	11,300
September	2,797	303	24	93.2	5,550
Water year 1944-45	81,302.1	2,630	.3	223	161,300

a No gage-height record; discharge computed on basis of records for Bayou Nezpique near Basile.
Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Bayou Plaquemine Brule near Crowley, La.

Location.- Wire-weight gage, lat. 30°14'05", long. 92°23'44", in NW¼SW¼ sec. 29, T. 9 S., R. 1 E. Louisiana meridian, at bridge on State Highway 370, 1½ miles upstream from Missouri Pacific Railroad bridge, 1 mile downstream from bridge on State Highway 26, and 1¼ miles northwest of Crowley. Datum of gage is 2.17 feet below mean sea level (Louisiana Geodetic Survey bench mark). Prior to Aug. 31, 1945, staff gage at same site and datum.

Records available.- October 1942 to September 1945.

Extremes.- Maximum discharge during year, 4,700 second-feet Feb. 7 (gage height, 15.0 feet, from graph based on gage readings); no flow Nov. 2-7.

1942-45: Maximum discharge, 8,150 second-feet Nov. 9, 1943 (gage height, 17.80 feet); no flow on many days in 1944.

Remarks.- Records fair except those for periods of no gage-height record and those below 300 second-feet, which are poor. Gage read twice daily. Divérsions above and below station for irrigation.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	113	e1	892	990	404	a70	835	4	a46	155	a1,400	408
2	9S	e0	493	792	368		1,800	e3	a35	108	a1,000	293
3	93	e0	252	743	389		2,760	e3	a30	11S	a500	188
4	83	e0	144	484	698		2,610	a3	24	133	a340	133
5	83	e0	103	348	1,980		2,090	a2	e10	133	a200	105
6	83	e0	793	404	3,680		1,430	a2	e5	113	a120	113
7	9e	e0	1,700	S37	4,590		873	a2	e3	98	a150	123
8	144	88	2,140	1,200	3,390		464	a2	e2	128	a170	123
9	257	177	2,020	1,340	2,220		249	a2	e2	59	199	355
10	281	355	1,670	1,250	1,570		128	a1	e1	27	281	368
11	177	436	1,300	1,020	946		108	a1	e1	50	221	269
12	108	408	S55	583	816		93	a1	33	36	155	188
13	73	329	443	298	942		88	14	62	88	323	269
14	50	144	231	166	1,920		7e	88	1,440	177	801	257
15	39	e3	123	138	2,120		78	188	3,340	269	1,010	166
16	26	50	98	a100	1,770		54	1,090	3,450	269	1,230	144
17	17	37	78	a80	1,240		e34	2,740	2,460	221	1,770	73
18	11	42	60	a70	712		e24	3,990	1,770	199	1,820	6e
19	a8	258	93	ae0	a180		e20	3,320	1,190	177	1,480	83
20	a7	575	83	a150			e17	2,330	a800	210	1,010	83
21	e6	705	S3	352			a60	1,660	a500	269	a600	83
22	e5	e50	83	707			233	1,160	a300	3e1	a440	83
23	e4	700	83	1,130			210	621	a200	440	a300	83
24	e3	1,000	7S	1,450			177	342	a140	381	245	83
25	e3	1,400	60	1,480			177	18e	10e	281	349	78
26	e2	1,720	46	1,200			188	155	93	177	366	177
27	e2	2,350	13S	751		50	133	155	7e	a240	243	166
28	e2	2,300	441	527		55	57	133	7e	a500	166	166
29	e2	1,e60	732	554	-	60	43	103	83	a900	177	113
30	e1	1,360	1,010	544	-	68	10	a80	88	a1,200	166	144
31	e1	-	1,070	452	-	108	-	a60	-	a1,500	408	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	1,880	281	1	60.6	3,730
November	17,228	2,350	0	574	34,170
December	17,395	2,140	46	561	34,500
Calendar year 1944	143,770	3,680	0	393	285,200
January	20,220	1,4S0	70	652	40,110
February	31,555	4,590	-	1,127	62,590
March	2,161	-	-	69.7	4,290
April	15,121	2,760	10	504	29,990
May	18,443	3,990	1	595	36,5e0
June	16,373	3,450	1	546	32,480
July	9,037	1,500	27	292	17,920
August	17,740	1,820	120	572	35,190
September	4,983	408	68	166	9,880
Water year 1944-45	172,136	4,590	0	472	341,400

a No gage-height record; discharge computed on basis of precipitation records and records for Bayou des Cannes near Eunice and Bayou Nezpique near Basile.

e Stage-discharge relation indefinite; discharge computed on basis of precipitation records and records for Bayou des Cannes near Eunice and Bayou Nezpique near Basile.

Note.- Discharge above about 200 second-feet computed by using rate of change of stage as a factor.

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Calcasieu River near Glenmora, La.

Location.- Wire-weight gage, lat. 30°59'40", long. 92°40'25", in SE¼SE¼ sec. 4, T. 1 S., R. 3 W. Louisiana meridian, at bridge on State Highway 113, 1.0 mile upstream from Prairie Branch and 4.6 miles northwest of Glenmora. Datum of gage is 110.77 feet above mean sea level (Louisiana Geodetic Survey bench mark).

Drainage area.- 499 square miles.

Records available.- August 1943 to September 1945.

Extremes.- 1943: Maximum discharge during period August to September, 126 second-feet Sept. 21 (gage height, 6.28 feet); minimum, 24 second-feet Sept. 16 (gage height, 4.28 feet).

1943-44: Maximum discharge during water year, 22,100 second-feet May 5 (gage height, 16.5 feet, from graph based on gage readings), from rating curve extended above 11,000 second-feet on basis of records for nearby stations and rainfall-runoff studies; minimum, 29 second-feet Oct. 25 (gage height, 4.47 feet).

1944-45: Maximum discharge during water year, 33,600 second-feet Apr. 4 (gage height, 18.0 feet, from graph based on gage readings), from rating curve extended above 11,000 second-feet on basis of records for nearby stations and rainfall-runoff studies; minimum, 29 second-feet Nov. 4 (gage height, 4.47 feet).

Remarks.- Records good except those for periods of doubtful or no gage-height record and those above 15,000 second-feet, which are fair. Gage read twice daily.

Rating table, August 1943 to September 1945 (gage height, in feet, and discharge, in second-feet)

4.3	24	8.5	292	11.5	1,020	14.5	7,650
4.5	31	9.0	360	12.0	1,300	15.0	11,000
5.0	52	9.5	440	12.5	1,750	16.0	18,200
5.5	77	10.0	540	13.0	2,490	17.0	25,900
6.0	107	10.5	655	13.5	3,540		
8.0	245	11.0	815	14.0	5,100		

Discharge, in second-feet, 1943-45

1943

Day	Aug.	Sept.	Day	Aug.	Sept.	Day	Aug.	Sept.	Day	Aug.	Sept.
1	-	33	9	-	d40	17	-	27	25	29	52
2	-	37	10	-	d36	18	-	37	26	27	43
3	-	39	11	-	31	19	-	45	27	27	39
4	-	41	12	-	29	20	-	95	28	27	39
5	-	41	13	-	26	21	-	119	29	29	35
6	-	43	14	-	26	22	-	95	30	27	35
7	-	43	15	-	27	23	-	72	31	27	-
8	-	45	16	-	24	24	-	54			

d Doubtful gage-height record; discharge computed on basis of records for station near Oberlin.

1943-44

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	37	39	45	850	930	580	715	1,640	540	41	35	119
2	35	41	45	1,300	1,070	440	580	1,450	405	41	37	230
3	37	39	56	1,450	1,120	345	630	1,370	292	41	39	375
4	39	35	61	1,370	1,120	281	655	2,120	237	39	35	390
5	d50	35	61	1,300	1,120	245	715	6,200	181	41	37	420
6	d48	35	56	1,640	d1,000	223	815	17,200	140	39	52	d380
7	41	345	58	2,490	815	202	930	10,300	119	41	50	292
8	37	304	61	2,490	685	188	1,020	7,050	140	41	52	174
9	33	292	64	2,320	745	174	1,020	4,380	181	45	64	181
10	32	440	72	2,160	815	160	930	3,310	160	41	50	d160
11	31	515	77	1,640	690	153	655	2,490	126	39	41	119
12	31	475	66	1,230	970	140	390	1,870	153	39	41	d100
13	31	390	61	930	970	140	253	1,450	188	35	41	113
14	33	d240	66	1,540	1,170	133	202	985	160	35	37	113
15	d40	133	77	2,160	1,300	133	174	525	126	35	39	89
16	d46	101	72	2,320	1,370	133	153	304	140	37	47	68
17	43	83	101	4,070	1,370	133	133	230	133	43	66	61
18	41	72	126	7,050	1,450	146	119	195	95	45	58	52
19	39	66	146	5,100	1,750	937	119	167	83	39	54	47
20	37	d60	146	3,790	2,160	1,120	140	146	68	39	43	43
21	37	56	133	3,090	2,160	1,170	174	153	61	39	41	41
22	33	54	119	2,320	2,160	1,300	314	250	56	41	35	39
23	31	52	107	1,670	1,750	1,640	728	405	54	43	37	39
24	33	50	253	1,640	1,450	1,750	1,070	560	52	39	35	d38
25	29	45	390	1,120	1,120	2,010	1,170	685	52	39	37	35
26	31	45	440	715	1,020	1,870	1,370	850	45	39	35	35
27	31	45	440	515	1,020	1,640	1,750	1,070	45	56	35	35
28	31	45	685	495	930	1,370	2,160	1,070	45	52	89	d35
29	41	45	815	515	815	970	2,160	930	43	43	126	d36
30	41	45	850	580	-	780	1,870	815	43	37	101	41
31	39	-	850	780	-	780	-	685	-	35	95	-

d Doubtful or no gage-height record; discharge computed on basis of records for station near Glenmora.

Discharge, in second-feet, of Calcasieu River near Glenmora, La., 1943-45--Continued

1944-45

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	45	33	560	5,520	281	815	1,640	890	262	107	262	101
2	54	d32	405	4,910	253	655	5,420	685	174	119	262	89
3	47	d32	230	4,070	245	580	25,100	475	160	195	223	83
4	45	31	195	4,070	245	560	25,900	262	146	281	174	72
5	41	35	d170	3,970	732	580	8,930	230	133	304	107	72
6	41	35	160	4,070	1,300	655	3,790	174	126	209	95	68
7	52	37	174	4,070	1,370	685	2,680	153	119	113	83	64
8	68	87	304	3,310	1,540	780	2,160	133	113	95	72	58
9	216	245	405	2,880	2,160	1,020	1,870	119	107	113	68	56
10	317	281	405	2,490	3,090	1,370	1,370	113	107	140	66	54
11	345	390	455	2,490	2,880	1,450	815	140	113	160	61	52
12	230	345	455	2,490	2,320	1,120	515	303	95	146	72	52
13	101	181	360	2,320	1,870	815	331	815	153	1,840	83	52
14	89	133	317	2,010	1,540	495	253	1,070	262	3,310	72	52
15	72	113	262	1,540	1,300	1,020	223	1,230	230	3,790	146	52
16	64	89	216	1,120	1,300	1,640	202	1,640	230	4,380	146	50
17	56	107	d200	605	1,300	1,300	181	1,750	223	3,790	195	66
18	52	133	195	420	1,540	1,870	174	1,870	195	2,880	153	83
19	47	230	d180	540	1,750	1,870	160	2,320	160	2,320	107	77
20	43	356	160	655	1,870	1,750	153	2,680	126	1,870	209	66
21	d40	540	153	745	1,750	2,490	181	2,490	101	1,370	281	58
22	d40	630	146	890	1,540	2,160	253	2,160	95	1,020	271	56
23	39	655	195	1,020	1,450	2,320	440	1,750	95	745	216	54
24	d36	605	245	1,300	1,450	2,160	940	1,230	95	495	271	52
25	35	560	470	1,750	1,450	2,010	2,880	1,170	89	281	237	77
26	35	540	815	1,870	1,450	1,870	3,090	1,750	133	253	209	140
27	d34	560	1,370	1,750	1,370	1,450	2,880	2,490	153	195	202	153
28	d34	d650	1,750	1,120	1,120	1,170	2,320	2,160	188	160	202	167
29	d34	685	2,010	605	-	890	1,870	1,640	195	153	202	101
30	33	630	3,790	390	-	815	1,450	1,300	174	119	167	68
31	33	-	5,980	317	-	930	-	540	-	209	119	-

d Doubtful or no gage-height record; discharge computed on basis of records for station near Oberlin.

Monthly discharge, in second-feet, 1943-45

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff	
						Inches	Acre-feet
January	-	-	-	-	-	-	-
February	-	-	-	-	-	-	-
March	-	-	-	-	-	-	-
April	-	-	-	-	-	-	-
May	-	-	-	-	-	-	-
June	-	-	-	-	-	-	-
July	-	-	-	-	-	-	-
August 25-31, 1943	193	29	27	27.6	0.055	0.01	383
September	1,348	119	24	44.9	.090	.10	2,670
Water year	-	-	-	-	-	-	-
October 1943	1,138	50	29	36.7	.074	.08	2,260
November	4,222	515	35	141	.283	.31	8,370
December	6,599	850	45	213	.427	.49	13,090
Calendar year	-	-	-	-	-	-	-
January 1944	60,840	7,050	495	1,963	3.93	4.53	120,700
February	35,245	2,160	685	1,215	2.43	2.63	69,910
March	21,286	2,010	133	687	1.38	1.59	42,220
April	23,114	2,160	119	770	1.54	1.72	45,850
May	70,855	17,200	146	2,286	4.58	5.28	140,500
June	4,163	540	43	139	.279	.31	8,260
July	1,259	56	35	40.6	.081	.09	2,500
August	1,584	126	35	51.1	.102	.12	3,140
September	3,900	420	35	130	.261	.29	7,740
Water year 1943-44	234,205	17,200	29	640	1.28	17.44	464,500
October 1944	2,418	345	33	78.0	.156	.18	4,800
November	8,980	685	31	299	.599	.67	17,810
December	22,732	5,980	146	733	1.47	1.69	45,090
Calendar year 1944	256,376	17,200	31	700	1.40	19.10	508,500
January 1945	65,307	5,520	317	2,107	4.22	4.87	129,500
February	40,466	3,090	245	1,445	2.90	3.02	80,260
March	39,295	2,490	495	1,268	2.54	2.93	77,940
April	98,171	25,900	153	3,272	6.56	7.32	194,700
May	35,732	2,680	113	1,153	2.31	2.66	70,870
June	4,552	262	89	152	.305	.34	9,030
July	31,162	4,380	95	1,005	2.01	2.32	61,810
August	5,033	281	61	162	.325	.38	9,980
September	2,245	167	50	74.8	.150	.17	4,450
Water year 1944-45	356,093	25,900	31	976	1.96	26.55	706,200

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Calcasieu River near Oberlin, La.

Location.- Water-stage recorder, lat. 30°38'25", long. 92°48'50", in NW¼NE¼ sec. 7, T. 5 S., R. 4 W., at bridge on State Highway 52, 3 miles northwest of Oberlin and 15 miles upstream from Whiskey Chitto Creek. Datum of gage is 39.43 feet above mean sea level, datum of 1929 (Louisiana Geodetic Survey bench mark).

Drainage area.- 753 square miles.

Records available.- August 1922 to January 1925, September 1938 to September 1945.

Extremes.- Maximum discharge during year, 20,500 second-feet Apr. 6 (gage height, 20.00 feet); minimum, 59 second-feet Nov. 3-6 (gage height, 3.60 feet).

1922-25, 1938-45: Maximum discharge, 34,700 second-feet Apr. 7, 1923 (gage height, 18.48 feet, datum then in use, or about 21 feet, present datum), from rating curve extended above 14,000 second-feet; minimum, 42 second-feet Aug. 16, 1924.

Flood of 1886 reached a stage about 1 foot higher than that of Apr. 7, 1923.

Remarks.- Records good except those for periods of no gage-height record, which are fair. Paper mill at Elizabeth pumps about 5 second-feet from wells which is later discharged into Mill Creek 20 miles above station. This discharge is continuous and fairly constant.

Rating table, water year 1944-45 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Oct. 1-18, June 4 to July 14, Aug. 21 to Sept. 30)

3.6	59	9.0	1,210	15.5	5,230
4.0	97	10.0	1,540	16.0	6,060
4.5	154	11.0	1,940	16.5	7,350
5.0	232	12.0	2,440	17.0	8,980
6.0	417	13.0	3,010	18.0	12,600
7.0	645	14.0	3,720	19.0	16,500
8.0	910	15.0	4,640	20.0	20,500

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	70	62	608	4,060	1,210	1,690	3,010	2,830	2,130	267	795	276
2	68	60	632	5,230	850	1,610	4,440	2,490	1,690	267	720	232
3	69	59	645	7,650	645	1,500	5,100	1,940	1,120	340	514	215
4	72	60	596	7,060	572	1,270	5,520	1,470	596	249	417	182
5	74	60	491	5,680	1,910	1,120	15,700	1,060	368	240	397	167
6	76	59	407	5,100	4,340	1,030	18,900	745	285	321	359	154
7	76	60	359	5,520	4,860	910	11,900	525	232	388	285	150
8	121	63	321	5,860	4,240	820	6,520	417	207	388	232	150
9	146	64	294	6,060	3,140	795	4,750	359	189	350	240	144
10	103	68	312	5,520	2,280	820	3,800	321	174	215	189	136
11	126	112	359	4,640	1,940	910	3,070	303	164	182	168	131
12	183	224	417	3,980	2,230	1,030	2,540	340	154	193	157	127
13	240	267	458	3,350	3,350	1,270	2,040	378	178	215	165	125
14	267	312	480	3,010	3,970	1,540	1,540	560	469	368	240	122
15	a240	350	480	2,890	3,490	1,580	1,030	850	695	1,270	267	119
16	a150	303	437	2,830	2,890	1,770	695	1,470	670	3,210	207	115
17	a120	215	388	2,600	2,380	a2,600	548	1,900	536	4,640	180	114
18	109	168	340	2,280	2,600	a3,400	469	2,040	632	4,860	207	115
19	102	174	330	2,040	2,770	a3,400	417	2,330	695	5,100	240	127
20	94	224	312	1,810	2,330	3,140	378	2,380	596	4,540	330	144
21	87	249	276	1,470	2,130	4,060	359	2,180	350	3,720	267	144
22	81	340	249	1,210	2,230	4,340	368	2,330	232	3,070	368	135
23	77	417	232	1,090	2,280	3,880	525	2,770	240	2,490	458	128
24	77	458	215	1,060	2,230	3,420	770	3,010	572	1,940	584	122
25	73	770	207	1,090	2,040	3,070	940	2,830	795	1,540	491	137
26	71	850	615	1,150	1,860	3,280	1,030	2,380	695	1,240	368	176
27	68	795	1,770	1,270	1,770	3,560	1,270	1,900	514	1,240	359	157
28	67	770	2,770	1,500	1,690	3,280	2,040	1,540	378	970	321	160
29	65	695	3,640	1,770	-	2,770	2,950	1,690	330	1,060	303	207
30	64	620	4,150	1,760	-	2,330	3,140	2,180	294	1,030	427	232
31	64	-	3,880	1,610	-	2,130	-	2,380	-	745	340	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	3,300	267	64	106	6,550
November	8,928	850	59	298	17,710
December	26,670	4,150	207	860	52,900
Calendar year 1944	428,319	14,500	55	1,170	849,600
January	102,150	7,650	1,060	3,295	202,600
February	68,227	4,860	572	2,437	135,300
March	68,325	4,340	795	2,204	135,500
April	105,759	18,900	359	3,525	209,800
May	49,898	3,010	303	1,610	98,970
June	16,180	2,130	154	539	32,090
July	46,648	5,100	182	1,505	92,520
August	10,595	795	157	342	21,010
September	4,643	276	114	155	9,210
Water year 1944-45	511,323	18,900	59	1,401	1,014,000

a No gage-height record; discharge computed on basis of records for other stations in basin.

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Calcasieu River near Kinder, La.

Location.- Water-stage recorder, lat. 30°30'10", long. 92°54'55", in NW¼SE¼ sec. 30, T. 6 S., R. 5 W., at bridge on U. S. Highway 190, 0.5 mile downstream from Whiskey Chitto Creek and 4 miles west of Kinder. Datum of gage is 12.02 feet above mean sea level, datum of 1929 (Louisiana Geodetic Survey bench mark).

Drainage area.- 1,700 square miles.

Records available.- August 1922 to January 1925, October 1938 to September 1945.

Extremes.- Maximum discharge during year, 28,800 second-feet Apr. 4 (gage height, 19.85 feet); minimum, 359 second-feet Nov. 2-4 (gage height, 2.57 feet).

1922-25, 1938-45: Maximum discharge, 68,000 second-feet Jan. 23, 1924 (gage height, 21.69 feet, datum then in use, or about 23.5 feet, present datum), from rating curve extended above 40,000 second-feet; minimum, 200 second-feet Aug. 9, 10, 1924 (gage height, 0.81 foot, datum then in use).

Remarks.- Records good except those computed from wire-weight gage readings, which are fair. Paper mill at Elizabeth pumps about 5 second-feet from wells which is later discharged into Mill Creek 36 miles above station. This discharge is continuous and fairly constant. Diversions from left bank of Calcasieu River immediately above station and 5 miles above station for irrigation.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	461	362	1,310	12,200	2,280	2,610	5,680	3,750	2,760	1,240	e1,730	928
2	494	359	1,200	12,800	1,890	2,560	9,740	3,750	2,430	1,060	e1,530	860
3	510	359	1,170	12,500	1,610	2,510	21,300	3,180	1,980	996	g1,420	860
4	478	362	1,130	12,500	1,490	2,280	27,600	2,570	1,420	962	g1,100	742
5	428	382	1,060	11,900	5,020	2,020	20,400	2,040	1,030	962	g928	676
6	415	375	1,060	11,100	9,710	1,930	24,100	1,690	826	996	g843	642
7	425	375	1,240	10,200	11,600	2,020	23,600	1,310	742	996	g775	610
8	725	428	1,380	10,500	10,900	1,890	15,000	1,130	659	894	g708	593
9	1,030	560	1,380	10,800	9,490	1,690	9,590	1,030	626	809	g659	560
10	758	544	1,270	10,800	7,940	1,570	6,930	962	593	758	642	544
11	725	725	1,100	10,800	5,270	1,530	5,560	894	560	676	610	544
12	725	962	1,030	9,040	3,880	1,610	4,490	928	576	626	593	560
13	676	996	996	6,450	4,830	1,770	3,590	1,170	708	659	593	560
14	676	894	1,060	4,950	5,930	1,970	2,920	1,730	1,270	1,760	843	560
15	659	809	1,030	4,250	6,660	2,190	2,340	2,390	1,970	3,650	894	560
16	593	775	996	3,880	6,530	3,610	1,890	3,970	2,020	6,190	1,130	576
17	527	742	928	3,680	5,810	5,420	1,610	4,600	1,730	g9,220	1,200	576
18	478	642	843	3,470	5,070	6,590	1,420	4,690	2,930	10,800	1,130	544
19	444	725	792	3,470	5,480	7,440	1,350	4,970	3,610	9,890	1,100	527
20	444	962	826	3,890	5,370	8,440	1,270	5,870	2,300	7,410	1,270	544
21	425	1,200	894	4,030	4,970	9,610	1,240	6,160	1,490	5,970	1,130	544
22	412	1,380	843	3,810	4,430	10,500	1,240	4,720	1,030	5,010	1,060	527
23	402	1,450	775	3,370	4,190	10,200	2,120	4,270	894	4,010	1,200	544
24	392	1,270	725	2,590	4,030	8,570	3,620	4,690	1,810	3,240	1,380	544
25	392	1,870	692	2,230	3,680	6,510	5,070	4,870	3,080	2,620	1,530	g692
26	385	3,200	1,370	2,150	3,290	5,470	5,700	4,420	3,650	g2,280	1,490	g659
27	375	2,920	5,670	2,100	2,930	5,480	5,690	3,420	3,820	g2,020	1,200	g676
28	372	2,480	10,500	2,190	2,710	5,480	3,890	2,590	3,160	g1,850	962	g928
29	369	2,100	12,800	2,370	-	5,070	3,350	2,230	2,020	g1,890	928	g962
30	365	1,650	12,200	2,510	-	4,510	3,610	2,380	1,610	g1,970	1,270	g928
31	365	-	11,900	2,560	-	3,890	-	2,660	-	g2,240	1,130	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	15,925	1,030	365	514	31,590
November	31,858	3,200	359	1,062	63,190
December	80,170	12,800	692	2,586	159,000
Calendar year 1944	960,281	20,200	280	2,624	1,905,000
January	199,090	12,800	2,100	6,422	394,900
February	146,990	11,600	1,490	5,250	291,600
March	136,940	10,500	1,530	4,417	271,600
April	225,910	27,600	1,240	7,530	448,100
May	95,034	6,160	894	3,066	188,500
June	53,304	3,820	560	1,777	105,700
July	93,654	10,800	626	3,021	185,800
August	32,978	1,730	593	1,064	65,410
September	19,570	962	527	652	38,820
Water year 1944-45	1,131,423	27,600	359	3,100	2,244,000

g Computed from graph based on once-daily wire-weight gage readings.

Note.- Discharge for periods of rapidly changing stage computed by using rate of change of stage as a factor.

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Whiskey Chitto Creek near Oberlin, La.

Location.- Water-stage recorder, lat. 30°41'55", long. 92°53'35", in NE¼NE¼ sec. 20, T. 4 S., R. 5 W., at bridge on State Highway 52, 1 mile downstream from Tenmile Creek, 8 miles upstream from Bundick Creek, and 10 miles northwest of Oberlin. Datum of gage is 46.24 feet above mean sea level (Louisiana Geodetic Survey bench mark). Prior to Oct. 20, 1944, wire-weight gage at same site and datum.

Drainage area.- 510 square miles.

Records available.- January 1939 to September 1945.

Extremes.- Maximum discharge during year, 16,500 second-feet Apr. 3 (gage height, 21.28 feet); minimum, 139 second-feet Nov. 2, 3 (gage height, 4.05 feet).
1939-45: Maximum discharge, 35,000 second-feet Aug. 9, 1940 (gage height, 23.42 feet); minimum observed, 102 second-feet Sept. 19, 1939 (gage height, 3.72 feet).
Maximum stage known, 25.7 feet in June 1886, from floodmarks preserved by local residents.

Remarks.- Records fair. Wire-weight gage read twice daily.

Rating table, water year 1944-45 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Oct. 1 to Dec. 26)

4.2	129	7.0	770	14.0	3,360	18.0	6,950
4.5	182	9.0	1,390	15.0	3,900	19.0	8,800
5.0	278	11.0	2,080	16.0	4,590	20.0	11,600
6.0	501	13.0	2,920	17.0	5,590	21.0	15,200

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	248	142	g430	4,760	477	602	1,810	799	407	551	477	319
2	278	141	g407	4,670	453	602	6,090	741	384	526	501	319
3	228	141	a380	3,670	453	551	15,200	551	384	477	407	298
4	200	148	a340	2,960	477	526	9,300	477	384	629	340	258
5	191	157	a320	2,530	2,260	526	6,080	453	362	602	319	248
6	176	160	a340	2,120	3,500	656	4,360	430	362	551	298	248
7	191	191	a460	2,660	3,400	712	2,570	407	340	430	298	238
8	920	210	a600	3,130	3,130	576	1,260	384	319	362	278	228
9	501	258	a650	a3,200	2,830	501	1,010	362	298	340	278	228
10	453	384	a550	a3,000	1,780	453	889	362	298	319	258	228
11	430	629	a440	g2,660	1,040	430	799	384	278	340	258	248
12	298	576	a360	1,520	889	407	712	477	278	340	258	238
13	258	362	a380	1,040	1,520	430	656	1,080	319	645	551	228
14	228	278	a380	889	1,780	430	602	1,520	920	2,000	453	228
15	178	228	a340	799	1,750	871	551	1,680	1,080	2,410	453	238
16	200	210	a300	712	1,550	2,570	526	1,820	920	4,020	a600	278
17	191	200	278	656	1,080	3,220	501	1,890	629	4,290	a750	238
18	182	200	278	602	1,390	3,400	477	2,240	951	3,360	629	219
19	182	319	278	982	1,450	4,020	477	3,000	1,230	1,650	684	210
20	180	602	319	1,390	1,420	4,760	453	3,260	829	889	551	210
21	171	829	362	1,450	1,290	5,260	430	1,950	526	629	453	200
22	171	889	340	1,390	1,200	4,360	602	1,200	407	551	501	228
23	166	602	298	1,040	1,140	3,310	1,720	1,450	948	576	656	228
24	164	407	278	799	982	2,160	2,960	1,720	2,280	526	656	219
25	159	602	258	684	770	1,520	4,090	1,580	2,570	453	889	200
26	157	g1,110	932	602	656	1,450	3,780	951	2,830	407	770	210
27	155	g1,170	3,260	551	602	1,490	2,110	656	2,240	430	501	501
28	150	g1,170	4,220	551	602	1,420	920	576	1,110	430	384	829
29	150	g741	4,360	501	-	1,040	712	501	951	684	340	629
30	146	g477	4,670	501	-	770	656	453	656	501	319	384
31	144	-	4,510	501	-	712	-	430	-	551	319	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff	
						Inches	Acre-feet
October	7,446	920	144	240	0.471	0.54	14,770
November	13,533	1,170	141	451	.884	.99	26,840
December	31,318	4,670	258	1,010	1.98	2.28	62,120
Calendar year 1944	281,303	6,640	141	769	1.51	20.51	558,000
January	52,520	4,760	501	1,694	3.32	3.83	104,200
February	39,871	3,500	453	1,424	2.79	2.91	79,080
March	49,735	5,260	407	1,604	3.15	3.63	98,650
April	72,303	15,200	430	2,410	4.73	5.27	143,400
May	33,784	3,260	362	1,090	2.14	2.46	67,010
June	25,490	2,830	278	850	1.67	1.86	50,560
July	30,469	4,290	319	983	1.93	2.22	60,430
August	14,429	889	258	465	.912	1.05	28,620
September	8,575	829	200	286	.561	.63	17,010
Water year 1944-45	379,473	15,200	141	1,040	2.04	27.67	752,700

a No gage-height record; discharge computed on basis of records for other stations in basin.
g Computed from graph based on twice-daily wire-weight gage readings.
Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Bundick Creek near Dry Creek, La.

Location.- Water-stage recorder, lat. 30°40'55", long. 93°02'15", on line between NE¼ and NW¼ sec. 25, T. 4 S., R. 7 W., at bridge on State Highway 251, 1 mile northeast of town of Dry Creek and 8 miles upstream from mouth. Datum of gage is 56.92 feet above mean sea level (Louisiana Geodetic Survey bench mark). Prior to Oct. 19, 1944, wire-weight gage at same site and datum.
Drainage area.- 238 square miles.
Records available.- January 1939 to September 1945.
Extremes.- Maximum discharge during year, 13,700 second-feet Apr. 2 (gage height, 17.7 feet); minimum, 67 second-feet Nov. 3 (gage height, 3.09 feet).

1939-45: Maximum discharge, 22,000 second-feet Aug. 10, 1940 (gage height, 19.12 feet, present datum, from floodmark), from rating curve extended above 10,000 second-feet by velocity-area method; minimum, 49 second-feet on many days in September and October 1939; minimum gage height, 2.53 feet, present datum, Sept. 24, 25, 1939.
Remarks.- Records good except those for periods of no gage-height record, which are fair.

Rating tables, water year 1944-45 (gage height, in feet, and discharge, in second-feet)

Oct. 1 to July 15						July 16 to Sept. 30	
3.1	68	9.0	846	14.5	3,550	3.2	88
3.5	99	11.0	1,200	15.0	4,570	4.0	154
4.0	141	12.0	1,460	15.5	5,810	4.5	201
4.5	195	12.5	1,640	16.0	7,220	5.0	258
5.0	257	13.0	1,880	16.5	8,800	6.0	389
6.0	389	13.5	2,200	17.0	10,600	Note.- Same as preceding table above 6.0 feet.	
7.0	533	14.0	2,710				

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	111	68	132	2,370	201	244	1,980	166	115	257	158	120
2	123	68	119	1,940	195	244	9,540	166	111	178	140	116
3	104	68	111	1,680	178	219	9,710	146	111	146	136	108
4	87	73	111	1,490	512	207	4,080	136	107	151	124	104
5	81	71	111	1,280	1,680	225	2,370	128	107	270	120	102
6	78	72	207	1,100	1,560	335	1,730	123	107	189	116	104
7	80	74	431	1,280	1,490	309	828	119	105	128	116	102
8	178	76	348	1,280	1,560	231	403	119	102	115	112	94
9	a160	111	316	1,460	1,520	189	335	115	98	132	108	92
10	a150	183	257	1,600	814	166	302	115	97	161	103	92
11	a150	166	178	1,360	361	161	276	115	95	128	101	94
12	128	244	151	513	450	161	244	250	94	115	100	108
13	89	231	151	348	926	166	225	283	156	409	102	116
14	82	178	146	316	1,010	166	201	361	431	1,200	104	116
15	76	91	a130	290	1,050	563	189	403	473	6,360	108	120
16	72	87	a120	264	960	1,100	178	665	328	3,360	120	120
17	69	88	115	231	563	960	166	782	283	2,130	112	108
18	72	93	111	238	814	960	156	798	1,100	1,260	108	98
19	72	128	136	638	814	1,200	151	910	270	361	132	94
20	72	283	195	814	798	1,680	151	846	146	228	181	96
21	71	361	166	878	654	1,390	156	309	141	196	154	95
22	71	270	151	862	563	1,050	648	403	195	181	140	108
23	70	178	136	563	548	766	1,120	608	161	168	124	112
24	70	136	123	328	473	417	1,160	518	348	154	132	104
25	69	638	119	283	361	335	1,010	417	654	150	120	98
26	70	702	983	244	290	488	814	257	814	145	112	96
27	69	548	2,060	225	264	533	316	178	878	246	104	94
28	69	417	2,200	213	250	459	219	151	533	234	104	96
29	69	302	2,370	225	-	361	189	136	518	176	108	104
30	68	172	2,280	231	-	250	172	128	488	145	108	108
31	68	-	2,280	213	-	264	-	123	-	136	112	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff	
						Inches	Acre-feet
October	2,798	178	68	90.3	0.379	0.44	5,550
November	6,177	702	68	206	.866	.97	12,250
December	16,444	2,370	111	530	2.23	2.57	32,620
Calendar year 1944	134,106	2,820	68	366	1.54	20.97	266,000
January	24,757	2,370	213	799	3.36	3.87	49,100
February	20,859	1,680	178	745	3.13	3.26	41,370
March	15,799	1,680	161	510	2.14	2.47	31,340
April	39,019	9,710	151	1,301	5.47	6.10	77,390
May	9,974	910	115	322	1.35	1.56	19,780
June	9,166	1,100	94	306	1.29	1.43	18,180
July	19,209	6,360	115	620	2.61	3.00	38,100
August	3,719	181	100	120	.504	.58	7,380
September	3,119	120	92	104	.437	.49	6,190
Water year 1944-45	171,040	9,710	68	469	1.97	26.74	339,200

Peak discharge.- Jan. 1 (3 a.m.) 2,710 sec.-ft.; Feb. 5 (7 p.m.) 1,780 sec.-ft.; Feb. 8 (11 p.m.) 1,600 sec.-ft.; Mar. 20 (3 p.m.) 1,780 sec.-ft.; Apr. 2 (10:30 p.m.) 13,700 sec.-ft.; July 15 (7 a.m.) 7,830 sec.-ft.

a No gage-height record; discharge computed on basis of records for other stations in basin.

Note.- Discharge Oct. 1-8, 12-18, Nov. 8 to Dec. 14, Jan. 24 to Feb. 7, Aug. 9-13, 17, 18, Aug. 27 to Sept. 1, Sept. 3-12, 17-30 computed from twice-daily wire-weight gage readings or from graph based on these readings.

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Sabine River near Mineola, Tex.

Location.- Water-stage recorder, lat. 32°36'45", long. 95°29'10", at bridge on U. S. Highway 69, 3.2 miles south of Mineola, Wood County, 4.5 miles upstream from International-Great Northern Railroad bridge, and 16.5 miles upstream from Lake Fork. Datum of gage is 304.2 feet above mean sea level, datum of 1929.

Drainage area.- 1,445 square miles.

Records available.- May 1939 to September 1945.

Extremes.- Maximum discharge during year, 76,000 second-feet Apr. 1 (gage height, 24.00 feet); minimum, 4.2 second-feet Oct. 5, 28.

1939-45: Maximum discharge, that of Apr. 1, 1945; maximum gage height, 24.37 feet June 8, 1943; no flow at times.

Maximum stage from about 1919 to 1939, 20.6 feet Jan. 25, 1938, from information by local resident.

Remarks.- Records good. No large diversion above station.

Rating table, water year 1944-45 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Oct. 1 to Nov. 24, July 24 to Aug. 13)

1.3	4.6	2.5	35.0	6.0	250	12.5	1,400	16.4	4,550	19.0	24,800
1.5	8.0	3.0	53.4	7.0	368	14.0	1,980	16.8	6,500	21.0	43,500
1.7	12.2	4.0	100	9.0	640	15.0	2,540	17.2	9,600	23.7	72,400
2.0	20.0	5.0	161	11.0	970	16.0	3,500	18.0	16,000		

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	6.6	5.1	2,700	9,440	123	10,200	72,400	354	27	75	87	37
2	6.0	5.2	2,230	9,600	105	15,400	58,600	138	27	111	100	41
3	5.4	9.1	1,140	8,080	98	16,800	25,600	95	28	71	62	38
4	4.8	19	313	5,540	95	12,400	11,600	78	31	55	43	29
5	4.5	11	174	3,390	92	9,520	7,440	66	32	701	33	23
6	4.5	8.8	482	1,910	88	7,760	5,400	60	31	1,980	29	21
7	4.9	8.0	938	973	82	7,200	4,200	56	36	1,730	26	21
8	20	9.2	1,480	448	75	5,800	2,690	52	62	2,950	24	18
9	176	19	2,040	245	71	3,840	1,500	48	44	2,340	22	17
10	128	25	3,160	172	66	2,700	667	57	32	2,070	20	17
11	61	15	5,040	138	64	2,070	380	75	28	2,860	24	18
12	37	10	4,550	117	100	1,900	741	82	8,380	3,900	34	24
13	26	9.0	2,600	105	358	1,980	1,380	80	32,100	3,900	31	24
14	19	9.6	1,390	95	598	2,020	1,990	190	35,000	4,140	72	21
15	15	22	461	88	806	2,350	2,170	444	37,800	8,180	141	18
16	12	43	121	80	1,100	2,850	2,120	760	23,200	9,920	85	16
17	9.2	49	75	73	1,790	7,060	1,570	910	12,400	7,360	52	15
18	7.6	37	62	279	2,860	6,320	788	1,020	8,960	4,700	37	14
19	6.7	48	53	1,400	3,250	5,600	315	1,150	6,380	3,040	30	14
20	5.9	51	47	2,070	3,140	7,440	225	1,270	4,240	2,400	26	13
21	5.7	47	42	2,620	3,820	5,960	225	1,030	3,040	1,700	24	13
22	6.2	38	39	3,040	5,900	4,590	210	471	2,340	715	32	14
23	5.4	33	37	3,250	9,620	3,500	240	138	2,220	169	94	22
24	4.8	64	36	3,550	19,800	3,370	308	78	1,840	80	430	20
25	4.6	471	43	3,140	15,600	3,640	500	60	1,240	60	368	17
26	4.6	930	100	2,400	10,200	2,620	655	51	950	51	205	16
27	4.5	1,270	1,290	1,720	7,840	1,380	854	44	910	46	192	16
28	4.5	1,580	2,220	842	8,000	682	1,020	38	773	44	117	18
29	4.6	1,860	3,230	371	-	12,000	1,180	34	355	39	66	62
30	4.6	2,280	4,300	188	-	46,000	882	32	122	36	48	67
31	4.8	-	6,730	144	-	66,700	-	29	-	36	39	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff	
						Inches	Acre-feet
October	614.4	176	4.5	19.8	0.014	0.02	1,220
November	8,986.0	2,280	5.1	300	.208	.23	17,820
December	47,325	6,730	37	1,527	1.06	1.22	93,870
Calendar year 1944	507,932.6	36,800	.2	1,388	.960	13.07	1,007,000
January	65,508	9,600	73	2,113	1.46	1.69	129,900
February	95,741	19,800	64	3,419	2.37	2.46	189,900
March	281,652	66,700	682	9,086	6.29	7.25	558,600
April	207,850	72,400	210	6,928	4.79	5.35	412,300
May	8,990	1,270	29	290	.201	.23	17,830
June	182,628	37,800	27	6,088	4.21	4.70	362,200
July	65,459	9,920	36	2,112	1.46	1.68	129,800
August	2,593	430	20	83.6	.058	.07	5,140
September	704	67	13	23.5	.016	.02	1,400
Water year 1944-45	968,050.4	72,400	4.5	2,652	1.84	24.92	1,920,000

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Sabine River near Gladewater, Tex.

Location.- Water-stage recorder and wire-weight gage, lat. 32°32', long. 94°57', at bridge on U. S. Highway 271, half a mile downstream from Glade Creek and 1 mile southwest of Gladewater, Gregg County. Datum of gage is 243.85 feet above mean sea level (Texas Reclamation Department bench mark based on Geological Survey datum).

Drainage area.- 2,846 square miles.

Records available.- October 1932 to September 1945.

Average discharge.- 13 years, 2,071 second-feet.

Extremes.- Maximum discharge during year, 138,000 second-feet Apr. 2 (gage height, 44.16 feet, from floodmark), from rating curve extended above 91,000 second-feet; minimum, 41 second-feet Oct. 11 (gage height, 4.76 feet).

1932-45: Maximum discharge, that of Apr. 2, 1945; minimum, 5.6 second-feet Aug. 16, 1939.

Maximum stage known prior to 1945, 41.7 feet in May 1914, from information by local resident (discharge, 71,100 second-feet).

Remarks.- Records good except those for periods affected by backwater from return of overbank flow and those for period of no gage-height record, which are poor. Small diversions above station for oil field operations and municipal supply.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	58	55	1,990	5,950	3,410	18,400	87,800	2,480	294	1,590	332	235
2	61	60	2,210	6,150	2,120	16,700	133,000	2,460	285	967	256	197
3	62	88	2,430	6,460	1,340	18,400	117,000	1,960	276	517	267	172
4	60	101	2,600	7,050	1,050	24,200	91,000	1,270	258	433	312	155
5	62	106	2,820	7,940	966	26,500	68,300	856	256	727	267	146
6	57	107	2,820	9,140	900	24,200	48,700	685	285	1,120	226	134
7	52	113	2,400	10,100	856	21,000	32,300	601	372	1,380	192	125
8	48	122	2,040	9,600	834	17,700	22,500	559	352	2,100	172	117
9	44	117	1,910	8,640	790	15,200	16,400	528	303	2,790	156	114
10	43	117	1,960	7,650	769	13,100	12,900	517	294	3,290	150	110
11	56	116	2,210	6,570	748	11,700	10,500	538	285	4,310	148	102
12	184	107	2,510	5,400	812	10,500	8,750	601	899	5,400	160	96
13	167	106	2,850	4,260	1,100	9,440	7,510	664	1,890	f5,760	178	93
14	130	125	3,230	2,960	1,320	8,440	5,720	685	3,540	f6,100	194	88
15	106	160	3,620	1,730	1,540	7,860	4,450	f900	7,910	6,350	194	91
16	93	194	3,830	1,050	1,730	7,440	3,650	1,560	30,400	6,460	190	96
17	85	204	3,710	812	1,960	6,740	3,260	1,960	41,500	6,620	276	93
18	75	a201	2,880	1,470	2,320	6,250	3,140	2,100	40,600	7,050	303	88
19	71	a258	1,520	3,170	2,710	6,150	3,140	2,180	31,600	7,720	235	85
20	68	402	706	3,710	3,470	6,680	3,050	2,460	24,200	8,180	199	81
21	65	382	466	3,740	4,320	7,380	2,760	2,680	19,200	8,180	201	79
22	65	322	412	3,740	5,200	7,940	2,150	2,620	15,500	7,720	197	76
23	64	276	382	3,830	5,760	8,440	1,630	2,790	12,900	6,980	229	77
24	62	321	433	4,070	6,350	8,750	1,380	2,370	10,500	6,050	352	89
25	61	793	538	4,350	7,120	8,870	1,320	1,470	8,640	4,900	444	98
26	60	1,120	700	4,650	8,840	8,540	1,380	f790	6,980	3,380	685	93
27	60	1,430	3,440	4,930	15,700	8,180	1,560	538	5,670	1,680	727	92
28	59	1,610	5,040	5,200	19,600	7,860	1,860	433	4,420	671	559	88
29	57	1,680	5,490	5,280	-	7,790	2,150	392	3,350	944	454	123
30	55	1,830	5,580	5,080	-	10,300	2,340	352	2,400	748	382	303
31	55	-	5,720	4,480	-	32,900	-	322	-	412	285	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff	
						Inches	Acre-feet
October	2,245	184	43	72.4	0.025	0.03	4,450
November	12,623	1,830	55	421	.148	.16	25,040
December	78,467	5,720	382	2,531	.889	1.03	155,600
Calendar year 1944	1,011,926	41,500	34	2,765	.972	13.22	2,007,000
January	159,162	10,100	812	5,134	1.80	2.08	315,700
February	103,635	19,600	748	3,701	1.30	1.35	205,600
March	393,550	32,900	6,150	12,700	4.46	5.14	780,600
April	701,600	133,000	1,320	23,390	8.22	9.17	1,392,000
May	40,521	2,820	322	1,307	.459	.53	80,370
June	275,359	41,500	256	9,179	3.23	3.60	546,200
July	120,529	8,180	412	3,888	1.37	1.56	239,100
August	8,922	727	148	288	.101	.12	17,700
September	3,536	303	76	118	.041	.05	7,010
Water year 1944-45	1,900,149	133,000	43	5,206	1.83	24.84	3,769,000

a No gage-height record; discharge computed on basis of recorded range in stage and weather records.

f Computed on basis of partly estimated gage-height record.

Note.- Recorder removed because of flood hazard Apr. 1-4; discharge computed from graph based on numerous readings of wire-weight gage by field engineers and U. S. Weather Bureau. Stage-discharge relation affected by backwater from return of overbank flow Mar. 17-20, Apr. 11-25, June 24 to July 1; discharge computed from backwater curve based on discharge measurements.

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Sabine River near Tatum, Tex.

Location.- Water-stage recorder, lat. 32°22', long. 94°28', at bridge on State Highway 43, 5 miles upstream from Potter Creek, 5.2 miles northeast of Tatum, Rusk County, and 7 miles downstream from Cherokee Bayou. Datum of gage is 204.2 feet above mean sea level, datum of 1929 (levels by Corps of Engineers, U. S. Army). Prior to Sept. 21, 1945, wire-weight gage at same site and datum.

Drainage area.- 3,586 square miles.

Records available.- January 1939 to September 1945.

Extremes.- Maximum discharge during year, 123,000 second-feet Apr. 4 (gage height, 33.80 feet, from graph based on gage readings), from rating curve based on extension of ratings for main channels above 40,000 second-feet and measured overflow at gage height 31.5 feet; minimum observed, 90 second-feet Oct. 31 (gage height, 3.01 feet).

1939-45: Maximum discharge, that of Apr. 4, 1945; minimum observed, 9.1 second-feet Oct. 9, 1939.

Maximum stage known prior to 1945, 32 feet in May 1884, from information by local residents.

Remarks.- Records good except those above 50,000 second-feet, which are fair. Gage read twice daily, oftener during high stages. Several small diversions above station for oil'field operations and municipal supply.

Rating table, water year 1944-45 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Oct. 1 to Nov. 24)

3.0	80	7.0	830	20.0	7,600	27.0	27,600
3.5	146	8.0	1,160	22.0	9,300	28.0	39,000
4.0	225	10.0	1,920	24.0	12,000	30.0	66,000
5.0	400	13.0	3,250	25.0	14,500	33.6	120,000
6.0	590	16.0	4,940	26.0	19,000		

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	113	a91	2,080	9,600	5,440	7,920	14,200	2,640	532	10,200	1,160	404
2	124	92	2,120	a9,500	5,440	8,760	36,000	2,770	494	8,670	800	409
3	124	102	2,240	9,400	4,940	12,000	105,000	2,770	475	6,700	a630	364
4	132	139	2,360	a9,120	3,910	19,300	120,000	2,640	437	3,830	590	328
5	139	187	2,640	a8,850	2,540	27,600	111,000	2,120	437	1,900	570	284
6	142	235	3,360	8,400	1,840	30,900	91,500	1,520	418	1,370	651	259
7	142	205	3,470	8,240	1,600	29,800	70,500	1,160	400	1,560	513	242
8	126	203	3,470	a8,080	1,440	28,700	53,400	950	437	1,760	475	232
9	121	216	3,470	a8,000	1,370	26,500	40,300	890	475	2,120	437	215
10	114	215	3,300	a8,080	1,300	23,500	29,800	920	513	2,930	400	208
11	105	213	2,950	a8,670	1,260	21,700	23,500	830	513	4,880	382	203
12	101	202	2,770	9,030	1,440	20,200	20,200	830	702	6,320	355	194
13	97	189	2,820	a9,210	2,120	19,000	18,000	890	1,680	10,000	382	181
14	156	181	2,900	9,120	2,360	18,000	16,600	920	2,820	10,200	391	176
15	195	184	3,000	8,760	2,360	17,500	14,500	1,120	3,420	9,400	a373	173
16	176	284	3,200	7,680	2,540	16,600	13,100	2,040	1,130	8,670	391	168
17	154	364	3,470	6,420	2,500	15,300	11,600	2,590	4,700	8,000	364	166
18	139	364	3,640	5,380	2,770	13,900	10,200	2,640	6,100	7,760	355	164
19	126	418	3,640	6,900	3,000	13,100	8,940	2,640	9,300	7,460	428	160
20	124	570	3,360	7,600	3,800	12,400	7,760	2,720	16,500	7,250	409	158
21	114	670	2,280	8,240	4,640	11,600	6,900	2,720	29,800	7,180	391	156
22	106	630	1,260	7,920	5,240	11,000	6,220	2,770	29,800	7,180	364	152
23	104	551	1,020	7,180	5,570	10,400	5,700	2,820	25,500	7,320	382	148
24	101	513	1,200	6,550	5,830	10,000	4,820	2,820	22,600	7,530	418	145
25	97	773	1,760	5,760	6,020	10,200	3,690	2,720	20,200	7,600	437	143
26	96	1,560	2,410	5,440	6,160	10,400	2,720	2,240	19,000	7,600	513	148
27	95	2,000	a4,060	5,310	6,550	10,500	2,240	1,520	17,000	7,390	630	158
28	92	2,000	6,480	5,240	7,320	10,700	2,160	985	15,300	6,760	745	166
29	91	1,960	7,180	5,310	-	10,800	2,320	770	12,800	5,040	720	173
30	91	2,000	8,670	5,310	-	11,300	2,460	670	11,600	2,950	630	186
31	90	-	9,500	5,440	-	12,800	-	745	-	2,080	551	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff	
						Inches	Acre-feet
October	3,727	195	90	120	0.033	0.04	7,390
November	17,311	2,000	91	577	.161	.18	34,340
December	106,080	9,500	1,020	3,422	.954	1.10	210,400
Calendar year 1944	1,422,293	36,900	61	3,886	1.08	14.75	2,821,000
January	233,740	9,600	5,240	7,540	2.10	2.42	463,600
February	101,300	7,320	1,260	3,618	1.01	1.05	200,900
March	502,380	30,900	7,920	16,210	4.52	5.21	996,500
April	855,330	120,000	2,160	28,510	7.95	8.87	1,697,000
May	56,380	2,820	670	1,819	.507	.58	111,800
June	258,083	29,800	400	8,603	2.40	2.68	511,900
July	189,610	10,200	1,370	6,116	1.71	1.97	376,100
August	15,737	1,160	355	508	.142	.16	31,210
September	6,353	494	143	212	.059	.07	12,600
Water year 1944-45	2,346,031	120,000	90	6,427	1.79	24.33	4,654,000

a No gage-height record; discharge computed on basis of estimated gage heights and weather records.

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Sabine River at Logansport, La.

Location.- Wire-weight gage, lat. 31°58', long. 94°00', at bridge on U. S. Highway 84, 200 feet upstream from Texas & New Orleans (Southern Pacific) Railroad bridge in Logansport, De Soto Parish, and 3 miles upstream from Bayou Castor. Datum of gage is 147.72 feet above mean sea level, datum of 1929.

Drainage area.- 4,858 square miles.

Records available.- July 1903 to September 1945 (January 1907 to September 1923, monthly records only in Water-Supply Paper 850). U. S. Weather Bureau has collected gage-height records in this vicinity since 1903.

Average discharge.- 39 years (1903-19, 1922-45), 3,140 second-feet.

Extremes.- Maximum discharge during year, 92,000 second-feet Apr. 8 (gage height, 44.07 feet, from floodmark); minimum observed, 118 second-feet Nov. 1, 2, 3; minimum gage height, -0.33 foot Nov. 2.

1903-45: Maximum discharge, that of Apr. 8, 1945; minimum observed during periods of daily records, 16 second-feet Sept. 26-28, Oct. 3, 4, 1939.

Maximum stage known prior to 1945, 39.4 feet, present datum, in May 1884.

Remarks.- Records good except those for periods of backwater or rapidly changing stage, which are fair. Gage read twice daily. Small diversions above station.

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

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	126	118	2,100	c11,000	8,490	10,300	c15,300	2,830	1,010	18,900	c5,670	750
2	126	118	2,060	c13,600	7,760	10,100	c19,600	2,790	906	17,700	c3,310	652
3	126	c122	2,060	15,600	7,140	c10,100	26,700	2,830	c854	16,700	c1,970	582
4	133	c126	2,060	16,300	6,740	c10,900	34,600	2,870	c880	15,400	c1,370	498
5	142	ac129	c2,220	16,500	6,490	c13,900	53,800	2,870	c854	14,500	a1,120	431
6	146	c133	c3,250	c16,700	6,070	20,800	77,900	2,690	750	13,200	984	380
7	a150	c150	c4,640	c16,700	5,040	26,700	89,300	2,350	652	11,500	880	349
8	a155	206	c5,560	c16,300	3,770	29,600	90,600	1,940	604	9,360	828	314
9	155	244	5,840	15,700	2,940	31,100	85,200	1,610	560	6,680	a750	307
10	155	244	5,840	14,900	2,560	32,300	77,300	1,430	a549	4,170	700	286
11	150	239	5,720	14,000	a2,290	32,700	68,900	c1,460	582	c3,500	628	280
12	142	a239	5,400	13,100	2,350	31,900	60,000	c1,490	604	c4,260	a582	268
13	137	239	4,740	12,600	3,050	31,100	50,700	a1,430	724	c5,300	538	256
14	129	244	3,930	12,000	4,220	29,600	42,100	1,370	c1,200	c6,550	498	250
15	a126	c244	3,390	11,500	5,000	28,500	34,800	1,400	c2,130	7,760	478	239
16	126	c239	3,200	11,100	5,300	27,100	29,200	2,740	c2,900	8,880	468	228
17	150	c239	3,160	10,800	5,300	26,100	24,700	4,430	c3,500	9,760	498	222
18	170	c256	3,230	c10,800	5,040	24,700	21,200	5,300	3,890	10,400	c528	217
19	175	c356	3,390	c12,200	5,000	23,500	18,400	5,620	4,170	10,600	a538	212
20	170	c488	3,500	c15,100	5,340	22,600	16,500	5,670	4,510	10,600	518	212
21	155	c652	3,500	19,100	6,010	21,700	14,900	5,340	5,000	10,200	518	212
22	146	750	3,120	21,200	7,070	20,900	13,700	4,560	5,500	9,760	518	206
23	142	802	2,350	21,200	7,970	19,900	12,800	3,770	6,070	9,120	508	a200
24	137	c828	1,700	20,100	8,720	18,900	11,600	3,270	6,880	8,560	478	195
25	133	c958	a1,430	18,600	9,360	17,900	10,500	3,080	8,260	8,040	449	195
26	129	c1,170	c1,430	16,700	9,840	16,900	9,440	2,940	11,500	7,620	a468	190
27	126	c1,430	c2,030	14,800	10,200	15,900	8,190	2,730	16,500	c7,480	488	185
28	126	c1,880	c3,080	13,100	10,300	15,100	6,440	2,450	19,100	c7,140	549	180
29	122	2,130	c4,430	11,800	-	14,500	a4,560	1,880	20,100	c6,940	628	239
30	122	2,130	c6,250	10,600	-	c14,000	3,230	1,430	19,900	c6,680	750	510
31	122	-	c8,420	9,600	-	c14,000	-	1,140	-	c6,310	802	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff	
						Inches	Acre-feet
October	4,349	175	122	140	0.029	0.03	8,630
November	17,103	2,130	118	570	.117	.13	33,920
December	113,030	8,420	1,430	3,646	.750	.87	224,200
Calendar year 1944	2,172,802	33,900	99	5,937	1.22	16.64	4,310,000
January	453,300	21,200	9,600	14,620	3.01	3.47	899,100
February	169,360	10,300	2,290	6,049	1.24	1.30	335,900
March	663,300	32,700	10,100	21,400	4.40	5.08	1,316,000
April	1,032,360	90,600	3,230	34,410	7.08	7.90	2,048,000
May	87,710	5,670	1,140	2,829	.582	.67	174,000
June	150,639	20,100	549	5,021	1.03	1.15	298,800
July	293,570	18,900	3,500	9,470	1.95	2.25	582,300
August	29,012	5,670	449	936	.193	.22	57,540
September	9,245	750	180	308	.063	.07	18,340
Water year 1944-45	3,022,978	90,600	118	8,282	1.70	23.14	5,997,000

a No gage-height record; discharge computed on basis of estimated gage heights.

c Backwater from Bayou Castor.

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Sabine River near Milam, Tex.

Location.- Wire-weight gage, lat. 31°28', long. 93°45', at bridge on State Highway 21, 6.5 miles northeast of Milam, Sabine County, and 7.2 miles upstream from Palo Gaucho Bayou. Datum of gage is 97.96 feet above mean sea level, datum of 1929, Alluvial Valley supplementary adjustment of 1941.

Drainage area.- 6,543 square miles.

Records available.- January 1939 to September 1945. October 1923 to August 1925 at Sabinetown, 7.4 miles downstream, records equivalent except those for periods of extreme low flow and high runoff from Palo Gaucho Bayou.

Extremes.- Maximum discharge during year, 83,400 second-feet Apr. 12 (gage height, 48.87 feet); minimum observed, 129 second-feet Oct. 19, 30 (gage height, 6.40 feet).

1939-45: Maximum discharge, that of Apr. 12, 1945; minimum observed, 32 second-feet Oct. 15, 22, 1939.

Maximum stage known prior to 1945, 48 feet about July 28, 1933, from information by observer.

Remarks.- Records good except those for period of doubtful gage-height record, which are poor. Gage read twice daily, oftener during high stages. No large diversion above station.

Rating table, water year 1944-45 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Oct. 1 to Nov. 16, Aug. 18 to Sept. 30)

6.4	122	16.0	4,480	41.0	29,200
7.0	282	20.0	7,250	42.0	32,700
8.0	598	24.0	10,500	43.0	39,200
9.5	1,120	28.0	13,900	46.0	61,700
11.0	1,730	32.0	17,500	49.0	84,200
13.0	2,740	38.0	23,800		

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	206	141	3,180	14,400	17,500	11,400	21,800	13,900	1,550	11,600	8,750	846
2	201	141	3,020	24,200	d15,500	11,400	25,400	6,740	1,340	12,500	8,350	882
3	190	144	2,850	26,100	d13,300	11,400	29,200	3,980	1,230	13,200	6,950	864
4	182	144	2,960	26,100	d11,000	11,700	32,700	3,560	1,150	13,900	4,350	780
5	195	159	4,940	26,100	d9,150	11,900	35,700	3,460	1,150	14,500	2,520	697
6	195	177	7,630	26,100	d7,950	12,000	37,800	3,400	1,190	15,000	1,820	631
7	201	175	9,820	26,200	d7,550	12,200	39,200	3,290	1,080	15,300	1,340	565
8	201	226	10,700	26,100	7,400	12,700	46,700	3,070	934	15,500	1,190	532
9	206	300	10,300	25,700	7,400	13,400	59,400	2,800	829	15,500	1,080	484
10	209	294	10,100	25,100	7,400	14,400	70,700	2,320	780	15,200	969	452
11	206	291	10,200	24,400	7,480	15,600	79,000	2,320	714	14,400	1,000	423
12	201	288	9,820	24,000	7,550	17,200	82,700	2,420	714	12,500	1,190	410
13	198	285	9,150	23,300	7,480	19,300	82,700	2,520	829	9,990	864	410
14	195	279	8,030	22,300	7,020	21,400	79,700	2,320	934	8,990	746	378
15	185	268	6,650	21,400	7,020	23,000	74,400	2,270	1,300	8,990	697	360
16	175	274	5,800	20,400	7,100	24,200	68,400	3,460	2,520	8,910	621	339
17	162	386	4,280	18,400	7,320	25,100	61,700	4,680	3,400	8,910	1,000	333
18	151	631	3,920	17,500	7,950	25,700	55,000	5,460	3,920	9,150	864	327
19	144	1,340	3,920	17,500	9,480	26,100	47,400	6,080	4,220	9,310	899	324
20	167	1,780	3,860	17,700	10,400	26,200	39,200	6,500	4,420	9,740	882	318
21	206	1,600	3,860	17,700	11,400	26,100	32,700	6,880	4,740	9,990	846	309
22	212	1,460	3,800	18,000	11,500	25,900	29,400	10,600	5,130	10,200	934	306
23	193	2,120	3,340	18,200	11,300	25,400	27,300	9,900	5,660	10,300	1,040	306
24	185	2,370	3,180	19,000	11,100	24,900	25,600	7,320	5,940	10,200	934	300
25	169	2,740	3,180	19,400	11,000	24,200	23,800	5,200	6,500	9,990	763	297
26	169	3,680	3,240	20,000	10,900	23,700	22,300	3,980	6,950	9,480	697	294
27	159	3,400	3,740	20,500	10,900	23,200	20,900	3,740	7,790	9,150	664	300
28	151	3,180	5,870	20,800	11,300	22,500	19,300	3,400	8,830	8,990	664	330
29	139	3,120	8,030	20,600	-	21,800	17,600	3,070	9,820	9,900	714	324
30	139	3,240	9,480	20,000	-	21,200	15,900	2,520	10,800	9,820	763	410
31	139	-	a10,800	19,000	-	20,700	-	1,970	-	9,150	780	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff	
						Inches	Acre-feet
October	5,631	212	139	182	0.028	0.03	11,170
November	34,633	3,680	141	1,154	.176	.20	68,690
December	189,650	10,800	2,850	6,118	.935	1.08	376,200
Calendar year 1944	2,962,015	52,700	139	8,093	1.24	16.84	5,875,000
January	666,200	26,200	14,400	21,490	3.28	3.79	1,321,000
February	272,350	17,500	7,020	9,727	1.49	1.55	540,200
March	605,900	26,200	11,400	19,550	2.99	3.44	1,202,000
April	1,303,600	82,700	15,900	43,450	6.64	7.41	2,586,000
May	143,130	13,900	1,970	4,617	.705	.81	283,900
June	106,364	10,800	714	3,545	.542	.60	211,000
July	350,260	15,500	8,910	11,300	1.73	1.99	694,700
August	54,881	8,750	621	1,770	.270	.31	108,900
September	13,531	882	294	451	.069	.08	26,840
Water year 1944-45	3,746,130	82,700	139	10,260	1.57	21.29	7,431,000

a No gage-height record; discharge estimated.

d Doubtful gage-height record; discharge computed on basis of a normal recession.

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Sabine River near Bon Wier, Tex.

Location.- Wire-weight gage, lat. 30°44', long. 93°37', at bridge on U. S. Highway 190, 1¼ miles east of Bon Wier, Newton County, and 2.4 miles upstream from Caney Creek. Datum of gage is 46.4 feet above mean sea level, datum of 1929.

Drainage area.- 8,323 square miles.

Records available.- October 1923 to September 1934, January 1939 to September 1945. U. S. Weather Bureau has collected gage-height records in this vicinity since 1913.

Average discharge.- 17 years (1923-34, 1939-45), 7,835 second-feet.

Extremes.- Maximum discharge during year, 75,500 second-feet Apr. 18 (gage height, 23.10 feet); minimum observed, 450 second-feet Nov. 2 (gage height, 1.44 feet).

1923-34, 1939-45: Maximum discharge, that of Apr. 18, 1945; minimum observed, 185 second-feet Sept. 11, 22, 24, 1925.

Maximum stage known, 26 feet, present site and datum, in May 1884, from information by local resident.

Remarks.- Records good. Gage read twice daily, oftener during high stages. No large diversion above station.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,020	457	3,670	19,600	22,400	12,000	29,400	28,600	3,670	10,200	12,400	1,760
2	825	450	3,670	21,900	22,400	12,700	34,700	26,500	3,220	11,200	11,200	1,580
3	758	464	3,580	23,200	22,400	13,200	39,700	22,900	2,780	12,200	10,300	1,510
4	690	485	3,490	24,600	21,900	14,000	42,700	16,400	2,520	12,900	9,360	1,510
5	645	645	3,670	25,800	22,900	16,200	42,700	8,990	2,260	13,500	7,710	1,480
6	690	735	4,290	26,800	25,200	17,600	39,700	6,320	2,180	14,200	5,480	1,380
7	736	712	6,960	29,000	26,500	17,600	37,400	5,480	2,020	14,500	3,670	1,250
8	802	735	12,000	30,400	25,200	17,000	35,500	5,120	1,940	15,100	2,950	1,220
9	925	780	12,600	30,400	24,000	15,600	35,500	4,640	1,800	15,400	2,440	1,160
10	1,000	900	12,400	31,000	19,800	14,700	35,500	4,400	1,650	16,800	2,180	1,110
11	950	1,020	11,600	31,000	13,700	15,100	37,400	3,770	1,480	16,000	2,020	1,080
12	735	1,000	11,200	30,400	11,500	15,400	39,700	4,180	1,440	16,200	1,870	1,440
13	645	1,050	10,900	29,400	14,200	16,400	46,500	8,100	1,440	17,600	1,940	1,580
14	600	950	10,500	29,000	16,200	17,200	58,100	8,940	2,610	22,200	2,180	1,350
15	580	802	9,640	28,200	16,000	18,700	67,400	6,800	2,600	20,200	1,910	1,140
16	560	735	7,450	27,900	14,200	21,700	72,100	7,450	2,180	17,200	1,680	1,020
17	540	758	6,680	27,200	12,400	22,400	75,500	11,000	2,100	14,400	1,510	925
18	520	1,000	5,480	27,200	11,600	22,900	75,500	12,000	2,860	12,400	1,650	900
19	520	1,350	4,640	28,200	11,800	23,500	72,100	11,600	3,580	11,200	1,800	875
20	502	1,870	4,180	28,200	11,800	24,300	67,400	10,200	4,070	10,800	1,720	825
21	485	2,350	3,970	27,900	13,700	25,600	64,500	8,800	4,400	10,800	1,680	825
22	482	2,520	3,870	27,500	16,600	26,200	60,500	9,780	4,640	11,000	1,800	875
23	471	2,440	3,870	26,800	17,200	26,500	56,900	14,400	5,360	11,200	1,800	875
24	471	2,350	3,870	25,500	16,400	26,800	53,300	15,800	6,320	11,400	1,800	850
25	485	2,350	3,770	24,300	15,100	27,200	48,700	16,200	6,800	11,200	2,180	802
26	485	2,950	4,180	23,200	14,000	27,500	42,700	14,400	7,320	11,200	2,260	900
27	482	3,580	8,380	22,400	13,500	27,900	37,400	9,640	7,450	11,000	1,800	1,190
28	478	3,770	12,700	22,200	11,600	27,500	34,000	6,800	7,840	11,500	1,580	1,000
29	474	3,970	14,900	22,200	-	27,200	31,600	5,600	8,380	11,800	1,760	900
30	464	3,870	15,600	21,900	-	27,200	30,000	4,880	9,220	12,600	1,870	875
31	457	-	16,400	22,400	-	27,200	-	4,400	-	12,900	1,800	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff	
						Inches	Acre-feet
October	19,476	1,020	457	628	0.075	0.09	38,630
November	47,048	3,970	450	1,568	.188	.21	93,320
December	239,110	16,400	3,490	7,713	.927	1.07	474,300
Calendar year 1944	3,787,156	53,300	450	10,350	1.24	16.92	7,512,000
January	815,700	31,000	19,600	26,310	3.16	3.64	1,618,000
February	484,200	26,500	11,500	17,290	2.08	2.18	960,400
March	644,900	27,900	12,000	20,800	2.50	2.88	1,279,000
April	1,444,100	75,500	29,400	48,140	5.78	6.45	2,864,000
May	324,090	28,600	3,770	10,450	1.28	1.45	642,800
June	116,130	9,220	1,440	3,871	.465	.52	230,300
July	419,800	22,200	10,200	13,540	1.63	1.88	832,700
August	106,300	12,400	1,510	3,429	.412	.47	210,800
September	34,187	1,760	802	1,140	.137	.15	67,810
Water year 1944-45	4,695,041	75,500	450	12,860	1.55	20.97	9,312,000

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Sabine River near Ruliff, Tex.

Location.- Wire-weight gage, lat. 30°18'10", long. 93°44'40", at bridge on State Highway 235, 2.4 miles north of Ruliff, Newton County, 4.2 miles upstream from Kansas City-Southern Railway bridge, and 4.5 miles downstream from Cypress Creek. Datum of gage is 4.08 feet above mean sea level, datum of 1929.

Drainage area.- 9,440 square miles.

Records available.- October 1924 to September 1945.

Average discharge.- 21 years, 8,623 second-feet.

Extremes.- Maximum discharge during year, 85,300 second-feet Apr. 22 (gage height, 17.59 feet); minimum observed, 865 second-feet Nov. 2, 3; minimum gage height, 3.31 feet Nov. 2.

1924-45: Maximum discharge, that of Apr. 22, 1945; maximum gage height, 17.9 feet May 24, 25, 1935, present site and datum; minimum discharge observed, 338 second-feet Sept. 25-27, Oct. 2, 3, 22-24, 1939.

Higher stages are known to have occurred in the past.

Remarks.- Records good. Gage read twice daily, oftener during high stages. No large diversion above station.

Rating table, water year 1944-45 (gage height, in feet, and discharge, in second-feet)

3.3	865	10.0	4,570	13.0	12,700
4.0	1,110	11.0	5,850	13.5	15,800
5.0	1,520	11.5	6,840	14.0	21,000
7.0	2,530	12.0	8,350	15.0	38,500
9.0	3,700	12.5	10,400	17.5	83,500

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,610	882	5,550	24,200	24,200	18,000	38,500	36,700	7,530	8,720	12,700	3,150
2	1,560	865	5,290	25,900	24,200	17,000	45,700	34,000	7,100	9,110	13,300	3,090
3	1,520	865	4,910	25,900	25,000	17,000	51,100	31,300	5,160	9,730	13,600	2,640
4	1,390	882	4,680	29,500	25,000	16,600	54,700	29,500	4,370	10,600	13,300	2,480
5	1,350	900	4,680	31,300	29,500	16,200	54,700	25,900	3,920	11,500	12,700	2,420
6	1,310	970	5,420	32,200	30,400	16,600	51,100	21,000	3,700	12,200	12,200	2,310
7	1,390	1,080	6,600	33,100	31,300	17,500	51,100	17,500	3,390	12,700	10,600	2,200
8	1,560	1,150	8,720	34,900	34,000	18,500	47,500	13,800	3,270	13,300	8,720	2,090
9	1,700	1,270	10,800	39,400	34,000	19,700	45,700	10,800	3,090	13,800	6,000	2,040
10	1,890	1,270	12,500	41,200	33,100	19,700	43,000	8,720	2,970	14,200	4,370	1,990
11	2,040	1,310	13,300	41,200	29,500	19,700	41,200	7,380	2,860	14,800	3,510	1,890
12	1,790	1,350	14,200	40,300	29,500	18,500	41,200	6,170	2,700	15,100	3,150	1,790
13	1,560	1,520	14,800	38,500	25,900	18,500	41,200	6,000	2,800	15,800	2,920	1,890
14	1,390	1,560	14,800	36,700	22,500	18,000	43,000	6,600	3,330	16,600	2,800	2,260
15	1,270	1,520	14,800	37,600	21,000	18,000	47,500	7,840	4,000	18,000	2,860	2,260
16	1,190	1,390	14,500	34,900	21,000	19,100	54,700	10,400	4,790	19,100	2,800	1,990
17	1,080	1,310	14,200	34,900	21,000	19,700	65,500	11,500	4,000	21,000	2,580	1,840
18	1,080	1,270	13,300	34,900	21,800	21,800	74,500	12,000	3,920	20,400	2,420	1,700
19	1,040	1,480	12,000	36,700	19,700	24,200	79,900	12,700	4,090	18,000	2,360	1,560
20	1,040	1,890	10,400	39,400	19,100	26,800	81,700	13,000	4,370	16,600	2,480	1,520
21	1,000	2,310	8,350	40,300	18,500	26,800	83,500	13,600	4,790	14,800	2,530	1,480
22	970	2,860	6,840	41,200	17,500	26,800	83,500	13,600	5,160	13,800	2,530	1,430
23	970	3,150	6,370	38,500	17,500	28,600	81,700	12,700	5,560	a13,300	2,640	1,430
24	935	3,210	5,850	35,800	18,000	28,600	74,500	12,200	5,850	a12,700	2,640	1,480
25	935	4,090	5,850	34,000	19,100	29,500	67,300	12,200	6,370	12,200	2,580	1,480
26	935	5,290	5,700	31,300	19,700	29,500	61,900	13,300	7,100	12,200	2,750	1,430
27	935	6,370	7,000	29,500	19,700	29,500	54,700	14,500	7,380	12,200	2,970	1,430
28	935	7,100	16,300	28,600	19,100	30,400	49,300	15,100	7,680	a12,200	3,090	1,610
29	935	7,380	25,100	26,800	-	30,400	45,700	14,500	8,000	a12,200	3,510	1,790
30	900	6,600	21,000	25,900	-	30,400	40,300	12,200	8,350	12,200	3,330	1,700
31	900	-	21,000	25,000	-	31,300	-	9,730	-	12,500	3,270	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff	
						Inches	Acre-feet
October	39,110	2,040	900	1,262	0.134	0.15	77,570
November	73,094	7,380	865	2,436	.258	.29	145,000
December	335,110	25,100	4,680	10,810	1.14	1.32	664,700
Calendar year 1944	4,892,244	61,900	865	13,370	1.42	19.27	9,704,000
January	1,049,600	41,200	24,200	33,860	3.59	4.13	2,082,000
February	670,800	34,000	17,500	23,960	2.54	2.64	1,331,000
March	702,900	31,300	16,200	22,670	2.40	2.77	1,394,000
April	1,695,900	83,500	38,500	56,530	5.99	6.68	3,364,000
May	466,440	36,700	6,000	15,050	1.59	1.84	925,200
June	147,600	8,350	2,700	4,920	.521	.58	292,800
July	431,560	21,000	8,720	13,920	1.47	1.70	856,000
August	167,210	13,600	2,360	5,394	.571	.66	331,700
September	58,370	3,150	1,430	1,946	.206	.23	115,800
Water year 1944-45	5,837,694	83,500	865	15,990	1.69	22.99	11,580,000

a No gage-height record; discharge interpolated.

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Lake Fork Sabine River near Quitman, Tex.

Location.- Wire-weight gage, lat. 32°46', long. 95°28', at bridge on State Highway 37, half a mile downstream from Dry Creek and 2.5 miles south of Quitman, Wood Courty. Datum of gage is 317.42 feet above mean sea level, datum of 1929.

Drainage area.- 586 square miles.

Records available.- June 1924 to April 1926, February 1939 to September 1945.

Extremes.- Maximum discharge during year, 75,600 second-feet Mar. 30 (gage height, 29.85 feet, from floodmark), from rating curve extended above 49,000 second-feet; no flow Oct. 1-9, Oct. 26 to Nov. 7.

1924-26, 1939-45: Maximum discharge, that of Mar. 30, 1945; no flow at times.

Flood of June 7, 1943, reached a gage height of 25.9 feet (discharge, 51,600 second-feet); flood of July 1895 reached about same stage, from information by local residents.

Remarks.- Records good except those above 52,000 second-feet, which are fair. Gage read twice daily, oftener during high water. No diversion above station.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	0	161	3,840	130	9,860	18,100	150	28	36	44	7.2
2	0	0	40	2,580	105	4,180	10,200	114	34	41	35	5.5
3	0	0	24	2,230	99	2,990	6,340	87	88	83	23	4.3
4	0	0	23	1,850	99	2,780	4,000	74	147	256	20	3.5
5	0	0	53	1,100	99	3,210	2,400	66	107	353	16	2.9
6	a0	0	150	508	96	3,100	1,310	60	68	780	14	2.5
7	a0	.4	395	285	93	1,910	591	55	93	928	12	2.1
8	0	10	394	222	87	1,160	277	51	42	2,820	11	1.7
9	.4	9.3	642	180	79	884	206	49	33	2,900	9.8	1.5
10	9.9	6.6	642	147	74	569	184	63	28	1,590	9.8	1.5
11	6.3	4.2	630	121	69	312	228	96	26	1,400	12	3.2
12	5.5	2.6	204	102	116	1,200	665	154	12,200	2,560	13	3.4
13	3.9	4.0	102	90	437	2,580	1,650	237	21,500	4,400	13	2.3
14	2.5	15	68	85	720	1,850	2,780	144	12,100	4,300	105	1.7
15	2.0	12	53	79	862	3,220	1,740	199	5,260	2,500	76	1.4
16	1.6	9.3	45	77	800	2,400	875	573	2,900	1,450	37	1.3
17	1.2	6.6	35	72	588	1,780	386	930	1,780	805	22	1.2
18	.8	6.6	28	210	340	2,070	237	1,220	1,080	469	a16	1.2
19	.7	7.2	25	896	312	1,570	188	1,120	639	172	12	1.2
20	.5	10	a25	1,500	772	1,480	140	562	422	82	10	1.1
21	.3	12	a26	3,020	2,500	1,780	111	146	274	58	a7.5	1.0
22	.3	11	a26	2,850	7,390	2,780	140	87	238	46	29	1.0
23	.2	7.7	a27	1,700	9,220	2,040	237	72	474	37	102	1.0
24	.2	21	27	1,020	3,880	1,160	428	60	326	31	82	1.0
25	.1	389	30	611	1,990	950	680	52	237	28	42	1.0
26	0	538	76	336	1,040	720	950	48	162	25	56	1.0
27	0	680	700	214	1,900	720	1,320	44	111	22	42	.9
28	0	800	1,370	169	10,900	680	940	41	74	21	a26	.8
29	0	950	2,160	154	-	16,500	332	37	52	20	16	2.0
30	0	539	3,280	154	-	70,500	169	33	43	18	13	a34
31	0	-	4,560	154	-	50,600	-	30	-	20	10	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff	
						Inches	Acre-feet
October	36.4	9.9	0	1.17	0.0020	0.002	72
November	4,051.5	950	0	135	.230	.26	8,040
December	16,021	4,560	23	517	.882	1.02	31,780
Calendar year 1944	181,569.2	18,900	0	496	.846	11.53	360,100
January	26,556	3,840	72	857	1.46	1.68	52,670
February	44,797	10,900	69	1,600	2.73	2.84	88,850
March	197,535	70,500	312	6,372	10.9	12.53	391,800
April	57,804	18,100	111	1,927	3.29	3.67	114,700
May	6,654	1,220	30	215	.367	.42	13,200
June	60,566	21,500	26	2,019	3.44	3.84	120,100
July	28,251	4,400	18	911	1.55	1.79	56,040
August	936.1	105	7.5	30.2	.052	.06	1,860
September	94.4	34	.8	3.15	.0054	.006	187
Water year 1944-45	443,302.4	70,500	0	1,215	2.07	28.12	879,300

a No gage-height record; discharge computed on basis of weather records and estimated gage heights.

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Big Sandy Creek near Big Sandy, Tex.

Location.- Water-stage recorder, lat. 32°37', long. 95°06', at county highway bridge, 2.2 miles northeast of Big Sandy, Upshur County, and 7.8 miles upstream from mouth. Datum of gage is 281.6 feet above mean sea level, unadjusted.

Drainage area.- 235 square miles.

Records available.- February 1939 to September 1945.

Extremes.- Maximum discharge during year, 38,000 second-feet Mar. 31 (gage height, 22.4 feet, from floodmark), from rating curve extended above 3,000 second-feet; minimum, 19 second-feet Oct. 10 (gage height, 5.43 feet).

1939-45: Maximum discharge, that of Mar. 31, 1945; minimum observed, 7.7 second-feet Sept. 30, 1939.

Maximum stage known prior to 1945, 20.4 feet (probably affected by backwater from Sabine River) in January 1938, from information by observer.

Remarks.- Records good except those above 3,000 second-feet, which are poor. No large diversion above station.

Rating table, water year 1944-45 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Oct. 1 to Jan. 18)

5.5	19	10.0	316	15.0	1,930	18.0	8,500
6.0	25	11.0	436	16.0	2,800	19.0	13,800
7.0	72	12.0	594	16.5	3,500	20.0	20,000
8.0	138	13.0	850	17.0	4,600	21.6	31,600
9.0	214	14.0	1,280	17.5	6,300		

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	25	25	145	1,420	174	963	16,200	274	62	90	47	41
2	24	26	142	960	166	1,780	6,890	219	60	83	47	39
3	22	31	117	733	162	1,970	3,010	186	57	79	44	36
4	20	33	96	682	162	1,400	1,880	162	56	74	41	34
5	20	35	145	636	156	1,180	1,170	145	60	87	38	33
6	20	36	182	556	145	1,360	a760	134	64	93	36	32
7	21	36	178	464	142	1,000	a556	128	66	100	35	32
8	20	37	182	364	138	733	a450	117	65	170	35	33
9	19	41	182	294	138	556	a400	106	58	186	34	32
10	19	38	194	244	134	464	a364	114	51	163	32	31
11	19	36	210	210	131	388	a340	131	48	697	33	30
12	19	35	219	194	156	434	a340	142	155	590	40	29
13	19	35	214	178	202	506	a340	142	6,290	412	45	29
14	19	37	194	162	190	580	a352	145	11,800	436	41	29
15	19	48	170	148	190	1,260	364	207	3,020	492	37	30
16	20	48	145	134	202	940	424	316	1,150	424	38	29
17	20	49	128	128	264	733	436	274	706	316	39	28
18	22	57	114	220	328	682	388	288	574	229	39	28
19	22	82	100	412	352	733	328	732	492	166	38	28
20	22	78	93	340	478	1,040	284	658	388	128	39	28
21	23	68	87	388	743	960	264	556	284	103	41	27
22	23	57	82	492	1,230	902	274	364	239	83	42	27
23	23	52	81	594	1,890	820	274	249	219	71	56	31
24	24	70	87	556	1,800	658	254	178	178	64	100	35
25	24	182	110	464	1,080	594	264	138	148	58	114	34
26	24	190	143	388	706	522	335	117	145	54	100	32
27	24	186	439	328	733	708	510	100	159	51	71	30
28	24	162	556	294	706	980	556	87	146	55	57	30
29	24	145	850	249	-	1,850	450	79	120	68	51	44
30	24	142	1,360	214	-	f16,600	352	72	103	58	47	70
31	25	-	1,740	190	-	f31,600	-	66	-	50	43	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff	
						Inches	Acre-feet
October	673	25	19	21.7	0.092	0.11	1,330
November	2,097	190	25	69.9	.297	.33	4,160
December	8,685	1,740	81	280	1.19	1.37	17,230
Calendar year 1944	94,573	5,340	18	258	1.10	14.96	187,600
January	12,636	1,420	128	408	1.74	2.00	25,060
February	12,898	1,890	131	461	1.96	2.04	25,580
March	74,896	31,600	388	2,416	10.3	11.85	148,600
April	38,809	16,200	254	1,294	5.61	6.14	76,980
May	6,626	732	66	214	.911	1.05	13,140
June	26,965	11,800	48	899	3.83	4.27	53,480
July	6,730	697	50	185	.787	.91	11,370
August	1,500	114	32	48.4	.206	.24	2,980
September	991	70	27	33.0	.140	.16	1,970
Water year 1944-45	192,506	31,600	19	527	2.24	30.47	381,900

Peak discharge.- Feb. 23 (12 p.m.) 2,090 sec.-ft.; Mar. 3 (4 p.m.) 2,210 sec.-ft.; Mar. 31 (4:30 a.m.) 38,000 sec.-ft.; June 13 (11:30 p.m.) 16,200 sec.-ft.

a No gage-height record; discharge computed on basis of weather records.

f Computed on basis of partly estimated gage-height record.

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Cherokee Bayou near Elderville, Tex.

Location.- Water-stage recorder, lat. 32°20', long. 94°42', at bridge on county highway, 3.8 miles southeast of Elderville, Gregg County, 4.5 miles upstream from bridge on State Highway 149, and 19.3 miles upstream from mouth. Datum of gage is 266.8 feet above mean sea level, datum of 1929 (Corps of Engineers, U. S. Army bench mark).

Drainage area.- 110 square miles.

Records available.- August 1939 to September 1945.

Extremes.- Maximum discharge during year, 9,450 second-feet July 11 (gage height, 12.47 feet), from rating curve extended above 4,500 second-feet by logarithmic plotting; minimum, 4.0 second-feet Sept. 15, 16 (gage height, 2.58 feet).

1939-45: Maximum discharge, 10,200 second-feet Nov. 23, 1940 (gage height, 12.81 feet), from rating curve extended above 4,500 second-feet by logarithmic plotting; no flow at times.

Maximum stage known, about 14.0 feet in September 1913, from information by local residents.

Remarks.- Records fair. No diversion above station.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	10	7.5	60	1,000	142	440	1,580	51	18	40	25	11
2	10	8.0	53	998	136	325	4,260	49	17	37	24	10
3	10	18	46	522	134	1,020	1,630	42	16	32	21	8.5
4	13	30	44	358	136	2,910	579	38	15	30	19	7.8
5	13	31	155	325	140	1,090	378	34	14	32	18	7.0
6	12	40	432	314	138	498	300	32	14	39	16	6.4
7	14	43	895	288	132	322	240	32	14	62	16	6.5
8	14	41	502	297	122	272	202	30	12	136	16	6.0
9	12	32	291	288	117	227	185	30	11	128	17	5.5
10	10	35	224	227	115	200	171	31	10	74	17	5.5
11	9.8	47	164	180	119	217	157	43	11	4,050	17	5.3
12	8.5	43	126	159	185	319	148	44	108	4,000	18	5.5
13	7.6	35	113	148	352	502	138	51	676	1,270	16	5.2
14	7.0	29	101	142	479	502	132	50	909	526	17	4.6
15	6.5	31	91	138	328	436	120	116	602	278	17	4.3
16	6.2	32	86	128	222	490	113	311	355	192	16	4.3
17	6.4	40	82	122	183	510	104	484	153	138	15	4.4
18	6.5	51	80	701	168	398	96	375	87	99	14	4.4
19	6.7	104	77	3,020	188	334	91	151	77	77	12	4.5
20	6.7	106	75	1,310	297	432	82	75	108	66	12	4.5
21	6.8	111	75	592	514	436	80	54	108	57	11	4.6
22	7.1	101	74	461	725	374	98	49	68	49	12	4.8
23	7.1	69	70	432	574	261	119	40	634	42	22	4.8
24	7.1	65	86	343	319	250	146	37	1,210	38	44	5.1
25	7.3	178	148	266	230	415	117	32	673	34	30	5.1
26	7.3	350	288	222	204	461	87	29	322	31	22	4.8
27	7.1	502	1,230	204	322	401	75	27	138	29	17	5.1
28	7.1	253	2,430	188	415	269	69	25	79	27	15	5.4
29	7.1	124	1,300	171	-	207	62	24	60	28	14	13
30	7.5	77	683	162	-	399	57	22	50	31	13	18
31	7.5	-	610	151	-	1,250	-	20	-	26	11	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff	
						Inches	Acre-feet
October	268.9	14	6.2	8.67	0.079	0.09	533
November	2,633.5	502	7.5	87.8	.798	.89	5,220
December	10,691	2,430	44	345	3.14	3.61	21,210
Calendar year 1944	80,887.4	7,610	0	221	2.01	27.33	160,400
January	13,857	3,020	122	447	4.06	4.69	27,480
February	7,136	725	115	255	2.32	2.41	14,150
March	16,167	2,910	200	522	4.75	5.47	32,070
April	11,616	4,260	57	387	3.52	3.93	23,040
May	2,428	484	20	78.3	.712	.82	4,820
June	6,569	1,210	10	219	1.99	2.22	13,030
July	11,698	4,050	26	377	3.43	3.96	23,200
August	554	44	11	17.9	.163	.19	1,100
September	191.9	18	4.3	6.40	.059	.06	381
Water year 1944-45	83,810.3	4,260	4.3	230	2.09	28.34	166,200

Peak discharge.- Jan. 19 (10 a.m.) 3,630 sec.-ft.; Mar. 4 (8 a.m.) 3,520 sec.-ft.; Apr. 2 (10 a.m.) 5,100 sec.-ft.; July 11 (6 p.m.) 9,450 sec.-ft.

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Neches River near Neches, Tex.

Location.- Wire-weight gage, lat. 31°54', long. 95°26', at bridge on U. S. Highway 79, half a mile downstream from International-Great Northern Railroad bridge, 1 mile downstream from Walnut Creek, and 4.4 miles northeast of Neches, Anderson County. Datum of gage is 263.9 feet above mean sea level, datum of 1929.

Drainage area.- 1,129 square miles.

Records available.- February 1939 to September 1945.

Extremes.- Maximum discharge during year, 45,500 second-feet Apr. 2 (gage height, 22.07 feet); minimum observed, 31 second-feet Oct. 21 (gage height, 2.54 feet).
1939-45: Maximum discharge, that of Apr. 2, 1945; no flow Oct. 3-5, 1939.
Flood of May 1908 reached a stage of 24.3 feet, from information by local resident. Flood of May 1884 was probably higher.

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

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	45	35	484	4,560	1,350	3,390	36,900	707	252	484	d198	a148
2	46	a36	496	4,560	1,260	3,000	44,100	645	236	362	d191	a145
3	49	40	508	4,290	1,130	3,060	35,500	619	220	268	d177	a139
4	52	68	484	3,820	1,060	5,040	26,300	568	205	220	163	a130
5	52	80	568	3,390	970	7,100	18,700	532	191	205	160	115
6	49	a85	724	3,260	865	d8,500	12,300	496	191	220	160	100
7	47	a88	800	3,120	800	9,300	7,640	448	198	252	151	88
8	44	a92	820	2,860	781	7,280	4,900	426	198	268	148	85
9	43	a90	781	2,680	743	5,560	3,530	393	198	286	142	80
10	46	a88	724	2,320	707	4,200	2,710	372	177	322	130	72
11	42	a82	675	2,050	690	3,390	2,240	415	170	2,130	118	66
12	39	a75	675	1,760	707	3,000	1,870	460	177	3,610	115	61
13	37	70	675	1,560	840	2,680	1,640	460	258	3,130	118	89
14	36	70	660	1,380	915	2,500	1,480	426	415	2,780	110	121
15	35	70	645	1,260	940	2,680	1,380	437	472	2,410	105	108
16	34	78	606	1,130	915	2,680	1,350	629	484	2,300	102	90
17	32	121	593	1,000	890	2,560	1,350	762	520	2,350	102	66
18	32	151	496	1,290	890	2,560	1,380	762	606	2,650	102	75
19	32	205	448	2,260	970	2,560	1,350	675	743	2,650	92	72
20	32	252	382	2,800	1,090	2,560	1,300	645	940	2,470	82	70
21	31	236	342	2,740	1,480	2,560	1,210	660	1,210	2,130	85	63
22	32	212	313	2,440	2,100	2,500	1,170	707	1,300	1,680	88	66
23	33	198	295	2,380	2,380	2,380	1,090	743	1,300	1,350	92	90
24	34	205	295	2,500	2,440	2,380	1,030	707	1,260	1,060	90	92
25	34	421	332	2,560	2,930	2,930	970	660	1,170	800	92	88
26	34	606	372	2,380	3,900	3,320	915	606	1,060	544	92	80
27	34	632	1,120	2,150	4,380	3,390	840	544	970	382	a90	75
28	34	593	3,290	1,950	3,980	3,120	800	460	840	295	a90	102
29	34	496	4,740	1,760	-	3,460	781	382	743	244	a92	179
30	35	484	4,740	1,680	-	4,380	743	322	619	a220	a112	352
31	35	-	4,470	1,480	-	12,400	-	286	-	d212	a142	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff	
						Inches	Acre-feet
October	1,194	52	31	38.5	0.034	0.04	2,370
November	5,959	632	35	199	.176	.20	11,820
December	32,553	4,740	295	1,050	.930	1.07	64,570
Calendar year 1944	460,706	22,800	20	1,259	1.12	15.19	913,800
January	75,370	4,560	1,000	2,431	2.15	2.48	149,500
February	42,103	4,380	690	1,504	1.33	1.39	83,510
March	126,420	12,400	2,380	4,078	3.61	4.16	250,800
April	217,469	44,100	743	7,249	6.42	7.16	431,300
May	16,954	762	286	547	.484	.56	33,630
June	17,323	1,300	170	577	.511	.57	34,360
July	38,284	3,610	205	1,235	1.09	1.26	75,940
August	3,731	198	82	120	.106	.12	7,400
September	3,107	352	61	104	.092	.10	6,160
Water year 1944-45	580,467	44, 00	31	1,590	1.41	19.11	1,151,000

a No gage-height record; discharge computed on basis of estimated gage heights, weather records, and records for station near Alto.

d Doubtful gage-height record; discharge computed on basis of estimated gage heights, weather records, and records for station near Alto.

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Neches River near Alto, Tex.

Location.- Water-stage recorder, lat. 31°34', long. 95°10', at bridge on State Highway 21, 600 feet downstream from Bowles Creek and 7½ miles southwest of Alto, Cherokee County. Datum of gage is 198.29 feet above mean sea level, datum of 1929, supplementary adjustment of 1937.

Drainage area.- 1,903 square miles.

Records available.- January 1944 to September 1945.

Extremes.- Maximum discharge during year, 42,800 second-feet Apr. 4 (gage height, 26.85 feet); minimum, 73 second-feet Oct. 29 to Nov. 2 (gage height, 2.57 feet).
1944-45: Maximum discharge, that of Apr. 4, 1945; minimum observed, 59 second-feet Aug. 10, 1944 (gage height, 2.35 feet).
Maximum stage known, about 28.2 feet in May 1884, from information by local residents.

Remarks.- Records good. No large diversion above station.

Rating table, water year 1944-45 (gage height, in feet, and discharge, in second-feet)

2.5	68	11.0	1,050	17.0	4,280
3.0	105	13.0	1,510	18.0	6,800
4.0	190	14.0	1,840	19.0	10,200
5.0	285	15.0	2,240	21.0	17,600
7.0	485	16.0	2,920	24.0	29,900
9.0	740	16.5	3,480	26.6	41,800

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	125	73	1,030	4,940	3,020	3,020	7,360	1,510	712	1,310	740	305
2	112	74	996	6,240	2,830	3,480	19,900	1,410	631	1,220	618	285
3	111	88	944	6,520	2,750	4,280	33,300	1,310	618	1,170	530	275
4	125	137	896	6,240	2,600	5,440	41,800	1,220	644	912	465	265
5	125	194	1,410	5,700	2,530	6,240	41,800	1,110	542	740	425	255
6	117	181	2,920	6,520	2,460	5,960	36,400	1,030	485	592	395	250
7	121	154	3,120	8,080	2,290	6,240	28,600	978	455	554	365	245
8	117	158	2,830	6,800	2,150	7,440	20,800	912	425	530	405	226
9	112	168	2,400	5,960	1,980	8,760	14,200	866	385	518	435	208
10	106	176	2,150	5,180	1,840	9,120	9,480	852	365	496	415	190
11	100	176	2,020	4,700	1,700	8,400	6,800	1,220	365	674	385	176
12	95	181	1,880	4,280	1,700	7,120	5,700	1,540	395	1,440	345	168
13	92	186	1,770	3,930	2,060	6,240	4,940	1,480	638	2,150	325	181
14	91	186	1,630	3,480	2,150	5,440	4,100	1,190	978	2,830	295	176
15	88	186	1,510	3,230	2,060	5,180	3,620	1,110	912	5,030	275	186
16	84	217	1,410	3,020	1,940	4,700	3,230	2,590	782	6,520	255	186
17	82	345	1,360	2,750	1,840	4,280	2,920	3,020	726	5,700	245	204
18	81	415	1,310	4,670	1,770	3,930	2,670	2,600	726	4,940	230	204
19	78	605	1,240	9,840	1,800	3,930	2,460	1,980	726	4,100	217	186
20	76	698	1,190	7,440	2,020	3,930	2,340	1,630	740	3,480	208	168
21	75	644	1,130	5,960	2,400	3,930	2,200	1,460	754	3,120	204	168
22	74	542	1,050	5,440	2,750	3,620	2,200	1,410	824	3,020	199	154
23	74	485	978	4,940	2,830	3,480	2,150	1,360	1,010	2,920	226	154
24	74	507	912	4,480	2,750	3,350	2,150	1,280	1,110	2,830	240	154
25	75	1,540	896	4,280	2,750	3,350	2,100	1,220	1,220	2,750	265	158
26	75	2,200	1,030	3,930	2,750	3,350	2,060	1,170	1,310	2,600	255	158
27	74	2,020	1,580	3,620	2,830	3,230	1,940	1,130	1,360	2,400	235	168
28	74	1,540	2,830	3,480	2,830	3,230	1,880	1,070	1,410	2,200	235	168
29	74	1,170	3,620	3,360	-	3,230	1,770	996	1,410	1,910	265	395
30	73	1,070	3,480	3,350	-	3,480	1,630	912	1,360	1,430	295	684
31	73	-	3,620	3,120	-	4,100	-	810	-	978	305	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff	
						Inches	Acre-feet
October	2,853	125	73	92.0	0.048	0.06	5,660
November	16,316	2,200	73	544	.286	.32	32,360
December	55,142	3,620	896	1,779	.935	1.08	109,400
Calendar year	-	-	-	-	-	-	-
January	155,470	9,840	2,750	5,015	2.64	3.04	308,400
February	65,380	3,020	1,700	2,335	1.23	1.28	129,700
March	151,480	9,120	3,020	4,886	2.57	2.96	300,500
April	312,500	41,800	1,630	10,420	5.48	6.11	619,800
May	42,376	3,020	810	1,367	.718	.83	84,050
June	24,018	1,410	365	801	.421	.47	47,640
July	71,064	6,520	496	2,292	1.20	1.39	141,000
August	10,297	740	199	332	.174	.20	20,420
September	6,700	684	154	223	.117	.13	13,290
Water year 1944-45	913,596	41,800	73	2,503	1.32	17.87	1,812,000

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Neches River near Diboll, Tex.

Location.- Wire-weight gage, lat. 31°08', long. 94°48', at bridge on U. S. Highway 59, 630 feet downstream from Texas & New Orleans Railroad bridge, 2.9 miles downstream from Alabama Creek, and 3.8 miles south of Diboll, Angelina County. Datum of gage is 134.46 feet above mean sea level, datum of 1929.

Drainage area.- 2,670 square miles.

Records available.- November 1923 to August 1925, March 1939 to September 1945.

Extremes.- Maximum discharge during year, 40,800 second-feet Apr. 8 (gage height, 17.95 feet); minimum observed, 68 second-feet Nov. 3.

1923-25, 1939-45: Maximum discharge, 49,900 second-feet May 4, 1944 (gage height, 18.70 feet); no flow Aug. 15-22, 1925.

Maximum stage known, about 21.0 feet, present site, in May 1884, from information by local residents.

Remarks.- Records good. Gage read once or twice daily. No large diversion above station.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	120	76	2,460	9,370	4,400	3,360	7,120	2,200	1,330	1,140	2,880	282
2	157	74	2,200	11,800	4,250	3,240	13,400	2,060	1,250	1,170	2,770	289
3	182	68	2,200	10,300	4,120	3,240	17,000	2,000	1,220	1,220	2,560	289
4	182	74	1,940	8,610	3,990	3,360	19,800	1,890	1,200	1,250	2,370	289
5	164	77	2,770	7,720	a4,250	3,480	21,600	1,840	1,070	1,270	2,000	282
6	150	78	5,420	7,510	4,400	3,600	28,800	1,750	920	1,270	1,790	282
7	142	81	6,720	8,840	a3,990	3,990	37,200	1,640	832	1,230	1,170	275
8	142	117	6,720	10,300	a3,480	4,580	39,600	1,640	668	1,200	748	254
9	152	141	6,360	11,800	a3,120	5,560	37,200	1,570	648	1,090	568	254
10	142	159	5,560	11,800	a3,000	6,020	32,400	1,440	588	920	496	248
11	140	154	5,020	11,000	a3,000	6,910	25,300	1,570	532	768	478	234
12	136	153	4,490	10,300	3,360	8,160	19,300	1,940	478	688	478	208
13	128	157	4,120	8,840	4,120	9,780	15,100	2,200	478	708	460	215
14	126	162	3,860	7,510	a4,120	10,800	11,800	2,060	550	810	400	208
15	118	170	3,600	6,720	a3,990	10,800	9,540	2,000	748	1,040	392	196
16	112	176	3,360	6,020	3,860	9,540	7,720	3,300	920	1,220	376	189
17	106	202	3,120	5,280	3,480	8,160	6,720	3,990	1,020	1,410	336	189
18	104	241	2,880	5,710	3,120	a8,380	5,560	3,990	1,090	1,570	304	189
19	99	460	2,660	8,160	3,000	a9,780	4,900	3,600	1,090	1,750	268	196
20	96	628	2,370	10,500	3,120	8,840	4,400	3,360	1,040	2,060	248	202
21	95	788	2,280	12,400	3,480	7,300	4,120	3,120	944	2,770	248	208
22	91	920	2,000	13,000	3,860	6,360	4,120	2,880	854	3,990	241	208
23	87	944	1,940	12,600	4,120	6,190	3,860	2,770	854	4,490	215	196
24	85	920	1,790	11,200	4,250	5,860	3,360	2,770	832	4,490	222	189
25	82	1,570	1,670	9,300	4,120	5,710	3,000	2,660	810	4,250	222	176
26	81	1,600	1,640	7,940	3,990	5,020	2,880	2,370	832	3,990	222	170
27	80	1,710	1,600	6,910	3,730	4,580	2,660	2,130	876	3,730	248	164
28	78	2,060	1,750	6,190	3,480	4,250	2,460	1,890	920	3,360	261	170
29	76	2,280	1,940	5,560	-	4,120	2,460	1,670	992	3,240	296	170
30	74	2,460	2,200	5,020	-	4,250	2,370	1,540	1,090	3,000	268	182
31	74	-	4,250	4,790	-	4,580	-	1,410	-	2,880	268	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff	
						Inches	Acre-feet
October	3,601	182	74	116	0.043	0.05	7,140
November	18,700	2,460	68	623	.233	.26	37,090
December	100,890	6,720	1,600	3,255	1.22	1.41	200,100
Calendar year 1944	1,285,834	49,900	68	3,513	1.32	17.91	2,550,000
January	273,000	13,000	4,790	8,806	3.30	3.80	541,500
February	105,200	4,400	3,000	3,757	1.41	1.47	208,700
March	189,800	10,800	3,240	6,123	2.29	2.64	376,500
April	395,750	39,600	2,370	13,190	4.94	5.51	785,000
May	71,250	3,990	1,410	2,298	.861	.99	141,300
June	26,676	1,330	478	889	.333	.37	52,910
July	63,994	4,490	688	2,064	.773	.89	126,900
August	23,803	2,880	215	768	.288	.33	47,210
September	6,603	289	164	220	.082	.09	13,100
Water year 1944-45	1,279,267	39,600	68	3,505	1.31	17.81	2,537,000

a No gage-height record; discharge computed on basis of weather records and records for nearby stations.

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Neches River near Rockland, Tex.

Location.- Staff gage, lat. 31°01'45", long. 94°23'50", a quarter of a mile downstream (corrected) from bridge on U. S. Highway 69, half a mile upstream from Texas & New Orleans Railroad bridge, 1 mile north of Rockland, Tyler County, and 3½ miles downstream from Billams Creek. Datum of gage is 91.4 feet above mean sea level, datum of 1929.

Drainage area.- 3,539 square miles.

Records available.- July 1903 to September 1945 (July 1903 to September 1923, monthly records only, in Water-Supply Paper 850). U. S. Weather Bureau has collected gage-height records in this vicinity since 1903.

Average discharge.- 39 years (1903-10, 1913-45), 2,456 second-feet.

Extremes.- Maximum discharge during year, 37,500 second-feet Apr. 11 (gage height, 28.37 feet); minimum observed, 93 second-feet Oct. 31, Nov. 1.

1903-45: Maximum discharge, 49,800 second-feet May 6, 1944 (gage height, 31.84 feet); minimum observed during period of daily records, 3.0 second-feet Oct. 15, 1931. Maximum stage known, 34.9 feet in May 1884, from information by local resident.

Remarks.- Records good. Gage read twice daily. No daily diversion above station.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	133	93	2,260	7,420	7,880	5,400	9,280	3,240	1,800	1,020	3,300	373
2	128	96	2,260	8,980	6,970	5,280	13,400	2,920	1,600	1,060	3,140	335
3	137	100	2,310	10,200	6,320	5,040	17,400	2,640	1,450	1,110	2,970	332
4	160	106	2,360	12,200	6,120	4,860	21,400	2,420	1,300	1,180	2,800	332
5	172	110	2,940	13,100	8,750	4,740	27,000	2,420	1,220	1,220	2,700	332
6	192	103	4,800	13,000	11,400	4,500	29,700	2,360	1,130	1,220	2,580	335
7	182	101	5,820	12,600	11,400	4,380	29,700	2,310	1,080	1,300	2,360	346
8	180	100	6,320	12,200	11,100	4,200	30,500	2,200	1,020	1,300	2,000	330
9	190	98	6,520	11,500	10,200	4,080	34,200	2,100	926	1,250	1,450	316
10	194	119	6,710	11,300	9,280	4,080	37,200	1,950	860	1,200	948	296
11	186	158	7,360	11,100	7,620	4,320	37,500	2,640	817	1,110	714	288
12	172	166	7,490	11,500	6,970	4,860	36,100	3,140	754	970	594	288
13	164	170	7,420	11,500	6,580	5,400	32,500	3,300	817	904	556	546
14	154	170	7,250	11,500	6,120	6,000	28,000	3,420	1,080	970	537	398
15	148	182	6,970	10,900	5,820	7,040	23,500	3,420	1,060	1,300	518	296
16	144	200	6,320	10,400	5,640	7,560	20,000	4,200	970	1,250	482	253
17	138	211	5,580	9,880	5,340	8,300	16,900	5,100	904	1,250	455	233
18	135	228	4,920	9,650	5,580	d9,960	14,400	5,520	970	1,350	417	228
19	131	270	4,320	9,960	6,000	10,900	13,100	5,460	1,130	1,450	385	226
20	128	431	4,080	10,400	6,900	d11,500	11,400	5,340	1,150	1,550	352	220
21	124	634	3,540	10,800	7,100	d11,000	10,300	5,280	754	1,600	327	220
22	120	904	2,970	11,300	6,970	10,900	9,200	5,460	1,130	1,750	364	220
23	113	926	2,750	12,100	6,580	10,300	8,160	5,400	1,020	1,900	310	226
24	110	993	2,640	13,100	5,940	9,650	7,490	5,040	926	2,150	291	226
25	106	1,550	2,530	13,100	4,920	9,050	6,900	4,560	904	2,530	286	226
26	101	2,310	2,580	13,100	4,680	8,380	6,450	4,260	904	2,970	265	217
27	98	2,700	2,750	12,700	4,620	7,880	6,060	3,900	904	3,240	258	206
28	95	2,580	2,920	11,900	4,860	7,420	5,460	3,560	904	3,540	364	196
29	96	2,310	3,300	10,800	-	7,100	4,320	2,700	926	3,720	674	192
30	96	2,200	3,300	9,880	-	6,780	3,780	2,360	948	3,780	634	211
31	93	-	a4,740	8,980	-	6,780	-	2,150	-	3,600	455	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff	
						Inches	Acre-feet
October	4,320	194	93	139	0.039	0.05	8,570
November	20,319	2,700	93	677	.191	.21	40,300
December	138,010	7,490	2,260	4,452	1.26	1.45	273,700
Calendar year 1944	1,745,644	49,700	77	4,770	1.35	18.34	3,462,000
January	347,050	13,100	7,420	11,200	3.17	3.65	688,400
February	197,660	11,400	4,620	7,059	1.99	2.08	392,100
March	217,640	11,500	4,080	7,021	1.98	2.29	431,700
April	551,300	37,500	3,780	18,380	5.19	5.79	1,093,000
May	110,570	5,520	1,950	3,567	1.01	1.16	219,300
June	31,358	1,800	754	1,045	.295	.33	62,200
July	54,744	3,780	904	1,766	.499	.58	108,600
August	33,486	3,300	258	1,080	.305	.35	66,420
September	8,443	546	192	281	.079	.09	16,750
Water year 1944-45	1,714,900	37,500	93	4,698	1.33	18.03	3,401,000

a No gage-height record; discharge estimated.

d Doubtful gage-height record; discharge computed on basis of weather records and records for nearby stations.

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Neches River at Evadale, Tex.

Location.- Staff gage, lat. 30°21', long. 94°05', at bridge on U. S. Highway 59, 200 feet upstream from Gulf, Colorado & Santa Fe Railway bridge at Evadale, Jasper County, and 15 miles upstream from Village Creek. Datum of gage is 8.3 feet above mean sea level, datum of 1929.

Drainage area.- 7,908 square miles.

Records available.- July 1904 to December 1906, October 1923 to September 1945.

Average discharge.- 24 years (1904-6, 1923-45), 6,494 second-feet.

Extremes.- Maximum discharge during year, 53,000 second-feet Apr. 15, 16 (gage height, 19.89 feet); minimum observed, 420 second-feet Oct. 31, Nov. 1-4; minimum gage height observed, 1.28 feet Nov. 2.

1904-6, 1923-45: Maximum discharge, 92,100 second-feet May 11, 1944 (gage height, 23.58 feet from floodmark); minimum observed, about 148 second-feet Sept. 10, 1925.

Maximum stages known, 26.2 feet in 1884 (discharge, about 175,000 second-feet, from rating curve extended above 72,000 second-feet by logarithmic plotting), and 24.5 feet in August 1915 (discharge not determined), from records of Gulf, Colorado & Santa Fe Railway Co.

Remarks.- Records good. Gage read twice daily. No large diversion above station.

Rating tables, water year 1944-45 (gage height, in feet, and discharge, in second-feet) (Shifting-control method used Oct. 8 to Nov. 22)

Oct. 1 to July 16						July 17 to Sept. 30			
1.4	420	8.5	3,640	15.0	15,500	2.6	890	10.0	5,000
2.0	576	10.0	5,000	16.0	21,000	4.0	1,420	11.0	6,150
3.0	886	11.5	6,820	17.0	27,600	6.0	2,300	12.0	7,660
5.0	1,660	13.0	9,500	19.0	44,000	7.5	3,100	13.2	9,960
7.0	2,670	14.0	11,900	20.0	54,000	9.0	4,100		

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	720	420	5,220	14,300	25,400	14,300	20,400	10,900	6,680	2,720	9,500	2,860
2	675	420	5,000	15,100	25,400	13,500	21,000	9,960	6,150	2,720	9,960	2,300
3	632	420	4,800	16,500	25,400	13,200	21,000	8,660	5,670	2,780	9,960	1,850
4	604	432	4,700	15,100	24,800	12,800	21,600	7,440	5,220	2,900	9,280	1,500
5	576	484	4,900	18,600	25,400	12,800	22,800	6,680	4,800	2,840	8,460	1,380
6	576	549	5,670	20,400	24,800	13,200	24,800	6,030	4,310	2,840	7,440	1,300
7	604	562	6,960	22,800	24,200	13,500	27,600	5,670	3,720	2,900	6,030	1,260
8	736	576	8,860	24,800	23,500	13,900	32,200	5,330	3,220	2,960	5,000	1,220
9	818	632	10,900	28,400	23,500	13,500	37,800	5,110	2,960	3,020	4,340	1,180
10	869	604	12,500	30,600	24,800	12,800	42,200	5,000	2,780	3,020	3,820	1,140
11	835	604	13,200	29,800	25,400	12,200	46,000	4,800	2,620	3,150	3,340	1,100
12	752	604	13,500	28,400	27,600	11,400	48,000	4,500	2,450	3,080	2,800	1,060
13	675	576	13,500	32,200	27,600	11,100	50,000	4,800	3,260	3,020	2,300	1,030
14	632	562	13,900	31,400	26,800	10,900	52,000	6,150	4,700	3,420	1,980	1,100
15	604	576	13,900	30,600	25,400	11,100	53,000	7,280	4,700	4,600	1,800	1,180
16	590	590	14,300	30,600	24,200	11,900	53,000	8,280	4,220	5,910	1,720	1,340
17	576	632	14,300	29,800	22,800	12,800	51,000	8,660	3,560	6,540	1,670	1,220
18	562	675	14,300	30,600	21,000	13,900	44,000	9,730	3,150	6,030	1,580	1,030
19	549	835	13,900	32,200	18,600	14,700	43,100	11,100	2,900	5,000	1,540	925
20	536	994	13,500	31,400	16,500	16,000	40,400	11,900	2,840	4,430	1,500	890
21	523	1,180	13,200	29,800	15,100	17,000	37,800	12,800	2,780	4,100	1,460	890
22	510	1,340	11,900	28,400	13,900	17,500	37,000	13,500	2,840	4,180	1,460	925
23	497	1,980	10,400	26,800	13,900	18,000	33,800	12,800	3,020	4,260	1,460	925
24	484	2,080	9,280	25,400	14,700	19,200	29,100	12,200	3,020	4,430	1,500	925
25	471	2,780	8,280	24,800	15,500	19,800	26,100	11,900	3,080	4,800	1,460	960
26	471	3,490	8,280	24,200	16,000	20,400	23,500	11,700	3,220	5,330	1,380	925
27	458	4,400	9,500	23,500	15,500	20,400	21,000	11,400	3,150	5,910	1,300	925
28	445	5,000	10,700	23,500	14,700	21,000	18,000	10,700	2,900	6,680	1,830	925
29	445	5,330	11,700	24,200	-	20,400	16,000	9,730	2,780	7,440	2,650	925
30	432	5,330	12,200	24,800	-	20,400	12,800	8,660	2,720	8,100	2,800	960
31	432	-	13,500	25,400	-	19,200	-	7,600	-	8,860	3,280	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff	
						Inches	Acre-feet
October	18,289	869	432	590	0.075	0.09	36,280
November	44,657	5,330	420	1,489	.188	.21	88,580
December	326,750	14,300	4,700	10,540	1.33	1.54	648,100
Calendar year 1944	4,124,195	92,100	420	11,270	1.43	19.42	8,180,000
January	794,400	32,200	14,300	25,630	3.24	3.74	1,576,000
February	602,400	27,600	13,900	21,510	2.72	2.83	1,195,000
March	472,800	21,000	10,900	15,250	1.93	2.22	937,800
April	1,007,000	53,000	12,800	33,570	4.25	4.74	1,997,000
May	270,970	13,500	4,500	8,741	1.11	1.27	537,500
June	109,420	6,680	2,450	3,647	.461	.51	217,000
July	137,970	8,860	2,720	4,451	.563	.65	273,700
August	114,600	9,960	1,300	3,697	.468	.54	227,300
September	36,150	2,860	890	1,205	.152	.17	71,700
Water year 1944-45	3,935,406	53,000	420	10,780	1.36	18.51	7,806,000

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Mud Creek near Jacksonville, Tex.

Location.- Water-stage recorder, lat. 31°58'40", long. 95°09'40", at bridge on U. S. Highway 79, 0.6 mile downstream from Caney Creek, 3.9 miles downstream from another Caney Creek, 4 miles (revised) downstream from International-Great Northern Railroad bridge, and 6.9 miles east of Jacksonville, Cherokee County. Datum of gage is 271.6 feet above mean sea level, datum of 1929.

Drainage area.- 382 square miles.

Records available.- May 1939 to September 1945.

Extremes.- Maximum discharge during year, 8,890 second-feet Apr. 2 (gage height, 10.66 feet); minimum, 8.5 second-feet Oct. 15 (gage height, 1.62 feet).

1939-45: Maximum discharge, 23,400 second-feet May 3, 1944 (gage height, 14.09 feet); no flow at times.

Maximum stage known occurred in May 1884, from information by local residents.

Remarks.- Records good. No large diversion above station.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	18	11	302	2,230	363	589	6,410	177	70	83	78	34
2	20	11	198	1,500	336	596	7,700	166	66	76	83	32
3	19	13	132	1,320	324	1,270	6,800	156	63	69	76	28
4	18	20	114	1,150	312	4,130	3,600	138	62	63	66	26
5	19	26	226	974	302	6,250	1,690	129	70	62	59	23
6	20	38	528	916	292	3,060	1,060	120	83	80	54	21
7	18	47	561	916	292	1,540	855	117	80	86	50	21
8	18	46	534	784	284	945	784	117	61	182	49	21
9	17	58	575	724	270	754	694	114	52	210	48	21
10	14	66	582	694	258	677	618	111	47	174	46	21
11	12	68	568	660	247	618	554	129	45	3,410	44	21
12	11	58	498	596	370	754	498	152	107	3,840	44	29
13	9.6	46	402	534	561	930	455	160	289	4,710	45	41
14	8.9	41	312	460	492	855	410	163	440	4,200	48	32
15	8.7	40	242	398	516	1,510	378	177	644	4,320	47	30
16	8.9	44	194	360	547	1,640	363	794	1,030	2,980	42	29
17	8.7	62	174	336	568	1,390	348	394	1,030	1,790	39	26
18	8.7	78	160	2,250	540	1,240	312	378	831	1,100	36	24
19	8.9	102	149	3,690	470	1,060	284	480	582	754	34	22
20	9.1	123	142	3,730	589	1,030	258	528	442	511	32	21
21	9.1	123	138	3,290	879	879	242	414	450	280	32	21
22	9.1	126	135	2,020	1,360	784	258	237	440	180	31	22
23	9.1	111	132	1,240	1,240	794	270	174	292	149	37	32
24	9.1	96	160	904	1,120	1,100	284	160	222	132	73	34
25	9.4	222	232	744	904	1,360	324	138	252	120	86	42
26	9.6	292	292	669	754	1,080	348	117	284	105	68	41
27	10	270	1,220	596	714	867	312	105	312	97	49	35
28	10	292	3,720	534	677	774	252	97	232	91	42	32
29	10	336	6,950	480	-	694	210	88	123	86	38	212
30	10	348	4,180	426	-	1,180	188	83	94	86	37	336
31	10	-	2,680	387	-	2,640	-	75	-	83	36	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff	
						Inches	Acre-feet
October	380.9	20	8.7	12.3	0.032	0.04	756
November	3,214	348	11	107	.280	.31	6,370
December	26,432	6,950	114	853	2.23	2.57	52,430
Calendar year 1944	199,477.7	18,400	1.4	545	1.43	19.43	395,700
January	35,512	3,730	336	1,146	3.00	3.46	70,440
February	15,581	1,360	247	556	1.46	1.52	30,900
March	42,990	6,250	589	1,387	3.63	4.19	85,270
April	36,759	7,700	188	1,225	3.21	3.58	72,910
May	6,388	794	75	206	.539	.62	12,670
June	8,795	1,030	45	293	.767	.86	17,440
July	30,109	4,710	62	971	2.54	2.93	59,720
August	1,549	66	31	50.0	.131	.15	3,070
September	1,330	336	21	44.3	.116	.13	2,640
Water year 1944-45	209,039.9	7,700	8.7	573	1.50	20.36	414,600

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Angelina River near Alto, Tex.

Location.- Chain gage, lat. 31°40', long. 94°58', at bridge on State Highway 21, 3 miles upstream from Bingham Creek and 7 miles east of Alto, Cherokee County. Datum of gage is 204.3 feet above mean sea level, datum of 1929.

Drainage area.- 1,261 square miles.

Records available.- May to August 1940 (discharge measurements only). September 1940 to September 1945 (fragmentary for 1941, 1942, 1944, 1945).

Extremes.- Maximum gage height observed during year, 20.10 feet Apr. 4 (discharge not determined); minimum discharge observed, 53 second-feet Oct. 25, Oct. 29 to Nov. 2.
1940-45: Maximum gage height observed, 21.52 feet May 5, 1944 (may have been higher during period of no gage-height record in November 1940); minimum discharge observed, 11 second-feet Aug. 30, 31, Sept. 25-27, 1943.

Remarks.- Records good. Discharge above 2,200 second-feet not computed. Gage read twice daily. No large diversion above station.

Rating table, water year 1944-45 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used July 25 to Sept. 30)

2.9	47	5.0	246	12.0	1,350
3.0	54	6.0	368	14.0	1,810
3.5	93	8.0	650	15.1	2,200
4.0	140	10.0	980		

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	103	53	1,260		2,200		-	893	356	1,050	394	155
2	104	53	1,290		1,940		-	825	332	825	a366	145
3	104	56	1,260		1,710		-	744	332	560	a339	131
4	103	63	1,180		1,560		-	665	308	381	a312	117
5	102	a72	1,570		1,470		-	590	332	320	284	110
6	99	a81	2,040		1,370		-	545	368	308	266	105
7	98	90	1,760		1,290		-	502	358	368	242	101
8	95	102	1,780		1,220		-	a480	320	516	248	95
9	90	116	-		1,160		-	460	278	635	230	92
10	86	124	-		1,120		-	474	254	712	202	89
11	85	128	-		1,090		-	674	218	911	196	91
12	83	126	-		1,240		-	876	224	1,220	191	140
13	77	126	-		1,350		-	806	476	-	175	236
14	71	136	-		1,330		-	808	760	-	170	276
15	67	165	-		1,350		2,000	910	808	-	170	308
16	64	191	-		1,450		1,730	1,480	876	-	175	272
17	62	248	1,640	2,040	1,550		1,540	1,660	a1,010	-	175	191
18	60	266	1,610		1,710		1,390	1,840	1,140	-	170	160
19	60	460	1,390		1,810		1,270	2,160	1,260	-	155	145
20	58	460	1,200		2,000		1,180	-	1,310	-	139	132
21	57	474	1,020		2,120		1,110	-	1,350	-	129	119
22	55	502	876		2,200		1,090	-	1,330	-	125	111
23	a55	530	760		-		1,050	-	1,290	-	125	106
24	a54	545	665		-		1,030	1,940	1,200	-	145	a107
25	54	953	650		-		1,030	1,630	1,160	1,660	160	a110
26	55	962	650		-		1,030	1,350	1,120	1,200	160	113
27	55	910	1,020		-		1,030	1,030	1,120	776	165	117
28	55	962	1,630		-		1,020	728	1,160	545	186	127
29	54	1,030	1,710		-		980	545	1,180	488	202	160
30	53	1,140	-		-		927	446	1,140	433	186	236
31	53	-	-		-		-	394	-	381	170	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff	
						Inches	Acre-feet
October	2,271	104	53	73.3	0.058	0.07	4,500
November	11,124	1,140	53	371	.294	.33	22,060
December	-	-	-	-	-	-	-
Calendar year	-	-	-	-	-	-	-
January	-	-	-	-	-	-	-
February 1-22	34,250	2,200	1,090	1,557	1.23	1.01	67,930
March	-	-	-	-	-	-	-
April 15-30	19,407	2,000	927	1,213	.962	.57	38,490
May	-	-	-	-	-	-	-
June	23,368	1,350	218	779	.618	.69	46,350
July	-	-	-	-	-	-	-
August	6,352	394	125	205	.163	.19	12,600
September	4,419	308	89	147	.117	.13	8,760
Water year	-	-	-	-	-	-	-

a No gage-height record; discharge estimated or interpolated.

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Angelina River near Lufkin, Tex.

Location.- Water-stage recorder, lat. 31°27'40", long. 94°43'35", at bridge on State Highway 35, 400 feet upstream from Procella Creek, half a mile downstream from Little Loco Bayou, 1.5 miles upstream from Texas & New Orleans Railroad bridge, and 8 miles north of Lufkin, Angelina County. Datum of gage is 164.72 feet above mean sea level, datum of 1929.

Drainage area.- 1,575 square miles.

Records available.- October 1923 to September 1934, July 1939 to September 1945.

Average discharge.- 17 years, 1,363 second-feet.

Extremes.- Maximum discharge during year, 17,300 second-feet Apr. 7 (gage height, 15.18 feet); minimum, 62 second-feet Oct. 31, Nov. 1, 2.

1923-34, 1939-45: Maximum discharge, 38,200 second-feet Feb. 24, 1932; maximum gage height, 18.55 feet May 7, 1944; minimum discharge, 2.3 second-feet Oct. 12, 1939.

Maximum stage known, about 26.5 feet in May 1884, from information by local residents.

Remarks.- Records good except those for period of no gage-height record, which are fair. No large diversion above station.

Rating table, water year 1944-45 (gage height, in feet, and discharge, in second-feet)

2.4	60	6.5	508	11.1	3,440
3.0	93	7.0	650	11.5	4,380
4.0	156	8.0	1,010	12.0	6,000
4.8	220	9.0	1,540	14.0	13,000
5.2	262	10.0	2,200	15.2	17,300
5.8	360	10.7	2,820		

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	120	62	1,080	5,320	3,860	2,890	a9,400	1,110	615	1,080	668	215
2	135	63	1,080	5,830	3,440	3,180	a9,060	1,060	530	1,080	542	194
3	135	67	1,160	6,340	3,180	3,350	a7,870	990	519	1,060	497	182
4	132	70	1,210	8,720	2,890	3,640	a8,380	912	530	930	453	170
5	129	72	2,090	9,400	2,820	3,980	a13,400	842	486	702	420	156
6	129	78	3,350	9,760	2,650	4,100	a16,600	772	442	542	378	146
7	126	84	3,540	10,800	2,480	3,750	17,000	702	420	570	351	135
8	126	93	3,540	10,100	2,280	3,860	15,500	632	420	668	324	129
9	123	102	3,100	8,720	2,060	6,850	13,000	600	409	585	308	123
10	120	117	2,700	7,190	1,880	8,720	10,100	570	378	668	333	117
11	114	132	2,480	6,000	1,750	8,720	8,040	720	342	720	308	111
12	108	142	2,360	5,160	1,880	7,700	6,340	1,080	316	878	269	111
13	102	149	2,360	4,680	2,240	6,510	5,160	1,340	369	1,140	245	149
14	102	152	2,480	4,240	2,360	5,490	4,240	1,420	555	1,510	235	178
15	96	166	2,600	3,860	2,280	4,840	3,540	1,280	738	1,750	220	230
16	90	198	2,760	3,540	2,200	4,240	3,260	1,720	842	1,850	210	262
17	84	250	2,820	3,260	2,020	3,980	2,960	2,060	842	2,240	202	269
18	81	324	2,820	4,240	1,920	3,860	2,600	1,960	842	5,660	202	250
19	75	486	2,700	7,020	2,020	3,440	2,360	1,960	878	8,040	198	210
20	72	555	2,600	7,530	2,650	3,350	2,060	1,820	970	8,720	190	186
21	70	542	2,440	5,830	3,030	3,440	1,850	1,850	1,060	7,870	182	170
22	69	542	2,200	5,490	3,030	3,860	1,720	1,960	1,140	6,850	170	160
23	68	530	1,990	8,040	2,960	3,980	1,630	2,020	1,240	5,660	166	152
24	68	555	1,720	10,500	2,960	3,980	1,510	2,130	1,260	4,680	160	146
25	68	930	1,450	10,500	2,760	3,980	1,420	2,160	1,260	3,860	160	138
26	67	1,180	1,310	9,400	2,650	3,860	1,310	2,160	1,240	3,260	160	132
27	66	1,260	1,600	8,210	2,650	3,640	1,210	2,100	1,180	2,820	170	129
28	66	1,260	2,200	7,020	2,760	a3,260	1,180	1,960	1,140	2,400	186	132
29	64	1,240	2,650	6,000	-	a3,260	1,160	1,660	1,080	1,850	215	142
30	64	1,110	2,820	5,000	-	a3,180	1,140	1,210	1,080	1,160	240	160
31	63	-	4,240	4,380	-	a5,060	-	825	-	808	235	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff	
						Inches	Acre-feet
October	2,932	135	63	94.6	0.060	0.07	5,820
November	12,511	1,260	62	417	.265	.30	24,820
December	73,450	4,240	1,080	2,369	1.50	1.73	145,700
Calendar year 1944	874,467	28,700	43	2,389	1.52	20.65	1,735,000
January	212,080	10,800	3,260	6,841	4.34	5.01	420,700
February	71,660	3,860	1,750	2,559	1.62	1.69	142,100
March	137,950	8,720	2,890	4,450	2.83	3.26	273,600
April	175,000	17,000	1,140	5,833	3.70	4.13	347,100
May	43,585	2,160	570	1,406	.893	1.03	86,450
June	23,123	1,260	316	771	.490	.55	45,860
July	81,611	8,720	542	2,633	1.67	1.93	161,900
August	8,597	668	160	277	.176	.20	17,050
September	4,984	269	111	166	105	.12	9,890
Water year 1944-45	847,483	17,000	62	2,322	1.47	20.02	1,681,000

a No gage-height record; discharge computed on basis of recorded range in stage and weather records.

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Angelina River at Horger, Tex.

Location.- Wire-weight gage, lat. 31°00', long. 94°10', at bridge on State Highway 63, a quarter of a mile east of Horger, Jasper County, 7 miles upstream from Indian Creek, and 20 miles upstream from mouth. Datum of gage is 68.4 feet above mean sea level, datum of 1929 (levels by Corps of Engineers, U. S. Army).

Drainage area.- 3,435 square miles.

Records available.- March 1928 to September 1945.

Average discharge.- 17 years, 3,114 second-feet.

Extremes.- Maximum discharge during year, 22,400 second-feet Apr. 8 (gage height, 29.07 feet); minimum observed, 142 second-feet Oct. 29 (gage height, 2.21 feet).

1928-45: Maximum discharge, 49,900 second-feet May 6, 1944 (gage height, 36.90 feet); minimum observed, 13 second-feet Sept. 22, 1937.

Maximum discharge known, 82,000 second-feet in August 1915 (gage height, 39.5 feet, from information by local residents), from rating curve extended above 50,000 second-feet.

Remarks.- Records good. Gage read twice daily. Occasional backwater from Neches River. No large diversion above station.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	238	148	2,350	9,740	12,400	6,740	10,100	2,840	2,570	1,390	5,430	457
2	225	148	2,300	13,700	11,900	6,870	13,700	2,520	2,460	1,390	4,560	469
3	238	170	2,300	15,800	11,200	7,130	17,900	2,240	2,020	1,340	3,780	457
4	253	180	2,240	16,600	10,400	7,660	19,800	2,130	1,640	1,340	a2,680	417
5	247	208	2,860	17,900	12,000	7,660	19,900	1,960	1,340	1,390	1,590	369
6	241	200	6,170	18,900	14,300	7,200	20,600	1,860	1,160	1,390	1,160	365
7	262	170	7,260	18,900	15,700	6,680	21,900	1,740	1,090	1,490	990	344
8	265	165	7,130	18,100	15,200	a6,360	22,200	1,640	965	1,690	890	323
9	235	170	6,480	17,300	14,000	6,050	21,500	1,490	815	1,640	890	289
10	232	210	6,680	16,900	12,600	5,920	20,600	1,440	790	1,390	745	259
11	235	192	7,000	17,200	10,900	5,920	20,300	1,740	745	1,390	678	271
12	232	200	7,060	17,300	10,200	5,980	20,200	3,010	678	1,340	700	259
13	222	200	7,000	16,900	9,740	6,110	19,900	3,450	865	2,540	632	298
14	228	202	7,000	16,100	9,250	6,290	19,200	3,010	1,040	4,380	678	354
15	230	215	7,060	15,200	7,800	7,130	18,100	2,240	990	4,810	a622	295
16	225	241	6,940	13,400	6,540	7,870	16,600	4,890	1,040	3,120	565	259
17	210	354	6,540	12,500	6,050	8,500	15,100	6,480	1,120	2,460	521	265
18	205	389	5,980	12,000	5,740	9,100	13,400	7,260	1,120	2,300	565	302
19	205	541	5,360	11,900	5,670	9,490	12,100	6,480	1,140	2,350	513	337
20	195	745	4,620	11,800	7,260	9,830	10,800	6,050	1,240	2,400	513	362
21	192	1,090	4,140	11,600	8,580	10,000	9,570	5,300	1,340	2,460	541	377
22	182	1,390	3,960	11,100	8,720	10,100	8,430	5,120	1,240	2,680	529	362
23	175	1,490	3,840	11,200	7,800	10,000	7,460	5,800	1,390	3,060	465	334
24	170	1,440	3,720	11,700	7,260	9,830	6,360	5,490	1,590	3,670	553	309
25	170	1,960	3,560	12,600	7,000	9,250	5,550	4,930	1,490	4,440	481	306
26	165	2,520	4,020	13,300	6,740	8,800	4,740	4,620	1,390	5,120	509	312
27	160	2,570	5,360	13,100	6,540	8,220	4,140	4,020	1,440	5,610	441	271
28	146	2,570	6,480	12,700	6,610	7,660	3,720	3,230	1,440	6,360	413	256
29	144	2,570	6,540	12,500	-	7,260	4,260	2,900	1,440	6,420	565	253
30	148	2,460	5,800	12,600	-	7,060	3,670	2,740	1,440	6,940	632	283
31	146	-	6,860	12,700	-	7,200	-	2,620	-	6,360	489	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff	
						Inches	Acre-feet
October	6,421	265	144	207	0.060	0.07	12,740
November	25,108	2,570	148	837	.244	.27	49,800
December	164,610	7,260	2,240	5,310	1.55	1.78	326,500
Calendar year 1944	1,928,413	49,300	144	5,269	1.53	20.89	3,825,000
January	443,240	18,900	9,740	14,300	4.16	4.80	879,200
February	268,100	15,700	5,670	9,575	2.79	2.90	531,800
March	239,870	10,100	5,920	7,738	2.25	2.60	475,800
April	411,800	22,200	3,670	13,730	4.00	4.46	816,800
May	111,240	7,260	1,440	3,588	1.04	1.20	220,600
June	39,028	2,570	678	1,301	.379	.42	77,410
July	94,660	6,940	1,340	3,054	.889	1.03	187,800
August	34,320	5,430	413	1,107	.322	.37	68,070
September	9,814	469	253	327	.095	.11	19,470
Water year 1944-45	1,848,211	22,200	144	5,064	1.47	20.01	3,666,000

a No gage-height record; discharge interpolated.

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Striker Creek near Summerfield, Tex.

Location.- Wire-weight gage, lat. 32°00'10", long. 94°59'35", at bridge on U. S. Highway 79, 3½ miles downstream from Johnson Creek and 6½ miles northeast of Summerfield, Cherokee County. Datum of gage is 287.0 feet above mean sea level, datum of 1929. Prior to Aug. 4, 1945, chain gage at same site and datum.

Drainage area.- 135 square miles.

Records available.- May to August 1940 (discharge measurements only). September 1940 to September 1945.

Extremes.- *Maximum discharge during year, 7,800 second-feet July 12 (gage height, 15.00 feet)*; minimum observed, 11 second-feet Oct. 14-16, 17, 25-27, Nov. 1; minimum gage height observed, 2.78 feet Oct. 16.

1940-45: Maximum discharge, 10,800 second-feet Nov. 24, 1940 (gage height, 17.23 feet, from floodmark), from rating curve extended above 5,000 second-feet by velocity-area studies; minimum observed, 0.7 second-foot Aug. 31, Sept. 1, 1943.

Remarks.- Records good. Gage read twice daily, oftener during floods. No large diversion above station.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	27	11	92	1,000	111	354	1,900	68	31	64	45	19
2	27	12	73	1,200	107	325	4,670	64	30	60	37	18
3	25	17	62	678	104	606	3,240	58	29	54	32	16
4	23	23	56	422	104	2,230	1,350	53	30	56	27	15
5	21	46	116	376	106	1,970	560	49	30	55	25	14
6	20	62	727	348	106	850	314	45	30	72	23	13
7	19	56	1,370	331	105	412	231	44	28	114	22	12
8	18	41	769	385	98	271	178	43	26	139	22	12
9	17	42	432	336	93	205	154	43	24	186	21	12
10	16	74	276	237	91	166	143	46	23	214	21	12
11	14	78	195	181	90	152	133	58	21	2,120	20	12
12	13	55	133	146	118	250	127	74	29	6,710	21	15
13	12	36	112	129	336	645	121	86	144	3,150	21	27
14	11	28	94	123	588	745	119	85	820	1,460	22	60
15	11	28	84	118	398	567	112	111	922	1,170	22	64
16	11	32	76	110	246	722	106	494	564	845	21	44
17	12	48	72	106	178	632	97	1,060	274	418	19	29
18	12	67	70	880	183	379	93	678	166	246	18	22
19	12	94	66	3,160	186	281	88	322	271	140	18	19
20	12	120	66	2,320	256	308	80	154	351	104	16	18
21	12	166	64	1,000	552	446	81	104	258	85	15	17
22	12	133	62	546	1,030	395	96	84	139	74	16	17
23	12	99	61	457	870	267	128	74	186	66	17	16
24	12	74	68	357	443	240	168	68	1,100	60	27	16
25	11	222	106	256	258	546	139	60	1,090	58	30	16
26	11	1,220	238	202	190	795	108	56	632	52	30	16
27	12	1,060	929	173	203	588	90	48	310	48	27	17
28	12	526	2,570	150	240	331	81	43	156	43	23	17
29	12	250	2,050	134	-	214	73	39	101	40	21	63
30	12	133	1,140	126	-	288	70	36	81	39	20	376
31	12	-	770	117	-	954	-	33	-	48	19	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff	
						Inches	Acre-feet
October	463	27	11	14.9	0.110	0.13	918
November	4,853	1,220	11	162	1.20	1.34	9,630
December	12,999	2,570	56	419	3.10	3.58	25,780
Calendar year 1944	101,754.4	7,240	3.1	278	2.06	28.04	201,800
January	16,104	3,160	106	519	3.84	4.44	31,940
February	7,392	1,030	90	264	1.96	2.04	14,660
March	17,164	2,230	152	554	4.10	4.73	34,040
April	14,850	4,670	70	495	3.67	4.09	29,450
May	4,280	1,060	33	138	1.02	1.18	8,490
June	7,896	1,100	21	263	1.95	2.18	15,660
July	17,990	6,710	39	580	4.30	4.96	35,680
August	718	45	15	23.2	.172	.20	1,420
September	1,024	376	12	34.1	.253	.28	2,030
Water year 1944-45	105,733	6,710	11	290	2.15	29.15	209,700

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Attoyac Bayou near Chireno, Tex.

Location.- Water-stage recorder, lat. 31°30'15", long. 94°18'15", at bridge on State Highway 21, 3 miles northeast of Chireno, Nacogdoches County, and 7 miles downstream from Arenoso Creek. Datum of gage is 169.9 feet above mean sea level, datum of 1929.

Drainage area.- 502 square miles.

Records available.- January 1924 to August 1925, July 1939 to September 1945.

Extremes.- Maximum discharge during year, 9,310 second-feet Jan. 1, Apr. 3; maximum gage height, 20.12 feet Apr. 3; minimum discharge, 41 second-feet Sept. 11 (gage height, 3.62 feet).

1924-25, 1939-45: Maximum discharge, 31,900 second-feet Nov. 24, 1940 (gage height, 25.97 feet); minimum observed, 7.0 second-feet Aug. 27, 1925.

Maximum stage known, 29.9 feet in June 1912 (result of local storm), from information by local residents.

Remarks.- Records fair. No large diversion above station.

Rating table, water year 1944-45 (gage height, in feet, and discharge, in second-feet)

3.6	41	11.0	510	17.0	2,240
4.0	56	13.0	700	17.5	2,920
4.5	78	14.0	834	18.0	3,870
5.0	104	15.0	1,040	19.0	6,200
6.0	161	15.8	1,340	19.8	8,420
9.0	360	16.5	1,780		

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	76	50	591	7,870	670	986	1,600	270	140	91	96	58
2	76	50	494	8,130	564	884	3,020	258	135	125	83	55
3	73	54	332	4,880	494	802	8,140	238	132	174	78	51
4	69	71	238	2,840	478	774	7,040	218	135	104	71	48
5	66	115	481	2,040	724	760	3,270	206	135	91	64	45
6	64	112	1,270	2,190	736	748	2,240	192	155	122	62	43
7	64	88	1,300	2,240	774	748	1,680	186	161	155	60	42
8	66	91	2,700	3,000	760	802	1,390	186	143	149	62	44
9	66	91	2,840	2,840	712	1,040	1,200	192	121	186	66	45
10	62	91	2,140	2,000	650	1,130	1,070	199	104	173	64	42
11	58	86	1,710	1,610	573	1,040	940	298	96	190	64	42
12	55	80	1,450	1,450	582	940	802	494	96	270	80	46
13	54	78	1,240	1,240	546	850	660	537	131	388	78	60
14	52	78	1,100	1,100	573	724	510	454	238	325	69	69
15	51	88	962	986	573	660	423	404	290	318	60	73
16	51	118	850	884	582	650	395	660	251	332	60	64
17	51	199	704	760	610	700	402	670	238	332	83	60
18	51	279	510	802	640	902	402	680	277	290	71	58
19	51	588	388	1,100	700	850	402	660	225	212	62	53
20	51	591	339	4,140	834	940	381	630	173	149	62	53
21	50	591	318	5,460	962	920	353	610	161	118	64	87
22	50	537	304	3,180	1,100	884	367	650	199	104	64	80
23	49	462	290	2,240	1,170	802	423	486	180	94	64	66
24	50	358	284	1,780	1,200	774	462	325	155	88	71	60
25	50	628	295	1,510	1,170	802	478	258	135	83	94	60
26	50	670	570	1,340	1,100	802	486	225	118	78	80	69
27	51	680	690	1,170	1,100	788	446	206	112	78	69	112
28	50	660	818	1,070	1,040	760	360	186	104	86	64	88
29	49	620	866	986	-	724	318	173	96	102	69	76
30	49	610	902	902	-	724	290	161	94	138	76	76
31	50	-	3,290	788	-	788	-	149	-	115	66	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff	
						Inches	Acre-feet
October	1,755	76	49	56.6	0.113	0.13	3,480
November	8,814	680	50	294	.586	.65	17,480
December	30,266	3,290	238	976	1.94	2.24	60,030
Calendar year 1944	280,257	15,600	39	766	1.53	20.76	555,900
January	72,528	8,130	760	2,340	4.66	5.37	143,900
February	21,617	1,200	478	772	1.54	1.60	42,880
March	25,698	1,130	650	829	1.65	1.90	50,970
April	39,950	8,140	290	1,332	2.65	2.96	79,240
May	11,061	680	149	357	.711	.82	21,940
June	4,730	290	94	158	.315	.35	9,380
July	5,260	388	78	170	.339	.39	10,430
August	2,176	96	60	70.2	.140	.16	4,320
September	1,825	112	42	60.8	.121	.14	3,620
Water year 1944-45	225,680	8,140	42	618	1.23	16.71	447,700

Peak discharge.- Dec. 31 (4 p.m.) 5,340 sec.-ft.; Jan. 1 (12 p.m.) 9,310 sec.-ft.; Jan. 20 (10 p.m.) 7,010 sec.-ft.; Apr. 3 (4 p.m.) 9,310 sec.-ft.

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Village Creek near Kountze, Tex.

Location.- Water-stage recorder, lat. 30°24', long. 94°16', at bridge on Kountze-Silsbee county highway, 1.2 miles upstream from Gulf, Colorado & Santa Fe Railway bridge, 3.2 miles northeast of Kountze, Hardin County, and 4½ miles downstream from Beech Creek. Datum of gage is 25.1 feet above mean sea level, datum of 1929.

Drainage area.- 837 square miles.

Records available.- May 1924 to November 1929, April 1939 to September 1945. October 1927 to November 1929 (discharge measurements only).

Extremes.- Maximum discharge during year, 16,700 second-feet Apr. 4 (gage height, 20.21 feet); minimum, 80 second-feet Nov. 2, 3; minimum gage height, 2.22 feet Nov. 2.

1924-27, 1939-45: Maximum discharge, 67,200 second-feet Nov. 26, 1940 (gage height, 27.6 feet, from floodmark), from rating curve extended above 35,000 second-feet by logarithmic plotting; minimum, 32 second-feet Sept. 28, 1939.

Maximum stage known, 34 feet, present site and datum, in August 1915. Flood of May 27, 1929, reached a stage of about 32 feet, present site and datum. Above stages were determined on basis of information by engineers of Gulf, Colorado & Santa Fe Railway for site 1.2 miles downstream.

Remarks.- Records good except those for periods of no gage-height record, which are poor. No diversion above station.

Rating table, water year 1944-45 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Oct. 1 to Dec. 26, Aug. 30 to Sept. 30)

2.1	74	5.5	466	11.5	1,970	16.5	7,050
2.6	114	6.5	646	13.0	2,800	18.0	10,200
3.5	200	8.0	970	14.0	3,550	19.5	14,200
4.5	317	10.0	1,450	15.0	4,650	20.0	16,000

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	222	82	386	5,070	686	926	1,790	600	298	206	180	2,500
2	185	80	310	4,790	626	904	5,720		273	273	175	1,800
3	155	83	279	4,050	646	838	12,300		255	222	160	873
4	132	a86	250	4,410	750	882	15,700		285	255	155	466
5	121	a86	344	4,650	1,300	1,080	9,620		440	317	146	379
6	113	a86	1,510	3,650	2,100	1,420	5,240		434	324	141	317
7	f115	a86	2,560	3,310	2,870	1,540	3,550		418	250	132	296
8	f170	a97	2,800	3,750	3,850	1,350	2,620		351	222	132	250
9	165	a170	2,800	4,050	4,930	1,010	2,010		273	216	136	233
10	141	a185	2,870	3,750	3,550	772	1,740		238	216	146	228
11	155	a146	2,440	3,090	2,380	686	1,350	466	216	195	155	228
12	146	a128	1,630	2,220	1,740	666	1,040	450	206	185	150	222
13	128	a116	992	1,510	2,150	686	860	568	396	319	136	211
14	113	a117	726	1,150	2,680	706	750	794	1,330	666	123	200
15	105	110	586	1,010	2,870	882	700	1,060	2,010	970	123	211
16	100	108	514	904	2,680	1,380		1,530	2,010	1,220	119	226
17	98	113	466	816	2,100	1,780		2,010	1,470	1,320	113	228
18	95	118	434	1,140	1,670	2,380	2,300	2,260	970	1,180	110	195
19	95	150	418	3,830	1,440	2,940		2,150	666	755	116	175
20	93	216	418	4,530	1,540	2,680		1,620	586	396	136	165
21	92	310	418	4,170	1,670	2,100		1,020	434	324	136	155
22	91	344	386	3,750	1,700	1,560		794	330	304	141	150
23	90	279	365	3,150	1,700	1,270		794	298	317	141	150
24	90	222	379	2,620	1,600	1,060		794	291	317	132	150
25	89	552	466	1,860	1,440	882		816	310	285	165	155
26	88	1,150	771	1,270	1,270	816		750	310	255	206	175
27	87	1,250	1,680	1,010	1,060	750		772	298	222	222	180
28	86	1,200	2,560	926	948	686		586	261	200	234	222
29	84	926	2,940	904	-	626		418	228	180	937	228
30	83	609	3,010	836	-	568		351	206	175	1,740	206
31	83	-	3,430	750	-	706	-	317	-	190	2,320	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff	
						Inches	Acre-feet
October	3,610	222	83	116	0.139	0.16	7,160
November	9,207	1,250	80	307	.367	.41	18,260
December	39,140	3,430	250	1,263	1.51	1.74	77,630
Calendar year 1944	336,206	10,200	80	919	1.10	14.93	666,900
January	82,928	5,070	750	2,675	3.20	3.68	164,500
February	53,946	4,930	626	1,927	2.30	2.40	107,000
March	36,532	2,940	568	1,176	1.41	1.62	72,460
April	96,290	15,700	-	3,210	3.84	4.28	191,000
May	26,320	2,260	317	849	1.01	1.17	52,200
June	16,091	2,010	206	536	.641	.71	31,920
July	12,476	1,320	175	402	.480	.55	24,750
August	9,160	2,320	110	295	.353	.41	18,170
September	11,178	2,500	150	373	.446	.50	22,170
Water year 1944-45	396,878	15,700	80	1,087	1.30	17.63	787,200

a No gage-height record; discharge computed on basis of recorded range in stage and weather records.

Note.- No gage-height record Apr. 15 to May 10; discharge computed on basis of weather records and by comparison with records during a period of similar rainfall.

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Bridgeport Reservoir above Bridgeport, Tex.

Location.- Staff gage, lat. 33°13'20", long. 97°50'10", at Bridgeport Dam on West Fork Trinity River, 2.0 miles west of Bridgeport, Wise County, and 5.8 miles upstream from Big Sandy Creek. Datum of gage is 0.06 foot above mean sea level, datum of 1929 (levels by engineers of Tarrant County Water Control and Improvement District No. 1).

Drainage area.- 978 square miles.

Records available.- April 1932 to September 1945.

Extremes.- Maximum contents observed during year, 273,000 acre-feet July 16, 17 (gage height, 824.3 feet); minimum observed, 139,400 acre-feet Nov. 21-23 (gage height, 808.2 feet).

1932-45: Maximum contents observed, 407,600 acre-feet Apr. 29, 30, 1942 (gage height, 836.2 feet); minimum observed at monthly intervals since appreciable storage began, 2,200 acre-feet Dec. 31, 1933.

Remarks.- Reservoir formed by a rolled-fill earthen-type dam, containing a concrete service spillway with three 20-foot bays, two of which are equipped with vertical lift gates, and the other left open, and two emergency spillways of natural ground. Dam completed Dec. 15, 1931; storage began Apr. 1, 1932. Capacity, 291,000 acre-feet, between gage heights 751.4 feet (bottom of three 48-inch outlet conduits) and 826.1 feet (top of service spillway). Dead storage is negligible. Reservoir used for flood control and municipal supply of city of Fort Worth.

Cooperation.- Capacity curve and records of daily gage heights furnished by Tarrant County Water Control and Improvement District No. 1.

Monthly gage height and contents, water year October 1944 to September 1945

Date	Gage height (feet)†	Contents (acre-feet)	Change in contents during month (acre-feet)
Sept. 30	808.3	140,100	-
Oct. 31	808.6	142,200	+2,100
Nov. 30	808.9	144,300	+2,100
Dec. 31	809.7	149,900	+5,600
Calendar year 1944	-	-	+19,700
Jan. 31	810.3	154,100	+4,200
Feb. 28	812.1	166,700	+12,600
Mar. 31	822.2	252,000	+85,300
Apr. 30	823.9	269,000	+17,000
May 31	821.0	241,000	-28,000
June 30	820.1	232,900	-8,100
July 31	821.9	249,100	+16,200
Aug. 31	818.4	217,600	-31,500
Sept. 30	817.8	212,200	-5,400
Water year 1944-45	-	-	+72,100

† Gage height at 7 a.m.

Eagle Mountain Reservoir above Fort Worth, Tex.

Location.- Staff gage, lat. 32°52'35", long. 97°28'15", at Eagle Mountain Dam on West Fork Trinity River, 3.0 miles downstream from Ash Creek, 4.1 miles downstream from Walnut Creek, and 14.6 miles northwest of Fort Worth, Tarrant County. Datum of gage is at mean sea level, datum of 1929.

Drainage area.- 1,821 square miles (revised).

Records available.- February 1934 to September 1945.

Extremes.- Maximum contents observed during year, 232,000 acre-feet Apr. 2 (elevation, 651.0 feet); minimum observed, 206,700 acre-feet Apr. 20, 21, May 14 (elevation, 648.3 feet).

1934-45: Maximum contents observed, 333,500 acre-feet Apr. 26, 1942 (elevation, 659.9 feet); minimum observed at monthly intervals since appreciable storage began, 9,320 acre-feet June 30, 1934.

Remarks.- Reservoir is formed by a composite rolled-fill and hydraulic-fill earthen-type dam, containing a concrete service spillway with four 25-foot bays, three of which are equipped with vertical lift gates. In addition there is an emergency spillway of natural ground. Dam completed Oct. 24, 1932, and storage began Feb. 28, 1934. Capacity, 214,000 acre-feet, between elevations 599.9 feet (bottom of four 48-inch outlet conduits) and 649.1 feet (top of service spillway). Dead storage is negligible. Reservoir used to maintain level of Lake Worth from which city of Fort Worth derives its municipal supply.

Cooperation.- Capacity curve and records of daily elevations furnished by Tarrant County Water Control and Improvement District No. 1.

Monthly elevation and contents, water year October 1944 to September 1945

Date	Elevation (feet)†	Contents (acre-feet)	Change in contents during month (acre-feet)
Sept. 30	648.8	211,200	-
Oct. 31	648.7	210,300	-900
Nov. 30	648.8	211,200	+900
Dec. 31	648.9	212,100	+900
Calendar year 1944	-	-	0
Jan. 31	649.0	213,000	+900
Feb. 28	649.9	221,600	+8,600
Mar. 31	649.7	219,600	-2,000
Apr. 30	648.6	209,400	-10,200
May 31	648.6	209,400	0
June 30	648.6	209,400	0
July 31	648.8	211,200	+1,800
Aug. 31	648.8	211,200	0
Sept. 30	649.0	213,000	+1,800
Water year 1944-45	-	-	+1,800

† Elevation at 8 a.m.

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central stardard time thereafter. To convert war time to standard time, subtract 1 hour.

West Fork Trinity River at Fort Worth, Tex.

Location.- Water-stage recorder above Texas Electric Service Co.'s concrete dam, lat. 32°46', long. 97°20', in old pump house of Texas Electric Service Co.'s plant in Fort Worth, Tarrant County, 150 feet upstream from Paddock viaduct and a quarter of a mile downstream from Clear Fork. Datum of gage is 519.2 feet above mean sea level (Texas Reclamation Department bench mark based on Coast & Geodetic Survey datum).

Drainage area.- 2,501 square miles (revised).

Records available.- October 1920 to September 1945. U. S. Weather Bureau has collected gage-height records in this vicinity since 1910.

Average discharge.- 25 years, 479 second-feet.

Extremes.- Maximum discharge during year, 31,200 second-feet Mar. 30 (gage height, 19.25 feet); minimum, 12 second-feet Oct. 24, 25.

1920-45: Maximum discharge, 85,000 second-feet Apr. 25, 1922 (gage height, 23.95 feet), by slope-area method, data furnished by city engineer of Fort Worth; no flow at times.

Remarks.- Records good. Flow partly regulated by Bridgeport, Eagle Mountain, and Lake Worth Reservoirs (combined capacity, 527,000 acre-feet). Considerable diversion above station for municipal supply of city of Fort Worth. Several small diversions above Fort Worth.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	110	23	160	566	106	2,970	8,020	1,530	82	72	546	573
2	61	23	87	360	106	4,530	4,350	1,430	75	78	553	553
3	89	23	51	207	106	3,270	3,340	1,080	92	78	553	540
4	694	23	45	132	102	2,550	3,570	903	72	89	553	546
5	807	23	92	89	95	2,690	3,200	843	82	106	546	540
6	713	22	156	82	92	3,810	3,200	814	82	113	540	540
7	494	23	164	99	92	2,290	3,120	888	75	174	546	527
8	211	25	225	67	89	1,500	2,970	807	69	144	546	514
9	94	25	397	64	82	1,210	2,900	778	69	305	299	421
10	58	23	573	56	82	895	2,360	1,180	85	1,480	122	194
11	46	23	338	53	78	970	2,680	1,740	104	2,040	122	80
12	39	25	160	53	1,230	2,930	2,360	1,560	565	1,920	201	49
13	27	25	106	51	2,200	1,090	2,620	1,440	714	1,860	69	70
14	23	25	58	51	1,470	1,040	2,360	1,350	992	2,830	48	35
15	23	23	48	51	1,500	3,350	2,360	1,380	851	2,760	41	29
16	23	27	46	51	1,520	2,160	2,160	728	542	2,620	37	27
17	23	25	39	64	1,560	2,040	1,740	494	419	2,550	33	25
18	23	37	39	448	1,050	1,860	1,860	613	353	2,160	33	22
19	23	38	37	811	874	2,680	2,040	677	234	1,470	31	22
20	25	29	35	326	1,730	3,120	1,980	698	136	1,260	29	22
21	25	35	35	548	14,500	2,970	1,610	829	102	1,180	25	22
22	23	37	35	534	4,990	3,120	3,540	792	95	1,140	35	22
23	23	39	33	299	3,200	3,200	1,560	727	85	903	35	23
24	15	241	35	202	3,500	3,200	3,820	705	82	691	61	23
25	16	534	44	194	3,340	2,970	2,160	613	78	607	365	22
26	23	705	76	152	3,270	2,760	2,100	350	72	580	425	27
27	23	419	88	132	8,420	2,690	2,160	220	69	553	508	100
28	23	200	252	136	4,030	2,160	3,300	160	67	566	540	95
29	23	140	544	128	-	2,060	1,680	128	67	560	520	109
30	23	140	318	113	-	19,800	1,440	113	69	546	586	107
31	23	-	537	109	-	4,310	-	95	-	540	573	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	3,846	807	15	124	7,630
November	3,000	705	22	100	5,950
December	4,853	573	33	157	9,630
Calendar year 1944	109,232	4,750	14	298	216,700
January	6,228	811	51	201	12,350
February	59,414	14,500	78	2,122	117,800
March	96,195	19,800	895	3,103	190,800
April	82,560	8,020	1,440	2,752	163,800
May	25,665	1,740	95	828	50,910
June	6,479	992	67	216	12,850
July	31,975	2,830	72	1,031	63,420
August	9,021	586	25	291	17,890
September	5,879	573	22	196	11,660
Water year 1944-45	335,115	19,800	15	918	664,700

Peak discharge.- Feb. 21 (10:30 a.m.) 18,000 sec.-ft.; Feb. 27 (1:30 p.m.) 12,400 sec.-ft.; Mar. 30 (11 a.m.) 31,200 sec.-ft.; Apr. 1 (2 p.m.) 13,700 sec.-ft.

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

West Fork Trinity River at Grand Prairie, Tex.

Location.- Water-stage recorder, lat. 32°46', long. 96°59', 440 feet downstream from bridge on Grand Prairie-Sowers-Irving highway, 1 mile northeast of Grand Prairie, Dallas County, and 6 miles upstream from Mountain Creek. Datum of gage is 412.98 feet above mean sea level, datum of 1929.

Drainage area.- 2,956 square miles (revised).

Records available.- March 1925 to September 1945.

Average discharge.- 20 years, 624 second-feet.

Extremes.- Maximum discharge during year, 29,500 second-feet Mar. 31 (gage height, 26.05 feet), from rating curve extended above 17,000 second-feet; minimum, 48 second-feet Oct. 26 (gage height, 1.90 feet).
1925-45: Maximum discharge, that of Mar. 31, 1945; minimum observed, 3.2 second-feet June 6, 1925.
Maximum stage known, 29 feet in April 1922.

Remarks.- Records good except those for period of no gage-height record, which are poor. Flow partly regulated by Bridgeport, Eagle Mountain, and Lake Worth Reservoirs (combined capacity, 527,000 acre-feet). City of Fort Worth diverts considerable water for municipal supply. Several small diversions above Fort Worth.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	250	62	196	635	169	8,150	11,800	1,730	174	124	606	592
2	155	63	215	606	163	4,650	9,500	1,790	161	127	620	577
3	116	63	152	403	163	7,520	7,750	1,570	156	130	620	562
4	466	64	113	266	169	4,190	4,520	1,260	167	130	620	548
5	965	64	147	194	157	2,950	4,120	1,080	150	137	620	548
6	645	60	215	159	152	3,910	3,700	1,020	156	150	606	548
7	710	59	324	143	148	4,320	3,570	995	156	159	606	548
8	476	65	304	148	147	2,190	3,390	1,060	148	194	606	534
9	244	65	313	130	147	1,660	3,260	935	141	202	592	519
10	154	64	504	123	140	1,390	3,060	965	138	377	378	418
11	121	63	592	112	137	1,160	2,890	1,570	156	1,980	227	239
12	105	62	382	109	a480	3,900	3,580	1,920	797	2,180	210	150
13	97	63	225	109	a1,600	3,870	2,870	1,730	2,000	1,980	280	104
14	82	63	174	108	a2,300	1,540	2,830	1,600	1,650	2,050	170	108
15	74	67	137	103	a1,600	3,640	2,640	1,660	1,240	2,950	141	96
16	65	67	112	104	a1,620	3,940	2,680	1,970	935	2,760	124	79
17	65	71	108	104	a1,670	2,500	2,360	843	635	2,610	114	70
18	70	75	97	186	a1,700	2,250	1,980	635	635	2,570	113	65
19	68	94	95	1,560	a1,020	2,790	2,120	725	461	2,080	113	66
20	67	103	99	870	a940	4,320	2,250	785	332	1,540	106	65
21	66	75	91	468	a4,200	3,390	2,120	815	234	1,360	104	64
22	65	79	88	695	14,800	3,260	4,380	965	194	1,300	106	62
23	59	85	91	558	11,500	3,340	4,240	875	192	1,240	124	61
24	59	140	87	358	4,490	3,440	3,440	815	170	935	168	59
25	62	771	83	278	3,750	3,390	4,220	785	156	755	120	57
26	52	755	103	261	3,520	3,060	2,420	650	152	680	299	60
27	57	710	176	223	6,500	2,830	2,320	418	145	650	461	74
28	61	432	310	200	10,800	2,640	3,020	291	137	635	534	152
29	62	252	965	194	-	3,450	3,790	241	129	635	562	124
30	59	198	690	186	-	16,400	1,850	213	126	620	562	176
31	58	-	446	172	-	24,100	-	188	-	620	606	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	5,855	965	52	189	11,610
November	4,854	771	59	162	9,630
December	7,634	965	83	246	15,140
Calendar year 1944	159,901	8,300	50	437	317,200
January	9,765	1,560	103	315	19,370
February	74,182	14,800	137	2,649	147,100
March	140,140	24,100	1,160	4,521	278,000
April	112,650	11,800	1,850	3,755	223,400
May	32,099	1,970	188	1,035	63,670
June	12,023	2,000	126	401	23,850
July	33,860	2,950	124	1,092	67,160
August	11,118	620	104	359	22,050
September	7,325	592	57	244	14,530
Water year 1944-45	451,505	24,100	52	1,237	895,500

Peak discharge.- Feb. 22 (8 p.m.) 16,800 sec.-ft.; Feb. 28 (8 p.m.) 12,000 sec.-ft.; Mar. 3 (2 p.m.) 8,200 sec.-ft.; Mar. 15 (10 p.m.) 5,560 sec.-ft.; Mar. 31 (2 a.m.) 29,500 sec.-ft.; Apr. 22 (10 p.m.) 6,350 sec.-ft.

a No gage-height record; discharge computed on basis of records for station at Fort Worth.

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Trinity River at Dallas, Tex.

Location.- Water-stage recorder, lat. 32°47', long. 96°48', at Commerce Street viaduct in Dallas, Dallas County, 5½ miles downstream from confluence of West and Elm Forks. Datum of gage is 368.14 feet above mean sea level, datum of 1929.

Drainage area.- 6,001 square miles.

Records available.- July 1903 to July 1930, October 1932 to September 1945 (January 1907 to September 1920, monthly records only, in Water-Supply Paper 850). October 1898 to December 1899 (gage heights only), at site 2 miles upstream. July 1930 to September 1932 at site 6 miles downstream. U. S. Weather Bureau has collected gage-height records in this vicinity since 1903.

Average discharge.- 42 years (1903-45), 1,557 second-feet.

Extremes.- Maximum discharge during year, 52,900 second-feet Mar. 31 (gage height, 40.96 feet); minimum, 63 second-feet Nov. 3 (gage height, 11.75 feet).
1903-45: Maximum discharge, 184,000 second-feet May 25, 1908 (gage height, 52.6 feet), from rating curve extended above 109,000 second-feet; minimum observed for periods 1903-6, 1920-45, 6.8 second-feet Sept. 11, 1924.

Remarks.- Records good except those between 3,000 and 15,000 second-feet, which are fair. Flow partly regulated by Bridgeport, Eagle Mountain, Lake Worth, Mountain Creek, and Lake Dallas Reservoirs (combined capacity, 757,000 acre-feet). Cities of Fort Worth and Dallas divert considerable water for municipal supply. Several small diversions on West Fork above Fort Worth.

Cooperation.- Three discharge measurements furnished by Corps of Engineers, U. S. Army.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	450	185	387	1,130	352	33,100	33,000	2,520	398	327	830	682
2	333	88	401	1,060	339	26,800	24,300	2,420	387	324	805	682
3	280	69	342	755	321	27,200	21,700	2,250	370	327	805	660
4	540	132	265	514	327	22,400	20,700	1,860	370	345	805	615
5	1,260	149	352	412	312	17,600	20,000	1,640	356	2,330	830	530
6	1,200	160	593	362	294	14,900	15,900	1,540	339	1,250	805	518
7	1,060	145	2,380	333	291	14,400	10,700	1,420	333	682	780	514
8	555	160	2,510	324	270	12,300	7,340	1,420	321	592	780	514
9	570	160	1,000	312	278	9,730	6,110	1,340	309	2,060	780	506
10	422	147	730	288	265	6,850	5,210	1,320	327	5,210	615	450
11	345	160	830	275	250	5,450	6,480	1,760	356	9,440	470	270
12	288	172	615	262	1,420	9,850	9,370	2,470	4,260	11,900	418	200
13	265	183	426	250	9,230	12,200	8,540	2,300	12,000	12,300	506	197
14	233	176	342	248	11,300	7,920	9,730	2,080	11,700	12,900	398	248
15	217	187	294	240	5,720	8,550	7,080	2,810	9,410	9,910	348	248
16	210	191	245	228	3,120	11,600	7,080	2,740	6,210	6,950	333	230
17	202	178	214	230	2,200	10,400	7,080	1,540	4,800	5,990	312	217
18	204	180	197	635	2,030	10,300	8,410	1,130	4,660	5,500	297	210
19	202	199	180	3,540	1,700	11,600	5,630	2,340	4,250	3,540	291	208
20	202	228	185	4,870	6,140	12,400	5,390	3,130	3,250	2,140	291	206
21	202	191	185	1,840	18,200	12,100	5,390	2,490	915	1,700	278	202
22	199	168	170	1,750	35,100	15,700	8,870	1,370	638	1,540	319	168
23	199	180	168	1,630	47,800	16,700	11,700	1,290	592	1,480	342	157
24	191	418	172	907	32,200	11,800	7,670	1,160	3,060	1,230	398	155
25	191	1,550	191	638	19,700	8,160	8,630	1,060	2,040	1,030	339	147
26	185	2,140	580	550	14,800	6,770	5,290	980	592	930	423	176
27	174	1,640	1,040	502	17,400	6,230	3,740	780	518	855	550	476
28	185	1,130	2,820	466	26,800	5,870	3,870	615	466	855	615	3,520
29	199	640	7,530	443	-	10,500	6,520	514	394	880	682	4,190
30	185	466	4,960	436	-	33,700	3,480	466	342	880	660	3,350
31	183	-	1,310	408	-	49,200	-	422	-	855	682	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	11,431	1,260	174	369	22,670
November	11,770	2,140	69	392	23,350
December	31,614	7,530	168	1,020	62,710
Calendar year 1944	503,579	20,300	69	1,376	998,800
January	25,638	4,870	228	827	60,850
February	258,159	47,800	250	9,220	512,100
March	462,280	49,200	5,450	14,910	916,900
April	302,910	33,000	3,480	10,100	600,800
May	51,177	3,130	422	1,651	101,500
June	73,963	12,000	309	2,465	146,700
July	106,252	12,900	324	3,427	210,700
August	16,787	830	278	542	33,300
September	20,448	4,190	147	682	40,560
Water year 1944-45	1,372,429	49,200	69	3,760	2,722,000

Peak discharge.- Feb. 23 (9:30 a.m.) 50,000 sec.-ft.; Mar. 1 (12 m.) 34,500 sec.-ft.; Mar. 31 (9 a.m.) 52,900 sec.-ft.

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Trinity River near Rosser, Tex.

Location.- Water-stage recorder, lat. 32°25'40", long. 96°27'50", at bridge on State Highway 34, 1.4 miles downstream from Texas & New Orleans Railroad bridge, 1.9 miles downstream from East Fork, and 2.5 miles south of Rosser, Kaufman County. Datum of gage is 302.6 feet above mean sea level, datum of 1929.

Drainage area.- 8,057 square miles.

Records available.- November 1938 to September 1945. July 1924 to September 1925 (October 1924 to September 1925, gage heights only), at site 1.7 miles upstream.

Extremes.- Maximum discharge during year, 66,600 second-feet Apr. 2 (gage height, 33.50 feet, levee broken); maximum gage height, 37.14 feet Feb. 25; minimum discharge, 96 second-feet Nov. 4.

1924, 1938-45: Maximum discharge not determined but occurred Apr. 23 or 24, 1942, following numerous breaks in levee system on both banks; maximum gage height, 41.55 feet Apr. 22, 1942, just prior to levee breaks; minimum discharge, 34 second-feet Sept. 8-11, 1924.

Flood of May 1908 reached a stage of about 33.0 feet, present site and datum, from information by Corps of Engineers, U. S. Army (discharge believed to have been approximately the same as that of Apr. 23 or 24, 1942).

Remarks.- Records good except those for Feb. 26, 27, June 16, which are poor. Flow partly regulated by reservoirs above Dallas. Levee system constructed in 1916. Levee breaks which occurred during April 1942 flood were repaired prior to current year. Left levee broke on Feb. 25 during high water. Partial repairs were made in May. High water of June 16 broke repaired portion. Cities of Fort Worth and Dallas divert considerable water for municipal supply. Several small diversions on West Fork above Fort Worth.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	823	236	658	4,290	948	26,800	58,800	4,320	594	614	1,100	873
2	554	243	536	3,290	873	37,800	64,000	3,090	574	726	1,050	873
3	401	178	518	2,980	823	54,900	47,600	2,630	782	873	998	823
4	377	105	483	2,650	798	47,600	33,100	2,610	536	948	973	798
5	1,010	136	2,210	2,460	798	35,000	25,200	2,220	536	2,260	948	774
6	1,520	181	3,940	2,180	798	26,200	23,400	1,950	518	5,060	948	680
7	1,360	206	2,910	1,480	726	21,800	21,000	1,800	483	3,720	923	636
8	1,170	193	3,780	1,070	702	19,600	18,400	1,740	466	2,460	898	636
9	923	189	3,600	948	658	17,800	15,200	1,740	466	2,040	898	636
10	658	206	2,180	873	636	16,200	12,900	1,660	449	3,790	898	614
11	518	189	1,660	774	614	15,200	11,300	1,680	449	7,720	750	574
12	449	192	1,520	726	1,400	13,700	10,100	2,220	7,970	11,500	694	401
13	377	206	1,100	680	5,960	12,600	9,350	2,870	15,700	13,700	518	321
14	345	228	774	658	7,660	11,800	9,250	2,910	e18,000	15,700	574	275
15	313	236	614	636	8,650	12,400	9,250	2,910	e20,000	16,200	500	313
16	289	243	536	614	9,550	12,900	9,150	3,650	e24,200	16,200	433	329
17	273	250	466	574	9,050	13,400	6,850	3,640	24,300	15,700	417	297
18	266	250	417	1,180	6,950	14,400	8,450	2,540	19,000	14,000	401	281
19	266	281	395	4,220	6,950	14,800	6,170	2,010	14,400	12,000	385	273
20	266	313	377	5,010	6,650	15,200	7,660	2,910	11,000	7,920	369	273
21	258	289	361	5,200	12,700	15,200	7,100	3,290	7,170	3,900	369	273
22	258	258	353	3,320	16,200	15,200	7,820	2,690	3,520	2,460	353	266
23	250	228	361	3,060	e17,600	15,200	6,350	1,800	2,180	2,080	444	228
24	250	643	329	2,980	e32,100	16,200	9,050	1,600	1,570	1,920	466	206
25	250	3,280	337	2,540	e45,500	16,700	10,100	1,520	3,140	1,660	449	199
26	250	3,020	483	2,320	e49,000	15,700	10,300	1,380	2,640	1,410	417	189
27	243	2,830	2,300	2,180	e46,000	13,700	10,200	1,250	1,300	1,250	466	282
28	228	2,250	3,970	1,830	37,100	12,200	7,750	1,020	948	1,150	658	680
29	236	1,720	7,420	1,360	-	12,400	5,790	848	823	1,360	774	3,040
30	250	1,050	7,900	1,120	-	17,100	6,020	726	702	1,300	698	3,810
31	243	-	6,950	1,020	-	34,000	-	658	-	1,170	673	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	14,874	1,520	228	460	29,500
November	19,629	3,260	105	661	39,330
December	59,436	7,900	329	1,917	117,900
Calendar year 1944	628,914	38,000	105	2,265	1,644,000
January	64,223	5,200	574	2,072	127,400
February	329,594	49,000	614	11,770	653,700
March	623,700	54,900	11,800	20,120	1,237,000
April	493,610	64,000	5,790	16,450	979,100
May	68,282	4,320	658	2,203	135,400
June	184,416	24,300	449	6,147	365,800
July	172,791	16,200	614	5,574	342,700
August	20,742	1,100	353	669	41,140
September	19,851	3,610	189	662	39,370
Water year 1944-45	2,071,348	64,000	105	5,675	4,108,000

e Stage-discharge relation indefinite; discharge computed from temporary rating curves.

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Trinity River near Oakwood, Tex.

Location.- Water-stage recorder, lat. 31°39', long. 95°47', at bridge on U. S. Highways 79 and 84, 1½ miles upstream from International-Great Northern Railroad bridge and 6 miles northeast of Oakwood, Leon County. Datum of gage is 175.03 feet above mean sea level, datum of 1929.

Drainage area.- 12,840 square miles.

Records available.- July 1932 to September 1945. January 1905 to July 1932, at site 1½ miles downstream (January 1905 to September 1923, monthly and yearly records only, in Water-Supply Papers 850 and 878). U. S. Weather Bureau has collected gage-height records in this vicinity since 1904.

Average discharge.- 22 years (1923-45), 5,304 second-feet.

Extremes.- Maximum discharge during year, 140,000 second-feet Apr. 3 (gage height, 50.86 feet); minimum, 158 second-feet Nov. 8.

1923-45: Maximum discharge, 153,000 second-feet Apr. 29, 1942 (gage height, 51.64 feet); minimum observed for period 1924-45, 22 second-feet Aug. 18, 1934.

Flood of June 4, 1908, reached a stage of about 52.2 feet, present site and datum, from information by U. S. Weather Bureau (discharge, about 164,000 second-feet).

Remarks.- Records good. Flow partly regulated by reservoirs above Dallas. Cities of Fort Worth and Dallas divert considerable water for municipal supply. Several small diversions on West Fork above Fort Worth.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	272	246	5,010	14,900	2,310	34,000	81,900	15,400	1,150	1,760	1,650	2,930
2	348	253	3,460	15,700	2,030	42,100	121,000	14,100	1,030	1,420	1,760	2,890
3	666	266	1,860	17,000	1,680	55,000	137,000	12,000	1,000	1,230	1,640	1,790
4	816	260	1,150	18,400	1,760	66,800	134,000	8,480	1,180	1,150	1,560	1,310
5	687	260	1,820	19,800	1,670	74,500	114,000	5,400	1,550	1,560	1,450	1,180
6	509	260	2,000	20,600	1,580	77,800	96,800	3,980	2,580	2,060	1,390	1,100
7	439	g208	4,230	18,200	1,560	82,400	83,800	3,360	2,820	2,820	1,340	1,050
8	899	g168	7,420	13,300	1,530	61,200	70,100	2,930	2,310	4,920	1,390	980
9	1,450	g174	8,820	8,100	1,470	72,300	57,000	2,610	1,390	6,600	1,700	884
10	1,450	227	9,340	4,260	1,420	60,200	48,000	2,480	932	7,090	2,310	838
11	1,280	240	9,340	2,610	1,360	49,000	40,300	2,480	794	9,930	1,910	794
12	1,050	227	8,200	2,120	1,450	41,200	34,900	2,440	772	13,700	1,580	816
13	816	220	5,180	1,880	1,530	35,800	31,600	2,410	1,860	14,800	1,670	860
14	645	202	2,880	1,730	2,160	30,800	29,200	2,650	7,060	15,800	1,360	816
15	527	208	2,000	1,580	6,170	29,200	26,800	3,320	10,700	16,700	1,080	666
16	407	266	1,560	1,500	9,140	28,400	25,300	3,860	13,500	18,000	932	565
17	347	340	1,230	1,420	11,200	28,400	23,800	3,980	16,000	20,400	908	545
18	326	368	1,000	2,750	12,100	27,600	22,300	4,330	22,000	24,700	838	527
19	319	455	860	5,320	12,200	26,800	20,000	4,780	30,000	27,600	729	527
20	305	455	794	8,620	12,200	26,000	18,200	4,410	30,800	25,300	666	509
21	292	439	729	11,500	13,300	25,300	16,500	3,400	28,400	23,000	605	473
22	279	439	687	13,300	14,400	24,200	15,100	3,240	26,000	21,000	645	455
23	266	491	645	14,700	15,300	24,200	14,100	3,770	25,300	19,300	687	439
24	234	603	625	15,800	16,700	24,700	13,800	3,900	24,200	18,200	708	407
25	240	1,280	625	16,800	19,600	26,000	14,100	3,320	23,800	16,000	838	375
26	266	2,360	816	16,000	30,500	25,300	14,900	2,550	22,600	11,200	816	375
27	266	5,350	4,850	12,200	38,500	23,800	15,800	2,150	18,700	5,680	772	383
28	266	7,040	7,900	7,260	34,000	22,600	17,000	1,940	13,300	2,860	708	375
29	260	6,650	9,970	4,370	-	22,300	17,400	1,790	7,380	2,060	772	473
30	260	5,800	11,900	3,360	-	25,500	16,700	1,580	3,120	1,790	838	972
31	253	-	13,700	2,790	-	40,600	-	1,340	-	1,730	1,310	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	16,440	1,450	234	530	32,610
November	35,755	7,040	168	1,192	70,920
December	130,601	13,700	625	4,213	259,000
Calendar year 1944	2,382,713	110,000	168	6,510	4,726,000
January	297,870	20,600	1,420	9,609	590,800
February	269,020	38,500	1,360	9,608	533,600
March	1,254,000	82,400	22,300	40,450	2,487,000
April	1,371,200	137,000	13,800	45,710	2,720,000
May	134,380	15,400	1,340	4,335	266,500
June	342,228	30,800	772	11,410	678,800
July	340,360	27,600	1,150	10,980	675,100
August	36,762	2,310	605	1,186	72,920
September	26,304	2,930	375	877	52,170
Water year 1944-45	4,254,920	137,000	168	11,660	8,439,000

g Computed from graph based on once-daily gage readings furnished by U. S. Weather Bureau.

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Trinity River near Midway, Tex.

Location.- Wire-weight gage, lat. 31°04'40", long. 95°42'00", at bridge on State Highway 21, 5 miles northeast of Midway, Madison County, and 8 miles downstream from Boggy Creek. Datum of gage is 117.6 feet above mean sea level, datum of 1929.

Drainage area.- 14,390 square miles.

Records available.- April 1939 to September 1945.

Extremes.- Maximum discharge during year, 145,000 second-feet Apr. 6 (gage height, 48.50 feet); minimum observed, 280 second-feet Oct. 27.

1939-45: Maximum discharge, 146,000 second-feet May 1, 1942 (gage height, 48.58 feet); minimum observed, 100 second-feet Oct. 4, 1939.

Maximum discharge known occurred in May 1890 (gage height, about 45.0 feet, discharge not determined), from information by local residents. Flood of May 27, 1930, reached a stage of 46.7 feet, from floodmark (flow confined within levee system constructed in 1916). Flood of June 9, 1908, reached a stage of 44.3 feet, from floodmarks and from information by local residents.

Remarks.- Records good. Gage read twice daily, oftener during high stages. Flow partly regulated by reservoirs above Dallas. Cities of Fort Worth and Dallas divert considerable water for municipal supply. Several small diversions on West Fork above Fort Worth.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	445	325	6,620	20,700	3,840	23,200	33,300	17,400	2,210	11,500	1,990	4,320
2	415	335	5,710	20,700	3,240	25,300	41,000	17,100	1,940	4,830	1,990	2,940
3	402	340	4,330	19,600	2,880	26,900	48,400	16,300	1,640	2,700	1,940	3,300
4	475	365	2,880	18,700	2,760	29,000	106,000	15,000	1,550	2,210	1,790	2,760
5	725	390	7,040	18,300	3,000	31,400	137,000	12,000	1,550	1,940	1,640	1,890
6	805	415	13,000	20,400	2,820	34,100	142,000	8,280	1,790	1,940	1,550	1,460
7	688	365	12,100	25,900	2,540	44,500	132,000	5,990	2,540	2,260	1,460	1,370
8	550	365	7,900	24,600	2,320	67,500	116,000	4,920	3,000	2,880	1,370	1,280
9	565	340	7,750	24,000	2,210	75,900	95,500	4,200	2,820	4,080	1,370	1,240
10	1,060	315	8,950	20,200	2,210	78,200	75,900	3,840	2,320	5,780	1,460	1,140
11	1,370	312	9,580	13,200	1,990	73,700	63,500	4,850	1,550	7,750	1,890	1,060
12	1,280	340	9,740	5,700	2,260	67,500	54,400	5,240	1,370	10,100	1,890	1,000
13	1,100	352	9,180	4,140	3,120	59,700	49,100	4,660	1,690	12,300	1,550	1,000
14	865	352	7,110	3,240	3,480	51,800	45,600	4,020	3,000	14,300	1,460	1,060
15	705	340	4,330	2,760	3,300	48,400	44,500	6,240	5,780	16,600	1,370	1,060
16	600	352	2,750	2,480	5,480	46,600	43,600	19,400	8,800	17,900	1,140	945
17	520	445	2,100	2,320	6,650	44,500	42,100	18,000	11,300	18,700	985	825
18	430	678	1,740	9,720	10,400	42,800	40,700	11,200	13,200	19,100	905	725
19	365	1,920	1,500	19,900	12,100	42,100	38,900	7,250	15,000	19,800	885	705
20	378	1,740	1,280	20,000	14,400	41,000	36,800	6,200	17,300	20,700	805	688
21	365	1,420	1,140	16,000	16,300	39,800	35,200	5,710	19,600	21,800	785	670
22	365	1,060	1,060	14,200	18,200	38,400	34,100	5,240	21,900	22,700	725	635
23	352	805	1,020	14,300	18,000	36,300	31,600	4,460	23,700	23,000	745	565
24	340	1,370	1,000	15,000	17,600	34,100	26,600	4,460	24,800	23,000	825	582
25	332	9,370	1,370	15,500	17,700	32,500	24,800	4,590	25,300	22,300	845	500
26	320	9,020	1,280	16,200	18,100	30,800	21,200	4,330	25,600	21,200	845	565
27	290	6,200	6,300	16,700	19,200	29,700	18,300	3,600	25,600	19,100	865	520
28	325	5,780	14,000	16,100	21,000	28,800	17,100	3,060	25,400	12,400	1,370	520
29	335	6,970	16,400	12,800	-	28,600	16,800	2,650	24,400	6,110	5,670	805
30	332	7,180	16,800	7,740	-	29,400	17,100	2,430	19,800	3,180	12,000	905
31	330	-	17,800	4,920	-	30,100	-	2,260	-	2,380	9,720	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	17,429	1,370	290	552	34,570
November	59,561	9,370	312	1,985	118,100
December	203,770	17,800	1,000	6,573	404,200
Calendar year 1944	2,959,490	108,000	290	8,086	5,870,000
January	445,220	24,600	2,320	14,360	883,100
February	239,100	21,000	1,990	8,539	474,200
March	1,312,600	78,200	23,200	42,340	2,604,000
April	1,632,100	142,000	16,800	54,400	3,237,000
May	234,880	19,400	2,260	7,577	455,900
June	336,450	25,600	1,370	11,210	667,300
July	374,540	23,000	1,940	12,080	742,900
August	53,835	12,000	725	2,059	126,600
September	37,135	4,320	520	1,238	73,660
Water year 1944-45	4,956,620	142,000	290	13,580	9,832,000

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Trinity River at Riverside, Tex.

Location.- Wire-weight gage, lat. 30°52', long. 95°24', at bridge on State Highway 45, 1,200 feet upstream from International-Great Northern Railroad bridge, 0.5 mile north of Riverside, Walker County, and three-quarters of a mile downstream from Harmon Creek. Datum of gage is 89.86 feet above mean sea level, datum of 1929.

Drainage area.- 15,510 square miles.

Records available.- January 1903 to December 1906, October 1923 to September 1945. U. S. Weather Bureau has collected gage-height records in this vicinity since 1903.

Average discharge.- 25 years (1903-6, 1923-45), 7,192 second-feet.

Extremes.- Maximum discharge during year, 116,000 second-feet Apr. 9 (gage height, 51.83 feet); minimum observed, 321 second-feet Oct. 30.

1903-6, 1923-45: Maximum discharge, 121,000 second-feet May 5, 1942 (gage height, 52.75 feet, from floodmark); minimum observed, 70 second-feet Aug. 20-26, Sept. 8-13, 1925, Sept. 29 to Oct. 4, 1931.

Flood of June 11, 1908, reached a stage of 50.1 feet, present site and datum (discharge, 100,000 second-feet).

Remarks.- Records good. Gage read twice daily. Flow partly regulated by reservoirs above Dallas. Cities of Fort Worth and Dallas divert considerable water for municipal supply. Several small diversions on West Fork above Fort Worth.

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

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	494	372	7,380	28,600	5,010	22,800	49,100	19,000	2,410	20,500	2,620	18,900
2	502	372	6,680	27,600	4,060	24,200	58,000	19,100	2,200	10,900	2,340	7,500
3	474	382	5,580	26,700	3,500	25,500	56,900	18,600	1,990	4,410	2,340	4,220
4	456	382	4,220	24,000	3,130	27,200	54,200	17,900	1,920	2,760	2,270	3,820
5	510	414	17,100	21,600	7,520	28,800	59,900	16,000	1,740	2,200	2,130	2,900
6	758	424	27,600	22,500	5,580	30,700	84,300	12,500	1,780	1,920	1,990	2,200
7	840	435	29,400	26,200	5,010	33,200	107,000	8,260	2,200	1,920	1,850	1,650
8	730	455	21,700	27,700	4,060	35,900	115,000	5,680	2,900	2,480	1,740	1,480
9	612	424	13,000	28,000	3,060	42,700	116,000	4,560	3,360	3,200	1,650	1,420
10	590	390	10,300	26,100	2,620	48,300	98,500	3,980	3,060	5,010	1,680	1,320
11	1,140	365	10,500	21,300	2,410	55,000	90,300	4,300	2,340	6,980	1,850	1,200
12	1,380	351	11,000	13,500	3,980	64,200	81,600	5,680	1,740	9,460	2,410	1,170
13	1,290	372	10,900	6,880	5,380	69,400	73,800	5,880	1,920	11,900	2,340	1,110
14	1,140	396	9,700	4,350	5,850	69,900	67,000	5,280	3,430	17,600	1,920	1,080
15	870	407	7,080	3,500	5,380	64,200	61,200	4,920	5,980	20,000	1,850	1,140
15	785	421	4,470	3,130	4,650	59,200	56,300	16,700	9,220	19,100	1,710	1,110
17	680	470	3,060	2,760	7,180	54,200	51,500	24,000	11,600	19,500	1,420	1,020
18	590	590	2,480	14,300	10,300	53,700	47,800	20,400	13,200	19,700	1,230	900
19	518	2,520	2,060	29,400	13,200	50,000	44,100	13,700	15,000	20,100	1,200	812
20	452	3,740	1,740	33,800	16,600	47,400	41,000	8,740	16,900	20,900	1,110	785
21	435	3,820	1,550	29,800	19,200	44,100	41,300	7,180	19,000	21,600	1,020	758
22	425	3,280	1,380	22,200	21,300	41,100	39,600	7,180	21,000	22,400	900	758
23	418	1,710	1,320	17,400	21,600	38,300	38,600	5,980	22,900	22,900	870	730
24	407	2,860	1,260	16,600	21,000	35,800	37,000	5,190	24,200	23,200	870	680
25	393	14,000	1,230	16,900	20,100	35,400	33,500	5,100	24,800	23,200	990	680
26	386	19,500	1,230	17,400	19,600	32,100	28,800	5,010	25,200	22,800	990	658
27	362	19,500	2,520	18,000	20,000	30,700	23,700	4,470	25,400	21,800	990	658
28	344	11,700	14,000	18,300	20,900	29,500	20,600	3,820	25,400	19,200	1,480	635
29	340	7,380	22,600	17,100	-	28,800	19,200	3,200	25,200	12,700	6,790	730
30	344	7,490	24,400	12,800	-	28,600	18,800	2,900	24,400	6,080	26,600	1,080
31	379	-	25,900	7,600	-	30,900	-	2,620	-	3,360	30,600	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	19,047	1,380	340	614	37,780
November	104,923	19,500	351	3,497	208,100
December	303,340	29,400	1,230	9,785	601,700
Calendar year 1944	3,556,106	82,300	340	9,716	7,053,000
January	586,050	33,800	2,760	18,900	1,162,000
February	282,210	21,600	2,410	10,080	559,800
March	1,282,100	69,900	22,800	41,360	2,543,000
April	1,714,900	116,000	18,800	57,160	3,401,000
May	288,030	24,000	2,620	9,291	571,300
June	342,390	25,400	1,740	11,410	679,100
July	419,780	23,200	1,920	13,540	832,600
August	109,780	30,600	870	3,541	217,700
September	63,434	18,900	635	2,114	125,800
Water year 1944-45	5,515,984	116,000	340	15,110	10,940,000

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Trinity River at Romayor, Tex.

Location.- Water-stage recorder, lat. 30°25'30", long. 94°51'05", at county highway bridge, 1.9 miles south of Romayor, Liberty County, 2.0 miles downstream from Gulf, Colorado & Santa Fe Railway bridge, and 4½ miles downstream from Big Creek. Datum of gage is 35.92 feet above mean sea level, datum of 1929.

Drainage area.- 17,200 square miles.

Records available.- October 1943 to September 1945. May 1924 to September 1943 at site 2.0 miles upstream.

Average discharge.- 21 years (1924-45), 7,999 second-feet.

Extremes.- Maximum discharge during year, 106,000 second-feet Apr. 13 (gage height, 33.49 feet); minimum, 450 second-feet Oct. 31.

1924-45: Maximum discharge, 111,000 second-feet May 9, 1942 (gage height, 35.8 feet, from floodmarks, present site and datum); minimum observed, 132 second-feet Aug. 21, 22, 1925.

Remarks.- Records good. Flow partly regulated by reservoirs above Dallas. Cities of Fort Worth and Dallas divert considerable water for municipal supply. Several small diversions on West Fork above Fort Worth.

Rating table, water year 1944-45 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Oct. 1 to Nov. 20, June 9 to Sept. 8)

2.3	450	7.0	3,000	18.0	18,200	30.0	57,100
3.0	720	8.0	3,900	21.0	24,000	31.0	69,000
4.0	1,200	10.0	6,100	24.0	31,300	32.0	83,000
5.0	1,730	12.0	8,750	27.0	40,000	33.4	104,000
6.0	2,300	14.0	11,700	29.0	49,600		

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	620	468	8,190	36,800	10,000	20,800	40,400	19,700	3,700	24,700	4,740	26,800
2	600	478	7,910	37,700	6,830	22,000	57,100	19,400	3,520	21,800	3,520	22,200
3	600	506	7,090	35,100	5,280	23,600	67,600	19,200	3,340	14,200	3,080	12,300
4	580	580	6,100	32,600	5,150	25,200	71,800	18,900	3,900	7,100	2,840	5,690
5	560	560	9,620	28,700	14,900	26,800	71,800	18,000	3,610	4,000	2,690	4,100
6	540	540	30,600	25,400	17,900	28,000	66,300	16,500	3,160	3,250	2,480	3,340
7	600	540	35,100	27,700	13,300	29,500	63,700	13,800	2,920	2,840	2,300	2,620
8	788	560	34,600	30,300	9,750	31,300	67,600	10,500	2,840	2,760	a2,180	2,060
9	900	560	28,500	31,000	6,960	33,700	77,400	7,910	3,250	2,840	a2,060	1,730
10	855	560	18,400	30,300	5,060	36,500	88,600	6,340	3,520	3,160	a1,950	1,560
11	742	540	12,700	28,200	4,100	39,300	98,000	6,340	3,610	4,000	a1,900	1,510
12	720	513	11,400	23,600	4,000	43,300	104,000	7,630	3,340	6,100	a1,840	1,510
13	1,050	488	11,400	16,700	10,800	47,900	104,000	7,220	3,430	9,440	1,950	1,560
14	1,350	468	11,100	10,200	11,100	53,700	103,000	6,960	4,620	12,500	2,120	1,350
15	1,350	468	10,200	6,600	9,170	60,200	96,400	6,460	4,300	18,700	2,000	1,250
16	1,250	506	7,490	5,060	7,770	66,300	90,000	8,650	5,620	21,000	a1,840	1,200
17	1,100	600	5,620	4,200	6,100	67,600	83,000	17,700	8,260	20,100	a1,680	1,180
18	950	660	4,000	6,100	8,190	62,500	74,600	22,700	10,800	19,600	a1,560	1,180
19	832	832	3,080	26,000	11,000	61,300	66,300	21,400	12,700	19,600	a1,400	1,100
20	742	2,190	2,550	34,600	16,900	60,200	60,200	15,800	14,300	19,900	a1,350	1,000
21	660	3,700	2,240	36,500	20,300	58,100	57,100	9,750	15,900	20,400	1,280	925
22	600	4,100	2,000	34,800	22,700	55,300	55,300	9,310	17,900	21,000	1,280	900
23	560	3,700	1,780	28,700	23,600	51,500	52,900	8,470	19,900	21,800	1,250	878
24	540	2,760	1,730	21,400	23,100	47,900	50,200	6,960	21,800	22,500	1,120	855
25	520	6,880	1,620	18,200	21,800	44,200	46,800	5,980	23,600	22,700	1,050	832
26	516	17,700	1,730	17,700	20,600	40,800	42,800	5,620	24,700	22,700	1,020	810
27	506	21,200	2,180	17,900	20,100	37,400	37,400	5,390	25,200	22,500	1,100	788
28	492	20,600	3,370	18,200	20,100	34,800	31,300	5,170	25,400	21,600	1,300	765
29	474	15,100	13,600	18,500	-	32,300	24,700	4,620	25,600	19,600	1,780	765
30	454	9,900	22,200	17,500	-	31,800	21,000	4,100	25,600	14,900	4,730	832
31	454	-	27,700	14,400	-	31,600	-	3,900	-	8,630	20,600	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	22,505	1,350	454	726	44,640
November	118,257	21,200	468	3,942	234,600
December	345,800	35,100	1,620	11,150	685,900
Calendar year 1944	4,104,365	69,000	454	11,210	8,141,000
January	720,660	37,700	4,200	23,250	1,429,000
February	356,560	23,600	4,000	12,730	707,200
March	1,305,400	67,600	20,800	42,110	2,589,000
April	1,971,300	104,000	21,000	65,710	3,910,000
May	340,380	22,700	3,900	10,980	675,100
June	330,340	25,600	2,840	11,010	655,200
July	455,820	24,700	2,760	14,700	904,100
August	81,990	20,600	1,020	2,645	162,600
September	103,590	26,800	765	3,453	205,500
Water year 1944-45	6,152,602	104,000	454	16,860	12,200,000

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

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Trinity River at Liberty, Tex.

Location.- Wire-weight gage, lat. 30°03'25", long. 94°49'05", at bridge on U. S. Highway 90 in Liberty, Liberty County, 450 feet downstream from Texas & New Orleans Railroad bridge. Datum of gage is 2.22 feet below mean sea level, datum of 1929.

Drainage area.- 17,500 square miles.

Records available.- October 1938 to September 1940 (gage heights, discharge measurements, and some records of daily discharge), October 1940 to September 1945. U. S. Weather Bureau has collected gage-height records in this vicinity since 1903.

Extremes.- Maximum discharge during year, 104,000 second-feet Apr. 14, 15; maximum gage height, 28.8 feet Apr. 15; minimum discharge not determined (affected by tides); minimum gage height observed, 4.18 feet Nov. 16.

1938-45: Maximum discharge, 114,000 second-feet May 12, 1942 (gage height, 29.38 feet); minimum discharge not determined (affected by tides); minimum gage height observed, 2.5 feet Nov. 4, 1939.

A stage 28.6 feet was reached May 8-11, 1922, from observation by U. S. Weather Bureau at chain gage on railroad bridge upstream.

Remarks.- Records fair. Gage read once daily. Discharge not computed below about 4,000 second-feet because tides affected stage-discharge relation. Cities of Fort Worth and Dallas divert considerable water for municipal supply. Several small diversions on West Fork above Fort Worth.

Cooperation.- Gage readings furnished by U. S. Weather Bureau.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1		-	12,300	23,900	15,600	21,000	45,000	31,800	4,130	23,200	11,800	18,700
2		-	9,660	27,400	11,800	21,200	52,200	26,800	-	22,800	7,220	21,800
3		-	8,330	33,200	8,560	21,800	55,000	24,800	-	21,200	5,110	20,300
4		-	7,600	36,200	6,580	22,800	58,000	23,200	-	18,000	-	15,400
5		-	8,110	36,200	8,040	23,900	67,000	22,000	4,060	11,800	-	9,790
6		-	6,500	33,200	15,600	25,200	67,000	20,800	-	7,060	-	6,500
7		-	23,900	30,600	16,200	26,200	70,000	19,400	-	4,910	-	5,040
8		-	27,400	29,600	14,400	27,400	70,000	16,500	-	-	-	4,130
9		-	30,600	29,600	11,300	28,800	73,000	13,200	-	-	-	-
10		-	29,600	30,600	8,440	30,600	73,000	10,000	-	-	-	-
11		-	23,900	30,600	6,660	34,600	76,000	7,700	-	-	-	-
12		-	19,600	30,600	5,680	37,800	85,000	7,310	4,000	4,390	-	-
13		-	16,500	26,200	7,300	41,200	91,400	7,900	-	5,980	-	-
14		-	14,700	21,400	10,700	43,000	104,000	7,700	-	8,440	-	-
15		-	13,200	16,800	10,800	47,200	104,000	7,310	4,580	12,300	-	-
16		-	11,300	11,200	9,660	49,600	97,800	7,800	4,720	16,900	-	-
17		-	9,160	8,110	8,000	52,200	88,200	10,700	5,680	18,700	-	-
18		-	7,500	7,440	6,900	52,200	82,000	18,400	7,500	19,000	-	-
19		-	5,180	13,700	8,680	55,000	73,000	21,000	10,000	19,000	-	-
20		-	4,200	21,800	11,800	58,000	70,000	20,600	12,000	19,400	-	-
21		-	-	25,700	16,100	58,000	67,000	18,400	13,800	19,600	-	-
22		-	-	28,800	18,400	58,000	64,000	15,800	15,400	19,900	-	-
23		4,260	-	31,800	20,300	58,000	64,000	13,400	17,000	20,600	-	-
24		4,260	-	29,600	21,400	58,000	61,000	10,800	18,900	21,000	-	-
25		4,970	-	27,400	21,600	55,000	55,000	8,330	20,100	21,600	-	-
26		8,900	-	23,900	21,600	56,000	55,000	7,060	21,200	21,800	-	-
27		16,500	-	21,200	21,200	52,200	49,600	6,350	22,000	22,000	-	-
28		19,200	4,580	20,500	20,800	49,600	45,000	6,050	22,200	22,000	-	-
29		18,900	5,940	19,700	-	47,200	45,000	5,600	22,500	21,800	10,200	-
30		15,900	13,500	19,400	-	47,200	39,500	5,040	22,800	20,500	6,980	-
31		-	20,300	18,500	-	45,000	-	4,580	-	17,300	8,730	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	-	-	-	-	-
November 23-30	92,890	19,200	4,260	11,610	184,200
December	-	-	-	-	-
Calendar year	-	-	-	-	-
January	764,850	36,200	7,440	24,670	1,517,000
February	364,100	21,600	5,680	13,000	722,200
March	1,302,900	58,000	21,000	42,030	2,584,000
April	2,046,700	104,000	39,500	68,220	4,060,000
May	426,330	31,800	4,580	13,750	845,600
June	-	-	-	-	-
July	-	-	-	-	-
August	-	-	-	-	-
September 1-8	101,660	21,800	4,130	12,710	201,600
Water year 1944-45	-	-	-	-	-

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Big Sandy Creek near Bridgeport, Tex.

Location.- Water-stage recorder, lat. 33°13', long. 97°41', at bridge on State Highway 24, 1.9 miles upstream from Turkey Creek, 4.4 miles upstream from mouth, and 5 miles east of Bridgeport, Wise County. Datum of gage is 727.44 feet above mean sea level, datum of 1929.

Drainage area.- 346 square miles (revised).

Records available.- October 1936 to September 1945.

Extremes.- Maximum discharge during year, 12,000 second-feet Mar. 15 (gage height, 11.34 feet); no flow at times.

1936-45: Maximum discharge, 53,000 second-feet June 10, 1941 (gage height, 15.69 feet, from floodmark), from rating curve extended above 22,000 second-feet by logarithmic plotting; no flow at times.

Remarks.- Records good. No diversion above station.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	0	8.0	19	9.9	498	838	65	6.9	1.9	6.8	0
2	0	0	6.2	15	9.9	200	1,040	58	7.6	1.8	6.5	0
3	0	0	4.9	12	10	117	1,360	50	6.9	1.8	5.9	0
4	200	0	3.9	11	11	66	370	43	5.9	1.7	5.5	0
5	358	0	45	10	11	51	141	41	5.6	3.0	5.0	0
6	48	0	156	11	9.9	68	117	39	5.2	2.9	4.3	0
7	11	25	238	11	9.4	86	102	38	4.5	2.4	4.0	0
8	3.6	105	100	10	8.9	48	94	34	3.9	2,230	4.2	0
9	1.6	50	40	8.9	8.6	35	86	31	9.8	3,690	4.3	0
10	1.0	13	22	8.1	9.0	30	81	32	12	2,150	3.6	0
11	.8	4.2	15	7.9	9.0	29	240	73	9.5	1,700	3.4	0
12	10	1.3	11	8.5	49	41	420	56	561	954	4.3	0
13	15	.5	9.6	8.9	319	36	222	39	318	135	4.2	0
14	4.1	4.0	8.8	8.8	86	35	1,070	32	86	525	3.2	0
15	1.7	.3	8.0	8.3	33	7,250	820	69	30	437	2.5	0
16	.8	.2	7.5	7.6	22	3,100	2,770	84	16	95	2.3	0
17	.4	.5	7.2	7.9	19	614	905	44	11	54	2.1	0
18	.2	1.5	7.0	49	16	348	208	31	49	36	1.8	0
19	.1	6.1	6.2	230	21	5,840	132	26	45	28	1.3	0
20	.1	6.4	5.8	97	184	3,970	114	21	21	24	1.0	0
21	.1	2.2	6.0	39	717	1,120	102	19	11	21	.6	0
22	0	.9	5.8	24	509	228	186	15	9.0	19	.4	0
23	0	.5	5.3	17	102	143	415	15	8.7	17	.2	0
24	0	79	5.5	14	46	126	873	14	13	15	.2	0
25	0	1,090	5.7	14	34	111	269	14	12	14	.3	0
26	0	336	6.5	12	30	94	123	13	6.7	12	.2	0
27	0	56	10	12	425	81	89	12	4.7	27	.1	475
28	0	23	160	12	944	74	171	11	3.6	19	0	110
29	0	15	211	12	-	75	117	9.7	2.8	13	0	60
30	0	11	67	11	-	1,120	84	8.6	2.3	10	0	1,640
31	0	-	31	10	-	1,860	-	7.8	-	8.1	0	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	656.5	358	0	21.2	1,300
November	1,831.6	1,090	0	61.1	3,630
December	1,223.9	238	3.9	39.5	2,430
Calendar year 1944	20,859.1	2,970	0	57.0	41,360
January	726.9	230	7.6	23.4	1,440
February	3,662.6	944	8.6	131	7,260
March	27,494	7,250	29	887	54,530
April	13,559	2,770	81	452	26,890
May	1,045.1	84	7.8	33.7	2,070
June	1,288.6	561	2.3	43.0	2,560
July	12,248.6	3,690	1.7	395	24,290
August	78.2	6.8	0	2.52	155
September	2,285	1,640	0	76.2	4,530
Water year 1944-45	66,100.0	7,250	0	181	131,100

Peak discharge.- Mar. 15 (3 p.m.) 12,000 sec.-ft.; Mar. 19 (8 a.m.) 7,680 sec.-ft.; Apr. 16 (10 a.m.) 3,470 sec.-ft.; July 9 (12:30 a.m.) 5,140 sec.-ft.

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Clear Fork Trinity River at Fort Worth, Tex.

Location.- Water-stage recorder and concrete control, lat. 32°44', long. 97°21', at bridge on Stove Foundry road, 388 feet downstream from Texas & Pacific Railway bridge at Fort Worth, Tarrant County, and 3 miles upstream from mouth. Datum of gage is 532.91 feet above mean sea level, datum of 1929.

Drainage area.- 522 square miles.

Records available.- March 1924 to September 1945.

Average discharge.- 21 years, 107 second-feet.

Extremes.- Maximum discharge during year, 27,000 second-feet Mar. 30 (gage height, 22.10 feet), from rating curve extended above 17,000 second-feet; no flow at times.
1924-45: Maximum discharge, that of Mar. 30, 1945; no flow at times.
Maximum discharge known, 74,300 second-feet Apr. 25, 1922 (gage height, 27.5 feet, present datum), by slope-area method, data furnished by city engineer of Fort Worth.

Remarks.- Records good. Texas & Pacific Railway Co. diverts small amount of water from pool in which gage is located.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	7.1	0	9.7	61	64	1,100	6,570	339	64	25	9.7	3.8
2	4.8	0	9.7	55	61	1,750	2,150	296	64	21	9.7	3.8
3	14	0	9.7	49	64	1,380	1,170	257	70	23	9.7	2.8
4	601	0	13	46	64	758	886	232	58	23	8.4	2.0
5	312	0	17	43	55	714	696	222	58	25	8.4	2.0
6	42	0	82	43	52	1,540	628	214	55	28	7.1	2.0
7	23	0	100	43	52	696	560	202	49	103	7.1	1.3
8	13	0	103	36	46	543	494	181	43	61	7.1	1.3
9	8.4	0	30	35	46	470	454	173	40	134	5.9	1.3
10	7.1	0	21	30	46	422	414	244	46	151	5.9	1.3
11	8.4	2.8	16	32	40	379	1,070	494	49	255	29	1.3
12	5.9	2.8	13	32	1,290	2,180	761	282	307	128	58	.7
13	5.9	2.0	13	32	1,720	644	754	197	298	67	9.7	.2
14	5.9	2.0	13	30	454	502	486	170	144	503	7.1	.7
15	3.8	2.0	13	30	272	2,290	454	608	80	308	5.9	1.3
16	4.9	3.8	11	28	214	744	543	303	64	76	4.8	2.0
17	3.8	4.8	11	35	206	511	376	181	71	52	5.9	1.3
18	2.8	8.4	11	537	216	470	308	156	120	46	5.9	1.3
19	1.3	6.4	11	861	496	1,070	278	143	115	43	3.6	1.3
20	1.3	9.7	9.7	213	1,370	861	644	132	70	40	2.6	.2
21	1.3	16	9.7	162	11,800	430	506	162	58	35	2.8	.7
22	.7	11	9.7	139	1,910	376	2,500	166	55	30	3.8	1.3
23	.7	7.1	9.7	111	831	347	776	132	52	25	4.8	.7
24	.7	60	11	100	619	314	2,610	125	52	23	3.8	.2
25	0	259	13	93	535	257	887	114	49	21	3.8	1.3
26	0	82	16	86	523	232	502	107	43	21	3.8	.7
27	0	25	35	83	4,900	214	430	97	38	17	2.8	8.7
28	0	16	162	86	2,100	202	1,420	86	32	16	2.0	38
29	.1	13	626	73	-	437	644	60	28	16	3.8	28
30	0	11	125	67	-	14,700	391	76	28	14	4.8	60
31	0	-	76	64	-	2,020	-	70	-	11	3.8	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	1,079.8	601	0	34.8	2,140
November	546.8	259	0	18.2	1,080
December	1,611.9	626	9.7	52.0	3,200
Calendar year 1944	31,834.0	3,670	0	87.0	63,140
January	3,337	861	28	108	6,620
February	30,048	11,800	40	1,073	59,600
March	38,553	14,700	202	1,244	76,470
April	30,562	6,570	276	1,019	60,620
May	6,243	608	70	201	12,380
June	2,300	307	28	76.7	4,560
July	2,341	503	11	75.5	4,640
August	251.9	58	2.0	8.13	500
September	171.5	60	.2	5.72	340
Water year 1944-45	117,045.9	14,700	0	321	232,200

Peak discharge.- Feb. 21 (9 a.m.) 16,200 sec.-ft.; Mar. 30 (8 a.m.) 27,000 sec.-ft.; Apr. 1 (12 m.) 13,600 sec.-ft.

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Lake Dallas near Lake Dallas, Tex.

Location.- Water-stage recorder, lat. 33°07', long. 96°59', in gatehouse at Garza Dam on Elm Fork Trinity River, 1.6 miles upstream from Little Elm Creek, 2.0 miles southeast of town of Lake Dallas, Denton County. Datum of gage is 0.08 foot above mean sea level, datum of 1929.

Drainage area.- 1,160 square miles.

Records available.- December 1928 to September 1945.

Extremes.- Maximum contents during year, 247,700 acre-feet Feb. 22 (gage height, 529.77 feet); minimum, 90,500 acre-feet Nov. 24 (gage height, 513.95).

1928-45: Maximum contents not determined; maximum gage height, 534.0 feet, from floodmark, Apr. 25, 1942; all gates were open during passing of crest through lake; minimum contents observed, 42,500 acre-feet Apr. 1, 1940 (gage height, 505.8 feet).

Remarks.- Reservoir is formed by earthen hydraulic-fill dam, consisting of 567 feet of concrete service spillway and two dikes. There are two emergency earthen spillways beyond right end of dam. Dam completed in November 1927 and storage began Feb. 16, 1928. Capacity, 194,000 acre-feet (gage height, 525.0 feet, top of service spillway). Water can be withdrawn through one 18-inch outlet gate (gage height of bottom of gate, 474.0 feet), four 48-inch outlet gates (gage height of bottom of gate, 463.0 feet), and one 6-inch gate (gage height of bottom of gate, 474.0 feet). Dead storage is negligible. Water is used by city of Dallas for municipal water supply. Figures given herein represent total contents.

Cooperation.- Capacity table furnished by city of Dallas.

Monthly gage height and contents water year October 1944 to September 1945

Date	Gage height (feet)†	Contents (acre-feet)	Change in contents during month (acre-feet)
Sept. 30	515.96	106,700	-
Oct. 31	514.91	97,400	-9,300
Nov. 30	515.94	105,800	+8,400
Dec. 31	519.04	132,700	+26,900
Calendar year 1944	-	-	+46,400
Jan. 31	520.14	143,200	+10,500
Feb. 28	523.63	178,600	+35,400
Mar. 31	526.51	210,500	+31,900
Apr. 30	523.60	178,600	-31,900
May 31	522.48	167,200	-11,400
June 30	523.54	177,500	+10,300
July 31	522.73	169,200	-8,300
Aug. 31	520.92	151,200	-18,000
Sept. 30	522.76	170,200	+19,000
Water year 1944-45	-	-	+63,500

† Gage heights at 12 p.m.

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Elm Fork Trinity River near Carrollton, Tex.

Location.- Water-stage recorder above spillway of California concrete dam, lat. 32°52'25", long. 96°55'50", at bridge on State Highway 114, 100 feet downstream from Hackberry Creek and 5.5 miles southwest of Carrollton, Dallas County. Datum of gage is 410.46 feet above mean sea level, datum of 1929.

Drainage area.- 2,542 square miles (revised).

Records available.- July 1938 to September 1945. January 1907 to December 1928 at site near Dallas, 7 miles downstream (January 1907 to September 1920, monthly records only in Water-Supply Paper 850). November 1923 to July 1938 at site 8.5 miles upstream, at Carrollton Dam. Records equivalent except following intense local rains and during periods of low flow affected by municipal pumping between present site and former site near Dallas.

Average discharge.- 37 years (1907-22, 1923-45), 854 second-feet.

Extremes.- Maximum discharge during year, 37,800 second-feet Feb. 22 (gage height, 16.96 feet); minimum, 23 second-feet (regulated) Nov. 2 (gage height, 0.99 foot).
1907-45: Maximum gage height, about 28 feet (revised) May 25, 1908, present site and datum, from floodmarks, furnished by State Reclamation Department (discharge not determined but probably maximum for period of record); maximum discharge determined, 90,700 second-feet Apr. 26, 1942 (gage height, 21.05 feet); no flow at times.

Remarks.- Records good except those between 3,000 and 9,000 second-feet, which are fair. Flow regulated by Lake Dallas (see preceding page). No diversion above station.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	201	142	220	413	206	21,200	10,000	470	256	271	297	225
2	201	34	206	308	192	17,300	11,700	435	256	266	267	225
3	210	92	174	246	178	15,500	15,500	424	246	266	282	220
4	251	131	124	215	174	14,200	18,000	413	241	261	282	178
5	418	138	157	201	174	10,600	14,900	402	241	309	282	110
6	340	138	257	196	170	8,800	8,920	374	236	192	277	107
7	324	142	2,190	192	161	8,800	3,830	352	230	201	277	107
8	324	142	1,680	188	157	7,650	2,480	330	230	303	277	104
9	318	146	546	183	154	4,720	1,530	313	230	2,930	277	101
10	303	146	292	178	150	3,510	1,300	313	230	5,160	277	101
11	261	146	225	174	146	3,610	3,020	374	236	7,060	277	101
12	230	157	215	161	987	5,990	4,420	570	2,340	8,550	277	101
13	210	170	206	157	5,880	6,230	5,350	452	6,570	10,600	292	190
14	201	174	192	150	6,740	3,920	4,970	424	7,870	7,140	292	220
15	201	170	170	146	2,300	5,520	4,360	402	6,540	4,230	297	220
16	196	161	146	138	1,040	7,400	4,780	374	3,880	3,070	277	220
17	196	154	124	138	570	7,990	4,880	357	3,510	3,070	277	225
18	196	157	114	200	545	9,400	4,430	652	3,990	1,840	271	225
19	192	157	114	1,570	578	6,880	3,600	2,160	3,920	413	266	225
20	192	157	110	1,410	4,640	7,740	3,410	2,460	2,270	362	261	230
21	192	157	110	716	11,400	11,800	3,410	1,160	504	346	261	206
22	188	154	107	1,040	31,800	15,500	3,680	424	435	335	266	170
23	188	154	104	708	32,500	10,200	3,840	402	702	330	271	170
24	188	198	104	354	17,000	5,060	3,400	368	3,690	318	266	174
25	188	1,250	153	271	10,700	3,600	3,060	324	1,060	313	261	178
26	188	1,280	613	251	6,660	3,410	1,000	303	418	277	261	188
27	188	780	666	241	8,270	3,300	582	292	396	292	256	1,110
28	192	582	2,050	236	18,000	3,180	673	292	362	297	256	4,040
29	192	313	4,590	236	-	4,810	1,160	287	318	297	236	3,680
30	196	261	2,080	230	-	12,100	570	268	282	313	230	2,290
31	196	-	702	220	-	13,600	-	261	-	303	225	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	7,061	418	188	228	14,010
November	7,983	1,280	34	266	15,830
December	18,741	4,590	104	605	37,170
Calendar year 1944	291,884	12,400	34	797	579,000
January	11,067	1,570	138	357	21,950
February	161,472	32,500	146	5,767	320,300
March	263,320	21,200	3,180	8,494	522,300
April	152,755	18,000	570	5,092	303,000
May	16,430	2,460	261	530	32,590
June	51,689	7,870	230	1,723	102,500
July	59,915	10,600	192	1,933	118,800
August	8,391	297	225	271	16,640
September	15,641	4,040	101	521	31,020
Water year 1944-45	774,465	32,500	34	2,122	1,536,000

Peak discharge.- Feb. 22 (11 p.m.) 37,800 sec.-ft.; Mar. 1 (1 a.m.) 22,900 sec.-ft.; Mar. 22 (7 a.m.) 16,100 sec.-ft.; Mar. 31 (10 a.m.) 13,600 sec.-ft.; Apr. 4 (10 a.m.) 18,000 sec.-ft.

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Denton Creek near Roanoke, Tex.

Location.- Water-stage recorder, lat. 33°02', long. 97°12', 340 feet upstream from bridge on U. S. Highway 377, a quarter of a mile downstream from Texas & Pacific Railway bridge, and 2.2 miles northeast of Roanoke, Denton County. Datum of gage is 523.6 feet above mean sea level, datum of 1929.

Drainage area.- 634 square miles (revised).

Records available.- October 1923 to December 1927, March 1939 to September 1945.

Extremes.- Maximum discharge during year, 23,200 second-feet Feb. 21 (gage height, 26.58 feet); no flow at times.

1923-27, 1939-45: Maximum discharge, 49,700 second-feet Apr. 20, 1942 (gage height, 30.20 feet), from rating curve extended above 32,000 second-feet on basis of velocity-area studies; no flow at times.

Maximum stage known, 31 feet in May 1908, from information by local residents.

Remarks.- Records good. No large diversion above station.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	0	24	113	55	1,370	4,740	174	32	12	12	1.3
2	0	0	19	78	54	3,070	1,840	160	29	11	10	1.2
3	11	0	16	64	55	1,750	1,370	142	28	11	9.7	.9
4	43	0	14	57	56	754	944	128	27	12	8.8	.5
5	9.9	0	19	52	52	781	476	120	26	21	7.9	.2
6	86	0	110	51	48	1,760	376	114	26	14	7.1	0
7	124	0	510	50	46	534	325	111	23	12	7.1	0
8	54	0	218	45	43	408	293	104	21	21	6.0	0
9	27	0	132	39	42	365	274	95	19	1,460	5.7	0
10	15	51	91	35	41	318	256	142	17	1,770	5.7	0
11	9.2	50	58	34	40	325	429	174	27	1,630	9.7	0
12	6.0	29	41	34	1,750	959	1,180	151	436	822	28	0
13	4.6	18	32	34	2,880	476	917	134	517	338	18	0
14	4.3	12	28	34	632	384	457	116	416	705	15	0
15	3.7	8.3	26	33	321	2,040	554	111	258	184	8.8	0
16	3.4	15	23	30	241	4,720	852	138	119	113	6.4	0
17	2.3	10	22	29	210	2,970	1,360	116	95	87	5.3	0
18	1.8	7.9	21	389	184	634	534	114	128	65	4.3	0
19	1.6	7.5	20	381	511	1,310	325	102	108	50	3.7	0
20	1.3	7.9	19	218	2,180	4,200	241	84	162	43	2.9	0
21	.9	14	19	263	12,900	3,050	221	81	112	36	2.3	0
22	.6	14	17	196	3,370	704	546	69	68	32	2.1	0
23	.4	9.2	17	124	897	449	338	59	49	27	2.1	0
24	.3	56	17	102	457	376	2,190	55	41	24	2.1	0
25	.2	235	21	92	325	318	694	52	42	22	2.1	0
26	.1	334	25	78	545	284	321	51	67	19	1.8	0
27	.1	365	40	70	7,170	277	232	48	43	18	1.7	460
28	0	134	637	70	2,720	277	420	44	28	18	1.7	573
29	0	58	369	65	-	690	271	40	20	25	1.6	334
30	0	34	204	61	-	2,610	200	38	16	20	1.6	561
31	0	-	160	57	-	1,300	-	35	-	15	1.6	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	410.7	124	0	13.2	815
November	1,469.8	365	0	49.0	2,920
December	2,969	637	14	95.8	5,890
Calendar year 1944	59,208.5	7,360	0	162	117,500
January	2,978	389	29	96.1	5,910
February	37,825	12,900	40	1,351	75,020
March	39,463	4,720	277	1,273	78,270
April	23,176	4,740	200	773	45,970
May	3,102	174	35	100	6,150
June	3,000	517	16	100	5,950
July	7,637	1,770	11	246	15,150
August	202.8	28	1.6	6.54	402
September	1,932.1	573	0	64.4	3,830
Water year 1944-45	124,165.4	12,900	0	340	246,300

Peak discharge.- Feb. 12 (12 p.m.) 6,860 sec.-ft.; Feb. 21 (9 a.m.) 23,200 sec.-ft.; Feb. 27 (12:30 p.m.) 13,300 sec.-ft.; Mar. 16 (7:30 p.m.) 8,160 sec.-ft.; Mar. 30 (10 a.m.) 5,760 sec.-ft.; Apr. 1 (1:30 p.m.) 8,520 sec.-ft.

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

East Fork Trinity River near Rockwall, Tex.

Location.- Chain gage, lat. 32°55'25", long. 96°30'20", at bridge on U. S. Highway 67, 3 miles southwest of Rockwall, Rockwall County, and 8 miles upstream from Muddy Creek. Datum of gage is 404.3 feet above mean sea level, datum of 1929.

Drainage area.- 831 square miles.

Records available.- November 1923 to September 1945.

Average discharge.- 22 years, 474 second-feet.

Extremes.- Maximum discharge during year, 42,800 second-feet Feb. 22 (gage height, 20.80 feet, from floodmark); no flow at times.

1923-45: Maximum discharge determined, 64,800 second-feet June 16, 1935 (gage height, 23.39 feet), by slope-area method; maximum gage height, 24.82 feet Apr. 20, 1942, while levees were breaking; no flow at times.

A stage of 24.6 feet was reached in April 1922. Levees also broke during this flood.

Remarks.- Records good. Gage read twice daily. No diversion above station.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	0	27	961	160	11,800	9,320	204	58	150	41	5.7
2	0	0	22	394	150	4,780	6,150	184	54	294	36	4.6
3	0	0	19	274	146	3,520	11,200	174	52	118	32	4.1
4	0	0	33	229	155	5,850	6,230	160	50	80	29	3.4
5	0	0	106	224	155	4,520	2,110	150	49	254	26	2.5
6	0	0	488	214	142	2,120	790	146	48	587	24	2.2
7	18	0	800	209	124	1,960	598	142	47	384	21	1.7
8	8.4	0	864	204	116	2,280	532	132	45	501	20	1.2
9	3.6	0	379	169	112	1,660	488	132	42	980	18	.8
10	1.7	0	118	146	104	708	455	132	39	1,380	17	.7
11	1.4	0	70	132	108	587	526	598	43	3,310	19	.5
12	1.1	0	53	128	391	967	666	1,150	8,770	6,050	21	.4
13	.6	0	45	142	1,740	3,860	631	1,020	31,300	7,380	18	.3
14	.3	0	41	132	5,290	6,810	744	324	14,000	2,780	18	.2
15	.2	0	39	124	6,220	2,860	587	284	5,720	809	18	.2
16	.1	0	38	116	2,190	2,960	488	499	1,430	482	18	.1
17	.1	0	37	108	737	5,190	833	565	404	214	13	.2
18	0	0	35	180	576	1,830	645	274	1,060	150	11	.1
19	0	0	34	647	532	1,290	384	164	988	120	10	0
20	0	0	33	1,260	1,140	5,850	324	132	324	100	9.0	0
21	0	0	31	1,670	7,570	5,850	294	120	194	90	8.1	0
22	0	0	30	1,030	29,600	2,480	364	112	160	79	7.3	0
23	0	0	28	945	9,960	812	455	164	155	70	6.5	0
24	0	1.6	27	522	3,450	598	587	108	501	68	8.2	0
25	0	226	53	324	1,360	532	842	97	229	64	12	0
26	0	472	193	274	786	477	566	97	137	58	13	0
27	0	254	506	234	4,720	404	284	90	112	53	13	0
28	0	98	968	214	25,200	354	229	78	97	57	11	368
29	0	52	1,540	209	-	2,330	294	72	90	55	10	744
30	0	34	2,200	189	-	14,000	229	67	78	56	8.2	786
31	0	-	2,370	169	-	16,000	-	62	-	47	6.6	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	35.5	18	0	1.15	70
November	1,137.6	472	0	37.9	2,260
December	11,227	2,370	19	362	22,270
Calendar year 1944	123,727.2	21,100	0	338	245,400
January	11,773	1,670	108	380	23,350
February	102,934	29,600	104	3,676	204,200
March	115,229	16,000	354	3,717	228,600
April	47,845	11,200	229	1,595	94,900
May	7,633	1,150	62	246	15,140
June	66,276	31,300	39	2,209	131,500
July	26,820	7,380	47	865	53,200
August	520.9	41	6.5	16.8	1,030
September	1,927.0	786	0	64.2	3,820
Water year 1944-45	393,358.0	31,300	0	1,078	780,300

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Cedar Creek near Mabank, Tex.

Location.- Water-stage recorder, lat. 32°19'45", long. 96°10'05", at bridge on county highway, 2 miles downstream from Lacys Fork and 5½ miles southwest of Mabank, Kaufman County. Datum of gage is 285.39 feet above mean sea level (Texas Reclamation Department bench mark based on U. S. Geological Survey datum, unadjusted).

Drainage area.- 741 square miles.

Records available.- December 1938 to September 1945.

Extremes.- Maximum discharge during year, 44,800 second-feet Mar. 30 (gage height, 25.43 feet), from rating curve extended above 3,200 second-feet on basis of slope-area determination at gage height 23.5 feet, at location 12 miles downstream; no flow at times.

1938-45: Maximum discharge, that of Mar. 30, 1945; no flow at times.

Maximum stage known prior to establishment of station, about 23.5 feet Sept. 29, 1936, from information by local residents; peak discharge of this flood at site about 12 miles below station (drainage area, 910 square miles), 35,400 second-feet, by slope-area method.

Remarks.- Records good except those above 4,000 second-feet, which are poor. No large diversion above station.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	0	32	3,600	34	8,300	20,000	61	3.0	13	27	3.4
2	0	0	20	2,560	30	4,400	8,720	40	2.8	17	15	2.8
3	0	0	14	1,100	26	3,140	4,130	28	3.0	90	11	2.4
4	0	0	12	214	22	4,400	2,720	22	2.8	64	8.9	1.8
5	0	0	720	140	20	4,130	727	17	3.0	26	7.6	1.6
6	0	0	2,540	107	18	2,840	168	15	3.8	253	6.4	2.6
7	0	0	3,900	84	17	969	107	13	2.6	300	5.1	2.8
8	3.7	0	4,220	67	15	658	84	12	2.0	1,220	4.4	2.8
9	8.6	0	2,100	55	14	238	73	11	1.6	2,190	3.8	2.6
10	4.8	0	294	45	13	122	64	10	1.3	1,380	3.4	2.8
11	3.4	0	87	37	13	95	370	11	1.2	4,740	4.7	8.0
12	3.0	0	54	32	44	780	1,580	12	1,550	15,800	32	3.8
13	2.0	0	38	29	814	1,550	1,730	14	17,000	11,800	43	30
14	1.3	0	29	27	1,420	1,210	1,230	22	16,600	5,580	21	148
15	.8	0	23	24	1,800	1,260	218	22	7,160	2,180	17	40
16	.6	0	18	22	719	2,650	104	66	2,750	676	9.9	13
17	0	0	14	20	153	2,490	75	522	543	214	7.3	7.6
18	0	0	10	675	173	987	61	260	128	84	5.7	4.8
19	0	0	8.3	2,890	736	654	50	79	304	52	3.8	3.2
20	0	3.2	7.0	3,350	3,020	2,300	40	40	302	35	6.0	2.4
21	0	60	6.4	3,280	4,490	2,830	35	28	99	26	11	2.0
22	0	44	5.7	1,940	9,280	2,440	396	18	49	20	6.7	1.7
23	0	22	5.4	796	9,540	584	1,110	13	225	17	35	1.3
24	0	67	5.1	281	3,940	142	531	10	497	14	62	1.2
25	0	1,180	5.1	131	1,360	107	878	8.6	386	12	48	1.0
26	0	2,200	214	87	314	93	1,300	7.0	96	10	21	.7
27	0	2,710	1,390	64	2,090	79	408	6.0	47	9.2	15	.6
28	0	2,450	3,360	52	5,720	67	119	5.1	29	8.6	8.6	2.4
29	0	390	4,930	43	-	2,490	80	4.4	19	9.1	7.0	120
30	0	58	5,180	42	-	33,700	66	3.8	14	38	5.4	291
31	0	-	4,800	38	-	39,400	-	3.2	-	66	4.1	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	28.2	8.6	0	0.91	56
November	9,184.2	2,710	0	306	18,220
December	34,042.0	5,180	5.1	1,098	67,520
Calendar year 1944	218,661.8	24,100	0	597	433,700
January	21,832	3,600	20	704	43,300
February	45,835	9,540	13	1,637	90,910
March	125,105	39,400	67	4,036	248,100
April	47,174	20,000	35	1,572	93,570
May	1,384.1	522	3.2	44.6	2,750
June	47,825.1	17,000	1.2	1,594	94,860
July	46,943.9	15,800	8.6	1,514	93,110
August	466.8	62	3.4	15.1	926
September	708.3	291	.6	23.6	1,400
Water year 1944-45	380,528.6	39,400	0	1,043	754,700

Peak discharge.- Mar. 30 (9:30 p.m.) 44,800 sec.-ft.; June 13 (9 p.m.) 22,600 sec.-ft.; July 12 (3 p.m.) 17,600 sec.-ft.

Time basis: Central war time up to 2 a.m., Sept. 30, 1945 central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Chambers Creek near Corsicana, Tex.

Location.- Water-stage recorder, lat. 32°06'30", long. 96°22'15", at bridge on State Highway 31, 500 feet upstream from St. Louis Southwestern Railway bridge, 6 miles east of Corsicana, Navarro County, and 17 miles upstream from Richland Creek. Datum of gage is 294.26 feet above mean sea level, datum of 1929.

Drainage area.- 958 square miles.

Records available.- March 1939 to September 1945.

Extremes.- Maximum discharge during year, 32,900 second-feet Mar. 31 (gage height, 25.72 feet); no flow Oct. 1-6, Oct. 30 to Nov. 17.

1939-45: Maximum discharge, 48,000 second-feet May 3, 1944 (gage height, 27.19 feet); no flow at times.

Maximum stage known, about 27½ feet in December 1913, from information by local residents.

Remarks.- Records good except those for periods of no gage-height record, which are fair. No large diversion above station.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	0	25	3,170	226	4,820	17,100	393	44	78	53	50
2	0	0	21	1,080	216	3,630	9,580	a330	42	72	45	25
3	0	0	19	518	208	4,430	6,800	a285	147	78	41	16
4	0	0	19	463	212	9,230	3,820	a265	657	70	37	13
5	0	0	1,050	380	198	5,370	1,670	a236	817	68	33	11
6	171	0	2,830	337	176	2,660	1,230	a210	242	123	29	9.0
7	84	0	2,260	317	160	1,540	898	a194	87	244	26	7.6
8	41	0	1,010	277	152	1,230	630	a184	57	451	124	6.9
9	23	0	526	239	136	850	542	a173	45	435	53	6.1
10	16	0	268	208	136	690	486	159	38	180	29	5.1
11	9.8	0	176	190	132	630	650	207	34	1,110	23	4.7
12	6.6	0	140	185	487	1,220	1,160	236	3,730	4,460	25	4.4
13	4.8	0	116	180	3,690	3,400	1,160	285	28,900	7,320	28	4.4
14	3.9	0	106	168	3,380	2,930	593	191	22,700	4,180	26	4.0
15	3.5	0	96	156	1,660	3,330	445	148	9,080	1,570	20	2.7
16	3.2	0	84	144	612	4,610	393	150	3,770	1,110	17	2.7
17	2.6	.4	77	132	507	3,300	367	236	1,040	604	15	3.7
18	2.2	8.5	73	1,490	543	1,290	354	166	585	240	14	2.6
19	2.0	8.3	65	6,640	1,500	1,360	285	126	630	180	21	2.1
20	1.7	5.4	57	5,100	5,750	3,260	a250	108	380	156	18	2.0
21	1.6	4.9	55	4,020	8,120	2,450	292	121	265	135	11	1.8
22	1.3	9.6	50	1,480	12,800	1,240	2,110	397	222	117	10	1.6
23	1.1	7.3	48	691	7,920	690	5,290	336	198	102	10	1.4
24	.9	40	45	507	3,800	600	5,280	143	187	90	9.8	1.3
25	.6	1,400	46	436	1,370	542	2,590	99	173	82	11	1.3
26	.5	1,210	52	391	962	486	2,720	85	156	75	12	1.2
27	.4	555	1,240	337	2,290	406	1,170	75	132	68	11	1.1
28	.3	128	3,110	317	5,100	354	570	68	114	59	9.0	3.6
29	.2	50	5,080	307	-	6,350	645	61	99	175	22	22
30	0	33	4,470	267	-	25,900	500	54	88	126	116	10
31	0	-	3,870	239	-	29,900	-	49	-	66	117	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	382.2	171	0	12.3	758
November	3,460.4	1,400	0	115	6,860
December	27,084	5,080	19	874	53,720
Calendar year 1944	268,105.6	36,800	0	733	531,700
January	30,366	6,640	132	980	60,230
February	62,443	12,800	132	2,230	123,900
March	128,698	29,900	354	4,152	255,300
April	69,580	17,100	250	2,319	138,000
May	5,770	397	49	186	11,440
June	74,659	28,900	34	2,489	148,100
July	23,824	7,320	59	769	47,250
August	1,015.8	124	9.0	32.8	2,010
September	228.3	50	1.1	7.61	453
Water year 1944-45	427,510.7	29,900	0	1,171	848,000

Peak discharge.- Jan. 19 (2 p.m.) 7,740 sec.-ft.; Feb. 22 (6 a.m.) 14,200 sec.-ft.; Mar. 4 (7 a.m.) 10,900 sec.-ft.; Mar. 31 (3:30 a.m.) 32,900 sec.-ft.; June 13 (8 p.m.) 30,900 sec.-ft.; July 13 (1 a.m.) 8,440 sec.-ft.

a No gage-height record; discharge computed on basis of estimated gage heights and weather records.

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Richland Creek near Richland, Tex.

Location.- Water-stage recorder, lat. 31°57', long. 96°25', at bridge on U. S. Highway 75, 750 feet downstream from Texas & New Orleans Railroad bridge, 1 mile north of Richland, Navarro County, and 3½ miles downstream from Pinoak Creek. Datum of gage is 299.0 feet above mean sea level, datum of 1929.

Drainage area.- 760 square miles.

Records available.- December 1924 to February 1925 (discharge measurements only), March 1939 to September 1945.

Extremes.- Maximum discharge during year, 55,000 second-feet Mar. 31 (gage height, 23.40 feet); no flow Oct. 1-9, Oct. 20 to Nov. 24.

1939-45: Maximum discharge, 55,000 second-feet May 2, 1944, Mar. 31, 1945 (gage height, 23.40 feet); no flow at times.

Maximum stage known, 25.5 feet in December 1913, from information by engineers of Texas & New Orleans Railroad.

Remarks.- Records fair. No large diversion above station.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	0	6.9	4,490	91	1,650	10,200	192	35	39	39	64
2	0	0	5.2	3,580	85	485	8,920	162	34	54	36	22
3	0	0	4.0	641	82	3,300	5,110	141	34	758	35	13
4	0	0	3.9	215	79	11,800	1,360	125	1,090	126	33	11
5	0	0	550	162	77	11,500	438	112	1,640	50	30	9.3
6	0	0	2,660	121	68	3,390	319	107	763	428	28	7.4
7	0	0	1,170	104	61	660	271	100	80	1,450	28	6.7
8	0	0	206	94	60	415	238	95	56	3,240	53	6.2
9	.4	0	103	74	55	331	215	85	47	3,270	74	5.5
10	3.0	0	51	65	53	277	197	81	42	1,800	39	5.2
11	2.3	0	29	56	54	251	252	142	39	2,820	28	5.0
12	1.2	0	18	56	239	763	541	162	494	3,940	22	4.9
13	.7	0	15	53	2,680	2,450	281	136	2,740	8,920	23	4.8
14	.5	0	13	51	2,800	1,720	184	84	3,940	4,900	24	8.6
15	.4	0	12	45	1,410	2,280	158	75	3,930	876	20	7.4
16	.3	0	12	43	276	2,990	145	72	542	264	16	5.2
17	.2	0	11	39	261	2,250	137	87	158	184	14	4.1
18	.1	0	9.4	1,800	690	418	125	67	609	149	13	3.3
19	.1	0	9.0	5,920	1,340	1,320	114	62	1,130	125	15	2.6
20	0	0	8.8	8,760	3,630	3,720	117	59	278	107	15	2.1
21	0	0	7.8	4,880	4,560	2,680	2,790	62	112	96	11	1.9
22	0	0	8.0	947	9,400	522	8,920	133	87	86	10	1.7
23	0	0	7.4	381	8,280	256	10,800	133	114	77	9.7	1.6
24	0	.3	7.1	247	2,080	224	5,970	60	188	71	9.9	1.6
25	0	778	7.3	202	392	206	1,150	53	81	65	9.9	1.5
26	0	870	7.6	175	331	188	391	50	66	61	11	1.6
27	0	97	675	145	1,750	166	277	47	57	55	11	1.5
28	0	36	2,250	133	3,010	149	446	44	50	52	9.9	2.2
29	0	17	3,830	125	-	1,630	1,130	42	45	48	57	480
30	0	10	2,890	112	-	15,700	506	39	41	45	1,950	1,080
31	0	-	2,060	100	-	38,700	-	37	-	43	1,140	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	9.2	3.0	0	0.30	18
November	1,808.3	870	0	60.3	3,590
December	16,647.4	3,830	3.9	537	33,020
Calendar year 1944	245,479.3	41,600	0	671	486,900
January	33,816	8,760	39	1,091	67,070
February	43,894	9,400	53	1,568	87,060
March	112,391	38,700	149	3,626	222,900
April	61,702	10,800	114	2,057	122,400
May	2,846	192	37	91.8	5,640
June	18,522	3,940	34	617	36,740
July	34,199	8,920	39	1,103	67,830
August	3,814.4	1,950	9.7	123	7,570
September	1,771.9	1,080	1.5	59.1	3,510
Water year 1944-45	331,421.2	38,700	0	908	657,300

Peak discharge.- Mar. 4 (10 p.m.) 13,200 sec.-ft.; Mar. 31 (3 a.m.) 55,000 sec.-ft.; July 13 (10 a.m.) 14,700 sec.-ft.

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

West Fork San Jacinto River near Conroe, Tex.

Location.- Water-stage recorder, lat. 30°15', long. 95°28', at bridge on U. S. Highway 75, 285 feet upstream from International-Great Northern Railroad bridge, 3½ miles downstream from Lake Creek, and 4¼ miles south of Conroe, Montgomery County. Datum of gage is 100.3 feet above mean sea level, datum of 1929.

Drainage area.- 832 square miles.

Records available.- May 1924 to September 1927, July 1939 to September 1945.

Extremes.- Maximum discharge during year, 41,100 second-feet Aug. 30 (gage height, 19.55 feet); minimum, 21 second-feet Oct. 20-22, Oct. 28 to Nov. 2.

1924-27, 1939-45: Maximum discharge, 110,000 second-feet Nov. 25, 1940 (gage height, 25.85 feet), from rating curve extended above 43,000 second-feet on basis of velocity-area studies; minimum, 9.3 second-feet Oct. 1, 2, 1939.

Maximum stage prior to 1940, 25.2 feet, present site and datum, in December 1913, at railroad bridge 285 feet downstream, from information by engineers of International-Great Northern Railroad (discharge, 101,000 second-feet, from rating curve extended above 43,000 second-feet on basis of velocity-area studies).

Remarks.- Records good except those for period of no gage-height record, which are fair. No large diversion above station.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	27	21	272	2,980	175	264	13,000	175	95	62	42	12,500
2	26	22	182	2,820	169	237	28,900	158	86	143	39	4,870
3	26	23	149	2,980	172	223	26,600	146	82	146	38	2,600
4	26	26	128	3,260	216	223	12,400	135	83	221	40	1,000
5	26	26	2,830	1,720	2,880	221	f4,710	121	93	438	40	451
6	25	26	8,180	924	3,840	209	f2,320	115	87	246	37	332
7	35	29	14,800	1,460	4,490	182	990	114	91	122	35	264
8	38	44	11,100	1,500	4,360	160	572	113	87	87	34	214
9	31	37	4,460	1,700	2,260	142	451	122	79	71	41	172
10	27	32	2,050	1,500	771	128	388	264	73	62	33	148
11	26	31	764	748	400	139	342	3,980	69	55	32	131
12	26	31	425	312	1,190	154	312	5,510	77	57	32	115
13	25	32	312	237	1,970	154	273	4,520	169	51	31	a129
14	24	32	246	199	2,100	145	255	2,600	636	54	30	a121
15	23	32	221	179	2,330	628	230	975	2,160	86	29	a101
16	22	34	192	158	1,800	800	223	1,890	2,670	233	27	a86
17	22	79	179	148	838	712	216	2,520	1,390	225	27	a70
18	22	73	167	2,510	841	828	242	1,860	474	189	26	a64
19	22	224	154	5,330	1,520	1,520	232	870	228	146	35	a59
20	22	451	142	7,820	2,280	3,140	394	388	160	104	31	a55
21	22	477	135	8,620	2,880	3,810	1,820	620	125	85	27	a52
22	22	425	126	4,080	4,230	2,620	1,580	1,370	108	69	29	a52
23	22	503	122	1,810	3,870	1,880	1,820	438	97	62	38	a52
24	22	324	122	712	2,500	946	3,340	312	87	59	35	a50
25	22	1,980	122	451	1,480	400	3,000	282	81	57	33	a49
26	22	2,380	139	353	643	273	1,410	194	93	54	32	a49
27	22	2,060	180	292	376	223	503	155	118	49	39	a48
28	21	2,720	255	255	322	182	292	135	100	47	934	a48
29	21	2,470	364	225	-	155	239	121	79	45	2,410	a47
30	21	885	614	204	-	631	204	112	66	43	29,400	a49
31	21	-	1,920	187	-	2,930	-	104	-	43	25,200	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff	
						Inches	Acre-feet
October	759	38	21	24.5	0.029	0.03	1,510
November	15,529	2,720	21	518	.623	.69	30,800
December	51,052	14,800	122	1,647	1.98	2.28	101,300
Calendar year 1944	246,538	14,800	18	674	.810	11.00	489,000
January	55,674	8,620	148	1,796	2.16	2.49	110,400
February	50,903	4,490	169	1,818	2.19	2.28	101,000
March	24,259	3,810	128	783	.941	1.08	48,120
April	107,258	28,900	204	3,575	4.30	4.79	212,700
May	30,419	5,510	104	981	1.18	1.36	60,340
June	9,843	2,670	66	328	.394	.44	19,520
July	3,411	438	43	110	.132	.15	6,770
August	58,856	29,400	26	1,899	2.28	2.63	116,700
September	23,978	12,500	47	799	.960	1.07	47,560
Water year 1944-45	431,941	29,400	21	1,183	1.42	19.29	856,700

Peak discharge.- Dec. 7 (4 p.m.) 16,300 sec.-ft.; Apr. 2 (10 p.m.) 32,600 sec.-ft.; Aug. 30 (2 p.m.) 41,100 sec.-ft.

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

f Computed on basis of partly estimated gage-height record.

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

West Fork San Jacinto River near Humble, Tex.

Location.- Water-stage recorder, lat. 30°01'35", long. 95°15'30", at bridge on U. S. Highway 59, 1,160 feet upstream from Texas & New Orleans Railroad bridge, about half a mile downstream from Spring Creek, and 2½ miles north of Humble, Harris County. Datum of gage is 30.53 feet above mean sea level, datum of 1929.

Drainage area.- 1,811 square miles.

Records available.- October 1928 to September 1945.

Average discharge.- 17 years, 1,176 second-feet.

Extremes.- Maximum discharge during year, 48,700 second-feet Aug. 31 (gage height, 22.65 feet); minimum, 59 second-feet Oct. 30 to Nov. 2.
1928-45: Maximum discharge, 187,000 second-feet May 31, 1929, Nov. 25, 26, 1940; maximum gage height, 32.7 feet, present site and datum, May 31, 1929, Nov. 26, 1940 (flood of Nov. 26, 1940, affected by backwater from East Fork and it is believed flood of May 31, 1929, occurred under similar conditions); minimum discharge observed, 14 second-feet Sept. 8-10, 1931.

Remarks.- Records good except those for periods of doubtful or no gage-height record, which are poor. No diversion above station.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	203	59	1,460	4,540	539	a461	13,500	479	207	d227	96	30,700
2	160	59	972	4,680	521	a376	29,300	403	186		93	14,300
3	134	66	716	4,260	503	a315	44,800	355	182		91	6,850
4	114	99	575	4,260	491	a275	35,100	335	174		89	3,740
5	100	143	4,700	3,580	2,240	a260	17,800	320	171		96	2,270
6	93	146	16,400	2,150	5,000	a225	8,440	280	203	581	98	1,660
7	107	120	18,200	2,500	5,160	a195	4,350	250	255	360	89	1,340
8	107	102	22,000	2,560	5,640	a174	2,740	230	260	216	87	1,100
9	112	120	12,400	2,560	4,150	a164	2,150	216	245	153	87	928
10	105	125	5,670	2,400	1,860	a149	1,700	230	225	149	91	716
11	93	109	2,860	1,750	950	a142	1,430	3,670	207	145	85	527
12	83	96	1,950	958	1,630	a139	1,140	8,800	191	128	83	467
13	80	85	1,480	664	4,400	a139	a854	10,200	2,860	120	82	392
14	82	83	1,180	551	4,540	a136	a696	6,430	920	125	80	355
15	80	80	875	467	5,000	a368	a618	2,610	1,540	153	76	310
16	76	82	638	408	3,840	1,660	a563	1,800	2,980	202	74	285
17	74	115	503	376	2,350	1,340	533	2,980	2,350	386	80	265
18	70	199	431	4,740	1,520	1,100	503	3,100	1,110	320	70	245
19	70	280	376	13,500	1,850	1,380	509	2,080	527	285	70	235
20	67	623	335	14,900	2,450	2,350	1,110	1,800	d218	230	72	216
21	66	854	300	14,400	3,340	4,120	7,810	1,330		207	72	199
22	64	882	280	10,700	4,680	3,840	9,000	8,010		203	70	191
23	62	798	265	5,910	5,640	2,740	6,800	4,450		146	70	182
24	62	805	250	3,040	4,130	1,800	5,800	1,800		128	82	174
25	62	4,100	235	2,050	2,500	875	5,640	912		117	98	174
26	64	5,800	250	1,560	1,430	539	3,580	624		120	112	171
27	64	5,480	320	1,260	847	408	1,900	449		105	133	182
26	62	4,540	414	1,060	a618	330	1,140	360		100	4,790	174
29	62	4,400	545	791	-	275	784	315		100	6,240	195
30	61	3,020	742	a638	-	285	587	255		98	13,200	305
31	59	-	1,780	557	-	2,290	-	230	-	98	44,600	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff	
						Inches	Acre-feet
October	2,698	203	59	87.0	0.048	0.06	5,350
November	33,470	5,800	59	1,116	.616	.69	66,390
December	99,102	22,000	235	3,197	1.77	2.04	196,600
Calendar year 1944	558,254	22,000	58	1,525	.842	11.46	1,107,000
January	113,770	14,900	376	3,670	2.03	2.34	225,700
February	77,819	5,640	491	2,779	1.53	1.60	154,400
March	28,850	4,120	136	931	.514	.59	57,220
April	210,877	44,800	503	7,029	3.88	4.33	418,300
May	65,303	10,200	216	2,107	1.16	1.34	129,500
June	17,191	2,980	-	573	.316	.35	34,100
July	6,110	581	98	197	.109	.13	12,120
August	71,156	44,600	70	2,295	1.27	1.46	141,100
September	68,848	30,700	171	2,295	1.27	1.41	136,600
Water year 1944-45	795,194	44,800	59	2,179	1.20	16.33	1,577,000

Peak discharge.- Dec. 8 (7:30 a.m.) 22,500 sec.-ft.; Apr. 3 (4 p.m.) 47,300 sec.-ft.; Aug. 31 (12 m.) 48,700 sec.-ft.

a No gage-height record; discharge computed on basis of engineer's notes and records for station near Conroe and Spring Creek near Spring.

d Doubtful gage-height record; discharge computed on basis of records for West Fork San Jacinto River near Conroe and Spring Creek near Spring.

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

San Jacinto River near Huffman, Tex.

Location.- Water-stage recorder, lat. 29°59'40", long. 95°08'00", at Beaumont, Sour Lake & Western Railway bridge, 0.4 mile downstream from confluence of East and West Forks and 3.4 miles southwest of Huffman, Harris County. Datum of gage is 1.93 feet above mean sea level, datum of 1929.

Drainage area.- 2,791 square miles.

Records available.- October 1936 to September 1945.

Extremes.- Maximum discharge during year, 92,100 second-feet Apr. 3 (gage height, 38.88 feet); minimum, 119 second-feet sometime during period Oct. 27 to Nov. 3.

1936-45: Maximum discharge observed, 253,000 second-feet Nov. 26, 1940 (gage height, 51.2 feet); minimum observed, 49 second-feet Sept. 1, 1939, Sept. 13, 14, 1940.

Flood of May 31, 1929, reached a stage of 50.3 feet, from information by Beaumont, Sour Lake & Western Railway Co. (discharge, 237,000 second-feet). Flood of April 1876 reached a stage about 1½ feet lower, from information by local resident.

Remarks.- Records good except those for period of no gage-height record, which are fair. No large diversion above station.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	336	123	2,000	6,410	1,100	1,360	14,900	778	563	458	257	45,400
2	267	123	1,360	8,730	1,020	1,230	51,600	657	518		238	26,800
3	229	123	1,040	8,450	985	1,200	87,700	563	495		226	13,100
4	202	149	865	8,730	985	1,460	73,100	500	504		221	5,780
5	179	172	4,130	7,160	3,350	1,390	39,000	482	452		209	3,440
6	172	212	18,400	4,120	10,500	1,320	19,200	428	543	985	224	2,520
7	184	226	23,800	4,080	10,500	1,160	9,630	391	618	745	199	2,000
8	189	207	25,400	4,680	10,500	1,020	4,950	359	553	500	191	1,620
9	181	194	21,200	4,250	9,220	895	3,600	343	477	387	189	1,360
10	169	179	11,400	4,160	4,720	806	2,900	343	423	332	194	1,100
11	153	172	4,760	3,440	2,480	750	2,370	2,490	387	318	194	806
12	144	167	2,900	2,220	2,430	772	1,930	8,190	419	367	179	728
13	144	162	2,300	1,650	6,080	985	1,490	10,200	f6,780	358	176	657
14	144	160	1,860	1,420	7,520	1,260	1,200	8,060	1,390	1,140	167	618
15	142	158	1,490	1,230	7,520	1,200	1,020	3,640		985	160	652
16	140	158	1,160	1,100	6,400	2,730	895	2,370		955	153	504
17	140	191	f955	1,020	4,250	3,360	806	3,760		1,320	153	441
18	138	391	f835	5,520	2,740	2,670	762	3,920		1,420	151	411
19	136	640	f740	18,600	3,200	2,600	723	3,040		1,260	147	391
20	134	895	f674	21,500	3,760	3,120	1,440	1,680		835	142	379
21	134	1,100	603	22,800	5,110	4,760	8,630	2,390		624	144	343
22	134	1,080	543	17,000	6,160	5,300	13,800	12,300		734	142	332
23	134	1,020	518	9,370	7,520	4,250	11,700	8,140		500	142	318
24	130	1,020	538	4,430	6,760	3,120	9,720	3,550		436	153	304
25	130	5,920	504	3,120	4,250	1,760	8,870	1,790		399	224	297
26	127	7,910	553	2,600	2,670	1,230	5,900	1,360		336	221	287
27	123	7,130	806	2,140	1,790	1,020	3,100	1,080		307	253	283
28	123	5,500	1,230	2,070	1,490	865	1,860	895		283	7,330	293
29	123	5,110	1,520	1,680	-	767	1,290	778		272	14,800	283
30	123	3,890	1,650	1,420	-	767	955	684		254	15,500	449
31	123	-	2,760	1,260	-	2,120	-	613	-	263	40,800	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff	
						Inches	Acre-feet
October	4,927	336	123	159	0.057	0.07	9,770
November	44,482	7,910	123	1,483	.531	.59	88,230
December	138,494	25,400	504	4,468	1.60	1.85	274,700
Calendar year 1944	808,978	25,400	108	2,210	.792	10.78	1,605,000
January	186,360	22,800	1,020	6,012	2.15	2.48	369,600
February	135,010	10,500	985	4,822	1.73	1.80	267,800
March	57,247	5,300	750	1,847	.662	.76	113,500
April	385,041	87,700	723	12,830	4.60	5.13	763,700
May	85,774	12,300	343	2,767	.991	1.14	170,100
June	36,392	6,780	-	1,213	.435	.48	72,180
July	18,605	1,420	254	600	.214	.25	36,900
August	83,479	40,800	142	2,693	.965	1.11	165,600
September	111,896	45,400	283	3,730	1.34	1.49	221,900
Water year 1944-45	1,287,707	87,700	123	3,528	1.26	17.15	2,554,000

Peak discharge.- Apr. 3 (5 p.m.) 92,100 sec.-ft.; Sept. 1 (1 a.m.) 51,800 sec.-ft.

f Computed on basis of partly estimated gage-height record.

Note.- No gage-height record Oct. 27 to Nov. 23, Dec. 26-29, Jan. 10-26, June 14 to July 5; discharge computed on basis of recorded range in stage, engineer's notes, weather records, and records for West Fork San Jacinto River near Humble and East Fork San Jacinto River near Cleveland.

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Spring Creek near Spring, Tex.

Location.- Wire-weight gage, lat. 30°06'35", long. 95°26'10", at bridge on U. S. Highway 75, 4,500 feet upstream from International-Great Northern Railroad bridge, 2.4 miles northwest of Spring, Harris County, and 4 miles downstream from Willow Creek. Datum of gage is 78.16 feet above mean sea level, unadjusted.

Drainage area.- 400 square miles.

Records available.- April 1939 to September 1945.

Extremes.- Maximum discharge during year, 31,100 second-feet Aug. 30 (gage height, 27.79 feet); minimum observed, 19 second-feet Nov. 1, 2, Aug. 18, 20, 23.

1939-45: Maximum discharge, 42,700 second-feet Nov. 25, 1940 (gage height, 28.6 feet, from graph based on gage readings); minimum observed, 7.7 second-feet Sept. 13, 1940.

Maximum stage known, 29.3 feet May 30, 1929, from floodmarks identified by local resident (discharge, 48,300 second-feet).

Remarks.- Records good except those for period of no gage-height record, which are fair. Gage read twice daily, oftener during high stages. No diversion above station.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	30	19	86	961	89	103	5,890	86	56	30	26	3,250
2	24	19	70	1,120	85	94	14,200	77	52	37	26	932
3	23	20	58	786	83	92	12,000	71	49	59	26	350
4	a23	94	57	390	93	92	4,380	66	50	89	25	207
5		35	2,660	283	282	93	1,650	62	90	66	25	151
6		26	6,180	259	782	86	784	58	138	80	25	116
7		24	5,920	474	880	78	393	56	76	51	26	100
8		30	2,590	505	369	71	265	55	54	40	28	86
9	22	32	888	362	169	63	207	59	46	35	26	77
10	24	24	390	202	133	62	174	53	44	33	29	66
11	23	21	259	146	124	61	151	2,320	41	32	27	63
12	22	22	202	120	469	69	128	3,650	45	32	24	61
13	22	23	160	102	1,380	78	112	3,810	91	33	26	62
14	22	22	128	92	1,850	71	100	1,160	133	33	25	58
15	22	22	112	83	1,290	122	92	350	212	33	22	52
16	22	23	102	72	447	426	91	436	120	34	22	50
17	22	29	92	95	259	365	86	685	59	34	21	46
16	21	32	82	1,440	227	169	81	890	53	31	20	46
19	21	83	74	6,290	187	124	76	348	48	31	20	42
20	21	160	70	7,060	259	116	130	160	42	30	19	43
21	21	164	69	3,100	783	146	2,890	206	42	32	20	43
22	20	71	65	1,050	1,040	151	2,940	1,800	42	30	20	43
23	20	42	66	475	656	98	2,520	1,530	64	31	21	40
24	20	38	62	296	292	78	1,390	477	98	30	27	42
25	20	908	62	217	169	69	558	178	52	29	33	42
26	20	1,340	62	178	138	64	246	124	36	29	36	40
27	20	1,030	72	151	124	58	192	99	32	29	64	42
28	20	374	88	133	116	50	146	81	32	27	782	42
29	20	164	108	120	-	49	116	69	33	26	1,570	49
30	20	116	124	108	-	60	100	64	30	26	20,800	151
31	20	-	278	97	-	402	-	59	-	26	13,600	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff	
						Inches	Acre-feet
October	677	30	20	21.8	0.054	0.06	1,340
November	5,007	1,340	19	167	.418	.47	9,930
December	21,236	6,180	57	685	1.71	1.97	42,120
Calendar year 1944	104,857	6,180	19	286	.715	9.74	208,000
January	26,767	7,060	72	863	2.16	2.49	53,090
February	12,775	1,850	83	456	1.14	1.19	25,340
March	3,660	426	49	118	.295	.34	7,260
April	52,088	14,200	76	1,736	4.34	4.84	103,300
May	19,139	3,810	53	617	1.54	1.78	37,960
June	1,960	212	30	65.3	.163	.18	3,890
July	1,158	89	26	37.4	.094	.11	2,300
August	37,461	20,800	19	1,208	3.02	3.48	74,300
September	6,392	3,250	40	213	.532	.59	12,680
Water year 1944-45	188,320	20,800	19	516	1.29	17.50	373,500

Peak discharge.- Jan. 20 (7 a.m.) 7,710 sec.-ft.; Apr. 2 (11 p.m.) 16,100 sec.-ft.; Aug. 30 (5:30 p.m.) 31,100 sec.-ft.

a No gage-height record; discharge computed on basis of observer's notes, weather records, and records for nearby stations.

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Cypress Creek near Westfield, Tex.

Location.- Water-stage recorder, lat. 30°02'08", long. 95°25'43", at bridge on U. S. Highway 75, 0.9 mile upstream from Senger Gully, 1.8 miles northwest of Westfield, Harris County, 2.0 miles upstream from International-Great Northern Railroad bridge, and 11.0 miles upstream from mouth. Datum of gage is 75.9 feet above mean sea level, datum of 1929, Houston supplementary adjustment of 1943.

Drainage area.- 262 square miles.

Records available.- July 1944 to September 1945.

Extremes.- Maximum discharge during year, 10,700 second-feet Aug. 31 (gage height, 19.03 feet); minimum, 1.2 second-feet Aug. 14.

1944-45: Maximum discharge, that of Aug. 31, 1945; minimum, that of Aug. 14, 1945. Maximum stage known, about 22 feet in May 1929, from information by local resident. Flood of November 1940 reached a stage of about 20.2 feet, from information by State Highway Department.

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

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	52	4.7	387	320	63	36	2,630	46	6.8	6.8	2.2	5,860
2	39	4.5	238	399	50	32	2,770	32	6.5	6.8	1.9	2,930
3	27	4.9	130	463	44	28	4,520	32	6.5	5.6	1.8	1,850
4	17	6.8	.85	450	46	26	4,040	62	8.0	4.9	1.8	1,400
5	14	50	f981	424	215	24	2,600	38	14	6.4	1.6	1,040
6	15	60	a2,790	490	171	23	1,750	23	43	7.0	1.5	828
7	16	39	f3,760	532	144	20	1,290	15	70	7.7	1.4	644
8	14	36	2,670	450	116	18	990	13	38	5.6	1.3	518
9	24	45	1,720	399	88	16	764	12	20	4.5	1.6	363
10	14	42	1,290	310	64	14	588	12	12	4.3	1.8	175
11	8.9	31	1,040	219	54	13	424	249	8.7	4.1	1.5	74
12	8.7	20	828	138	257	13	228	300	9.1	3.8	1.3	44
13	10	15	630	96	588	12	98	273	17	3.6	1.3	30
14	10	13	450	74	892	13	60	175	21	3.8	1.3	21
15	9.6	11	226	58	940	41	44	110	18	5.6	2.0	15
16	8.2	10	107	46	704	29	34	74	20	5.6	2.1	12
17	7.2	10	71	38	560	21	27	52	15	11	2.5	11
18	6.6	10	55	1,530	504	24	22	46	11	10	2.2	8.9
19	6.1	34	44	3,000	387	62	18	34	8.7	6.2	2.1	8.2
20	5.7	55	36	4,200	202	88	370	23	7.2	5.0	2.1	7.7
21	5.3	107	32	3,120	128	69	1,750	164	6.5	7.9	1.8	7.4
22	5.0	93	26	2,120	122	70	1,850	602	6.1	8.4	2.1	7.4
23	4.9	60	22	1,540	144	68	1,500	268	6.6	7.7	2.0	7.6
24	5.3	90	22	1,170	128	44	1,210	104	37	5.2	4.8	9.1
25	5.7	824	21	860	93	29	945	56	85	3.9	3.4	9.4
26	5.3	1,330	20	644	67	20	644	30	64	3.3	3.1	8.0
27	5.3	1,470	27	490	52	16	437	18	26	2.7	15	8.2
28	5.3	1,150	28	318	42	14	270	12	15	2.5	1,170	7.9
29	5.3	782	31	155	-	13	124	9.4	10	2.3	1,700	8.9
30	5.2	546	30	101	-	22	69	8.2	8.0	2.1	4,660	a30
31	4.9	-	152	82	-	115	-	7.4	-	2.1	9,840	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff	
						Inches	Acre-feet
October	370.5	52	4.9	12.0	0.046	0.05	735
November	6,953.9	1,470	4.5	232	.885	.99	13,790
December	17,949	3,760	20	579	2.21	2.55	35,600
Calendar year	-	-	-	-	-	-	-
January	24,236	4,200	38	782	2.98	3.44	48,070
February	6,865	940	42	245	.935	.97	13,620
March	1,033	115	12	33.3	.127	.15	2,050
April	32,066	4,520	18	1,069	4.08	4.55	63,600
May	2,900.0	602	7.4	93.5	.357	.41	5,750
June	624.7	85	6.1	20.8	.079	.09	1,240
July	166.4	11	2.1	5.37	.020	.02	330
August	17,437.5	9,840	1.3	562	2.15	2.48	34,590
September	15,943.7	5,860	7.4	531	2.03	2.26	31,620
Water year 1944-45	126,545.7	9,840	1.3	347	1.32	17.96	251,000

Peak discharge.- Dec. 7 (1:30 p.m.) 3,760 sec.-ft.; Jan. 20 (2:30 p.m.) 4,700 sec.-ft.; Apr. 1 (4 p.m.) 3,360 sec.-ft.; Apr. 3 (4 p.m.) 4,700 sec.-ft.; Apr. 21 (10:30 p.m.) 1,900 sec.-ft.; Aug. 31 (9 a.m.) 10,700 sec.-ft.

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

f Computed on basis of partly estimated gage-height record.

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

East Fork San Jacinto River near Cleveland, Tex.

Location.- Water-stage recorder, lat. 30°20', long. 95°07' at bridge on State Highway 105, 83 feet downstream from Gulf, Colorado & Santa Fe Railway bridge, 1¼ miles west of Cleveland, Liberty County, and 4 miles downstream from Nebblets Creek. Datum of gage is 113.0 feet above mean sea level, datum of 1929.

Drainage area.- 330 square miles.

Records available.- April 1939 to September 1945.

Extremes.- Maximum discharge during year, 45,300 second-feet Apr. 2 (gage height, 18.32 feet), from rating curve extended above 14,000 second-feet by logarithmic plotting; minimum, 12 second-feet Oct. 28 to Nov. 2.

1939-45: Maximum discharge, 77,500 second-feet Nov. 24, 1940 (gage height, 20.37 feet), from rating curve extended above 14,000 second-feet by logarithmic plotting; minimum, 7.2 second-feet Sept. 6, 1939.

Maximum stage known prior to 1940, 19.9 feet May 5, 1935, from information by local resident (discharge, 69,500 second-feet, from rating curve extended above 14,000 second-feet by logarithmic plotting).

Remarks.- Records good except those for periods of no gage-height record, which are poor. No large diversion above station.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	25	12	68	1,360	95	143	12,700	108	34	30	36	1,920
2	23	12	54	3,470	93	139	30,400	100	33	34	34	864
3	21	16	44	2,890	98	135	9,180	93	32	40	33	176
4	20	34	39	1,340	334	135	3,360	87	37	202	31	110
5	20	62	579	482	1,800	145	2,180	78	57	188	29	93
6	19	29	2,650	436	2,710	139	1,130	73	47	82	28	71
7	19	24	f6,650	654	3,350	119	378	71	39	52	28	57
8	20	25	a2,610	880	1,840	102	270	71	34	41	26	50
9	21	23	a827	964	426	95	226	69	31	39	28	46
10	20	19	a163	425	226	86	199	69	31	34	25	43
11	17	18	a95	203	180	86	180	105	29	32	26	43
12	16	18	a84	165	361	254	161	135	32	31	25	53
13	16	18	a78	149	1,120	464	147	104	226	44	24	152
14	15	18	a77	135	1,720	186	133	102	355	310	24	140
15	15	18	a75	125	1,400	531	121	98	212	497	24	67
16	15	20	a73	110	490	790	115	384	216	897	23	49
17	15	30	a73	102	244	574	125	180	106	908	23	43
18	15	41	a71	603	432	516	110	123	69	702	22	37
19	14	a96	a69	1,470	975	608	104	108	59	181	21	36
20	14		a69	2,770	1,310	936	105	78	49	95	20	43
21	13		a68	2,940	1,310	1,130	835	64	43	80	21	36
22	14		68	1,270	1,600	992	1,610	108	40	68	31	32
23	14		64	315	1,550	476	2,240	136	40	80	34	31
24	14		66	229	608	184	1,720	77	44	62	32	30
25	14		71	193	251	157	538	66	46	50	29	30
26	13	750	91	165	203	139	224	57	46	46	29	30
27	13	964	149	143	184	123	167	50	41	41	30	29
28	12	1,000	259	131	165	102	147	46	39	39	417	33
29	12	226	401	123	-	91	133	41	34	37	909	41
30	12	95	321	113	-	100	121	39	32	36	942	39
31	12	-	516	106	-	891	-	37	-	39	1,620	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff	
						Inches	Acre-feet
October	503	25	12	16.2	0.049	0.06	998
November	4,144	1,000	12	138	.418	.47	8,220
December	16,522	6,650	39	533	1.61	1.86	32,770
Calendar year 1944	61,966	6,650	12	224	.679	9.23	162,600
January	24,461	3,470	102	789	2.39	2.76	48,520
February	25,075	3,350	93	896	2.71	2.83	49,740
March	10,568	1,130	86	341	1.03	1.19	20,960
April	69,059	30,400	104	2,302	6.98	7.78	137,000
May	2,957	384	37	95.4	.289	.33	5,870
June	2,133	355	29	71.1	.215	.24	4,230
July	5,017	908	30	162	.491	.57	9,950
August	4,624	1,620	20	149	.451	.52	9,170
September	4,424	1,920	29	147	.445	.50	8,770
Water year 1944-45	169,487	30,400	12	464	1.41	19.11	336,200

Peak discharge.- Dec. 7 (3 a.m.) 8,400 sec.-ft.; Apr. 2 (1 a.m.) 45,300 sec.-ft.

a No gage-height record; discharge computed on basis of recorded range in stage and weather records.

f Computed on basis of partly estimated gage-height record.

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Peach Creek at Splendora, Tex.

Location.- Water-stage recorder, lat. 30°14', long. 95°10', at county road bridge between Splendora and Conroe, about 1,500 feet west of depot at Splendora, Montgomery County, about 3 miles upstream from Texas & New Orleans Railroad bridge, and about 8 miles upstream from Caney Creek. Datum of gage is 86.61 feet above mean sea level, datum of 1929, Galveston-Houston supplementary adjustment of 1936.

Drainage area.- 120 square miles.

Records available.- December 1943 to September 1945.

Extremes.- Maximum discharge during year, 7,980 second-feet Apr. 1 (gage height, 13.85 feet), from rating curve extended above 3,000 second-feet by logarithmic plotting; minimum, 15 second-feet Oct. 19 to Nov. 2.

1943-45: Maximum discharge, that of Apr. 1, 1945; minimum, 15 second-feet Sept. 25, 26, Oct. 19 to Nov. 2, 1944.

Maximum stage known since about 1895, 17.0 feet in November 1940, from floodmarks (adjusted to present site and datum), from information by local resident.

Remarks.- Records good except those above 3,000 second-feet, which are fair.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	20	15	42	398	57	67	4,310	54	32	25	22	107
2	18	15	37	364	56	67	4,500	51	32	25	23	74
3	18	16	35	200	60	70	973	50	31	28	23	65
4	18	19	33	117	98	72	440	47	36	38	20	51
5	17	24	697	97	1,750	72	532	44	45	28	20	49
6	18	20	1,470	136	752	67	376	41	44	28	22	40
7	18	18	621	268	392	58	205	42	34	27	21	36
8	18	18	250	184	180	53	144	44	31	24	20	35
9	18	18	124	115	120	51	124	45	29	23	20	34
10	19	19	97	82	102	51	111	45	28	23	24	33
11	18	18	92	72	105	58	100	77	28	22	22	32
12	17	17	84	67	223	85	90	82	29	22	20	37
13	16	17	70	65	614	116	84	74	225	71	19	39
14	16	17	63	63	344	80	77	55	293	216	19	37
15	16	18	58	58	180	106	72	60	106	131	18	35
16	16	19	55	54	117	243	70	234	54	63	18	29
17	16	36	53	51	119	221	70	208	41	51	18	28
18	16	36	52	475	148	128	72	96	37	35	18	27
19	15	65	50	1,460	114	134	58	57	37	27	17	27
20	15	70	50	597	146	87	62	49	37	26	17	27
21	15	56	47	273	220	77	375	67	32	28	18	27
22	15	32	46	156	216	74	702	147	31	28	18	27
23	15	26	45	117	138	56	426	108	30	25	20	26
24	15	32	46	97	92	55	190	70	32	25	38	26
25	15	471	51	90	80	57	114	50	32	24	25	26
26	15	344	66	82	77	54	90	45	29	23	20	26
27	15	172	108	74	77	48	74	42	28	22	25	26
28	15	67	111	72	74	43	70	39	27	21	1,120	26
29	15	54	111	70	-	42	67	37	26	20	1,540	33
30	15	48	84	65	-	48	63	35	25	20	546	53
31	15	-	180	60	-	108	-	34	-	24	213	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	508	20	15	16.4	1,010
November	1,797	471	15	59.9	3,560
December	4,928	1,470	33	159	9,770
Calendar year 1944	33,035	2,000	15	90.3	65,500
January	6,079	1,460	51	196	12,060
February	6,651	1,750	56	238	13,190
March	2,548	243	42	82.2	5,050
April	14,641	4,500	58	488	29,040
May	2,129	234	34	68.7	4,220
June	1,521	293	25	50.7	3,020
July	1,193	216	20	38.5	2,370
August	3,984	1,540	17	129	7,900
September	1,138	107	26	37.9	2,260
Water year 1944-45	47,117	4,500	15	129	93,450

Peak discharge.- Dec. 6 (2 a.m.) 1,840 sec.-ft.; Jan. 19 (5 a.m.) 1,840 sec.-ft.; Feb. 5 (12 m.) 2,530 sec.-ft.; Apr. 1 (9 p.m.) 7,980 sec.-ft.; Aug. 29 (12 p.m.) 2,710 sec.-ft.

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Barker Reservoir near Addicks, Tex.

Location.- Water-stage recorder, lat. 29°46'05", long. 95°38'45", at dam on Buffalo Bayou, 45 feet upstream from reservoir outlet works, 1,160 feet upstream from Addicks-Howell county road, 1.1 miles south of Addicks, Harris County, and 1.2 miles upstream from South Mayde Creek. Auxiliary water-stage recorder, lat. 29°43'10", long. 95°44'00", on Buffalo Bayou, 2.8 miles west of Clodine, Fort Bend County, 4.8 miles (2.7 miles by reservoir) upstream from Mason Creek, 9.0 miles (6.4 miles by reservoir) upstream from reservoir outlet works. Datum of both gages is 0.3 foot below mean sea level, datum of 1929, Galveston-Houston supplementary adjustment and Houston supplementary adjustment of 1943.

Drainage area.- 150 square miles at outlet works; 105 square miles at upper gage.

Records available.- August to September 1945.

Extremes.- Maximum gage height at dam during period, 90.4 feet Aug. 30 (contents, 11,240 acre-feet); maximum at upper gage, 98.6 feet Aug. 28.

Maximum stage known near site of upper gage prior to construction of reservoir, 98.1 feet in December 1935, from floodmark about 1,100 feet to right of and 1,100 feet downstream from upper gage.

Remarks.- Reservoir is formed by rolled-earth dam 72,844 feet long. Dam completed Feb. 3, 1946, but was first used for flood control in spring of 1945. Reservoir is operated for flood protection of city of Houston. It is a detention reservoir with no provision for permanent storage. Outlet works consist of five concrete conduits, four of which are uncontrolled. The middle conduit is controlled by two vertical-lift steel gates and remains closed except during recession of large floods or during emergencies. Capacity, 127,900 acre-feet between gage heights 75.0 feet (bottom of conduits) and 101.9 feet (top of design flood pool). No constructed emergency spillways; runoff considerably in excess of designed capacity will be discharged around ends of dam. Table given below shows gage heights at both gages and total contents, computed on basis of gage at dam, at indicated times for periods when flood runoff was partially stored in reservoir. Gage height at upper gage is given to show whether an existing stage at that site is due to normal stream flow or to flood storage in reservoir.

Cooperation.- Capacity table furnished by Corps of Engineers, U. S. Army.

Gage heights and contents at indicated time when flood runoff was partially stored in reservoir, during period August to September 1945

Date	Time	Gage height at dam (feet)	Contents (acre-feet)	Gage height upper gage (feet)	Date	Time	Gage height at dam (feet)	Contents (acre-feet)	Gage height upper gage (feet)
Aug. 27	1 a.m.	75.2	2.5	91.5	Aug. 31	12 m.	89.2	7,560	97.5
27	8 a.m.	75.2	2.5	-	31	6 p.m.	88.6	6,060	-
27	9 a.m.	-	-	91.5	31	12 p.m.	88.0	4,770	-
27	10 a.m.	75.3	2.9	91.8	Sept. 1	6 a.m.	87.3	3,520	-
27	12 m.	76.6	10	94.0	1	12 m.	86.4	2,270	97.2
27	6 p.m.	77.0	14	95.3	1	6 p.m.	85.4	1,290	-
27	12 p.m.	78.7	34	96.0	1	12 p.m.	84.5	714	-
28	6 a.m.	79.7	50	96.7	2	6 a.m.	83.5	368	-
28	12 m.	82.0	129	98.3	2	12 m.	82.7	205	96.9
28	4 p.m.	-	-	98.6	2	6 p.m.	82.1	136	-
28	6 p.m.	83.5	368	-	2	12 p.m.	81.7	110	-
28	9 p.m.	84.4	667	-	3	6 a.m.	81.4	95	-
28	12 p.m.	86.2	2,040	98.4	3	12 m.	81.1	83	96.7
29	2 a.m.	87.3	3,520	-	3	6 p.m.	80.8	73	-
29	4 a.m.	88.2	5,180	-	3	12 p.m.	80.5	65	-
29	6 a.m.	88.8	6,530	-	4	12 m.	80.0	55	96.5
29	8 a.m.	89.3	7,830	-	4	12 p.m.	79.6	48	-
29	12 m.	89.8	9,280	98.1	5	12 m.	79.2	42	96.4
29	6 p.m.	90.2	10,560	-	5	12 p.m.	78.9	37	-
29	12 p.m.	90.4	11,240	-	6	12 m.	78.6	32	96.3
30	3 a.m.	90.4	11,240	-	6	12 p.m.	78.3	28	-
30	6 a.m.	90.4	11,240	-	7	12 m.	78.0	24	96.1
30	12 m.	90.3	10,890	97.7	8	12 m.	77.5	19	95.8
30	6 p.m.	90.1	10,230	-	9	12 m.	77.0	14	94.8
30	12 p.m.	89.9	9,590	-	10	12 m.	76.4	8.8	94.2
31	6 a.m.	89.5	8,390	-	11	12 m.	75.9	5.7	93.5

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Buffalo Bayou near Addicks, Tex.

Location.- Water-stage recorder, lat. 29°45'30", long. 95°36'25", at Dairy-Ashford road bridge, 2.0 miles downstream from South Mayde Creek, 2.8 miles southeast of Addicks, Harris County, and 3.2 miles downstream from outlet works of Barker Reservoir. Datum of gage is 0.31 foot below mean sea level, datum of 1929, Galveston Houston supplementary adjustment and Houston supplementary adjustment of 1943. Prior to Sept. 24, 1945, staff gage at same site and datum.

Drainage area.- 310 square miles.

Records available.- August to September 1945.

Extremes.- Maximum discharge during period, 11,200 second-feet Aug. 29 (gage height, 81.23 feet); minimum not determined; minimum daily, 12 second-feet Aug. 26, 27.

Maximum stage known since about 1896, 85.6 feet, present site and datum, in December 1935 (adjusted to present site from floodmark half a mile downstream, on basis of slope of flood of Aug. 29, 1945), from information by local resident.

Remarks.- Records good except those for Aug. 25-28, which are fair. Flood flow partly regulated by Barker Reservoir (see above).

Discharge, in second-feet, of Buffalo Bayou near Addicks, Tex., August to September 1945

Day	Aug.	Sept.	Day	Aug.	Sept.	Day	Aug.	Sept.	Day	Aug.	Sept.
1	-	a7,720	9	-	a478	17	-	g46	25	a12	22
2	-	g5,080	10	-	a310	18	-	a44	26	a12	22
3	-	a3,460	11	-	g198	19	-	a42	27	a140	20
4	-	g2,550	12	-	132	20	-	a38	28	g1,960	25
5	-	g1,840	13	-	a90	21	-	a36	29	g10,000	53
6	-	g1,340	14	-	a70	22	-	a34	30	a10,700	80
7	-	g970	15	-	a59	23	-	a30	31	g9,700	-
8	-	g688	16	-	a50	24	-	28			

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
August 25-31	32,524	10,700	12	5,421	64,510
September	25,555	7,720	20	852	50,690

a No gage-height record; discharge computed on basis of occasional gage readings, weather records, and records for Barker Reservoir near Addicks,

g Computed from graph based on gage readings.

Buffalo Bayou at Houston, Tex.

Location.- Water-stage recorder, lat. 29°45'42", long. 95°23'52", at Waugh Drive Bridge in Houston, Harris County, half a mile upstream from Texas & New Orleans Railroad bridge and 3¼ miles upstream from Whiteoak Bayou. Datum of gage is 4.08 feet below mean sea level, datum of 1929.

Drainage area.- 362 square miles (revised).

Records available.- May 1936 to September 1945.

Extremes.- Maximum discharge during year, 10,900 second-feet Aug. 30 (gage height, 34.23 feet); minimum, 0.8 second-foot (regulated) May 16.

1936-45: Maximum discharge, that of Aug. 30, 1945; minimum not determined.

Maximum stage known, 54.4 feet, present site and datum, Dec. 9, 1935 (discharge, 40,000 second-feet, furnished by M. J. McCall, engineer for Harris County). Flood of May 31, 1929, reached a stage of 48.9 feet, present site and datum (discharge, 19,000 second-feet at bridge on Capitol Avenue, 2 miles downstream, from rating curve extended above 15,300 second-feet, stage-discharge relation materially affected by interference of bridge; furnished by W. E. White, assistant engineer, city of Houston).

Remarks.- Records good. No diversion above station.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	190	7.0	530	652	326	45	1,360	82	8.0	13	7.0	9,870
2	120	6.8	420	1,060	220	40	2,330	57	7.2	12	6.8	e,280
3	96	28	333	968	156	41	2,360	47	7.5	11	11	5,920
4	74	10	227	669	135	35	2,200	34	8.2	14	11	4,030
5	59	9.2	1,200	482	296	38	1,920	34	e.5	11	9.0	2,860
6	46	19	a3,460	340	742	35	1,740	29	8.5	12	11	2,060
7	35	18	a3,580	272	820	29	1,490	24	10	17	13	1,440
8	35	23	a3,140	260	615	26	1,080	24	10	13	11	966
9	151	38	a2,570	208	405	23	762	19	10	12	9.5	705
10	141	40	a2,100	150	240	22	530	17	12	9.8	94	530
11	94	34	a1,690	103	158	21	333	16	11	11	184	353
12	53	28	1,290	76	509	20	190	16	65	8.5	127	240
13	33	22	900	60	1,020	19	115	15	339	8.5	74	162
14	23	18	669	50	1,550	19	79	14	590	20	48	122
15	19	15	466	43	1,690	19	61	16	202	6.e	35	103
18	26	13	286	38	1,230	19	a48	26	79	7.5	24	94
17	19	12	172	34	820	19	a42	11	43	8.5	19	84
18	15	15	122	a1,180	514	17	a41	13	35	17	17	72
19	14	37	87	a2,700	a405	17	a43	12	19	20	17	62
20	12	15	67	4,650	260	16	a92	10	19	21	17	58
21	9.2	20	56	5,280	202	15	a530	239	18	13	16	53
22	9.0	43	47	4,520	202	17	a1,470	563	16	12	14	50
23	19	51	41	3,340	240	17	2,690	88	19	12	14	48
24	14	114	36	2,360	196	20	2,910	32	19	17	13	45
25	11	1,980	32	1,660	115	20	2,290	21	15	21	11	41
26	9.2	1,360	40	1,160	81	18	1,500	19	24	18	12	41
27	8.8	1,210	33	858	64	16	796	16	37	14	969	38
28	8.8	1,060	37	796	53	15	405	13	31	11	5,850	45
29	8.8	743	36	800	-	14	208	11	23	9.0	7,450	50
30	8.2	615	34	705	-	35	124	9.0	17	7.8	10,600	64
31	7.8	-	282	482	-	90	-	8.0	-	11	10,400	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff	
						Inches	Acre-feet
October	1,368.8	190	7.8	44.2	0.122	0.14	2,710
November	7,604.0	1,980	8.8	253	.699	.78	15,080
December	23,983	3,580	32	774	2.14	2.46	47,570
Calendar year 1944	176,695.3	5,570	4.4	483	1.33	18.15	350,500
January	35,954	5,280	34	1,160	3.20	3.69	71,310
February	13,264	1,690	53	474	1.31	1.36	26,310
March	797	90	14	25.7	.071	.08	1,580
April	29,739	2,910	41	991	2.74	3.06	58,990
May	1,535.0	563	8.0	49.5	.137	.1e	3,040
June	1,710.9	590	7.2	57.0	.157	.1e	3,390
July	399.4	21	6.8	12.9	.036	.04	792
August	36,094.3	10,600	6.e	1,164	3.22	3.71	71,590
September	38,484	9,870	38	1,283	3.54	3.95	76,330
Water year 1944-45	190,933.4	10,600	6.8	523	1.44	19.61	378,700

Peak discharge.- Dec. 6 (12 p.m.) 3,660 sec.-ft.; Jan. 21 (8 a.m.) 5,390 sec.-ft.; Apr. 24 (4 a.m.) 3,030 sec.-ft.; Aug. 30 (7 p.m.) 10,900 sec.-ft.

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

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Whiteoak Bayou at Houston, Tex.

Location.- Water-stage recorder, lat. 29°46'31", long. 95°23'54", at Yale Street Bridge, in Houston, Harris County, just downstream from Texas & New Orleans Railroad bridge and 2 miles upstream from Little Whiteoak Bayou. Datum of gage is 4.08 feet below mean sea level, datum of 1929.

Drainage area.- 92 square miles (revised).

Records available.- May 1936 to September 1945.

Extremes.- Maximum discharge during year, 4,330 second-feet Aug. 28 (gage height, 38.80 feet); minimum observed, 0.6 second-foot Aug. 20-27.

1936-45: Maximum discharge, 8,600 second-feet Nov. 2, 1943 (gage height, 42.45 feet); minimum, 0.2 second-foot Aug. 7, 8, 1940.

Maximum stage known, 51.5 feet, present datum, Dec. 9, 1935 (discharge, 14,750 second-feet, furnished by M. J. McCall, engineer for Harris County). Discharge for flood of May 31, 1929, 9,360 second-feet (gage height, 47.0 ±0.5 foot, present site and datum), computed on basis of current-meter measurement at stage 1 foot below crest, made at bridge 1 block downstream from gage; furnished by W. E. White, assistant engineer, city of Houston.

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

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	24	2.0	50	474	54	10	906	14	2.1	3.1	0.8	502
2	13	2.0	34	370	a36	8.9	1,770	9.8	1.9	3.0	.9	208
3	8.0	4.4	24	190	a36	9.2	1,050	8.6	2.1	2.3	.8	92
4	5.7	4.6	17	185	a43	a12	542	6.0	2.1	6.0	1.0	67
5	4.6	3.0	556	142	a310	a8.9	258	6.1	2.0	2.6	1.4	45
6	3.7	3.7	1,380	96	322	a8.0	a109	5.3	2.2	2.2	1.3	30
7	22	7.5	1,340	117	170	a7.2	a48	5.0	2.5	2.0	.8	20
8	8.6	5.3	769	91	87	6.5	a19	4.8	2.4	2.3	.7	15
9	5.0	3.7	461	58	53	6.3	a10	4.6	2.1	2.8	.7	11
10	3.4	3.4	a255	40	a43	6.1	a9.5	4.2	2.0	2.2	.7	8.6
11	2.6	3.7	a128	29	a36	5.9	a9.5	4.0	1.7	2.0	.7	8.3
12	2.4	3.4	a75	23	a358	6.1	a9.5	20	21	2.1	1.6	6.7
13	2.3	2.8	51	19	a288	5.9	9.5	10	333	3.2	.9	5.3
14	2.3	2.6	37	16	a200	5.7	9.5	6.5	1,280	5.0	.9	4.2
15	2.1	2.4	28	14	a142	6.1	7.6	6.9	258	2.4	4.4	4.0
16	2.1	2.4	21	12	91	6.5	6.7	6.6	47	2.0	5.0	4.2
17	2.2	2.6	16	10	65	5.9	5.7	4.2	21	1.8	1.0	3.8
18	2.1	3.2	13	758	53	5.7	f5.0	3.6	13	2.1	1.2	3.1
19	2.0	12	11	2,170	46	5.5	f1.9	3.1	7.0	3.1	.7	3.1
20	1.9	8.9	10	1,580	a36	5.0	48	2.8	5.5	5.4	.6	3.7
21	1.9	14	8.9	846	a33	5.1	571	45	4.4	1.3	.6	3.7
22	1.8	8.6	7.8	496	a29	4.6	865	148	3.7	1.2	.6	3.7
23	1.7	6.5	7.4	257	a25	4.2	833	22	20	1.1	.6	3.2
24	1.8	135	7.4	128	a21	4.4	500	10	16	1.1	.6	3.6
25	1.8	1,520	7.2	87	17	4.4	f244	6.5	15	1.0	.6	3.7
26	1.6	666	a8.9	63	14	4.0	f112	4.6	8.9	1.1	.6	3.4
27	1.5	383	a9.8	51	13	3.7	65	3.4	6.1	1.2	287	3.8
28	1.9	158	a10	322	11	3.2	43	3.0	5.7	1.1	3,740	6.5
29	2.1	86	a11	364	-	3.2	29	2.5	4.8	1.0	3,100	5.5
30	2.0	73	a12	150	-	12	21	2.2	3.6	.9	1,590	5.0
31	2.1	-	a189	86	-	38	-	2.1	-	1.4	882	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff	
						Inches	Acre-feet
October	140.2	24	1.5	4.52	0.049	0.06	278
November	3,133.7	1,520	2.0	104	1.13	1.27	6,220
December	5,555.4	1,380	7.2	179	1.95	2.25	11,020
Calendar year 1944	49,232.7	2,030	.7	135	1.47	19.90	97,670
January	9,244	2,170	10	298	3.24	3.74	18,340
February	2,632	358	11	94.0	1.02	1.06	5,220
March	228.2	38	3.2	7.36	.080	.09	453
April	8,117.4	1,770	1.9	271	2.95	3.28	16,100
May	387.4	148	2.1	12.5	.136	.16	768
June	2,096.8	1,280	1.7	69.9	.760	.85	4,160
July	70.0	6.0	.9	2.26	.025	.03	139
August	9,628.7	3,740	.6	311	3.38	3.89	19,100
September	1,087.1	502	3.1	36.2	.393	.44	2,160
Water year 1944-45	42,320.9	3,740	.6	116	1.26	17.12	83,960

Peak discharge.- Nov. 25 (3:30 a.m.) 1,960 sec.-ft.; Dec. 6 (10:30 p.m.) 1,560 sec.-ft.; Jan. 19 (12 m.) 2,380 sec.-ft.; Apr. 2 (6:30 a.m.) 2,040 sec.-ft.; June 14 (7 a.m.) 1,580 sec.-ft.; Aug. 28 (7 p.m.) 4,330 sec.-ft.

a No gage-height record; discharge computed on basis of recorded range in stage, comparison with similar rises at this station, and records for Buffalo Bayou and Brays Bayou at Houston.

f Computed on basis of partly estimated gage-height record.

Note.- Discharge Jan. 1-3, Feb. 6-9, July 17 to Aug. 26 computed from graph based on gage readings.

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Brays Bayou at Houston, Tex.

Location.- Water-stage recorder, lat. 29°42'06", long. 95°24'06", at Old Main Street Bridge in southwest section of Houston, Harris County, three-quarters of a mile upstream from Harris Gully and about 15 miles upstream from Buffalo Bayou. Datum of gage is 3.90 feet below mean sea level, datum of 1929.

Drainage area.- 100 square miles (revised).

Records available.- May 1936 to September 1945.

Extremes.- Maximum discharge during year, 5,590 second-feet Aug. 28 (gage height, 51.70 feet, affected by backwater); minimum, 1.0 second-foot Aug. 18, 24-26.

1936-45: Maximum discharge, 8,120 second-feet Nov. 2, 1943; maximum gage height, that of Aug. 28, 1945; minimum discharge, 0.1 second-foot Oct. 10-13, 1937.

Maximum discharge known, 11,095 second-feet May 31, 1929 (gage height, 50.4 feet, present site and datum), from current-meter measurement at Lawndale Avenue Bridge, about 12 miles below gage; furnished by W. E. White, assistant engineer, city of Houston.

Remarks.- Records good. No diversion above station.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	6.5	2.1	18	620	28	4.8	1,580	5.7	3.0	2.4	2.0	786
2	4.0	2.2	11	210	22	5.0	1,460	11	2.9	2.7	1.7	324
3	3.0	2.7	7.7	83	20	7.0	546	4.2	4.0	2.7	1.7	156
4	2.4	2.5	6.2	53	21	6.0	180	3.8	4.2	4.1	2.2	78
5	2.3	2.1	780	36	312	5.5	71	6.6	3.3	23	2.5	40
6	2.9	7.8	1,080	33	250	5.2	38	8.6	10	9.4	2.3	26
7	7.6	7.8	526	31	91	4.7	25	4.1	5.9	5.4	2.3	19
8	79	2.9	217	22	45	4.2	17	3.1	3.1	3.3	1.8	13
9	26	2.0	82	15	28	4.4	12	3.1	2.7	2.5	4.2	10
10	8.9	1.7	46	10	19	4.4	8.7	2.9	2.8	2.0	23	7.9
11	4.7	1.8	30	7.7	14	4.4	6.7	2.9	2.8	2.3	13	6.2
12	3.5	1.7	20	6.5	495	4.1	5.3	3.4	26	4.1	5.9	6.2
13	2.9	1.8	15	5.8	474	3.8	4.6	2.9	160	2.9	2.7	4.0
14	2.5	1.8	11	5.2	168	3.5	4.1	3.0	188	2.5	1.9	3.1
15	2.3	1.8	8.3	5.0	74	4.2	3.8	5.7	44	19	2.4	2.8
16	2.3	2.0	6.9	4.2	46	3.5	3.5	3.8	24	21	2.5	2.7
17	2.2	2.7	5.8	4.2	37	3.4	3.1	2.2	18	7.2	1.9	2.4
18	2.1	3.4	5.0	450	26	3.4	3.1	2.0	20	3.1	2.0	2.4
19	2.1	16	4.1	707	18	3.1	2.9	2.2	16	2.5	2.9	2.3
20	2.2	2.7	3.5	380	16	3.0	435	2.9	14	3.7	1.6	2.1
21	2.3	2.1	3.5	135	16	2.9	936	182	7.5	3.8	1.4	2.1
22	2.1	2.0	3.3	62	13	2.9	750	1,880	5.7	2.0	1.5	2.0
23	2.1	2.0	3.6	39	12	2.9	273	601	15	1.9	1.5	1.9
24	2.1	32	4.2	28	8.3	2.9	100	188	69	1.8	1.4	2.1
25	2.1	1,220	3.8	20	7.1	2.9	49	50	19	1.8	1.5	1.9
26	2.1	652	31	15	6.5	5.2	24	22	6.4	2.0	1.4	1.9
27	2.1	231	26	15	6.2	3.1	15	11	6.5	2.1	575	1.9
28	2.1	76	26	374	5.5	3.3	10	7.1	9.2	2.0	5,370	3.1
29	1.8	43	30	218	-	3.6	6.5	7.6	5.0	1.8	4,920	7.7
30	2.2	29	20	82	-	13	4.6	6.2	2.9	1.7	2,660	7.9
31	2.3	-	440	44	-	18	-	3.6	-	2.7	1,560	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff	
						Inches	Acre-feet
October	192.7	79	1.8	6.22	0.062	0.07	382
November	2,358.6	1,220	1.7	78.6	.786	.88	4,680
December	3,474.9	1,080	3.3	112	1.12	1.29	6,890
Calendar year 1944	48,664.2	3,040	1.7	133	1.33	18.09	96,520
January	3,720.6	707	4.2	120	1.20	1.38	7,380
February	2,278.6	495	5.5	81.4	.814	.85	4,520
March	148.3	18	2.9	4.78	.048	.06	294
April	6,577.9	1,580	2.9	219	2.19	2.45	13,050
May	3,042.6	1,880	2.0	98.1	.981	1.13	6,030
June	700.9	188	2.7	23.4	.234	.26	1,390
July	149.4	23	1.7	4.82	.048	.06	296
August	15,174.2	5,370	1.4	489	4.89	5.64	30,100
September	1,526.6	786	1.9	50.9	.509	.57	3,030
Water year 1944-45	39,345.3	5,370	1.4	108	1.08	14.64	78,040

Peak discharge.- Apr. 1 (2:30 p.m.) 2,690 sec.-ft.; May 22 (2:30 a.m.) 2,720 sec.-ft.; Aug. 28 (10 p.m.) 5,590 sec.-ft.

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Oyster Creek near Angleton, Tex.

Location.- Water-stage recorder, lat. 29°09'25", long. 95°28'35", at bridge or State Highway 35, 2¾ miles west of Angleton, Brazoria County, 4.0 miles upstream from Missouri Pacific Railroad bridge, 4½ miles downstream from another Missouri Pacific Railroad bridge, and about 45 miles upstream from mouth at Gulf of Mexico. Datum of gage is 1.31 feet below mean sea level, datum of 1929.

Records available.- October 1944 to September 1945.

Extremes.- Maximum discharge during period, 935 second-feet Apr. 2 (gage height, 20.25 feet); minimum, 16 second-feet May 12, 13.

Flood of December 1913 reached a stage of about 32 feet, from information by State Highway Department; flood of Dec. 5, 1940, reached a stage of 30.7 feet, from levels to floodmark on bridge to which gage is attached. At extreme high stages the Brazos River overflows into Oyster Creek above this station and there may be some relation between the stage of Brazos River at East Columbia and the stage at this station.

Remarks.- Records good. Diversions above station for irrigation. A large part of flow at this station is water diverted from Brazos River for industrial use below station.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	-	29	36	207	28	30	515	305	32	36	35	392
2	-	29	36	188	30	29	920	252	30	37	35	325
3	-	29	36	156	33	28	866	181	29	41	35	279
4	-	30	36	137	34	28	764	119	29	42	35	239
5	-	31	42	116	48	27	680	72	29	41	35	213
6	-	33	137	100	71	27	634	46	29	39	36	200
7	-	35	162	85	69	25	572	35	29	38	38	194
8	-	36	131	72	67	25	492	29	30	37	40	194
9	-	35	100	62	68	24	399	23	30	36	40	188
10	-	35	78	54	66	23	318	20	29	36	39	188
11	41	35	63	49	62	22	246	18	31	35	39	188
12	39	35	52	44	68	22	188	17	34	35	40	181
13	37	35	44	40	81	24	140	17	37	35	40	175
14	36	35	39	36	74	23	103	18	38	37	40	162
15	35	35	36	34	67	22	72	18	38	46	37	153
16	32	35	36	32	63	22	56	19	38	67	37	137
17	32	35	35	31	59	21	46	20	37	67	37	122
18	32	36	33	32	54	21	41	21	36	46	37	106
19	32	36	31	44	49	21	37	25	36	37	38	88
20	32	36	30	42	46	22	36	30	36	35	37	72
21	32	36	28	37	43	21	51	35	35	34	36	59
22	32	36	26	37	40	20	68	97	37	34	36	48
23	32	36	25	36	37	20	65	213	38	34	36	40
24	32	36	24	34	35	19	54	175	38	34	35	34
25	32	36	23	32	34	19	44	112	37	35	35	30
26	31	36	29	30	33	19	37	73	37	35	40	30
27	31	36	44	27	32	19	68	52	37	35	200	30
28	31	36	49	26	31	19	153	41	36	35	792	30
29	30	36	64	26	-	18	233	37	36	34	757	45
30	30	36	64	25	-	18	299	35	36	35	602	128
31	29	-	109	26	-	22	-	34	-	35	488	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October 11-31	690	41	29	32.9	1,370
November	1,035	36	29	34.5	2,050
December	1,678	162	23	54.1	3,330
Calendar year	-	-	-	-	-
January	1,897	207	25	61.2	3,760
February	1,422	81	28	50.8	2,820
March	700	30	18	22.6	1,390
April	8,197	920	36	273	16,260
May	2,189	305	17	70.6	4,340
June	1,024	38	29	34.1	2,030
July	1,203	67	34	38.8	2,390
August	3,807	792	35	123	7,550
September	4,270	392	30	142	8,470
The period	-	-	-	-	55,760

Note.- Discharge Nov. 14 to Dec. 14 computed from graph based on once-daily staff-gage readings; Sept. 17-25 from graph based on several staff-gage readings.

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

BRAZOS RIVER BASIN

Double Mountain Fork Brazos River at Lubbock, Tex.

Location.- Water-stage recorder and masonry control, lat. 33°35'05", long. 101°49'40", in Mackenzie State Park in Lubbock, Lubbock County, 1.9 miles downstream from Yellowhouse Creek. Datum of gage is 3,132.7 feet above mean sea level, datum of 1929.

Records available.- September 1939 to September 1945.

Extremes.- No flow during year.

1929-45: Maximum discharge, 892 second-feet June 6, 1941 (gage height, 6.73 feet), from rating curve extended above 120 second-feet on basis of slope-area determination at gage height 6.72 feet; no flow most of time.

Remarks.- Station is located in small pool (capacity, 29.5 acre-feet). Figures of daily discharge represent inflow into pool computed on basis of outflow and change in contents with no correction for evaporation, transpiration, or seepage. Several dams form small pools above station which affect low flow.

Monthly discharge, in second-feet, of Double Mountain Fork Brazos River at Lubbock, Tex., water year October 1944 to September 1945

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October		0	0	0	0
November		0	0	0	0
December		0	0	0	0
Calendar year 1944		81	0	.40	293
January		0	0	0	0
February		0	0	0	0
March		0	0	0	0
April		0	0	0	0
May		0	0	0	0
June		0	0	0	0
July		0	0	0	0
August		0	0	0	0
September		0	0	0	0
Water year 1944-45		0	0	0	0

Double Mountain Fork Brazos River near Aspermont, Tex.

Location.- Water-stage recorder, lat. 33°00', long. 100°11', at bridge on U. S. Highway 83, 8 miles downstream from Mountain Creek and 10 miles south of Aspermont, Stonewall County.

Drainage area.- 7,979 square miles, of which 6,470 square miles is probably noncontributing.

Records available.- December 1923 to September 1934, June 1939 to September 1945.

Average discharge.- 16 years (1924-34, 1939-45), 181 second-feet.

Extremes.- Maximum discharge during year, 13,000 second-feet July 10 (gage height, 7.58 feet); no flow at times.

1924-34, 1939-45: Maximum discharge, 52,000 second-feet Oct. 15, 1926 (gage height, 18.14 feet, from floodmark), by slope-area method; no flow at times.

Remarks.- Records poor. Daily discharge published only to show distribution of runoff. No large diversion above station.

Cooperation.- Seven discharge measurements furnished by Bureau of Reclamation.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	6.6	0	2.2	8.3	g1.1	1.2	8.4	0.2	0	0.2	0.7	4.6
2	2.8	0	2.1	7.2	1.1	1.4	8.1	.2	0	.2	.6	.9
3	502	0	2.0	6.2	1.0	1.0	7.9	0	0	.2	.4	0
4	135	0	8.7	5.8	.6	.7	7.6	.2	4.0	.3	.4	0
5	41	0	162	5.2	.4	.4	7.3	.1	2,200	.2	.3	0
6	12	0	309	5.0	.3	.2	7.1	0	198	.2	.2	0
7	6.9	19	218	4.2	.1	0	6.8	0	23	.4	.2	0
8	15	6.1	126	3.2	.1	0	6.6	0	13	46	.2	0
9	6.2	.7	76	2.6	0	0	6.3	7.0	9.0	68	30	0
10	2.7	.4	48	2.2	0	.2	6.0	2.2	8.3	5,540	23	0
11	1.5	.4	32	1.8	0	.2	5.8	10	16	4,330	8.2	0
12	1.1	.4	25	1.6	.2	3.5	5.5	3.8	1,070	666	2.7	0
13	.7	.3	18	1.5	.2	13	5.3	.3	760	1,110	.8	0
14	.5	.3	14	1.3	.1	2.2	5.0	.1	f92	670	.2	0
15	.4	.3	12	1.1	0	143	47	0	f29	724	4.5	0
16	.4	140	9.9	1.0	0	17	14	.1	20	f431	3.9	0
17	.2	74	8.3	2.6	0	13	8.3	.1	9.9	f225	1.4	0
18	.1	42	7.2	4.8	0	53	3.8	0	6.9	f134	3.3	0
19	.1	24	5.8	6.2	.2	201	1.4	0	4.0	92	6.4	0
20	0	12	5.2	6.6	.6	80	.4	0	3.8	56	1.4	0
21	0	40	3.8	5.0	10	32	g19	0	5.5	40	.1	0
22	0	44	3.2	4.0	5.1	12	g5.2	0	7.2	28	0	0
23	0	25	3.0	3.0	1.4	11	g3.2	0	12	20	0	0
24	0	18	2.8	2.7	.9	11	2.4	0	f5.6	15	0	0
25	0	18	2.7	2.4	.5	10	.8	22	1.2	11	0	.1
26	0	13	3.5	2.2	.4	10	.4	125	.4	8.0	0	0
27	0	9.9	6.6	2.1	.9	9.7	.4	69	.2	7.2	0	0
28	0	4.8	16	1.8	1.1	9.4	.3	20	.2	6.6	0	944
29	0	2.8	16	1.6	-	9.2	.3	5.0	.1	5.5	0	1,190
30	0	2.4	13	1.5	-	8.9	.2	1.0	0	2.4	7.2	465
31	0	-	11	g1.3	-	8.7	-	.2	-	1.2	5.4	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	735.2	502	0	23.7	1,460
November	497.8	140	0	16.6	987
December	1,173.0	309	2.0	37.8	2,330
Calendar year 1944	17,571.4	4,140	0	48.0	34,850
January	106.0	8.3	1.0	3.42	210
February	26.3	10	0	.94	52
March	662.9	201	0	21.4	1,310
April	200.8	47	.2	6.69	398
May	266.5	125	0	8.60	529
June	4,499.3	2,200	0	150	8,920
July	14,238.6	5,540	.2	459	28,240
August	101.5	30	0	3.27	201
September	2,604.6	1,190	0	86.8	5,170
Water year 1944-45	25,112.5	5,540	0	68.8	49,810

Peak discharge.- June 5 (9 a.m.) 9,720 sec.-ft.; June 12 (8 p.m.) 5,660 sec.-ft.; July 10 (9 p.m.) 13,000 sec.-ft.; July 13 (1 p.m.) 4,160 sec.-ft.; Sept. 28 (10 p.m.) 3,710 sec.-ft.

f Computed on basis of partly estimated gage-height record.

g Computed from graph based on gage readings.

Note.- No gage-height record Jan. 23-30, Feb. 2, Mar. 23 to Apr. 20, Apr. 27-30; discharge computed on basis of recorded range in stage, weather records, records for nearby stations, and by interpolation.

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Brazos River at Seymour, Tex.

Location.- Water-stage recorder, lat. 33°34', long. 99°16', at bridge on U. S. Highways 277 and 283, three-quarters of a mile upstream from Wichita Valley Railway bridge and 1 mile southwest of courthouse in Seymour, Baylor County. Datum of gage is 1,258.7 feet above mean sea level (Texas State Highway bench mark).

Drainage area.- 14,490 square miles, of which 9,240 square miles is probably noncontributing.

Records available.- November 1923 to September 1945.

Average discharge.- 21 years (1924-45), 472 second-feet.

Extremes.- Maximum discharge during year, 9,780 second-feet July 12, 14 (gage height, 5.96 feet); no flow at times.
1923-45: Maximum discharge, 95,400 second-feet Oct. 16, 1926 (gage height, 15.16 feet, from floodmarks), by slope-area method; no flow at times.
Maximum stage known, about 21.0 feet, sometime prior to 1916.

Remarks.- Records fair. No large diversion above station.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	317	0	23	37	30	83	42	38	0	13	20	3.6
2	160	0	21	38	30	63	40	24	0	8.9	19	6.5
3	246	0	20	38	29	39	40	14	0	6.5	17	4.0
4	160	0	21	32	26	39	41	13	0	7.4	15	3.6
5	594	0	30	28	23	39	35	11	0	15	13	1.8
6	341	0	135	28	22	36	25	8.0	353	164	14	1.3
7	164	99	528	25	19	30	21	5.0	655	90	53	1.0
8	112	115	578	23	18	27	19	4.2	597	852	42	0
9	72	99	384	21	16	29	17	a4.3	402	396	16	0
10	43	81	266	19	16	27	17	a4.4	194	915	14	0
11	29	49	202	18	14	321	26	4.5	168	3,410	14	0
12	19	31	160	17	14	309	54	43	572	7,920	14	0
13	14	23	115	16	14	61	107	35	2,140	2,040	13	0
14	12	16	88	15	14	40	53	11	2,660	5,640	11	0
15	8.0	13	66	14	14	846	44	a3.2	731	3,940	9.5	0
16	5.2	16	54	13	14	483	61	a1.6	391	1,810	40	0
17	3.2	20	44	26	14	292	35	a1.1	250	1,640	54	0
18	1.7	36	37	194	14	302	26	a1.0	150	640	18	0
19	1.3	f148	32	129	14	254	23	a.9	92	398	16	0
20	1.0	f198	29	61	19	308	31	a.8	57	250	12	0
21	.6	129	24	56	38	335	63	a.8	35	164	11	0
22	0	112	23	49	72	305	74	a.7	19	118	7.1	0
23	0	72	21	47	36	185	68	a.3	18	88	6.2	0
24	0	53	19	44	23	99	177	0	60	70	6.2	0
25	0	47	19	39	28	63	85	0	24	59	6.5	24
26	0	42	18	35	32	50	56	0	14	50	3.8	46
27	0	42	23	36	36	42	36	0	11	42	3.8	527
28	0	39	32	40	65	41	35	0	7.7	38	1.9	521
29	0	32	38	41	-	41	21	0	233	31	2.0	1,960
30	0	27	35	35	-	68	20	0	49	24	4.0	2,320
31	0	-	37	32	-	43	-	0	-	24	3.8	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	2,304.0	594	0	74.3	4,570
November	1,539	198	0	51.3	3,050
December	3,122	578	18	101	6,190
Calendar year 1944	38,492.1	3,380	0	105	76,330
January	1,246	194	13	40.2	2,470
February	704	72	14	25.1	1,400
March	4,900	846	27	158	9,720
April	1,392	177	17	46.4	2,760
May	229.8	43	0	7.41	456
June	9,882.7	2,660	0	329	19,600
July	30,863.8	7,920	6.5	996	61,220
August	480.8	54	1.9	15.5	954
September	5,419.8	2,320	0	181	10,750
Water year 1944-45	62,083.9	7,920	0	170	123,100

Peak discharge.- June 13 (11:30 p.m.) 5,640 sec.-ft.; July 12 (7:30 a.m.) 9,780 sec.-ft.; July 14 (5:30 p.m.) 9,780 sec.-ft.; Sept. 30 (1 a.m.) 4,480 sec.-ft.

a No gage-height record; discharge computed on basis of weather records and records for nearby stations.

f Computed on basis of partly estimated gage-height record.

Note.- Discharge Feb. 10 to Mar. 20, May 4-8, June 16-22, July 19 to Sept. 7 computed from graph based on one or more daily wire-weight gage readings.

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Brazos River near South Bend, Tex.

Location.- Water-stage recorder and wire-weight gage, lat. 33°01'30", long. 98°38'50", at bridge on State Highway 67, 0.3 mile upstream from Wichita Falls & Southern Railroad bridge, 1.6 miles downstream from Clear Fork Brazos River, and 2.0 miles northeast of South Bend, Young County. Datum of gage is 1,003.0 feet above mean sea level, datum of 1929.

Drainage area.- 21,600 square miles, of which 9,240 square miles is probably noncontributing.

Records available.- September 1938 to September 1945.

Extremes.- Maximum discharge during year, 13,100 second-feet Mar. 20 (gage height, 11.17 feet); minimum, 0.1 second-foot Sept. 20.

1938-45: Maximum discharge, 87,400 second-feet May 4, 1941 (gage height, 27.35 feet); no flow at times.

Maximum stage known, 36.2 feet in 1876, from information by Texas State Highway Department and Corps of Engineers, U. S. Army.

Remarks.- Records fair. Wire-weight gage read once or twice daily and readings used for major portion of year when water-stage recorder record was not available. Flow partly regulated by reservoirs in Elm Creek Basin (see p. 96), and Lakes Sweetwater and Trammel in Sweetwater Creek Basin, which have a combined capacity of about 106,000 acre-feet. Many small diversions above station for municipal supply and oil field operations. Records of water analyses for water year 1945 are given in Water-Supply Paper 1030.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	308	19	74	96	67	152	580	260	90	92	70	7.0
2	210	18	68	90	64	217	792	152	62	225	58	5.3
3	185	16	66	74	55	352	457	102	47	789	49	4.3
4	6,910	16	89	66	52	329	220	84	40	205	43	3.9
5	7,280	16	86	68	48	207	140	75	221	361	36	3.3
6	3,370	17	84	81	56	146	104	64	756	4,280	30	3.0
7	3,040	67	92	74	46	150	88	55	231	1,430	28	2.5
8	1,940	70	102	70	42	281	77	47	353	959	26	2.2
9	657	47	262	64	43	276	74	47	641	2,460	28	2.2
10	373	35	415	58	30	217	70	191	1,450	2,600	142	1.9
11	260	67	350	61	31	146	1,020	850	1,970	3,560	932	1.7
12	191	62	274	52	60	361	4,130	1,520	3,010	4,910	1,220	1.2
13	146	61	223	48	46	255	4,440	645	4,070	8,880	362	.8
14	115	48	182	47	41	237	4,900	750	1,490	5,690	147	.8
15	100	39	149	43	42	275	3,740	458	3,950	7,490	86	.4
16	108	43	120	46	38	817	3,280	292	1,340	6,390	64	.3
17	92	43	100	47	33	860	1,450	194	930	2,690	52	.4
18	79	64	84	60	33	824	640	138	913	2,030	98	.4
19	64	84	79	64	36	6,940	464	102	580	1,190	74	.4
20	54	100	74	104	54	9,950	330	83	397	848	79	.2
21	46	152	55	179	51	3,660	257	64	319	645	51	.3
22	41	204	55	146	85	1,790	264	55	330	474	35	.4
23	36	204	51	96	176	1,360	530	58	226	358	24	.4
24	33	191	51	81	110	762	637	54	207	285	22	.2
25	30	190	47	75	157	494	1,260	43	191	233	28	.2
26	29	152	60	74	118	338	502	38	271	191	23	3.0
27	28	149	63	70	128	257	315	34	230	152	16	1.0
28	25	108	99	64	132	197	504	30	163	130	10	1.2
29	23	86	187	68	-	160	274	33	113	110	12	336
30	22	81	190	66	-	362	428	58	92	96	11	1,460
31	19	-	118	66	-	1,230	-	52	-	77	8.0	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	25,844	7,280	19	834	51,260
November	2,451	204	16	81.7	4,860
December	3,969	415	47	128	7,870
Calendar year 1944	118,150.7	7,280	4.0	323	234,300
January	2,298	179	43	74.1	4,560
February	1,874	176	30	66.9	3,720
March	33,604	9,950	146	1,084	66,650
April	31,967	4,900	70	1,066	63,410
May	6,628	1,520	30	214	13,150
June	24,683	4,070	40	823	48,960
July	59,850	8,880	77	1,931	118,700
August	3,864.0	1,220	8.0	125	7,660
September	1,844.9	1,460	.2	61.5	3,660
Water year 1944-45	198,876.9	9,950	.2	546	394,500

Peak discharge.- Oct. 4 (11 p.m.) 9,780 sec.-ft.; Mar. 20 (3 a.m.) 13,100 sec.-ft.; July 6 (2 p.m.) 6,240 sec.-ft.; July 13 (3:30 p.m.) 9,540 sec.-ft.; July 15 (11:30 p.m.) 10,500 sec.-ft.

Note.- Discharge, except for Oct. 4-10, Dec. 10, 11, Feb. 26, 28, Mar. 16 to Apr. 17, Apr. 20, 21, 25, 27, 28, May 11, 12, June 11-17, July 6-18, Aug. 19 computed from graph based on once- or twice-daily wire-weight gage readings.

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Possum Kingdom Reservoir near Graford, Tex.

Location.- Mercury U-tube gage, lat. 32°52', long. 98°26', in powerhouse at dam on Brazos River, 2.6 miles upstream from Loving Creek and 11.3 miles southwest of Graford, Palo Pinto County. Datum of gage is 0.10 foot above mean sea level, datum of 1929 (levels by Brazos River Conservation and Reclamation District).

Drainage area.- 22,550 square miles, of which 9,240 square miles is probably noncontributing.

Records available.- March 1941 to September 1945.

Extremes.- Maximum contents observed during year, 670,800 acre-feet July 20-23 (gage height, 997.1 feet); minimum observed, 449,100 acre-feet Mar. 8-11 (gage height, 983.0 feet).

1941-45: Maximum contents observed, 743,700 acre-feet (revised) Oct. 5, 1941 (gage height, 1,001.0 feet); minimum observed, 378,900 acre-feet (revised) Feb. 18-27, 1944 (gage height, 977.3 feet).

Remarks.- Reservoir is formed by reinforced concrete dam of flat slab deck, massive buttress type, with nine roof-weir (modified bear-trap) type gates, two bulkhead sections, and earthen dike section. Dam completed and storage began Mar. 21, 1941. Total capacity, 724,700 acre-feet (revised) (gage height, 1,000.0 feet, top of closed roof-weir gages). Usable capacity, 698,900 acre-feet (revised) between gage heights 911.5 feet (sill of powerhouse penstock) and 1,000.0 feet (top of closed roof-weir gates). Water below gage height 911.5 feet can be withdrawn through high-pressure outlet down to gage height 874.8 feet. Figures given herein represent total contents. Water used for power development. Records of water analyses for water year 1945 are given in Water-Supply Paper 1030. Water samples are collected immediately below dam.

Cooperation.- Records of daily gage height and capacity table furnished by Brazos River Conservation and Reclamation District.

Capacity table, revised (elevation, in feet, and contents, in acre-feet)
Prepared by Texas Board of Water Engineers and Brazos River Conservation and Reclamation District from surveys and maps of the district.

872	0	900	11,910	960	216,600
875	255	910	23,680	970	301,800
880	864	920	41,170	980	410,400
885	2,300	930	66,390	990	548,000
890	4,540	940	101,900	1,001	743,700
895	7,610	950	151,100		

Monthly gage height and contents, water year October 1944 to September 1945

Date	Gage height (feet)†	Contents (acre-feet)	Change in contents during month (acre-feet)
Sept. 30	985.5	‡483,000	-
Oct. 31	987.6	512,600	+29,600
Nov. 30	986.7	499,900	-12,700
Dec. 31	985.7	485,800	-14,100
Calendar year 1944	-	-	‡100,300
Jan. 31	984.5	469,200	-16,600
Feb. 28	983.5	455,800	-13,400
Mar. 31	988.5	525,400	+69,600
Apr. 30	992.5	588,500	+63,100
May 31	991.6	573,600	-14,900
June 30	991.1	565,600	-8,000
July 31	996.3	656,400	+90,800
Aug. 31	994.0	615,000	-41,400
Sept. 30	992.7	591,900	-23,100
Water year 1944-45	-	-	108,900

† Gage height at 1 a.m., Oct. 1 to Nov. 8 and at 12 p.m. thereafter.
‡ Computed on basis of revised capacity table.

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Brazos River near Palo Pinto, Tex.

Location.- Water-stage recorder, lat. 32°51'45", long. 98°18'10", at bridge on Palo Pinto-Graford highway, 300 feet downstream from Dark Valley Creek, 6½ miles north of Palo Pinto, Palo Pinto County, and 20 miles downstream from Possum Kingdom Dam. Datum of gage is 831.23 feet above mean sea level, datum of 1929.

Drainage area.- 22,760 square miles, of which 9,240 square miles is probably noncontributing.

Records available.- November 1933 to September 1945. January 1924 to November 1933 at site near Mineral Wells.

Average discharge.- 11 years (1934-45), 1,313 second-feet.

Extremes (regulated).- Maximum discharge during year, 10,700 second-feet July 10 (gage height, 7.50 feet); minimum not determined.

1933-45: Maximum discharge, 64,900 second-feet May 20, 1935, from rating curve extended above 32,000 second-feet; maximum gage height, 17.42 feet Oct. 17, 1942; no flow at times.

Maximum stage known was reached by flood of 1876, according to data of Corps of Engineers, U. S. Army, and was several feet higher than any subsequent flood. A stage of about 24.0 feet was reached in June 1930, from information by local residents.

Remarks.- Records good except those for period of no gage-height record, which are poor. Flow largely regulated by Possum Kingdom Reservoir on Brazos River (see preceding page) and several smaller reservoirs above Nugent in Clear Fork Basin, having a combined capacity of 831,000 acre-feet. Many small diversions above station for irrigation, municipal supply, and oil-field operation.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	68	764	170	90	316	1,320	769	126	272	200	800	320
2	83	870	369	68	467	1,220	688	395	633	279		
3	587	1,090	268	448	368	830	541	473	309	591		
4	641	772	340	1,030	158	321	625	273	87	424		
5	251	500	977	1,560	395	282	408	299	491	299		
6	671	271	1,040	924	586	1,160	185	199	886	834		
7	566	770	788	511	499	642	152	559	1,060	505		
8	134	695	533	103	534	603	198	659	1,180	360		
9	68	424	300	294	555	427	154	1,330	1,280	229		
10	51	133	161	394	377	264	643	1,940	577	3,970		
11	61	197	58	408	312	125	1,040	1,660	631	920		
12	54	92	403	499	545	144	1,260	629	1,120	415		
13	48	56	538	404	751	442	1,460	329	612	655	511	
14	113	330	459	154	640	1,080	1,000	217	747	572	1,160	
15	72	562	541	71	387	2,090	587	1,020	1,140	310	480	
16	50	483	558	354	554	702	376	792	934	220	61	
17	65	520	389	718	446	506	471	586	560	1,630	500	
18	216	614	141	1,150	251	643	459	392	114	1,120		
19	576	390	538	832	178	1,340	322	448	600	711		
20	539	106	526	442	834	695	411	291		965		
21	456	64	514	f290	594	492	766	452		847		
22	344	167	486	110	161	492	555	363		447		
23	108	148	212	213	119	854	240	103		350		
24	460	363	219	316	116	676	849	511		1,070		
25	632	456	75	256	121	241	471	642		1,110		
26	849	117	48	260	272	155	490	384		1,410		
27	798	69	177	247	1,380	287	228	164		1,390		
28	532	147	443	302	1,300	471	600	76		1,180		
29	372	320	601	72	-	1,280	233	547		731		
30	158	161	659	83	-	3,920	100	468		413		
31	796	-	300	674	-	843	-	102	-	1,330		-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	10,419	849	48	336	20,670
November	11,651	1,090	56	388	23,110
December	12,831	1,040	48	414	25,450
Calendar year 1944	89,467	2,090	48	244	177,500
January	13,277	1,560	68	428	26,330
February	13,216	1,380	116	472	26,210
March	24,547	3,920	125	792	48,690
April	16,281	1,460	100	543	32,290
May	16,429	1,940	76	530	32,590
June	19,833	-	87	661	39,340
July	25,487	3,970	200	822	50,550
August	19,312	-	61	623	38,300
September	9,600	-	-	320	19,040
Water year 1944-45	192,883	3,970	48	528	382,600

f Computed on basis of partly estimated gage-height record.

Note.- No gage-height record Feb. 4, June 19 to July 1, Aug. 1-12, Aug. 17 to Sept. 30; discharge computed on basis of weather records, records of water released from Possum Kingdom Reservoir, and records for stations downstream.

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Brazos River near Glen Rose, Tex.

Location.- Water-stage recorder, lat. 32°15'40", long. 97°41'50", a quarter of a mile upstream from bridge on U. S. Highway 67, 2 miles upstream from Paluxy Creek, and 4 miles northeast of Glen Rose, Somervell County. Datum of gage is 567.83 feet above mean sea level, datum of 1929.

Drainage area.- 24,840 square miles, of which 9,240 square miles is probably noncontributing.

Records available.- October 1923 to September 1945.

Average discharge.- 22 years, 1,711 second-feet.

Extremes.- Maximum discharge during year, 39,200 second-feet Mar. 30 (gage height, 13.85 feet); minimum, 79 second-feet (regulated) Oct. 20, 21, 23 (gage height, 0.75 foot).

1923-45: Maximum discharge, 97,600 second-feet May 18, 1935 (gage height, 23.68 feet), from rating curve extended above 68,000 second-feet; no flow at times.

Maximum stage known, about 30.0 feet May 8 or 9, 1922, from information by local residents.

Remarks.- Records good except those above 4,000 second-feet and those for periods of no gage-height record, which are fair. Flow partly regulated by Possum Kingdom Reservoir (see p. 79) and several smaller reservoirs. Many small diversions above station for irrigation, municipal supply, and oil-field operation.

Rating table, water year 1944-45 (gage height, in feet, and discharge, in second-feet)

0.7	60	1.4	524	5.0	6,200
.8	98	1.8	954	6.0	8,800
.9	146	2.2	1,460	7.0	12,100
1.0	203	3.0	2,570	9.0	19,500
1.2	344	4.0	4,100	10.3	24,500

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	370	534	262	989	449	2,710	14,000	1,230	306	943	a980	446
2	262	378	197	897	370	2,860	5,670	1,000	392	920	a540	564
3	276	329	157	709	298	2,500	4,960	741	554	886	g908	574
4	458	643	212	554	262	2,080	3,720	594	378	688	g1,050	584
5	351	709	291	404	262	1,800	2,170	524	306	574	g818	468
6	752	908	268	314	458	1,760	1,630	666	554	3,020	g688	291
7	785	977	439	459	486	1,910	1,470	730	413	2,410	g943	229
8	681	666	507	1,230	378	1,080	1,240	604	336	a1,050	g829	192
9	387	544	1,090	1,040	306	1,270	1,060	564	314	a544	g635	193
10	496	401	931	698	564	1,240	920	564	796	a19,500	g730	458
11	534	666	677	574	458	1,040	1,180	980	989	a15,700	966	496
12	344	624	574	404	914	1,040	1,350	1,710	2,010	a6,680	897	449
13	242	486	477	306	2,220	1,360	1,800	2,940	1,880	a4,100	829	276
14	186	378	378	378	2,570	1,080	2,080	2,710	1,970	1,920	863	192
15	146	321	314	430	2,220	1,170	1,840	1,740	2,500	1,180	656	241
16	122	262	255	468	1,630	3,110	2,010	1,200	1,330	863	477	515
17	103	255	458	550	1,110	4,300	1,700	1,020	908	977	477	458
18	94	216	458	894	931	2,320	1,330	989	977	763	908	353
19	87	392	524	1,220	1,040	1,660	1,110	1,230	1,190	574	534	276
20	79	458	524	1,720	1,430	3,020	886	943	954	777	314	242
21	83	534	458	1,760	15,900	5,320	1,180	763	614	1,440	308	210
22	90	524	370	1,410	4,750	2,800	3,080	785	413	774	544	174
23	83	449	329	966	2,710	1,620	2,860	1,050	353	741	477	229
24	355	449	449	752	1,840	1,180	3,460	1,010	421	886	361	306
25	404	604	496	624	1,280	1,000	2,780	807	645	709	624	336
26	329	351	544	496	1,000	1,010	2,780	604	677	534	635	396
27	291	378	468	413	2,110	1,060	2,640	430	524	458	604	743
28	222	336	468	439	3,700	763	1,550	574	378	874	534	1,180
29	510	496	544	468	-	970	1,270	594	463	1,070	468	458
30	796	370	843	404	-	24,300	1,220	524	1,070	a1,040	329	563
31	666	-	931	396	-	11,900	-	370	-	a1,010	276	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	10,584	796	79	341	20,990
November	14,638	977	216	488	29,030
December	14,893	1,090	157	480	29,540
Calendar year 1944	224,456	13,600	51	613	445,200
January	22,366	1,760	306	721	44,360
February	51,646	15,900	262	1,844	102,400
March	91,233	24,300	763	2,943	181,000
April	74,946	14,000	886	2,498	148,700
May	30,190	2,940	370	974	59,880
June	24,615	2,500	306	820	48,820
July	73,605	19,500	458	2,374	146,000
August	20,202	1,050	276	652	40,070
September	12,092	1,180	174	403	23,980
Water year 1944-45	441,010	24,300	79	1,208	874,800

Peak discharge.- Mar. 30 (10:45 a.m.) 39,200 sec.-ft.; Apr. 1 (1:30 p.m.) 19,900 sec.-ft.; July 10 (about 5 p.m.) 34,000 sec.-ft.

a No gage-height record; discharge computed on basis of weather records and records for stations near Palo Pinto and near Whitney.

g Computed from graph based on once-daily-wire-weight gage readings.

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Brazos River near Whitney, Tex.

Location.- Wire-weight gage, lat. 31°54'10", long. 97°23'05", at bridge on State Highway 22, 1.8 miles upstream from Towash Creek and 5 miles southwest of Whitney, Hill County. Datum of gage is 432.06 feet above mean sea level, datum of 1929 (Brazos River Conservation and Reclamation District bench mark).

Drainage area.- 26,090 square miles, of which 9,240 square miles is probably noncontributing.

Records available.- October 1938 to September 1945.

Extremes.- Maximum discharge during year, 49,800 second-feet Mar. 30 (gage height, 24.51 feet); minimum observed, 99 second-feet Oct. 22, 23 (gage height, 5.23 feet).
1938-45: Maximum discharge, 66,400 second-feet May 1, 1944 (gage height, 29.3 feet, from floodmark); minimum observed, 2.0 second-feet Oct. 31, Nov. 1, 1939.
Maximum stage known, 46 feet May 9, 1922, from information by local residents.

Remarks.- Records good. Gage read twice daily, oftener during high stages. Flow partly regulated by Possum Kingdom Reservoir (see p. 79) and several smaller reservoirs. Many small diversions above station for irrigation, municipal supply, and oil-field operations.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	423	748	476	1,200	642	4,020	25,800	2,020	330	986	1,340	385
2	496	590	380	1,240	650	4,840	15,300	1,960	282	1,060	1,080	385
3	314	418	277	1,200	620	7,480	9,300	1,540	248	1,060	757	642
4	2,020	346	262	920	496	4,100	8,000	1,190	545	850	560	635
5	1,450	392	718	774	444	3,780	4,840	976	463	710	1,180	665
6	666	688	612	635	411	4,100	3,480	868	252	6,230	1,010	628
7	650	859	508	502	489	3,940	2,840	1,960	336	5,380	1,170	418
8	718	1,000	688	430	628	2,900	2,530	967	309	3,400	1,240	314
9	808	658	642	1,270	515	2,080	2,240	816	252	1,540	1,040	282
10	489	575	1,200	1,180	424	2,350	2,080	628	215	4,920	725	243
11	411	444	1,090	842	560	2,180	3,480	1,800	919	20,800	590	392
12	568	560	808	680	1,360	2,020	3,700	3,430	16,500	12,500	1,440	560
13	424	650	702	530	5,020	2,080	2,780	2,300	4,520	6,520	1,110	560
14	319	552	598	398	3,040	2,300	3,180	3,320	2,650	5,160	948	437
15	248	476	496	352	3,250	5,230	3,250	2,840	2,350	3,480	958	267
16	202	418	418	450	2,900	2,900	3,110	2,240	2,470	1,800	782	243
17	185	358	358	628	2,240	6,300	3,110	1,590	1,390	1,290	598	392
18	150	330	341	4,800	1,540	4,180	2,530	1,240	1,050	1,340	437	568
19	137	304	522	3,840	2,350	4,910	2,130	1,140	976	1,130	1,020	482
20	120	257	568	2,240	4,280	3,800	1,960	1,340	1,240	816	702	380
21	107	463	552	2,590	22,600	7,280	8,850	1,340	948	740	430	309
22	99	545	515	2,350	13,300	5,090	20,400	1,690	665	1,740	336	282
23	99	530	470	1,910	4,940	3,320	7,240	1,100	424	1,030	598	228
24	107	642	368	1,440	3,860	2,300	9,740	1,080	363	893	590	194
25	101	1,990	463	1,200	2,970	1,690	6,060	1,080	380	1,050	463	298
26	352	1,140	567	1,050	2,300	1,390	4,540	842	530	859	628	336
27	341	628	1,110	859	7,100	1,390	4,360	628	582	680	725	380
28	288	437	1,600	757	7,070	1,390	4,180	437	508	515	688	374
29	277	444	2,040	757	-	1,390	2,780	450	346	976	702	1,540
30	228	424	1,240	748	-	26,200	2,300	582	282	1,240	620	688
31	641	-	1,130	672	-	19,900	-	463	-	1,340	476	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	13,438	2,020	99	433	26,650
November	17,866	1,990	257	596	35,440
December	21,719	2,040	262	701	43,080
Calendar year 1944	352,499	35,800	78	963	699,200
January	38,444	4,800	352	1,240	76,250
February	95,999	22,600	411	3,429	190,400
March	146,830	26,200	1,390	4,736	291,200
April	176,090	25,800	1,960	5,870	349,300
May	43,857	3,430	437	1,415	86,990
June	42,325	16,500	215	1,411	83,950
July	92,035	20,800	515	2,969	182,500
August	24,943	1,440	336	805	49,470
September	13,507	1,540	194	450	26,790
Water year 1944-45	727,053	26,200	99	1,992	1,442,000

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Brazos River at Waco, Tex.

Location.- Water-stage recorder, lat. 31°33'40", long. 97°07'45", at Washington Avenue Bridge in Waco, McLennan County, 2½ miles downstream from Bosque River. Datum of gage is 356.80 feet above mean sea level, datum of 1929, supplementary adjustment of 1942.

Drainage area.- 28,500 square miles, of which 9,240 square miles is probably noncontributing.

Records available.- September 1898 to September 1945. (January 1912 to September 1914, monthly records only, in Water-Supply Paper 850). U. S. Weather Bureau has collected gage-height records in this vicinity since 1900.

Average discharge.- 47 years, 2,750 second-feet.

Extremes.- Maximum discharge during year, 144,000 second-feet Apr. 22 (gage height, 36.70 feet); minimum observed, 104 second-feet (regulated) Oct. 26.

1898-1945: Maximum discharge, 246,000 second-feet Sept. 27, 1936 (gage height, 40.90 feet, levee on left bank was overtopped and broken by flood); minimum discharge for periods of daily record, 1898-1911, 1914-45, no flow Aug. 20, 21, 1918 and probably for several days in August 1923.

A stage of 39.7 feet was reached Dec. 3, 1913, when levee on left bank was broken by flood, from information by U. S. Weather Bureau.

Remarks.- Records fair. Flow partly regulated by Possum Kingdom Reservoir on Brazos River (see p. 79) and Lake Waco on Bosque River near Waco (capacity, 39,000 acre-feet). Many small diversions above station for municipal supply, irrigation, and oil-field operation which do not appreciably affect flow.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	377	592	468	3,880	1,310	8,010	32,800	3,200	1,180	657	1,850	573
2	332	678	542	1,640	1,280	6,340	34,200	4,610	1,040	2,170	1,370	501
3	512	587	464	1,580	2,430	26,200	12,800	4,320	1,940	3,310	1,180	473
4	401	473	479	1,560	1,130	12,900	11,600	3,900	1,380	1,380	970	645
5	1,560	382	1,730	3,590	1,070	8,180	7,000	2,160	1,160	1,220	772	675
6	2,180	377	1,460	1,100	1,010	4,770	5,360	2,000	1,150	1,440	1,140	688
7	820	645	1,060	930	985	7,920	6,320	3,510	876	18,900	1,220	657
8	721	748	902	820	1,890	6,730	3,980	1,800	909	5,740	1,220	513
9	820	875	930	738	1,040	3,010	5,390	3,260	902	3,380	2,010	407
10	875	726	943	1,300	985	4,510	3,380	2,920	838	1,780	1,140	352
11	592	592	2,890	1,310	902	2,570	5,090	3,560	714	33,800	894	315
12	468	488	1,100	1,040	1,860	5,300	8,770	2,500	14,600	27,000	736	373
13	602	492	930	930	11,100	2,640	4,080	4,200	19,500	8,060	1,220	579
14	517	645	820	792	4,980	4,360	4,920	3,990	5,880	6,060	1,150	585
15	406	572	710	1,210	5,380	10,600	3,880	4,810	3,110	5,440	1,000	495
16	322	547	634	640	3,260	7,830	5,390	3,110	3,340	2,760	970	380
17	268	468	557	797	3,850	5,670	3,580	2,670	2,630	2,080	864	305
18	232	464	483	16,500	2,330	6,130	4,690	2,160	4,990	2,280	727	394
19	199	420	446	17,200	2,380	6,140	3,110	3,370	1,760	1,720	909	597
20	176	363	597	7,590	8,040	8,810	3,370	1,790	1,560	1,600	942	519
21	160	308	624	3,450	26,400	4,090	27,500	3,270	1,640	1,990	802	451
22	152	425	651	5,390	28,800	8,460	121,000	1,910	1,500	1,250	579	380
23	143	507	618	2,800	7,720	3,800	47,500	2,260	3,770	1,800	495	346
24	127	792	572	3,640	6,440	4,540	18,100	3,320	970	1,340	557	290
25	127	992	502	1,900	3,900	2,180	13,900	1,680	864	1,220	657	260
26	115	1,720	531	1,700	5,590	1,900	8,510	1,640	1,810	1,730	555	287
27	203	1,260	927	2,690	4,460	1,760	7,460	1,520	935	1,180	607	380
28	349	889	1,940	1,400	13,800	3,060	7,160	1,340	935	1,030	753	492
29	344	662	4,560	1,340	-	10,500	6,110	1,180	896	857	1,270	840
30	268	512	2,440	1,310	-	41,500	5,440	1,110	779	1,080	792	1,280
31	304	-	2,200	1,340	-	50,300	-	1,260	-	1,300	682	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	14,672	2,180	115	473	29,100
November	19,201	1,720	308	640	38,080
December	33,710	4,560	446	1,087	66,860
Calendar year 1944	742,183	114,000	110	2,028	1,472,000
January	92,107	17,200	640	2,971	182,700
February	154,322	28,800	902	5,512	306,100
March	280,710	50,300	1,760	9,055	556,800
April	432,390	121,000	3,110	14,410	857,600
May	84,330	4,810	1,110	2,720	167,300
June	83,558	19,500	714	2,785	165,700
July	145,554	33,800	657	4,695	288,700
August	30,033	2,010	495	969	59,570
September	15,032	1,280	260	501	29,820
Water year 1944-45	1,385,619	121,000	115	3,796	2,748,000

Peak discharge.- Feb. 21 (11:30 p.m.) 40,400 sec.-ft.; Mar. 3 (1 p.m.) 39,900 sec.-ft.; Mar. 31 (3:40 a.m.) 67,200 sec.-ft.; Apr. 22 (12 m.) 144,000 sec.-ft.; June 12 (11:30 p.m.) 46,000 sec.-ft.; July 11 (2 p.m.) 49,500 sec.-ft.

Note.- Discharge for Oct. 24-31, June 23 to July 10 computed from graph based on once-daily readings of outside gage by U. S. Weather Bureau.

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Brazos River near Marlin, Tex.

Location.- Wire-weight gage, lat. 31°17'20", long. 96°58'10", at bridge on State Highway 139, 1 mile upstream from Deer Creek and 4.5 miles southwest of Marlin, Falls County. Datum of gage is 312.15 feet above mean sea level, datum of 1929.

Drainage area.- 29,150 square miles, of which 9,240 square miles is probably noncontributing.

Records available.- October 1938 to September 1945.

Extremes.- Maximum discharge during year, 120,000 second-feet Apr. 23 (gage height, 31.65 feet, from floodmark); minimum observed, 184 second-feet (regulated) Oct. 28.
1938-45: Maximum discharge, 132,000 second-feet May 3, 1944 (gage height, 33.3 feet, from floodmark); minimum not determined.
Maximum stage known, 35.8 feet Dec. 3 or 4, 1913, from information by local residents. Flood of Sept. 28, 1936, reached a stage of 35.2 feet.

Remarks.- Record good. Gage read twice daily, oftener during high stages. Flow partly regulated by Possum Kingdom Reservoir on Brazos River (see p. 79) and Lake Waco on Bosque River near Waco (capacity, 39,000 acre-feet). Many small diversions above station for irrigation, municipal supply, and oil-field operations which do not appreciably affect flow.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	504	309	628	7,770	1,700	12,100	34,700	3,810	1,120	604	1,430	706
2	423	552	584	4,160	1,600	9,710	39,200	4,790	1,080	819	1,840	592
3	370	709	641	2,730	2,380	28,000	18,500	3,970	2,010	2,130	1,430	521
4	540	622	1,570	2,400	2,270	31,100	12,600	4,620	2,830	2,560	1,240	554
5	449	522	4,390	3,960	1,450	12,600	9,260	2,990	1,580	1,160	1,010	644
6	2,250	438	4,050	3,830	1,360	7,990	6,390	2,190	1,290	1,630	885	680
7	1,860	454	2,400	1,700	1,270	9,850	6,960	3,300	1,200	11,300	1,290	680
8	938	674	1,450	1,410	1,960	8,890	4,620	2,580	1,000	6,720	2,010	656
9	801	838	1,200	1,270	1,600	5,680	5,660	3,170	1,040	3,810	1,640	532
10	883	922	1,160	1,140	1,320	6,080	3,730	3,280	1,000	3,380	2,380	424
11	890	772	2,000	1,900	1,230	4,050	4,940	2,850	975	24,700	2,530	391
12	635	655	2,460	1,800	3,670	5,800	6,270	4,020	3,270	30,300	1,130	353
13	516	558	1,450	1,500	13,600	6,480	7,300	3,740	29,500	12,900	780	424
14	635	546	1,180	1,360	9,640	6,140	5,130	4,790	8,170	7,960	1,200	548
15	552	722	1,080	1,180	7,110	9,440	4,290	4,130	4,790	7,150	1,120	620
16	449	722	945	1,650	5,090	14,000	5,660	5,130	3,040	4,290	990	500
17	388	695	853	1,070	4,560	7,550	3,970	3,350	3,860	2,640	990	500
18	335	577	794	14,400	5,880	8,430	5,130	2,780	4,580	2,250	857	338
19	318	641	674	29,600	4,560	8,210	3,650	2,440	5,340	2,070	706	407
20	271	516	628	13,700	8,650	11,100	3,500	2,380	1,630	1,680	604	560
21	246	433	808	5,280	23,900	7,110	16,500	2,850	1,430	1,580	960	510
22	229	379	830	7,160	40,200	9,610	87,700	2,850	1,680	1,580	766	438
23	210	460	853	4,730	13,300	6,900	100,000	2,130	2,140	1,430	609	438
24	204	1,500	823	5,180	8,890	6,900	27,000	3,650	2,340	1,680	565	331
25	198	3,400	779	3,100	7,330	4,560	17,000	2,580	960	1,290	614	321
26	192	2,020	722	2,340	7,170	3,640	10,200	1,900	1,350	1,240	656	318
27	192	2,340	1,180	3,890	6,030	3,250	7,960	1,680	1,360	1,740	565	324
28	187	1,450	2,420	2,270	14,300	4,300	6,580	1,580	829	1,160	656	490
29	393	1,040	5,010	1,750	-	7,710	6,580	1,900	843	a1,020	1,000	871
30	366	779	5,660	1,650	-	32,600	6,390	1,240	752	a1,130	1,200	1,340
31	343	-	4,340	1,650	-	56,000	-	1,080	-	1,240	808	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	16,767	2,250	187	541	33,260
November	26,245	3,400	309	875	52,060
December	53,582	5,660	584	1,728	106,300
Calendar year 1944	1,089,152	116,000	187	2,976	2,161,000
January	137,530	29,600	1,070	4,436	272,800
February	202,020	40,200	1,230	7,215	400,700
March	355,780	56,000	3,250	11,480	705,700
April	477,370	100,000	3,500	15,910	946,800
May	93,750	5,130	1,080	3,024	186,000
June	92,989	29,500	752	3,100	184,400
July	145,143	30,300	604	4,682	287,900
August	34,461	2,530	565	1,112	68,350
September	16,011	1,340	318	534	31,760
Water year 1944-45	1,651,648	100,000	187	4,525	3,276,000

a No gage-height record; discharge computed on basis of records for stations at Waco and near Bryon.

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Brazos River near Bryan, Tex.

Location.- Water-stage recorder, lat. 30°37', long. 96°29', 2.4 miles downstream from Little Brazos River and 9 miles southwest of Bryan, Brazos County. Datum of gage is 192.3 feet above mean sea level, datum of 1929.

Drainage area.- 38,430 square miles, of which 9,240 square miles is probably noncontributing.

Records available.- September 1925 to September 1945. February 1918 to September 1925 at site near College Station, 7½ miles downstream.

Average discharge.- 26 years (1918-25, 1926-45), 6,243 second-feet.

Extremes.- Maximum discharge during year, 139,000 second-feet Apr. 24 (gage height, 41.70 feet); minimum, 475 second-feet Sept. 28.
1925-45: Maximum gage height, 46.1 feet, present site and datum, May 20, 1930 (discharge not determined); minimum discharge, 87 second-feet Aug. 24, 1934.
Maximum stage known, about 54.0 feet, present datum, Dec. 5, 1913.

Remarks.- Records fair. Flow partly regulated by Possum Kingdom Reservoir on Brazos River (see p. 79) and Lake Waco on Bosque River near Waco (capacity, 39,000 acre-feet). Many small diversions above station for irrigation, municipal supply, and oil-field operation which do not appreciably affect flow.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	668	650	2,000	12,700	3,800	22,500	67,800	15,100	2,920	2,330	1,660	3,260
2	812	639	1,610	14,600	3,660	18,400	65,400	11,500	2,920	2,080	1,960	2,330
3	948	627	1,400	9,610	2,900	17,400	64,600	10,800	2,780	1,900	2,660	2,140
4	872	722	1,280	6,760	4,030	50,800	46,000	9,700	3,970	2,780	2,400	1,450
5	812	872	8,030	5,200	4,850	48,000	31,200	9,040	7,240	3,820	2,080	1,120
6	886	865	19,900	6,860	a3,520	33,400	23,100	8,000	7,800	2,980	1,780	998
7	1,340	799	22,200	7,480	a3,070	26,500	19,000	6,800	5,380	2,780	1,500	1,030
8	2,920	722	17,000	5,200	a2,900	24,000	a17,300	7,000	3,820	11,900	1,450	1,060
9	2,090	704	8,040	4,350	a2,840	18,700	a16,200	7,200	2,920	8,120	1,960	1,040
10	1,650	832	5,020	3,260	a3,010	13,000	a14,500	6,440	2,460	6,620	2,520	974
11	1,490	983	3,590	2,680	a3,590	12,000	a11,500	8,200	2,260	5,830	3,330	835
12	1,440	1,060	3,450	2,580	a3,010	10,100	a9,920	7,600	2,590	26,600	3,120	754
13	1,400	948	3,880	2,840	a10,900	11,300	a10,100	8,400	f12,900	29,300	2,260	742
14	1,240	838	2,730	2,630	a27,100	11,300	a9,700	9,480	27,800	16,600	1,610	663
15	1,130	760	2,380	2,380	a20,200	11,500	a9,260	8,400	15,800	12,200	1,450	615
16	1,130	779	2,140	2,190	a14,300	17,000	a8,820	9,480	9,700	12,000	1,900	754
17	1,060	983	1,960	2,190	9,860	20,400	a8,400	10,100	7,600	8,820	1,660	787
18	948	1,060	1,820	6,170	8,380	15,100	a8,000	8,000	9,700	7,000	1,500	723
19	865	1,320	1,650	40,200	8,380	13,200	8,000	7,400	18,300	f5,720	1,450	645
20	792	1,360	1,530	54,900	8,140	13,200	7,800	6,620	21,300	f5,380	1,290	573
21	741	1,240	1,400	42,100	17,700	15,800	7,680	7,400	13,200	f4,270	1,110	561
22	704	1,090	1,320	26,400	43,100	12,700	f49,600	8,000	6,640	f3,680	1,050	693
23	644	983	1,320	17,400	51,400	14,000	f114,000	7,000	7,600	f3,400	902	675
24	621	1,390	1,360	11,100	31,200	11,000	139,000	5,380	7,000	f2,920	1,160	615
25	598	12,600	1,360	9,110	21,300	10,400	87,600	5,380	6,800	f2,850	990	555
26	587	16,300	1,470	6,760	15,100	8,600	f53,400	5,720	4,420	f2,780	942	516
27	570	9,610	6,300	5,380	14,500	7,400	f35,600	4,270	3,330	2,400	958	490
28	553	5,560	13,000	5,380	13,700	6,800	26,800	4,120	3,190	2,720	1,140	485
29	542	3,800	11,700	4,850	-	7,200	21,700	3,820	2,720	2,520	3,610	2,160
30	537	2,680	12,700	4,030	-	14,200	17,400	3,540	2,460	2,080	6,800	11,100
31	610	-	11,900	3,800	-	44,100	-	3,190	-	1,780	5,380	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	31,200	2,920	537	1,006	61,880
November	72,776	16,300	627	2,426	144,300
December	175,440	22,200	1,280	5,659	348,000
Calendar year 1944	2,925,618	155,000	537	7,993	5,803,000
January	331,490	54,900	2,190	10,690	657,500
February	356,440	51,400	2,840	12,730	707,000
March	560,000	50,800	6,800	18,060	1,111,000
April	1,009,380	139,000	7,680	33,650	2,002,000
May	233,080	15,100	3,190	7,519	462,300
June	227,520	27,800	2,260	7,584	451,300
July	206,160	29,300	1,780	6,650	408,900
August	63,582	6,800	902	2,051	126,100
September	40,343	11,100	485	1,345	80,020
Water year 1944-45	3,307,411	139,000	485	9,061	6,560,000

a No gage-height record; discharge computed on basis of weather records and records for stations near Marlin, near Hempstead, and near San Felipe.

f Computed on basis of partly estimated gage-height record.

Note.- Discharge Apr. 28 to May 29 computed from graph based on twice-daily staff-gage readings.

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Brazos River near Hempstead, Tex.

Location.- Wire-weight gage, lat. 30°07'25", long. 96°11'00", at bridge on U. S. Highway 290, 4,500 feet upstream from Texas & New Orleans Railroad bridge, 6.5 miles northwest of Hempstead, Waller County, and 8 miles upstream from Caney Creek. Datum of gage is 118.07 feet above mean sea level, datum of 1929.

Drainage area.- 42,670 square miles, of which 9,240 square miles is probably noncontributing.

Records available.- October 1938 to September 1945. U. S. Weather Bureau has collected gage-height records in this vicinity at intermittent periods since 1903.

Extremes.- Maximum discharge during year, 106,000 second-feet Apr. 26 (gage height, 39.31 feet); minimum discharge observed, 602 second-feet Nov. 1.

1938-45: Maximum discharge, 116,000 second-feet Nov. 30, 1940 (gage height, 44.04 feet); minimum, 254 second-feet Nov. 8, 1939.

Maximum stage known, 56.1 feet Dec. 8, 1913, from data by engineers of Texas & New Orleans Railroad, obtained at bridge 4,500 feet downstream.

Remarks.- Records fair. Flow partly regulated by Possum Kingdom Reservoir on Brazos River (see p. 79) and Lake Waco on Bosque River near Waco (capacity, 39,000 acre-feet). Gage read twice daily, oftener during high stages. Many small diversions above station for irrigation, municipal supply, and oil-field operation which do not appreciably affect flow.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	880	621	10,800	24,800	10,300	17,700	67,700	24,500	4,440	3,780	2,640	20,100
2	855	680	a8,310	23,800	9,110	24,000	77,700	22,000	4,110	4,560	2,480	17,200
3	855	765	6,950	24,000	8,000	19,900	73,700	19,000	4,000	3,780	2,480	13,600
4	1,010	788	5,500	20,100	7,100	26,900	69,400	17,700	4,000	3,060	a2,770	9,110
5	1,120	832	12,900	17,200	12,900	49,200	54,000	16,800	4,220	2,970	3,060	7,400
6	1,060	880	27,200	16,600	12,600	45,200	41,000	15,000	7,100	3,560	2,720	7,400
7	1,040	1,040	33,300	20,100	9,780	37,300	33,000	12,600	7,850	3,460	2,480	a7,480
8	1,120	1,090	34,200	19,000	8,470	29,500	29,200	10,300	7,850	2,970	2,340	7,550
9	2,040	1,010	25,900	17,000	7,250	25,300	28,300	9,610	5,430	9,640	2,180	7,400
10	2,720	880	19,000	15,200	6,230	20,400	25,900	9,950	a4,220	9,610	2,180	6,950
11	2,180	855	15,400	12,600	6,090	17,900	24,000	19,700	3,560	7,400	2,800	6,370
12	1,760	982	13,400	10,600	6,370	18,300	20,800	19,200	3,670	7,590	2,970	5,690
13	1,580	1,120	11,400	9,780	8,310	17,200	18,800	15,400	6,860	25,300	3,360	4,680
14	1,580	1,180	10,300	9,270	10,600	17,700	19,700	13,000	21,500	26,700	2,970	3,560
15	1,480	1,120	8,630	8,630	a17,500	18,300	18,300	11,600	28,100	16,600	2,480	2,970
16	1,360	1,060	7,400	7,850	a18,100	18,300	15,400	13,600	18,300	11,800	2,110	2,180
17	1,260	1,180	6,650	7,100	15,600	24,000	14,000	12,800	12,800	11,400	2,180	1,970
18	1,240	1,720	5,820	13,100	13,600	29,500	13,200	13,000	11,000	8,950	2,260	1,970
19	1,150	3,730	4,800	30,600	12,600	21,300	11,400	11,200	14,800	7,250	2,110	1,970
20	1,060	7,400	4,000	53,000	15,800	19,900	11,000	9,610	22,300	6,230	2,040	1,830
21	982	6,800	3,260	60,000	16,200	19,000	a15,200	8,310	24,800	6,090	1,970	1,760
22	905	7,100	2,880	51,200	29,500	20,400	23,900	9,610	18,300	5,500	1,900	1,690
23	855	6,370	2,560	38,800	47,200	17,000	65,200	9,950	12,200	4,920	1,830	1,660
24	810	4,800	2,480	29,500	44,900	17,900	95,600	10,600	10,800	4,440	1,830	1,720
25	765	17,400	a2,480	22,000	29,500	15,400	104,000	8,470	10,300	4,000	1,900	1,690
26	742	31,200	2,480	19,200	22,000	14,600	103,000	7,550	9,610	3,560	1,720	1,580
27	700	30,900	2,860	16,000	18,500	12,800	83,100	7,550	6,950	3,560	1,660	1,550
28	a680	23,500	13,000	14,600	18,100	11,000	58,100	6,230	5,170	3,160	a1,760	1,480
29	660	17,900	19,400	14,200	-	10,100	41,000	5,430	4,330	3,060	21,900	1,450
30	640	13,800	21,500	13,200	-	11,000	30,100	5,040	4,000	3,260	23,300	1,480
31	621	-	24,000	11,600	-	26,900	-	4,680	-	2,880	19,400	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	35,710	2,720	621	1,152	70,830
November	188,703	31,200	621	6,290	374,300
December	368,760	34,200	2,480	11,900	731,400
Calendar year 1944	4,148,894	108,000	621	11,340	8,230,000
January	650,630	60,000	7,100	20,990	1,291,000
February	442,210	47,200	6,090	15,790	877,100
March	673,900	49,200	10,100	21,740	1,337,000
April	1,285,700	104,000	11,000	42,860	2,550,000
May	379,990	24,500	4,680	12,260	753,700
June	302,570	28,100	3,560	10,090	600,100
July	221,040	26,700	2,880	7,130	438,400
August	129,780	23,300	1,660	4,186	257,400
September	153,440	20,100	1,450	5,115	304,300
Water year 1944-45	4,832,433	104,000	621	13,240	9,586,000

a No gage-height record; discharge interpolated or computed on basis of estimated gage heights and records for nearby stations.

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Brazos River near San Felipe, Tex.

Location.- Water-stage recorder, lat. 29°46'20", long. 96°02'10", at bridge on U. S. Highway 90, 200 feet downstream from Missouri-Kansas-Texas Railroad bridge, 1.3 miles downstream from Irons Creek, and 5.0 miles southeast of San Felipe post office, Austin County. Datum of gage is 79.32 feet above mean sea level, datum of 1929.

Drainage area.- 43,690 square miles, of which 9,240 square miles is probably noncontributing.

Records available.- December 1938 to September 1945.

Extremes.- Maximum discharge during year, 94,300 second-feet Apr. 26 (gage height, 34.85 feet); minimum, 734 second-feet Nov. 2.

1938-45: Maximum discharge, 152,000 second-feet Nov. 25, 1940 (gage height, 41.10 feet); minimum, 278 second-feet Oct. 9, 13, 1939.

Maximum stage known, 49.0 feet Dec. 9, 1913, from information by local resident.

Remarks.- Records fair. Flow partly regulated by Possum Kingdom Reservoir on Brazos River (see p. 79) and Lake Waco on Bosque River near Waco (capacity, 39,000 acre-feet). Many small diversions above station for irrigation, municipal supply, and oil-field operation which do not appreciably affect flow.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	989	746	11,100	24,900	10,300	17,300	61,200	25,000	4,890	5,060	2,570	22,800
2	961	746	8,720	23,500	9,390	21,000	86,000	22,000	4,550	4,380	2,320	19,000
3	926	766	7,270	23,500	8,500	18,600	81,000	19,700	4,220	4,550	2,210	14,700
4	912	857	6,320	21,400	7,870	20,800	74,000	16,700	4,060	5,420	2,160	10,400
5	982	905	12,000	17,300	9,360	44,400	60,100	16,300	4,060	4,550	2,320	7,070
6	1,080	933	30,200	14,700	16,900	50,000	44,500	14,700	4,380	4,220	2,500	6,880
7	1,080	954	34,900	16,000	11,800	40,000	34,300	13,300	6,440	3,900	2,440	6,880
8	1,050	1,080	35,300	19,000	9,160	31,800	29,700	11,100	8,080	3,580	2,320	6,500
9	1,080	1,160	31,800	16,600	8,080	28,000	28,000	9,390	6,690	4,520	2,260	6,500
10	1,640	1,080	22,100	14,700	7,270	23,500	26,000	9,160	5,060	11,300	2,100	6,320
11	2,320	1,000	15,300	12,900	f6,500	18,600	24,200	13,400	4,220	8,290	2,100	6,320
12	1,990	940	12,100	11,100	7,270	16,900	22,000	23,200	3,980	11,600	2,440	5,960
13	1,690	989	10,100	9,620	9,160	17,300	19,100	18,300	4,060	26,400	2,770	5,420
14	1,550	1,120	8,940	8,940	9,850	16,000	18,500	13,500	8,910	24,200	2,640	4,550
15	1,500	1,200	8,080	8,500	24,400	18,300	19,600	11,800	27,200	13,500	2,840	3,580
16	1,460	1,160	7,070	7,870	24,200	18,600	16,400	11,600	22,100	11,100	2,320	2,770
17	1,370	1,120	6,320	7,270	18,000	21,400	14,700	12,400	14,400	9,850	1,990	2,440
18	1,240	1,330	5,780	12,200	15,300	30,600	13,200	11,800	10,800	8,940	2,100	2,210
19	1,240	2,020	5,060	32,200	12,900	28,700	12,400	11,800	11,600	7,670	2,210	2,160
20	1,160	5,040	4,550	48,800	16,600	21,800	10,600	9,850	18,200	6,500	2,160	2,100
21	1,120	6,880	3,820	58,900	16,600	20,000	12,900	8,720	25,300	6,140	2,040	2,040
22	1,050	5,960	3,200	57,600	22,700	20,000	17,600	8,290	22,100	5,420	2,100	1,940
23	982	5,780	2,840	46,400	39,800	19,000	50,500	8,940	14,400	4,720	1,990	1,840
24	933	5,240	2,640	34,900	46,800	16,600	77,000	9,850	10,600	4,060	1,990	1,790
25	898	6,700	2,500	26,100	34,900	16,300	88,000	9,620	10,300	3,740	1,840	1,890
26	870	25,400	2,500	20,700	23,900	13,500	93,800	7,870	9,390	3,340	1,740	1,840
27	844	29,900	2,570	17,600	18,300	12,700	90,000	7,270	8,720	3,050	1,980	1,690
28	812	25,300	4,540	14,400	16,900	10,600	68,400	7,070	7,670	3,120	16,200	1,600
29	792	19,300	16,400	13,200	-	8,940	45,500	6,140	6,880	2,840	45,500	1,690
30	779	14,700	19,700	12,900	-	9,390	31,800	5,600	5,960	2,640	53,700	2,400
31	760	-	22,100	11,600	-	20,800	-	5,240	-	2,700	34,200	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	36,060	2,320	760	1,163	71,520
November	170,306	29,900	746	5,677	337,800
December	365,820	35,300	2,500	11,800	725,600
Calendar year 1944	4,252,943	106,000	746	11,620	8,436,000
January	665,300	58,900	7,270	21,460	1,320,000
February	462,710	46,800	6,500	16,530	917,800
March	671,430	50,000	8,940	21,660	1,332,000
April	1,271,000	93,800	10,600	42,370	2,521,000
May	379,610	25,000	5,240	12,250	752,900
June	299,220	27,200	3,980	9,974	593,500
July	221,300	26,400	2,640	7,139	438,900
August	210,050	53,700	1,740	6,776	416,600
September	163,280	22,800	1,600	5,443	323,900
Water year 1944-45	4,916,086	93,800	746	13,470	9,752,000

f Computed on basis of partly estimated gage-height record.

Note.- No gage-height record Feb. 24 to Mar. 3, June 27 to July 8, July 10-17, 19-23, Sept. 9, 10; discharge computed on basis of weather records and records for nearby stations. Discharge July 24 to Aug. 27, Sept. 4-8, 11, 16-30 computed from graph based on twice-daily wire-weight gage readings.

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Brazos River at Richmond, Tex.

Location.- Water-stage recorder and wire-weight gage, lat. 29°35', long. 95°45', at bridge on U. S. Highway 59 in Richmond, Fort Bend County, 925 feet downstream from Texas & New Orleans Railroad bridge. Datum of gage is 40.8 feet above mean sea level, datum of 1929.

Drainage area.- 44,050 square miles, of which 9,240 square miles is probably noncontributing.

Records available.- January 1903 to June 1906, June 1931 to September 1945. October 1922 to September 1931 at site at Rosenberg, 7.6 miles upstream; records equivalent except for diversion by Richmond Irrigation Co.'s canal. U. S. Weather Bureau has collected gage-height records in this vicinity since 1914.

Average discharge.- 25 years (1903-5, 1922-45), 8,269 second-feet.

Extremes.- Maximum discharge during year, 85,000 second-feet Apr. 27 (gage height, 32.60 feet); minimum discharge, 880 second-feet Nov. 1-4.

1903-6, 1931-45: Maximum discharge, 117,000 second-feet Nov. 28, 1940 (gage height, 38.40 feet); minimum, 33 second-feet Aug. 23, 24, 1934.

Flood of June 6, 1929, reached a stage of 40.6 feet, present datum, from floodmarks (discharge, 120,000 second-feet). Flood of Dec. 10, 1913, reached a stage of 48.2 feet, present datum, from floodmarks on right bank 1,000 feet upstream from gage.

Remarks.- Records fair. Flow partly regulated by Possum Kingdom Reservoir on Brazos River (see p. 79) and Lake Waco on Bosque River near Waco (capacity, 39,000 acre-feet). Considerable water diverted above station for irrigation and municipal supply. See records of American Canal Co.'s canal (formerly Brazos Valley Irrigation Co.'s canal) near Fulshear (p. 107) and Richmond Irrigation Co.'s canal near Richmond (p. 107).

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,200	880	14,700	24,600	11,200	18,800	41,200	30,000	4,540	4,540	2,630	30,000
2	1,200	880	•11,900	23,800	10,200	21,000	77,800	23,800	4,160	4,280	2,360	23,000
3	1,160	880	10,000	23,500	9,400	24,400	81,400	21,000	3,800	4,280	2,360	18,500
4	1,140	880	8,440	23,500	8,630	20,400	74,000	17,900	3,560	4,670	2,180	14,200
5	1,100	935	11,000	19,000	8,260	31,800	69,300	16,000	3,450	3,800	2,140	10,600
6	1,160	990	26,000	16,300	13,200	45,600	57,100	14,700	3,340	3,340	2,180	8,080
7	1,300	1,040	38,000	16,800	15,000	38,900	43,200	13,200	3,800	3,230	2,450	7,220
8	1,360	1,040	38,900	19,300	10,600	32,000	33,200	11,700	5,950	3,560	2,270	6,730
9	1,260	1,100	34,600	17,600	9,010	27,200	28,600	9,800	7,050	3,560	2,140	6,570
10	1,230	1,230	26,800	15,700	7,730	24,100	26,300	8,820	5,650	4,080	2,050	6,250
11	1,700	1,200	18,700	14,200	7,050	20,200	24,100	9,010	4,040	9,800	1,850	6,100
12	2,540	1,100	14,700	12,300	7,560	17,400	22,400	17,600	3,450	8,080	1,780	5,650
13	2,270	1,040	12,300	10,600	8,260	17,100	19,600	19,900	3,340	8,740	1,970	5,220
14	1,930	1,040	10,600	9,600	9,800	16,300	17,400	15,500	3,450	24,300	2,270	4,540
15	1,780	1,160	9,600	9,010	16,000	16,800	17,400	12,800	15,400	26,100	2,630	3,800
16	1,700	1,300	8,440	8,630	24,400	17,900	16,800	11,500	25,800	17,600	2,450	3,020
17	1,660	1,300	7,560	8,080	20,400	18,200	14,400	11,900	18,800	12,800	2,010	2,360
18	1,560	1,260	6,730	12,800	17,100	25,200	13,200	11,500	13,200	11,000	1,700	1,890
19	1,460	1,460	6,100	27,000	15,000	30,000	12,100	11,000	11,000	9,400	1,660	1,740
20	1,420	2,260	5,360	41,900	15,000	24,100	11,700	10,400	13,700	7,560	1,740	1,700
21	1,360	6,560	4,670	53,600	17,100	20,200	11,500	9,010	21,600	6,250	1,660	1,660
22	1,300	7,560	4,040	53,900	17,400	19,000	15,200	8,260	23,000	5,650	1,600	1,660
23	1,230	6,730	3,560	47,800	31,200	19,300	29,200	8,260	17,900	5,080	1,700	1,560
24	1,140	6,570	3,230	36,900	44,000	16,500	66,700	9,010	12,800	4,670	1,600	1,520
25	1,100	7,220	2,920	28,300	40,700	16,300	81,800	9,600	11,000	4,160	1,490	1,490
26	1,040	15,300	2,820	21,600	30,300	13,700	84,500	8,630	10,400	3,800	1,460	1,490
27	1,020	30,600	2,820	18,200	23,600	12,600	83,200	7,220	9,400	3,340	2,120	1,520
28	990	25,500	2,920	15,500	19,600	11,000	78,500	6,890	8,080	3,020	20,000	1,520
29	962	22,100	9,600	13,700	-	9,400	62,500	6,570	6,250	2,920	44,000	1,800
30	935	18,200	19,900	13,000	-	9,010	42,700	5,650	5,220	2,630	61,500	1,600
31	908	-	22,100	12,300	-	13,200	-	4,940	-	2,540	44,700	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	42,115	2,540	908	1,359	83,530
November	169,315	30,600	880	5,644	335,800
December	399,010	38,900	2,820	12,870	791,400
Calendar year 1944	4,336,251	93,800	670	11,850	8,600,000
January	669,020	53,900	8,080	21,580	1,327,000
February	467,600	44,000	7,050	16,700	927,500
March	647,610	45,600	9,010	20,890	1,285,000
April	1,257,000	84,500	11,500	41,900	2,493,000
May	382,070	30,000	4,940	12,320	757,800
June	283,130	25,800	3,340	9,438	561,600
July	218,780	26,100	2,540	7,057	433,900
August	224,650	61,500	1,460	7,247	445,600
September	182,790	30,000	1,490	6,093	362,600
Water year 1944-45	4,943,090	84,500	880	13,540	9,805,000

Note.- No recorder record June 7-12, 15-18, June 23 to July 23; discharge computed from graph based on once-daily wire-weight gage readings furnished by U. S. Weather Bureau.

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Brazos River at East Columbia, Tex.

Location.- Wire-weight gage, lat. 29°09', long. 95°37', at bridge on State Highway 35 at East Columbia, Brazoria County, 1 mile downstream from Yarners Creek. Datum of gage is 2.7 feet below mean sea level (unadjusted).

Drainage area.- 44,540 square miles, of which 9,240 square miles is probably noncontributing.

Records available.- October 1938 to September 1939 (gage heights only), October 1939 to September 1940 and February 1942 to September 1945 (gage heights, discharge measurements, and daily discharge above 8,000 second-feet), October 1940 to September 1941 (discharge measurements only).

Extremes.- Maximum gage height during year, 32.98 feet Apr. 28, from graph based on gage readings (discharge not determined); minimum observed, 2.27 feet Nov. 20 (affected by tides).

1938-45: Maximum gage height observed, 34.12 feet Dec. 5, 1940 (discharge not determined); minimum, 1.54 feet Aug. 22, 1939 (affected by tides).

Maximum stage known, 35.3 feet Dec. 11 or 12, 1913. Flood of 1899 reached a stage of 35.0 feet. Stages from information by local residents.

Remarks.- Records fair and are for main channel only. Discharge for periods below 8,000 second-feet not published because of effect from tides. Gage read twice daily, oftener during high stages. Flow partly regulated by Possum Kingdom Reservoir on Brazos River (see p.   ) and Lake Waco on Bosque River near Waco (capacity, 39,000 acre-feet). Considerable water diverted above station for irrigation and municipal supply.

Gage height, in feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4.53	4.68	12.65	15.70	10.47	13.25	15.30	24.35	5.29	4.70	3.98	25.60
2	4.53	4.90	10.65	16.80	9.70	13.34	26.62	19.35	4.95	4.21	3.66	21.20
3	4.98	4.76	9.12	16.69	8.88	15.40	31.20	16.40	4.49	4.16	3.58	18.30
4	4.35	3.63	8.32	16.59	8.28	15.70	32.18	14.80	4.38	4.15	3.89	15.45
5	4.34	3.70	8.08	15.56	7.97	15.58	32.31	13.24	4.37	4.15	4.49	12.80
6	3.92	3.82	11.75	14.18	8.02	21.80	31.55	12.40	4.38	4.34	4.50	10.24
7	4.00	4.04	18.65	12.68	11.30	23.40	28.80	11.59	4.50	4.44	4.40	8.27
8	3.94	4.15	21.00	12.80	11.18	21.20	24.40	10.58	4.94	4.59	4.96	7.49
9	4.06	3.48	21.15	13.52	9.40	18.60	21.30	9.61	6.32	4.68	4.58	7.14
10	4.04	3.45	19.75	13.38	8.20	17.12	19.47	8.48	6.84	4.50	4.68	6.70
11	4.00	4.28	16.80	12.31	7.46	15.68	18.26	8.02	7.12	5.42	4.45	6.52
12	3.90	4.64	13.75	11.27	7.38	14.04	17.34	8.37	4.62	7.14	3.78	6.51
13	4.20	5.06	11.70	10.01	8.03	12.70	16.68	13.22	5.44	6.38	3.80	5.70
14	4.18	4.66	10.36	8.95	8.62	12.65	14.64	13.29	5.34	8.30	3.36	5.44
15	4.06	4.00	9.40	8.23	9.21	12.30	13.86	11.30	5.05	15.26	3.37	5.49
16	4.30	3.82	8.64	7.94	14.10	12.80	14.02	9.58	12.74	14.82	3.44	5.32
17	4.92	3.88	7.72	7.90	15.78	13.25	13.10	9.15	14.60	11.68	3.94	5.12
18	4.80	3.46	6.93	7.92	13.95	14.35	11.92	9.70	12.00	9.41	3.54	4.82
19	4.64	3.12	6.35	13.23	12.55	17.35	10.96	9.40	9.78	8.81	3.60	4.56
20	4.10	2.80	5.97	19.33	11.35	16.88	10.34	9.37	8.85	8.08	4.16	4.88
21	3.70	3.36	5.60	24.45	12.10	14.65	10.24	8.87	11.72	6.95	4.60	5.02
22	3.28	5.58	5.04	27.18	12.78	13.88	10.64	8.78	14.70	6.18	4.81	4.80
23	3.76	5.78	4.98	27.10	15.00	13.70	13.20	8.56	15.24	5.72	5.05	5.24
24	3.62	6.15	4.70	24.26	20.87	13.70	21.32	8.64	12.22	5.38	4.92	4.87
25	3.70	6.42	4.54	20.56	23.40	12.65	29.10	8.84	9.70	4.97	4.66	4.08
26	3.36	6.38	4.47	17.09	20.82	12.08	31.55	8.90	8.58	4.61	6.11	3.94
27	3.84	13.65	4.37	14.88	17.05	13.10	32.54	8.11	7.95	4.19	6.92	4.84
28	4.28	17.60	4.04	13.62	14.05	10.32	32.95	7.19	7.38	4.14	9.30	4.47
29	4.32	16.70	4.26	12.12	-	9.60	32.50	6.82	6.74	4.44	19.03	4.92
30	4.62	14.70	10.35	11.30	-	8.85	29.95	6.38	5.68	4.98	27.95	4.76
31	4.56	-	14.20	11.65	-	8.70	-	5.74	-	3.91	23.40	-

Discharge measurements, water year October 1944 to September 1945

Date	Width (feet)	Area (square feet)	Mean velocity (feet per second)	Gage height (feet)	Discharge (second-feet)
Nov. 22.........	255	3,300	1.92	5.57	6,470
Dec. 15.........	324	4,240	2.69	9.35	11,400
Feb. 8.........	333	5,000	2.86	11.18	14,300

Discharge, in second-feet, of Brazos River at East Columbia, Tex., water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1		-	16,900	23,400	13,100	18,000	23,200	45,100	-	-	-	48,500
2		-	13,300	25,900	11,800	18,200	51,700	32,000	-	-	-	36,500
3		-	10,800	25,700	10,500	22,700		25,000	-	-	-	29,400
4		-	9,620	25,400	9,620	23,400		21,400	-	-	-	22,700
5		-	9,340	23,200	9,200	23,200	75,000	18,000	-	-	-	17,300
6		-	15,500	20,100	9,200	38,000		16,500	-	-	-	12,600
7		-	30,100	17,100	14,500	42,300	58,100	15,000	-	-	-	9,620
8		-	36,000	17,300	14,300	36,500	45,100	13,300	-	-	-	8,500
9		-	36,500	18,600	11,300	30,100	36,800	11,600	-	-	-	-
10		-	33,000	18,400	9,480	26,600	32,300	9,900	-	-	-	-
11		-	25,900	16,300	8,500	23,400	29,400	9,200	-	-	-	-
12		-	19,300	14,500	8,370	19,700	27,000	9,760	-	-	-	-
13		-	15,200	12,200	9,200	17,100	25,700	18,200	-	-	-	-
14		-	12,900	10,600	10,000	16,900	21,000	18,200	-	9,780	-	-
15		-	11,300	9,480	11,000	16,300	19,500	14,500	-	22,600	-	-
16		-	10,000	9,060	20,100	17,300	19,700	11,600	17,500	21,400	-	-
17		-	8,780	9,060	23,600	18,000	17,800	11,000	21,000	15,200	-	-
18		-	-	9,060	19,700	20,500	15,600	11,800	15,800	11,300	-	-
19		-	-	18,300	16,900	27,300	14,000	11,300	11,900	10,400	-	-
20		-	-	31,900	14,700	26,100	12,800	11,300	10,400	9,340	-	-
21		-	-	45,100	15,900	21,000	12,600	10,500	15,400	-	-	-
22		-	-	53,300	17,300	19,500	13,300	10,400	21,200	-	-	-
23		-	-	53,000	21,800	19,100	18,000	10,000	22,300	-	-	-
24		-	-	44,800	35,800	19,100	37,500	10,000	16,100	-	-	-
25		-	-	35,000	42,300	16,900	59,000	10,400	11,800	-	-	-
26		-	-	26,600	35,500	15,900	80,000	10,500	10,000	-	-	-
27		19,200	-	21,600	26,400	17,800		9,340	9,200	-	-	-
28		27,700	-	18,900	19,700	12,800		8,110	8,370	-	11,400	-
29		25,700	-	15,900	-	11,600		-	-	-	31,300	-
30		21,200	13,000	14,500	-	10,400	61,800	-	-	-	55,700	-
31		-	20,100	15,000	-	10,200	-	-	-	-	59,900	-

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Salt Fork Brazos River near Aspermont, Tex.

Location.- Water-stage recorder, lat. 33°20', long. 100°14', at bridge on U. S. Highway 83, 5½ miles downstream from Dove Creek and 13.2 miles northwest of Aspermont, Stonewall County. Datum of gage is 1,588.7 feet above mean sea level, datum of 1929.

Drainage area.- 4,834 square miles, of which 2,770 square miles is probably noncontributing.

Records available.- December 1923 to August 1925, June 1939 to September 1945.

Extremes.- Maximum discharge during year, 20,900 second-feet July 13 (gage height, 9.54 feet); no flow at times.

1923-25, 1939-45: Maximum discharge, 26,600 second-feet Aug. 16, 1940 (gage height, 11.05 feet), from rating curve extended above 20,000 second-feet; no flow at times.

Maximum stage known, 14.4 feet in December 1913. Flood of November 1934 reached a stage of 13.7 feet. Stages from information by local residents.

Remarks.- Records fair. No large diversion above station.

Cooperation.- Five discharge measurements furnished by Bureau of Reclamation.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	12	0.3	2.5	14	9.6	16	2.5	0.6	0	0.1	8.5	0.2
2	4.2	.3	2.5	14	8.8	13	2.5	.5	0	.1	5.0	.2
3	65	.3	3.2	12	8.0	12	2.5	.4	.1	.1	3.1	.1
4	14	.3	250	12	7.4	16	2.0	.4	.2	.1	1.9	0
5	12	.3	776	10	6.8	16	1.4	.4	1,770	51	.7	0
6	7.4	.3	632	10	5.9	13	1.3	.3	706	5.3	0	0
7	4.2	9.4	228	9.6	5.3	10	1.2	.3	110	6.6	30	0
8	4.5	9.2	100	8.8	4.5	8.8	1.0	.3	18	1.9	17	0
9	2.5	5.0	58	7.4	4.2	7.7	1.0	.3	8.0	.2	3.1	0
10	1.4	3.0	35	6.5	3.5	7.4	1.2	.3	4.0	3,440	1.3	0
11	1.0	2.0	23	6.2	3.0	7.1	1.0	.3	2.4	4,250	.3	0
12	.8	1.8	18	5.9	3.2	6.8	.9	.2	4,730	362	0	0
13	.6	1.6	17	5.6	3.5	6.2	.9	.2	1,840	6,780	36	0
14	.6	1.4	15	5.3	4.0	7.1	.9	.2	238	2,530	7.9	0
15	.5	1.4	14	4.8	4.2	10	2.0	.2	66	1,210	1.9	0
16	.5	4.0	12	4.5	4.2	9.6	33	.2	20	f480	.6	0
17	.5	10	12	7.7	3.8	7.4	36	.2	12	f233	.2	0
18	.5	21	10	20	3.0	8.4	14	.2	9.2	f145	.1	0
19	.5	16	9.6	25	3.2	9.2	7.1	.1	5.9	f87	.1	0
20	.4	11	8.4	21	3.8	7.1	8.4	.1	3.5	61	.2	0
21	.4	8.0	7.1	18	5.0	6.8	11	.1	2.2	47	.2	0
22	.4	6.8	6.8	16	6.2	5.3	12	0	2.2	37	.1	0
23	.4	5.3	6.5	16	6.8	4.5	7.7	.1	1.3	30	.1	0
24	.4	5.3	6.5	14	7.1	3.8	4.8	.1	.6	23	.2	0
25	.3	6.5	6.5	13	7.1	2.5	2.8	.1	.4	18	.1	9.2
26	.3	5.9	6.5	11	6.5	2.0	1.3	.1	.2	15	.1	1,750
27	.3	5.0	10	14	6.2	1.8	1.0	.1	.1	18	.2	186
28	.3	4.0	17	16	14	1.4	1.2	.1	.1	30	.2	630
29	.3	3.2	26	16	-	1.3	1.2	.1	.1	16	.3	1,430
30	.3	2.8	21	12	-	1.4	.8	.1	.1	18	.7	765
31	.3	-	16	10	-	1.6	-	.1	-	16	.4	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	136.8	65	0.3	4.41	271
November	151.4	21	.3	5.05	300
December	2,356.1	776	2.5	76.0	4,670
Calendar year 1944	13,795.0	4,550	0	37.7	27,350
January	366.3	25	4.5	11.8	727
February	158.8	14	3.0	5.67	315
March	231.2	16	1.3	7.46	459
April	164.6	36	.8	5.49	326
May	6.7	.6	0	.22	13
June	9,550.6	4,730	0	318	18,940
July	19,911.4	6,780	.1	642	39,490
August	150.5	66	0	4.85	299
September	4,770.7	1,750	0	159	9,460
Water year 1944-45	37,955.1	6,780	0	104	75,270

Peak discharge.- June 12 (2 p.m.) 16,600 sec.-ft.; July 10 (3:30 p.m.) 11,000 sec.-ft.; July 13 (1:30 p.m.) 20,900 sec.-ft.

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

White River at Plainview, Tex.

Location.- Water-stage recorder, lat. 34°11', long. 101°41', at bridge on Broadway Street in Plainview, Hale County, 0.7 mile upstream from Atchison, Topeka & Santa Fe Railway bridge. Datum of gage is 3,341.1 feet above mean sea level, datum of 1929.

Records available.- June 1939 to September 1945.

Extremes.- Maximum discharge during year, 1.8 second-feet Dec. 4 (gage height, 1.39 feet); no flow most of time.

1939-45: Maximum discharge, 12,000 second-feet June 6, 1941 (gage height, 8.75 feet), by slope-area method; no flow most of time.

Maximum stage known prior to 1941, about 6.50 feet in May 1927 (discharge, about 1,100 second-feet), from information by local resident. Flood of May 24, 1937, reached about same stage as that of May 1927.

Remarks.- Records poor. No diversion above station.

Discharge, in second-feet, water year October 1944 to September 1945

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

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	0	0	0	0	0
November	0	0	0	0	0
December	.8	.6	0	.03	1.6
Calendar year 1944	39.2	22	0	.11	78
January	0	0	0	0	0
February	0	0	0	0	0
March	0	0	0	0	0
April	.2	.2	0	.01	.4
May	0	0	0	0	0
June	0	0	0	0	0
July	.1	.1	0	.003	.2
August	.4	.4	0	.01	.8
September	0	0	0	0	0
Water year 1944-45	1.5	.6	0	.004	3.0

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Clear Fork Brazos River at Nugent, Tex.

Location.- Water-stage recorder, lat. 32°41', long. 99°40', at county highway bridge in Nugent, Jones County, 4 miles upstream from Deadman Creek.

Drainage area.- 2,220 square miles.

Records available.- February 1924 to September 1945.

Average discharge.- 21 years, 163 second-feet.

Extremes.- Maximum discharge during year, 4,200 second-feet July 12 (gage height, 10.58 feet); minimum, 4.3 second-feet Feb. 7 (gage height, 1.67 feet).
1924-45: Maximum discharge observed, 47,000 second-feet Sept. 8, 1932 (gage height, 27.05 feet, site then in use), from rating curve extended above 25,000 second-feet; no flow at times.
Maximum stage known, about 30.0 feet in 1876, from information by local residents.

Remarks.- Records good except those for periods of no gage-height record, which are fair. Flow partly regulated by reservoirs in Elm Creek Basin (see p. 96) and Lakes Sweetwater and Trammel in Sweetwater Creek Basin, which have a combined capacity of about 106,000 acre-feet. Diversions above station for municipal supply and oil-field operation materially affect low flow.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	6.8	6.2	4.7	8.5	5.6	14	15	12	8.5	6.2	47	26
2	7.3	6.2	4.7	7.9	5.6	12	12	12	14	8.4	34	20
3	249	6.2	4.7	7.3	5.2	12	11	11	25	59	30	18
4	1,240	6.8	7.4	6.8	5.2	11	9.2	11	14	339	30	15
5	1,740	6.8	60	6.8	5.2	9.9	9.2	11	413	574	29	14
6	926	6.8	71	6.2	4.7	13	9.2	11	156	404	26	14
7	56	7.9	20	5.6	4.3	11	9.2	11	474	746	26	14
8	28	48	11	5.6	4.7	20	9.9	11	399	1,410	158	12
9	19	33	8.5	5.6	4.7	12	11	27	30	2,960	970	9.9
10	14	15	7.3	5.6	4.7	9.2	12	150	21	2,070	1,050	9.2
11	44	11	6.2	5.6	4.7	7.9	690	577	157	2,730	82	8.5
12	19	7.9	6.2	5.6	4.7	28	1,570	990	811	3,900	48	8.5
13	11	6.8	5.2	5.6	5.2	240	213	210	830	3,150	34	7.9
14	9.2	6.2	5.2	5.6	5.2	57	49	50	302	2,020	30	9.9
15	8.5	5.2	5.2	5.6	4.7	45	170	24	488	735	27	9.9
16	7.9	6.2	5.2	5.6	4.7	46	187	14	220	461	24	9.2
17	7.9	7.3	5.2	7.3	5.6	28	109	11	28	154	27	9.2
18	7.3	22	5.2	8.5	5.6	17	44	9.2	23	112	26	7.9
19	6.8	18	5.2	7.3	5.6	77	30	8.5	20	94	24	7.9
20	6.8	36	5.2	6.8	6.2	718	48	7.9	19	78	22	8.5
21	6.8	21	5.2	6.8	8.5	590	33	9.2	21	71	19	11
22	6.8	12	5.2	6.2	33	123	28	58	176	63	17	8.5
23	6.2	8.5	5.2	6.8	24	28	32	33	82	58	17	7.9
24	6.2	7.9	5.2	6.2	14	18	24	22	21	55	17	7.9
25	6.2	7.3	5.2	6.2	13	14	23	24	79	51	17	7.9
26	6.2	5.6	5.2	5.6	11	12	18	14	29	46	17	7.6
27	6.2	5.2	7.3	5.6	13	11	14	128	12	45	26	7.2
28	6.2	4.7	23	5.6	14	11	14	130	8.5	42	18	6.8
29	6.2	4.7	14	5.6	-	9.9	13	21	6.2	40	17	6.5
30	6.2	4.7	11	5.6	-	9.9	13	13	5.6	37	19	6.2
31	6.2	-	11	5.6	-	11	-	9.2	-	36	19	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	4,483.9	1,740	6.2	145	8,890
November	351.1	48	4.7	11.7	696
December	350.8	71	4.7	11.3	696
Calendar year 1944	24,222.0	1,740	1.0	66.2	48,030
January	195.2	8.5	5.6	6.30	387
February	232.6	33	4.3	8.31	461
March	2,225.8	718	7.9	71.8	4,410
April	3,429.7	1,570	9.2	114	6,800
May	2,630.0	990	7.9	84.8	5,220
June	4,892.8	830	5.6	163	9,700
July	22,554.6	3,900	6.2	728	44,740
August	2,947	1,050	17	95.1	5,850
September	317.0	26	6.2	10.6	629
Water year 1944-45	44,610.5	3,900	4.3	122	88,480

Peak discharge.- Oct. 5 (10 a.m.) 1,900 sec.-ft.; Apr. 12 (3 p.m.) 1,790 sec.-ft.; July 9 (5:30 a.m.) 3,350 sec.-ft.; July 12 (11 a.m.) 4,200 sec.-ft.; Aug. 10 (4 a.m.) 2,320 sec.-ft.

Note.- No gage-height record June 19-21, 24, 26-30, Sept. 13-17, 26-30; discharge computed on basis of weather records, recorded range in stage, and records for station at Fort Griffin.

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Clear Fork Brazos River at Fort Griffin, Tex.

Location.- Water-stage recorder, lat. 32°56', long. 99°13', at bridge on Fort Griffin-Throckmorton highway, half a mile east of Fort Griffin, Shackelford County, and 1.3 miles upstream from Mill Creek. Datum of gage is 1,174.53 feet above mean sea level, datum of 1929.

Drainage area.- 3,974 square miles.

Records available.- December 1923 to September 1945.

Average discharge.- 21 years (1924-45), 295 second-feet.

Extremes.- Maximum discharge during year, 5,340 second-feet Apr. 12 (gage height, 14.94 feet); no flow at times.
1923-45: Maximum discharge, 33,600 second-feet Sept. 10, 1932 (gage height, 35.09 feet); no flow at times.
Maximum stage known, about 38.0 feet in 1900, from information by local residents.

Remarks.- Records good. Flow partly regulated by reservoirs in Elm Creek Basin (see p. 96) and Lakes Sweetwater and Trammel in Sweetwater Creek Basin, which have a combined capacity of about 106,000 acre-feet. Diversions above station for irrigation, municipal supply, and oil-field operation materially affect low flow.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	0.8	13	11	4.7	62	29	55	34	18	18	2.9
2	0	.8	9.9	33	4.7	97	24	36	23	14	16	2.2
3	221	.8	8.5	24	4.7	73	20	24	16	11	14	2.2
4	1,190	1.2	11	17	5.8	54	17	19	12	17	13	1.5
5	2,900	2.2	26	15	6.2	42	16	16	749	1,630	16	1.3
6	2,380	1.8	56	14	6.2	39	18	14	213	1,600	14	1.0
7	1,420	6.7	66	12	6.2	180	21	11	306	613	11	.7
8	337	4.0	65	11	6.2	161	21	9.9	257	373	11	.7
9	136	2.4	70	9.9	6.2	82	20	8.5	1,590	1,190	13	.7
10	74	1.3	44	8.5	6.2	49	20	8.0	1,500	2,820	298	.4
11	54	.8	30	8.5	6.2	40	1,630	9.0	1,270	2,720	1,300	.2
12	40	.8	21	8.5	7.1	30	4,310	502	392	2,660	242	.1
13	56	.7	18	8.0	8.0	50	3,330	658	831	3,850	100	.1
14	67	15	15	8.0	7.6	94	3,710	391	998	3,760	58	0
15	42	15	13	8.0	7.1	193	2,220	167	477	2,570	34	0
16	27	16	11	6.7	7.6	148	636	95	398	1,450	21	0
17	20	14	9.0	7.1	7.1	100	412	60	470	690	15	0
18	15	63	8.0	9.4	5.3	242	269	43	156	358	11	0
19	12	85	7.1	9.0	5.8	2,490	179	34	76	191	9.4	0
20	9.0	85	6.2	11	5.1	2,280	114	25	49	142	7.6	0
21	7.1	64	5.4	11	5.7	1,110	210	19	46	111	5.6	0
22	5.4	36	5.1	9.9	34	948	469	15	47	88	5.1	0
23	4.4	34	4.7	11	100	382	240	13	49	74	5.4	0
24	3.4	36	4.0	15	34	187	123	10	112	61	4.0	0
25	2.9	33	4.0	14	24	103	102	9.0	130	51	3.4	0
26	2.4	24	4.4	11	24	63	88	7.6	68	43	2.9	0
27	2.0	19	5.4	9.9	41	44	58	79	41	36	2.4	0
28	1.2	16	9.0	8.0	42	33	142	62	40	31	1.8	2.7
29	1.0	15	9.4	7.6	-	27	346	39	45	26	1.2	7.4
30	.9	14	9.4	6.7	-	56	109	128	28	22	19	11
31	.9	-	9.4	5.8	-	32	-	56	-	20	6.1	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	9,031.6	2,900	0	291	17,910
November	608.3	85	.7	20.3	1,210
December	577.9	70	4.0	18.6	1,150
Calendar year 1944	34,610.8	2,900	0	94.6	68,650
January	349.5	33	5.8	11.3	693
February	429.2	100	4.7	15.3	851
March	9,491	2,490	27	306	18,830
April	18,903	4,310	16	630	37,490
May	2,623	658	7.6	84.6	5,200
June	10,423	1,590	12	347	20,670
July	27,240	3,850	11	879	54,030
August	2,279.1	1,300	1.2	73.5	4,520
September	35.1	11	0	1.17	70
Water year 1944-45	81,990.7	4,310	0	225	162,600

Peak discharge.- Oct. 5 (2 p.m.) 3,160 sec.-ft.; Mar. 19 (8 p.m.) 3,160 sec.-ft.; Apr. 12 (5:30 a.m.) 5,340 sec.-ft.; Apr. 14 (4:30 a.m.) 4,700 sec.-ft.; July 10 (5:30 p.m.) 3,360 sec.-ft.; July 13 (10 p.m.) 4,120 sec.-ft.

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Clear Fork Brazos River near Crystal Falls, Tex.

Location.- Water-stage recorder above concrete dam, lat. 32°54', long. 98°50', at Texas Co.'s pumping plant, 2½ miles downstream from Hubbard Creek and 3¼ miles northeast of Crystal Falls, Stephens County. Datum of gage is 1,055.25 feet above mean sea level, datum of 1929.

Drainage area.- 5,658 square miles.

Records available.- July 1928 to September 1945.

Average discharge.- 17 years, 505 second-feet.

Extremes.- Maximum discharge during year, 9,080 second-feet Oct. 4 (gage height, 15.38 feet); no flow at times.

1928-45: Maximum discharge, 35,800 second-feet June 11, 1941 (gage height, 33.45 feet), from rating curve extended above 23,000 second-feet; no flow at times.

Maximum stage known, about 34.0 feet, present site and datum, in 1900, from information by local residents.

Remarks.- Records good. Flow partly regulated by reservoirs in Elm Creek Basin (see p. 95) and Lakes Sweetwater and Trammel in Sweetwater Creek Basin, which have a combined capacity of about 106,000 acre-feet. Diversions above station for irrigation, municipal supply, and oil-field operation materially affect low flow.

Rating table, water year 1944-45 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Nov. 1 to Dec. 7, May 1-8)

2.2	0	2.6	72	6.0	2,400
2.25	1.5	2.8	142	8.0	4,090
2.3	5.5	3.0	224	10.0	5,620
2.35	12.5	3.5	470	12.0	6,980
2.4	22	4.0	800	14.4	8,480
2.5	44	5.0	1,560		

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	0.6	16	22	6.9	64	395	128	72	29	35	0
2	0	.3	14	14	5.5	66	630	72	40	584	33	0
3	1,090	.3	14	11	5.5	99	248	44	29	277	31	0
4	8,470	.3	14	22	5.5	79	110	31	22	75	29	0
5	4,550	.3	20	22	4.7	64	61	24	526	1,420	24	0
6	2,740	0	29	20	4.7	50	40	18	473	3,340	22	0
7	2,140	5.7	47	14	4.7	40	31	18	256	1,210	26	0
8	1,020	18	86	12	4.7	131	26	14	242	722	26	0
9	270	5.5	64	11	4.7	161	24	16	369	775	66	0
10	142	3.1	86	9.7	4.7	96	24	781	1,800	1,800	432	0
11	86	2.3	64	8.3	4.7	61	1,170	954	1,750	2,780	770	0
12	64	1.5	42	6.9	5.5	50	3,360	1,340	3,510	2,440	962	0
13	47	1.5	33	6.9	18	40	3,760	794	2,420	2,570	208	0
14	40	1.5	26	5.5	14	35	3,160	588	1,320	3,790	110	0
15	64	4.9	20	5.5	8.3	122	3,420	332	906	3,340	72	0
16	47	26	16	4.7	11	242	2,570	172	400	2,290	50	0
17	35	12	12	4.7	11	172	742	131	434	1,130	47	0
18	26	26	9.7	11	8.3	181	443	86	372	618	44	0
19	18	38	6.9	18	8.3	5,700	299	58	153	337	44	0
20	16	99	6.9	12	8.3	4,830	211	42	86	202	44	0
21	14	103	5.5	11	8.3	2,070	146	37	55	153	36	0
22	9.7	89	4.7	8.3	18	1,290	200	44	47	124	5.5	0
23	5.5	58	4.7	6.9	14	806	506	40	50	99	30	0
24	5.5	47	3.9	6.9	75	352	443	31	52	89	40	0
25	5.5	69	3.9	6.9	64	184	247	24	100	75	34	0
26	4.7	75	3.9	8.3	40	113	153	20	128	66	8.3	0
27	3.9	47	6.9	14	40	75	138	20	72	58	3.1	0
28	3.1	33	60	14	66	58	279	20	42	52	1.2	0
29	2.3	24	159	11	-	44	188	75	31	47	.6	0
30	1.2	18	69	8.3	-	851	305	44	33	44	.3	.9
31	.9	-	37	6.9	-	769	-	102	-	40	0	- -

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	20,921.3	8,470	0	675	41,500
November	809.8	103	0	27.0	1,610
December	985.0	159	3.9	31.8	1,950
Calendar year 1944	67,555.8	8,470	0	185	134,000
January	343.7	22	4.7	11.1	682
February	474.3	75	4.7	16.9	941
March	18,895	5,700	35	610	37,480
April	23,329	3,760	24	778	46,270
May	6,100	1,340	14	197	12,100
June	15,790	3,510	22	526	31,320
July	30,576	3,790	29	986	60,650
August	3,234.0	962	0	104	6,410
September	.9	.9	0	.03	1.8
Water year 1944-45	121,459.0	8,470	0	333	240,900

Peak discharge.- Oct. 4 (6:30 p.m.) 9,080 sec.-ft.; Mar. 19 (9 p.m.) 8,300 sec.-ft.; June 12 (11:30 p.m.) 5,170 sec.-ft.; July 6 (5 a.m.) 6,260 sec.-ft.

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Fort Phantom Hill Reservoir near Nugent, Tex.

Location.- Staff gage, lat. 32°37', long. 99°40', on outlet tower at dam on Elm Creek, 4 miles upstream from Clear Fork Brazos River and 5 miles south of Nugent, Jones County. Datum of gage is 1,580.0 feet above mean sea level.

Drainage area.- 478 square miles.

Records available.- July 1940 to September 1945.

Extremes.- Maximum contents observed during year, 54,800 acre-feet July 13-19 (gage height, 49.7 feet); minimum observed, 47,200 acre-feet Dec. 26, 27 (gage height, 46.8 feet).

1940-45: Maximum contents observed, 80,900 acre-feet Oct. 17, 1941 (gage height, 56.8 feet); minimum observed, 20,290 acre-feet Aug. 12, 13, 1940 (gage height, 34.7 feet).

Remarks.- Reservoir is formed by earth-fill dam with rock riprap face; dam completed and storage began in October 1938. Capacity, 69,550 acre-feet between gage heights 1.6 feet (sill of lowest outlet gage) and 54.0 feet (crest of spillway). Dead storage, 450 acre-feet. Records given herein represent total contents. Water is used for municipal supply. Gage read once daily at 8 a.m. Lake Abilene on Elm Creek, Lake Kirby on Cedar Creek, and Lytle Lake on Lytle Creek (combined capacity, 19,300 acre-feet) are smaller reservoirs above station in Elm Creek Basin.

Cooperation.- Gage-height record and capacity table furnished by city of Abilene.

Monthly gage height and contents, water year October 1944 to September 1945

Date	Gage height (feet)†	Contents (acre-feet)	Change in contents during month (acre-feet)
Sept.30	47.1	47,950	-
Oct. 31	47.2	48,200	+250
Nov. 30	47.1	47,950	-250
Dec. 31	47.1	47,950	0
Calendar year 1944	-	-	-2,250
Jan. 31	47.1	47,950	0
Feb. 28	46.9	47,450	-500
Mar. 31	47.0	47,700	+250
Apr. 30	47.2	48,200	+500
May 31	47.2	48,200	0
June 30	48.3	50,950	+2,750
July 31	49.3	53,600	+2,650
Aug. 31	49.0	52,700	-900
Sept.30	48.1	50,450	-2,250
Water year 1944-45	-	-	+2,500

† Gage height at 8 a.m.

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Aquilla Creek near Aquilla, Tex.

Location.- Water-stage recorder, lat. 31°51', long. 97°12', at bridge on Abbot-Aquilla county road, three-quarters of a mile upstream from Falls Branch and 1 mile southeast of Aquilla, Hill County.

Drainage area.- 309 square miles.

Records available.- December 1924 to August 1925, December 1938 to September 1945.

Extremes.- 1943-44: Maximum gage height during water year, 30.84 feet May 2 (discharge not determined); no flow Sept. 14, 16-26.

1944-45: Maximum discharge during water year, 14,700 second-feet July 11 (gage height, 28.64 feet); no flow Oct. 22.

1924-25, 1938-45: Maximum gage height, that of May 2, 1944 (discharge not determined); no flow at times.

Maximum stage known, 34 feet Aug. 31, 1887, from information by local resident. Flood of Sept. 27, 1936, reached a stage of about 33 feet, from floodmark. Peak discharge of this flood as determined about 9 miles below station, 84,500 second-feet, by slope-area method (drainage area, 370 square miles).

Remarks.- Records good except those above 7,000 second-feet and those for periods of no gage-height record, which are poor. No large diversion above station.

Discharge, in second-feet, 1943-45

1943-44

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	179	0.2	1.4	183	28	296	29	9,070	146	3.8	0.3	2.2
2	28	.2	1.3	385	258	142	31	18,000	106	3.8	.2	.7
3	8.5	.2	1.3	88	114	90	36	1,890	84	4.0	.2	.4
4	4.8	.2	1.6	30	57	84	29	338	71	5.9	.2	.2
5	1.8	.2	1.8	19	41	72	24	252	305	6.4	.2	.8
6	.7	.2	3.6	14	36	69	22	170	1,430	5.1	.2	15
7	.4	.2	3.4	13	31	46	21	134	85	3.8	.2	1.0
8	.2	.2	1.9	18	531	41	22	106	72	3.1	.2	.4
9	.2	.2	1.8	12	634	40	23	106	51	2.4	.2	.2
10	.2	.2	6.5	11	142	60	21	110	43	2.2	.2	.2
11	.2	.2	11	9.7	76	118	17	76	37	1.9	.2	.1
12	1.1	.3	3.8	19	54	77	13	65	36	1.6	.2	.1
13	92	.5	2.4	70	50	57	13	58	31	1.2	.2	.1
14	9.4	.8	1.9	30	267	49	13	51	26	8.5	.2	.1
15	2.4	1.0	1.5	24	115	45	13	46	f23	2.5	.2	.1
16	.9	.9	1.3	24	69	42	11	40	f21	2.5	.3	0
17	.6	.9	1.3	20	84	38	10	36	18	1.4	.2	0
18	.4	.9	1.3	17	71	54	10	33	16	1.0	.2	0
19	.3	.9	1.4	15	71	538	9.7	30	14	.8	.2	0
20	.3	1.2	1.6	14	71	129	10	32	13	.7	.2	0
21	.4	1.5	1.6	13	71	68	10	35	11	.7	.2	0
22	.4	1.5	1.6	12	71	110	11	348	9.4	2.9	.2	0
23	.5	1.5	1.8	11	71	160	13	252	8.0	6.7	.1	0
24	20	1.5	3.6	12	71	72	10	60	7.2	3.8	.1	0
25	4.0	1.4	9.1	38	78	46	8.2	723	6.4	2.0	.1	0
26	1.0	1.6	5.7	31	496	43	7.5	3,110	5.9	1.8	.1	.1
27	.4	2.4	25	36	519	46	6.9	1,620	5.3	1.2	.2	.6
28	.3	2.4	41	29	326	55	5.9	1,910	4.8	.7	.2	2.8
29	.2	2.0	9.7	40	942	80	1,260	f1,330	4.2	.6	.2	.6
30	.2	1.4	6.4	49	-	39	3,410	1,630	3.8	.5	1.6	.2
31	.2	-	4.4	36	-	33	-	219	-	.4	4.4	-

Peak discharge.- Apr. 29 (9 p.m.) 4,200 sec.-ft.; May 1 (6:30 a.m.) 11,600 sec.-ft.; May 2 (4 a.m.) discharge not determined; May 26 (1:30 p.m.) 3,850 sec.-ft.; May 30 (6 a.m.) 2,890 sec.-ft.; June 6 (3:30 a.m.) 4,400 sec.-ft.

f Computed on basis of partly estimated gage-height record.

Note.- No gage-height record Feb. 12-14, Feb. 17 to Mar. 2; discharge computed on basis of recorded range in stage, engineer's notes, and weather records.

Discharge, in second-feet, of Aquilla Creek near Aquilla, Tex., 1943-45--Continued

1944-45

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.2	0.1	0.7	206	48	158	2,730	85	7.2	14	15	2.4
2	.2	.1	.6	81	46	146	3,200	74	6.9	120	14	1.9
3	.2	.1	.5	65	46	130	348	61	34	32	12	1.6
4	.2	.1	11	59	47	118	251	49	86	16	11	1.4
5	18	.1	504	50	41	106	166	48	48	96	10	1.2
6	13	.1	268	49	37	397	134	44	15	2,090	8.8	1.0
7	5.9	.2	101	46	34	237	122	43	10	884	8.0	.9
8	66	.2	79	37	31	178	106	37	7.5	1,270	7.7	.9
9	11	.3	23	31	30	150	98	33	5.9	134	7.5	.8
10	2.2	.3	12	27	29	138	88	72	5.3	375	6.9	.7
11	.6	.3	8.0	26	29	130	451	157	5.3	9,500	6.7	.7
12	.2	.3	6.2	26	1,380	236	420	104	1,880	2,330	6.4	.7
13	.2	.3	5.5	26	214	291	138	45	3,550	257	5.9	.7
14	.2	.2	4.8	24	138	177	118	34	973	522	5.3	.6
15	.2	.3	4.4	22	130	2,160	102	30	118	207	4.6	.6
16	.1	.6	4.0	20	118	416	118	81	62	126	4.4	.6
17	.1	.8	3.8	98	106	174	100	38	44	96	3.6	.6
18	.1	1.3	3.4	3,450	94	142	67	28	158	76	3.4	.6
19	.1	1.2	3.1	3,430	3,660	474	66	24	73	61	2.9	.6
20	.1	1.4	2.9	288	4,730	669	358	20	41	53	2.7	.6
21	.1	.2	2.9	242	4,820	142	4,200	52	33	45	2.4	.6
22	.1	.1	2.9	220	516	110	8,240	111	517	40	3.1	.6
23	.1	.1	2.7	130	201	f98	1,680	28	194	35	4.0	.6
24	.1	24	2.9	110	158	f92	574	20	42	31	3.3	.6
25	.1	149	3.1	94	154	f82	513	18	30	28	2.7	.6
26	.1	34	7.9	76	146	70	192	16	24	24	2.4	.6
27	.1	6.8	752	69	592	59	134	13	19	22	2.2	.6
28	.1	2.4	1,180	70	174	400	232	11	15	22	2.0	9.8
29	.1	1.3	1,280	63	-	3,190	265	10	14	20	4.2	23
30	.1	.8	149	55	-	7,740	106	8.5	14	19	5.3	7.8
31	.1	-	381	49	-	3,640	-	7.5	-	16	3.3	-

Peak discharge.- Mar. 30 (2:30 p.m.) 9,000 sec.-ft.; Apr. 22 (6:30 a.m.) 10,400 sec.-ft.; July 11 (1:30 p.m.) 14,700 sec.-ft.

f Computed on basis of partly estimated gage-height record.

Note.- No gage-height record Feb. 10 to Mar. 7; discharge computed on basis of floodmarks in well, weather records, and by comparison with past records for floods of similar magnitude.

Monthly discharge, in second-feet, 1943-45

Month	Second-feet-days	Maximum	Minimum	Mean	Runoff in acre-feet
October 1943	359.0	179	0.2	11.6	712
November	26.8	2.4	.2	.89	53
December	164.0	41	1.3	5.29	325
Calendar year 1943	21,639.2	4,620	0	59.3	42,920
January 1944	1,322.7	385	9.7	42.7	2,620
February	5,445	942	28	188	10,800
March	2,841	538	33	91.6	5,640
April	5,120.2	3,410	5.9	171	10,160
May	41,880	18,000	30	1,351	83,070
June	2,694.0	1,430	3.8	89.8	5,340
July	83.9	8.5	.4	2.71	166
August	11.6	4.4	.1	.37	23
September	25.9	15	0	.86	51
Water year 1943-44	59,974.1	18,000	0	164	119,000
October 1944	119.9	66	.1	3.87	238
November	227.0	149	.1	7.57	450
December	4,810.3	1,280	.5	155	9,540
Calendar year 1944	64,581.5	18,000	0	176	128,100
January 1945	9,239	3,450	20	298	18,330
February	17,749	4,820	29	634	35,200
March	22,250	7,740	59	718	44,130
April	25,207	8,240	56	840	50,000
May	1,402.0	157	7.5	45.2	2,780
June	8,032.1	3,550	5.3	268	15,930
July	18,561	9,500	14	599	36,820
August	181.7	15	2.0	5.86	360
September	63.9	23	.6	2.13	127
Water year 1944-45	107,842.9	9,500	.1	295	213,900

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

North Bosque River near Clifton, Tex.

Location.- Staff gage above spillway of masonry dam, lat. 31°48', long. 97°35', 730 feet upstream from Gulf, Colorado & Santa Fe Railway bridge and 1.4 miles northwest of Clifton, Bosque County. Datum of gage is 622.7 feet above mean sea level, datum of 1929.

Drainage area.- 974 square miles.

Records available.- November 1923 to September 1945.

Average discharge.- 22 years, 237 second-feet.

Extremes.- Maximum discharge during year, 33,700 second-feet Apr. 22 (gage height, 20.80 feet, from graph based on gage readings); minimum observed, 4.8 second-feet Nov. 5-13 (gage height, 0.58 foot).

1923-45: Maximum discharge, 38,500 second-feet Jan. 23, 1938; maximum gage height observed, 22.10 feet May 5, 1941; no flow at times.

Flood of May 9, 1922, reached a stage of 25 feet, from information by local resident.

Remarks.- Records good. Railway company pumps about 100,000 gallons a day (0.15 second-foot) from pool formed by control dam a third of a mile below gage. Gage read twice daily, oftener during high stages.

Rating table, water year 1944-45 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Oct. 1 to Dec. 13)

0.55	4.8	1.3	218	5.0	5,590
.60	9.4	1.5	354	7.0	9,750
.65	15	1.7	500	8.0	11,700
.70	23	2.0	780	9.0	13,400
.80	43	2.5	1,340	10.0	14,900
1.0	99	3.0	2,000	12.0	18,000
1.2	166	4.0	3,610	14.3	21,800

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	9.4	6.6	23	126	162	880	5,080	662	136	99	90	43
2	8.5	5.7	18	114	159	923	2,700	617	129	1,210	81	41
3	8.5	5.7	18	105	151	2,480	990	563	123	238	78	39
4	527	5.7	25	102	144	935	780	527	159	120	75	35
5	171	4.8	121	96	136	780	626	492	140	162	69	33
6	136	4.8	69	93	136	1,060	590	454	129	5,970	66	31
7	99	4.8	81	87	129	990	554	409	117	1,580	64	29
8	75	4.8	114	81	123	644	509	375	111	485	64	a29
9	46	4.8	78	72	117	536	477	354	117	285	61	a29
10	23	4.8	61	69	117	477	462	347	123	5,300	61	a27
11	20	4.8	41	64	136	485	1,550	662	114	10,500	59	a27
12	17	4.8	37	61	641	492	1,070	680	9,530	990	93	27
13	14	4.8	33	59	1,270	462	680	536	1,380	518	81	25
14	13	5.7	31	59	423	561	599	409	581	454	75	25
15	12	5.7	31	56	320	2,420	500	361	299	368	64	23
16	9.4	6.6	29	56	278	935	554	340	218	285	53	23
17	8.5	7.6	27	53	238	590	469	326	202	238	48	23
18	8.5	9.4	27	3,790	340	518	402	326	182	197	43	20
19	8.5	a14	25	2,060	492	1,250	382	299	162	176	39	17
20	8.5	18	23	590	702	938	368	265	151	166	39	17
21	8.5	18	23	438	6,140	527	6,430	354	144	159	35	15
22	7.6	15	23	340	1,880	477	21,700	340	136	151	35	15
23	7.6	15	22	285	671	454	3,080	333	a136	148	39	14
24	7.6	14	22	258	536	423	2,440	306	a136	140	33	14
25	7.6	70	20	231	500	395	1,470	278	136	129	33	13
26	7.6	102	41	208	500	361	1,040	231	129	123	35	13
27	7.6	78	138	202	1,680	326	935	197	120	117	33	12
28	7.6	56	458	a197	2,160	306	880	176	108	a136	33	12
29	7.6	37	570	192	-	4,200	830	159	99	176	48	27
30	7.6	29	306	182	-	7,940	780	151	93	114	46	427
31	7.6	-	197	166	-	2,800	-	144	-	102	46	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	1,307.3	527	7.6	42.2	2,590
November	567.9	102	4.8	18.9	1,130
December	2,732	570	18	88.1	5,420
Calendar year 1944	71,644.9	15,600	3.7	136	142,100
January	10,492	3,790	53	338	20,810
February	20,281	6,140	117	724	40,230
March	36,565	7,940	306	1,180	72,530
April	58,927	21,700	368	1,964	116,900
May	11,673	680	144	377	23,150
June	15,340	9,530	93	511	30,430
July	30,836	10,500	99	995	61,160
August	1,719	93	33	55.5	3,410
September	1,125	427	12	37.5	2,230
Water year 1944-45	191,565.2	21,700	4.8	525	380,000

a No gage-height record; discharge interpolated or computed on basis of weather records.

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Leon River near Hasse, Tex.

Location.- Water-stage recorder and concrete control, lat. 31°57', long. 98°28', at bridge on U. S. Highway 67, 1,000 feet upstream from Gulf, Colorado & Santa Fe Railway bridge, 0.4 mile upstream from Walnut Creek, and 2.1 miles northeast of Hasse, Comanche County. Datum of gage is 1,115.1 feet above mean sea level, datum of 1939.

Drainage area.- 1,276 square miles.

Records available.- January 1939 to September 1945.

Extremes.- Maximum discharge during year, 16,900 second-feet Mar. 30 (gage height, 17.23 feet); minimum, 0.1 second-foot Sept. 27, 28 (gage height, 3.00 feet).
1939-45: Maximum discharge, that of Mar. 30, 1945; maximum gage height, 17.72 feet Oct. 19, 1942; no flow at times.
Maximum stage known, about 25.0 feet in May 1908, from information by Texas State Highway Department.

Remarks.- Records good except those for periods of no gage-height record, which are poor. No large diversion above station.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.2	2.8	15	60	32	622	6,640	115	54	13	16	5.8
2	2.1	2.8	13	46	32	385	4,930	104	50	26	15	4.4
3	2.2	2.8	12	36	33	f254	2,120	94	150	108	14	3.5
4	41	2.8	13	32	34	180	1,260	60	70	58	14	2.8
5	276	3.0	34	27	33	148	686	82	54	33	12	2.7
6	273	3.3	39	26	32	272	448	79	44	227	12	2.4
7	84	3.5	46	25	30	227	320	79	36	1,240	11	2.1
8	60	3.6	34	24	29	141	254	76	28	974	11	2.1
9	33	3.8	27	23	29	123	219	73	24	466	47	1.7
10	26	3.8	22	21	29	104	194	94	23	486	52	1.7
11	16	3.8	18	20	28	97	369	495	26	566	66	1.5
12	13	4.0	15	20	56	94	544	558	201	688	25	1.4
13	9.8	4.7	14	20	115	97	522	296	425	718	16	1.1
14	7.7	44	13	20	104	97	455	186	272	537	10	.9
15	5.8	49	13	19	91	193	290	115	172	214	8.2	.9
16	4.7	32	12	19	66	264	197	119	612	119	6.8	1.0
17	4.0	23	12	24	52	227	151	130	588	85	6.3	1.0
18	3.8	16	12	333	44	141	123	138	343	68	5.1	1.0
19	3.5	30	11	382	70	123	108	134	154	52	4.7	.9
20	3.0	23	11	176	88	212	135	130	58	43	3.8	.8
21	3.0	19	11	100	1,980	270	442	123	43	37	3.5	.8
22	2.7	16	10	73	1,210	174	1,400	115	39	34	3.5	.7
23	2.7	12	11	62	602	127	899	104	35	32	3.8	.6
24	2.7	22	11	50	355	100	854	97	32	29	3.5	.5
25	2.7	108	11	44	183	85	577	94	26	28	3.3	.3
26	2.7	100	12	40	115	76	425	85	23	25	3.5	.2
27	2.8	62	23	36	799	76	280	76	19	23	3.5	.2
28	2.7	40	62	36	1,110	70	183	73	17	23	3.0	.3
29	2.8	27	138	34	-	73	148	66	15	21	3.3	17
30	2.8	19	148	33	-	8,740	130	62	13	19	9.0	208
31	2.7	-	91	32	-	6,420	-	58	-	17	8.7	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	901.1	276	2.1	29.1	1,790
November	686.7	108	2.8	22.9	1,360
December	914	148	10	29.5	1,810
Calendar year 1944	49,530.2	7,280	.2	135	98,240
January	1,893	382	19	61.1	3,750
February	7,581	1,980	28	271	15,040
March	20,212	8,740	70	652	40,090
April	25,303	6,640	108	843	50,190
May	4,110	558	58	133	8,150
June	3,646	612	13	122	7,230
July	7,009	1,240	13	226	13,900
August	404.5	66	3.0	13.0	802
September	268.3	208	.2	8.94	532
Water year 1944-45	72,928.6	8,740	.2	200	144,600

Peak discharge.- Feb. 21 (2:30 p.m.) 3,840 sec.-ft.; Mar. 30 (6 p.m.) 16,900 sec.-ft.; Apr. 1 (12:30 p.m.) 8,380 sec.-ft.

f Computed on basis of partly estimated gage-height record.

Note.- No gage-height record Nov. 7, 8, 21, 22, May 15 to June 23; discharge computed on basis of recorded range in stage, weather records, and records for station near Belton.

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Leon River near Belton, Tex.

Location.- Water-stage recorder above spillway of concrete dam, lat. 31°04'15", long. 97°26'30", 1,400 feet upstream from bridge on U. S. Highway 81 and 2 miles east of Belton, Bell County. Datum of gage is 476.9 feet above mean sea level, datum of 1929.

Drainage area.- 3,547 square miles.

Records available.- October 1923 to September 1945.

Average discharge.- 22 years, 773 second-feet.

Extremes.- Maximum discharge during year, 70,600 second-feet Apr. 22 (gage height, 24.41 feet), from rating curve extended above 45,000 second-feet; minimum, 42 second-feet Sept. 25-28 (gage height, 2.57 feet).

1923-45: Maximum discharge, that of Apr. 22, 1945; no flow at times.

Maximum stage known, 25 feet in December 1913, from information by local residents.

Remarks.- Records good except those for periods of no gage-height record, which are fair. Several small pumping plants divert water above station.

Rating table, water year 1944-45 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Oct. 8 to Nov. 23)

2.55	36	3.6	727	10.0	13,200
2.6	52	4.0	1,150	12.0	18,500
2.7	92	5.0	2,400	14.0	23,700
2.8	141	6.0	3,870	17.0	30,700
3.0	262	7.0	5,740	20.0	39,000
3.3	478	8.0	8,050	21.2	45,500

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	68	52	242	583	840	2,400	7,350	2,660	470	337	176	116
2	68	52	220	566	811	2,270	6,030	2,400	448	359	158	97
3	68	56	199	542	792	7,310	5,000	2,140	668	323	147	88
4	609	56	296	526	783	8,760	4,900	1,940	904	303	136	97
5	372	60	2,200	518	755	7,570	5,740	1,820	641	359	126	147
6	359	60	1,530	510	718	6,180	6,870	1,630	542	373	121	116
7	425	60	953	502	684	3,240	7,570	1,560	425	359	121	97
8	199	60	675	502	650	2,800	6,410	1,430	388	410	141	84
9	212	60	448	494	624	2,460	f3,160	1,340	402	667	136	68
10	193	60	352	470	641	2,340	2,400	1,270	425	860	158	60
11	310	52	330	448	1,630	2,140	2,270	1,820	518	870	147	56
12	218	56	310	432	3,470	2,010	2,530	1,470	1,580	1,550	126	56
13	182	56	296	410	2,600	1,940	2,140	1,270	2,360	1,820	107	55
14	147	56	269	402	2,530	1,880	2,340	1,220	1,220	1,460	107	55
15	126	60	243	417	2,080	3,110	2,200	1,450	2,800	1,110	102	54
16	112	88	224	455	1,750	2,660	2,080	1,630	2,870	1,010	158	54
17	102	88	212	5,700	1,450	2,660	1,940	1,410	1,080	1,090	141	53
18	97	102	212	10,100	1,220	2,530	1,820	1,260	4,250	975	141	52
19	102	153	205	6,870	1,750	2,460	1,690	1,550	2,010	650	112	56
20	97	141	205	5,740	1,750	2,870	2,450	1,430	1,490	470	102	52
21	92	136	205	4,620	6,720	2,340	13,700	1,170	1,230	380	97	52
22	88	136	205	2,940	3,470	2,270	45,000	1,100	1,030	330	102	48
23	84	121	205	2,200	3,390	1,820	19,000	920	997	296	112	48
24	80	298	205	1,750	3,090	1,630	12,200	792	910	269	97	45
25	76	597	249	1,510	3,020	1,590	10,300	727	608	243	97	42
26	64	352	544	1,280	3,240	1,470	8,530	718	502	224	88	42
27	64	330	1,010	1,140	3,090	1,320	5,520	736	455	199	80	42
28	60	308	1,900	1,080	2,730	1,190	4,360	633	432	187	88	45
29	60	286	1,130	1,020	-	3,470	3,550	575	395	237	126	936
30	56	264	667	920	-	7,080	3,020	534	366	205	102	2,420
31	56	-	608	860	-	4,800	-	502	-	176	97	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	4,846	609	56	156	9,610
November	4,256	597	52	142	8,440
December	16,549	2,200	199	534	32,820
Calendar year 1944	544,764	35,200	52	1,488	1,081,000
January	55,507	10,100	402	1,791	110,100
February	56,278	6,720	624	2,010	111,600
March	98,570	8,760	1,190	3,180	195,500
April	202,070	45,000	1,690	6,736	400,800
May	41,107	2,660	502	1,326	81,530
June	32,416	4,250	366	1,081	64,300
July	18,101	1,820	176	584	35,900
August	3,749	176	80	121	7,440
September	5,233	2,420	42	174	10,380
Water year 1944-45	538,682	45,000	42	1,476	1,068,000

Peak discharge.- Feb. 21 (12 m.) 10,600 sec.-ft.; Mar. 3 (11:30 p.m.) 16,900 sec.-ft.; Mar. 30 (5:30 a.m.) 11,400 sec.-ft.; Apr. 22 (2:30 a.m.) 70,600 sec.-ft.

f Computed on basis of partly estimated gage-height record.

Note.- No gage-height record Nov. 27 to Dec. 2, Dec. 20 to Jan. 8, Jan. 15-18, Sept. 12-17; discharge computed on basis of estimated gage heights based on recorded peak and trough stages, weather records, and records for Leon River near Hasse. Discharge Dec. 3-10, Jan. 19 to Feb. 13 computed from graph based on daily readings of outside gage.

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Little River at Cameron, Tex.

Location.- Water-stage recorder, lat. 30°50', long. 96°57', at site of old McCowan bridge, 2,100 feet upstream from bridge on U. S. Highway 77 and 2 miles southeast of Cameron, Milam County. Datum of gage is 281.9 feet above mean sea level, datum of 1929.

Drainage area.- 7,034 square miles.

Records available.- November 1916 to September 1945.

Average discharge.- 28 years (1917-45), 2,058 second-feet.

Extremes.- Maximum discharge during year, 98,000 second-feet Apr. 23 (gage height, 37.44 feet); minimum, 182 second-feet Nov. 13 (gage height, 3.97 feet).

1916-45: Maximum discharge, 647,000 second-feet Sept. 10, 1921 (gage height, 53.2 feet, present datum, from floodmark), by slope-area method; minimum, 2.6 second-feet, Sept. 3, 5, 7, 1918.

Flood of 1852 reached about same stage as that of Sept. 10, 1921. Flood of December 1913 reached a stage of 49.0 feet. Stages based on information by local residents.

Remarks.- Records good except those for periods of no gage-height record, which are poor. Many small diversions for irrigation and municipal supply affect very low flows. Slight regulation caused by pumping above station.

Rating table, water year 1944-45 (gage height, in feet, and discharge, in second-feet)

3.9	167	7.0	1,210	25.0	9,670	34.0	27,700
4.2	239	10.0	2,340	30.0	12,600	35.0	41,700
4.6	357	13.0	3,630	32.0	14,500	36.0	61,000
5.0	490	16.0	5,040	32.6	16,200	36.7	78,000
6.0	848	20.0	7,060	33.2	19,900		

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	363	199	668	4,460	2,710	5,890	10,100	6,090	1,280	1,210	525	656
2	327	196	614	4,460	2,590	5,290	15,800	5,440	1,170	1,140	525	758
3	300	194	632	3,190	2,540	6,620	17,000	4,990	1,060	1,060	525	508
4	297	211	650	2,710	2,540	12,400	10,100	4,550	2,490	992	483	415
5	273	211	5,920	2,380	2,750	12,800	7,630	4,220	5,480	920	458	389
6	875	201	12,700	2,590	2,840	12,900	7,480	3,940	4,020	866	435	348
7	794	201	12,700	2,710	2,420	10,600	8,050	3,760	2,040	834	418	357
8	794	203	5,210	2,260	2,230	7,680	8,720	3,590	1,540	866	405	324
9	668	199	3,150	1,960	2,110	5,990	8,670	3,370	1,360	884	772	297
10	462	194	2,380	1,770	2,040	5,340	4,700	3,450	1,210	902	650	279
11	441	187	2,070	1,660	2,000	4,940	4,800	3,410	1,100	2,180	920	267
12	424	185	1,810	1,580	2,360	4,700	4,220	3,990	1,890	1,430	758	256
13	490	182	1,660	1,580	8,510	4,460	4,550	4,080	5,800	1,510	525	242
14	418	185	1,580	1,540	10,000	4,360	3,660	3,190	6,440	2,540	438	229
15	379	185	1,510	1,510	7,180	4,460	4,040	2,840	3,520	3,370	402	218
16	345	194	1,430	1,430	5,040	5,990	3,990	2,970	3,190	2,590	376	218
17	321	218	1,360	1,360	4,170	6,650	3,810	4,550	3,900	1,920	367	234
18	300	345	1,280	5,370	3,900	5,290	3,630	4,270	6,470	1,540	383	231
19	279	472	1,250	18,100	3,590	4,890	3,410	3,230	12,700	1,360	363	223
20	264	525	1,140	24,100	4,460	4,550	3,190	2,880	11,200	1,250	351	213
21	253	525	1,100	16,100	6,290	5,540	4,990	2,790	4,110	1,170	330	206
22	245	480	1,060	10,100	10,700	4,990	19,300	3,010	2,790	1,100	315	203
23	234	428	1,060	7,010	11,700	4,360	76,300	2,670	2,710	1,060	306	201
24	229	1,070	1,030	5,340	8,540	3,990	43,800	2,340	3,060	992	389	199
25	223	7,550	1,030	4,550	6,450	3,720	26,600	2,110	2,190	956	357	194
26	221	6,870	1,060	4,040	5,940	3,540	18,800	1,960	1,810	902	324	194
27	216	1,900	2,980	3,630	5,990	3,370	13,400	1,850	1,510	848	309	189
28	213	1,060	4,990	3,370	6,090	3,100	10,700	1,810	1,430	794	357	194
29	208	848	4,270	3,230	-	2,930	8,150	1,730	1,320	740	2,250	3,910
30	203	722	3,190	3,010	-	4,300	6,910	1,580	1,250	668	2,470	1,690
31	201	-	3,100	2,840	-	7,780	-	1,430	-	578	858	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	11,260	875	201	363	22,330
November	26,140	7,550	182	871	51,850
December	84,584	12,700	614	2,729	167,800
Calendar year 1944	1,302,847	60,800	182	3,560	2,584,000
January	149,940	24,100	1,360	4,837	297,400
February	137,680	11,700	2,000	4.917	273,100
March	183,420	12,900	2,930	5,917	363,800
April	366,700	76,300	3,190	12,220	727,300
May	102,090	6,090	1,430	3.293	202,500
June	100,040	12,700	1,060	3,335	198,400
July	39,222	3,370	578	1.265	77,800
August	18,344	2,470	306	592	36,380
September	13,842	3,910	189	461	27,460
Water year 1944-45	1,233,262	76,300	182	3,379	2,446,000

Peak discharge.- Dec. 6 (12 p.m.) 14,400 sec.-ft.; Jan. 19 (11 p.m.) 28,800 sec.-ft.; Mar. 6 (5 a.m.) 13,300 sec.-ft.; Apr. 2 (11 p.m.) 22,200 sec.-ft.; Apr. 23 (8 a.m.) 98,000 sec.-ft.; June 19 (10:30 p.m.) 13,900 sec.-ft.

Note.- No gage-height record May 15-22, May 30 to June 3, June 9-11, June 27 to July 4, July 12-30; discharge computed on basis of weather records, and records for Leon River near Belton, Lampasas River at Youngsport, and San Gabriel River at Georgetown.

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Lampasas River at Youngsport, Tex.

Location.- Water-stage recorder, lat. 30°57', long. 97°43', 300 feet upstream from bridge on county highway and half a mile southeast of Youngsport, Bell County.

Drainage area.- 1,242 square miles.

Records available.- February 1924 to September 1945.

Average discharge.- 21 years, 340 second-feet.

Extremes.- Maximum discharge during year, 15,000 second-feet Apr. 21 (gage height, 13.8 feet, from graph based on partial recorder record); minimum, 30 second-feet Sept. 26-28 (gage height, 2.95 feet).

1924-45: Maximum discharge, 53,200 second-feet Sept. 28, 1936 (gage height, 33.5 feet, from floodmarks), from rating curve extended above 40,000 second-feet; no flow July 17 to Aug. 18, 1925, July 22, 23, Aug. 9 to Sept. 8, 1934.

Flood of September 1873 reached a stage of 44.2 feet and that of Dec. 2, 1913, reached a stage of 33.6 feet, present datum, from information by local residents.

Remarks.- Records good except those for periods of no gage-height record, which are fair. Small diversions above station for municipal uses.

Discharge, in second-feet, water year Octcber 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	79	42	176	1,130	966	1,300	2,100	1,400	243	168	83	159
2	72	42	168	829	922	1,350	f1,790	1,340	248	254	79	109
3	66	42	159	765	879	4,680	f1,270	1,270	486	189	72	78
4	279	42	189	725	837	3,510	1,160	1,180	2,820	172	69	60
5	382	42	3,000	701	821	2,030	1,030	1,160	737	163	66	54
6	233	45	1,270	717	757	2,030	1,000	1,120	379	168	63	51
7	146	45	1,230	678	741	1,910	966	1,030	302	185	63	48
8	104	42	904	610	701	1,790	939	948	259	180	251	45
9	86	42	733	583	693	1,730	913	913	238	163	446	42
10	76	40	640	549	670	1,620	870	904	284	150	385	40
11	72	40	569	542	648	1,560	1,010	1,910	576	163	150	42
12	72	40	529	542	1,770	1,460	1,180	1,140	1,900	233	97	40
13	66	40	488	529	3,670	1,390	913	870	1,430	168	83	45
14	66	42	456	515	1,680	1,340	854	797	648	330	72	79
15	63	48	436	495	1.620	2,960	829	781	430	480	66	60
16	60	86	416	468	1,510	f1,620	813	845	331	280	60	48
17	60	112	404	535	1,390	1,300	765	733	290	180	57	42
18	57	112	379	6,990	f1,290	1,200	701	570	1,180	150	54	40
19	57	142	348	3,800	f1,510	1,560	662	f610	569	135	51	37
20	54	172	342	1,910	f1,400	1,400	957	f569	367	123	48	37
21	54	116	336	1,680	5,420	1,180	f10,300	f542	302	116	45	35
22	54	94	313	1,620	2,300	1,090	f7,490	556	456	108	57	35
23	51	86	307	1,510	1,790	1,060	2,980	462	402	101	57	32
24	51	314	307	1,460	1,680	1,040	2,900	410	296	97	51	32
25	51	556	319	1,380	1,560	966	2,280	385	259	94	48	32
26	51	342	331	1,240	1,510	896	1,850	360	238	90	45	32
27	48	243	990	1,170	1,400	854	1,730	331	218	83	45	30
28	48	214	773	1,160	1,360	837	1,620	307	199	79	45	32
29	48	199	948	1,120	-	1,450	1,560	290	185	79	63	f3,690
30	45	180	709	1,070	-	1,900	1,460	274	172	76	337	f3,920
31	45	-	905	1,010	-	1,250	-	254	-	83	559	-

Month	Second-fcct-days	Maximum	Minimum	Mean	Runoff in acre-feet
Octcber	2,696	382	45	87.0	5,350
November	3,602	556	40	120	7,140
December	19,074	3,000	159	615	37,830
Calendar year 1944	298,073	26,800	40	814	591,200
January	38,033	6,990	468	1,227	75,440
February	41,495	5,420	648	1,482	82,300
March	50,263	4,680	837	1,621	99,700
April	54,892	10,300	662	1,830	108,900
May	24,361	1,910	254	786	48,320
June	16,444	2,820	172	548	32,620
July	5,040	480	76	163	10,000
August	3,667	559	45	118	7,270
September	9,026	3,920	30	301	17,900
Water year 1944-45	268,593	10,300	30	736	532,800

Peak discharge.- Jan. 18 (6:30 p.m.) 11,400 sec.-ft.; Feb. 21 (3 p.m.) 8,590 sec.-ft.; Mar. 3 (11 p.m.) 10,600 sec.-ft.; Apr. 21 (7 p.m.) 15,000 sec.-ft.; June 4 (12:30 p.m.) 6,780 sec.-ft.; Sept. 29 (10 p.m.) 12,900 sec.-ft.

f Computed on basis of partly estimated gage-height record.

Note.- No gage-height record Jan. 21-23, Feb. 14-16, Feb. 23 to Mar. 2, Mar. 8-13, Apr. 27 to May 2; discharge computed on basis of weather records and records for nearby stations.

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

San Gabriel River at Georgetown, Tex.

Location.- Water-stage recorder and concrete control, lat. 30°39'10", long. 97°39'20", 100 feet downstream from Missouri-Kansas-Texas Railroad bridge, 1¼ miles downstream from confluence of North and South Forks, and 1¾ miles northeast of Georgetown, Williamson County. Datum of gage is 643.71 feet above mean sea level, datum of 1929.

Drainage area.- 415 square miles.

Records available.- July 1934 to September 1945. February 1924 to August 1925 at site 1 mile upstream; records equivalent except those for extremely low flow.

Average discharge.- 11 years, 194 second-feet.

Extremes.- Maximum discharge during year, 10,300 second-feet Jan. 18 (gage height, 9.54 feet); minimum, 13 second-feet Nov. 1, 2, 10-12.

1924-25, 1934-45: Maximum discharge, 37,500 second-feet June 6, 1944 (gage height, 19.49 feet), from rating curve extended above 24,000 second-feet; minimum, 0.2 second-foot (regulated) July 31, Aug. 1, 29, 30, 1942.

Maximum stage known, 39.36 feet, present site and datum, in September 1921 (discharge, 160,000 second-feet, by slope-area method), from information by Missouri-Kansas-Texas Railroad Co.

Remarks.- Records good. Several small diversions have some effect on low flow which is also regulated at times by gates in recreation dam 3,000 feet above station.

Rating table, water year 1944-45 (gage height, in feet, and discharge, in second-feet)

1.1	11	2.6	174	4.0	930
1.3	25	2.8	225	4.5	1,440
1.6	49	3.0	294	5.0	2,100
1.8	66	3.2	380	6.0	3,640
2.0	87	3.4	483	7.0	5,300
2.4	139	3.6	610		

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	28	14	72	306	310	424	2,280	371	96	92	41	32
2	26	52	70	238	310	440	598	358	96	90	39	28
3	24	17	68	222	310	751	434	335	345	88	37	25
4	23	16	166	214	310	507	400	319	1,460	85	35	22
5	23	15	2,770	211	344	467	362	310	226	79	33	21
6	25	15	576	222	294	424	348	302	129	75	32	20
7	28	15	507	211	276	385	340	290	108	72	30	20
8	25	15	353	190	257	371	327	268	98	69	522	20
9	22	14	306	181	254	358	319	310	76	66	79	20
10	20	14	268	170	247	353	306	268	142	83	49	18
11	21	14	244	174	238	346	398	483	198	549	26	17
12	22	14	238	174	1,220	344	358	268	937	143	34	17
13	20	14	222	170	597	327	294	241	429	89	32	16
14	20	14	208	164	419	327	279	222	176	121	29	15
15	20	18	200	157	371	609	272	533	131	100	28	15
16	20	25	190	150	353	358	268	318	111	76	26	16
17	20	38	183	596	344	331	251	222	101	69	25	16
18	19	47	174	4,180	335	319	231	203	3,220	64	25	15
19	19	56	163	895	592	319	219	188	470	61	23	15
20	18	52	161	617	507	310	1,040	176	247	68	22	15
21	17	45	159	557	1,630	279	1,990	192	195	56	22	15
22	17	33	150	483	603	272	1,040	211	215	54	22	15
23	17	30	149	440	520	272	617	161	208	56	25	15
24	17	707	155	424	483	268	952	152	157	50	24	15
25	16	504	161	400	478	254	645	145	142	48	22	15
26	15	140	170	376	461	238	501	122	131	46	22	15
27	15	96	186	362	483	225	461	126	120	43	22	15
28	15	85	200	358	456	222	456	118	111	45	23	16
29	15	84	208	340	-	244	419	111	90	42	33	654
30	15	76	186	327	-	632	385	104	97	39	36	357
31	14	-	261	319	-	360	-	100	-	38	38	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	616	28	14	19.9	1,220
November	2,279	707	14	76.0	4,520
December	9,124	2,770	68	294	18,100
Calendar year 1944	87,809.1	5,060	1.1	240	174,200
January	13,828	4,180	150	446	27,430
February	13,002	1,630	238	464	25,790
March	11,338	751	222	366	22,490
April	16,790	2,280	219	560	33,300
May	7,527	533	100	243	14,930
June	10,262	3,220	76	342	20,350
July	2,646	549	38	85.4	5,250
August	1,456	522	22	47.0	2,890
September	1,515	654	15	50.5	3,000
Water year 1944-45	90,383	4,180	14	248	179,300

Peak discharge.- Jan. 18 (11 a.m.) 10,300 sec.-ft.; Apr. 1 (12 m.) 8,600 sec.-ft.; June 4 (7:30 a.m.) 7,200 sec.-ft.; June 18 (2 p.m.) 7,800 sec.-ft.

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Yegua Creek near Somerville, Tex.

Location.- Water-stage recorder, lat. 30°19', long. 96°30', at bridge on State Highway 36, 760 feet downstream from Gulf, Colorado & Santa Fe Railway bridge, 2 miles south of Somerville, Burleson County, and 5 miles upstream from Davidson Creek. Datum of gage is 199.29 feet above mean sea level, datum of 1929.

Drainage area.- 990 square miles.

Records available.- May 1924 to September 1945.

Average discharge.- 21 years, 326 second-feet.

Extremes.- Maximum discharge during year, 11,600 second-feet Aug. 30 (gage height, 12.00 feet); no flow at times.
1924-45: Maximum discharge, 56,800 second-feet July 1, 1940 (gage height, 19.27 feet); no flow at times.
Maximum stage known, about 22.0 feet, present site and datum, Dec. 5, 1913, from information by chief engineer, Gulf, Colorado & Santa Fe Railway Co.

Remarks.- Records good. No diversion above station.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.0	0	746	2,070	86	147	5,000	101	9.4	36	1.6	2,780
2	.8	0	398	2,070	81	129	6,280	71	9.2	244	1.4	841
3	.8	.1	149	1,580	79	121	3,810	80	9.0	170	1.1	204
4	.6	6.8	91	926	118	117	2,380	70	9.8	90	.9	73
5	.6	a3.6	2,030	610	495	114	1,340	65	11	78	.8	40
6	.5	a1.2	3,790	1,310	416	108	764	48	10	46	.6	26
7	.4	a.8	4,060	2,640	434	100	456	41	8.1	27	.4	17
8	.4	a.7	2,380	2,500	434	92	228	76	6.6	17	.3	13
9	.3	a.5	1,900	1,580	316	83	127	60	5.2	13	.4	11
10	.2	a.4	1,950	716	200	76	98	153	3.7	10	59	9.0
11	.2	a.3	1,430	380	128	72	82	740	3.1	14	35	7.5
12	.1	.2	636	225	274	70	71	471	16	22	11	6.7
13	.1	.2	219	152	585	68	65	135	60	21	5.2	7.4
14	.1	.1	114	127	590	67	59	128	40	29	3.1	15
15	.1	.1	85	114	333	211	55	210	39	27	1.9	18
16	0	4.6	73	102	213	249	51	150	31	23	1.3	12
17	0	216	64	103	237	358	47	68	26	18	1.0	8.1
18	0	211	57	2,390	284	650	43	45	457	13	.8	6.0
19	0	1,490	52	5,620	455	500	41	33	1,380	9.2	.4	4.7
20	0	1,530	49	4,900	764	252	58	27	2,130	7.4	.3	4.2
21	0	1,680	44	3,420	807	249	222	26	2,010	6.0	.2	3.6
22	0	982	41	2,770	842	157	2,770	49	1,340	5.0	.2	3.2
23	0	333	40	2,070	835	102	2,910	33	814	4.3	.4	2.7
24	0	370	42	1,210	710	83	1,840	22	728	4.6	.3	2.3
25	0	4,730	46	728	580	78	1,340	18	722	4.3	.3	1.9
26	0	6,750	117	319	500	73	1,170	16	505	3.5	.2	1.8
27	0	4,150	1,010	184	368	60	996	14	294	2.6	.3	1.7
28	0	2,070	3,280	139	225	52	638	13	125	2.0	119	1.8
29	0	1,130	4,150	118	-	47	384	11	62	1.7	4,560	9.2
30	0	835	2,640	106	-	236	182	10	39	1.6	9,940	19
31	0	-	1,900	96	-	1,520	-	9.6	-	1.6	6,800	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	6.2	1.0	0	0.20	12
November	26,496.6	6,750	0	883	52,560
December	33,583	4,150	40	1,083	66,610
Calendar year 1944	146,077.1	6,750	0	399	289,800
January	41,275	5,620	96	1,331	81,870
February	11,389	842	79	407	22,590
March	6,241	1,520	47	201	12,380
April	33,507	6,280	41	1,117	66,460
May	2,993.6	740	9.6	96.6	5,940
June	10,903.1	2,130	3.1	363	21,630
Jnly	951.8	244	1.6	30.7	1,890
August	21,547.4	9,940	.2	695	42,740
September	4,150.8	2,780	1.7	138	8,230
Water year 1944-45	193,044.5	9,940	0	529	382,900

Peak discharge.- Nov. 26 (10 a.m.) 7,770 sec.-ft.; Dec. 6 (11 p.m.) 5,100 sec.-ft.; Dec. 29 (4 a.m.) 4,610 sec.-ft.; Jan. 19 (6:30 p.m.) 7,000 sec.-ft.; Apr. 2 (8 a.m.) 6,750 sec.-ft.; Aug. 30 (3 p.m.) 11,600 sec.-ft.

a No gage-height record; discharge computed on basis of observed range in stage and notes by construction foreman.

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Navasota River near Easterly, Tex.

Location.- Water-stage recorder, lat. 31°10'10", long. 96°17'55", at bridge on U. S. Highway 79, 1 mile upstream from Missouri Pacific Railroad bridge and 6 miles northeast of Easterly, Robertson County. Datum of gage is 276.42 feet above mean sea level, datum of 1929.

Drainage area.- 949 square miles.

Records available.- March 1924 to September 1945.

Average discharge.- 21 years, 452 second-feet.

Extremes.- Maximum discharge during year, 15,600 second-feet Mar. 5, Apr. 2; maximum gage height, 17.30 feet Mar. 5; minimum discharge, 1.4 second-feet Oct. 14-21.

1924-45: Maximum discharge, 60,300 second-feet May 2, 1944 (gage height, 22.13 feet); no flow at times.

Maximum stage known, about 24.0 feet in 1900, from information by local residents (discharge, about 71,000 second-feet).

Remarks.- Records good. No diversion above station.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.8	1.6	112	3,040	82	568	9,800	119	16	17	13	5,500
2	1.9	1.7	70	2,620	76	684	14,900	102	14	13	13	3,760
3	1.9	2.4	50	1,940	73	532	12,800	86	13	11	12	2,180
4	1.9	2.6	39	1,940	73	1,290	7,300	73	96	32	10	407
5	1.7	2.7	603	1,600	81	11,900	4,100	64	248	50	9.1	102
6	1.7	2.7	1,300	972	77	8,800	1,960	56	550	29	8.4	66
7	1.6	3.1	1,510	1,810	74	4,800	468	52	512	17	7.8	50
8	1.6	3.8	1,570	1,810	69	2,440	228	46	142	13	8.0	40
9	1.6	3.6	1,600	1,240	62	691	184	43	74	12	14	32
10	1.7	2.9	990	402	58	246	168	50	50	28	40	25
11	1.7	2.6	166	158	67	334	148	652	36	212	40	20
12	1.6	2.5	98	116	99	364	136	912	262	801	30	18
13	1.6	2.6	73	95	198	684	148	912	568	1,100	19	24
14	1.5	2.5	54	81	285	956	152	550	824	1,300	14	23
15	1.4	2.4	42	72	496	1,150	140	534	890	929	11	97
16	1.4	4.4	36	64	568	1,640	122	649	824	385	9.1	78
17	1.5	26	36	57	254	1,940	108	262	362	292	7.8	37
18	1.5	22	26	501	152	1,810	102	252	122	168	6.8	23
19	1.4	176	22	2,100	222	1,070	89	140	84	102	5.8	17
20	1.4	86	20	4,270	474	356	93	92	95	68	5.3	14
21	1.4	49	18	5,900	1,480	334	510	98	82	51	4.9	11
22	1.5	43	16	4,500	2,630	624	1,970	95	45	40	4.6	9.8
23	1.5	34	17	1,070	3,920	664	4,300	69	97	33	4.9	8.9
24	1.5	146	17	2,820	3,600	412	4,500	56	725	28	5.1	8.4
25	1.5	1,550	17	296	2,720	184	5,200	50	868	26	6.1	7.8
26	1.6	1,390	21	193	1,260	148	3,610	42	274	20	29	7.0
27	1.6	1,330	1,090	156	299	126	1,490	34	79	17	28	7.6
28	1.6	2,040	4,260	136	292	108	272	28	45	16	32	10
29	1.6	2,100	5,200	116	-	653	168	24	30	14	2,050	41
30	1.6	656	5,200	102	-	4,410	140	21	22	13	6,300	629
31	1.6	-	3,310	95	-	8,800	-	19	-	13	6,800	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	49.4	1.9	1.4	1.59	98
November	9,692.1	2,100	1.6	323	19,220
December	27,583	5,200	16	890	54,710
Calendar year 1944	333,267.8	47,800	.7	911	661,000
January	40,372	5,900	57	1,302	80,080
February	19,731	3,920	57	705	39,140
March	58,718	11,900	108	1,894	116,500
April	75,306	14,900	89	2,510	149,400
May	6,192	912	19	200	12,280
June	8,049	890	13	268	15,960
July	5,850	1,300	11	189	11,600
August	15,548.7	6,800	4.6	502	30,840
September	13,253.5	5,500	7.0	442	26,290
Water year 1944-45	280,344.7	14,900	1.4	768	556,100

Peak discharge.- Dec. 30 (12:30 a.m.) 5,900 sec.-ft.; Jan. 21 (8 a.m.) 6,800 sec.-ft.; Mar. 5 (10 a.m.) 15,600 sec.-ft.; Apr. 2 (4 a.m.) 15,600 sec.-ft.; Apr. 25 (3 a.m.) 5,500 sec.-ft.; Aug. 30 (5 p.m.) 7,800 sec.-ft.

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

American Canal Co.'s canal near Fulshear, Tex.
(Formerly published as Brazos Valley Irrigation Co.'s canal near Fulshear, Tex.)

Location.- Water-stage recorder, lat. 29°39', long. 95°54', 1 mile downstream from point of diversion and 3 miles south of Fulshear, Fort Bend County.

Records available.- October 1931 to September 1945.

Average discharge.- 14 years, 66.4 second-feet.

Extremes.- Maximum daily discharge during year, 346 second-feet July 16; no flow at times. 1931-45: Maximum daily discharge, 363 second-feet May 17, 1942; no flow for several months each year.

Remarks.- Records good. Station above all diversions from canal. Flow controlled by pumping plant. Canal diverts water from left bank of Brazos River 18 miles above Richmond for irrigation near Sugarland. Figures of discharge represent water actually pumped from Brazos River into canal.

Monthly discharge, in second-feet, water year October 1944 to September 1945

Month	Maximum	Minimum	Mean	Runoff in acre-feet
October	0	0	0	0
November	0	0	0	0
December	0	0	0	0
Calendar year 1944	355	0	96.3	69,890
January	0	0	0	0
February	0	0	0	0
March	244	0	33.7	2,070
April	166	0	60.2	3,580
May	338	100	239	14,710
June	330	207	282	16,800
July	346	237	304	18,670
August	298	0	242	14,860
September	230	0	156	9,310
Water year 1944-45	346	0	111	80,000

Note.- Gage-height record Apr. 1-5, 21, 22, 26, 27, Aug. 27 to Sept. 4 affected by inflow from surface runoff; discharge computed on basis of record of pump operation furnished by canal company.

Richmond Irrigation Co.'s canal near Richmond, Tex.

Location.- Water-stage recorder, lat. 29°34', long. 95°47', 600 feet downstream from crossing of U. S. Highway 59, 1½ milas downstream from point of diversion, and 1½ miles west of Richmond, Fort Bend County.

Records available.- October 1931 to September 1945.

Average discharge.- 14 years, 33.2 second-feet.

Extremes.- Maximum daily discharge during year, 190 second-feet June 2, 3, 5, 6; no flow at times.
1931-45: Maximum daily discharge, 234 second-feet June 5, 6, 1938; no flow for several months each year.

Remarks.- Records good. Station above all diversions from canal. Flow controlled by pumping plant. Canal diverts water from right bank of Brazos River 6 miles upstream from Richmond for irrigation. Figures of discharge represent water actually pumped from Brazos River into canal.

Monthly discharge, in second-feet, water year October 1944 to September 1945

Month	Maximum	Minimum	Mean	Runoff in acre-feet
October	0	0	0	0
November	0	0	0	0
December	0	0	0	0
Calendar year 1944	213	0	37.9	27,530
January	0	0	0	0
February	0	0	0	0
March	16	0	2.29	141
April	138	0	32.5	1,930
May	177	0	95.0	5,840
June	190	19	120	7,170
July	184	114	144	8,830
August	184	0	116	7,110
September	99	0	28.0	1,670
Water year 1944-45	190	0	45.1	32,690

Note.- No gage-height record July 23-25, Aug. 28 to Sept. 16, Sept. 27-29; discharge computed on basis of record of pump operation furnished by canal company.

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Colorado River at Robert Lee, Tex.

Location.- Water-stage recorder, lat. 31°53'05", long. 100°28'45", at bridge on State Highway 208 in Robert Lee, Coke County, half a mile upstream from Mountain Creek. Datum of gage is 1,771.7 feet above mean sea level, datum of 1929 (levels by Bureau of Reclamation).

Drainage area.- 15,770 square miles, of which 11,500 square miles is probably noncontributing.

Records available.- April 1939 to September 1945. September 1915 to September 1920 (October 1918 to October 1920, gage heights only) at site near Bronte, 16 miles downstream, October 1923 to December 1927 at site near Robert Lee, 9 miles downstream. Records equivalent except during periods of local runoff between sites.

Average discharge.- 12 years (1915-18, 1924-27, 1939-45), 206 second-feet.

Extremes.- Maximum discharge during year, 25,200 second-feet July 9 (gage height, 21.15 feet, from rating curve extended above 18,000 second-feet; no flow May 18-20.
1939-45: Maximum discharge, 31,700 second-feet June 22, 1939 (gage height, 21.70 feet, from graph based on gage readings), by slope-area method; no flow at times.

Remarks.- Records good except those for periods of no gage-height record, which are fair. About 2,200 acres irrigated above station.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3.5	1.6	12	14	8.6	10	10	2.2	203	3.8	46	62
2	2.9	1.5	9.2	16	8.1	9.2	6.4	1.7	84	561	42	37
3	316	1.5	9.2	15	7.5	8.6	5.5	1.5	18	84	37	28
4	773	1.3	10	14	7.0	7.5	11	1.1	7.5	27	33	37
5	363	1.2	11	13	6.4	6.4	23	.9	3.5	124	31	58
6	180	1.2	9.2	12	5.0	5.5	16	.8	1.6	1,560	40	42
7	98	1.1	62	10	4.6	5.0	12	f.5	.9	9,070	180	31
8	64	1.0	56	8.6	3.8	5.0	8.6	f.5	.5	18,500	450	25
9	44	.9	42	7.5	3.5	3.5	5.9	.3	.3	18,200	2,520	20
10	31	.9	32	7.0	3.5	2.9	8.0	.3	.9	1,620	1,940	19
11	25	.9	25	5.9	3.2	2.9	1,250	.3	.4	3,480	600	16
12	21	.9	20	5.5	3.8	2.9	75	.2	.6	1,630	250	16
13	18	.9	16	5.0	3.5	2.9	27	.2	246	884	130	13
14	16	.9	13	4.6	2.9	4.9	16	.1	235	6,190	100	12
15	12	.9	12	4.6	2.6	3.5	106	.1	116	7,210	80	11
16	11	.8	9.2	3.8	2.6	2.4	26	.1	99	1,760	64	10
17	9.2	1.1	8.6	4.6	2.4	2.4	33	.1	49	d747	50	8.6
18	8.1	1.6	7.5	6.4	2.2	2.4	28	.1	30	d428	42	7.5
19	7.0	9.0	6.4	6.4	2.4	6.4	16	0	21	d293	35	7.0
20	5.9	68	5.9	56	2.9	43	16	0	13	d227	30	7.0
21	5.5	93	5.5	93	4.1	116	16	10	699	d183	27	6.4
22	4.6	68	5.5	56	3.8	58	12	26	689	d158	25	5.9
23	4.1	52	4.6	35	3.8	34	9.2	8.1	251	d132	70	5.5
24	3.8	54	4.1	28	3.5	20	6.4	4.1	519	d116	200	5.5
25	3.5	44	4.1	22	3.2	13	4.6	2.2	165	98	110	5.0
26	3.2	30	4.6	19	13	9.2	3.8	.9	67	86	60	4.6
27	2.9	23	6.4	16	16	7.5	4.6	.5	28	77	40	4.6
28	2.4	19	10	13	12	8.6	3.8	.3	16	74	32	210
29	2.2	16	9.2	11	-	7.0	3.5	.2	10	64	30	676
30	2.1	14	8.6	9.2	-	5.9	2.9	.1	5.9	66	130	1,210
31	1.9	-	10	8.6	-	5.9	-	.1	-	50	167	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	2,044.8	773	1.9	66.0	4,060
November	510.2	93	.8	17.0	1,010
December	448.8	62	4.1	14.5	890
Calendar year 1944	54,058.0	15,800	0	148	107,200
January	530.7	93	3.8	17.1	1,060
February	145.9	16	2.2	5.21	289
March	422.4	116	2.4	13.6	838
April	1,766.2	1,250	2.9	58.9	3,500
May	62.5	25	0	2.02	124
June	3,580.1	699	.3	119	7,100
July	73,692.8	18,600	3.8	2,377	146,200
August	7,591	2,520	25	245	15,060
September	2,600.6	1,210	4.6	86.7	5,160
Water year 1944-45	93,396.0	18,500	0	256	185,300

Peak discharge.- Apr. 11 (2:30 a.m.) 5,900 sec.-ft.; June 21 (10 p.m.) 4,220 sec.-ft.; July 9 (6 a.m.) 25,200 sec.-ft.; July 11 (5 p.m.) 4,690 sec.-ft.; July 14 (7 a.m.) 8,960 sec.-ft.; Aug. 9 (11 a.m.) 4,110 sec.-ft.

d Doubtful gage-height record; discharge *computed on basis of records for station at Ballinger.*

f Computed on basis of partly estimated gage-height record.

Note.- No gage-height record July 29 to Aug. 8, Aug. 11-28; discharge computed on basis of weather records, record of peak stages, and records for station at Ballinger.

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Colorado River at Ballinger, Tex.

Location.- Water-stage recorder, lat. 31°43'50", long. 99°56'25", at bridge on U. S. Highway 83 in Ballinger, Runnels County, 2,000 feet upstream from Elm Creek. Datum of gage is 1,593.7 feet above mean sea level, datum of 1929.

Drainage area.- 16,840 square miles, of which 11,500 square miles is probably noncontributing.

Records available.- June 1907 to September 1945 (June 1907 to November 1915, monthly records only, in Water-Supply Paper 850). U. S. Weather Bureau collected gage-height records in this vicinity from 1903 to 1929.

Average discharge.- 38 years, 411 second-feet.

Extremes.- Maximum discharge during year, 25,200 second-feet July 10 (gage height, 19.80 feet); minimum, 0.8 second-foot May 20, 21 (gage height, 1.24 feet).
1907-45: Maximum discharge, 75,400 second-feet Sept. 18, 1936 (gage height, 28.6 feet); no flow at times.
Maximum stage known, about 36.0 feet sometime in 1884, present site and datum, from information by local residents. A stage of about 32.0 feet occurred Aug. 6, 1906, present site and datum, from floodmarks (backwater from Elm Creek).

Remarks.- Records good except those for periods of backwater of no gage-height record, which are fair. Small diversions above station for irrigation affect low flow.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	9.0	7.8	17	19	17	13	50	15	1.9	18	79	190
2	8.4	6.6	16	19	17	16	84	13	22	124	73	111
3	1,220	5.6	17	17	16	17	50	11	147	394	68	71
4	6,050	5.6	18	18	15	18	28	9.0	c522	137	63	53
5	835	5.2	22	19	13	17	19	9.0	58	68	58	40
6	347	5.2	26	21	14	16	17	7.2	22	180	55	48
7	210	5.2	18	19	13	16	15	6.6	13	c6,910	72	63
8	130	4.8	17	19	13	15	21	5.2	8.4	c14,600	339	53
9	90	4.8	32	18	14	15	26	5.2	6.0	16,800	715	43
10	68	4.4	53	17	12	15	31	9.0	6.0	16,100	2,390	36
11	53	4.4	40	19	9.9	14	2,740	73	49	2,520	1,320	30
12	40	4.4	34	16	24	15	616	9.0	24	3,430	568	28
13	32	4.4	28	16	30	16	185	5.6	19	1,380	347	22
14	28	4.4	24	15	21	17	98	5.2	81	3,260	227	19
15	24	63	22	14	16	16	200	3.4	215	6,300	167	18
16	21	16	19	15	14	16	405	2.4	111	5,920	127	16
17	18	9.0	19	16	12	15	144	1.9	101	1,540	104	16
18	17	7.8	18	19	12	18	71	1.5	73	733	87	15
19	16	6.6	17	18	12	22	53	1.2	48	471	76	14
20	15	6.6	16	17	11	84	58	.8	32	356	63	14
21	13	6.0	14	16	11	50	58	2.4	24	338	55	13
22	13	23	14	32	9.9	57	53	1.2	1,420	248	50	12
23	12	68	14	79	9.9	90	43	15	548	214	45	9.9
24	11	53	13	60	11	60	36	9.9	286	186	73	9.0
25	9.9	43	13	50	9.9	43	30	12	380	159	214	a9.0
26	9.9	43	13	40	11	34	28	9.9	182	144	134	a8.4
27	9.0	36	18	36	14	26	24	5.6	98	130	96	a8.4
28	9.0	26	32	28	13	22	19	3.7	60	117	76	a12
29	9.0	22	36	22	-	21	18	2.2	38	111	63	a1,210
30	7.8	18	30	19	-	22	16	1.9	26	98	63	896
31	7.8	-	22	18	-	22	-	1.7	-	87	160	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	9,342.8	6,050	7.8	301	18,530
November	519.8	68	4.4	17.3	1,030
December	692	53	13	22.3	1,370
Calendar year 1944	80,070.3	11,500	.8	219	158,800
January	751	79	14	24.2	1,490
February	395.6	30	9.9	14.1	785
March	838	90	13	27.0	1,660
April	5,236	2,740	15	175	10,390
May	259.7	73	.8	8.38	515
June	4,621.3	1,420	1.9	154	9,170
July	83,073	16,800	18	2,680	164,800
August	8,027	2,390	45	259	15,920
September	3,087.7	1,210	8.4	103	6,120
Water year 1944-45	116,843.9	16,800	.8	320	231,800

Peak discharge.- Oct. 4 (3:30 a.m.) 13,200 sec.-ft.; July 8 (1 p.m.) 15,800 sec.-ft.; July 10 (10 a.m.) 25,200 sec.-ft..

a No gage-height record; discharge computed on basis of weather records, record of peak stage, and 1 staff gage reading Sept. 29.

c Backwater from Elm Creek.

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Colorado River at Winchell, Tex.

Location.- Water-stage recorder, lat. 31°28'05", long. 99°09'45", at bridge on State Highway 23, 0.3 mile south of Winchell, Brown County, and 6.2 miles downstream from Home Creek. Datum of gage is 1,264.86 feet above mean sea level, datum of 1929.

Drainage area.- 24,580 square miles, of which 11,800 square miles is probably noncontributing.

Records available.- January 1939 to September 1945. November 1923 to September 1934 at site near Milburn, 4.2 miles downstream.

Average discharge.- 16 years (1924-34, 1939-45), 780 second-feet.

Extremes.- Maximum discharge during year, 41,100 second-feet July 8 (gage height, 37.66 feet); minimum, 11 second-feet May 31, June 1 (gage height, 2.84 feet).

1923-34, 1939-45: Maximum discharge, 76,100 second-feet Oct. 15, 1930, at site then in use (gage height, 51.8 feet, present site and datum); no flow Aug. 8-10, Sept. 1-5, 1929, Aug. 15-25, 1934, Aug. 22 to Sept. 4, 1943.

Maximum stage known, 62.2 feet Sept. 19, 1936, present site and datum, from information obtained by engineers of Gulf, Colorado & Santa Fe Railway at railway bridge 1,000 feet above present gage.

Remarks.- Records good. Diversions above station for irrigation and municipal supply. Flow partly regulated by storage in reservoirs on Concho River.

Rating table, water year 1945-45 (gage height, in feet, and discharge, in second-feet)

2.85	12	4.8	430	16.0	9,640
2.9	18	5.3	680	18.0	11,800
3.1	43	6.0	1,080	20.0	14,000
3.3	74	8.0	2,390	23.0	17,600
3.5	110	10.0	4,040	26.0	21,300
4.0	212	12.0	5,810	29.0	25,500
4.5	332	14.0	7,670	31.4	29,100

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	25	43	76	159	114	133	1,180	82	12	77	135	81
2	23	42	69	147	108	116	361	118	13	63	123	69
3	28	40	63	127	106	151	167	91	19	49	112	116
4	10,000	40	82	114	104	133	137	72	18	56	108	165
5	7,330	39	77	106	102	127	190	124	1,620	250	100	120
6	1,770	39	88	100	100	147	149	151	523	820	95	91
7	934	38	77	97	93	129	112	100	225	14,900	91	74
8	604	36	76	91	93	112	91	76	129	29,000	89	61
9	386	35	74	91	88	100	77	63	84	22,300	190	54
10	288	33	77	91	76	95	66	58	74	29,100	433	48
11	223	31	72	88	68	89	524	190	65	17,300	2,190	55
12	173	31	64	84	74	84	4,870	472	2,260	3,530	1,580	60
13	143	30	60	84	88	81	1,820	284	513	3,890	900	50
14	123	30	82	86	106	101	845	155	298	1,900	525	46
15	104	35	81	86	123	167	452	133	106	3,760	340	40
16	93	44	74	84	133	139	306	123	112	7,060	257	36
17	84	49	68	88	133	131	650	79	119	5,770	201	34
18	76	54	63	127	106	100	580	55	218	1,990	159	30
19	71	142	60	112	97	108	316	43	156	1,230	133	28
20	68	98	56	118	91	139	446	36	108	846	112	25
21	61	76	55	133	271	100	738	40	93	590	95	24
22	58	64	54	127	157	86	293	31	72	439	82	22
23	54	60	54	114	97	106	232	25	754	354	74	20
24	50	63	54	106	91	127	225	23	940	309	68	18
25	48	96	54	100	86	97	177	19	526	291	60	17
26	46	82	58	123	82	106	141	18	314	248	56	16
27	44	110	71	137	441	108	120	16	353	216	54	16
28	43	99	91	123	210	93	102	14	216	271	146	16
29	43	91	129	120	-	109	93	13	147	216	135	32
30	43	84	149	116	-	521	82	12	102	159	112	52
31	43	-	149	120	-	290	-	12	-	141	97	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	23,079	10,000	23	744	45,780
November	1,754	142	30	58.5	3,480
December	2,357	149	54	76.0	4,680
Calendar year 1944	156,592.8	11,400	3.0	428	310,600
January	3,399	159	84	110	6,740
February	3,438	441	68	123	6,820
March	4,125	521	81	133	8,180
April	15,542	4,870	66	518	30,830
May	2,728	472	12	88.0	5,410
June	10,188	2,260	12	340	20,210
July	147,124	29,100	49	4,746	291,800
August	8,852	2,190	54	286	17,560
September	1,516	165	16	50.6	3,010
Water year 1944-45	224,102	29,100	12	614	444,500

Peak discharge.- Oct. 4 (11 a.m.) 14,200 sec.-ft.; July 8 (1 a.m.) 41,100 sec.-ft.; July 10 (1 p.m.) 30,100 sec.-ft.

Time basis: Central war time up to 2 a.m., Sept. 30, 1946; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Colorado River near San Saba, Tex.

Location.- Water-stage recorder, lat. 31°13'05", long. 98°33'50", at bridge on State Highway 190, 5.2 miles downstream from San Saba River and 9.2 miles east of San Saba, San Saba County. Datum of gage is 1,096.22 feet above mean sea level, datum of 1929.

Drainage area.- 30,600 square miles, of which 11,800 square miles is probably noncontributing.

Records available.- August 1930 to September 1945. October 1915 to October 1922 at site near Chadwick, 1.2 miles upstream. October 1923 to December 1934 at site near Tow, 44 miles downstream.

Average discharge.- 20 years (1916-19, 1920-22, 1930-45), 1,840 second-feet.

Extremes.- Maximum discharge during year, 32,300 second-feet July 10 (gage height, 22.63 feet); minimum, 115 second-feet Sept. 25-28 (gage height, 2.08 feet).

1915-22, 1930-45: Maximum discharge, 224,000 second-feet July 23, 1938 (gage height, 63.2 feet, present site, based on floodmarks at site then in use); minimum observed, 1.5 second-feet Aug. 22, 23, 1918.

Maximum stage known prior to 1938, 58.4 feet Sept. 25, 1900 (discharge, 184,000 second-feet), present site, based on floodmarks at former site.

Remarks.- Records good. Diversions above station for irrigation and municipal use. Flow partly regulated by reservoirs on Pecan Bayou and Concho River having a combined capacity of 151,000 acre-feet.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	148	331	403	380	301	1,230	4,630	852	208	305	592	256
2	158	331	403	348	301	798	6,680	825	204	1,030	561	236
3	164	331	389	344	305	2,870	2,420	825	365	578	556	220
4	196	322	430	335	297	1,780	1,540	825	860	326	541	200
5	12,200	322	528	309	293	1,060	1,240	770	340	417	521	193
6	9,660	322	940	297	288	1,060	1,100	748	1,350	284	501	268
7	2,370	331	556	280	276	1,060	1,100	770	1,000	1,180	496	244
8	1,500	314	477	268	276	798	1,030	770	587	12,200	536	216
9	1,100	244	435	260	272	640	970	732	398	25,400	541	193
10	852	204	407	266	268	572	940	1,720	357	32,000	646	182
11	738	168	384	252	264	531	1,110	1,220	301	32,000	825	168
12	640	171	375	252	1,750	511	2,510	592	2,630	30,200	1,890	164
13	556	158	375	252	2,300	492	5,170	767	5,700	12,100	1,740	158
14	492	154	366	244	1,220	605	2,720	798	1,370	5,060	1,100	158
15	449	154	353	240	711	1,600	1,740	613	1,060	3,130	798	161
16	435	171	353	236	546	1,240	1,420	934	721	4,510	608	151
17	407	193	371	394	492	759	1,200	798	536	7,500	468	145
18	398	228	366	2,570	463	619	1,160	700	587	6,290	389	138
19	362	240	353	2,110	458	646	1,390	651	440	2,500	331	138
20	353	240	344	1,040	440	598	1,500	608	511	1,700	293	132
21	353	357	340	640	1,580	546	3,660	592	412	1,350	268	129
22	348	344	335	496	2,630	521	3,280	673	331	1,100	240	129
23	340	297	331	444	1,060	468	2,140	613	297	970	220	124
24	340	305	326	407	678	421	1,580	546	328	880	220	118
25	340	318	326	371	551	403	1,200	521	1,200	825	208	115
26	340	366	385	344	496	421	940	506	852	770	204	115
27	344	380	403	331	482	394	798	487	613	732	193	115
28	335	417	463	322	2,310	380	880	458	521	716	186	130
29	322	430	463	344	-	566	940	444	482	700	189	248
30	322	430	468	326	-	1,100	910	407	371	754	244	175
31	322	-	398	314	-	5,000	-	264	-	651	297	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	36,884	12,200	148	1,190	73,160
November	8,573	430	154	286	17,000
December	12,846	940	326	414	25,480
Calendar year 1944	334,223	12,200	126	913	662,900
January	15,006	2,570	236	484	29,760
February	21,308	2,630	264	761	42,260
March	29,689	5,000	380	958	58,890
April	57,898	6,680	798	1,930	114,800
May	22,029	1,720	264	711	43,690
June	24,932	5,700	204	831	49,450
July	188,158	32,000	284	6,070	373,200
August	16,402	1,890	186	529	32,530
September	5,119	268	115	171	10,150
Water year 1944-45	438,844	32,000	115	1,202	870,400

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Buchanan Reservoir near Burnet, Tex.

Location.- Selsyn indicator, lat. 30°45'05", long. 98°25'00", at Buchanan Dam on Colorado River, 1 mile upstream from bridge on State Highway 29 and 10 miles west of Burnet, Burnet County. Datum of gage is 0.48 foot above mean sea level, datum of 1929 (levels by Lower Colorado River Authority).

Drainage area.- 31,250 square miles, of which 11,800 square miles is probably noncontributing.

Records available.- May 1937 to September 1945.

Extremes.- Maximum contents observed during year, 996,600 acre-feet July 17, 18 (gage height, 1,020.2 feet); minimum observed, 660,900 acre-feet Oct. 3, Dec. 1-3 (gage height, 1,004.1 feet).

1937-45: Maximum contents, 1,004,000 acre-feet July 27, 1938 (gage height, 1,020.5 feet; several taintor gates were open); minimum after filling of reservoir in July 1938, 578,500 acre-feet Dec. 31, 1943 (gage height, 999.5 feet).

Remarks.- Reservoir is formed by two reinforced concrete multiple-arch sections, three banks of taintor gates, and a 1,088-foot reinforced concrete spillway section. Dam completed and storage began May 20, 1937. Total capacity, 992,000 acre-feet (gage height, 1,020.0 feet, top of spillway section). Usable capacity, 955,000 acre-feet between gage height 937.0 feet (sill of powerhouse penstock) and 1,020.0 feet (top of spillway section). Water below gage height 937.0 feet can be withdrawn through two 5-foot Bunger gates (emergency) down to gage height of 890.0 feet. Figures given herein represent total contents. Water used for power development and irrigation of rice on several districts below Columbus.

Cooperation.- Records of daily gage height and capacity table furnished by Lower Colorado River Authority.

Monthly gage height and contents, water year October 1944 to September 1945

Date	Gage height (feet)†	Contents (acre-feet)	Change in contents during month (acre-feet)
Sept. 30	1,004.3	664,700	-
Oct. 31	1,006.0	697,000	+32,300
Nov. 30	1,004.2	662,800	-34,200
Dec. 31	1,005.2	681,800	+19,000
Calendar year 1944	-	-	+103,300
Jan. 31	1,006.4	704,600	+22,800
Feb. 28	1,008.6	747,000	+42,400
Mar. 31	1,010.8	791,000	+44,000
Apr. 30	1,016.6	915,200	+124,200
May 31	1,016.9	921,800	+6,600
June 30	1,017.7	939,400	+17,600
July 31	1,019.0	969,000	+29,600
Aug. 31	1,017.4	932,800	-36,200
Sept. 30	1,016.4	910,800	-22,000
Water year 1944-45	-	-	+246,100

† Gage height at 8 a.m., Oct. 1 to Nov. 8 and at 12 p.m. thereafter.

Marshall Ford Reservoir near Austin, Tex.

Location.- Bailey indicator gage, lat. 30°23'20", long. 97°54'35", in powerhouse at dam on Colorado River, 7.3 miles downstream from Sandy Creek and 12 miles northwest of Austin, Travis County. Datum of gage is 0.12 foot above mean sea level, datum of 1929 (levels by Bureau of Reclamation).

Drainage area.- 37,900 square miles, of which 11,800 square miles is probably noncontributing.

Records available.- September 1940 to September 1945.

Extremes.- Maximum contents observed during year, 1,282,000 acre-feet July 18 (gage height, 686.5 feet); minimum observed, 908,800 acre-feet Jan. 16, 17 (gage height, 665.6 feet).

1940-45: Maximum contents observed, 1,377,000 acre-feet Oct. 23, 1942 (gage height, 691.2 feet); minimum observed, 716,800 acre-feet Jan. 13, 1944 (gage height, 652.1 feet).

Remarks.- Reservoir is formed by concrete gravity-type dam. Storage began Sept. 9, 1940; dam completed early in 1942. Total capacity, 1,950,000 acre-feet (gage height, 714.0 feet, top of spillway). Capacity between gage heights 680.0 and 714.0 feet, 798,000 acre-feet, is reserved for flood control. Usable capacity, 1,124,000 acre-feet between gage heights 535.8 feet (bottom of 24 8½-foot diameter Paradox gates) and 680.0 feet (maximum power pool). Bottom of penstocks, gage height, 552.0 feet. Figures given herein represent total contents. Water used for power development and for irrigation of rice in several districts below Columbus.

Cooperation.- Records of daily gage heights and capacity curve furnished by Lower Colorado River Authority.

Monthly gage height and contents, water year October 1944 to September 1945

Date	Gage height (feet)†	Contents (acre-feet)	Change in contents during month (acre-feet)
Sept. 30	672.7	1,021,000	-
Oct. 31	667.2	933,500	-87,500
Nov. 30	667.1	932,000	-1,500
Dec. 31	666.5	922,600	-9,400
Calendar year 1944	-	-	+203,200
Jan. 31	670.0	976,900	+54,300
Feb. 28	672.5	1,018,000	+41,100
Mar. 31	675.8	1,076,000	+58,000
Apr. 30	680.4	1,160,000	+84,000
May 31	678.1	1,118,000	-42,000
June 30	676.6	1,091,000	-27,000
July 31	681.8	1,188,000	+97,000
Aug. 31	674.8	1,058,000	-130,000
Sept. 30	673.4	1,034,000	-24,000
Water year 1944-45	-	-	+13,000

† Gage height at 1 a.m.

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Colorado River at Austin, Tex.

Location.- Water-stage recorder, lat. 30°14'40", long. 97°41'20", at southeast edge of Austin, Travis County, at Montopolis Bridge on U. S. Highway 290, 2.8 miles upstream from Walnut Creek, 3.8 miles downstream from Waller Creek, and 5 miles downstream from Barton Creek. Datum of gage is 407.3 feet above mean sea level, datum of 1929.

Drainage area.- 38,160 square miles, of which 11,800 square miles is probably noncontributing.

Records available.- February 1898 to September 1945. U. S. Weather Bureau has collected gage-height records in this vicinity since 1903.

Average discharge.- 47 years, 2,717 second-feet.

Extremes.- Maximum discharge during year, 18,400 second-feet (regulated) Aug. 6 (gage height, 11.14 feet); minimum daily, 822 second-feet (regulated) July 8.

1898-1945: Maximum discharge, 481,000 second-feet June 15, 1935 (gage height, 45.0 feet, present site and datum, from floodmark); minimum, 13 second-feet Aug. 18, 1918.

Maximum stage known, 46.0 feet, present site and datum, July 7, 1869 (adjusted to present site on basis of record for flood of June 15, 1935), determined from information concerning stage at former site furnished by Prof. T. U. Taylor.

Remarks.- Records good. Flow partly regulated by Buchanan and Marshall Ford Reservoirs (see p. 112) and other smaller reservoirs, having a combined capacity of 3,130,000 acre-feet. About 36,000 acres irrigated above station.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2,460	1,440	2,180	1,600	1,820	1,990	2,460	2,780	2,890	1,360	4,960	2,220
2	2,840	1,450	2,340	2,240	2,170	2,390	2,560	2,510	2,960	2,640	4,960	2,100
3	3,320	1,600	1,850	1,900	1,760	2,860	2,560	2,730	1,950	2,680	4,960	1,760
4	3,020	1,220	2,660	1,960	1,030	1,890	2,840	2,330	2,220	1,880	4,100	2,550
5	2,780	1,070	4,100	1,900	2,130	2,440	2,400	2,370	2,770	2,520	3,700	2,960
6	2,780	1,220	2,730	1,600	2,450	2,480	2,460	1,840	2,730	2,670	10,400	2,470
7	2,560	1,400	2,180	1,030	2,420	2,640	2,120	2,520	2,770	2,150	4,980	2,680
8	1,750	1,350	2,340	1,380	1,520	2,620	1,750	2,370	3,060	822	3,560	2,470
9	1,750	1,260	2,340	1,650	2,400	2,400	2,310	2,890	2,320	1,220	3,240	1,930
10	g2,340	1,130	1,800	2,200	1,960	1,900	2,390	2,860	1,750	2,560	3,460	2,360
11	g2,340	930	2,670	2,370	1,400	1,740	2,240	2,540	2,370	3,000	3,050	2,530
12	g2,290	1,060	2,240	1,760	3,000	2,090	2,580	2,440	2,520	2,870	3,200	2,760
13	g2,180	1,400	2,340	2,020	2,680	2,560	2,760	1,410	1,850	3,830	3,430	2,460
14	g2,240	1,450	2,400	1,740	2,390	2,350	3,080	2,730	2,100	3,830	3,320	2,560
15	g1,850	1,260	2,290	1,700	2,560	2,200	2,730	2,690	2,120	3,080	3,020	2,330
16	g1,550	1,400	2,240	2,310	2,340	2,460	2,510	2,840	2,120	3,200	2,900	2,070
17	g2,400	2,550	1,550	3,090	2,560	2,290	2,460	1,700	1,550	3,320	2,950	2,450
18	g2,290	2,110	2,210	3,720	1,390	1,350	2,310	1,960	2,720	2,840	2,670	2,460
19	g2,120	882	2,180	3,080	2,080	2,070	2,400	1,900	1,850	4,980	2,620	2,350
20	2,120	1,550	2,120	2,510	2,170	2,240	2,690	1,990	2,120	8,900	3,200	2,560
21	2,030	1,450	2,070	1,650	1,860	2,250	2,790	2,160	2,140	8,900	2,430	2,650
22	2,520	1,600	1,900	2,200	1,750	2,120	1,890	2,180	2,420	8,900	2,680	2,220
23	2,290	1,700	1,650	2,060	1,800	1,960	2,610	2,130	2,110	7,880	2,310	1,230
24	2,180	1,700	1,600	1,900	2,070	2,040	4,660	2,690	1,350	4,100	1,350	1,620
25	2,020	1,750	1,500	2,120	1,400	1,700	2,960	2,340	2,480	4,100	1,910	2,480
26	2,120	1,500	1,600	1,880	2,100	1,570	2,900	2,340	2,900	4,100	1,660	2,450
27	2,070	2,020	1,850	1,940	2,290	2,200	2,900	1,670	2,360	4,240	2,620	2,340
28	1,900	2,440	1,750	1,350	1,900	2,310	3,080	2,290	2,250	4,520	2,140	2,380
29	1,400	2,070	1,850	1,500	-	2,170	1,930	2,600	2,350	4,800	2,730	2,640
30	2,070	1,900	1,850	1,750	-	2,240	2,620	2,760	1,980	4,800	2,120	1,640
31	2,400	-	1,500	1,600	-	2,120	-	2,600	-	4,800	1,970	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	69,980	3,320	1,400	2,257	138,800
November	45,862	2,550	882	1,529	90,970
December	65,880	4,100	1,500	2,125	130,700
Calendar year 1944	760,444	4,100	724	2,078	1,508,000
January	61,710	3,720	1,030	1,991	122,400
February	57,400	3,000	1,030	2,050	113,900
March	67,640	2,860	1,350	2,182	134,200
April	78,150	4,660	1,750	2,605	155,000
May	73,160	2,890	1,410	2,360	145,100
June	69,080	3,060	1,350	2,303	137,000
July	121,492	8,900	822	3,919	241,000
August	102,600	10,400	1,350	3,310	203,500
September	69,680	2,960	1,230	2,323	138,200
Water year 1944-45	882,634	10,400	822	2,418	1,751,000

g Computed from graph based on twice-daily wire-weight gage readings.

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Colorado River at Smithville, Tex.

Location.- Water-stage recorder, lat. 30°01', long. 97°10', 1,200 feet upstream from bridge on State Highway 71 at Smithville, Bastrop County, and 3.7 miles downstream from Alum Creek. Datum of gage is 270.14 feet above mean sea level, datum of 1929.

Drainage area.- 39,650 square miles, of which 11,800 square miles is probably noncontributing.

Records available.- July 1930 to September 1945. U. S. Weather Bureau has collected gage-height records in this vicinity since 1920.

Average discharge.- 15 years, 3,461 second-feet.

Extremes.- Maximum discharge during year, 27,200 second-feet Dec. 5 (gage height, 14.12 feet); minimum, 788 second-feet (regulated) July 10 (gage height, 2.92 feet).
1930-45: Maximum discharge, 305,000 second-feet June 16, 1935 (gage height, 42.5 feet, from floodmarks), by slope-area method; minimum, 76 second-feet Nov. 2, 1934.
Maximum stage known, about 47.4 feet Dec. 4, 1913, from information by local residents.

Remarks.- Records good. Many diversions above station for irrigation and municipal supply. Regulation same as that for Colorado River at Austin.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2,680	2,420	2,030	3,090	1,960	2,480	8,980	2,360	2,480	2,160	5,170	1,960
2	2,680	2,100	1,770	1,900	1,900	2,420	10,100	2,680	2,620	1,840	5,170	2,220
3	2,740	1,380	2,160	2,100	2,360	2,620	3,480	2,810	2,680	1,700	5,170	2,160
4	3,480	1,670	2,160	2,100	2,420	5,170	2,880	2,940	2,420	2,360	5,370	1,670
5	3,390	1,480	12,100	2,030	3,660	3,090	2,880	2,360	1,900	2,220	4,790	2,100
6	3,240	1,200	16,300	3,000	3,090	2,680	2,550	2,480	2,360	1,840	4,240	2,880
7	3,160	1,020	4,470	2,360	3,020	3,020	2,420	2,290	2,480	2,420	7,610	2,420
8	2,940	1,290	2,880	1,610	2,880	3,090	2,220	2,100	2,480	2,360	6,420	2,550
9	2,620	1,360	2,420	980	2,940	3,160	1,960	2,480	2,680	1,570	3,730	2,420
10	1,960	1,180	2,480	1,430	2,940	2,940	1,960	2,880	2,420	851	3,640	2,290
11	2,550	1,080	2,100	1,760	2,420	2,650	2,220	3,240	1,960	1,680	3,390	1,900
12	2,620	970	2,160	2,100	2,160	2,220	2,220	2,680	1,900	2,620	3,390	2,360
13	2,620	833	2,360	1,840	6,330	2,100	2,360	2,480	3,160	2,680	3,160	2,550
14	2,550	930	2,100	1,540	4,400	2,880	2,480	2,100	2,420	3,320	3,390	2,550
15	2,550	1,370	2,290	1,540	3,090	3,020	3,020	2,160	1,770	3,640	3,480	2,480
16	2,480	1,310	2,160	1,150	3,240	3,390	2,740	2,680	2,160	3,160	3,240	2,620
17	1,840	1,510	2,160	1,540	3,020	2,680	2,420	2,880	1,900	3,090	3,020	2,160
18	2,550	2,140	1,900	9,990	4,240	2,740	2,220	2,160	3,850	3,240	3,020	2,290
19	2,620	3,020	1,630	19,500	2,940	2,160	2,100	2,030	13,400	2,940	2,810	2,480
20	2,680	2,080	2,220	5,740	2,940	1,840	2,290	1,960	3,340	3,950	2,740	2,420
21	2,420	1,160	2,160	3,730	3,540	2,480	2,620	2,160	1,960	8,300	3,160	2,620
22	2,360	1,460	2,100	2,740	4,850	2,420	5,110	1,770	2,960	9,220	2,810	2,680
23	2,160	1,420	1,960	2,360	2,620	2,420	3,470	2,160	3,480	8,990	2,420	2,480
24	2,740	1,850	1,690	2,550	2,290	2,220	4,590	2,100	2,480	8,530	2,880	1,960
25	2,360	7,130	1,650	2,420	2,420	2,290	9,960	2,360	1,840	4,980	1,440	1,170
26	2,160	4,300	1,430	2,360	2,290	2,030	3,820	2,360	1,680	4,240	1,550	2,160
27	2,220	1,840	2,840	2,220	2,030	1,500	2,940	2,290	2,360	4,160	2,100	2,480
28	2,220	1,670	4,790	2,160	2,740	2,160	2,940	2,030	2,290	4,240	2,160	2,360
29	2,160	2,220	3,390	1,960	-	2,420	2,940	1,760	2,030	4,600	2,220	2,680
30	1,640	2,220	2,360	1,500	-	5,860	2,480	2,420	2,160	4,980	3,320	2,880
31	1,770	-	2,360	1,840	-	5,170	-	2,480	-	5,170	2,480	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	78,160	3,480	1,640	2,521	155,000
November	55,613	7,130	833	1,854	110,300
December	96,580	16,300	1,430	3,115	191,600
Calendar year 1944	910,695	16,300	833	2,488	1,806,000
January	93,140	19,500	980	3,006	184,700
February	84,730	6,330	1,900	3,026	168,100
March	87,220	5,860	1,500	2,814	173,000
April	104,370	10,100	1,960	3,479	207,000
May	73,640	3,240	1,760	2,375	146,100
June	83,620	13,400	1,680	2,787	165,900
July	117,051	9,220	851	3,776	232,200
August	109,490	7,610	1,440	3,532	217,200
September	69,950	2,880	1,170	2,332	138,700
Water year 1944-45	1,053,564	19,500	833	2,886	2,090,000

Peak discharge.- Dec. 5 (10 p.m.) 27,200 sec.-ft.; Jan. 19 (6:30 a.m.) 25,200 sec.-ft.; Apr. 2 (8:30 a.m.) 13,100 sec.-ft.; Apr. 25 (2:30 a.m.) 13,900 sec.-ft.; June 19 (11 a.m.) 16,600 sec.-ft.; Aug. 7 (8 p.m.) 11,400 sec.-ft.

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Colorado River at La Grange, Tex.

Location.- Wire-weight gage, lat. 29°53'45", long. 96°52'15", at bridge on U. S. Highway 77 in La Grange, Fayette County, 1.2 miles downstream from Buckner Creek. Datum of gage is 211.23 feet above mean sea level, datum of 1929.

Drainage area.- 40,200 square miles, of which 11,800 square miles is probably noncontributing.

Records available.- July and August 1938 (flood discharge measurements only), November 1938 to September 1945.

Extremes.- Maximum discharge during year, 27,800 second-feet Jan. 19 (gage height, 12.78 feet, from graph based on gage readings); maximum gage height, 13.45 feet Apr. 1, from graph based on gage readings; minimum discharge observed, 1,110 second-feet (regulated) Nov. 14 (gage height, 1.53 feet).

1938-45: Maximum discharge observed, 182,000 second-feet June 30, 1940 (gage height, 40.18 feet); minimum observed, 430 second-feet (regulated) Mar. 7, 1940.

Maximum stage known, about 56.7 feet probably July 9, 1869 (from marble high-water marker in La Grange). Data on other floods as follows: Dec. 5, 1913, stage 56.4 feet, from floodmarks; June 17, 1935, stage 50.84 feet, from floodmarks (discharge, 255,000 second-feet, from rating curve extended as a straight line above 200,000 second-feet); July 27, 1938, stage 42.95 feet, observed (discharge, 200,000 second-feet).

Remarks.- Records good. Gage read twice daily. Diversions above station for irrigation and municipal supply. Regulation same as that for Colorado River at Austin.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2,810	2,140	2,470	4,540	2,200	2,930	22,400	2,360	2,520	2,200	5,510	2,360
2	2,690	2,520	1,930	3,290	2,080	2,810	15,100	2,580	2,470	2,470	5,510	2,200
3	2,690	2,030	1,930	2,420	2,360	2,690	7,780	2,750	2,690	1,980	5,510	2,250
4	3,050	1,680	1,680	2,640	2,880	3,970	4,020	2,930	2,690	2,250	5,510	2,250
5	3,530	1,780	5,760	2,420	4,280	4,950	3,530	2,870	2,360	2,520	5,510	1,930
6	3,530	1,630	21,600	5,280	3,890	2,930	3,410	2,520	2,140	2,140	4,810	2,580
7	3,170	1,480	8,640	5,050	3,290	3,170	3,050	2,520	2,420	2,250	4,540	2,990
8	3,170	1,350	4,540	2,580	3,290	3,170	2,990	2,080	2,470	2,580	9,300	2,690
9	2,930	1,530	3,410	1,830	3,050	3,410	2,640	2,470	2,520	2,300	5,480	2,520
10	2,300	1,530	3,050	1,270	3,050	3,410	2,200	2,580	2,690	1,680	3,890	2,580
11	2,080	1,440	3,050	1,680	3,170	3,170	2,580	3,410	2,300	1,400	3,650	2,200
12	2,520	1,310	2,520	2,200	2,810	2,690	2,520	3,170	2,140	2,250	3,770	2,300
13	2,680	1,230	2,750	2,420	3,200	2,360	2,470	2,750	2,440	2,750	3,050	2,810
14	2,520	1,150	2,580	1,830	7,280	2,690	2,690	2,520	2,990	2,870	3,170	2,810
15	2,520	1,310	2,520	1,780	4,150	3,770	2,930	2,140	2,200	3,770	3,530	2,690
16	2,520	1,730	2,640	1,680	3,650	3,410	3,170	2,520	1,980	3,770	3,530	2,810
17	2,360	2,140	2,580	1,530	3,650	4,060	2,930	2,640	2,030	3,170	3,170	2,470
18	2,030	1,780	2,250	14,900	3,650	4,540	2,640	2,750	4,830	3,290	3,170	2,300
19	2,580	7,970	1,930	26,100	5,880	3,290	2,520	1,980	8,600	3,290	2,990	2,420
20	2,690	5,560	2,250	11,300	4,410	2,420	2,830	2,080	9,080	3,170	2,810	2,640
21	2,520	2,120	2,470	5,250	4,670	2,580	4,020	2,030	2,690	6,190	2,810	2,750
22	2,360	1,680	2,250	3,770	5,250	2,750	4,150	2,080	2,300	8,590	3,170	2,810
23	2,300	1,680	2,200	2,640	4,020	2,690	5,570	1,930	3,650	8,920	2,810	2,810
24	2,360	2,970	2,200	2,750	2,870	2,640	2,860	2,140	3,170	8,750	2,930	2,520
25	2,470	13,200	1,930	2,640	2,690	2,420	7,860	1,930	2,470	7,470	2,520	1,880
26	2,360	8,720	1,830	2,520	2,810	2,470	6,450	2,360	1,980	4,670	1,830	1,680
27	2,250	3,210	5,180	2,520	2,420	2,080	3,410	2,300	1,980	4,540	2,030	2,520
28	2,250	1,830	8,250	2,360	2,810	1,930	3,170	2,250	2,520	4,540	2,140	2,640
29	2,250	2,300	5,250	2,300	-	2,470	3,170	1,830	2,300	4,540	2,750	2,580
30	2,140	2,580	3,530	1,980	-	10,500	2,870	1,980	2,250	4,950	2,640	2,990
31	1,730	-	3,220	1,830	-	13,900	-	2,420	-	5,370	3,530	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	79,260	3,530	1,730	2,557	157,200
November	83,580	13,200	1,150	2,786	165,800
December	118,390	21,600	1,680	3,819	234,800
Calendar year 1944	1,045,010	21,600	1,000	2,855	2,073,000
January	127,200	26,100	1,270	4,103	252,300
February	99,760	7,280	2,080	3,563	197,900
March	112,270	13,900	1,930	3,622	222,700
April	137,930	22,400	2,200	4,598	273,600
May	74,870	3,410	1,830	2,415	148,500
June	88,870	9,080	1,980	2,962	176,300
July	120,630	8,920	1,400	3,891	239,300
August	117,570	9,300	1,830	3,793	233,200
September	74,980	2,990	1,680	2,499	148,700
Water year 1944-45	1,235,310	26,100	1,150	3,384	2,450,000

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Colorado River at Columbus, Tex.

Location.- Water-stage recorder, lat. 29°42'20", long. 96°32'05", at bridge on U. S. Highway 90 at eastern edge of Columbus, Colorado County, 340 feet downstream from Texas & New Orleans Railroad bridge and 2.6 miles downstream from Cummins Creek. Datum of gage is 155.52 feet above mean sea level, datum of 1929.

Drainage area.- 40,840 square miles, of which 11,800 square miles is probably noncontributing.

Records available.- January 1903 to December 1911, May 1916 to November 1930, May 1939 to September 1945. September 1930 to June 1939 at site near Eagle Lake, 23 miles downstream. U. S. Weather Bureau has collected gage-height records in this vicinity since 1903.

Average discharge.- 27 years (1904-11, 1916-30, 1939-45), 3,332 second-feet.

Extremes.- Maximum discharge during year, 36,400 second-feet Apr. 1 (gage height, 17.63 feet); minimum, 1,230 second-feet (regulated) Nov. 15.

1903-11, 1916-30, 1939-45: Maximum discharge, 152,000 second-feet July 1, 1940 (gage height, 36.2 feet); minimum observed, about 80 second-feet Sept. 9, 10, 1910.

Maximum stage known, 41.6 feet, present datum, in July 1869 and on Dec. 6, 1913, from information by local resident. River divided each time and left Columbus on an island. Data on other floods as follows: June 18, 1935, observed stage, 38.5 feet, present datum, furnished by U. S. Weather Bureau (discharge, 190,000 second-feet, computed on basis of records for station near Eagle Lake, 23 miles downstream); July 29, 1938, observed stage, 38.4 feet, present datum, furnished by U. S. Weather Bureau (discharge, 175,000 second-feet, computed on basis of records for station near Eagle Lake).

Remarks.- Records good. Diversions above station for irrigation and municipal supply. Regulation same as that for Colorado River at Austin.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3,030	1,800	2,760	4,790	2,110	2,810	29,100	3,250	2,600	2,350	5,070	3,360
2	2,760	2,200	2,450	4,050	2,350	2,810	24,600	2,550	2,700	2,450	5,220	2,650
3	2,650	2,550	2,250	2,810	2,200	2,650	14,500	2,920	2,600	2,550	5,220	2,500
4	2,650	1,930	2,400	2,600	2,550	2,600	6,430	3,140	2,760	1,980	5,070	2,450
5	3,140	1,750	11,000	2,650	6,450	4,100	4,290	3,140	2,760	2,450	5,220	2,250
6	3,360	1,800	19,200	2,760	4,790	4,060	4,050	2,810	2,110	2,550	4,920	2,110
7	3,250	1,620	14,200	6,870	3,930	2,760	3,690	2,700	2,250	2,060	4,410	2,760
8	3,030	1,500	5,790	3,870	3,360	3,140	3,360	2,650	2,550	2,400	5,860	2,810
9	2,920	1,420	3,810	2,550	3,140	3,140	3,250	2,200	2,600	2,500	7,940	2,700
10	2,760	1,580	2,920	1,930	3,140	3,250	3,030	2,650	2,650	2,160	4,620	2,700
11	2,200	1,540	2,920	1,930	3,140	3,250	2,600	3,760	2,760	1,660	4,050	2,650
12	2,250	1,460	2,650	2,060	4,280	2,920	2,920	3,690	2,450	1,620	3,690	2,160
13	2,500	1,380	2,350	2,450	4,140	2,500	3,030	3,250	2,250	2,400	3,690	2,500
14	2,550	1,310	2,760	2,450	4,580	2,200	2,920	2,810	2,930	2,810	3,360	2,700
15	2,500	1,230	2,450	2,060	5,500	3,230	3,030	2,650	2,920	2,920	3,470	2,760
16	2,500	1,420	2,500	2,060	3,580	3,930	3,470	2,110	2,160	3,690	3,690	2,650
17	2,500	1,750	2,500	1,880	3,470	3,810	3,580	2,760	2,160	3,470	3,470	3,930
18	2,200	2,060	2,450	15,200	3,360	7,400	3,140	2,920	9,260	3,140	3,140	2,500
19	2,160	5,300	2,300	26,800	6,370	4,230	2,920	2,700	5,730	3,250	3,250	2,300
20	2,550	7,760	1,930	18,800	7,220	3,250	2,810	2,160	11,600	3,250	3,140	2,550
21	2,650	3,620	2,400	8,000	5,120	2,350	4,120	2,160	5,680	3,250	2,920	2,600
22	2,460	1,840	2,400	5,370	5,690	2,700	6,030	2,200	2,810	6,400	3,030	2,650
23	2,350	1,700	2,300	4,290	5,370	2,650	5,220	2,020	2,920	9,210	3,250	2,760
24	2,200	1,750	2,300	3,360	3,470	2,650	5,480	2,250	4,050	9,450	2,600	2,760
25	2,650	12,900	2,160	3,580	2,760	2,550	3,820	2,250	3,140	9,210	3,030	2,500
26	2,400	10,700	2,020	3,360	2,700	2,450	10,500	2,300	2,500	6,360	2,330	1,840
27	2,250	6,450	2,390	3,030	2,700	2,300	5,330	2,500	2,020	4,530	1,980	1,880
28	2,200	3,030	9,800	3,030	2,200	1,930	3,580	2,350	2,400	4,410	3,040	2,600
29	2,200	2,550	6,620	2,700	-	1,980	3,360	2,350	2,550	4,290	8,630	2,600
30	2,200	2,760	4,170	2,700	-	7,610	3,250	1,880	2,300	4,530	6,270	2,600
31	2,020	-	3,140	2,160	-	21,000	-	2,300	-	4,790	3,470	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	79,030	3,360	2,020	2,549	156,800
November	90,660	12,900	1,230	3,022	179,800
December	131,290	19,200	1,930	4,235	260,400
Calendar year 1944	1,104,530	19,200	1,050	3,018	2,191,000
January	152,150	26,800	1,880	4,908	301,800
February	109,670	7,220	2,110	3,917	217,500
March	118,210	21,000	1,930	3,813	234,500
April	177,410	29,100	2,600	5,914	351,900
May	81,380	3,760	1,880	2,625	161,400
June	100,170	11,600	2,020	3,339	198,700
July	118,090	9,450	1,620	3,809	234,200
August	129,050	8,630	1,980	4,163	256,000
September	77,780	3,930	1,840	2,593	154,300
Water year 1944-45	1,364,890	29,100	1,230	3,739	2,707,000

Peak discharge.- Nov. 25 (2 p.m.) 17,100 sec.-ft.; Dec. 6 (6 p.m.) 25,100 sec.-ft.; Jan. 19 (12:30 a.m.) 29,500 sec.-ft.; Mar. 31 (4 a.m.) 25,800 sec.-ft.; Apr. 1 (7 p.m.) 36,400 sec.-ft.

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Colorado River at Wharton, Tex.

Location.- Wire-weight gage, lat. 29°18'30", long. 96°06'15", at bridge on U. S. Highway 96 in Wharton, Wharton County, 1,000 feet downstream from Texas & New Orleans Railroad bridge and 12 miles upstream from Jones Creek. Datum of gage is 65.42 feet above mean sea level, datum of 1929.

Drainage area.- 41,150 square miles, of which 11,800 square miles is probably noncontributing.

Records available.- July 1916 to September 1925, July and August 1938 (flood discharge measurements only), October 1938 to September 1945. U. S. Weather Bureau has collected gage-height records in this vicinity since 1935.

Average discharge.- 12 years (1919-21, 1922-25, 1938-45), 3,604 second-feet.

Extremes.- Maximum discharge during year, 36,400 second-feet Apr. 2 (gage height, 19.80 feet, from graph based on gage readings); minimum observed, 828 second-feet (regulated) July 13 (gage height, 1.75 feet).

1919-25, 1938-45: Maximum discharge observed, 100,000 second-feet July 3, 1940 (gage height, 35.99 feet); no flow Aug. 6, 1925 (result of pumping).

Maximum stage known, 38.9 feet, present datum, Dec. 8, 1913, from information by local residents; below Wharton floodwater combined with floodwater of Brazos River. Flood of about July 12, 1869, reached about same height. Flood of June 20, 1935, reached a stage of 38.2 feet, present datum (discharge, 159,000 second-feet, from rating curve extended above 145,000 second-feet), furnished by U. S. Weather Bureau. Flood of July 30, 1938, reached a stage of 37.4 feet, present datum, observed by Geological Survey engineers (discharge, 145,000 second-feet).

Remarks.- Records good. Gage read twice daily. Diversions above station for irrigation and municipal supply. Regulation same as that for Colorado River at Austin. Records of water analyses for water year 1945 are given in Water-Supply Paper 1030.

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

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3,340	2,110	3,040	4,440	d2,280	2,370	23,800	4,000	1,350	1,500	4,220	4,440
2	2,940	1,780	2,940	5,420	d2,150	2,940	34,400	4,000	1,740	1,580	4,440	4,110
3	2,940	2,070	2,840	4,920	d2,370	3,040	22,900	3,780	1,860	1,620	4,440	3,040
4	2,740	2,370	2,740	3,450	d2,550	2,840	12,400	3,450	1,820	1,940	4,440	2,840
5	2,740	2,280	5,220	3,040	d2,740	2,740	6,800	3,670	1,980	1,540	4,330	2,640
6	2,940	1,780	14,000	3,140	5,810	4,220	4,920	3,670	1,860	1,620	4,440	2,460
7	3,450	1,820	20,800	3,410	5,040	4,220	4,440	3,340	1,620	1,700	4,220	2,150
8	3,340	1,700	11,900	6,360	4,220	2,940	4,110	3,140	1,430	1,580	3,560	2,640
9	2,940	1,460	6,220	4,560	3,560	3,240	3,670	2,940	1,740	1,580	4,550	2,740
10	2,550	1,320	4,440	2,940	3,450	3,240	3,450	2,550	1,780	1,580	6,800	2,280
11	2,740	a1,340	3,670	2,280	3,450	3,340	3,240	2,940	1,860	1,430	4,220	2,370
12	2,370	1,350	3,450	2,110	3,890	3,240	2,840	3,340	2,150	1,010	3,560	2,020
13	2,200	1,430	3,140	2,280	4,800	2,940	3,140	3,780	2,460	855	3,040	1,700
14	2,550	1,350	2,640	2,640	4,560	2,550	3,140	d3,140	2,460	a1,210	3,040	1,700
15	2,550	1,280	2,940	2,740	4,440	2,280	3,040	d2,640	2,460	1,860	2,640	2,110
16	2,550	1,210	2,740	2,370	5,420	2,940	3,240	2,460	2,840	2,460	2,740	2,370
17	2,460	1,210	2,740	2,200	4,000	3,890	3,670	1,780	2,280	2,740	2,940	2,280
18	a2,370	1,580	2,740	6,000	3,780	3,780	3,890	2,150	2,300	2,460	2,740	2,740
19	2,280	a2,370	2,640	27,400	4,110	6,220	3,560	2,460	8,890	a2,200	2,460	2,550
20	1,980	5,160	2,550	27,800	6,080	4,220	3,340	2,280	6,220	2,150	2,370	2,640
21	2,200	6,360	2,200	15,000	6,360	3,240	3,670	1,740	10,300	a2,280	2,370	2,460
22	2,550	4,220	2,460	7,780	5,290	2,550	5,420	1,820	5,150	a2,940	2,150	2,280
23	2,550	2,640	2,550	5,680	5,810	2,740	7,280	1,820	2,640	4,880	2,280	2,460
24	2,370	2,200	2,550	4,560	5,420	2,740	6,220	1,740	2,740	7,120	2,550	2,550
25	2,370	3,640	2,460	3,560	3,780	2,840	5,810	1,390	3,560	7,440	1,980	2,460
26	2,370	14,000	2,370	3,670	3,040	2,550	6,360	1,900	2,550	7,280	2,740	2,460
27	2,550	8,630	2,070	3,340	2,940	2,460	10,100	1,900	1,820	5,290	3,960	1,980
28	2,370	a5,040	2,280	3,140	2,940	2,370	6,220	2,020	1,320	3,780	6,220	1,740
29	2,200	3,780	8,680	3,040	-	2,070	4,560	1,780	1,460	3,670	5,940	2,550
30	2,200	a3,340	6,500	2,840	-	2,200	4,220	1,700	1,660	3,670	9,650	2,640
31	2,200	-	4,920	2,740	-	16,900	-	1,280	-	3,780	6,380	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	79,900	3,450	1,980	2,577	158,500
November	90,820	14,000	1,210	3,027	180,100
December	142,430	20,800	2,070	4,595	282,500
Calendar year 1944	1,109,770	20,800	1,120	3,032	2,201,000
January	174,850	27,800	2,110	5,640	346,800
February	114,280	6,360	2,150	4,081	226,700
March	109,850	16,900	2,070	3,544	217,900
April	213,850	34,400	2,840	7,128	424,200
May	80,600	4,000	1,280	2,600	159,900
June	84,300	10,300	1,320	2,810	167,200
July	86,745	7,440	855	2,798	172,100
August	121,410	9,650	1,980	3,916	240,800
September	75,400	4,440	1,700	2,513	149,600
Water year 1944-45	1,374,435	34,400	855	3,766	2,726,000

a No gage-height record; discharge computed on basis of weather records and records for station at Columbus.

d Doubtful gage-height record; discharge computed on basis of weather records and records for station at Columbus.

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Elm Creek at Ballinger, Tex.

Location.- Water-stage recorder upstream from spillway of masonry dam, lat. 31°45'00", long. 99°56'50", in Ballinger, Runnels County, and 1¼ miles upstream from mouth. Datum of gage is 1,617.72 feet above mean sea level, datum of 1929.

Drainage area.- 458 square miles.

Records available.- April 1932 to September 1945.

Average discharge.- 13 years, 58.7 second-feet.

Extremes.- Maximum discharge during year, 7,060 second-feet July 7 (gage height, 6.98 feet); no flow at times.

1932-45: Maximum discharge, about 26,100 second-feet Sept. 3, 1935 (gage height, 10.30 feet, from floodmarks, probably slightly affected by backwater from Colorado River), from rating curve extended in a straight line above 15,000 second-feet; no flow at times.

Remarks.- Records good except those below 100 second-feet and those for period of no gage-height record, which are poor. Below about 100 second-feet stage-discharge relation affected by wind action and occasional accumulation of drift on dam. Low flow affected by diversion of Ballinger city pumping plant.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	0	0	0.3	0	0	1.4	0.1	0	0		
2	0	0	0	.6	0	0	4.5	146	0	3.6		
3	0	0	0	.6	0	0	4.5	120	384	1.0		
4	a2,400	0	0	.6	0	.2	.2	16	1,000	.4		
5	a853	0	.1	.6	0	.4	.2	4.5	27	.1		
6	a180	0	.2	.4	0	0	.6	2.5	4.5	107		
7	a52	0	0	0	0	0	.6	.6	2.5	2,800		
8	a7.0	0	.6	.1	0	0	.6	0	1.0	2,480		
9	2.5	0	.3	0	0	0	.4	0	.4	119		
10	1.5	0	0	0	0	0	.6	4.3	0	45		
11	1.0	0	0	0	0	0	1,090	22	4.2	59		
12	.6	0	0	.1	.5	0	274	1.5	62	16		
13	.6	0	0	.2	2.5	0	39	1.5	59	11		
14	.4	0	0	.2	2.5	.1	11	1.0	21	4.5		
15	.2	0	0	.2	2.5	0	136	.2	7.0	4.5		
16	.1	0	0	.2	1.5	0	317	0	1.5	2.5		
17	0	0	0	.2	.2	1.0	59	0	.6	1.5		
18	0	0	0	.6	.1	1.0	16	0	.2	.4		
19	0	.1	0	.6	.4	.3	7.0	0	0	.1		
20	0	.2	0	.6	.6	22	4.5	0	0	0		
21	0	.2	0	.4	.1	11	34	0	0	0		
22	0	.2	0	0	0	7.0	21	0	470	0		
23	0	.2	0	0	0	2.5	7.0	0	33	0		
24	0	.2	0	0	0	.4	1.5	0	7.0	0		
25	0	.1	0	0	0	0	1.0	0	2.5	0		
26	0	0	0	0	0	0	1.0	0	.6	0		
27	0	0	0	0	0	0	1.5	0	0	0		
28	0	0	1.0	0	0	0	1.5	0	0	0		
29	0	0	4.5	0	-	0	.4	0	0	0		
30	0	0	4.5	0	-	0	.1	0	0	0		
31	0	-	.6	0	-	0	-	0	-	0		

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	3,498.9	2,400	0	113	6,940
November	1.2	.2	0	.04	2.4
December	11.8	4.5	0	.38	23
Calendar year 1944	9,209.8	2,400	0	25.2	18,270
January	6.5	.6	0	.21	13
February	10.9	2.5	0	.39	22
March	45.9	22	0	1.48	91
April	2,036.1	1,090	.1	67.9	4,040
May	320.2	146	0	10.3	635
June	2,088.0	1,000	0	69.6	4,140
July	5,655.6	2,800	0	182	11,220
August	0	0	0	0	0
September	0	0	0	0	0
Water year 1944-45	13,675.1	2,800	0	37.5	27,130

Peak discharge.- Oct. 4 (3 p.m.) 6,060 sec.-ft.; June 4 (1 a.m.) 4,690 sec.-ft.; July 7 (8:30 p.m.) 7,060 sec.-ft.

a No gage-height record; discharge computed on basis of range in stage and weather records.

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

South Concho River at Christoval, Tex.

Location.- Water-stage recorder and concrete control, lat. 31°13', long. 100°30', at Panhandle & Santa Fe Railway bridge at Christoval, Tom Green County. Datum of gage is 2,010.22 feet above mean sea level, datum of 1929.

Drainage area.- 434 square miles.

Records available.- February 1930 to September 1945.

Average discharge.- 15 years, 50.3 second-feet.

Extremes.- Maximum discharge during year, 9,970 second-feet July 6 (gage height, 9.96 feet); minimum, 3.8 second-feet July 3-6 (gage height, 1.79 feet).

1930-45: Maximum discharge, 100,000 second-feet July 23, 1938 (gage height, 21.95 feet, from floodmarks), from rating curve extended above 9,000 second-feet on basis of slope-area determination at gage height 20.5 feet; minimum, 2.1 second-feet July 17-19, 26-29, Aug. 28 to Sept. 5, 1934.

Flood of Aug. 6, 1906, reached a stage about 1.1 feet higher than flood of July 23, 1938, at a point 0.5 mile downstream from gage, from information by local residents.

Remarks.- Records excellent except those for period of no gage-height record, which are good. Low flow materially affected by diversion 600 feet above station to South Concho Irrigation Co.'s canal (see p. 123).

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	7.9	14	16	14	13	14	13	13	5.8	4.2	13	10
2	7.9	20	17	13	13	14	10	14	5.8	4.6	13	10
3	9.1	11	17	14	13	14	10	14	5.8	3.8	13	9.7
4	9.1	12	17	14	14	14	10	14	5.4	3.8	12	8.5
5	9.1	12	14	14	16	14	10	14	5.0	3.8	12	8.5
6	9.1	13	14	14	17	14	10	14	5.0	2,530	12	8.5
7	9.1	13	14	14	18	14	10	13	5.0	166	12	9.1
8	9.1	13	14	14	14	14	10	14	5.0	48	12	9.1
9	9.1	13	14	14	13	14	11	16	5.0	40	12	9.1
10	11	13	14	14	13	14	14	14	5.0	14	12	8.5
11	14	14	14	14	13	16	20	10	5.0	14	12	8.5
12	14	20	14	16	14	16	13	9.1	5.0	14	12	8.5
13	14	14	14	16	14	16	13	8.5	5.0	14	12	7.9
14	14	9.1	14	14	13	16	13	7.9	5.0	21	11	7.9
15	14	9.1	14	14	13	16	13	7.9	5.0	17	11	7.9
16	14	9.7	14	13	13	16	13	7.9	5.0	16	10	7.9
17	14	9.7	14	14	13	16	13	7.9	5.0	16	10	7.9
18	14	9.7	14	16	13	16	13	7.9	5.0	16	11	7.9
19	14	10	13	14	14	16	13	7.9	5.0	16	11	7.9
20	13	14	13	13	14	16	16	7.3	5.0	17	10	7.9
21	10	14	14	13	14	16	16	7.3	5.0	17	10	7.3
22	10	14	14	13	13	16	14	7.3	5.0	17	10	7.3
23	12	14	14	13	13	16	14	6.7	5.4	17	9.7	7.3
24	13	17	14	13	13	14	13	6.7	5.0	16	10	7.3
25	13	16	14	13	14	14	13	6.7	5.0	16	10	7.3
26	14	16	16	13	14	13	13	6.7	4.6	14	10	7.3
27	14	16	14	13	14	9.7	14	6.7	4.6	17	10	7.3
28	14	16	16	13	14	9.7	14	6.2	4.6	17	11	8.5
29	13	16	14	13	-	9.7	14	6.2	4.2	14	12	9.7
30	12	16	14	13	-	9.7	14	6.2	4.2	14	13	9.7
31	11	-	14	13	-	10	-	6.2	-	13	10	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	365.5	14	7.9	11.8	725
November	408.3	20	9.1	13.6	810
December	447	17	13	14.4	887
Calendar year 1944	4,905.1	21	5.4	13.4	9,740
January	426	16	13	13.7	845
February	387	18	13	13.8	768
March	437.8	16	9.7	14.1	868
April	387	20	10	12.9	768
May	295.2	16	6.2	9.6	586
June	150.4	5.8	4.2	5.0	298
July	3,151.2	2,530	3.8	102	6,250
August	348.7	13	9.7	11.2	692
September	250.2	10	7.3	8.3	496
Water year 1944-45	7,054.3	2,530	3.8	19.3	13,990

Note.- No gage-height record Oct. 1-18; discharge computed on basis of range in stage and records for South Concho Irrigation Co.'s canal at Christoval.

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Lake Nasworthy near San Angelo, Tex.

Location.- Water-stage recorder, lat. 31°23'15", long. 100°28'40", 250 feet upstream from Nasworthy Dam on South Concho River, half a mile downstream from Middle Concho River, and 6 miles southwest of San Angelo, Tom Green County. Datum of gage is 1,840.0 feet above mean sea level, datum of 1929.

Drainage area.- 2,659 square miles.

Records available.- March 1930 to September 1945.

Extremes.- Maximum contents during year, 9,780 acre-feet Apr. 10, July 6; maximum gage height, 29.45 feet July 6; minimum contents, 5,730 acre-feet July 1, 2 (gage height, 25.7 feet).

1930-45: Maximum contents, 26,900 acre-feet Sept. 15, 1936 (gage height, 38.36 feet); minimum contents since lake filled, 594 acre-feet Oct. 14, 1936 (gage height, 12.6 feet).

Remarks.- Lake is formed by 4,900-foot earthen dam (contains 2 emergency spillways, 300 and 800 feet in length) and 438-foot concrete service spillway, with a bank of 15 taintor gates. Dam completed and storage began Mar. 28, 1930. Total capacity, 10,740 acre-feet (gage height, 30.2 feet, top of taintor gates). Usable capacity, 10,740 acre-feet between gage heights -3.6 feet (bottom of two 36-inch gates) and 30.2 feet (top of taintor gates). Figures of contents shown herein represent total contents of lake, and are unadjusted for siltation. A siltation survey made by the Soil Conservation Service of the U. S. Department of Agriculture indicates a 10 percent capacity loss from siltation in 8.2 years (1930-39). Water used for San Angelo municipal supply.

Monthly gage height and contents, water year October 1944 to September 1945

Date	Gage height (feet)†	Contents (acre-feet)	Change in contents during month (acre-feet)
Sept.30	27.5	7,650	-
Oct. 31	28.4	8,640	+990
Nov. 30	28.2	8,420	-220
Dec. 31	28.8	9,080	+660
Calendar year 1944	-	-	-220
Jan. 31	28.5	8,750	-330
Feb. 28	28.7	8,970	+220
Mar. 31	28.9	9,190	+220
Apr. 30	28.6	8,860	-330
May 31	27.3	7,430	-1,430
June 30	25.8	5,820	-1,610
July 31	28.1	8,310	+2,490
Aug. 31	27.4	7,540	-770
Sept.30	27.2	7,320	-220
Water year 1944-45	-	-	-330

† Gage height at 12 p.m.

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

South Concho River at San Angelo, Tex.

Location.- Water-stage recorder above spillway of San Angelo waterworks concrete dam, lat. 31°26'45", long. 100°25'30", at bridge on U. S. Highways 87 and 277, half a mile south of San Angelo, Tom Green County, and 1 mile upstream from confluence with North Concho River. Datum of gage is 1,802.94 feet above mean sea level, datum of 1929.

Drainage area.- 2,687 square miles, of which 152 square miles is probably noncontributing.

Records available.- October 1931 to September 1945.

Average discharge.- 14 years, 152 second-feet.

Extremes.- Maximum discharge during year, 21,500 second-feet July 6 (gage height, 7.81 feet); no flow at times.

1931-45: Maximum discharge, 111,000 second-feet Sept. 17, 1936 (gage height, 23.4 feet, of which about 2.4 feet was caused by backwater from North Concho River) by slope-area method; no flow at times.

Maximum stage known, 29.7 feet Aug. 6, 1906 (not affected by backwater), from information by local residents.

Remarks.- Records good except those for periods of no gage-height record, which are poor. Diversions above station for irrigation, municipal supply, and power. Flow partly regulated by reservoirs above station (combined capacity, about 11,200 acre-feet), the largest of which is Lake Nasworthy (capacity, 10,740 acre-feet), 6.5 miles above station (see p. 120).

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	6.9	27	17	32	61	40	48	21	1.7	0	0	9.0
2	7.9	25	19	19	61	37	27	21	.4	1.2	1.6	9.0
3	19	25	23	30	57	34	25	21	0	2.4		7.9
4	19	25	23	30	48	37	25	19	0	1.7		6.0
5	17	30	23	32	30	34	37	21	0	1.7		3.4
6	16	27	21	34	32	34	37	21	0	6,910		1.7
7	17	23	23	34	30	32	37	17	0	1,730		1.7
8	17	21	23	40	32	32	37	21	0	1,780		1.0
9	16	23	17	43	30	30	37	30	0	1,660		2.8
10	16	19	17	43	30	34	60	34	1.5	285		2.4
11	16	17	19	43	30	37	1,440	30	6.0	253		2.4
12	17	21	21	37	40	34	21	23	3.4	120		.9
13	19	19	21	37	37	34	19	23	2.0	3.4		.6
14	17	17	19	40	34	34	17	17	1.0	1.4		1.4
15	19	14	21	40	34	32	19	14	0	2.8		2.4
16	19	16	23	40	32	30	19	14	0	1.7		4.5
17	17	13	23	43	30	32	17	2.4	0	.1		3.9
18	19	17	23	48	30	25	17	.2	.3	.4	.8	2.8
19	21	17	32	48	30	21	19	0	.2	4.5	.8	.9
20	21	16	37	48	30	17	23	0	0	4.5	1.2	0
21	23	14	32	51	34	19	30	.4	0	5.2	.6	0
22	25	14	30	45	32	21	30	0	0	4.5	1.7	0
23	25	14	30	48	34	21	32	0	1.0	5.2	3.4	0
24	25	16	30	48	34	17	25	0	4.5	1.2	3.9	0
25	25	17	30	48	32	19	23	0	1.2	.6	2.4	0
26	23	14	30	65	21	16	23	0	.2	3.9	5.2	0
27	25	16	34	65	43	14	23	0	0	16	4.5	0
28	25	16	40	61	37	14	27	0	0	3.9	2.8	.9
29	25	16	34	65	-	17	25	0	0	4.5	3.9	10
30	25	16	34	65	-	30	21	.2	0	1.7	16	6.9
31	25	-	37	65	-	30	-	18	-	.6	9.0	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	605.8	25	6.9	19.5	1,200
November	565	30	13	18.8	1,120
December	806	40	17	26.0	1,600
Calendar year 1944	17,544.9	4,320	0	47.9	34,790
January	1,387	65	19	44.7	2,750
February	1,005	61	21	35.9	1,990
March	858	40	14	27.7	1,700
April	2,240	1,440	17	74.7	4,440
May	368.2	34	0	11.9	730
June	23.4	6.0	0	.78	46
July	12,811.1	6,910	0	413	25,410
August	81.8	-	0	2.64	163
September	82.5	10	0	2.75	164
Water year 1944-45	20,833.8	6,910	0	57.1	41,310

Peak discharge.- Apr. 11 (2:45 p.m.) 15,700 sec.-ft.; July 6 (1 p.m.) 21,500 sec.-ft.

Note.- No gage-height record Mar. 7-11, Apr. 22-29, May 20-25, Aug. 2-17; discharge computed on basis of engineer's notes and records for Concho River near San Angelo.

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Concho River near San Angelo, Tex.

Location.- Water-stage recorder, lat. 31°27'10", long. 100°24'40", half a mile downstream from confluence of North Concho and South Concho Rivers and 1¾ miles southeast of San Angelo, Tom Green County. Datum of gage is 1,776.8 feet above mean sea level, datum of 1929.

Drainage area.- 4,492 square miles, of which 275 square miles is probably noncontributing.

Records available.- September 1915 to September 1945.

Average discharge.- 30 years, 188 second-feet.

Extremes.- Maximum discharge during year, 20,000 second-feet July 6 (gage height, 19.62 feet); minimum, 1.1 second-feet Sept. 24, 26, 27.
1915-45: Maximum discharge, 230,000 second-feet Sept. 17, 1936 (gage height, 46.6 feet, from floodmarks), by slope-area method; no flow Nov. 29, 1921.
Maximum stage known, 47.5 feet Aug. 6, 1906 (discharge, about 246,000 second-feet), from information by local residents.

Remarks.- Records good. Many diversions above station for irrigation and municipal supply. Flow partly regulated by reservoirs above station (combined capacity, about 11,400 acre-feet), the largest of which is Lake Nasworthy (capacity, 10,840 acre-feet). (See p. 120.)

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	9.2	23	18	42	72	43	86	25	6.1	1.8	8.2	11
2	9.8	22	19	43	68	43	30	23	2.5	2.5	7.6	10
3	80	21	22	40	68	42	29	25	2.1	6.1	6.5	9.8
4	131	21	26	40	60	44	26	24	2.1	4.1	13	5.7
5	29	22	23	41	36	42	33	23	2.1	4.1	7.0	4.9
6	24	22	22	41	36	42	34	23	1.9	6,820	5.7	4.5
7	20	21	22	42	43	40	33	19	2.0	2,680	14	3.3
8	21	20	22	48	34	38	34	18	1.9	12,800	5.3	3.3
9	20	19	19	46	32	38	34	36	2.3	8,460	5.7	3.3
10	20	19	18	48	30	38	57	58	12	716	5.7	4.9
11	19	19	19	48	31	40	1,870	28	11	446	4.1	4.1
12	22	20	20	46	58	38	209	23	7.6	237	3.7	2.3
13	23	20	19	46	44	37	68	20	5.3	71	3.3	1.8
14	22	17	19	46	38	41	45	16	3.7	361	2.9	2.0
15	22	14	19	46	36	40	43	13	2.1	388	2.5	2.4
16	22	15	21	46	37	35	34	13	2.0	347	2.4	3.7
17	22	14	24	49	35	34	30	6.1	2.3	131	7.8	5.3
18	22	17	22	54	37	25	28	2.9	2.3	69	2.4	3.7
19	22	18	30	54	37	28	26	2.5	2.3	55	2.3	2.0
20	22	17	34	54	38	22	30	2.4	2.0	40	2.4	1.4
21	24	16	33	54	40	22	36	2.5	2.0	38	2.3	1.3
22	25	16	31	53	35	21	35	2.5	1.9	30	2.3	1.2
23	26	17	30	54	37	19	33	2.4	2.3	32	2.4	1.3
24	25	18	31	54	37	19	31	2.3	5.7	22	2.9	1.1
25	24	18	31	58	38	19	28	2.3	6.3	17	3.7	1.2
26	24	16	36	73	22	16	24	2.1	2.4	15	4.1	1.1
27	24	17	43	73	48	15	25	2.4	2.0	34	6.5	1.1
28	23	17	52	72	43	14	28	2.3	1.9	15	4.5	280
29	24	17	43	72	-	16	30	2.3	1.8	15	5.9	165
30	24	17	43	70	-	27	27	2.3	1.9	13	24	19
31	22	-	44	70	-	29	-	17	-	9.8	14	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	847.0	131	9.2	27.3	1,680
November	550	23	14	18.3	1,090
December	855	52	18	27.6	1,700
Calendar year 1944	20,087.2	4,540	1.5	54.9	39,850
January	1,623	73	40	52.4	3,220
February	1,172	72	22	41.9	2,320
March	967	44	14	31.2	1,920
April	3,076	1,870	24	103	6,100
May	441.3	58	2.1	14.2	875
June	102.8	12	1.6	3.43	204
July	33,880.4	12,800	1.8	1,093	67,200
August	185.1	24	2.3	5.97	367
September	561.7	280	1.1	18.7	1,110
Water year 1944-45	44,261.3	12,800	1.1	121	87,790

Peak discharge.- Apr. 11 (3 a.m.) 13,500 sec.-ft.; July 6 (2 p.m.) 20,000 sec.-ft.; July 9 (4:30 a.m.) 18,500 sec.-ft.

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Concho River near Paint Rock, Tex.

Location.- Water-stage recorder above spillway of masonry dam, lat. 31°31', long. 99°55', at bridge on U. S. Highway 83, a quarter of a mile north of Paint Rock, Concho County. Datum of gage is 1,574.43 feet above mean sea level, datum of 1929.

Drainage area.- 5,538 square miles, of which 275 square miles is probably noncontributing.

Records available.- September 1915 to September 1945.

Average discharge.- 30 years, 247 second-feet.

Extremes.- Maximum discharge during year, 21,300 second-feet July 7 (gage height, 21.36 feet); minimum, 0.8 second-foot July 1 (gage height, 11.80 feet).

1915-45: Maximum discharge, 301,000 second-feet Sept. 17, 1936 (gage height, 43.4 feet, from floodmarks), by slope-area method; no flow at times.

Remarks.- Records good. Many diversions above station for irrigation and municipal supply. Flow partly regulated by reservoirs above station (combined capacity, about 11,400 acre-feet), largest of which is Lake Nasworthy (capacity, 10,740 acre-feet). (See p. 120.)

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	9.1	28	28	50	77	48	53	36	3.1	0.9	2[illegible]	17
2	12	28	28	50	77	48	93	36	2.4	1.2	2[illegible]	21
3	1,750	28	28	48	77	45	56	32	2.4	1.5	2[illegible]	19
4	1,030	28	34	48	74	45	36	30	2.6	2.6	2[illegible]	19
5	233	26	36	45	74	45	30	30	1.9	2.6	2[illegible]	19
6	97	26	38	45	63	45	30	30	4.0	3,960	19	17
7	60	26	40	45	43	45	30	28	6.1	12,100	54	17
8	56	26	36	45	45	45	32	26	4.0	8,210	17	15
9	36	26	34	45	43	43	34	28	3.5	15,200	17	13
10	32	26	34	50	45	45	34	28	3.5	1,410	17	10
11	30	26	32	53	43	45	1,910	40	3.3	555	17	8.0
12	28	26	30	53	56	43	509	53	4.0	400	17	7.0
13	28	26	30	53	63	43	230	38	3.8	260	15	4.6
14	26	26	30	56	77	43	127	32	2.8	140	13	4.0
15	26	30	30	53	53	48	93	26	2.2	393	12	3.8
18	28	34	28	50	43	45	67	21	1.9	384	12	3.5
17	28	34	28	53	43	43	60	19	1.9	256	8.0	3.3
18	28	36	28	70	40	40	48	15	2.4	172	7.0	3.1
19	28	38	28	67	40	40	43	13	2.4	114	5.3	3.1
20	26	34	30	63	43	36	48	10	2.4	89	4.0	3.1
21	26	32	32	63	43	32	74	9.1	2.8	74	4.0	3.1
22	26	34	36	63	40	28	60	5.3	3.8	65	4.0	3.1
23	26	32	40	60	40	26	53	4.0	2.6	56	4.0	3.1
24	28	34	40	60	38	24	48	3.5	a2.4	48	4.0	3.5
25	30	32	38	60	40	23	45	3.3	a2.2	48	3.8	3.5
26	30	30	40	56	40	21	40	3.1	a1.9	40	3.8	3.5
27	30	30	48	67	45	21	38	3.1	a1.7	34	3.8	6.1
28	30	30	63	81	40	19	36	2.8	1.5	36	5.3	6.1
29	30	26	67	77	-	19	36	2.6	1.4	40	6.1	41
30	28	28	60	77	-	21	36	2.4	1.0	34	7.0	196
31	28	-	53	77	-	23	-	2.4	-	26	1[illegible]	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	3,903.1	1,750	9.1	126	7,740
November	886	38	26	29.5	1,760
December	1,147	67	28	37.0	2,280
Calendar year 1944	31,110.2	5,180	.1	85.0	61,720
January	1,783	81	45	57.5	3,540
February	1,445	77	38	51.6	2,870
March	1,137	48	19	36.7	2,260
April	4,029	1,910	30	134	7,990
May	612.6	53	2.4	19.8	1,220
June	81.9	6.1	1.0	2.73	162
July	44,150.8	15,200	.9	1,424	87,570
August	410.1	54	3.8	13.2	813
September	479.5	196	3.1	16.0	951
Water year 1944-45	60,065.0	15,200	.9	165	119,200

Peak discharge.- Oct. 3 (1:15 p.m.) 6,660 sec.-ft.; Apr. 11 (10 a.m.) 7,340 sec.-ft.; July 6 (1 p.m.) 7,100 sec.-ft.; July 7 (10:45 a.m.) 21,300 sec.-ft.; July 9 (3 p.m.) 20,200 sec.-ft.

a No gage-height record; discharge interpolated.

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

South Concho Irrigation Co.'s canal at Christoval, Tex.

Location.- Water-stage recorder, lat. 31°13', long. 100°30', at Christoval, Tom Green County, 85 feet downstream from point of diversion and 100 feet downstream from bridge on U. S. Highway 277. Datum of gage is 2,017.0 feet above mean sea level, datum of 1929.

Records available.- November 1939 to September 1945. (November 1921, February 1930 to September 1939, miscellaneous discharge measurements only.)

Extremes.- Maximum daily discharge during year, 39 second-feet July 6; minimum daily, 6.0 second-feet Feb. 7.

1939-45: Maximum daily discharge, that of July 6, 1945; minimum daily, 2.7 second-feet Dec. 12, 1941.

Remarks.- Records fair. No diversion above station. Canal diverts water for irrigation from right bank of South Concho River 600 feet above station at Christoval.

Monthly discharge, in second-feet, of South Concho Irrigation Co.'s canal at Christoval, Tex., water year October 1944 to September 1945

Month	Maximum	Minimum	Mean	Runoff in acre-feet
October	18	10	12.9	793
November	15	6.4	10.7	635
December	11	8.5	9.21	566
Calendar year 1944	18	6.4	11.8	8,370
January	9.7	8.6	9.22	567
February	9.5	6.0	8.52	473
March	12	6.6	7.86	484
April	14	12	12.3	734
May	14	12	13.0	797
June	13	11	11.7	698
July	39	11	15.9	976
August	15	12	13.3	819
September	12	11	11.9	706
Water year 1944-45	39	6.0	11.4	8,250

Middle Concho River near Tankersly, Tex.

Location.- Water-stage recorder and masonry control, lat. 31°22'35", long. 100°36'50", at Twelvemile Bridge, 3 miles northeast of Tankersly, Tom Green County, and 9½ miles upstream from Spring Creek. Datum of gage is 1,919.5 feet above mean sea level, datum of 1929.

Drainage area.- 1,280 square miles, of which 152 square miles is probably noncontributing.

Records available.- February 1930 to September 1945.

Average discharge.- 15 years, 45.0 second-feet.

Extremes.- Maximum discharge during year, 3,280 second-feet July 9 (gage height, 10.76 feet); no flow at times.

1930-45: Maximum discharge, 35,000 second-feet Sept. 26, 1936 (gage height, 24.2 feet), computed on basis of flow over Nasworthy Dam, 12 miles downstream, corrected for inflow and storage; no flow at times.

Maximum stage known, about 27.2 feet in April 1922, from information by State Highway Department.

Remarks.- Records good. Small diversions for irrigation above station affect low flow.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0			0	0	1.2	3.9	2.0		0	0	0.1
2	0			0	.1	1.2	2.3	1.8		0	0	0
3	39			0	.3	1.3	1.9	2.2		59	0	0
4	26			0	.4	1.3	1.7	1.9		4.4	0	0
5	3.3			0	.4	1.2	1.5	1.5		.8	0	0
6	1.5			0	.6	.9	1.2	1.4		119	0	0
7	1.2			0	.4	.9	1.0	.6		343	0	0
8	.4			0	.7	.8	.9	.1		1,650	0	0
9	0			0	.5	.7	.8	2.2		1,140	0	0
10	0			0	.1	.8	1.4	14		152	0	0
11	0			0	.2	1.3	22	3.5		60	0	0
12	0			0	1.1	1.2	142	1.4		32	0	0
13	0			0	2.7	1.1	44	.8		20	0	0
14	0			0	1.8	1.3	24	.1		13	0	0
15	0			0	.9	1.6	18	0		8.7	0	0
16	0			0	1.1	1.6	16	0		6.0	0	0
17	0			0	1.7	1.4	11	0		4.0	0	0
18	0			0	1.4	1.2	8.4	0		2.8	0	0
19	0			0	1.3	1.3	6.5	0		2.4	0	0
20	0			0	1.4	2.4	6.1	0		2.3	0	0
21	0			.1	1.2	4.0	5.8	0		1.0	0	0
22	0			.6	1.3	3.1	5.8	0		.5	202	0
23	0			.3	1.2	2.7	5.1	0		0	17	0
24	0			.2	.9	2.3	4.3	0		0	4.4	0
25	0			.3	1.1	1.9	3.5	0		0	2.4	0
26	0			.5	.9	2.4	3.1	0		0	1.0	0
27	0			.7	1.2	1.7	2.8	0		0	0	0
28	0			.3	1.3	1.3	2.7	0		0	0	16
29	0			.5	-	1.0	2.4	0		0	0	53
30	0			.4	-	.7	2.3	0		0	.8	6.8
31	0			.2	-	1.2	-	0		0	1.0	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	71.4	39	0	2.30	142
November	0	0	0	0	0
December	0	0	0	0	0
Calendar year 1944	7,293.0	4,480	0	19.9	14,460
January	4.1	.7	0	.13	8.1
February	26.2	2.7	0	.94	52
March	47.0	4.0	.7	1.52	93
April	352.4	142	.8	11.7	699
May	33.7	14	0	1.09	67
June	0	0	0	0	0
July	3,620.9	1,650	0	117	7,180
August	228.6	202	0	7.37	453
September	75.9	53	0	2.53	151
Water year 1944-45	4,460.2	1,650	0	12.2	8,850

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Spring Creek near Tankersly, Tex.

Location.- Water-stage recorder and concrete control, lat. 31°21'30", long. 100°32'05", 2¾ miles upstream from mouth and 6½ miles east of Tankersly, Tom Green County. Datum of gage is 1,874.6 feet above mean sea level, datum of 1929.

Drainage area.- 734 square miles.

Records available.- February 1930 to September 1945.

Average discharge.- 15 years, 41.3 second-feet.

Extremes.- Maximum discharge during year, 11,000 second-feet July 6 (gage height, 14.89 feet); no flow June 26 to July 1.

1930-45: Maximum discharge, 26,900 second-feet Aug. 23, 1942 (gage height, 21.37 feet), from rating curve extended above 18,000 second-feet; no flow at times.

Maximum stage known, about 26.0 feet in 1882, from information by local residents.

Remarks.- Records good except those above 2,000 second-feet and those for periods of no gage-height record, which are fair. Several small diversions above station for irrigation.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	23	13	12	20	26	18	14	7.8	0.3	0	5.1	1.4
2	22	14	16	18	26	18	21	5.9	.3	.2	4.8	1.4
3	35	18	15	29	25	18	18	4.6	.3	.3	4.6	2.3
4	66	15	15	31	24	16	14	6.0	.3	.2	4.2	2.1
5	34	10	18	30	21	17	13	9.5	.3	.2	4.1	3.9
6	29	9.5	23	30	10	14	16	7.2	.3	3,560	3.5	3.4
7	28	6.1	22	28	9.1	9.8	18	2.6	.3	797	3.2	2.8
8	27	4.2	20	28	9.5	8.6	18	2.1	.3	176	3.1	4.9
9	27	3.5	19	27	10	8.3	16	2.1	.4	59	2.9	2.4
10	27	4.4	16	26	9.5	9.5	23	2.1	1.0	41	2.5	5.7
11	26	5.5	16	26	9.5	11	58	1.7	.5	36	2.8	1.5
12	25	5.5	16	26	14	11	22	2.0	.3	36	4.0	1.1
13	26	5.1	15	26	25	11	19	2.9	.3	34	2.2	1.0
14	25	5.3	15	25	21	11	18	1.2	.3	36	2.1	.8
15	28	5.3	15	24	19	13	22	1.5	.2	36	2.3	.8
16	28	5.5	14	24	18	12	18	1.5	.2	31	2.1	.7
17	27	7.2	14	26	18	11	17	2.8	.3	29	2.2	.5
18	24	9.4	13	28	15	9.5	18	1.0	.3	26	1.7	.5
19	22	14	13	26	15	11	16	.9	.3	23	1.6	.5
20	22	14	12	26	18	10	16	.8	.2	22	1.2	.5
21	22	13	10	26	20	10	20	.8	.2	22	1.1	.5
22	21	12	8.6	25	19	11	20	.7	.3	21	1.0	.5
23	18	12	9.5	25	20	10	20	.7	.3	19	1.0	.5
24	18	11	9.1	24	20	9.5	18	.6	.3	18	.9	.4
25	20	13	13	24	21	7.6	14	.6	.2	16	.9	.4
26	22	14	16	24	18	6.7	12	.8	0	15	.8	.5
27	22	13	19	26	19	6.5	13	.4	0	11	.8	.5
28	19	11	26	25	18	5.5	13	.3	0	10	.7	9.2
29	17	11	22	25	-	4.6	13	.4	0	10	.8	33
30	16	11	20	25	-	4.2	10	.3	0	7.4	1.9	14
31	15	-	20	25	-	4.1	-	.3	-	5.7	1.4	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	781	66	15	25.2	1,550
November	295.5	18	3.5	9.85	586
December	492.2	26	8.6	15.9	976
Calendar year 1944	8,295.5	1,440	.3	22.7	16,460
January	798	31	18	25.7	1,580
February	497.6	26	9.1	17.8	987
March	327.4	18	4.1	10.6	649
April	548	58	10	18.3	1,090
May	72.1	9.5	.3	2.33	143
June	8.0	1.0	0	.27	16
July	5,098.0	3,560	0	164	10,110
August	71.6	5.1	.7	2.31	142
September	97.7	33	.4	3.26	194
Water year 1944-45	9,087.1	3,560	0	24.9	18,020

Note.- No gage-height record Nov. 23 to Dec. 5, Feb. 10-15; discharge computed on basis of range in stage and engineer's notes.

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Dove Creek Spring near Knickerbocker, Tex.

Location.- Staff gage, lat. 31°11', long. 100°44', at W. G. Rawls ranch house, 200 feet downstream from spring, about 300 feet upstream from confluence with Dove Creek, 1¾ miles upstream from Stilson Dam, and about 8½ miles southwest of Knickerbocker, Tom Green County.

Records available.- April 1944 to September 1945 (discharge measurements only).

Extremes.- 1944-45: Maximum discharge measured, 17.2 second-feet Aug. 23, 1944; minimum measured, 11.1 second-feet June 6, 1945.

Remarks.- Discharge measurements represent total flow of springs. Flow emerges from limestone outcrop at left bank of draw that extends upstream for about 1 mile, and responds to rainfall on Edwards Plateau. Water used for irrigation below station.

Discharge measurements, in second-feet, of Dove Creek Springs near Knickerbocker, Tex., 1944-45

Date	Discharge	Date	Discharge
1944		1945	
Apr. 26	16.2	Mar. 1	11.9
Aug. 23	17.2	28	12.6
Nov. 10	14.6	May 2	12.1
Dec. 12	14.9	June 6	11.1
1945		July 21	16.1
Jan. 13	15.0	Sept. 10	11.6

North Concho River at Sterling City, Tex.

Location.- Water-stage recorder and concrete control, lat. 31°50', long. 100°59', at county highway bridge, 0.3 mile south of Sterling City, Sterling County, and 4 miles upstream from Sterling Creek. Datum of gage is 2,242.4 feet above mean sea level, datum of 1929.

Drainage area.- 690 square miles, of which 75 square miles is probably noncontributing.

Records available.- September 1939 to September 1945.

Extremes.- Maximum discharge during year, 25,000 second-feet July 8 (gage height, 23.52 feet), by slope-area method; no flow at times.
1939-45: Maximum discharge, that of July 8, 1945; no flow at times.
Maximum stage known, 22.4 feet (revised) May 6, 1891, from information by local residents.

Remarks.- Records good except those above 1,000 second-feet, which are poor. Small diversions above station for irrigation.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1							0		56	16	0.8	0.2
2							.3		3.5	24	.8	.2
3							.4		.4	14	.8	.2
4							.2		0	35	.7	.1
5							0		0	1.5	.7	0
6							0		0	447	.6	0
7							0		0	4,840	.5	.1
8							0		0	10,100	1.3	.1
9							0		0	319	.6	0
10							.1		0	30	1.3	0
11							.6		0	12	.8	0
12							.3		0	8.1	.6	0
13							.2		0	6.4	.5	0
14							.1		0	87	.4	0
15							.5		0	459	.4	0
16							.4		0	52	.3	0
17							.1		0	10	.3	0
18							0		0	5.7	.3	0
19							0		0	4.0	.2	0
20							0		0	3.3	0	0
21							.1		0	2.9	.2	0
22							.2		0	2.6	.3	0
23							.2		0	2.3	.2	0
24							.1		0	2.0	.3	0
25							.1		0	1.9	.3	0
26							0		0	1.6	.3	0
27							0		0	1.5	.3	0
28							0		0	1.4	.3	0
29							0		0	1.3	.3	0
30							0		0	.8	.4	0
31							-		-	1.0	.3	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	0	0	0	0	0
November	0	0	0	0	0
December	0	0	0	0	0
Calendar year 1944	676.4	507	0	1.85	1,340
January	0	0	0	0	0
February	0	0	0	0	0
March	0	0	0	0	0
April	3.9	.6	0	.13	7.7
May	0	0	0	0	0
June	59.9	56	0	2.00	119
July	16,493.3	10,100	.8	532	32,710
August	15.1	1.3	0	.49	30
September	.9	.2	0	.03	1.8
Water year 1944-45	16,573.1	10,100	0	45.4	32,870

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

North Concho River near Carlsbad, Tex.

Location.- Water-stage recorder above spillway of State Sanatorium Dam, lat. 31°36', long. 100°40', 2 miles upstream from Carlsbad, Tom Green County. Datum of gage is 2,000.8 feet above mean sea level, datum of 1929.

Drainage area.- 1,529 square miles, of which 123 square miles is probably noncontributing.

Records available.- March 1924 to September 1945.

Average discharge.- 21 years, 52.9 second-feet.

Extremes.- Maximum discharge during year, 32,400 second-feet July 8 (gage height, 13.33 feet, from floodmark in well); minimum, 0.1 second-foot Oct. 1, 2, 28-30, Nov. 1, 2, Sept. 20-28.

1924-45: Maximum discharge, 94,600 second-feet Sept. 26, 1936 (gage height, 16.0 feet, from highest floodmarks known), by slope-area method; no flow at times.

Remarks.- Records good except those for period of fragmentary or no gage-height record, which are fair. Diversions by pumping above station affect low flow (combined capacity of pumps, 40 second-feet); low flow also partly regulated by small reservoir above station.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.1	0.1	3.4	3.6	4.0	4.0	5.3	3.4	0.2	0.2	8.0	3.8
2	.1	.1	3.4	3.6	4.0	4.0	4.6	3.4	.2	69	8.0	2.6
3	9.3	.2	3.4	3.6	4.0	4.0	3.9	3.5	.2	28	7.2	1.9
4	19	.2	3.4	4.2	4.0	4.0	4.6	3.5	.2	48	6.4	1.4
5	3.4	.3	3.4	4.2	4.0	4.0	4.6	2.9	.2	49	6.4	1.2
6	2.1	.6	3.0	3.6	4.0	3.0	4.6	3.5	.2	306	6.4	1.0
7	1.0	.5	3.0	3.6	3.5	3.4	3.9	3.9	.2	f2,450	5.7	.7
8	.6	.3	3.0	3.6	3.5	4.0	3.9	4.7	.2	a18,900	6.4	.6
9	.2	.2	3.0	3.6	3.5	4.0	3.9	5.5	.2	f1,400	6.4	.5
10	.1	.3	2.6	3.6	3.5	4.5	4.6	3.9	9.7	168	5.7	.4
11	.1	.4	2.6	3.6	3.5	4.5	406	3.2	1.6	84	5.7	.4
12	.2	.4	2.6	3.6	4.0	4.5	51	1.9	.7	53	5.0	.3
13	.4	.5	2.6	3.6	4.0	5.1	22	1.9	.4	42	4.4	.3
14	.8	.5	2.6	3.6	3.4	4.5	14	.5	.2	555	3.8	.3
15	.8	.6	3.0	3.6	3.4	4.5	12	.5	.2	379	2.9	.3
16	.4	.9	3.0	3.6	3.4	4.0	9.9	.9	.2	151	2.5	.2
17	.3	.9	3.0	4.2	3.4	4.0	8.8	1.9	.2	64	2.5	.2
18	.2	1.2	3.0	4.6	4.0	4.0	8.0	1.4	.2	38	1.7	.2
19	.2	2.3	3.0	4.6	4.0	4.5	7.2	1.4	.2	28	1.4	.2
20	.2	2.6	3.0	4.6	4.5	4.5	9.4	1.1	.2	24	1.2	.1
21	.2	3.0	3.0	4.0	3.4	4.0	7.5	.9	.2	19	1.0	.1
22	.2	3.4	3.0	4.0	3.4	3.4	6.7	.7	.2	18	1.2	.1
23	.2	4.1	3.4	4.0	3.4	3.4	6.7	.7	.2	16	1.3	.1
24	.2	4.1	3.4	4.0	3.4	2.6	6.7	.6	.2	15	1.2	.1
25	.2	2.8	3.4	4.0	3.4	2.6	5.9	.5	.2	12	1.1	.1
26	.2	5.6	4.0	4.0	4.0	2.9	6.2	.4	.2	11	1.0	.1
27	.2	5.6	4.5	4.0	4.5	3.3	5.2	.4	.2	9.8	.9	.1
28	.1	4.1	7.0	4.0	4.0	3.8	5.4	.3	.2	9.8	.8	.1
29	.1	3.4	5.5	4.0	-	3.8	4.0	.3	.2	9.8	.7	5.9
30	.1	3.4	4.8	4.0	-	3.9	3.4	.2	.2	9.8	4.3	9.9
31	.2	-	4.2	4.0	-	4.6	-	.2	-	8.7	6.4	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	41.4	19	0.1	1.34	82
November	52.6	5.6	.1	1.75	104
December	106.2	7.0	2.6	3.43	211
Calendar year 1944	2,016.7	751	.1	5.51	4,000
January	120.8	4.6	3.6	3.90	240
February	105.1	4.5	3.4	3.75	208
March	121.3	5.1	2.6	3.91	241
April	650.9	406	3.4	21.7	1,290
May	58.1	5.5	.2	1.87	115
June	17.6	9.7	.2	.59	35
July	24,975.1	18,900	.2	806	49,540
August	117.6	8.0	.7	3.79	233
September	33.1	9.9	.1	1.10	66
Water year 1944-45	26,399.8	18,900	.1	72.3	52,360

a No gage-height record; discharge computed on basis of range in stage and information relative to time of peak obtained by field engineer.

f Fragmentary gage-height record; discharge computed from partly estimated gage heights.

Note.- Water below crest of control Oct. 1, 2, June 2-9, June 15 to July 1, Sept. 20-28; flow is estimated seepage under dam.

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Pecan Bayou at Brownwood, Tex.

Location.- Water-stage recorder above spillway of city dam, lat. 31°44'10", long. 98°58'30", at Gulf, Colorado & Santa Fe (Fort Worth & Rio Grande) Railway bridge, 1 mile north of Brownwood, Brown County, 6 miles downstream from Salt Creek, and 10 miles downstream from Brownwood Reservoir. Datum of gage is 1,318.58 feet above mean sea level, datum of 1929.

Drainage area.- 1,614 square miles.

Records available.- May 1917 to June 1918, October 1923 to September 1945.

Average discharge.- 20 years (1924-28, 1929-45), 217 second-feet.

Extremes.- Maximum discharge during year, 11,000 second-feet July 8 (gage height, 11.96 feet); minimum, 0.1 second-foot (seepage) Sept. 10-29.

1917-18, 1923-45: Maximum discharge, 52,700 second-feet Oct. 14, 1930 (gage height, 16.92 feet), from rating curve extended above 38,000 second-feet; no flow at times.

Maximum stage known, 21.7 feet in September 1900, from information by Gulf, Colorado & Santa Fe Railway Co. Flood of July 3, 1932, probably the greatest known, reached a discharge of about 235,000 second-feet as it entered Brownwood Reservoir (computed from rate of change of contents in reservoir; data furnished by engineers of Brown County Water Improvement District No. 1).

Remarks.- Records good except those below 10 second-feet, which are poor. Stage-discharge relation for low flows affected by occasional accumulation of drift on dam. Flow regulated by Brownwood Reservoir (capacity, 140,000 acre-feet). Water is diverted at Brownwood Reservoir, 10 miles upstream, for irrigation of 6,430 acres and for municipal supply of city of Brownwood. Irrigation canal completed Apr. 9, 1939.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.9	158	124	1.3	1.3	14	680	305	4.7	8.9	273	1.9
2	2.8	163	129	1.3	1.3	12	412	305	4.7	4.7	273	1.3
3	6.0	163	129	1.3	1.3	16	337	305	3.7	.9	273	.9
4	12	163	178	1.3	1.3	12	330	298	3.7	.6	280	.6
5	6.1	163	178	1.3	1.3	8.9	317	298	2.8	.6	280	.2
6	139	118	134	1.3	1.3	38	317	298	1.9	738	280	.4
7	147	2.8	129	1.3	1.3	14	311	292	1.3	4,530	280	.2
8	147	.6	129	1.3	.9	8.9	311	281	2.8	9,820	286	.2
9	147	.4	129	1.3	1.3	7.4	311	33	1.9	6,320	175	.2
10	152	.4	129	1.3	1.3	7.4	305	23	8.9	3,720	12	.1
11	152	.4	129	1.3	.9	6.0	524	71	7.4	2,200	7.4	a.1
12	152	.9	129	1.9	3.7	6.0	324	21	80	1,410	4.7	a.1
13	152	.9	129	1.9	6.0	4.7	311	14	147	1,040	3.7	a.1
14	152	1.9	129	2.8	2.8	8.9	311	103	147	830	2.8	a.1
15	152	1.9	134	1.9	1.9	23	311	305	143	638	1.9	a.1
16	158	6.0	134	1.9	1.9	12	305	286	95	473	1.9	a.1
17	138	3.7	138	6.0	1.9	7.4	305	286	5.0	376	1.9	a.1
18	138	3.7	138	32	1.3	7.4	305	286	7.4	305	1.9	a.1
19	138	8.9	138	18	2.8	14	305	286	3.7	280	1.9	e.1
20	143	2.8	138	6.0	6.5	14	311	286	1.9	273	.6	e.1
21	143	.9	129	3.7	542	11	330	292	1.3	273	.2	e.1
22	152	.9	124	2.8	16	11	356	286	1.3	273	.6	e.1
23	152	.9	124	1.9	7.4	11	293	280	3.7	273	.6	e.1
24	152	6.6	124	1.9	6.0	11	42	273	1.3	273	.6	e.1
25	158	52	129	1.9	6.0	8.9	29	273	.9	273	.6	e.1
26	158	124	96	1.3	3.7	8.9	127	273	.6	267	.6	e.1
27	158	124	8.9	1.3	275	8.9	305	273	.4	267	.4	e.1
28	158	129	25	1.3	55	11	311	259	.2	267	.4	e.1
29	158	129	12	1.3	-	24	311	23	.4	273	1.3	1.4
30	152	129	3.7	1.3	-	1,270	305	3.7	.2	273	2.8	6.0
31	158	-	2.8	1.3	-	363	-	2.8	-	273	2.8	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	3,934.8	158	1.9	127	7,800
November	1,659.6	163	.4	55.3	3,290
December	3,502.4	178	2.8	113	6,950
Calendar year 1944	19,939.5	503	0	54.5	39,550
January	106.7	32	1.3	3.44	212
February	953.4	542	.9	34.0	1,890
March	1,980.7	1,270	4.7	63.9	3,930
April	9,352	680	29	312	18,550
May	6,620.5	305	2.8	214	13,130
June	685.1	147	.2	22.8	1,360
July	35,953.7	9,820	.6	1,160	71,310
August	2,451.6	286	.4	79.1	4,860
September	15.2	6.0	.1	.51	30
Water year 1944-45	67,215.7	9,820	.1	184	133,300

a No gage-height record; discharge computed on basis of range in stage and 1 discharge measurement.
e Stage below crest of dam; discharge estimated on basis of 1 discharge measurement.

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

San Saba River at Menard, Tex.

Location.- Water-stage recorder, lat. 30°55', long. 99°47', at bridge on U. S. Highway 83 in Menard, Menard County, 0.7 mile downstream from Las Moras Creek. Datum of gage is 1,863.05 feet above mean sea level, datum of 1929.

Drainage area.- 1,151 square miles.

Records available.- September 1915 to September 1945.

Average discharge.- 30 years, 75.0 second-feet.

Extremes.- Maximum discharge during year, 9,320 second-feet Oct. 4 (gage height, 12.35 feet); minimum, 8.2 second-feet (regulated) Sept. 26-28.
1915-45: Maximum discharge, 117,000 second-feet July 23, 1938 (gage height, 22.2 feet, present site and datum, from floodmark), from rating curve extended above 60,000 second-feet on basis of slope-area determinations at gage heights 21.0 and 22.2 feet; no flow at times caused by diversions to Noyes Canal.
Maximum stage known, 23.3 feet, present site and datum, June 5 or 6, 1899, from information by local residents.

Remarks.- Records good. Low flow during irrigation season regulated by diversions to Noyes Canal, 4 miles above Menard. About 4,300 acres above and 7,700 acres below station have been declared irrigated (see records of Noyes Canal at Menard).

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	42	69	29	32	33	54	64	26	21	14	14	14
2	41	70	29	30	35	54	54	26	22	15	14	12
3	162	72	32	29	a35	54	33	25	33	19	14	12
4	1,960	73	36	28	a43	52	29	25	50	21	14	12
5	155	76	41	26	a62	51	27	25	21	18	14	12
6	120	61	33	29	62	50	27	25	19	20	13	12
7	94	20	30	28	61	47	27	24	18	22	18	12
8	83	20	27	27	61	48	27	25	18	19	19	12
9	80	20	27	27	61	40	27	45	18	17	16	10
10	76	20	26	26	60	23	27	29	27	17	28	9.8
11	76	22	25	26	59	24	42	27	44	18	29	10
12	76	22	25	24	75	25	41	25	49	19	28	9.8
13	72	23	26	29	74	21	31	23	47	19	27	9.8
14	72	23	26	32	65	25	30	22	41	18	26	10
15	72	26	26	32	62	30	31	54	38	18	26	10
16	72	41	26	31	59	23	29	51	35	17	26	10
17	71	36	26	37	59	22	28	30	35	16	26	9.8
18	70	37	25	57	58	22	27	26	40	16	26	9.8
19	70	55	24	47	59	23	26	25	43	15	26	9.8
20	69	37	27	31	58	23	33	24	40	15	25	9.8
21	59	30	31	30	61	22	44	28	35	15	24	9.8
22	69	28	30	33	59	23	42	27	34	15	17	9.8
23	69	28	30	35	57	23	35	24	35	15	12	10
24	69	35	29	33	54	23	32	23	34	15	12	10
25	69	38	29	32	55	22	35	23	33	15	12	9.5
26	70	30	29	30	56	22	31	22	27	13	12	8.8
27	69	28	31	31	59	22	28	21	15	13	12	8.8
28	70	29	35	32	57	22	27	21	15	23	12	8.8
29	71	29	34	32	-	26	28	20	15	15	12	10
30	69	29	31	32	-	111	27	20	14	14	16	13
31	69	-	33	33	-	73	-	19	-	14	16	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	4,296	1,960	41	139	8,520
November	1,127	76	20	37.6	2,240
December	908	41	24	29.3	1,800
Calendar year 1944	20,396	2,860	13	65.7	40,460
January	983	57	24	31.7	1,950
February	1,599	75	33	57.1	3,170
March	1,100	111	21	35.5	2,180
April	990	64	26	33.0	1,960
May	831	54	19	26.8	1,650
June	916	50	14	30.5	1,820
July	520	23	13	16.8	1,030
August	586	29	12	18.9	1,160
September	315.1	14	8.8	10.5	625
Water year 1944-45	14,171.1	1,960	8.8	38.8	28,100

a No gage-height record; discharge computed on basis of records for Noyes Canal at Menard.

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

San Saba River at San Saba, Tex.

Location.- Water-stage recorder, lat. 31°12'10", long. 98°42'15", at bridge on San Saba-Chadwick Mill highway, three-quarters of a mile northeast of San Saba, San Saba County, and 15 miles upstream from mouth. Datum of gage is 1,153.3 feet above mean sea level, datum of 1929.

Drainage area.- 3,046 square miles.

Records available.- August 1930 to September 1945. December 1904 to December 1906 and September 1915 to August 1930 at site 4½ miles upstream.

Average discharge.- 30 years (1915-45), 286 second-feet.

Extremes.- Maximum discharge during year, 4,780 second-feet Oct. 5 (gage height, 20.47 feet); minimum, 59 second-feet Sept. 23 (gage height, 3.62 feet).

1904-6, 1915-45: Maximum discharge, 203,000 second-feet July 23, 1938 (gage height, 45.18 feet, from floodmarks at highest stage known), by slope-area method; no flow Aug. 9, 10, 1918.

Maximum stage known prior to 1938, 42.6 feet June 6, 1899, from information by local resident.

Remarks.- Records good except those for periods of no gage-height record, which are fair. Diversions above station for irrigation and municipal uses affect low flow.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	h66	103	112	152	153	244	2,460	236	124	98	74	92
2	66	102	110	145	152	268	1,520	228	132	97	74	87
3	65	100	111	139	153	1,170	673	220	213	96	80	81
4	978	99	118	136	152	792	493	212	256	209	76	79
5	3,440	99	146	133	150	456	402	204	231	198	69	76
6	740	102	180	132	147	393	358	196	284	133	66	75
7	368	103	170	129	143	333	342	190	187	125	67	75
8	268	103	164	126	147	292	316	182	143	123	70	74
9	212	99	153	124	149	268	308	175	128	122	139	74
10	174	99	142	122	149	260	292	239	132	130	103	73
11	157	92	132	121	146	252	316	220	140	165	115	70
12	153	84	128	119	623	252	333	196	242	150	102	69
13	138	81	124	119	1,150	236	308	187	292	133	102	75
14	126	79	121	118	570	228	316	175	350	122	90	79
15	121	78	119	117	358	696	300	174	276	117	86	74
16	118	87	117	112	292	373	284	169	202	110	87	70
17	112	112	117	156	260	276	276	169	164	107	86	67
18	110	111	115	797	236	260	260	178	170	105	85	65
19	108	110	114	647	228	268	252	181	174	98	82	62
20	107	132	114	350	228	252	358	169	147	93	82	61
21	106	136	112	276	546	228	1,070	168	142	93	82	60
22	102	126	110	236	596	220	646	162	140	88	81	61
23	102	124	110	205	333	212	447	154	135	83	86	60
24	100	128	110	190	276	205	376	153	131	80	85	61
25	100	152	114	184	252	200	324	152	124	79	82	62
26	99	153	121	178	244	194	284	149	118	78	82	62
27	99	135	149	172	236	190	268	140	112	75	82	64
28	97	131	176	169	236	188	260	135	107	81	81	66
29	99	126	175	165	-	243	252	133	102	83	88	91
30	99	118	164	169	-	899	236	129	100	83	104	105
31	100	-	153	156	-	1,420	-	125	-	79	99	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	8,729	3,440	65	282	17,310
November	3,304	153	78	110	6,550
December	4,101	180	110	132	8,130
Calendar year 1944	81,857	3,440	44	224	162,300
January	6,082	797	112	196	12,060
February	8,305	1,150	143	297	16,470
March	11,768	1,420	188	380	23,340
April	14,330	2,460	236	478	28,420
May	5,500	239	125	177	10,910
June	5,198	350	100	173	10,310
July	3,431	209	75	111	6,810
August	2,687	139	66	86.7	5,330
September	2,170	105	60	72.3	4,300
Water year 1944-45	75,605	3,440	60	207	149,900

h Computed from staff-gage reading.

Note.- No gage-height record Oct. 2, 3, Apr. 27 to May 10; discharge computed on basis of occasional staff-gage readings and records for San Saba River at Menard and Colorado River near San Saba.

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time, thereafter. To convert war time to standard time, subtract 1 hour.

Noyes Canal at Menard, Tex.

Location.- Water-stage recorder, lat. 30°55', long. 99°47', at intersection of Canal and Gay Streets in Menard, Menard County, 4½ miles downstream from head gates. Datum of gage is 1,878.1 feet above mean sea level, datum of 1929.

Records available.- March 1924 to September 1945.

Average discharge.- 21 years (1924-45), 15.0 second-feet.

Extremes.- Maximum daily discharge during year, 28 second-feet Jan. 15; maximum gage height, 4.04 feet June 3 (affected by local runoff); no flow at times.

1924-45: Maximum daily discharge (exclusive of times canal submerged by waters of San Saba River), 50 second-feet Apr. 15, 1925 (probably affected by local runoff between point of diversion and station); no flow at times.

Remarks.- Records fair. Discharge represents flow diverted from San Saba River not including local runoff between point of diversion and station. Canal diverts water from right bank of San Saba River 4 miles above Menard for irrigation near Menard; 10 acres irrigated from canal above station.

Monthly discharge, in second-feet, of Noyes Canal at Menard, Tex., water year October 1944 to September 1945

Month	Maximum	Minimum	Mean	Runoff in acre-feet
October	0	0	0	0
November	23	0	15.6	928
December	24	22	23.6	1,450
Calendar year 1944	26	0	13.7	9,900
January	28	21	22.4	1,370
February	22	0	2.14	119
March	23	0	14.0	861
April	24	21	22.3	1,330
May	21	16	19.2	1,180
June	16	0	6.25	372
July	18	13	16.0	982
August	15	0	7.48	460
September	19	14	16.6	986
Water year 1944-45	28	0	13.9	10,040

Brady Creek at Brady, Tex.

Location.- Water-stage recorder, lat. 31°08'15", long. 99°19'55", just upstream from bridge on North Bridge Street in Brady, McCulloch County, and 0.4 mile downstream from Live Oak Creek. Datum of gage is 1,646.50 feet above mean sea level, datum of 1929.

Drainage area.- 575 square miles.

Records available.- May 1939 to September 1945.

Extremes.- Maximum discharge during year, 5,940 second-feet Oct. 4 (gage height, 12.67 feet); no flow at times.

1939-45: Maximum discharge, 13,900 second-feet Apr. 27, 1941 (gage height, 16.81 feet), from rating curve extended above 8,000 second-feet; no flow at times.

Maximum stage known, 29.1 feet July 23, 1938, present site and datum (discharge at site 5 miles downstream, 86,000 second-feet, by slope-area method).

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

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.7	0.1	1.2	2.6	0.5	18	63	1.0	0.4	0	0	
2	.7	.1	1.0	2.4	.5	12	50	.7	.2	.2	.2	
3	139	.1	.9	2.4	.5	12	27	.5	.2	.4	.1	
4	1,400	.1	3.6	2.5	.6	16	15	.2	.1	3.3	0	
5	50	.1	7.2	2.7	.5	14	8.8	.1	0	1.4	0	
6	14	.1	5.1	3.0	.4	11	5.5	.1	0	1.0	0	
7	5.6	.1	4.2	3.6	.4	8.0	3.5	.2	.1	27	.1	
8	11	.1	3.2	3.3	.2	7.5	2.5	.3	0	36	.2	
9	5.9	.2	2.3	2.9	.2	6.6	1.8	.5	0	22	.1	
10	1.7	.3	1.9	2.4	.2	5.7	1.4	.5	1.0	11	.1	
11	.9	.3	1.4	2.0	.2	5.6	48	.4	.2	5.9	0	
12	.4	.3	1.1	2.0	42	5.4	51	.4	46	3.6	0	
13	.2	.3	1.1	2.1	31	4.7	27	.4	61	1.9	0	
14	.1	.3	1.0	1.9	10	5.4	14	.6	31	1.0	0	
15	.1	1.2	.8	1.2	5.5	9.3	18	.9	17	.5	0	
16	0	2.7	.7	1.0	4.5	7.2	14	f.6	7.0	.3	0	
17	0	1.2	.9	2.5	3.9	6.2	10	.5	30	.2	0	
18	0	2.7	.7	11	3.6	5.0	7.2	.5	62	.1	0	
19	0	1.7	.6	6.6	3.9	4.6	4.8	.5	40	0	0	
20	0	.8	.5	4.5	4.9	3.8	96	.5	25	0	0	
21	.1	.6	.5	3.6	12	3.1	97	.7	14	.1	0	
22	.2	.5	.4	2.8	7.0	2.7	36	.4	5.0	.1	0	
23	.2	.4	.4	1.9	4.8	2.7	20	.5	.2	0	0	
24	.2	1.8	.4	1.3	3.8	2.4	12	.3	.2	0	0	
25	.2	1.9	.5	1.1	3.7	1.9	7.2	.2	.2	.1	0	
26	.2	1.1	.7	.9	3.9	1.4	4.7	.2	.1	0	0	
27	.1	1.1	.9	.8	17	1.2	3.5	.2	.1	0	0	
28	.2	1.8	1.9	.8	31	1.2	3.0	.1	0	.1	0	
29	.2	1.7	1.7	.6	-	1.9	2.1	0	0	.2	0	
30	.1	1.8	2.1	.6	-	31	1.5	0	0	.2	0	
31	.1	-	2.6	.5	-	28	-	0	-	.1	0	

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	1,632.1	1,400	0	52.6	3,240
November	25.5	2.7	.1	.85	51
December	51.5	7.2	.4	1.66	102
Calendar year 1944	6,318.1	1,400	0	17.3	12,540
January	77.5	11	.5	2.50	154
February	196.7	42	.2	7.02	390
March	245.7	31	1.2	7.93	487
April	655.5	97	1.4	21.8	1,300
May	12.0	1.0	0	.39	24
June	341.0	62	0	11.4	676
July	116.7	36	0	3.76	231
August	.8	.2	0	.03	1.6
September	0	0	0	0	0
Water year 1944-45	3,355.0	1,400	0	9.19	6,660

f Computed on basis of partly estimated gage-height record.

Note.- No gage-height record Apr. 2-19, June 11-22, June 29 to July 1; discharge computed on basis of range in stage and weather records.

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

North Llano River near Junction, Tex.

Location.- Water-stage recorder, lat. 30°30', long. 99°47', about 1,000 feet upstream from remains of old Wilson Dam, 3 miles northwest of Junction, Kimble County, and 4 miles upstream from confluence with South Llano River. Datum of gage is 1,699.9 feet above mean sea level, datum of 1929.

Drainage area.- 914 square miles.

Records available.- September 1915 to September 1945.

Average discharge.- 30 years, 74.6 second-feet.

Extremes.- Maximum discharge during year, 5,900 second-feet Oct. 4 (gage height, 6.53 feet); no flow Sept. 10, 11.
1915-45: Maximum discharge, 94,800 second-feet Sept. 16, 1936 (gage height, 29.2 feet, present site, based on gage-height relation curve), by slope-area method; no flow at times.

Remarks.- Records good except those above 1,500 second-feet, which are fair. Diversions for irrigation materially reduce low flow.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	13	19	21	22	26	25	41	17	6.2	3.1	2.0	1.3
2	13	19	21	21	26	26	30	17	6.2	3.3	2.0	.8
3	26	19	21	20	26	26	28	16	5.8	3.6	1.8	.8
4	1,300	19	23	20	26	26	28	16	5.5	4.2	1.7	.8
5	128	19	24	20	26	25	27	16	5.5	3.9	1.5	.7
6	75	19	24	20	25	24	27	15	5.2	3.3	1.5	.5
7	58	18	24	19	24	24	26	14	5.0	3.1	2.4	.4
8	49	17	24	19	24	24	25	14	4.7	2.8	4.9	.4
9	44	17	23	19	24	24	25	14	4.7	2.6	2.6	.2
10	40	17	22	19	24	24	24	13	4.4	3.1	2.0	.2
11	36	17	21	19	23	24	25	13	4.4	5.5	1.7	.2
12	34	17	21	19	27	25	25	12	9.9	4.4	1.7	.2
13	32	17	21	19	27	27	25	11	5.8	3.9	1.7	.2
14	29	17	20	19	27	27	25	10	5.2	3.6	1.5	.3
15	27	17	20	19	26	27	26	12	4.7	3.9	1.5	.4
16	26	19	20	19	25	26	26	12	4.4	4.2	1.3	.4
17	26	19	20	22	24	25	25	12	4.4	4.2	1.3	.4
18	25	23	19	40	24	24	24	11	22	4.2	1.3	.4
19	24	27	19	38	24	25	23	11	11	4.2	1.1	.4
20	24	24	20	34	25	24	23	11	7.6	4.2	.9	.5
21	24	24	20	32	30	24	24	12	6.6	3.9	.9	.4
22	23	23	20	29	27	22	25	11	5.5	3.9	3.4	.4
23	22	23	20	28	26	22	24	11	5.2	3.6	2.4	.4
24	22	24	20	27	24	21	24	10	5.0	3.1	1.8	.8
25	21	24	20	27	24	20	22	9.9	5.0	2.8	1.5	.8
26	21	23	20	26	24	19	20	9.4	4.2	2.6	.9	.8
27	20	23	21	25	24	20	20	8.6	3.9	2.6	1.1	.8
28	20	22	23	26	25	19	20	8.3	3.6	2.8	.9	.8
29	19	21	23	26	-	41	18	7.2	3.6	2.8	.9	1.7
30	19	21	22	26	-	68	17	6.9	3.3	2.4	1.5	1.3
31	19	-	22	26	-	29	-	6.2	-	2.0	1.3	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	2,259	1,300	13	72.9	4,480
November	608	27	17	20.3	1,210
December	659	24	19	21.3	1,310
Calendar year 1944	16,366.1	3,670	2.0	44.7	32,460
January	746	40	19	24.1	1,480
February	707	30	23	25.2	1,400
March	807	68	19	26.0	1,600
April	742	41	17	24.7	1,470
May	367.5	17	6.2	11.9	729
June	178.5	22	3.3	5.95	354
July	107.8	5.6	2.0	3.48	214
August	53.0	4.9	.9	1.71	105
September	17.7	1.7	.2	.59	35
Water year 1944-45	7,252.5	1,300	.2	19.9	14,390

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Llano River near Junction, Tex.

Location.- Water-stage recorder, lat. 30°30', long. 99°44', 250 feet north of old Kerrville-Junction road, about half a mile downstream from point where slough diverts floodwater from main channel, 3 miles east of Junction, Kimble County, 4 miles downstream from confluence of North Llano and South Llano Rivers, and 4¾ miles upstream from Johnson Fork. Datum of gage is 1,630.32 feet above mean sea level, datum of 1929.

Drainage area.- 1,762 square miles.

Records available.- September 1915 to September 1945.

Average discharge.- 30 years, 219 second-feet.

Extremes.- Maximum discharge during year, 3,270 second-feet Oct. 4 (gage height, 4.56 feet); minimum, 31 second-feet Sept. 11, 20, 21, 27, 28.

1915-45: Maximum discharge, 319,000 second-feet June 14, 1935 (gage height, 43.3 feet, present site and datum, from floodmarks), by slope-area method; minimum, 13 second-feet Aug. 23-28, 1918.

Remarks.- Records good except those above 100 second-feet, which are fair. Small diversions above station for irrigation.

Rating table, water year 1944-45 (gage height, in feet, and discharge, in second-feet)

1.1	29	1.7	174
1.2	38	1.9	275
1.3	51	2.3	510
1.4	72	2.7	810
1.5	100	3.0	1,100

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	67	72	77	77	82	85	163	75	46	41	36	39
2	67	72	77	77	82	85	144	72	46	42	36	37
3	67	72	80	77	82	82	128	70	47	50	35	36
4	1,050	72	82	77	82	85	117	70	46	53	34	35
5	214	72	82	75	82	82	110	70	46	56	32	32
6	136	72	82	75	82	82	107	67	44	55	32	32
7	114	72	82	75	80	80	103	65	43	50	36	32
8	107	72	82	72	77	80	100	65	43	48	72	32
9	100	70	80	72	77	80	100	65	43	47	51	32
10	97	70	80	72	77	80	97	65	43	44	46	32
11	94	72	77	72	77	80	94	62	43	46	42	31
12	91	72	77	72	82	80	91	60	53	47	39	32
13	91	72	77	72	85	91	91	56	50	46	38	32
14	88	75	77	72	82	107	91	55	48	44	37	32
15	85	80	77	72	82	103	91	58	46	42	36	32
16	82	82	77	72	80	100	94	56	44	44	34	32
17	82	82	77	77	80	97	94	55	43	46	34	32
18	82	91	77	103	77	94	91	55	78	43	32	32
19	80	97	77	103	77	91	91	55	58	41	32	32
20	80	94	77	97	80	88	88	53	53	41	32	31
21	80	88	77	91	91	82	91	58	50	38	32	31
22	80	85	77	88	85	82	97	55	48	38	32	32
23	80	82	77	85	82	82	94	55	47	37	32	32
24	80	85	77	82	82	80	88	53	47	37	32	32
25	77	88	77	82	82	77	80	51	46	36	32	32
26	77	85	77	82	85	77	80	51	44	35	35	32
27	77	82	77	82	82	77	80	50	43	36	35	32
28	77	80	80	82	82	77	80	48	42	38	35	31
29	77	80	80	82	-	184	77	48	42	37	36	37
30	75	80	80	82	-	308	77	47	41	37	39	41
31	72	-	80	82	-	194	-	46	-	36	41	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	3,726	1,050	67	120	7,390
November	2,368	97	70	78.9	4,700
December	2,433	82	77	78.5	4,830
Calendar year 1944	38,376	3,060	44	105	76,130
January	2,481	103	72	80.0	4,920
February	2,276	91	77	81.3	4,510
March	3,072	308	77	99.1	6,090
April	2,929	163	77	97.6	5,810
May	1,811	75	46	58.4	3,590
June	1,413	78	41	47.1	2,800
July	1,331	56	35	42.9	2,640
August	1,147	72	32	37.0	2,280
September	989	41	31	33.0	1,960
Water year 1944-45	25,976	1,050	31	71.2	51,520

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Llano River at Llano, Tex.

Location.- Water-stage recorder, lat. 30°45', long. 98°40', in Llano, Llano County, 0.4 mile downstream from bridge on State Highway 81 and 7 miles upstream from Little Llano River. Datum of gage is 970.0 feet above mean sea level, datum of 1929.

Drainage area.- 4,000 square miles.

Records available.- September 1939 to September 1945.

Extremes.- Maximum discharge during year, 8,500 second-feet Jan. 18 (gage height, 7.61 feet); minimum daily, 17 second-feet (regulated) Aug. 18, 20, 21, 24-28.

1939-45: Maximum discharge, 50,600 second-feet June 5, 1943 (gage height, 16.92 feet), from rating curve extended above 17,000 second-feet; minimum daily, 12 second-feet (regulated) Aug. 7, 1942.

Maximum stage known, 41.5 feet June 14, 1935, from information by local resident.

Remarks.- Records good. Low flow regulated by power plant half a mile above station. No large diversion above station.

Rating table, water year 1944-45 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used June 26 to Sept. 28)

1.7	14	2.3	90	3.4	860
1.8	21	2.4	125	4.0	1,490
1.9	30	2.5	170	4.8	2,510
2.0	41	2.6	225	5.5	3,620
2.1	54	2.8	360	6.2	4,980
2.2	70	3.0	510		

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	100	92	108	336	190	339	1,690	197	49	30	29	113
2	95	101	104	238	196	325	1,230	164	50	38	23	70
3	91	95	104	207	193	478	644	225	56	38	23	55
4	135	98	149	173	175	558	462	162	63	39	22	40
5	448	82	524	184	189	374	360	143	200	41	22	38
6	742	84	332	151	171	332	304	143	234	46	22	36
7	392	110	416	172	144	284	284	142	109	85	22	29
8	252	71	244	145	158	244	254	116	62	88	23	34
9	194	91	203	134	163	232	251	154	64	56	28	26
10	153	78	165	138	149	264	238	440	77	56	32	22
11	132	86	148	118	153	251	251	274	84	70	21	22
12	127	88	134	138	956	251	251	153	270	45	21	22
13	112	75	125	130	1,280	244	232	118	152	76	23	22
14	95	103	118	127	555	264	225	118	102	70	34	21
15	94	92	118	136	374	767	220	123	94	54	31	20
16	106	104	114	114	297	510	208	170	82	50	28	20
17	76	114	114	748	284	367	199	258	72	40	32	20
18	103	130	123	4,970	270	311	172	210	73	46	17	20
19	94	220	118	1,570	584	290	171	130	74	39	25	20
20	76	203	109	798	582	297	488	100	72	28	17	20
21	93	183	102	582	3,210	251	940	114	60	35	17	20
22	80	156	124	462	1,140	225	525	94	84	25	18	20
23	102	135	104	388	526	221	345	88	79	35	22	20
24	80	176	118	332	470	214	2,390	89	62	25	17	20
25	92	225	114	290	423	191	1,000	82	64	32	17	20
26	84	176	144	258	409	179	462	80	46	27	17	19
27	90	152	263	244	423	172	325	62	44	18	17	20
28	92	131	344	232	395	180	277	73	40	33	17	39
29	85	122	374	220	-	198	251	59	35	35	138	258
30	98	155	258	208	-	636	220	59	38	25	450	194
31	82	-	387	203	-	1,230	-	44	-	28	120	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	4,598	742	75	148	9,120
November	3,730	225	71	124	7,400
December	5,903	524	102	190	11,710
Calendar year 1944	99,355	2,960	29	271	197,100
January	14,156	4,970	114	457	28,080
February	14,170	3,210	144	506	28,110
March	10,679	1,230	172	344	21,180
April	14,881	2,390	171	495	29,520
May	4,384	440	44	141	8,700
June	2,593	270	35	86.4	5,140
July	1,365	88	18	44.0	2,710
August	1,345	450	17	43.4	2,670
September	1,300	258	19	43.3	2,580
Water year 1944-45	79,104	4,970	17	217	156,900

Peak discharge.- Jan. 18 (10 a.m.) 8,500 sec.-ft.; Feb. 12 (7 p.m.) 3,890 sec.-ft.; Feb. 21 (8 a.m.) 6,170 sec.-ft.; Apr. 24 (1:30 p.m.) 3,620 sec.-ft.

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Pedernales River near Johnson City, Tex.

Location.- Water-stage recorder, lat. 30°18', long. 98°24', at bridge on U. S. Highway 281, 1.5 miles north of Johnson City, Blanco County, and 1.9 miles downstream from Buffalo Creek. Datum of gage is 1,096.6 feet above mean sea level, unadjusted.

Drainage area.- 947 square miles.

Records available.- May 1939 to September 1945.

Extremes.- Maximum discharge during year, 25,500 second-feet Sept. 29 (gage height, 13.96 feet); minimum, 13 second-feet Aug. 19-22 (gage height, 2.39 feet).

1939-45: Maximum discharge, 104,000 second-feet Aug. 30, 1944 (gage height, 26.10 feet, from recorder at upstream side of right bridge pier, affected by draw-down; maximum gage height, 27.6 feet, from floodmark on staff gage 50 feet upstream and 300 feet to right of recorder), from rating curve extended above 42,000 second-feet by logarithmic plotting; minimum discharge, 1.2 second-feet Oct. 1-3, 1939.

Maximum stage known, about 33 feet in July 1869, from information by local residents.

Remarks.- Records good except those for periods of no gage-height record, which are fair. No diversion above station for irrigation.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	89	36	64	137	202	285	1,360	275	73	35	23	76
2	52	36	64	127	202	294	885	266	76	40	23	a42
3	50	36	64	120	202	803	524	300	76	50	21	a30
4	954	36	1,270	113	202	342	430	257	144	79	19	a29
5	265	36	3,440	113	244	328	384	240	100	52	18	a25
6	130	36	524	117	206	303	379	227	79	42	18	24
7	94	36	379	113	186	271	357	218	66	42	18	21
8	76	35	271	103	174	262	352	210	59	40	18	a19
9	68	33	231	94	170	257	342	714	57	36	20	a18
10	62	33	198	91	170	253	328	262	158	35	20	18
11	62	33	182	94	182	253	337	223	204	43	21	18
12	57	33	174	97	1,370	248	342	198	167	82	18	18
13	55	35	167	97	543	559	308	186	227	52	17	16
14	52	36	156	94	323	369	303	174	130	212	16	15
15	50	36	152	88	266	1,480	294	167	88	120	15	29
16	48	75	144	85	248	406	280	159	68	68	14	23
17	45	97	137	134	244	323	262	152	62	82	14	19
18	45	117	134	4,310	247	298	248	144	208	57	14	18
19	43	226	120	1,090	430	289	240	137	110	48	13	17
20	43	134	117	453	395	257	1,980	130	82	42	13	17
21	42	91	113	374	865	240	1,150	159	66	38	13	16
22	42	73	113	313	424	236	453	178	59	35	15	15
23	40	66	113	285	337	236	461	134	91	33	18	15
24	40	192	117	266	313	231	3,930	120	71	32	20	15
25	42	183	137	253	313	214	648	113	55	32	18	15
26	40	113	134	236	308	198	412	106	48	28	17	15
27	38	88	130	227	323	194	352	97	45	25	18	14
28	38	76	152	227	303	194	342	91	42	24	18	14
29	36	71	152	218	-	202	313	88	38	24	69	8,560
30	36	68	141	206	-	9,470	289	82	36	23	682	682
31	36	-	144	202	-	950	-	76	-	23	178	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	2,740	954	36	88.4	5,430
November	2,196	226	33	73.2	4,360
December	9,434	3,440	64	304	18,710
Calendar year 1944	97,600.8	24,500	4.0	267	193,600
January	10,477	4,310	85	338	20,780
February	9,392	1,370	170	335	18,630
March	20,245	9,470	194	653	40,160
April	18,285	3,930	240	610	36,270
May	5,883	714	76	190	11,670
June	2,785	227	36	92.8	5,520
July	1,574	212	23	50.8	3,120
August	1,419	682	13	45.8	2,810
September	9,853	8,560	14	328	19,540
Water year 1944-45	94,283	9,470	13	258	187,000

Peak discharge.- Dec. 4 (10 p.m.) 9,680 sec.-ft.; Jan. 18 (9:30 a.m.) 8,590 sec.-ft.; Mar. 30 (12:30 p.m.) 23,200 sec.-ft.; Apr. 24 (8:30 a.m.) 9,450 sec.-ft.; Sept. 29 (9:30 a.m.) 25,500 sec.-ft.

a No gage-height record; discharge computed on basis of range in stage.

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Barton Springs at Austin, Tex.

Location.- Lat. 30°16', long. 97°46'. Springs issue from channel and along barks of Barton Creek for a distance of 1,000 feet in Zilker Park at Austin, Travis County. The main spring is near right bank of creek 500 feet upstream from concrete dam forming swimming pool, 1,800 feet upstream from bridge on Austin-Bee Cave highway, and 0.6 mile upstream from mouth of Barton Creek.

Records available.- October 1918 to September 1926 and October 1940 to September 1945. November 1894 to September 1918, October 1926 to September 1940, discharge published as miscellaneous measurements. Daily discharge record of Barton Creek at Austin, published for period April 1917 to September 1918, closely represents flow of Barton Springs. Summary of all discharge measurements prior to October 1937 is contained in Water-Supply Paper 850.

Extremes.- Maximum discharge measured during year, 106 second-feet May 16; minimum measured, 30.9 second-feet Nov. 14.

1894-1945: Maximum discharge measured, 166 second-feet May 10, 1941; minimum measured, 12.1 second-feet Feb. 26, 1918.

Remarks.- Discharge measurements represent total flow of springs including Old Mill Spring which is on right bank and about 1,000 feet downstream from main spring. Springs emerge from Edwards limestone in Balcones fault zone and respond to rainfall on Edwards Plateau. Water used for recreational purposes.

Discharge measurements, in second-feet, of Barton Creek and determination of discharge of Barton Springs at Austin, Tex., Water year October 1944 to September 1945

Date	Barton Creek below springs	Barton Creek above springs	Barton Springs	Date	Barton Creek below springs	Barton Creek above springs	Barton Springs
Oct. 20	37.3	0	37.3	June 21	83.7	2.80	80.9
Nov. 14	30.9	0	30.9	July 11	79.5	1.23	78.3
Dec. 15	97.6	45.2	52.4	Aug. 14	63.8	0	63.8
Jan. 24	237	157	80.0	Sept.18	48.9	0	48.9
May 16	139	32.9	106				

Dry Creek at Buescher Lake, near Smithville, Tex.

Location.- Water-stage recorder above concrete spillway of dam, lat. 30°03', long. 97°09', in Bastrop-Buescher State Park, 1.9 miles upstream from mouth and 2.2 miles north of Smithville, Bastrop County. Datum of gage is 327.9 feet above mean sea level, datum of 1929.

Drainage area.- 1.48 square miles (area above dam).

Records available.- October 1939 to September 1945.

Extremes.- Maximum discharge during year, 1,200 second-feet Mar. 30; maximum gage height, 21.79 feet Apr. 2; no flow most of time.

1939-45: Maximum discharge, 1,870 second-feet June 30, 1940 (gage height, 24.82 feet); maximum gage height, 24.96 feet June 30, 1940; no flow most of time.

Remarks.- Records good. Records given herein represent flow into Buescher Lake. No runoff except during and immediately following precipitation. Discharge below gage height 22.27 feet (spillway crest) determined from change in contents of lake; that above gage height 22.27 feet determined by algebraic summation of flow over spillway (computed from spillway curve) and change in contents of lake (computed from capacity curve and reduced to equivalent second-feet). There was no flow over spillway during year. No adjustments made for evaporation or seepage losses. Capacity of lake, 255 acre-feet. No diversion above station or from lake.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1		0	0	0.2	0	0	25	0	0	1.4	0	0
2		0	0	0	0	0	1.2	0	0	0	0	0
3		0	0	0	0	0	0	0	0	0	0	0
4		0	.8	0	0	0	0	0	.5	0	0	0
5		0	4.4	0	0	0	0	0	0	0	0	0
6		0	.4	1.2	0	0	0	0	0	0	0	0
7		0	0	0	0	0	0	0	0	0	0	0
8		0	0	0	0	0	0	0	0	0	0	0
9		0	0	0	0	0	0	0	0	0	0	0
10		0	0	0	0	0	0	.2	0	0	0	0
11		0	0	0	0	0	0	0	0	1.0	0	0
12		0	0	0	0	0	0	0	0	0	0	.5
13		0	0	0	0	0	0	0	0	0	0	0
14		0	0	0	0	.6	0	0	0	0	0	0
15		0	0	0	0	0	3.2	0	0	0	0	0
16		0	0	0	0	0	0	0	0	0	0	0
17		0	0	.6	0	.6	0	0	0	0	0	0
18			0	33	0	0	0	0	4.6	0	0	0
19			0	1.9	0	0	0	0	0	0	0	0
20			0	.6	0	0	.8	0	0	0	0	0
21		3.0	0	.2	.2	0	7.8	0	0	0	0	0
22			0	0	0	0	.6	0	.4	0	0	0
23			0	0	0	0	0	0	0	0	0	0
24			0	0	0	0	0	0	0	0	0	0
25			0	0	0	0	0	0	0	0	0	0
26		0	.2	0	0	0	0	0	0	0	0	0
27		0	6.4	0	0	0	0	0	0	0	.2	0
28		0	2.0	0	0	0	0	0	0	0	.4	.4
29		0	.5	0	-	0	0	0	0	0	.2	.3
30		0	0	0	-	34	0	0	0	0	0	0
31		-	1.8	0	-	16	-	0	-	.3	0	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	0	0	0	0	0
November	21.0	-	0	.70	42
December	16.5	6.4	0	.53	33
Calendar year 1944	54.6	6.4	0	.15	109
January	37.7	33	0	1.22	75
February	.2	.2	0	.01	.4
March	51.2	34	0	1.65	102
April	38.6	25	0	1.29	77
May	.2	.2	0	.01	.4
June	5.5	4.6	0	.18	11
July	2.7	1.4	0	.09	5.4
August	.8	.4	0	.03	1.6
September	1.2	.5	0	.04	2.4
Water year 1944-45	175.6	34	0	.48	350

Note.- No gage-height record Oct. 1-7, Nov. 9-28, June 4-14; no flow except during a period in November for which discharge was computed on basis of range in stage and weather records.

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Lavaca River at Hallettsville, Tex.

Location.- Wire-weight gage for low stages and water-stage recorder for high stages, lat. 29°26', long. 96°57', at bridge on U. S. Highway 77 in Hallettsville, Lavaca County, and 0.4 mile upstream from Texas & New Orleans Railroad bridge. Datum of gage is 186.7 feet above mean sea level, datum of 1929.

Drainage area.- 101 square miles.

Records available.- July 1939 to September 1945.

Extremes.- Maximum discharge during year, 6,590 second-feet Jan. 18 (gage height, 22.36 feet); minimum, 0.7 second-foot Sept. 19-23.

1939-45: Maximum discharge, 93,100 second-feet June 30, 1940 (gage height, 40.60 feet, from floodmarks of highest flood known), by slope-area method; minimum, 0.4 second-foot Sept. 29, 1939.

Maximum stage known prior to 1940, 32.8 feet July 16, 1936, from information by local resident.

Remarks.- Records good except those above 3,000 second-feet, which are fair. Wire-weight gage read twice daily, oftener during floods, and used for computing discharge below about 40 second-feet. No known diversion above station.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4.7	3.0	6.5	6.5	14	12	1,330	9.7	4.1	1.8	2.4	3.4
2	3.6	3.0	6.3	7.6	14	12	108	9.4	4.1	7.0	2.4	3.0
3	3.4	3.0	6.1	7.0	14	12	34	9.1	3.9	4.3	2.2	2.6
4	3.4	28	5.8	6.8	14	12	26	8.8	3.8	20	2.0	2.4
5	3.2	4.9	360	6.5	74	12	23	8.5	3.6	5.9	2.0	2.2
6	3.2	3.4	29	8.2	28	12	20	7.9	3.8	3.6	1.8	2.0
7	33	3.6	14	8.2	14	11	18	8.2	3.6	3.6	1.3	1.9
8	8.9	3.2	11	7.9	12	11	16	303	3.6	3.4	1.3	1.8
9	3.9	3.2	9.7	7.9	12	10	15	19	3.6	3.0	1.2	1.6
10	3.4	3.0	8.5	7.9	12	11	14	12	3.6	2.6	1.2	1.4
11	3.2	3.0	7.9	7.6	12	12	12	10	3.6	2.8	1.1	1.3
12	3.2	3.0	7.3	7.6	15	12	11	8.2	70	2.4	1.1	1.2
13	3.2	3.0	6.8	7.3	15	12	10	7.6	24	2.5	1.1	1.6
14	3.2	3.0	6.6	7.0	13	11	10	6.8	7.6	2.6	1.1	1.4
15	3.2	3.0	6.3	7.0	12	11	9.7	6.3	5.2	2.6	1.1	1.3
16	3.2	3.8	6.1	7.0	12	11	9.4	5.8	4.7	2.8	1.1	1.2
17	3.2	4.3	6.1	8.5	12	11	9.7	6.1	4.7	2.6	1.1	1.0
18	3.2	5.6	6.1	2,450	12	11	9.1	5.8	354	2.2	1.1	.9
19	3.2	58	5.8	107	62	11	8.5	5.6	52	2.2	1.1	.8
20	3.0	8.5	5.8	40	30	11	249	5.6	16	2.2	1.2	.7
21	3.0	5.2	5.8	36	48	11	252	5.6	8.5	2.4	1.2	.7
22	3.0	4.3	5.8	28	26	10	338	5.2	5.8	2.2	1.2	.7
23	3.0	4.3	5.8	22	15	10	36	5.2	4.9	2.2	1.2	.7
24	3.0	168	5.8	20	13	10	22	4.9	4.1	1.9	1.2	1.3
25	3.0	478	6.1	19	13	10	17	4.7	3.2	1.9	1.2	.8
25	3.0	18	6.3	18	13	8.8	15	4.7	2.8	1.9	1.2	.8
27	3.0	10	18	18	14	8.2	13	4.7	2.2	1.8	4.7	.8
28	3.0	8.8	12	18	14	7.9	13	4.7	2.2	1.6	7.3	1.2
29	3.0	7.3	9.4	17	-	7.9	12	4.7	2.0	1.6	6.5	.9
30	3.0	7.0	9.4	15	-	1,360	11	4.5	1.9	1.6	5.4	1.4
31	3.0	-	9.7	14	-	111	-	4.3	-	1.9	4.7	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	135.7	33	3.0	4.38	269
November	864.4	478	3.0	28.8	1,710
December	615.7	360	5.8	19.9	1,220
Calendar year 1944	15,318.6	2,590	1.6	41.9	30,380
January	2,950.5	2,450	6.5	95.2	5,850
February	559	74	12	20.0	1,110
March	1,782.8	1,360	7.9	57.6	3,540
April	2,671.4	1,330	8.5	89.0	5,300
May	516.6	303	4.3	16.7	1,020
June	617.3	354	1.9	20.6	1,220
July	101.1	20	1.6	3.26	201
August	64.7	7.3	1.1	2.09	128
September	43.0	3.4	.7	1.43	85
Water year 1944-45	10,922.2	2,450	.7	29.9	21,650

Peak discharge.- Jan. 18 (9 a.m.) 6,590 sec.-ft.; Mar. 30 (2:30 p.m.) 5,780 sec.-ft.; Apr. 1 (11 a.m.) 2,800 sec.-ft.

Time basis: Central war time up to 2 a.m., Sept. 30, 1946; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Lavaca River near Edna, Tex.

Location.- Wire-weight gage, lat. 28°58', long. 96°42', at bridge on U. S. Highway 59, 550 feet upstream from Texas & New Orleans Railroad bridge and 2.8 miles southwest of Edna, Jackson County. Datum of gage is 13.88 feet above mean sea level, datum of 1929 (levels by Corps of Engineers, U. S. Army).

Drainage area.- 887 square miles.

Records available.- August 1938 to September 1945.

Extremes.- Maximum discharge during year, 6,280 second-feet Jan. 20 (gage height, 20.87 feet, from graph based on gage readings); minimum observed, 11 second-feet Sept. 25, 26.

1938-45: Maximum discharge, 73,000 second-feet July 1, 1940 (gage height, 32.51 feet); minimum observed, 5.2 second-feet July 10, 1939.

Maximum stage known, 33.8 feet May 25, 1936, from information by local resident (discharge, 83,400 second-feet).

Remarks.- Records good. Gage read twice daily, oftener during high stages. No large diversion above station.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	44	29	55	55	101	77	2,330	69	26	3[illegible]	22	42
2	40	29	50	57	99	77	3,820	65	25	3[illegible]	22	29
3	37	30	48	59	98	75	1,200	61	24	3[illegible]	27	25
4	36	67	49	53	98	75	407	57	23	5[illegible]	42	22
5	36	334	661	53	107	75	256	55	23	4[illegible]	26	20
6	35	109	2,060	52	263	72	188	53	22	5[illegible]	23	18
7	35	50	441	51	256	68	152	52	22	41	23	18
8	34	40	176	53	128	66	132	168	21	31	18	18
9	74	36	124	57	105	63	120	185	21	2[illegible]	18	17
10	61	34	98	51	96	63	111	127	20	2[illegible]	18	16
11	40	37	82	48	91	65	102	69	21	2[illegible]	16	15
12	35	30	80	48	113	65	96	61	74	2[illegible]	19	15
13	33	27	67	48	136	79	91	53	90	2[illegible]	17	15
14	33	27	63	49	139	71	88	51	122	2[illegible]	16	14
15	33	29	60	50	102	68	84	48	77	2[illegible]	16	14
16	33	28	58	48	88	66	80	42	45	6[illegible]	16	15
17	32	26	56	48	84	64	74	40	35	3[illegible]	15	13
18	31	30	54	464	77	61	70	38	75	4[illegible]	14	13
19	31	44	51	3,910	76	60	72	37	1,080	3[illegible]	14	13
20	31	366	50	4,160	79	58	3,200	36	764	3[illegible]	16	13
21	30	168	49	408	162	55	2,920	36	415	3[illegible]	15	12
22	30	75	48	264	108	60	1,220	44	309	2[illegible]	14	12
23	30	52	48	214	164	57	766	35	208	3[illegible]	14	13
24	29	46	48	180	100	55	286	34	116	2[illegible]	16	12
25	29	76	49	158	78	52	175	33	71	2[illegible]	14	12
26	30	813	50	145	77	50	128	31	57	2[illegible]	15	12
27	30	196	54	134	76	52	105	30	49	2[illegible]	124	13
28	29	100	63	126	74	50	91	29	44	2[illegible]	239	15
29	29	72	80	120	-	48	81	29	40	2[illegible]	102	14
30	29	61	68	117	-	188	76	27	37	2[illegible]	261	14
31	29	-	60	107	-	1,910	-	26	-	2[illegible]	116	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	1,088	74	29	35.1	2,160
November	3,061	813	26	102	6,070
December	5,000	2,060	48	161	9,920
Calendar year 1944	119,015	7,800	22	325	236,100
January	11,387	4,160	48	367	22,590
February	3,175	263	74	113	6,300
March	3,945	1,910	48	127	7,820
April	18,521	3,820	70	617	36,740
May	1,721	185	26	55.5	3,410
June	3,956	1,080	20	132	7,850
July	997	66	20	32.2	1,980
August	1,328	261	14	42.8	2,630
September	494	42	12	16.5	980
Water year 1944-45	54,673	4,160	12	150	108,400

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Navidad River near Ganado, Tex.

Location.- Wire-weight gage, lat. 29°02', long. 96°33', at bridge on U. S. Highway 59, 100 feet upstream from Texas & New Orleans Railroad bridge, a quarter of a mile downstream from Sandy Creek, and 2¼ miles southwest of Ganado, Jackson County. Datum of gage is 13.62 feet above mean sea level, datum of 1929 (levels by Corps of Engineers, U. S. Army).

Drainage area.- 1,116 square miles.

Records available.- May 1939 to September 1945.

Extremes.- Maximum discharge during year, 12,800 second-feet Apr. 3 (gage height, 27.97 feet, from graph based on gage readings); minimum observed, 13 second-feet Oct. 27, 28, Nov. 1.

1939-45: Maximum discharge, 64,500 second-feet July 2, Nov. 26, 1940; maximum gage height, 36.54 feet July 2, 1940, from floodmark; minimum discharge observed, 4.0 second-feet Nov. 1, 1939.

Maximum stage known, 39.8 feet May 27, 1936, from information by engineers of Texas & New Orleans Railroad (discharge, 94,000 second-feet, from rating curve extended above 60,000 second-feet).

Remarks.- Records good except those for periods of backwater, which are poor. Gage read twice daily, oftener during high stages. No large diversion above station.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	247	14	131	73	106	93	6,180	118	26	55	87	2,060
2	180	22	110	77	101	93	9,500	103	24	58	144	1,050
3	132	118	92	123	104	89	11,500	93	26	109	164	407
4	119	697	127	100	105	89	c6,410	90	24	151	140	202
5	115	548	3,210	73	175	83	c1,400	101	28	131	115	124
6	106	158	6,260	63	431	83	c491	79	32	106	113	94
7	95	76	7,390	61	515	78	367	72	24	115	128	68
8	83	54	c3,760	63	247	76	282	68	24	103	132	48
9	75	42	c1,470	76	158	70	219	79	20	97	112	33
10	57	40	c664	63	123	70	186	85	18	72	100	28
11	38	38	350	57	110	74	158	76	18	64	91	26
12	45	36	202	55	300	73	140	61	64	79	88	26
13	46	34	158	54	720	109	127	57	184	101	85	33
14	53	32	131	52	810	80	117	50	321	125	78	36
15	40	37	117	54	304	74	107	48	343	129	97	63
16	30	48	102	52	175	72	97	49	146	131	87	85
17	26	42	93	78	127	72	89	39	83	103	77	95
18	23	44	86	453	110	79	83	37	68	94	67	104
19	21	137	81	3,840	102	73	88	36	164	77	73	133
20	16	788	76	5,950	186	70	2,710	37	403	68	75	122
21	18	498	70	5,700	862	65	5,670	40	170	80	55	96
22	17	158	64	1,490	325	68	5,950	155	186	103	61	85
23	18	115	66	449	486	71	6,090	148	261	123	101	75
24	17	109	67	282	186	63	3,500	89	196	104	180	70
25	16	603	61	214	134	60	929	55	99	93	128	65
26	14	1,880	61	186	113	54	444	42	76	87	129	53
27	14	2,410	67	164	107	44	272	33	57	76	553	75
28	13	555	76	158	99	44	202	29	50	66	2,400	85
29	14	230	89	139	-	75	170	28	43	57	3,520	73
30	14	158	111	133	-	337	146	32	39	52	5,000	91
31	14	-	83	117	-	1,870	-	30	-	62	4,640	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	1,716	247	13	55.4	3,400
November	9,721	2,410	14	324	19,280
December	25,425	7,390	61	820	50,430
Calendar year 1944	255,681	15,100	13	699	507,100
January	20,449	5,950	52	660	40,560
February	7,321	862	99	261	14,520
March	4,351	1,870	44	140	8,630
April	63,624	11,500	83	2,121	126,200
May	2,059	155	28	66.4	4,080
June	3,219	403	18	107	6,380
July	2,871	151	52	92.6	5,690
August	18,816	5,000	55	607	37,320
September	5,605	2,060	26	187	11,120
Water year 1944-45	165,177	11,500	13	453	327,600

c Stage-discharge relation affected by backwater from return of overbank flow; discharge computed on basis of backwater curve based on discharge measurements.

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

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Guadalupe River at Hunt, Tex.

Location.- Water-stage recorder and concrete control, lat. 30°03', long. 99°19', at bridge on State Highway 39, half a mile downstream from confluence of North and South Forks, 0.6 mile east of Hunt, Kerr County. Datum of gage is 1,722.7 feet above mean sea level, datum of 1929.

Drainage area.- About 370 square miles.

Records available.- October 1941 to September 1945.

Extremes.- Maximum discharge during year, 355 second-feet Jan. 18 (gage height, 3.00 feet); minimum, 16 second-feet Aug. 17 (gage height, 0.67 foot).

1941-45: Maximum gage height occurred May 25, 1944 (gage height and discharge not determined); minimum discharge, that of Aug. 17, 1945.

Maximum stage known, 36.6 feet July 2, 1932, from information by local resident.

Remarks.- Records excellent. Discharge not computed above 600 second-feet. About 60 acres above station are irrigated.

Rating table, water year 1944-45 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used July 1 to Sept. 30)

0.7	18	1.2	54	2.0	166
.8	22	1.4	78	2.4	234
.9	28	1.6	105	3.0	355
1.0	34	1.8	135		

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	36	32	38	38	54	49	99	33	32	28	24	24
2	36	32	38	38	54	50	102	42	30	32	24	23
3	35	32	44	37	54	50	83	42	28	32	24	22
4	67	32	51	37	53	48	74	42	30	30	23	22
5	56	32	73	38	52	48	68	40	30	29	22	21
6	45	32	60	38	50	47	65	40	30	28	22	21
7	40	32	51	38	49	45	62	40	28	28	22	21
8	38	32	46	37	48	44	61	38	28	28	24	20
9	37	31	44	36	47	44	60	40	27	27	24	20
10	36	30	42	35	48	45	60	48	34	26	23	20
11	36	31	40	35	47	46	61	46	33	38	22	19
12	35	32	38	36	58	46	59	42	40	48	22	19
13	34	33	38	37	54	48	56	38	38	34	27	19
14	34	33	38	36	50	48	55	38	33	38	22	20
15	33	32	38	36	48	64	54	37	31	34	22	20
16	32	36	38	35	49	61	52	35	30	33	20	20
17	32	38	38	52	48	49	50	35	29	32	18	20
18	32	40	38	250	48	49	49	34	75	30	21	20
19	32	48	36	218	54	48	48	34	58	28	21	20
20	32	40	36	136	53	46	52	34	42	28	21	20
21	32	37	36	112	65	44	52	42	37	27	22	20
22	32	35	36	98	61	44	54	46	34	26	22	20
23	32	34	36	86	53	45	51	38	33	26	22	20
24	32	40	38	79	51	45	55	36	32	26	22	20
25	32	45	38	74	52	44	59	35	31	26	22	20
26	32	40	40	70	51	42	55	34	30	24	23	20
27	32	35	44	66	51	42	48	32	29	24	24	20
28	31	38	45	65	50	42	48	32	28	24	26	19
29	31	38	42	61	-	53	46	32	28	24	23	38
30	31	38	40	59	-	99	42	31	28	24	23	38
31	31	-	40	56	-	81	-	31	-	24	23	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	1,106	67	31	35.7	2,190
November	1,060	48	30	35.3	2,100
December	1,300	73	36	41.9	2,580
Calendar year 1944	-	-	20	-	-
January	2,069	250	35	66.7	4,100
February	1,452	65	47	51.9	2,880
March	1,546	99	42	49.9	3,070
April	1,780	102	42	59.3	3,560
May	1,167	48	31	37.6	2,310
June	1,016	75	27	33.9	2,020
July	906	48	24	29.2	1,800
August	700	27	18	22.6	1,390
September	646	38	19	21.5	1,280
Water year 1944-45	14,748	250	18	40.4	29,250

Note.- No gage-height record Sept. 1-10; discharge computed on basis of range in stage and weather records.

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Guadalupe River at Comfort, Tex.

Location.- Water-stage recorder, lat. 29°58', long. 98°54', at bridge on U. S. Highway 87, a quarter of a mile downstream from Cypress Creek and half a mile east of Comfort, Kendall County. Datum of gage is 1,372.0 feet above mean sea level, datum of 1929.

Drainage area.- About 990 square miles.

Records available.- May 1939 to September 1945. December 1917 to August 1924 at site 5 miles upstream, and August 1924 to September 1932 at site 4 miles upstream. Records published as Guadalupe River near Comfort (records equivalent during flood runoff originating above upper site and during extremely low flow, at which times Cypress Creek contributes no appreciable flow).

Extremes.- Maximum discharge during year, 15,000 second-feet Sept. 29 (gage height, 18.50 feet); minimum, 30 second-feet Sept. 11, 12, 22, 23.
1917-32, 1939-45: Maximum discharge, 182,000 second-feet July 1, 1932 (gage height, 38.4 feet, present site and datum, from floodmarks, from data furnished by Texas Highway Department), by slope-area method (flood originated above Cypress Creek drainage); minimum observed, 0.4 second-foot Aug. 2, 1918, at site then in use.
Flood of July 16, 1900, reached about same stage as that of July 1, 1932.

Remarks.- Records good except those for periods of no gage-height record, which are fair. Several small diversions above station for irrigation. Slight regulation at low flow by power plants above station.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	93	78	83	146	270	316	915	207	91	71	47	40
2	90	78	83	146	270	316	688	200	93	71	45	38
3	88	79	83	141	264	392	565	213	93	100	44	38
4	1,480	79	268	136	267	328	497	172	88	80	42	37
5	177	79	765	134	272	322	446	170	85	73	41	35
6	160	79	355	139	247	304	424	167	83	71	40	33
7	134	78	290	134	234	290	404	165	80	68	39	33
8	95	76	245	132	228	284	392	162	79	67	54	33
9	104	75	223	130	228	275	382	160	76	66	56	32
10	97	75	202	127	220	275	370	177	107	83	50	32
11	97	75	192	127	236	278	382	223	106	456	48	30
12	95	75	184	127	390	303	361	197	127	143	45	31
13	91	76	177	127	290	457	343	190	110	121	44	58
14	90	78	174	125	261	354	331	184	93	104	41	38
15	88	80	172	123	247	747	319	180	83	88	40	33
16	86	166	167	121	242	379	307	177	78	78	41	32
17	85	97	165	237	242	334	290	172	68	67	40	33
18	85	102	160	2,100	376	322	272	165	323	62	38	32
19	85	130	158	938	434	310	261	158	184	60	37	32
20	83	112	158	582	379	290	304	148	141	59	36	32
21	82	102	155	497	430	275	340	141	110	59	36	32
22	82	90	146	430	376	270	295	134	97	59	37	30
23	80	85	148	395	367	267	275	127	90	58	36	30
24	79	100	155	373	352	264	341	123	86	57	36	32
25	79	125	158	352	349	250	278	119	83	56	35	32
26	79	106	155	328	346	245	250	114	79	54	36	31
27	80	97	160	319	340	239	245	108	78	53	36	31
28	79	90	167	310	322	236	236	104	75	52	36	33
29	78	86	165	298	-	253	223	99	72	50	36	3,580
30	78	85	162	287	-	2,800	213	97	71	49	39	210
31	78	-	158	278	-	775	-	93	-	47	43	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	4,277	1,480	78	138	8,480
November	2,733	166	75	91.1	5,420
December	6,033	765	83	195	11,970
Calendar year 1944	83,739	15,900	30	229	166,100
January	9,839	2,100	121	317	19,520
February	8,479	434	220	303	16,820
March	12,750	2,800	236	411	25,290
April	10,949	915	213	365	21,720
May	4,846	213	93	156	9,610
June	3,029	323	68	101	6,010
July	2,582	456	47	83.3	5,120
August	1,274	56	35	41.1	2,530
September	4,743	3,580	30	158	9,410
Water year 1944-45	71,534	3,580	30	196	141,900

Peak discharge.- Oct. 4 (2:30 a.m.) 9,210 sec.-ft.; Jan. 18 (5 a.m.) 5,240 sec.-ft.; Mar. 30 (11:30 a.m.) 9,030 sec.-ft.; Sept. 29 (3:30 a.m.) 15,000 sec.-ft.

Note.- No gage-height record May 3-29, July 10 to Aug. 7; discharge computed on basis of range in stage, floodmarks in well, and weather records.

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Guadalupe River near Spring Branch, Tex.

Location.- Water-stage recorder, lat. 29°51'40", long. 98°23'00", at bridge on county highway, 4 miles southeast of Spring Branch, Comal County, and 6 miles downstream from Curry Creek. Datum of gage is 948.13 feet above mean sea level, datum of 1929.

Drainage area.- 1,432 square miles.

Records available.- June 1922 to September 1945.

Average discharge.- 23 years, 293 second-feet.

Extremes.- Maximum discharge during year, 10,100 second-feet Sept. 30 (gage height, 14.43 feet); minimum, 53 second-feet Sept. 26-28 (gage height, 2.16 feet).

1922-45: Maximum discharge, 121,000 second-feet July 3, 1932 (gage height, 42.10 feet), from rating curve extended above 70,000 second-feet; minimum, 2.2 second-feet July 11, 1939, from rating curve extended below 15 second-feet.

Maximum stage known, between 45 and 50 feet in 1900, from information by local residents.

Remarks.- Records good. Small diversions above station for irrigation. Slight regulation at low flow by power plants above station.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	188	147	194	354	620	760	1,550	427	183	128	90	84
2	177	147	191	337	615	760	1,620	422	180	128	84	79
3	172	149	191	333	510	1,900	1,220	414	180	130	84	76
4	1,860	147	286	333	600	1,160	1,020	427	180	159	81	71
5	734	144	2,270	329	630	955	852	392	174	154	81	70
6	337	144	1,310	333	600	920	790	379	166	139	81	66
7	282	144	820	329	565	820	760	370	161	133	76	64
8	247	144	635	317	530	790	744	358	156	128	77	62
9	220	144	575	306	521	760	727	341	154	122	72	62
10	208	144	516	298	516	749	705	366	248	119	79	58
11	200	142	473	294	506	749	694	396	306	647	81	57
12	194	142	450	290	1,300	738	694	362	211	530	76	57
13	188	142	432	290	1,070	974	666	341	227	180	72	58
14	185	142	414	290	790	885	650	325	208	147	70	56
15	183	142	400	282	722	2,260	635	309	183	154	68	65
16	177	156	396	275	688	1,340	620	290	166	139	65	65
17	172	223	388	290	700	990	595	279	156	133	65	58
18	172	197	379	3,600	672	885	570	272	156	126	64	56
19	169	200	358	2,760	1,040	852	550	264	330	117	62	56
20	155	220	350	1,740	955	790	540	254	264	111	62	56
21	164	191	350	1,340	1,020	738	615	254	220	107	61	54
22	161	183	337	1,100	990	722	640	254	200	103	61	54
23	159	172	329	955	885	716	570	250	183	101	61	54
24	159	205	337	885	852	710	579	243	166	99	61	54
25	156	279	346	820	852	683	713	237	159	97	62	54
26	156	247	358	790	852	645	540	224	151	93	64	53
27	154	217	366	744	820	630	501	211	147	93	64	53
28	149	211	379	722	790	620	492	205	139	91	64	54
29	149	202	379	683	-	615	473	197	135	88	62	2,550
30	147	197	375	656	-	656	445	191	130	86	763	3,100
31	147	-	370	635	-	2,980	-	185	-	74	119	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	7,932	1,860	147	25[illegible]	15,730
November	5,264	279	142	17[illegible]	10,440
December	14,954	2,270	191	48[illegible]	29,660
Calendar year 1944	158,851	12,000	65	43[illegible]	315,100
January	22,710	3,600	275	73[illegible]	45,040
February	21,311	1,300	506	76[illegible]	42,270
March	29,752	2,980	615	96[illegible]	59,010
April	21,770	1,620	445	72[illegible]	43,180
May	9,439	427	185	30[illegible]	18,720
June	5,619	330	130	18[illegible]	11,150
July	4,666	647	84	15[illegible]	9,250
August	2,932	763	61	9[illegible].6	6,820
September	7,356	3,100	53	24[illegible]	14,590
Water year 1944-45	153,705	3,600	63	42[illegible]	304,900

Peak discharge.- Oct. 4 (7:30 p.m.) 5,310 sec.-ft.; Jan. 18 (11 p.m.) 5,670 sec.-ft.; Mar. 3 (2:30 p.m.) 3,780 sec.-ft.; Mar. 15 (12 m.) 3,780 sec.-ft.; Mar. 31 (8 a.m.) 5,670 sec.-ft.; Sept. 30 (1:30 a.m.) 10,100 sec.-ft.

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Guadalupe River above Comal River, at New Braunfels, Tex.

Location.- Water-stage recorder and concrete control, lat. 29°42'55", long. 98°06'40", at New Braunfels, Comal County, 1.1 miles upstream from Comal River. Datum of gage is 586.6 feet above mean sea level, datum of 1929.

Drainage area.- 1,666 square miles.

Records available.- December 1927 to September 1945. March 1898 to December 1899 and January 1915 to December 1927 at site 1 mile downstream from Comal River.

Average discharge.- 17 years (1928-45), 422 second-feet.

Extremes.- Maximum discharge during year, 10,100 second-feet Sept. 30 (gage height, 9.26 feet); minimum, 81 second-feet Sept. 28, 29 (gage height, 1.49 feet).

1927-45: Maximum discharge, 101,000 second-feet June 15, 1935 (gage height, 32.95 feet); minimum, 9.6 second-feet July 9-11, 1939.

Maximum stage known, 38 feet sometime in 1869 and in December 1913, from information by local residents.

Remarks.- Records excellent. Small diversions above station for irrigation. Some regulation at low flow by small power plants above station.

Rating table, water year 1944-45 (gage height, in feet, and discharge, in second-feet)

1.5	82	2.2	280	3.0	995
1.6	95	2.4	415	3.5	1,690
1.8	128	2.6	580	4.0	2,420
2.0	186	2.8	773	6.0	5,320

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	249	194	280	617	892	1,120	2,270	664	318	228	156	224
2	249	203	275	589	869	1,110	2,050	654	318	244	146	150
3	238	215	280	572	859	1,390	1,780	664	312	220	143	124
4	244	203	298	563	903	2,120	1,520	636	312	220	138	114
5	1,940	199	1,620	554	914	1,400	1,360	636	312	228	130	108
6	602	203	2,490	546	892	1,300	1,230	599	299	238	130	106
7	401	199	1,330	546	848	1,220	1,180	589	286	224	124	101
8	350	199	1,040	538	805	1,130	1,130	580	275	215	136	98
9	330	194	892	520	784	1,100	1,100	563	270	207	170	94
10	270	190	794	504	773	1,070	1,080	554	264	199	128	92
11	259	186	723	495	763	1,060	1,040	580	338	211	119	91
12	249	186	683	487	1,590	1,040	1,020	589	479	726	128	90
13	249	183	654	479	1,890	1,060	1,020	554	350	547	126	91
14	244	179	723	479	1,470	1,270	972	529	357	337	115	92
15	238	183	608	471	1,290	1,540	960	512	343	270	110	91
16	233	207	589	463	1,190	2,340	972	487	305	270	108	87
17	228	224	572	471	1,150	1,440	903	471	286	238	107	91
18	228	299	563	2,510	1,150	1,290	859	447	318	220	104	98
19	220	305	546	4,810	1,120	1,270	826	439	286	215	101	91
20	220	264	529	2,490	1,510	1,130	816	423	420	203	100	87
21	215	275	520	1,910	1,400	1,070	816	431	393	190	100	86
22	211	249	512	1,630	1,470	1,020	903	415	350	183	98	85
23	211	233	504	1,440	1,320	995	880	408	324	179	94	85
24	207	259	504	1,330	1,260	984	826	408	299	173	95	88
25	207	468	512	1,250	1,230	949	880	393	280	170	95	86
26	203	408	529	1,180	1,230	903	892	393	270	166	95	82
27	203	365	645	1,110	1,200	869	784	372	254	160	98	82
28	199	337	664	1,060	1,180	848	733	357	249	153	100	83
29	194	318	673	1,020	-	978	723	343	238	150	101	107
30	194	293	664	960	-	1,100	693	337	233	146	278	4,590
31	194	-	645	926	-	2,620	-	324	-	148	616	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	9,479	1,940	194	306	18,800
November	7,420	468	179	247	14,720
December	21,861	2,490	275	705	43,360
Calendar year 1944	226,955	18,400	136	620	450,100
January	32,520	4,810	463	1,049	64,500
February	31,952	1,890	763	1,141	63,380
March	38,736	2,620	848	1,250	76,830
April	32,218	2,270	693	1,074	63,900
May	15,351	664	324	495	30,450
June	9,338	479	233	311	18,520
July	7,278	726	146	235	14,440
August	4,289	615	94	138	8,510
September	7,494	4,590	82	250	14,860
Water year 1944-45	217,936	4,810	82	597	432,300

Peak discharge.- Oct. 5 (7 a.m.) 4,590 sec.-ft.; Jan. 19 (9:15 a.m.) 6,330 sec.-ft.; Mar. 4 (1:15 a.m.) 3,360 sec.-ft.; Mar. 16 (1:30 a.m.) 3,580 sec.-ft.; Mar. 31 (7:15 p.m.) 5,600 sec.-ft.; Sept. 30 (12:30 p.m.) 10,100 sec.-ft.

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Guadalupe River at Victoria, Tex.

Location.- Water-stage recorder, lat. 28°47', long. 97°01', at bridge on U. S. Highway 59 in Victoria, Victoria County, 1,300 feet upstream from Texas & New Orleans Railroad bridge and 10 miles upstream from Coleto Creek. Datum of gage is 29.23 feet above mean sea level, datum of 1929.

Drainage area.- 5,676 square miles.

Records available.- November 1934 to September 1945. Gage-height records collected in this vicinity since 1904 are contained in reports of U. S. Weather Bureau.

Average discharge.- 10 years (1935-45) 1,979 second-feet.

Extremes.- Maximum discharge during year, 22,000 second-feet Apr. 6 (gage height, 28.57 feet); minimum daily, 454 second-feet Sept. 16.
1934-45: Maximum discharge, 179,000 second-feet July 3, 1936 (gage height, 31.22 feet); minimum daily, 308 second-feet Sept. 5, 1939.

Remarks.- Records good. Many small diversions above station do not materially affect flow. Ordinary flow partly regulated by power plants above station.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	760	688	1,050	2,080	2,250	a2,560	7,870	2,080	1,160	1,050	778	670
2	814	670	1,080	1,760	2,210	a2,530	10,300	2,000	1,160	886	868	652
3	832	778	976	1,840	2,210	2,500	12,700	1,640	1,120	1,010	850	833
4	850	796	868	1,760	2,120	2,370	17,200	1,760	1,160	1,080	670	1,080
5	832	868	1,230	1,570	2,160	2,420	21,300	1,760	1,120	1,160	832	832
6	814	1,120	940	1,570	3,120	3,030	19,000	1,800	1,120	940	760	598
7	904	742	3,270	1,410	4,360	3,380	6,140	1,840	1,120	976	724	706
8	1,190	814	7,140	1,530	3,660	2,900	3,660	1,570	1,120	904	652	670
9	1,450	868	8,280	1,720	3,700	2,680	3,290	1,600	1,080	886	814	598
10	1,380	778	4,460	1,600	3,520	2,540	3,030	1,720	1,010	904	688	634
11	976	760	2,500	1,490	3,290	2,460	2,940	1,760	1,010	940	688	634
12	976	814	2,160	1,380	3,120	2,370	2,850	1,680	1,160	850	814	634
13	904	850	1,960	1,410	2,630	2,330	2,810	1,530	1,160	904	670	652
14	940	688	1,760	1,300	2,790	2,250	2,720	1,530	1,260	904	598	814
15	670	832	1,760	1,340	4,860	2,330	2,630	1,530	1,380	976	706	634
16	796	670	1,600	1,600	4,760	2,250	2,540	1,490	1,410	1,160	688	454
17	832	832	1,600	1,530	3,060	2,590	2,460	1,450	1,260	1,190	706	616
18	850	832	1,570	1,860	2,810	3,750	3,160	1,380	1,190	976	634	508
19	742	1,180	1,530	5,760	2,680	3,750	3,250	1,450	1,380	940	670	562
20	742	2,700	1,490	8,800	3,070	5,370	3,570	1,380	1,920	904	742	580
21	814	3,210	1,380	10,400	4,960	4,740	4,080	1,380	2,420	904	616	544
22	778	1,580	1,450	11,800	5,200	2,940	4,430	1,380	2,060	886	598	580
23	778	1,080	1,380	10,600	3,840	2,590	4,410	1,300	1,410	850	742	652
24	706	1,080	1,380	5,060	3,750	2,460	4,620	1,260	1,300	868	616	544
25	760	1,600	1,340	3,430	3,070	2,330	4,260	1,380	2,160	832	634	580
26	868	3,120	1,380	3,030	2,810	2,210	2,850	1,300	1,900	688	670	544
27	760	3,310	1,410	2,810	2,590	2,160	2,420	1,260	1,300	778	778	760
28	778	1,740	1,380	2,630	2,590	2,160	2,290	1,300	1,120	850	598	670
29	616	1,490	1,890	2,540	-	2,160	2,210	1,260	1,050	850	760	562
30	832	1,300	3,030	2,370	-	2,160	2,120	1,230	1,080	670	706	580
31	796	-	2,810	2,290	-	3,320	-	1,160	-	778	706	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	26,740	1,450	616	863	53,040
November	37,790	3,310	670	1,260	74,960
December	66,054	8,280	868	2,131	131,000
Calendar year 1944	671,847	12,100	586	1,836	1,333,000
January	100,270	11,800	1,300	3,235	198,900
February	91,190	5,200	2,120	3,257	180,900
March	85,590	5,370	2,160	2,761	169,800
April	167,110	21,300	2,120	5,570	331,500
May	47,160	2,080	1,160	1,521	93,540
June	40,100	2,420	1,010	1,337	79,540
July	28,494	1,190	670	919	56,520
August	21,976	868	598	709	43,590
September	19,377	1,080	454	646	38,430
Water year 1944-45	731,851	21,300	454	2,005	1,452,000

a No gage-height record; discharge interpolated.

Note.- Discharge Nov. 19 to Dec. 5, Dec. 7, Jan. 14 to Feb. 17, Feb. 27, 28 computed from graph based on once-daily wire-weight gage readings furnished by U. S. Weather Bureau.

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Johnson Creek near Ingram, Tex.

Location.- Water-stage recorder, lat. 30°05', long. 99°16', 1.3 miles upstream from Henderson Branch, 3 miles northwest of Ingram, Kerr County, 4.5 miles upstream from mouth, and 9.5 miles northwest of Kerrville. Datum of gage is 1,721.3 feet above mean sea level, datum of 1929.

Drainage area.- About 150 square miles.

Records available.- September 1941 to September 1945.

Extremes.- Maximum and minimum discharges for the water years 1942 to 1945 are contained in the following table:

Water year	Maximum			Minimum	
	Date	Discharge (sec.-ft.)	Gage height (feet)	Date	Discharge (sec.-ft.)
1941-42	Oct. 4	(†)	4.71	Aug. 7, 8	7.0
1942-43	Oct. 18	(†)	4.05	Aug. 18, 22-25, 27, 28	6.5
1943-44	May 25	(†)	3.22	Aug. 19, 20	4.8
1944-45	Jan. 18	(†)	4.56	Aug. 23, 24, Sept. 8, 9, 11-15	6.3

† Stage above limits of rating; discharge not determined.

Maximum stage known since 1852, about 35 feet July 2, 1932, from information by local resident; discharge, 138,000 second-feet by slope-area method at point half a mile downstream from State Fish Hatchery and about 6 or 7 miles upstream from gage. Flood of June 14, 1935, reached a stage of about 31 or 32 feet, from information by local resident.

Remarks.- Records good. Small diversions above station for irrigation. Discharge not determined for days on which stage was above limits of rating.

Discharge, in second-feet, 1941-45

1941

Day	Discharge	Day	Discharge
Sept. 24	19	Sept. 28	17
25	17	29	16
26	16	30	16
27	17	31	-

1941-42

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	16	21	12	15	16	15	14	19	19	12	7.5	12
2	19	21	12	15	16	13	14	19	19	17	7.5	10
3	24	21	12	15	16	14	14	19	17	15	8.0	9.3
4	-	21	13	15	16	14	14	17	17	16	8.0	9.3
5	50	20	16	15	16	14	14	17	17	17	7.5	9.3
6	35	20	16	15	15	14	14	17	17	19	7.5	8.6
7	29	20	15	15	15	14	15	-	17	16	7.0	13
8	26	20	16	15	16	13	19	-	16	14	7.0	21
9	24	20	25	15	17	13	15	50	16	12	7.5	15
10	30	20	16	16	16	13	15	40	15	12	7.5	13
11	26	20	13	16	16	13	15	35	13	11	8.0	12
12	25	20	16	16	15	13	15	31	13	10	8.0	12
13	24	21	16	15	15	13	15	29	13	10	7.5	11
14	23	21	21	15	17	13	15	28	14	8.6	7.5	10
15	21	21	23	15	16	14	14	25	14	8.6	8.0	10
16	23	21	19	15	16	13	14	25	15	8.6	9.3	10
17	21	17	13	12	14	13	14	25	13	8.6	11	12
18	21	17	12	12	14	13	14	25	12	8.6	12	12
19	21	15	12	12	14	13	26	25	13	8.6	13	12
20	21	12	14	15	15	13	20	23	13	8.6	12	12
21	a21	12	16	15	15	13	25	21	13	8.6	10	12
22	21	13	16	15	15	12	21	20	12	8.6	12	12
23	21	12	16	14	15	12	24	20	13	8.6	12	11
24	23	12	17	15	14	13	26	21	13	8.6	11	11
25	21	12	17	14	15	15	28	20	12	8.0	9.3	11
26	20	13	19	14	15	14	25	21	12	8.6	8.6	11
27	20	13	17	14	14	13	24	20	12	8.6	9.3	10
28	20	13	17	14	15	13	23	21	12	8.6	9.3	10
29	20	13	17	16	-	13	21	21	12	8.6	8.6	10
30	23	12	16	16	-	14	20	20	12	8.0	11	9.3
31	23	-	15	15	-	14	-	20	-	7.5	16	-

a No gage-height record; discharge interpolated.
Note.- On days for which no discharge is given, stage was above limits of rating.

Discharge, in second-feet, of Johnson Creek near Ingram, Tex., 1941-45--Continued

1942-43

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	10	16	14	14	13	12	12	11	10	10	8.6	10
2	10	16	14	14	12	11	12	11	10	10	8.6	10
3	10	16	14	14	12	11	12	11	9.3	11	8.6	10
4	11	17	14	12	12	11	12	11	9.3	9.3	8.0	9.3
5	12	17	13	15	12	11	12	11	-	9.3	8.0	8.6
6	10	28	13	15	12	11	12	12	67	9.3	7.5	11
7	9.3	23	14	14	12	10	12	12	38	9.3	7.5	12
8	8.6	20	15	14	12	10	23	11	29	8.6	7.6	8.6
9	8.6	20	15	13	12	10	16	12	24	8.6	7.5	8.6
10	8.0	19	15	13	12	10	14	12	21	8.6	7.5	8.6
11	8.0	17	15	13	12	9.3	13	11	17	20	7.5	8.6
12	8.0	17	14	12	12	10	12	10	16	19	7.5	8.0
13	8.6	17	14	12	11	10	12	10	16	13	7.5	8.0
14	8.6	19	14	12	11	10	12	9.3	16	13	7.0	7.6
15	23	17	14	12	11	10	12	11	15	12	7.5	7.5
16	12	17	14	12	11	9.3	13	10	14	12	7.5	11
17	-	17	14	12	11	9.3	13	10	13	10	7.5	13
18	-	17	14	12	11	10	12	10	13	10	7.0	9.3
19	42	17	14	12	11	10	12	10	13	9.3	7.5	8.0
20	26	17	15	12	12	9.3	12	9.3	12	9.3	7.5	7.5
21	21	17	21	12	12	9.3	12	9.3	12	8.6	7.5	8.0
22	17	16	17	12	12	10	12	16	11	8.6	7.0	8.0
23	16	15	16	12	12	11	13	20	11	8.6	6.6	8.0
24	16	15	15	12	12	19	12	12	11	8.0	6.5	8.6
25	16	16	15	12	11	28	12	11	11	8.0	7.0	8.6
26	16	15	16	12	11	17	12	10	11	8.0	7.0	10
27	17	15	15	12	11	16	12	9.3	11	8.6	6.5	13
28	19	15	13	12	12	14	12	9.3	10	7.5	6.5	11
29	17	15	13	12	-	14	11	11	9.3	8.0	7.0	11
30	16	15	14	13	-	13	11	11	9.3	9.3	7.0	10
31	17	-	15	14	-	12	-	10	-	8.6	7.0	-

Note.- On days for which no discharge is given, stage was above limits of rating.

1943-44

Day	Oct.	Nov.	Deo.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	11	8.6	10	20	10	12	10	12	16	9.1	6.7	14
2	11	8.6	10	20	10	12	12	10	16	8.6	6.7	12
3	14	8.6	10	18	10	12	12	10	16	8.1	6.3	10
4	9.3	8.6	10	16	9.3	12	11	26	16	8.1	5.9	9.1
5	8.0	8.6	14	15	9.3	12	11	17	15	8.1	5.9	8.6
6	7.5	8.6	14	13	10	12	10	13	21	8.1	5.9	25
7	8.0	8.6	13	12	10	10	10	12	16	8.1	5.9	21
8	8.0	8.6	12	11	12	9.3	10	12	15	8.1	5.5	16
9	8.0	8.6	10	10	12	12	11	12	15	7.1	5.5	14
10	8.0	9.3	10	10	10	17	9.3	12	14	7.1	5.5	12
11	8.0	9.3	10	10	9.3	13	9.3	12	16	7.6	6.5	11
12	9.3	10	10	11	10	12	9.3	12	16	7.1	5.5	10
13	8.6	9.3	10	10	11	12	9.3	11	14	6.7	5.5	9.7
14	8.0	8.6	9.3	10	12	12	9.3	11	12	7.1	5.5	8.6
15	8.0	9.3	9.3	10	12	13	8.6	10	11	7.1	5.5	8.1
16	8.0	9.3	9.3	10	12	13	9.3	10	11	7.1	5.1	7.6
17	7.5	8.6	9.3	10	12	12	9.3	10	11	7.1	5.5	8.1
18	8.0	10	9.3	12	11	12	9.3	10	10	7.1	5.5	9.1
19	8.6	10	9.3	9.3	11	12	10	13	10	6.7	5.1	9.1
20	8.6	10	9.3	9.3	11	12	11	12	9.7	6.3	5.1	9.7
21	8.0	10	9.3	9.3	11	12	11	17	9.1	6.7	5.5	8.6
22	8.0	9.3	9.3	10	11	16	11	14	9.1	6.7	6.3	8.6
23	8.0	8.6	9.3	10	11	12	9.3	12	8.6	6.7	7.1	8.6
24	8.6	8.6	10	10	11	12	8.6	-	8.6	6.3	6.7	8.6
25	8.0	8.6	10	10	23	12	10	-	8.6	6.7	5.9	8.6
28	8.0	8.6	10	10	15	12	17	-	8.1	7.1	5.9	11
27	8.0	8.6	10	9.3	13	12	6.5	29	7.6	8.1	7.1	12
28	8.0	15	10	9.3	19	11	5.6	26	8.1	7.1	6.3	12
29	8.0	13	10	11	13	10	10	22	9.1	6.3	6.3	9.7
30	8.0	12	10	10	-	10	12	19	11	6.3	-	9.7
31	8.0	-	10	10	-	10	-	18	-	5.9	22	-

Note.- On days for which no discharge is given, stage was above limits of rating. No gage-height record Nov. 24 to Jan. 4; discharge computed on basis of recorded range in stage, weather records and records for nearby stations.

Discharge, in second-feet, of Johnson Creek near Ingram, Tex., 1941-45--Continued

1944-45

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	9.7	8.6	9.7	13	16	16	32	16	9.1	8.6	8.1	7.6
2	9.7	9.1	10	13	16	16	31	16	9.7	9.7	8.1	7.1
3	11	9.1	13	13	16	16	27	15	9.1	9.7	7.6	7.1
4	16	9.1	19	13	16	15	24	15	9.1	9.1	7.6	7.1
5	12	8.6	24	15	15	16	22	14	8.6	8.6	7.1	6.7
6	10	8.6	19	13	14	15	20	14	8.6	8.6	7.6	6.7
7	10	8.6	16	12	13	13	20	13	8.6	9.7	8.6	6.7
8	9.7	8.6	14	11	13	14	20	12	8.6	9.1	9.7	6.7
9	9.7	8.1	13	10	13	14	20	13	8.6	8.6	8.6	6.7
10	9.7	8.1	12	10	14	14	19	16	24	8.1	8.1	6.7
11	9.1	8.1	12	11	13	15	20	15	14	9.7	7.6	6.3
12	9.1	8.6	12	11	18	15	18	16	15	12	7.1	6.7
13	9.1	8.6	12	10	16	16	18	16	12	9.1	7.6	6.7
14	9.1	8.6	11	10	15	16	18	13	14	9.1	7.1	6.3
15	9.1	8.6	11	10	15	18	18	14	13	9.1	7.1	6.7
16	9.1	10	11	9.7	15	16	17	12	14	9.1	7.1	6.7
17	9.1	10	11	16	14	16	16	12	13	8.6	7.6	6.7
18	9.7	11	11	-	15	16	16	12	15	8.6	7.6	6.7
19	9.7	14	11	-	16	15	16	12	13	8.1	7.1	6.7
20	8.1	11	11	41	16	14	17	12	11	8.1	7.1	6.7
21	7.6	10	11	32	22	14	17	13	10	7.6	7.6	6.7
22	8.1	10	11	28	18	13	20	11	10	7.6	7.1	6.7
23	8.1	10	11	23	17	14	17	10	9.7	7.6	6.7	6.7
24	8.1	13	11	22	17	13	20	10	9.7	7.6	6.7	7.1
25	9.1	12	12	20	17	12	17	10	9.1	7.6	7.1	7.1
26	8.6	10	13	20	16	12	16	9.7	9.1	7.6	7.6	6.7
27	8.1	10	16	19	16	13	16	9.1	8.6	7.1	7.6	7.1
28	8.1	10	15	19	16	13	16	9.1	8.6	7.6	7.6	6.7
29	8.1	10	14	18	-	22	16	9.1	8.6	8.1	7.6	17
30	8.1	9.7	13	17	-	32	16	9.1	8.6	7.6	9.1	13
31	8.1	-	13	16	-	24	-	9.1	-	7.6	8.6	-

Note.- On days for which no discharge is given, stage was above limits of rating. No gage-height record Dec. 8 to Jan. 8; discharge computed on basis of recorded range in stage, weather records, and records for nearby stations.

Monthly discharge, in second-feet, 1941-45

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October					
November					
December					
Calendar year					
January	-	-	-	-	-
February	-	-	-	-	-
March	-	-	-	-	-
April	-	-	-	-	-
May	-	-	-	-	-
June	-	-	-	-	-
July	-	-	-	-	-
August	-	-	-	-	-
September 24-30, 1941	118	19	16	16.9	234
Water year	-	-	-	-	-
October	-	-	16	-	-
November 1941	514	21	12	17.1	1,020
December	495	25	12	16.0	982
Calendar year	-	-	-	-	-
January 1942	456	16	12	14.7	904
February	429	17	14	15.3	851
March	414	15	12	13.4	821
April	547	28	14	18.2	1,080
May	-	-	17	-	-
June	426	19	12	14.2	845
July	333.5	19	7.5	10.8	661
August	288.4	16	7.0	9.30	572
September	340.8	21	8.6	11.4	676
Water year 1941-42	-	-	7.0	-	-
October	-	-	8.0	-	-
November 1942	618	28	16	17.3	1,030
December	453	21	13	14.6	899
Calendar year 1942	-	-	7.0	-	-
January 1943	394	15	12	12.7	781
February	327	13	11	11.7	649
March	367.5	28	9.3	11.9	729
April	379	23	11	12.6	752
May	343.5	20	9.3	11.1	681
June	-	-	9.3	-	-
July	313.4	20	7.5	10.1	622
August	228.8	8.6	6.5	7.38	454
September	281.3	13	7.5	9.38	558
Water year 1942-43	-	-	6.6	-	-

Monthly discharge, in second-feet, of Johnson Creek near Ingram, Tex., 1941-45--Continued

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October 1943	264.0	14	7.5	8.52	524
November	283.4	15	8.6	9.45	562
December	316.0	14	9.3	10.2	627
Calendar year 1943	-	-	6.5	-	-
January 1944	355.5	20	9.3	11.5	705
February	340.9	23	9.3	11.8	676
March	372.3	17	9.3	12.0	738
April	302.0	17	5.6	10.1	599
May	-	-	10	-	-
June	368.6	21	7.6	12.3	731
July	224.3	9.1	5.9	7.24	445
August	-	-	5.1	-	-
September	330.1	25	7.6	11.0	655
Water year 1943-44	-	-	5.1	-	-
October 1944	288.8	16	7.6	9.32	573
November	289.7	14	8.1	9.66	575
December	402.7	24	9.7	13.0	799
Calendar year 1944	-	-	5.1	-	-
January	-	-	9.7	-	-
February 1945	438	22	13	15.6	869
March	488	32	12	15.7	968
April	580	32	16	19.3	1,150
May	387.2	16	9.1	12.5	768
June	330.0	24	8.6	11.0	655
July	264.9	12	7.1	8.55	525
August	237.4	9.7	6.7	7.66	471
September	220.1	17	6.3	7.34	437
Water year 1944-45	-	-	6.3	-	-

Time basis: Central standard time except 2 a.m., Feb. 9, 1942, to Sept. 30, 1945, when central war time was used. To convert war time to standard time, subtract 1 hour.

Comal River at New Braunfels, Tex.

Location.- Water-stage recorder, lat. 29°42'05", long. 98°07'10", 200 feet upstream from San Antonio Street viaduct in New Braunfels, Comal County, and 1.1 miles upstream from mouth. Datum of gage is 582.80 feet above mean sea level, datum of 1929.

Drainage area.- 94 square miles. Ordinary flow of river comes from springs; drainage area of stream not applicable.

Records available.- December 1927 to September 1945. 1882 to November 1927 (discharge measurements only).

Average discharge.- 13 years (1932-45), 340 second-feet.

Extremes.- Maximum discharge during year, 4,140 second-feet Mar. 30 (gage height, 10.07 feet); minimum daily, 309 second-feet (regulated) Oct. 27, Nov. 8-10, 12-15, 17.

1927-45: Maximum gage height, 30.71 feet June 15, 1935, from floodmarks (affected by backwater from Guadalupe River; discharge not determined); minimum discharge, about 142 second-feet (regulated) Dec. 11, 1928 (gage height, 2.12 feet); minimum daily, 245 second-feet July 17, 20, 1939.

Maximum stage known, 35.4 feet in December 1913, from floodmarks (probably some backwater from Guadalupe River).

Remarks.- Records good except those for periods of backwater, which are fair. Flow partly regulated by steam power plant half a mile above station. Entire flow of river from Comal Springs, about 1 mile above station, except during periods of local rain. Springs emerge from the Edwards limestone in the Balcones fault zone.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	340	316	320	332	351	390	c1,040	406	418	347	344	340
2	336	313	324	336	359	386	500	406	410	355	344	340
3	336	316	324	332	355	398	425	418	394	355	340	344
4	336	313	347	336	521	429	410	410	394	355	340	340
5	336	316	640	336	470	382	402	402	394	351	340	340
6	340	313	351	340	363	379	410	410	382	351	344	336
7	340	313	340	340	363	382	398	414	386	347	340	340
8	340	309	332	340	363	375	406	410	386	347	344	332
9	340	309	324	340	363	375	398	410	382	347	340	336
10	336	309	332	340	367	375	402	410	379	347	344	332
11	336	313	336	332	363	371	398	414	375	347	340	332
12	336	309	328	340	c1,000	375	402	406	386	344	340	332
13	332	309	328	336	422	371	402	410	379	347	344	332
14	324	309	332	336	390	379	402	410	379	347	340	332
15	320	309	332	336	390	394	406	406	379	344	336	332
16	324	316	328	340	382	445	406	406	371	344	344	336
17	324	309	336	344	386	418	402	410	371	347	344	332
18	324	328	332	c1,080	394	398	402	425	398	344	340	332
19	313	320	332	c463	445	390	406	422	382	344	344	332
20	316	313	332	371	414	386	402	422	371	347	344	336
21	313	316	332	363	410	382	410	422	363	344	340	336
22	316	313	332	359	398	386	449	422	363	344	340	328
23	316	313	336	351	390	386	414	422	359	344	340	332
24	313	320	336	351	390	386	410	422	363	347	340	332
25	313	316	336	355	394	379	410	422	355	344	340	332
26	313	316	332	351	394	382	410	418	347	344	340	332
27	309	316	332	355	394	382	410	418	361	344	340	336
28	313	316	336	351	390	398	402	422	355	340	340	332
29	313	316	332	355	-	449	410	418	355	336	336	336
30	313	316	336	351	-	1,280	406	418	351	344	344	336
31	313	-	336	351	-	c716	-	414	-	347	340	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	10,074	340	309	325	19,980
November	9,420	328	309	314	18,680
December	10,626	640	320	343	21,080
Calendar year 1944	128,539	702	309	351	254,900
January	11,543	1,080	332	372	22,900
February	11,621	1,000	351	415	23,050
March	13,324	1,280	371	430	26,430
April	12,950	1,040	398	432	25,690
May	12,845	425	402	414	25,480
June	11,278	418	347	376	22,370
July	10,735	355	336	346	21,290
August	10,576	344	336	341	20,980
September	10,040	344	328	335	19,910
Water year 1944-45	135,032	1,280	309	370	267,800

Peak discharge.- Dec. 5 (3 a.m.) 1,000 sec.-ft.; Jan. 18 (10 a.m.) 1,720 sec.-ft.; Feb 4 (9 p.m.) 1,120 sec.-ft.; Feb. 12 (7:30 a.m.) 2,580 sec.-ft.; Mar. 30 (8 a.m.) 4,140 sec.-ft.; Apr. 1 (7:30 a.m.) 2,290 sec.-ft.

c Stage-discharge relation affected by backwater from Guadalupe River.

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

San Marcos River at Luling, Tex.

Location.- Water-stage recorder, lat. 29°39'55", long. 97°39'05", 390 feet downstream from bridge on State Highway 80, 1 mile south of Luling, Caldwell County, and 8 miles upstream from Plum Creek. Datum of gage is 322.0 feet above mean sea level, datum of 1929.

Drainage area.- 833 square miles.

Records available.- April 1939 to September 1945.

Extremes.- Maximum discharge during year, 7,740 second-feet Mar. 30 (gage height, 27.97 feet); minimum, 39 second-feet (regulated) Sept. 20; minimum daily, 158 second-feet Sept. 23.

1939-45: Maximum discharge, 29,500 second-feet July 5, 1942 (gage height, 32.93 feet); minimum, 7.7 second-feet (regulated) May 21, 1943; minimum daily, 55 second-feet Oct. 15, 1939.

Maximum stage known, 40.4 feet in 1869 and 1870, from information by engineers of State Highway Department.

Remarks.- Records good except those for periods of rapidly changing stage, which are fair. Flow regulated by power plant 800 feet above station. Discharge is mostly from large springs near San Marcos. No large diversion above station.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	209	183	216	425	532	677	5,550	440	279	223	216	183
2	209	190	216	395	516	668	2,330	440	279	328	216	190
3	202	257	209	380	516	677	932	470	272	251	216	183
4	209	196	216	380	556	1,420	796	425	265	230	216	176
5	209	190	4,260	372	1,580	966	728	440	272	223	209	160
6	216	190	3,470	410	704	847	677	425	272	216	202	164
7	216	190	962	425	548	779	668	410	272	216	202	165
8	244	190	639	372	500	728	644	410	265	209	196	167
9	216	190	532	358	485	711	628	395	258	209	196	165
10	216	183	470	342	485	694	628	395	258	209	196	164
11	209	183	440	335	470	694	612	395	265	230	190	166
12	209	183	410	335	2,300	677	612	380	395	230	190	165
13	209	183	395	335	2,600	741	596	380	395	251	190	169
14	202	190	372	335	1,100	644	580	365	410	237	183	166
15	202	190	372	328	898	886	600	358	328	265	183	167
16	202	226	358	328	796	1,560	1,740	350	286	265	183	165
17	202	314	350	361	813	985	668	335	272	272	183	164
18	196	514	335	4,430	864	3,420	564	335	365	293	176	165
19	196	1,600	342	4,750	1,480	932	532	328	440	258	176	164
20	196	322	328	1,270	983	830	532	321	321	244	176	162
21	196	230	321	1,000	1,060	779	688	321	314	237	176	165
22	190	202	314	881	924	745	726	328	382	237	176	161
23	196	196	314	779	796	728	564	314	467	237	176	158
24	190	216	314	728	728	711	532	314	279	237	176	164
25	190	1,040	314	694	728	694	516	307	258	230	176	164
26	190	328	321	644	728	668	500	300	244	223	176	160
27	183	307	481	628	711	644	485	300	230	216	176	160
28	183	258	711	596	711	628	470	293	230	216	176	162
29	190	244	564	580	-	628	455	286	223	216	183	202
30	183	230	456	548	-	6,030	455	279	223	216	183	196
31	183	-	440	532	-	2,990	-	279	-	216	176	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	6,243	244	183	201	12,380
November	9,115	1,600	183	304	18,080
December	19,441	4,260	209	627	38,560
Calendar year 1944	169,367	4,460	176	463	335,900
January	24,276	4,750	328	783	48,150
February	25,112	2,600	470	897	49,810
March	34,781	6,030	628	1,122	68,990
April	26,008	5,550	455	867	51,590
May	11,118	470	279	359	22,060
June	9,019	467	223	301	17,890
July	7,340	328	209	237	14,560
August	5,845	216	176	189	11,590
September	5,062	202	158	169	10,040
Water year 1944-45	183,360	6,030	158	502	363,700

Peak discharge.- Dec. 5 (11:30 p.m.) 6,980 sec.-ft.; Jan. 18 (11 p.m.) 7,530 sec.-ft.; Feb. 12 (10:30 p.m.) 6,220 sec.-ft.; Mar. 18 (8 a.m.) 6,160 sec.-ft.; Mar. 30 (10 p.m.) 7,740 sec.-ft.; Apr. 1 (8 p.m.) 7,320 sec.-ft.

Time basis: Central war time up to 2 a.m., Sept. 30, 1946; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Blanco River at Wimberley, Tex.

Location.- Water-stage recorder, lat. 29°59', long. 98°04', 800 feet downstream from Cypress Creek, 1,200 feet upstream from bridge on State Highway 12, and a quarter of a mile south of Wimberley, Hays County. Datum of gage is 802.2 feet above mean sea level, datum of 1929.

Drainage area.- 378 square miles.

Records available.- August 1924 to September 1926, June 1928 to September 1945.

Average discharge.- 19 years, 115 second-feet.

Extremes.- Maximum discharge during year, 5,340 second-feet Dec. 4 (gage height, 6.14 feet); minimum, 27 second-feet Aug. 22-25, Sept. 22, 25-27.

1924-26, 1928-45: Maximum discharge, 113,000 second-feet May 28, 1929 (gage height, 31.10 feet, from floodmarks), by slope-area method; minimum, 2.9 second-feet Oct. 5, 6, 1940.

Remarks.- Records good except those for period of no gage-height record, which are poor. No diversion above station.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	39	35	66	182	274	388	737	172	82	60	43	43
2	39	35	66	175	270	383	428	168	82	62	39	41
3	62	37	64	172	266	1,590	356	172	79	60	39	41
4	61	37	319	168	270	653	338	188	92	60	37	37
5	60	37	2,180	162	298	562	316	162	92	57	37	37
6	59	37	493	165	262	514	316	155	89	57	37	37
7	58	37	651	162	250	468	311	152	79	57	35	35
8	57	37	282	155	235	458	302	149	76	55	37	35
9	56	35	250	149	231	443	298	142	74	55	35	33
10	54	35	228	146	231	428	294	146	103	55	33	33
11	53	37	206	146	220	418	286	146	200	64	33	33
12	52	35	196	142	1,200	398	282	139	152	84	33	33
13	51	35	188	142	573	403	274	133	178	87	31	31
14	50	35	178	146	463	398	262	126	114	76	31	31
15	49	35	172	142	423	1,680	266	123	92	84	31	31
16	48	43	165	136	403	546	266	117	84	157	29	31
17	47	41	159	155	453	473	250	114	82	95	31	31
18	46	47	152	2,280	448	473	239	112	103	64	29	31
19	45	53	146	797	478	448	228	109	155	57	29	29
20	44	44	139	578	473	418	231	109	112	51	29	29
21	43	43	139	530	540	398	250	109	95	51	29	29
22	41	41	136	458	473	379	243	109	89	51	27	27
23	40	41	133	423	443	374	228	109	82	49	27	29
24	39	51	133	398	433	370	224	103	79	49	27	31
25	38	178	139	379	433	347	220	98	74	47	27	27
26	37	114	146	351	423	329	210	92	71	44	29	27
27	36	82	217	333	428	320	199	92	69	44	31	27
28	35	76	199	324	398	311	196	87	66	44	29	29
29	35	71	199	307	-	307	185	84	64	44	29	57
30	35	69	192	294	-	307	175	84	62	43	67	55
31	35	-	192	282	-	333	-	82	-	43	44	-

Month	Second-feet-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	1,444	62	35	46.6	2,860
November	1,533	178	35	51.1	3,040
December	7,825	2,180	64	252	15,520
Calendar year 1944	65,940	2,430	29	180	130,800
January	10,379	2,280	136	335	20,590
February	11,292	1,200	220	403	22,400
March	15,317	1,680	307	494	30,380
April	8,410	737	175	280	16,680
May	3,883	188	82	125	7,700
June	2,871	200	62	95.7	5,690
July	1,906	157	43	61.5	3,780
August	1,044	67	27	33.7	2,070
September	1,020	57	27	34.0	2,020
Water year 1944-45	66,924	2,280	27	183	132,700

Peak discharge.- Dec. 4 (12 p.m.) 5,340 sec.-ft.; Jan. 18 (1 p.m.) 4,670 sec.-ft.; Feb. 12 (10:30 a.m.) 2,370 sec.-ft.; Mar. 3 (11 a.m.) 3,760 sec.-ft.; Mar. 15 (6:30 a.m.) 4,800 sec.-ft.

Note.- No gage-height record Oct. 1-27; discharge computed on basis of range in stage and weather records.

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Plum Creek near Luling, Tex.

Location.- Water-stage recorder, lat. 29°42', long. 97°37', at county highway bridge 1 mile downstream from West Fork Plum Creek, 2 miles upstream from Texas & New Orleans Railroad bridge, 3 miles northeast of Luling, Caldwell County. Datum of gage is 326.6 feet above mean sea level, datum of 1929.

Drainage area.- 356 square miles.

Records available.- March 1930 to September 1945.

Average discharge.- 15 years, 101 second-feet.

Extremes.- Maximum discharge during year, 6,350 second-feet Jan. 19 (gage height, 17.06 feet); minimum, 3.4 second-feet Sept. 23.

1930-45: Maximum discharge, 78,500 second-feet July 1, 1936 (gage height, 25.7 feet, from floodmarks), from rating curve extended above 54,000 second-feet; minimum, 0.7 second-foot Oct. 24, 1939.

Flood in December 1913 reached about same stage as that of July 1, 1936, from information by local residents.

Remarks.- Records good except those for periods of no gage-height record, which are poor. Slight regulation at low flow by oil-field operations above station. No diversion above station.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5.6	4.6	19	230	45	35	2,860		27	10	12	7.8
2	5.2	5.2	17	84	46	39	2,900	40	22	10	11	7.2
3	5.2	16	15	56	48	45	235		22	11	9.4	6.4
4	4.9	7.2	17	51	95	46		34	19	11	8.9	6.4
5	5.2	5.2	2,530	47	938	50		35	17	9.4	8.9	6.0
6	5.2	4.6	3,900	184	532	34		36	16	8.3	9.4	6.4
7	5.2	4.6	345	298	87	30		39	13	8.3	9.4	6.4
8	19	4.6	99	73	56	27		252	11	8.3	8.3	6.4
9	5.6	4.6	52	f47	46	27		82	11	8.3	21	6.4
10	4.2	4.9	37	f36	47	29	60	43	11	9.4	13	6.0
11	3.6	4.9	32	f29	49	32		37	11	19	8.3	6.0
12	3.9	5.6	31	32	228	35		34	47	20	6.4	6.0
13	3.9	4.9	29	31	1,110	58		34	128	11	6.0	8.3
14	4.2	5.2	28	32	142	36		33	42	11	6.0	7.8
15	4.6	6.8	27	30	73	497		33	23	11	5.2	7.3
16	3.9	71	26	27	53	359		34	15	11	4.9	6.8
17	4.2	168	25	39	116	85		36	12	11	4.6	6.3
18	3.9	278	24	2,970	120	1,150		40	322	14	4.6	5.8
19	4.2	2,180	22	4,220	460	173		41	1,010	13	4.6	5.4
20	4.2	395	22	324	358	77		43	120	12	5.2	4.9
21	3.9	42	21	162	350	59		45	27	10	5.6	4.4
22	3.9	23	20	147	355	51		47	183	8.9	6.0	3.9
23	4.6	20	20	84	73	50	300	44	1,060	8.9	5.2	3.4
24	4.2	28	21	69	41	50		45	53	10	6.0	4.9
25	4.2	1,220	28	66	36	49		43	25	10	7.8	4.6
26	4.2	555	44	62	39	49		39	17	8.9	6.8	4.6
27	3.9	42	508	55	42	48		38	13	8.3	7.2	4.6
28	3.9	24	1,010	53	38	48		36	11	8.3	8.3	4.6
29	4.6	28	505	51	-	48		34	10	6.3	9.4	21
30	4.2	20	142	48	-	1,110		32	10	8.3	8.9	19
31	4.6	-	98	46	-	1,190	-	29	-	8.9	6.4	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	152.1	19	3.6	4.91	302
November	5,182.9	2,180	4.6	173	10,280
December	9,714	3,900	15	313	19,270
Calendar year 1944	50,620.8	3,900	2.3	138	100,400
January	9,683	4,220	27	312	19,210
February	5,623	1,110	36	201	11,150
March	5,616	1,190	27	181	11,140
April	11,215	-	-	374	22,240
May	1,438	252	29	46.4	2,850
June	3,308	1,060	10	110	6,560
July	325.8	20	8.3	10.5	648
August	244.7	21	4.6	7.89	485
September	205.0	21	3.4	6.83	407
Water year 1944-45	52,707.5	4,220	3.4	144	104,500

Peak discharge.- Nov. 19 (11:30 a.m.) 2,620 sec.-ft.; Dec. 6 (3 a.m.) 5,750 sec.-ft.; Jan. 19 (4 a.m.) 6,350 sec.-ft.; Mar. 30 (9:30 p.m.) 2,310 sec.-ft.; Apr. 1 (7:30 p.m.) 5,150 sec.-ft.

f Computed on basis of partly estimated gage-height record.

Note.- No gage-height record Apr. 4 to May 3, Sept. 10-23; discharge computed on basis of range in stage, weather records, and records for San Marcos River at Luling.

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Coleto Creek near Victoria, Tex.

Location.- Water-stage recorder, lat. 28°43', long. 97°08', at bridge on U. S. Highway 59, 100 feet upstream from Texas & New Orleans Railroad bridge, 1.1 miles downstream from Perdido Creek, and 9.4 miles southwest of Victoria, Victoria County. Datum of gage is 49.2 feet above mean sea level, datum of 1929.

Drainage area.- 514 square miles.

Records available.- June 1939 to September 1945.

Extremes.- Maximum discharge during year, 2,700 second-feet Apr. 20 (gage height, 7.09 feet); no flow at times.

1939-45: Maximum discharge, 48,200 second-feet Nov. 25, 1940 (gage height, 24.25 feet); no flow at times.

Maximum stage known, 27.2 feet July 1, 1936, at railroad bridge 100 feet below station, from information by Texas & New Orleans Railroad Co.

Remarks.- Records good except those for periods of no gage-height record, which are fair. No large diversion above station.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	16	5.4	a16	14	12	10	939	20	0.2	2.0	16	2.0
2	14	6.0	a15	13	12	11	221	18	.2	1.6	7.1	1.8
3	13	16	a15	13	12	11	91	17	.2	19	4.3	1.6
4	12	13	14	13	12	11	61	16	.1	15	2.7	1.2
5	12	11	34	13	14	10	45	14	0	8.3	2.4	1.0
6	12	11	32	13	12	9.5	38	14	0	6.5	4.3	.8
7	12	9.5	41	13	12	8.9	32	13	0	4.3	3.8	.8
8	14	a9.4	31	12	12	8.9	28	12	0	3.4	2.4	.7
9	13	a9.3	23	12	11	9.5	26	9.5	0	2.4	1.6	.7
10	10	a9.1	19	11	11	11	24	8.9	0	1.6	1.4	.7
11	9.5	a9.0	16	11	11	11	22	8.3	0	1.2	1.2	.7
12	9.5	a8.9	15	12	15	10	22	14	68	1.0	1.0	.7
13	8.9	a8.8	15	12	14	37	21	13	62	.7	.7	1.6
14	8.9	a8.7	14	11	12	71	19	8.3	f20	a.7	.6	1.6
15	8.9	a8.5	14	10	12	28	18	6.0	f10	a1.4	.4	.8
16	8.3	a8.4	14	9.5	11	18	17	4.3	f6.5	a1.3	.2	.8
17	7.7	a8.3	14	9.5	11	14	16	3.4	3.8	a1.2	.2	.7
18	7.7	15	14	14	11	12	15	3.1	58	a1.2	.2	.7
19	7.7	15	13	12	11	11	14	2.4	60	a1.1	0	.7
20	7.1	14	13	30	12	12	746	2.0	22	1.0	0	.7
21	6.5	13	13	28	13	11	1,760	2.0	34	1.0	.1	.7
22	6.5	14	13	20	10	10	1,520	15	61	1.0	.2	.6
23	6.5	17	13	16	9.5	9.5	244	7.7	22	1.0	.7	1.0
24	6.5	15	14	14	8.9	9.5	91	4.9	13	1.0	18	1.4
25	6.5	19	14	14	10	8.9	63	3.4	8.9	.8	13	1.2
26	6.5	a18	16	13	10	7.1	47	2.4	7.7	.7	4.3	.8
27	6.0	a18	16	13	11	6.5	37	1.8	6.5	.6	30	.7
28	6.0	a17	17	13	10	6.5	32	1.4	4.9	.4	17	1.2
29	5.4	a17	16	12	-	7.1	26	1.0	3.4	.2	7.7	1.8
30	5.4	a16	16	12	-	16	22	.7	2.4	.2	3.4	1.4
31	5.4	-	16	12	-	550	-	.4	-	4.2	2.4	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	279.4	16	5.4	9.01	554
November	368.3	19	5.4	12.3	731
December	546	41	13	17.6	1,080
Calendar year 1944	28,040.6	3,930	1.6	76.6	55,610
January	425.0	30	9.5	13.7	843
February	322.4	15	8.9	11.5	639
March	966.9	550	6.5	31.2	1,920
April	6,257	1,760	14	209	12,410
May	247.9	20	.4	8.00	492
June	474.8	68	0	15.8	942
July	86.0	19	.2	2.77	171
August	147.3	30	0	4.75	292
September	31.1	2.0	.6	1.04	62
Water year 1944-45	10,152.1	1,760	0	27.8	20,140

Peak discharge.- Mar. 31 (3 p.m.) 1,300 sec.-ft.; Apr. 1 (4:15 p.m.) 1,500 sec.-ft.; Apr. 20 (9 p.m.) 2,700 sec.-ft.; Apr. 22 (10 a.m.) 2,210 sec.-ft.

a No gage-height record; discharge computed on basis of range in stage and weather records.

f Computed on basis of partly estimated gage-height record.

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

San Antonio River at San Antonio, Tex.

Location.- Water-stage recorder, lat. 29°24'35", long. 98°29'40", at South Alamo Street Bridge in San Antonio, Bexar County, 2.1 miles upstream from San Pedro Creek. Datum of gage is 612.3 feet above mean sea level, datum of 1929.

Drainage area.- 38 square miles.

Records available.- January 1915 to November 1929, February 1939 to September 1945. Estimated monthly ground-water discharge contained in Water-Supply Paper 773-B.

Average discharge.- 20 years (1915-29, 1939-45), 72.7 second-feet.

Extremes.- Maximum discharge during year, 1,820 second-feet Dec. 4 (gage height, 7.21 feet), from rating curve extended above 700 second-feet; minimum, 9.6 second-feet (regulated) Aug. 11; minimum daily, 23 second-feet Aug. 21.

1915-29, 1939-45: Maximum discharge, 15,300 second-feet Sept. 10, 1921 (gage height, 20.14 feet, from floodmark), by slope-area method; no flow at times because of regulation.

Flood of July 5, 1819, equalled or exceeded that of Sept. 10, 1921.

Remarks.- Records good. Flood flow regulated by Olmos flood-control reservoir (capacity, 15,500 acre-feet), about 8½ miles above station. Normal flow of river comes from springs located about 8 miles above station. Springs emerge from Edwards limestone formation in Balcones fault zone. Diurnal fluctuation caused by industrial pumping from wells (depleting the underground reservoir) above station.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	35	39	49	84	135	153	282	137	89	71	38	31
2	37	46	49	88	123	154	152	131	86	66	42	30
3	36	38	50	89	130	154	152	176	85	74	41	32
4	70	37	287	88	228	154	156	133	85	60	42	30
5	40	37	323	88	182	156	150	135	81	72	40	29
6	40	38	100	90	136	153	152	135	72	60	42	29
7	41	39	73	88	135	150	152	136	74	62	39	28
8	43	38	82	89	135	152	153	133	73	60	36	27
9	42	37	83	86	136	145	154	135	67	60	36	26
10	41	36	82	85	137	148	153	136	67	56	34	28
11	41	36	85	85	144	149	152	133	70	56	32	27
12	40	36	84	86	482	148	152	140	86	55	34	28
13	40	37	83	88	157	148	152	131	71	53	34	26
14	40	38	82	88	153	148	150	130	73	52	30	26
15	42	40	84	85	153	148	161	127	75	65	29	26
16	42	58	84	84	153	145	150	126	64	56	30	26
17	40	34	85	135	153	226	149	124	65	52	29	27
18	39	75	84	668	170	131	148	122	182	50	29	26
19	39	36	83	131	158	139	145	120	83	49	28	26
20	38	49	84	122	154	132	185	116	80	49	33	25
21	37	42	84	123	150	131	153	120	80	46	23	25
22	37	42	83	130	153	131	142	113	97	45	29	26
23	37	41	84	121	152	132	148	113	86	47	35	39
24	37	111	101	127	153	131	146	110	84	47	26	26
25	37	42	88	128	154	128	145	108	85	43	30	28
26	42	49	89	128	159	131	144	104	60	43	37	29
27	33	52	89	130	149	126	140	104	78	41	33	30
28	36	64	88	128	152	127	140	104	76	41	34	29
29	37	47	86	128	-	133	137	98	72	40	35	93
30	38	50	90	128	-	147	135	95	68	41	34	34
31	38	-	89	130	-	154	-	92	-	118	34	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	1,235	70	33	39.8	2,450
November	1,364	111	34	45.5	2,710
December	2,987	323	49	96.4	5,920
Calendar year 1944	21,841	323	14	59.7	43,320
January	3,848	668	84	124	7,630
February	4,576	482	123	163	9,080
March	4,504	226	126	145	8,930
April	4,630	282	135	154	9,180
May	3,817	176	92	123	7,570
June	2,435	182	64	81.2	4,830
July	1,732	118	40	55.9	3,440
August	1,048	42	23	33.6	2,080
September	912	93	25	30.4	1,810
Water year 1944-45	33,088	668	23	90.7	65,630

Peak discharge.- Dec. 4 (10:30 p.m.) 1,820 sec.-ft.; Jan. 18 (1:45 p.m.) 1,320 sec.-ft.; Feb. 4 (5 p.m.) 893 sec.-ft.; Feb. 12 (4 a.m.) 874 sec.-ft.; June 18 (5 a.m.) 798 sec.-ft.; July 31 (7 p.m.) 836 sec.-ft.

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

San Antonio River near Falls City, Tex.

Location.- Water-stage recorder, lat. 28°57'05", long. 98°03'55", at highway bridge 0.9 mile upstream from Scared Dog Creek and 3.6 miles southwest of Falls City, Karnes County. Datum of gage is 285.5 feet above mean sea level, datum of 1929.

Drainage area.- 2,067 square miles.

Records available.- April 1925 to September 1945.

Average discharge.- 20 years, 310 second-feet.

Extremes.- Maximum discharge during year, 3,820 second-feet Jan. 20; maximum gage height, 5.58 feet Feb. 14; minimum discharge, 148 second-feet Sept. 15-17.

1925-45: Maximum discharge, 18,500 second-feet July 6, 1942; maximum gage height, 22.3 feet June 13, 1935, affected by backwater; minimum discharge, 36 second-feet May 11, 12, 1928 (gage height, 0.97 foot).

Maximum stage known, 28.36 feet in October 1913, from information by local residents.

Remarks.- Records good except those for periods of no gage-height record, which are fair. Flow partly regulated by Medina Lake and Olmos flood-control reservoir (combined capacity, 269,500 acre-feet). Water diverted by diversion dam on Medina River about 70 miles upstream from mouth for irrigation in vicinity of Devine and Lytle, and some water diverted for irrigation near San Antonio. Water used industrially in San Antonio.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	189	163	185	324	283	373	1,960	278	213	273	196	230
2	189	178	178	238	288	373	1,600	268	204	258	437	221
3	181	181	178	225	314	368	1,980	273	209	253	335	196
4	181	213	174	221	314	368	764	632	234	258	248	192
5	244	204	189	217	319	368	515	895	230	368	234	192
6	615	181	1,060	213	1,460	368	454	454	234	258	230	185
7	314	174	2,260	209	1,050	362	373	340	258	263	221	181
8	238	178	885	204	515	356	351	324	253	263	217	166
9	346	181	424	200	413	356	368	314	213	268	204	185
10	230	178	304	196	351	351	373	309	204	238	200	196
11	209	174	273	192	346	346	368	309	196	238	200	209
12	192	170	263	189	340	340	368	314	221	243	200	196
13	185	166	263	189	2,280	335	368	293	243	238	196	170
14	181	166	258	189	3,090	330	368	283	346	221	189	159
15	181	170	248	189	946	324	362	278	248	225	192	159
16	181	174	248	185	521	319	346	253	221	230	178	148
17	181	178	253	185	448	678	362	238	209	288	174	166
18	181	230	248	521	442	1,360	330	234	234	258	196	174
19	178	238	243	2,440	448	1,230	304	230	542	234	191	178
20	174	335	243	3,620	521	627	539	225	1,610	213	[illegible]	181
21	170	288	238	2,060	436	390	600	225	1,000	204	170	181
22	170	192	234	865	413	346	615	225	419	221	196	170
23	170	178	221	552	413	324	558	221	614	196	178	174
24	163	166	213	454	407	319	491	230	969	204	174	189
25	159	189	221	373	401	319	356	258	430	196	185	253
26	159	360	217	340	395	319	330	253	340	196	196	217
27	166	316	217	330	390	314	309	234	314	204	268	196
28	166	204	213	314	378	314	304	221	298	189	374	196
29	166	189	213	304	-	309	298	213	288	185	273	217
30	163	189	213	298	-	470	293	243	278	178	196	487
31	163	-	258	293	-	1,710	-	238	-	178	217	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	6,385	615	159	206	12,660
November	6,103	360	163	203	12,110
December	10,835	2,260	174	350	21,490
Calendar year 1944	102,637	2,620	141	280	203,600
January	16,329	3,620	185	527	32,390
February	17,922	3,090	283	640	35,550
March	14,666	1,710	309	473	29,090
April	16,607	1,980	293	554	32,940
May	9,305	895	213	300	18,460
June	11,272	1,610	196	375	22,360
July	7,239	368	178	234	14,360
August	6,775	437	170	219	13,440
September	5,964	487	148	199	11,830
Water year 1944-45	129,402	3,620	148	355	256,700

Peak discharge.- Dec. 7 (8 a.m.) 2,610 sec.-ft.; Jan. 20 (2 p.m.) 3,820 sec.-ft.; Feb. 14 (3 a.m.) 3,720 sec.-ft.; Apr. 1 (7:15 a.m.) 2,670 sec.-ft.; Apr. 3 (4 a.m.) 2,310 sec.-ft.

Note.- No gage-height record Dec. 24 to Jan. 17, Feb. 9-12, Feb. 21 to Mar. 25; discharge computed on basis of range in stage, weather records, and records for station at Goliad.

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

San Antonio River at Goliad, Tex.

Location.- Water-stage recorder, lat. 28°39', long. 97°23', at bridge on State Highway 29, 1.3 miles southeast of courthouse in Goliad, Goliad County, and 10 miles upstream from Manahuilla Creek. Datum of gage is 91.1 feet above mean sea level, datum of 1929, Houston supplementary adjustment of 1943.

Drainage area.- 3,914 square miles.

Records available.- June 1924 to March 1929, February 1939 to September 1945.

Average discharge.- 10 years (1924-28, 1939-45), 545 second-feet.

Extremes.- Maximum discharge during year, 5,170 second-feet Apr. 3 (gage height, 21.84 feet); minimum, 173 second-feet Sept. 18, 19.

1924-29, 1939-45: Maximum discharge, 33,800 second-feet July 9, 1942 (gage height, 44.9 feet); minimum observed, 44 second-feet for several periods in 1937.

Floods of October 1913 and June 15, 1935, reached about same stage as that of July 9, 1942.

Remarks.- Records good except those for period of no gage-height record and those above 1,000 second-feet, which are fair. Flow partly regulated by Medina Lake and Olmos flood-control reservoir (combined capacity, 269,500 acre-feet). Water diverted at diversion dam on Medina River about 70 miles upstream from mouth for irrigation in vicinity of Devine and Lytle, and some water diverted for irrigation near San Antonio. Water used industrially in San Antonio.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	272	214	290	434	425	452	1,720	434	317	326	209	229
2	252	220	281	362	425	452	4,460	425	317	317	204	231
3	241	254	272	335	425	452	5,020	416	299	326	220	249
4	236	272	272	335	425	445	3,790	407	290	317	482	243
5	229	245	272	326	452	445	1,810	425	290	299	380	223
6	227	281	326	335	488	434	970	775	317	299	299	205
7	425	272	583	335	1,470	425	720	763	308	362	272	207
8	596	247	2,060	335	1,520	416	650	506	317	299	263	205
9	389	238	1,780	335	884	416	578	434	335	281	254	195
10	326	240	792	335	578	407	524	416	335	281	249	195
11	407	241	524	326	488	407	524	407	290	281	238	195
12	317	243	425	317	470	407	524	416	308	254	227	214
13	281	240	389	299	470	452	506	425	317	254	209	225
14	254	238	371	308	2,790	452	506	416	326	254	205	229
15	247	240	362	317	3,660	416	488	398	344	254	200	205
16	241	238	353	326	1,980	488	488	380	380	238	205	182
17	238	241	344	317	837	506	488	380	308	234	214	182
18	238	241	344	317	650	434	470	362	299	241	202	175
19	234	240	344	673	578	764	470	344	723	290	191	178
20	232	238	335	2,520	596	f2,020	506	335	972	272	204	195
21	231	252	335	3,980	839	f1,180	815	326	1,080	230	205	196
22	227	335	335	3,070	801	632	2,350	326	1,440	227	182	202
23	225	281	326	1,380	614	524	1,770	326	881	238	186	205
24	223	263	326	860	578	488	801	326	1,030	229	213	204
25	222	253	317	680	524	452	725	326	965	214	200	196
26	215	254	317	614	488	434	725	326	782	218	187	204
27	211	299	335	524	470	425	524	344	470	213	209	249
28	213	488	362	488	452	425	488	344	398	209	223	254
29	215	407	362	470	-	416	452	326	371	214	272	229
30	218	326	353	452	-	416	445	308	344	202	326	328
31	220	-	371	434	-	445	-	290	-	202	312	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	8,304	596	211	268	16,470
November	8,051	488	214	268	15,970
December	14,458	2,060	272	466	28,680
Calendar year 1944	188,654	9,730	202	515	374,200
January	22,139	3,980	299	714	43,910
February	24,377	3,660	425	871	48,350
March	16,527	2,020	407	533	32,780
April	34,307	5,020	445	1,144	68,050
May	12,432	775	290	401	24,660
June	15,153	1,440	290	505	30,060
July	8,075	362	202	260	16,020
August	7,442	482	182	240	14,760
September	6,429	328	175	214	12,750
Water year 1944-45	177,694	5,020	175	487	352,500

f Computed on basis of partly estimated gage-height record.

Note.- No gage-height record Nov. 17 to Dec. 4; discharge computed on basis of range in stage, weather records, and records for station near Falls City.

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Medina River near San Antonio, Tex.

Location.- Water-stage recorder, lat. 29°15', long. 98°28', at bridge on U. S. Highway 281, 5.2 miles upstream from mouth and 9 miles south of San Antonio, Bexar County.

Drainage area.- 1,225 square miles (587 square miles is above dam forming Medina Lake).

Records available.- July 1939 to September 1945. October 1929 to December 1930, records below about 50 second-feet, at Losoya, 1.5 miles downstream, in connection with seepage investigation.

Extremes.- Maximum and minimum discharges for the water years 1941 to 1945 are contained in the following table:

Water year	Maximum			Minimum		
	Date	Discharge (sec.-ft.)	Gage height (feet)	Date	Discharge (sec.-ft.)	Gage height (feet)
1940-41	Feb. 2	6,890	22.93	Oct. 6	31	2,04
1941-42	Sept. 5	17,500	30.92	May 23	46	2.28
1942-43	Oct. 18	12,100	27.20	Aug. 11	50	2.26
1943-44	Aug. 28	2,000	13.33	Aug. 9	28	1.88
1944-45	Feb. 12	3,540	16.96	Oct. 23	62	2.36

1939-45: Maximum discharge, 17,500 second-feet Sept. 5, 1942 (gage height, 30.92 feet); minimum, 21 second-feet Aug. 9, 13, 1940.

Maximum stage known, about 55 feet in 1912 (prior to construction of Medina Dam, 60 miles upstream), from information by State Highway Department.

Remarks.- Records good except those for periods of no gage-height record, which are poor. Flow partly regulated by Medina Lake (capacity, 254,000 acre-feet) and diversion dam reservoir (capacity, 4,500 acre-feet). About 5,000 acres are irrigated by water released from Medina Lake above station.

Discharge, in second-feet, 1940-45

1940-41

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	35	1,430	35	42	869	71	88	234	88	66	56	49
2	34	297	34	41	5,180	69	86	224	87	65	55	49
3	35	66	34	42	996	69	82	1,170	88	64	55	48
4	34	48	33	48	490	69	78	578	104	a64	54	49
5	34	822	33	50	340	67	74	304	91	a64	54	48
6	33	176	34	44	264	66	71	343	89	a64	56	48
7	87	60	34	41	217	69	71	228	87	a63	60	46
8	49	47	33	40	195	66	71	195	82	a63	63	46
9	39	46	33	39	175	66	70	180	78	a63	60	49
10	38	43	33	38	155	64	74	170	77	a62	57	54
11	37	40	33	36	145	62	69	160	77	a79	57	60
12	36	37	446	38	130	62	67	155	84	a72	55	57
13	37	35	276	40	118	62	69	160	78	a69	54	54
14	38	44	73	40	108	62	68	150	77	a69	53	55
15	38	41	769	38	99	64	65	155	74	a68	52	52
16	37	37	597	37	94	63	74	130	82	a68	52	52
17	37	36	214	36	90	78	72	122	379	67	52	146
18	36	35	97	35	88	220	67	112	160	66	50	165
19	36	34	73	35	88	253	67	83	95	69	50	88
20	36	35	f751	35	84	170	63	102	78	63	50	66
21	36	34	f139	35	82	145	61	112	74	62	50	62
22	36	39	68	35	80	130	60	112	71	61	50	60
23	36	55	55	35	83	116	63	155	69	61	51	60
24	38	56	50	34	84	106	66	200	67	60	51	60
25	310	48	48	39	80	101	64	135	67	60	52	60
26	340	42	47	44	77	97	402	113	67	61	64	58
27	121	38	46	54	75	155	862	103	183	59	55	58
28	62	36	44	349	73	140	2,610	100	93	58	61	57
29	46	35	43	473	-	112	1,030	99	74	60	52	60
30	42	35	42	318	-	98	436	92	68	60	66	64
31	686	-	42	53	-	91	-	86	-	57	57	-

Peak discharge.- Nov. 1 (4:30 a.m.) 2,350 sec.-ft.; Feb. 2 (1:30 a.m.) 6,890 sec.-ft.; Apr. 28 (8:45 a.m.) 3,140 sec.-ft.

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

f Computed on basis of partly estimated gage-height record.

Discharge, in second-feet, of Medina River near San Antonio, Tex., 1940-45--Continued

1941-42

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	63	66	65	61	62	62	58	73	57	54	61	333
2	64	64	65	60	62	60	59	72	57	57	61	228
3	64	64	65	61	62	62	58	301	56	62	61	135
4	69	64	64	62	63	62	59	1,290	55	143	60	a827
5	68	64	64	62	66	60	63	231	57	1,520	61	a8,700
6	64	63	64	61	67	61	110	101	70	2,040	62	a2,370
7	63	62	74	61	66	60	688	87	69	952	60	a830
8	63	62	406	60	66	59	216	88	70	526	60	a3,930
9	66	62	63	61	66	58	78	84	66	296	59	3,700
10	62	63	65	61	66	58	68	77	64	94	57	1,450
11	61	64	70	61	66	59	64	74	62	81	57	541
12	60	64	69	61	66	60	67	73	62	77	57	355
13	61	64	66	62	65	60	68	73	60	76	57	185
14	61	65	65	62	71	62	65	72	57	74	57	160
15	60	65	64	62	72	62	64	69	62	74	58	145
16	60	65	64	62	68	62	63	70	64	73	64	130
17	60	64	65	64	79	62	63	67	a63	71	94	126
18	61	64	65	64	283	60	62	67	a62	70	74	122
19	61	66	65	64	441	60	62	377	a61	69	67	118
20	60	66	64	64	180	60	63	180	a60	66	68	111
21	61	66	68	63	59	60	62	78	a59	66	66	108
22	63	67	69	62	60	60	170	62	a58	68	83	108
23	71	68	67	62	61	60	96	49	a58	70	66	103
24	156	66	65	62	60	61	83	52	a57	67	63	100
25	73	64	64	62	60	62	112	60	57	64	61	99
26	67	66	61	63	60	62	799	60	56	63	59	99
27	64	69	61	62	58	61	185	59	56	63	58	96
28	63	69	61	62	59	60	97	60	56	61	58	94
29	63	68	61	62	-	60	83	59	55	61	57	94
30	64	66	60	62	-	60	75	60	55	62	74	96
31	66	-	60	62	-	60	-	57	-	62	209	-

Peak discharge.- July 5 (10:30 p.m.) 3,100 sec.-ft.; Sept. 5 (3 p.m.) 17,500 sec.-ft.; Sept. 8 (10:30 p.m.) 7,000 sec.-ft.; Sept. 9 (11:30 a.m.) 5,050 sec.-ft.

a No gage-height record; discharge computed on basis of recorded range in stage, engineer's notes, weather records, and records for nearby stations.

1942-43

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept
1	97	160	107	95	84	87	84	71	80	73	62	226
2	95	155	107	94	84	91	82	71	74	74	60	105
3	96	150	106	146	87	94	61	71	71	75	58	368
4	1,080	150	106	394	83	92	a78	73	70	74	58	98
5	2,050	145	106	270	86	88	a78	74	122	71	58	74
6	748	140	104	172	84	88	a77	73	135	70	60	66
7	393	135	103	98	84	84	a78	74	172	71	59	155
8	264	130	102	94	83	82	89	77	119	71	58	94
9	165	126	103	93	84	82	108	78	90	75	59	76
10	145	300	105	94	127	84	115	81	84	80	57	108
11	135	296	105	93	368	88	89	88	83	182	63	74
12	123	114	104	97	252	87	83	84	83	102	55	71
13	118	115	103	96	151	84	a80	80	84	172	58	69
14	117	114	102	94	82	84	a78	83	82	412	59	66
15	476	112	104	90	81	82	a78	81	84	100	59	66
16	818	112	103	90	81	84	a79	81	82	82	60	94
17	464	113	102	89	81	81	86	79	81	75	60	253
18	3,790	112	102	86	82	81	87	78	101	71	60	161
19	4,080	110	103	258	83	82	84	81	84	66	60	69
20	814	108	103	264	84	81	82	81	82	64	60	62
21	441	237	104	184	88	81	81	79	77	64	61	60
22	340	333	107	85	84	80	80	107	78	64	61	60
23	284	210	104	85	94	82	82	112	76	63	61	61
24	270	107	101	85	84	89	81	92	75	64	61	60
25	246	112	100	83	84	144	81	76	74	62	61	60
26	217	112	102	83	87	125	79	71	74	62	64	72
27	200	112	99	83	86	101	80	68	74	64	63	66
28	195	109	95	83	66	92	78	69	73	64	62	71
29	185	108	95	84	-	88	81	85	72	63	62	69
30	180	107	95	85	-	86	75	90	73	62	67	68
31	170	-	95	88	-	85	-	88	-	64	64	-

Peak discharge.- Oct. 4 (11:15 p.m.) 3,040 sec.-ft.; Oct. 18 (10 p.m.) 12,100 sec.-ft

a No gage-height record; discharge computed on basis of records for nearby stations.

Discharge, in second-feet, of Medina River near San Antonio, Tex., 1940-45--Continued

1943-44

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	67	69	69	122	91	96	64	108	63	69	58	288
2	66	118	66	231	90	94	67	116	62	64	58	148
3	65	106	65	145	90	94	66	90	62	99	59	116
4	77	89	85	124	88	79	66	76	60	69	58	94
5	71	115	112	112	88	57	67	74	59	60	60	84
6	90	115	102	102	87	56	84	69	67	57	61	159
7	126	104	82	112	88	54	107	64	70	56	58	209
8	112	87	87	96	90	55	112	62	69	56	59	128
9	59	102	66	74	74	56	134	63	63	57	57	116
10	59	100	64	71	60	130	106	63	61	56	59	84
11	60	79	62	69	58	126	75	63	63	56	59	78
12	71	59	62	68	57	96	71	63	70	56	60	83
13	71	60	60	69	57	62	69	65	60	57	57	82
14	67	62	60	88	79	61	69	64	62	57	56	79
15	66	86	59	110	102	108	69	62	60	57	57	75
16	62	144	59	106	96	123	69	65	58	57	56	74
17	60	117	59	102	93	86	65	66	58	56	56	72
18	59	121	72	102	92	67	69	64	58	57	55	69
19	65	116	101	102	73	62	71	69	58	57	57	72
20	108	112	93	102	57	58	71	79	61	58	57	72
21	111	109	95	101	66	59	74	143	61	57	56	74
22	72	82	96	99	105	105	76	120	62	59	62	74
23	65	60	106	99	104	189	76	114	64	59	73	74
24	66	61	106	104	100	116	66	107	66	58	68	74
25	64	61	104	135	98	74	67	166	69	58	67	68
26	65	75	89	125	98	69	68	132	64	59	64	70
27	81	113	63	98	115	64	67	204	64	60	68	83
28	108	160	64	94	115	65	66	558	63	59	685	85
29	114	160	62	128	102	64	65	158	62	58	990	82
30	93	111	64	119	-	63	71	91	78	57	262	84
31	71	-	63	92	-	63	-	66	-	57	249	-

1944-45

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	78	70	77	a70	98	82	975	80	84	75	112	95
2	74	73	76	71	108	84	402	80	84	74	82	74
3	74	83	77	72	104	85	160	421	83	76	79	72
4	484	76	76	72	165	85	122	324	81	81	77	66
5	229	74	998	72	869	82	108	100	98	81	76	66
6	120	72	983	74	286	87	100	89	118	80	74	65
7	102	74	255	71	118	84	98	85	98	79	73	88
8	109	77	157	68	98	81	95	87	80	77	72	108
9	85	74	92	69	98	82	91	84	80	77	72	108
10	86	73	88	71	96	84	92	89	79	77	73	90
11	67	71	84	73	102	84	96	91	76	79	71	70
12	67	69	83	76	2,120	88	95	93	140	79	70	71
13	67	69	84	75	721	264	93	92	114	78	69	72
14	69	72	83	73	178	140	89	89	91	78	71	69
15	68	74	81	70	124	97	88	86	84	78	72	69
16	65	74	81	72	108	90	87	84	84	76	71	68
17	66	93	80	223	104	149	87	84	83	76	69	68
18	66	91	79	1,660	99	260	84	82	481	75	70	73
19	68	135	76	1,570	100	101	84	82	1,090	76	71	75
20	68	93	75	671	96	98	151	83	237	76	69	73
21	68	81	74	310	95	88	254	84	102	76	71	74
22	67	77	a74	196	92	85	123	88	114	78	73	74
23	63	76	a74	137	88	85	98	89	116	79	77	77
24	66	82	a74	98	87	87	91	87	94	82	85	77
25	72	192	a73	91	87	87	87	90	82	90	120	75
26	73	99	a72	86	85	84	84	85	81	83	154	74
27	73	82	a71	83	86	85	83	84	79	81	186	74
28	73	80	a78	82	83	85	82	82	76	78	75	78
29	73	81	a126	79	-	108	83	83	76	76	85	229
30	68	79	a74	84	-	967	60	82	75	75	112	545
31	69	-	a70	87	-	456	-	83	-	83	114	-

Peak discharge.- Dec. 5 (9 p.m.) 2,090 sec.-ft.; Jan. 18 (9 p.m.) 2,930 sec.-ft.

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

Monthly discharge, in second-feet, of Medina River near San Antonio, Tex., 1940-45

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October 1940	2,539	686	33	81.9	5,040
November	3,827	1,430	34	128	7,590
December	4,289	769	33	138	8,510
Calendar year 1940	29,537	1,430	22	80.7	58,590
January 1941	2,264	473	34	73.0	4,490
February	10,559	5,180	73	377	20,940
March	3,063	253	62	98.8	6,080
April	7,100	2,610	60	237	14,080
May	6,262	1,170	83	202	12,420
June	2,888	379	67	96.3	5,730
July	1,987	79	57	64.1	3,940
August	1,704	66	50	55.0	3,380
September	1,880	165	46	62.7	3,730
Water year 1940-41	48,362	5,180	33	132	95,930
October 1941	2,062	156	60	66.5	4,090
November	1,950	69	62	65.0	3,870
December	2,349	406	60	75.8	4,660
Calendar year 1941	44,068	5,180	34	121	87,410
January 1942	1,920	64	60	61.9	3,810
February	2,514	441	58	89.8	4,990
March	1,875	62	58	60.5	3,720
April	3,860	799	58	129	7,660
May	4,182	1,290	49	135	8,290
June	1,801	70	55	60.0	3,570
July	7,182	2,040	54	232	14,250
August	2,109	209	57	68.0	4,180
September	25,493	8,700	94	850	50,560
Water year 1941-42	57,297	8,700	49	157	113,600
October 1942	18,796	4,080	95	606	37,280
November	4,444	333	107	148	8,810
December	3,177	107	95	102	6,300
Calendar year 1942	77,353	8,700	49	212	153,400
January 1943	3,855	394	83	124	7,610
February	2,916	368	81	104	5,780
March	2,759	144	80	89.0	5,470
April	2,494	115	75	83.1	4,950
May	2,496	112	68	80.5	4,950
June	2,609	172	70	87.0	5,170
July	2,770	412	62	89.4	5,490
August	1,860	67	53	60.0	3,690
September	3,002	368	60	100	5,950
Water year 1942-43	51,158	4,080	53	140	101,400
October 1943	2,391	126	59	77.1	4,740
November	2,953	160	59	98.4	5,860
December	2,397	112	59	77.3	4,750
Calendar year 1943	32,482	412	53	89.0	64,410
January 1944	3,301	231	68	106	6,550
February	2,513	115	57	86.7	4,980
March	2,551	189	54	82.3	5,060
April	2,263	134	64	75.4	4,490
May	3,302	558	62	107	6,550
June	1,897	78	58	63.2	3,760
July	1,852	99	56	59.7	3,670
August	3,801	990	55	123	7,540
September	2,950	288	68	98.3	5,850
Water year 1943-44	32,171	990	54	87.9	63,800
October 1944	2,877	484	63	92.8	5,710
November	2,516	192	69	83.9	4,990
December	4,545	998	70	147	9,010
Calendar year 1944	34,368	998	54	93.9	68,160
January 1945	6,606	1,660	68	213	13,100
February	6,495	2,120	83	232	12,880
March	4,424	967	81	143	8,770
April	4,262	975	80	142	8,450
May	3,242	421	80	105	6,430
June	4,260	1,090	75	142	8,450
July	2,429	90	74	78.4	4,820
August	2,645	186	69	85.3	5,250
September	2,917	545	65	97.2	5,790
Water year 1944-45	47,218	2,120	63	129	93,650

Time basis: Central standard time except 2 a.m., Feb. 9, 1942, to 2 a.m., Sept. 30, 1945, when central war time was used. To convert war time to standard time, subtract 1 hour.

Cibolo Creek near Falls City, Tex.

Location.- Water-stage recorder, lat. 29°01', long. 97°56', at bridge on State Highway 123, 5.5 miles northeast of Falls City, Karnes County, and 9 miles upstream from mouth. Datum of gage is 264.3 feet above mean sea level, datum of 1929, Houston supplementary adjustment of 1943.

Drainage area.- 831 square miles.

Records available.- November 1930 to September 1945.

Average discharge.- 14 years (1931-45), 129 second-feet.

Extremes.- Maximum discharge during year, 5,230 second-feet Feb. 13 (gage height, 16.93 feet); minimum, 8.3 second-feet Sept. 3, 4, 26 (gage height, 0.97 foot).
1930-45: Maximum discharge, 33,600 second-feet July 6, 1942 (gage height, 34.45 feet); minimum, 4.9 second-feet Aug. 27, 28, Oct. 23, 1940.
Flood in October 1913 reached a stage about half a foot higher than that of July 6, 1942.

Remarks.- Records good: No large diversion above station.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	20	17	23	34	35	49	1,950	33	18	22	17	13
2	20	18	22	31	34	48	2,450	32	19	22	87	10
3	20	22	21	30	34	44	347	48	[a]19	22	55	9.3
4	20	30	21	29	40	44	186	36	[a]18	20	29	9.3
5	28	22	38	29	494	44	115	33	[a]18	20	22	10
6	25	20	872	29	708	43	88	32	[a]17	24	18	10
7	24	20	267	29	134	41	71	32	[a]17	20	16	10
8	22	19	99	27	71	39	60	32	[a]16	19	16	10
9	37	19	63	27	51	38	55	31	[a]16	19	15	10
10	34	19	47	27	44	37	52	31	[a]16	18	14	10
11	23	19	36	27	40	36	48	30	[a]15	18	14	9.8
12	20	19	32	26	468	36	47	29	24	18	13	11
13	19	19	29	27	3,230	38	45	28	22	19	13	12
14	18	19	28	26	270	38	44	27	20	19	13	11
15	18	19	27	25	124	38	44	27	17	18	13	11
16	18	20	27	24	85	37	42	27	16	17	12	11
17	18	22	26	44	69	37	45	26	17	21	11	11
18	17	24	24	303	80	1,190	74	25	387	24	10	11
19	18	32	24	3,000	237	752	52	24	274	20	10	11
20	17	39	24	1,000	402	144	76	24	134	19	9.8	11
21	17	48	24	329	163	80	91	24	52	17	11	11
22	17	37	24	172	127	62	59	24	361	16	12	10
23	17	32	24	115	97	52	107	24	444	16	12	11
24	17	28	24	84	62	47	98	24	67	16	10	9.8
25	17	53	25	65	52	44	53	23	55	16	11	9.3
26	17	26	27	54	48	39	41	22	37	16	10	8.8
27	17	24	29	48	47	38	38	22	29	15	12	9.3
28	17	30	34	44	46	36	38	22	24	16	13	14
29	17	29	33	40	-	36	36	21	23	16	15	30
30	17	25	36	38	-	273	34	20	22	16	13	24
31	16	-	36	36	-	2,030	-	19	-	16	13	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	622	37	16	20.1	1,230
November	770	53	17	25.7	1,530
December	2,066	872	21	66.6	4,100
Calendar year 1944	37,236	4,540	13	102	73,860
January	5,819	3,000	24	188	11,540
February	7,292	3,230	34	260	14,460
March	5,510	2,030	36	178	10,930
April	6,486	2,450	34	216	12,860
May	852	48	19	27.5	1,690
June	2,214	444	15	73.8	4,390
July	575	24	15	18.5	1,140
August	539.8	87	9.8	17.4	1,070
September	348.6	30	8.8	11.6	691
Water year 1944-45	33,094.4	3,230	8.8	90.7	65,630

Peak discharge.- Jan. 19 (1 p.m.) 4,320 sec.-ft.; Feb. 13 (9 a.m.) 5,230 sec.-ft.; Mar. 18 (9:30 p.m.) 3,230 sec.-ft.; Mar. 31 (1 p.m.) 3,230 sec.-ft.; Apr. 2 (11:15 a.m.) 3,660 sec.-ft.

[a] No gage-height record; discharge computed on basis of range in stage and weather records.

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Mission River at Refugio, Tex.

Location.- Wire-weight gage, lat. 28°17', long. 97°17', at bridge on U. S. Highway 77, 500 feet upstream from Missouri Pacific Railroad bridge and a quarter of a mile southwest of Refugio, Refugio County. Datum of gage is 1.7 feet above mean sea level, datum of 1929.

Drainage area.- 643 square miles.

Records available.- July 1939 to September 1945.

Extremes.- Maximum discharge during year, 4,470 second-feet Apr. 21 (gage height, 21.26 feet, from graph based on gage readings); minimum observed, 0.7 second-foot Aug. 18-20, Sept. 5.

1939-45: Maximum discharge, 41,700 second-feet July 7, 1942 (gage height, 33.3 feet); minimum observed, 0.7 second-foot Oct. 7, 9, 1940, Aug. 18-20, Sept. 5, 1945.

Maximum stage known prior to 1942, 32.3 feet in August 1914, May 17, 1938, from information by local residents.

Remarks.- Records good. Gage read twice daily, oftener during floods. No large diversion above station.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	27	5.4	6.8	7.8	4.5	6.8	35	24	8.6	3.3	10	2.7
2	20	5.8	7.6	7.8	4.7	7.6	98	22	8.8	5.2	9.3	2.6
3	13	6.3	8.0	7.6	4.9	6.3	29	19	8.8	6.8	3.3	2.0
4	11	5.6	7.6	7.3	4.7	6.8	14	17	8.3	5.6	2.7	1.5
5	9.6	7.0	9.3	7.6	5.8	6.3	9.3	15	7.8	2.9	2.7	.8
6	9.1	5.4	11	8.3	4.5	5.4	8.3	14	7.8	3.6	2.0	1.5
7	8.6	6.1	17	7.8	4.5	4.9	7.8	14	7.6	3.6	1.7	1.5
8	8.3	4.9	11	7.8	4.0	5.4	7.3	13	7.3	3.1	1.7	1.5
9	7.3	4.9	10	7.6	4.5	6.1	7.3	12	7.0	2.2	1.7	1.5
10	7.3	5.2	8.0	7.0	4.5	6.1	6.8	12	7.0	2.4	1.2	1.5
11	6.8	5.2	7.6	7.3	4.5	6.8	6.3	11	6.8	2.4	1.1	5.6
12	6.8	5.6	6.8	7.3	8.6	26	6.8	11	23	2.1	1.0	3.3
13	6.3	5.8	6.8	7.3	6.1	1,750	6.1	11	80	2.0	.9	2.7
14	6.3	6.1	6.8	7.6	5.8	856	5.4	11	38	2.0	.9	2.2
15	6.6	6.1	6.8	9.8	5.8	183	6.8	9.6	14	1.8	.8	2.2
16	6.3	6.1	6.8	6.3	5.4	74	4.2	8.8	8.6	1.8	.9	1.8
17	5.8	5.6	6.8	6.8	5.4	40	4.0	8.6	6.3	2.0	.9	1.8
18	5.8	7.0	7.0	6.3	4.9	24	4.5	8.0	8.0	1.8	.7	1.6
19	5.4	9.6	6.8	5.4	5.6	18	5.6	8.3	19	1.8	.7	1.5
20	5.8	8.0	6.8	4.9	6.8	17	1,410	7.8	120	1.8	.9	1.4
21	5.4	7.6	7.0	4.9	5.8	14	4,270	7.8	38	1.8	1.0	1.2
22	5.4	6.6	7.0	4.9	5.4	12	3,830	80	18	1.7	1.0	1.2
23	5.4	6.3	7.0	4.7	4.9	11	2,000	90	66	2.0	.9	1.5
24	5.4	13	7.6	4.5	5.2	11	433	29	39	1.8	.9	1.7
25	5.2	8.1	7.8	4.7	5.4	10	194	18	16	1.7	1.4	1.7
26	5.4	6.6	7.8	4.5	5.4	9.6	111	15	8.6	1.6	6.8	1.5
27	5.2	6.8	7.8	4.5	5.2	9.1	71	12	6.6	1.6	40	1.7
28	5.4	11	7.8	4.5	5.6	9.1	46	10	4.9	1.6	122	2.1
29	4.9	6.6	8.0	4.5	-	9.3	36	a9.6	4.0	1.6	28	2.6
30	4.9	6.3	7.8	4.5	-	9.1	28	9.1	3.6	1.7	8.9	3.1
31	4.9	-	7.8	4.2	-	11	-	8.8	-	10	3.5	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	240.6	27	4.9	7.76	477
November	200.6	13	4.9	6.69	398
December	248.7	17	6.8	8.02	493
Calendar year 1944	23,331.0	3,790	2.2	63.7	45,270
January	196.0	9.8	4.2	6.32	389
February	148.4	8.6	4.0	5.30	294
March	3,171.7	1,750	4.9	102	6,290
April	12,701.5	4,270	4.0	423	25,190
May	546.4	90	7.8	17.6.	1,080
June	607.4	120	3.6	20.2	1,200
July	85.3	10	1.6	2.75	169
August	259.5	122	.7	8.37	515
September	59.5	5.6	.8	1.98	118
Water year 1944-45	18,465.6	4,270	.7	50.6	36,610

a No gage-height record; discharge interpolated.

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Nueces River at Laguna, Tex.

Location.- Water-stage recorder, lat. 29°25'45", long. 99°59'50", half a mile downstream from Sycamore Creek and 1 mile northeast of Laguna, Uvalde County. Datum of gage is 1,119.72 feet above mean sea level, datum of 1929.

Drainage area.- 764 square miles.

Records available.- October 1923 to September 1945.

Average discharge.- 22 years, 148 second-feet.

Extremes.- Maximum discharge during year, 2,580 second-feet Jan. 18 (gage height, 6.13 feet); minimum, 13 second-feet Sept. 29.

1923-45: Maximum discharge, 222,000 second-feet July 13, 1939 (gage height, 26.40 feet), from rating curve extended above 40,000 second-feet on basis of float measurement (110,000 second-feet) and slope-area dtermination (213,000 second-feet); minimum, 7.8 second-feet Nov. 3-15, 18, 1934.

Flood of Sept. 21, 1923, reached a stage of 26.5 feet (discharge, 226,000 second-feet, based on rating curve mentioned above). Flood of June 1913 reached a stage 2 or 3 feet higher than that of Sept. 21, 1923, from information by local resident.

Remarks.- Records good. Part of flow of Nueces River and its tributaries enters Edwards limestone in Balcones fault zone which crosses basin just north of Uvalde and downstream from station. No diversion above station.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	113	70	65	64	110	92	152	67	39	26	20	18
2	111	70	65	63	114	92	138	65	39	25	20	17
3	118	67	67	63	114	92	121	72	39	25	20	17
4	226	67	67	63	114	89	104	62	37	25	20	17
5	179	67	67	63	114	89	101	62	37	25	20	16
6	143	65	70	62	110	89	95	60	36	25	20	16
7	128	65	70	62	107	89	92	60	34	25	20	16
8	117	65	70	62	107	86	89	58	34	24	20	16
9	107	62	69	60	104	86	89	62	34	24	20	15
10	104	62	69	60	101	86	86	60	33	24	20	15
11	98	60	69	60	101	86	89	58	32	25	19	15
12	92	60	69	60	104	86	89	65	45	25	19	15
13	92	60	68	60	101	86	89	62	34	24	18	14
14	89	60	68	60	98	83	86	60	32	22	18	14
15	89	60	68	60	95	83	86	58	32	24	18	14
16	86	60	68	60	95	80	83	55	32	22	18	15
17	83	60	67	94	92	80	83	55	32	22	18	15
18	83	62	67	972	95	80	80	53	44	22	18	14
19	80	62	67	423	98	80	78	51	34	22	18	14
20	78	62	67	270	98	80	104	51	32	22	19	14
21	78	65	66	208	98	78	89	51	32	22	19	14
22	78	65	66	175	98	78	86	48	30	22	19	14
23	78	65	66	156	98	75	83	46	30	22	19	14
24	78	70	66	141	95	75	83	46	30	22	19	14
25	75	70	65	127	95	72	80	44	30	22	19	14
26	72	67	65	124	95	70	78	42	29	22	19	14
27	72	67	65	121	95	70	78	42	28	20	18	14
28	70	67	65	117	92	70	72	41	27	20	18	14
29	70	65	64	117	-	100	70	41	27	20	18	17
30	70	65	64	114	-	146	67	39	25	20	18	16
31	70	-	64	110	-	152	-	39	-	20	18	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	3,027	226	70	97.6	6,000
November	1,932	70	60	64.4	3,830
December	2,073	70	64	66.9	4,110
Calendar year 1944	32,130	1,350	23	87.8	63,720
January	4,251	972	60	137	8,430
February	2,838	114	92	101	5,630
March	2,700	152	70	87.1	5,360
April	2,720	152	67	90.7	5,400
May	1,675	72	39	54.0	3,320
June	1,000	45	26	33.3	1,980
July	710	26	20	22.9	1,410
August	587	20	18	18.9	1,160
September	452	18	14	15.1	897
Water year 1944-45	23,965	972	14	65.7	47,530

Note.- No gage-height record Dec. 7 to Jan. 6; discharge interpolated on basis of range in stage.

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Nueces River below Uvalde, Tex.

Location.- Water-stage recorder, lat. 29°08', long. 99°54', on Smyth Ranch, 4 miles upstream from bridge on U. S. Highway 83, 9 miles southwest of Uvalde, Uvalde County, and 15 miles downstream from West Nueces River. Datum of gage is 796.1 feet above mean sea level, datum of 1929.

Drainage area.- 1,947 square miles.

Records available.- April 1939 to September 1945.

Extremes.- Maximum discharge during year, 70 second-feet Mar. 17 (gage height, 2.98 feet); minimum, 4.8 second-feet Aug. 24, 25.

1939-45: Maximum gage height, 19.25 feet July 13, 1939 (discharge not determined); minimum, that of Aug. 24, 25, 1945.

Maximum stage known, 40.4 feet June 14, 1935, from floodmarks (discharge at former station 5 miles upstream, 616,000 second-feet, by slope-area method).

Remarks.- Records good. Part of flow of Nueces River enters Edwards limestone in Balcones fault zone which crosses basin just north of Uvalde. At low stages most of headwater flow enters this formation. No diversion above station.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	26	18	16	14	13	12	16	11	9.9	8.3	7.0	6.3
2	25	18	16	14	13	12	14	11	9.9	8.1	7.0	6.3
3	26	18	20	14	13	12	13	12	10	8.3	6.8	6.0
4	32	18	18	14	13	12	13	11	9.9	8.1	6.8	6.0
5	26	18	18	14	13	12	13	11	9.6	7.8	6.5	6.0
6	26	18	17	14	13	12	13	11	9.6	7.8	6.3	5.8
7	25	18	17	13	12	12	12	11	9.6	7.8	6.3	7.0
8	24	16	17	13	12	12	12	11	9.6	7.8	6.0	5.8
9	24	16	16	12	13	12	13	12	9.6	7.8	6.0	5.8
10	23	16	16	12	13	12	12	13	9.6	7.8	6.0	5.8
11	23	16	15	12	13	12	12	12	9.6	7.8	5.8	5.8
12	23	16	15	12	14	13	12	12	14	7.8	5.8	9.4
13	23	16	15	12	13	14	12	11	10	7.3	5.8	17
14	23	16	15	15	12	13	12	11	8.9	7.3	5.5	7.8
15	22	16	15	13	13	12	12	11	8.9	7.3	5.5	6.8
16	22	17	15	13	13	12	11	10	8.9	7.3	5.5	6.8
17	22	16	15	19	13	28	11	10	8.9	7.0	5.5	6.8
18	20	17	15	30	12	16	11	10	9.9	7.0	5.3	6.8
19	20	16	15	19	13	14	11	11	9.6	7.0	5.3	6.8
20	20	16	15	18	13	13	12	11	9.2	7.0	5.5	6.8
21	20	16	15	16	12	13	11	10	8.9	7.0	5.5	6.8
22	20	16	14	16	12	13	11	10	8.9	7.0	5.3	6.8
23	20	16	14	15	12	13	11	10	8.9	7.3	5.0	6.8
24	20	19	15	15	12	13	11	10	8.9	7.3	4.8	6.5
25	20	16	15	15	12	12	11	10	8.6	7.6	5.8	6.3
26	20	16	15	14	12	12	11	10	8.6	7.3	7.6	6.3
27	19	16	15	14	12	12	11	10	8.6	7.3	6.5	6.3
28	19	16	15	13	12	12	11	10	8.6	7.0	6.3	6.8
29	18	16	14	13	-	13	11	9.9	8.6	7.0	6.0	11
30	18	16	14	13	-	13	11	10	8.3	7.0	6.0	8.1
31	18	-	14	13	-	14	-	9.9	-	7.0	6.3	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	687	32	18	22.2	1,360
November	499	19	16	16.6	990
December	481	20	14	15.5	954
Calendar year 1944	6,966.9	630	6.0	19.0	13,820
January	454	30	12	14.6	900
February	353	14	12	12.6	700
March	407	28	12	13.1	807
April	357	16	11	11.9	708
May	332.8	13	9.9	10.7	660
June	282.1	14	8.3	9.40	560
July	231.2	8.3	7.0	7.46	459
August	185.3	7.6	4.8	5.98	368
September	212.3	17	5.8	7.08	421
Water year 1944-45	4,481.7	32	4.8	12.3	8,890

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Nueces River near Asherton, Tex.

Location.- Water-stage recorder, lat. 28°30', long. 99°42', at bridge on county road between Asherton and Brundage, 1.2 miles downstream from El Moro Creek and 5.5 miles northeast of Asherton, Dimmit County. Datum of gage is 470.9 feet above mean sea level, datum of 1929.

Drainage area.- 4,082 square miles.

Records available.- October 1939 to September 1945.

Extremes.- Maximum discharge during year, 9,340 second-feet Sept. 30 (gage height, 28.32 feet); no flow at times.

1939-45: Maximum discharge, 15,400 second-feet Sept. 2, 1944 (gage height, 30.24 feet, corrected); no flow at times.

Maximum stage known, about 33 feet June 17, 1935, present site and datum; based on relation determined from levels to floodmarks of the June 17, 1935, and the Sept. 2, 1944, floods at farmhouse on left bank, 0.8 mile upstream from gage.

Remarks.- Records good. Part of flow of Nueces River and its headwater tributaries enters Edwards limestone in Balcones fault zone which crosses basin just north of Uvalde. At low stages most of headwater flow enters this formation. Flow partly regulated by several small reservoirs above station. About 12,000 acres irrigated from river or jointly from wells and river above station.

Rating table, water year 1944-45 (gage height, in feet, and discharge, in second-feet)

1.3	0	2.2	12	5.0	140	18.0	2,660
1.4	.3	2.4	17	6.0	230	22.0	3,820
1.5	1.0	2.7	26	7.0	340	24.0	4,700
1.6	1.9	3.0	36	8.5	542	26.0	6,200
1.7	2.9	3.5	56	10.0	790	27.0	7,300
1.8	4.1	4.0	80	12.0	1,190		
2.0	7.8	4.5	107	14.0	1,640		

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0		0	0	1.9	0	4,890	6.8				0
2	0		0	0	1.3	0	4,170	4.8				0
3	0		0	0	.9	0	1,520	9.6				0
4	0		0	0	.7	0	588	7.6				0
5	0		2.9	0	.4	0	392	3.6				0
6	356		3.9	0	.2	0	245	2.7				0
7	668		1.4	0	.1	0	156	2.0				0
8	379		.5	0	0	0	107	1.5				0
9	186		.4	0	0	0	77	1.2				0
10	110		.2	0	0	0	57	.9				0
11	75		.1	0	0	0	40	1.4				0
12	52		0	0	.3	0	29	237				0
13	35		0	0	.3	35	21	713				0
14	23		0	0	.2	369	16	392				0
15	14		0	11	.2	200	12	78				0
16	6.8		0	1.6	.1	44	8.0	31				0
17	3.1		0	.7	0	54	5.5	18				0
18	1.6		0	.3	0	63	3.9	15				0
19	.9		0	0	0	46	3.0	13				0
20	.5		0	0	0	342	6.8	11				0
21	.2		0	0	.1	572	568	8.0				0
22	.1		0	0	0	295	1,410	5.1				0
23	0		0	0	0	160	468	3.1				0
24	0		0	0	0	96	182	2.4				0
25	0		0	0	0	59	116	1.7				0
26	0		0	0	0	40	75	1.2				0
27	0		0	0	0	22	48	.7				0
28	0		0	0	0	12	32	.4				0
29	0		0	2.2	-	5.3	19	.2				4,120
30	0		0	3.9	-	65	11	.1				7,220
31	0		0	2.7	-	1,490	-	0				-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	1,911.2	668	0	61.7	3,790
November	0	0	0	0	0
December	9.4	3.9	0	.30	19
Calendar year 1944	126,668.7	15,000	0	346	251,200
January	22.4	11	0	.72	44
February	6.7	1.9	0	.24	13
March	3,969.3	1,490	0	128	7,870
April	15,276.2	4,890	3.0	509	30,300
May	1,573.0	713	0	50.7	3,120
June	0	0	0	0	0
July	0	0	0	0	0
August	0	0	0	0	0
September	11,340	7,220	0	378	22,490
Water year 1944-45	34,108.2	7,220	0	93.4	67,650

Peak discharge.- Apr. 1 (8 p.m.) 5,560 sec.-ft.; Apr. 22 (6:30 a.m.) 1,620 sec.-ft.; Sept. 30 (1:30 a.m.) 9,340 sec.-ft.

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Nueces River at Cotulla, Tex.

Location.- Wire-weight gage, lat. 28°26', long. 99°16', at bridge on U. S. Highway 81 at Cotulla, La Salle County, a third of a mile upstream from International-Great Northern Railroad bridge. Datum of gage is 368.08 feet above mean sea level, datum of 1929.

Drainage area.- 5,260 square miles.

Records available.- October 1923 to September 1945. July 1915 to June 1918 at site 4 miles upstream. U. S. Weather Bureau has collected gage heights in this vicinity during 1914-17 and since 1922.

Average discharge.- 22 years, 323 second-feet.

Extremes.- Maximum discharge during year, 6,480 second-feet Apr. 4 (gage height, 15.65 feet, from graph based on gage readings); no flow at times.
1923-45: Maximum discharge, 82,600 second-feet June 18, 1935 (gage height, 32.4 feet, from floodmarks), by slope-area method; no flow at times.

Remarks.- Records good. Gage read once daily. Part of flow of Nueces River and its headwater tributaries enters Edwards limestone in Balcones fault zone which crosses basin just north of Uvalde. At low stages most of headwater flow enters this formation. Low flow partly regulated by small storage reservoirs above station; most of it is diverted above station by pumping.

Cooperation.- Gage-height record furnished by U. S. Weather Bureau.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.7	0.4	0.4	0.7	0.4	0.4	128	64	0.3			
2	1.2	.4	.4	.6	.5	.4	1,240	62	.2			
3	.7	.4	.5	.5	.5	.4	4,340	72	.2			
4	.4	.3	.7	.5	.5	.4	5,980	77	0			
5	.3	.3	6.5	.6	.6	.6	3,320	72	0			
6	.3	.3	57	.6	.6	.6	1,340	67	0			
7	.2	.3	164	.6	.6	.7	665	46	0			
8	.1	.2	5.8	.6	.5	.4	368	30	0			
9	376	.1	.9	.6	.5	.3	233	18	0			
10	356	.1	.9	.5	.5	.3	138	14	0			
11	200	.1	.7	.4	5.0	.3	99	15	0			
12	138	.3	.7	.4	15	.3	91	88	0			
13	85	.3	.7	.4	2.0	14	57	269	0			
14	57	.3	.9	.4	.4	7.2	d45	432	0			
15	42	.2	.9	.4	.3	5.9	d33	1,190	0			
16	29	d.2	2.0	.4	.4	46	22	1,340	0			
17	22	.3	3.7	.3	.4	233	15	1,400	0			
18	18	.5	3.2	.4	.4	105	15	656	0			
19	14	1.2	2.4	.4	.5	72	18	263	.7			
20	8.6	1.2	2.0	.4	.6	74	14	119	.9			
21	6.5	.7	1.4	.4	.6	295	135	133	1.2			
22	4.2	.5	2.0	.4	.6	297	792	113	.9			
23	3.7	.6	1.4	.4	.5	394	2,730	22	.9			
24	2.8	.4	.7	.4	.5	294	4,060	15	.6			
25	2.0	.6	.6	.4	.5	164	2,540	14	0			
26	1.2	.5	.6	.4	.5	110	1,370	7.9	0			
27	.9	.4	.5	.4	.5	67	604	5.9	0			
28	.7	.4	1.4	.4	.5	48	278	4.7	0			
29	.7	.4	1.7	.4	-	35	156	2.4	0			
30	.6	.4	1.4	.4	-	30	88	1.7	0			
31	.4	-	.9	.4	-	27	-	.4	-			

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	1,374.2	376	0.1	44.3	2,730
November	12.3	1.2	.1	.41	24
December	266.9	164	.4	8.61	529
Calendar year 1944	241,498.6	37,800	0	630	479,000
January	14.1	.7	.3	.45	28
February	34.4	15	.3	1.23	68
March	2,323.2	394	.3	74.9	4,610
April	30,914	5,980	14	1,030	61,320
May	6,614.0	1,400	.4	213	13,120
June	5.9	1.2	0	.20	12
July	0	0	0	0	0
August	0	0	0	0	0
September	0	0	0	0	0
Water year 1944-45	41,559.0	5,980	0	114	82,440

d Doubtful gage-height record; discharge interpolated.

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Nueces River near Tilden, Tex.

Location.- Water-stage recorder, lat. 28°18', long. 98°34', at bridge on State Highway 173, 2 miles upstream from Cow Creek and 10.5 miles south of Tilden, McMullen County. Datum of gage is 183.3 feet above mean sea level, datum of 1929 (levels by State Highway Department).

Drainage area.- 8,192 square miles.

Records available.- November 1942 to September 1945.

Extremes.- Maximum discharge during year, 3,550 second-feet Apr. 27 (gage height, 17.25 feet); no flow at times.

1943-45: Maximum discharge, 29,900 second-feet Sept. 3, 1944 (gage height, 22.98 feet); no flow at times.

Maximum stage known, about 23.7 feet in June 1935, from information by State Highway Department.

Remarks.- Records good except those for period of no gage-height record, which are poor. Part of flow of Nueces River and its headwater tributaries enters Edwards limestone in Balcones fault zone which crosses basin just north of Uvalde. At low stages most of headwater flow enters this formation. About 12,000 acres irrigated from river or jointly from wells and river above station.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	64	0.9	0.5	0.6	0.2	2.2	238	2,840	f7.7	8.6	0.6	0
2	41	.8	.5	.6	.2	2.0	388	2,470	f7.0	7.7	.5	91
3	28	.8	.7	.6	.2	1.8	590	797	f6.1	7.2	.4	110
4	f18	.7	.5	.5	.2	1.5	488	146	5.5	6.3	.3	29
5	12	.7	.6	.5	.3	1.4	525	220	5.0	6.1	.3	11
6	f8.6	.8	.5	.7	.3	1.1	659	321	4.6	5.5	.2	5.2
7	f6.1	.9	.5	.6	.4	.9	804	230	4.0	4.8	.2	2.9
8	5.3	f.7	.6	.6	.3	.9	1,010	212	3.5	4.4	.6	1.6
9	4.4	.6	.5	.5	.2	.9	1,390	95	3.3	3.8	.5	1.0
10	3.3	.5	2.7	.4	.2	.8	1,980	77	3.1	3.5	.4	.7
11	2.9	.5	52	.4	.4	.8	2,970	53	2.9	3.1	.3	.4
12	215	.6	28	.4	67	.8	2,940	305	4.7	2.4	.2	.4
13	356	.5	13	.4	23	1,060	1,860	165	f7.4	2.0	.1	2.5
14	299	.5	7.2	.3	15	1,780	281	180	2.6	1.5	.1	2.3
15	196	.5	4.0	.3	161	1,310	133	368	1.4	1.1	.1	.7
16	136	.6	2.4	.3	117	861	95	321	1.0	.9	.1	.4
17	92	.6	1.6	.3	58	564	64	321	.9	66	0	.3
18	68	.8	1.3	.3	33	210	47	512	6.4	428	0	.1
19	51	1.1	1.0	.7	22	114	37	674	290	428	0	.1
20	39	1.0	.9	7.7	26	64	30	823	268	205	0	.1
21	29	1.0	.7	4.0	16	100	1,150	968	31	92	0	.1
22	22	.7	.6	1.9	12	112	2,400	1,010	20	f41	0	0
23	f18	.6	.6	1.1	12	80	2,500	400	18	17	0	0
24	f13	.6	.6	.9	10	68	1,980	136	17	7.7	0	0
25	9.1	.6	.5	.7	7.9	130	2,020	72	15	4.4	0	0
26	5.5	.5	.5	.5	5.7	282	2,890	44	13	2.7	0	0
27	3.5	.5	.6	.4	4.0	321	3,550	28	12	1.8	0	0
28	2.4	.5	1.1	.4	2.9	225	3,040	19	11	1.2	0	0
29	1.9	.5	1.0	.3	-	138	2,580	f13	9.6	.9	0	148
30	1.4	.5	1.0	.2	-	98	2,660	f9.6	8.9	.8	0	621
31	1.0	-	.8	.2	-	80	-	f8.6	-	.6	0	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	1,752.4	356	1.0	56.5	3,480
November	20.1	1.1	.5	.67	40
December	127.0	52	.5	4.10	252
Calendar year 1944	302,809.6	25,400	0	827	600,500
January	27.3	7.7	.2	.88	54
February	596.4	161	.2	21.3	1,180
March	7,610.1	1,780	.8	245	15,090
April	41,299	3,550	30	1,377	81,920
May	13,747.2	2,840	8.6	443	27,270
June	790.6	290	.9	28.4	1,570
July	1,366.0	428	.6	44.1	2,710
August	4.9	.6	0	.16	9.7
September	1,028.8	621	0	34.3	2,040
Water year 1944-45	68,368.8	3,550	0	187	135,600

f Computed on basis of partly estimated gage-height record.

Note.- No gage-height record June 19 to July 21; discharge computed on basis of recorded range in stage, weather records, and records for Nueces River station near Three Rivers and Frio River at Calliham.

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Nueces River near Three Rivers, Tex.

Location.- Water-stage recorder, lat. 28°26'10", long. 98°11'10", 100 feet downstream from San Antonio, Uvalde & Gulf (Missouri Pacific) Railroad bridge, half a mile downstream from Frio River, and 2 miles southeast of Three Rivers, Live Oak County. Datum of gage is 101.16 feet above mean sea level, datum of 1929.

Drainage area.- 15,600 square miles.

Records available.- July 1915 to September 1945. U. S. Weather Bureau has collected gage-height records in this vicinity since 1922.

Average discharge.- 28 years (1915-18, 1920-45), 821 second-feet.

Extremes.- Maximum discharge during year, 6,670 second-feet June 19 (gage height, 25.40 feet, from graph based on gage readings); minimum, 0.2 second-foot Sept. 21-23, 25-29.

1915-45: Maximum discharge observed, 85,000 second-feet Sept. 18, 1919 (gage height, 46.0 feet), from rating curve extended above 55,000 second-feet; no flow at times.

Remarks.- Records good. Part of flow of Nueces and Frio Rivers and their headwater tributaries enters Edwards limestone in Balcones fault zone which crosses basin just north of Uvalde in an east-west course. At low stages most of headwater flow enters this formation. About 5,000 acres irrigated from river above station, and about 12,000 acres jointly from river and wells.

Rating table, water year 1944-45 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used May 4-6)

1.1	0	1.6	7.2	2.2	43	3.4	218	12.0	2,350
1.2	.6	1.7	11	2.4	65	4.0	311	16.0	3,550
1.3	1.5	1.8	15	2.6	95	5.0	500	20.0	4,830
1.4	2.9	1.9	20	2.8	131	6.0	730	24.0	6,150
1.5	4.8	2.0	27	3.0	163	8.0	1,220		

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	85	14	28	33	61	45	4,020	2,800	21	63	5.0	0.4
2	81	13	24	33	57	44	6,080	2,740	19	43	4.2	1.0
3	61	16	24	34	52	42	3,470	2,800	16	34	4.0	1.3
4	47	17	25	35	50	41	1,520	1,600	14	38	3.1	71
5	38	310	26	33	59	40	1,090	391	11	58	2.6	42
6	33	214	56	33	61	38	1,170	302	9.7	58	2.3	21
7	114	63	808	32	52	35	1,170	364	6.7	33	1.9	9.8
8	193	45	475	32	100	33	1,170	286	5.0	33	1.6	5.0
9	892	36	163	31	82	33	1,300	188	4.4	25	1.3	2.9
10	1,710	34	103	29	64	32	1,550	157	3.1	15	1.0	1.9
11	1,990	31	72	27	59	32	1,910	220	3.3	11	.9	1.3
12	633	28	57	27	465	30	2,380	1,090	249	11	.8	1.0
13	261	26	75	26	2,190	778	2,830	755	554	10	.6	1.0
14	440	23	59	28	2,530	1,940	2,770	264	270	8.3	.5	15
15	364	20	47	27	1,190	2,170	698	212	121	11	.5	9.0
16	240	21	41	25	410	1,690	218	364	63	56	.5	2.6
17	172	21	39	25	270	1,090	164	302	52	580	.4	1.2
18	121	32	37	28	169	646	126	311	1,540	476	.4	.7
19	87	57	34	28	126	241	103	544	5,910	239	.4	.4
20	69	84	32	84	119	172	156	778	4,190	460	.4	.4
21	58	117	35	85	117	116	2,470	946	1,970	249	.4	.3
22	47	63	34	126	97	126	4,480	1,090	1,350	119	.4	.2
23	40	44	32	354	76	144	4,860	1,090	1,430	68	.4	.2
24	36	43	31	970	66	110	3,430	474	1,880	44	.4	.3
25	33	39	31	922	61	92	3,010	173	1,210	32	.4	.3
26	28	49	31	286	58	120	3,310	79	476	21	.4	.2
27	21	93	32	169	52	247	2,740	63	181	13	.5	.2
28	17	50	33	129	48	278	2,980	51	108	9.4	1.3	.2
29	14	38	33	99	-	212	3,220	41	81	8.7	1.1	3.5
30	12	32	33	81	-	157	3,130	35	78	4.6	.7	868
31	15	-	34	71	-	495	-	31	-	4.6	.5	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	7,952	1,990	12	257	15,770
November	1,673	310	13	55.8	3,320
December	2,584	808	24	83.4	5,130
Calendar year 1944	354,132.6	20,000	.5	968	702,500
January	3,942	970	25	127	7,820
February	8,741	2,530	48	312	17,340
March	11,269	2,170	30	364	22,350
April	67,525	6,080	103	2,251	133,900
May	20,541	2,800	31	663	40,740
June	21,826.2	5,910	3.1	728	43,290
July	2,833.6	580	4.6	91.4	5,620
August	38.9	5.0	.4	1.25	77
September	862.3	668	.2	28.7	1,710
Water year 1944-45	149,788.0	6,080	.2	410	297,100

Note.- Discharge Dec. 9-13, May 7 to June 12, June 15 to July 23 computed from graph based on once-daily reading of outside gage.

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Nueces River near Mathis, Tex.

Location.- Water-stage recorder, lat. 28°02', long. 97°52', at bridge on U. S. Highway 59, 200 feet downstream from Texas & New Orleans Railroad bridge, 0.8 mile downstream from Lake Corpus Christi Dam, and 4 miles southwest of Mathis, San Patricio County. Datum of gage is 27.53 feet above mean sea level, datum of 1929.

Drainage area.- 16,660 square miles.

Records available.- August 1939 to September 1945.

Extremes.- Maximum and minimum discharge during year not determined, probably occurred during period of no gage-height record.

1939-45: Maximum discharge, 49,400 second-feet July 12, 1942 (gage height, 37.38 feet); minimum, 3.7 second-feet (regulated) Aug. 15, 1940, minimum daily, 6.8 second-feet (regulated) Aug. 15, 1940.

Maximum stage known, 39.9 feet September 1919 at railroad bridge 200 feet upstream, from floodmark identified by Texas & New Orleans Railroad engineers.

Remarks.- Records good except those for periods of no gage-height record; which are poor. Flow regulated by Lake Corpus Christi Reservoir. (Original capacity at spillway crest, about 64,000 acre-feet, as determined by Texas State Board of Water Engineers, computed from Geological Survey advance topographic sheets, scale 1:48,000, contour interval, 10 feet; the U. S. Soil Conservation Service, in connection with a siltation survey, determined capacity in 1942 to be 43,400 acre-feet, which survey also determined original capacity to be 54,000 acre-feet, indicating a loss of 10,600 acre-feet by siltation). Part of flow of Nueces River and its headwater tributaries enters Edwards limestone in Balcones fault zone which crosses basin just north of Uvalde. At low stages most of headwater flow enters this formation. About 5,000 acres irrigated from river above station, and about 12,000 acres jointly from river and wells above station.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	111	28	93	47	53	45	538	2,740	50	70	50	45
2	104	30	94	44	42	44	2,080	2,570			61	45
3	97	28	94	44	40	44	4,580	2,570			48	44
4	86	41	95	42	40	43	4,180	2,370			56	45
5	73	94	125	53	75	43	1,850	1,600			46	45
6	66	94	121	56	36	70	1,150	700			45	45
7	104	94	90	58	53	43	988	617			46	45
8	174	106	91	52	36	42	957	750			45	45
9	158	90	90	53	35	42	864	554			45	44
10	375	90	138	53	35	42	694	190			45	44
11	960	91	89	53	37	41	1,310	246			45	43
12	1,310	91	85	53	89	39	1,470	326			45	44
13	752	90	88	53	36	68	1,850	237			86	44
14	436	89	86	53	545	356	2,270	672			122	44
15	386	89	86	53	1,560	1,210	2,270	1,150	48		117	44
16	358	100	86	53	1,310	1,630	1,380	771	1,320		118	44
17	292	100	86	54	895	1,530	542	470			117	43
18	228	98	93	62	545	1,050	320	208			117	43
19	196	98	89	53	348	805	224	154			117	44
20	136	89	89	53	201	570	727	47		110	112	44
21	101	89	91	53	316	248	1,180	47		116	75	44
22	95	89	90	53	286	130	2,210	82		122	45	44
23	61	91	90	53	62	126	3,540	345		114	47	44
24	42	91	90	53	62	165	4,420	881		93	46	44
25	37	93	90	56	58	212	3,460	698		52	46	43
26	30	94	90	59	91	62	3,000	518		50	46	43
27	38	91	90	53	254	54	2,870	536		49	48	43
28	28	100	90	64	46	78	2,640	189		49	43	43
29	32	102	86	57	-	127	2,640	45		49	44	44
30	28	94	43	57	-	203	2,770	37		49	44	44
31	28	-	113	57	-	237	-	30	-	50	45	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	6,922	1,310	28	223	13,730
November	2,564	106	28	85.5	5,090
December	2,871	138	43	92.6	5,690
Calendar year 1944	374,573	18,700	28	1,023	742,900
January	1,657	64	42	53.5	3,290
February	7,186	1,560	35	257	14,250
March	9,399	1,630	39	303	18,640
April	58,974	4,580	224	1,966	117,000
May	22,350	2,740	30	721	44,330
June	20,548	-	-	685	40,760
July	2,233	-	-	72.0	4,430
August	2,012	122	43	64.9	3,990
September	1,320	45	43	44.0	2,620
Water year 1944-45	138,036	-	-	378	273,800

Note.- No gage-height record May 31 to June 14, June 16 to July 19; discharge computed on basis of records for stations at Calallen and near Three Rivers.

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Nueces River at Calallen, Tex.

Location.- Staff gage, lat. 27°52'40", long. 97°37'35", at old pump house of city of Corpus Christi, half a mile northwest of Calallen, Nueces County, and half a mile upstream from tidewater and breakwater dam. Datum of gage is 1.12 feet above mean sea level, datum of 1929.
Drainage area.- 16,920 square miles.
Records available.- August 1915 to September 1945 (1918-45 gage heights only).
Extremes.- Maximum gage height observed during year, 7.48 feet June 22; minimum observed, 2.84 feet July 12-14.
1915-45: Maximum gage height observed, 13.58 feet July 13, 1942; no flow Aug. 23-29, 1918 (only period of no flow known).
Remarks.- Discharge not computed. Gage read twice daily.
Cooperation.- Gage readings furnished by city of Corpus Christi.

Gage height, in feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3.99	3.40	3.70	3.71	3.57	3.65	4.19	6.52	3.49	3.81	3.44	3.32
2	3.92	3.49	3.73	3.67	3.59	3.43	4.55	6.47	3.49	3.57	3.46	3.34
3	3.83	3.51	3.74	3.56	3.54	3.42	5.78	6.39	3.50	3.60	3.47	3.36
4	3.76	3.50	3.74	3.52	3.51	3.48	6.79	6.32	3.40	3.58	3.33	3.37
5	3.72	3.49	3.77	3.48	3.51	3.42	7.16	6.15	3.35	3.50	3.38	3.26
6	3.66	3.67	3.80	3.51	3.60	3.34	6.24	5.60	3.21	3.33	3.43	3.19
7	3.67	3.68	3.80	3.61	3.52	3.43	5.35	4.73	3.17	3.27	3.29	3.32
8	4.01	3.70	3.70	3.57	3.44	3.45	5.10	4.66	3.19	3.36	3.31	3.34
9	3.83	3.75	3.72	3.56	3.45	3.37	4.97	4.69	3.18	3.34	3.39	3.36
10	3.80	3.76	3.75	3.55	3.39	3.41	4.87	4.40	3.25	3.25	3.31	3.28
11	4.13	3.69	3.83	3.56	3.44	3.45	4.91	3.99	3.25	3.07	3.31	3.24
12	4.83	3.73	3.72	3.56	3.48	3.40	5.24	4.05	3.32	2.96	3.36	3.31
13	5.09	3.71	3.70	3.51	3.56	3.58	5.39	4.07	4.06	2.96	3.27	3.40
14	4.73	3.71	3.71	3.57	3.59	3.73	5.66	4.20	3.63	2.92	3.36	3.36
15	4.34	3.66	3.72	3.60	4.42	4.19	5.97	4.70	3.47	3.17	3.66	3.33
16	4.22	3.68	3.70	3.56	5.20	5.04	6.05	5.02	3.43	3.27	3.64	3.36
17	4.17	3.70	3.77	3.56	5.09	5.39	5.42	4.60	3.45	3.63	3.64	3.27
18	4.10	3.70	3.73	3.59	4.82	5.40	4.60	4.19	3.47	3.61	3.68	3.28
19	3.98	3.75	3.74	3.59	4.43	5.04	4.25	4.02	3.62	3.64	3.67	3.21
20	3.94	3.74	3.68	3.61	4.18	4.82	4.25	3.95	5.86	3.70	3.66	3.28
21	3.84	3.68	3.70	3.60	3.98	4.50	5.73	3.67	6.96	3.71	3.65	3.15
22	3.80	3.64	3.71	3.56	4.07	4.10	5.98	3.65	7.46	3.70	3.57	3.16
23	3.73	3.69	3.73	3.56	4.06	3.87	6.15	3.65	7.05	3.72	3.47	3.27
24	3.62	3.68	3.76	3.56	3.66	3.81	6.79	4.23	5.45	3.74	3.41	3.31
25	3.55	3.70	3.74	3.58	3.59	3.90	7.30	4.79	4.30	3.67	3.44	3.29
26	3.49	3.70	3.77	3.56	3.53	3.97	7.33	4.66	4.75	3.43	3.52	3.32
27	3.51	3.71	3.75	3.57	3.60	3.67	7.05	4.51	4.90	3.34	3.60	3.29
28	3.48	3.72	3.75	3.56	3.96	3.52	6.81	4.48	4.77	3.32	3.36	3.32
29	3.49	3.69	3.71	3.58	-	3.63	6.52	4.13	4.45	3.36	3.36	3.34
30	3.50	3.74	3.72	3.56	-	3.74	6.42	3.83	4.25	3.28	3.35	3.44
31	3.44	-	3.72	3.55	-	3.94	-	3.47	-	3.37	3.29	-

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

West Nueces River near Brackettville, Tex.

Location.- Water-stage recorder, lat. 29°28'55", long. 100°14'20", at Bruce Ranch, 11 miles upstream from Liveoak Creek and 15.8 miles northeast of Brackettville, Kinney County. Datum of gage is 1,326.8 feet above mean sea level, datum of 1929.
Drainage area.- 700 square miles.
Records available.- September 1939 to September 1945.
Extremes.- Maximum discharge during year, 1.1 second-feet Jan. 21, 22 (gage height, 2.84 feet); no flow most of time.
1939-45: Maximum gage height, 11.56 feet Oct. 27, 1939, from floodmark (discharge not determined); no flow most of time.
Maximum stage known, 48.0 feet June 14, 1935, from floodmark, at site 0.6 mile above gage (discharge at a point 33 miles above gage and 2½ miles downstream from Kickapoo Creek, 580,000 second-feet, by slope-area method; a second determination 24 miles below gage and 8 miles north of Cline, 536,000 second-feet, by slope-area method).
Remarks.- Records poor. In ordinary years, most of runoff from basin is lost by seepage into Edwards limestone above station. No diversion above station.

Discharge, in second-feet, 1944-45

Day	Discharge	Day	Discharge	Day	Discharge
Jan. 1	0	Jan. 11	0	Jan. 21	1.1
2	0	12	0	22	1.1
3	0	13	0	23	.9
4	0	14	0	24	.7
5	0	15	0	25	.4
6	0	16	0	26	.3
7	0	17	0	27	.2
8	0	18	0	28	.1
9	0	19	0	29	0
10	0	20	.8	30	0
				31	0

Monthly discharge, in second-feet, of West Nueces River near Brackettville, Tex., 1944-45

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	0	0	0	0	0
November	0	0	0	0	0
December	0	0	0	0	0
Calendar year 1944	6.8	1.0	0	.02	14
January	5.6	1.1	0	.18	11
February	0	0	0	0	0
March	0	0	0	0	0
April	0	0	0	0	0
May	0	0	0	0	0
June	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 1944-45	5.6	1.1	0	.02	11

Frio River at Concan, Tex.

Location.- Water-stage recorder, lat. 29°29', long. 99°42', half a mile southeast of Concan post office, Uvalde County, and 15 miles upstream from Dry Frio River. Datum of gage is 1,203.71 feet above mean sea level, datum of 1929.

Drainage area.- 485 square miles.

Records available.- October 1923 to September 1945.

Average discharge.- 20 years (1924-29, 1930-45), 111 second-feet.

Extremes.- Maximum discharge during year, 1,560 second-feet Jan. 18 (gage height, 3.77 feet); minimum, 13 second-feet Sept. 25-28.

1923-45: Maximum discharge, 162,000 second-feet July 1, 1932 (gage height, 34.44 feet, from floodmarks), by slope-area method; minimum observed, 8.1 second-feet Aug. 2, 3, 1928.

Remarks.- Records good. Part of flow of Frio River enters Edwards limestone in Balcones fault zone which crossee basin just north of Uvalde and below station. Most of low flow enters this formation. No diversion above station.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	72	64	50	61	140	102	152	89	66	41	26	18
2	69	64	52	61	140	102	148	89	66	40	26	17
3	69	64	64	61	136	102	140	99	66	40	26	17
4	127	61	69	61	132	102	136	99	64	40	24	17
5	114	61	75	61	132	102	132	95	61	38	24	16
6	95	61	72	61	128	99	128	92	59	38	24	16
7	86	61	72	59	125	99	125	89	57	38	24	15
8	80	59	72	61	121	99	125	86	57	37	24	15
9	78	57	72	61	121	99	125	157	57	35	24	15
10	78	57	69	64	121	99	125	210	54	35	22	15
11	78	57	69	64	117	99	125	125	54	40	22	14
12	75	57	66	64	128	99	121	125	74	38	20	15
13	75	57	66	64	121	99	121	106	57	37	20	16
14	75	54	64	64	117	99	117	102	52	37	18	14
15	72	52	64	61	114	95	117	99	52	40	18	14
16	72	52	64	61	114	95	114	95	50	40	18	14
17	72	54	64	102	114	95	110	92	50	37	18	14
18	72	57	64	698	117	95	106	89	70	36	18	14
19	72	57	64	326	121	92	102	86	64	35	17	14
20	72	52	64	245	114	89	132	86	54	34	18	14
21	72	52	64	213	117	89	125	89	54	32	20	14
22	69	52	64	195	114	89	114	86	52	31	18	14
23	69	52	64	182	106	86	106	83	50	31	17	14
24	69	61	64	173	106	86	114	83	48	29	17	14
25	69	59	64	169	106	86	106	80	45	29	17	14
26	69	54	64	161	106	83	102	78	43	28	18	13
27	66	52	64	161	108	83	99	75	43	26	18	13
28	66	52	64	157	102	83	99	72	41	26	17	14
29	66	52	64	148	-	225	95	72	41	26	16	45
30	64	50	64	144	-	194	92	69	41	26	17	31
31	64	-	64	140	-	140	-	66	-	26	17	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	2,346	127	64	75.7	4,650
November	1,694	64	50	56.5	3,360
December	2,020	75	50	65.2	4,010
Calendar year 1944	28,265	879	26	77.2	56,060
January	4,203	698	59	136	8,340
February	3,336	140	102	119	6,620
March	3,206	225	83	103	6,360
April	3,553	152	92	118	7,050
May	2,963	210	66	95.6	5,880
June	1,642	74	41	54.7	3,260
July	1,065	41	26	34.4	2,110
August	623	26	16	20.1	1,240
September	490	45	13	16.3	972
Water year 1944-45	27,141	698	13	74.4	53,850

Peak discharge.- Jan. 18 (5 a.m.) 1,560 sec.-ft.; Mar. 29 (3:30 p.m.) 900 sec.-ft.; May 9 (11:30 p.m.) 574 sec.-ft.

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Frio River near Derby, Tex.

Location.- Water-stage recorder and concrete control, lat. 28°44'10", long. 99°08'45" at bridge on U. S. Highway 81, 150 feet upstream from International-Great Northern Railroad bridge, 750 feet downstream from Leona River, and 2.4 miles south of Derby, Frio County. Datum of gage is 449.3 feet above mean sea level, datum of 1929.

Drainage area.- 3,493 square miles.

Records available.- August 1915 to September 1945.

Average discharge.- 30 years, 160 second-feet.

Extremes.- Maximum discharge during year, 6,460 second-feet Sept. 30 (gage height, 9.75 feet); no flow at times.
1915-45: Maximum discharge, 230,000 second-feet July 4, 1932 (gage height, 29.60 feet, present site, from floodmarks at former site), by slope-area method; no flow at times.

Remarks.- Records good. Part of flow of Frio River and its headwater tributaries enters Edwards limestone in Balcones fault zone which crosses basin just north of Uvalde. At low stages most of headwater flow enters this formation. Diversions above station for irrigation.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.3	0.1	3.2	8.6	15	4.6	306	4.6	0			0
2	.2	0	2.6	6.2	15	6.2	426	3.8	0			0
3	.1	0	3.2	5.4	14	6.2	337	3.2	0			0
4	95	0	5.4	4.6	14	7.0	205	2.6	0			0
5	3,030	.2	5.4	4.6	13	7.0	150	2.2	0			0
6	3,640	.1	2.2	5.4	21	7.0	97	1.8	0			0
7	568	0	5.5	5.4	68	7.8	70	1.8	0			0
8	189	.1	10	5.4	40	7.8	57	1.4	0			0
9	64	.2	6.2	6.2	30	7.8	51	.5	0			0
10	33	.2	5.4	6.2	15	7.8	48	.3	0			0
11	17	.2	4.6	7.0	11	7.8	44	.2	0			0
12	10	.1	3.8	6.2	15	7.8	40	.2	0			0
13	6.2	0	3.8	6.2	11	24	36	.2	0			0
14	5.4	0	3.8	6.2	10	28	32	.2	0			0
15	3.8	0	3.8	5.4	18	54	29	.2	0			0
16	3.2	0	3.8	6.2	23	29	25	7.3	0			0
17	3.2	0	3.8	7.0	14	39	21	6.2	0			0
18	3.8	.1	3.8	7.0	11	21	16	1.8	0			0
19	4.6	.3	4.6	363	7.8	12	12	.8	9.1			0
20	3.2	.5	5.4	1,960	5.4	8.6	9.4	.3	424			0
21	3.2	1.4	7.0	444	5.4	10	11	.2	72			0
22	2.6	1.8	7.8	216	4.6	20	129	.1	21			0
23	1.8	2.2	7.8	138	3.8	12	77	0	7.8			0
24	1.0	2.2	8.6	94	3.2	7.8	57	0	2.2			0
25	.5	3.2	8.6	70	3.8	5.4	38	0	.5			0
26	.5	4.6	10	51	4.6	4.6	23	0	.3			0
27	.4	3.2	10	41	4.6	3.2	14	0	.3			0
28	.3	3.2	12	33	4.6	4.6	11	0	.1			0
29	.2	3.8	12	27	-	5.4	8.6	0	0			0
30	.2	3.8	12	23	-	5.4	5.4	0	0			4,150
31	.2	-	11	20	-	17	-	0	-			-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	7,690.9	3,640	0.1	248	15,250
November	31.5	4.6	0	1.05	62
December	197.1	12	2.2	6.36	391
Calendar year 1944	23,722.9	3,640	0	64.8	47,040
January	3,589.2	1,960	4.6	116	7,120
February	408.8	68	3.2	14.6	811
March	395.8	54	3.2	12.8	785
April	2,385.4	426	5.4	79.5	4,730
May	39.9	7.3	0	1.29	79
June	537.3	424	0	17.9	1,070
July	0	0	0	0	0
August	0	0	0	0	0
September	4,150	4,150	0	138	8,230
Water year 1944-45	19,425.9	4,150	0	53.2	38,530

Peak discharge.- Oct. 6 (2 a.m.) 5,800 sec.-ft.; Sept. 30 (10 p.m.) 6,460 sec.-ft.
Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Frio River at Calliham, Tex.

Location.- Water-stage recorder and concrete control, lat. 28°29'30", long. 98°20'45", at bridge on Calliham-Whitsett highway, 1 mile north of Calliham, McMullen County, and 9.7 miles downstream from San Miguel Creek. Datum of gage is 153.47 feet above mean sea level, datum of 1929.

Drainage area.- 5,491 square miles.

Records available.- October 1924 to April 1926, April 1932 to September 1945.

Average discharge.- 14 years (1924-25, 1932-45), 289 second-feet.

Extremes.- Maximum discharge during year, 5,070 second-feet June 19 (gage height, 19.21 feet); no flow Aug. 7 to Sept. 29.

1924-26, 1932-45: Maximum discharge, 109,000 second-feet July 6, 1932 (gage height, 39.20 feet, from floodmarks), by slope-area method; no flow at times.

Remarks.- Records good. Part of flow of Frio River and its headwater tributaries enters Edwards limestone in Balcones fault zone which crosses basin just north of Uvalde. At low stages most of headwater flow enters this formation. Diversions above station for irrigation.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4.3	5.5	3.4	12	41	12	4,010	31	2.9	13	0.7	0
2	4.0	5.2	4.5	12	37	12	2,300	22	3.1	9.7	.6	0
3	3.4	7.1	4.5	13	32	12	752	17	4.3	7.1	.5	0
4	3.4	8.9	3.8	12	30	11	367	13	3.6	5.5	.4	0
5	4.0	49	4.0	10	37	10	413	10	3.6	4.0	.3	0
6	82	16	222	9.7	32	9.2	397	8.3	2.7	5.2	.1	0
7	84	8.7	208	10	50	8.3	277	7.1	1.7	6.2	0	0
8	412	6.8	118	9.7	73	8.3	184	8.3	1.0	4.3	0	0
9	1,080	12	66	8.3	52	7.8	133	9.2	.5	2.9	0	0
10	1,760	11	46	7.1	40	7.1	94	6.8	.1	1.9	0	0
11	954	8.7	30	6.8	102	7.1	75	5.8	.1	1.7	0	0
12	167	6.8	21	6.8	924	7.1	61	66	226	1.3	0	0
13	79	5.5	17	6.8	1,560	202	54	60	195	1.0	0	0
14	54	5.2	12	6.5	1,030	177	50	19	79	.9	0	0
15	37	5.5	11	5.5	268	116	46	16	46	.9	0	0
16	28	5.8	12	5.2	113	46	40	12	26	252	0	0
17	20	6.5	11	4.8	69	23	37	8.7	19	464	0	0
18	16	17	8.7	6.2	50	17	36	6.5	1,600	145	0	0
19	12	18	9.2	5.5	49	42	31	5.5	3,710	55	0	0
20	10	20	13	5.8	52	40	31	4.8	818	30	0	0
21	7.8	24	12	80	44	36	926	4.8	391	17	0	0
22	6.8	15	10	104	34	34	1,370	5.5	229	11	0	0
23	5.5	16	8.7	544	28	27	786	4.8	528	8.3	0	0
24	4.8	14	7.8	880	24	21	343	4.5	384	6.8	0	0
25	4.3	12	7.5	421	20	15	376	4.5	143	4.5	0	0
26	3.8	8.3	6.8	184	17	11	265	4.3	71	3.6	0	0
27	3.4	11	7.1	128	15	8.3	130	4.8	43	2.7	0	0
28	2.9	9.2	7.8	94	14	10	86	4.3	30	1.8	0	0
29	6.8	6.2	7.8	75	-	15	63	5.2	20	1.4	0	0
30	7.8	4.3	10	60	-	19	44	4.3	15	.9	0	589
31	6.5	-	11	50	-	351	-	3.8	-	.8	0	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	4,874.5	1,760	2.9	157	9,670
November	349.2	49	4.3	11.6	693
December	921.6	222	3.4	29.7	1,830
Calendar year 1944	68,754.8	9,400	0	188	136,400
January	2,783.7	880	4.8	89.8	5,520
February	4,837	1,560	14	173	9,590
March	1,322.2	351	7.1	42.7	2,620
April	13,777	4,010	31	459	27,330
May	377.8	66	3.8	12.2	749
June	8,596.6	3,710	.1	287	17,050
July	1,070.4	464	.8	34.5	2,120
August	2.6	.7	0	.08	5.2
September	589	589	0	19.6	1,170
Water year 1944-45	39,501.6	4,010	0	108	78,350

Peak discharge.- Apr. 1 (3:30 p.m.) 4,950 sec.-ft.; June 19 (2 a.m.) 5,070 sec.-ft.

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Leona River spring flow near Uvalde, Tex.

Location.- Water-stage recorder, lat. 29°09', long. 99°44', at old road crossing on White's ranch, 3¼ miles downstream from Cooks Slough and 5.6 miles southeast of Uvalde, Uvalde County. Datum of gage is 838.4 feet above mean sea level, datum of 1929.

Records available.- January 1939 to September 1945. Occasional discharge measurements since 1925 in connection with seepage investigations.

Extremes.- Maximum daily spring discharge during year, 18 second-feet Mar. 12-14, Mar. 29 to Apr. 2; maximum gage height, 3.48 feet Mar. 13; minimum daily spring discharge, 6.2 second-feet Sept. 27.

1939-45: Maximum daily spring discharge, 33 second-feet Feb. 15-18, 1942; maximum gage height, from floodmark, 13.63 feet Aug. 30, 1944; minimum daily spring discharge, 4.9 second-feet Aug. 26, 1944.

Remarks.- Records good. Discharge represents flow from several springs that enter river above station and below Uvalde. Surface runoff from precipitation is excluded. A few small diversions by pumping from river channel above station.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	12	12	14	15	14	16	e18	15	15	12	9.3	8.3
2	12	12	14	15	14	16	e18	15	15	12	9.3	7.9
3	12	12	15	15	14	16	e17	16	15	12	9.3	7.9
4	e12	13	15	15	15	17	17	15	15	12	9.3	7.9
5	12	13	15	15	15	17	16	15	15	12	8.8	7.9
6	12	13	15	15	14	17	16	15	14	12	8.8	7.5
7	12	13	15	15	15	17	16	15	14	11	8.8	7.5
8	12	13	15	14	15	17	16	15	15	11	8.3	7.5
9	12	13	14	14	15	17	17	15	15	11	8.3	7.5
10	13	13	14	14	14	17	17	16	15	11	8.3	7.5
11	13	13	14	14	14	17	17	e16	14	11	8.3	7.5
12	13	14	14	14	15	18	17	e17	e14	11	8.3	7.5
13	13	14	14	14	15	e18	17	17	14	11	7.9	7.5
14	13	14	14	14	15	e18	17	17	14	11	7.9	7.5
15	13	14	14	14	15	e17	16	17	14	12	7.9	7.5
16	13	14	14	14	15	17	16	17	14	11	7.9	7.5
17	13	14	14	e14	15	e17	16	17	14	11	7.9	7.5
18	13	15	14	e14	15	e17	16	17	14	11	7.9	7.5
19	13	15	14	e14	15	e17	16	17	14	11	7.5	7.5
20	13	14	14	e14	15	17	17	17	14	11	7.5	7.5
21	13	14	14	14	15	17	17	17	14	11	7.5	7.1
22	13	14	14	14	15	17	16	17	14	11	7.5	6.8
23	13	14	14	14	15	17	16	17	14	11	7.5	6.8
24	13	e14	14	14	15	17	16	17	14	10	7.5	6.8
25	13	14	14	14	15	17	16	17	14	10	e8.2	6.5
26	13	14	15	14	16	17	16	16	14	10	8.8	6.5
27	13	14	15	14	16	17	16	15	13	10	8.3	6.2
28	13	14	15	14	16	17	16	15	13	9.8	8.3	e6.3
29	13	14	15	14	-	18	15	15	12	9.8	8.3	e6.4
30	13	14	15	14	-	18	15	15	12	9.8	8.3	6.5
31	13	-	15	14	-	18	-	15	-	9.3	8.3	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	394	13	12	12.7	781
November	408	15	12	13.6	809
December	446	15	14	14.4	885
Calendar year 1944	3,790.2	15	4.9	10.4	7,520
January	441	15	14	14.2	875
February	417	16	14	14.9	827
March	530	18	16	17.1	1,050
April	492	18	15	16.4	976
May	497	17	15	16.0	986
June	422	15	12	14.1	837
July	338.7	12	9.3	10.9	672
August	256	9.3	7.5	8.26	508
September	218.3	8.3	6.2	7.28	433
Water year 1944-45	4,860.0	18	6.2	13.3	9,640

e Gage height not representative of average spring flow for day; discharge interpolated.
Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Atascosa River at Whitsett, Tex.

Location.- Water-stage recorder and wooden control, lat. 28°39', long. 98°18', 0.9 mile west of Whitsett, Live Oak County, and 4 miles downstream from La Parita Creek. Datum of gage is 159.0 feet above mean sea level, datum of 1929.

Drainage area.- 1,171 square miles.

Records available.- September 1924 to May 1926, May 1932 to September 1945.

Average discharge.- 14 years (1924-25, 1932-45), 147 second-feet.

Extremes.- Maximum discharge during year, 2,980 second-feet Apr. 22 (gage height, 19.71 feet); no flow at times.

1924-26, 1932-45: Maximum discharge, 39,300 second-feet July 7, 1942 (gage height, 38.3 feet, from floodmark), from rating curve extended above 12,000 second-feet on basis of slope-area determination at gage height 38.0 feet; no flow at times.

Remarks.- Records good. No diversion above station.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.8	2.2	15	16	16	24	1,960	26	2.8	20	5.5	3.7
2	2.2	2.9	14	16	16	24	2,010	23	2.8	18	5.2	4.4
3	1.9	7.9	14	16	16	23	324	20	2.8	18	4.3	3.8
4	1.4	109	13	15	18	23	91	18	2.6	30	3.8	2.0
5	1.3	345	16	15	18	23	48	17	2.4	23	3.4	.8
6	1.1	54	218	15	18	23	34	16	2.2	16	2.9	0
7	10	32	415	15	29	21	26	16	2.1	14	2.4	0
8	7.6	25	94	15	30	20	23	15	1.7	12	2.1	0
9	4.5	20	49	15	20	19	21	14	1.4	10	2.0	0
10	11	17	37	15	18	19	19	13	1.0	9.4	1.5	0
11	6.2	15	30	14	20	19	18	13	1.2	9.0	.8	0
12	4.0	14	26	14	86	19	17	16	46	8.2	0	0
13	3.4	14	23	14	801	20	16	12	83	7.8	0	40
14	3.1	13	22	14	612	22	15	11	76	7.5	0	14
15	2.9	13	20	14	131	30	14	10	30	7.2	0	3.7
16	2.9	12	20	14	71	20	13	9.0	13	44	0	1.7
17	2.8	17	19	15	54	19	12	8.2	8.5	101	0	1.2
18	2.8	32	19	16	45	18	12	7.2	237	26	0	.6
19	2.6	43	17	40	43	16	11	6.8	1,100	15	0	0
20	2.5	100	17	112	48	16	364	6.5	1,410	12	0	0
21	2.4	50	16	51	45	15	1,790	6.5	410	9.8	0	0
22	2.4	26	16	31	37	14	2,740	6.5	99	9.4	0	0
23	2.4	18	16	23	33	14	824	6.2	292	8.5	5.3	0
24	2.4	17	16	20	30	14	134	5.9	318	7.8	1.7	0
25	2.4	16	16	20	28	13	739	5.2	96	7.2	10	0
26	2.4	95	16	18	27	13	534	4.7	56	5.9	5.0	0
27	2.5	40	18	18	26	12	87	4.3	40	5.2	2.1	0
28	2.6	21	19	18	25	12	51	4.0	30	4.5	.3	0
29	2.5	17	19	17	-	11	39	3.6	25	4.3	0	208
30	2.4	15	19	16	-	36	32	3.1	21	3.8	0	419
31	2.4	-	18	16	-	392	-	3.1	-	3.8	8.1	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	103.8	11	1.1	3.35	206
November	1,203.0	345	2.2	40.1	2,390
December	1,287	415	13	41.5	2,550
Calendar year 1944	25,577.5	4,980	0	69.9	50,730
January	668	112	14	21.5	1,320
February	2,361	801	16	84.3	4,680
March	964	392	11	31.1	1,910
April	12,018	2,740	11	401	23,840
May	330.8	26	3.1	10.7	656
June	4,413.5	1,410	1.0	147	8,750
July	478.3	101	3.8	15.4	949
August	66.4	10	0	2.14	132
September	702.9	419	0	23.4	1,390
Water year 1944-45	24,596.7	2,740	0	67.4	48,780

Peak discharge.- Feb. 13 (6 p.m.) 1,050 sec.-ft.; Apr. 2 (7:30 a.m.) 2,410 sec.-ft.; Apr. 22 (11:30 a.m.) 2,980 sec.-ft.; Apr. 25 (7:30 p.m.) 1,080 sec.-ft.; June 20 (8:30 a.m.) 1,730 sec.-ft.

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Rio Grande at Thirtymile Bridge, near Creede, Colo.

Location.- Water-stage recorder, lat. 37°44', long. 107°16', in sec. 13, T. 40 N., R. 4 W., 500 feet upstream from Squaw Creek, three-quarters of a mile downstream from Rio Grande Reservoir, and 20 miles southwest of Creede.

Drainage area.- 163 square miles.

Records available.- June 1909 to September 1913 and October 1933 to September 1945 in reports of Geological Survey. June 1909 to September 1945 in reports of State engineer.

Average discharge.- 32 years (1910-23, 1926-45), 229 second-feet.

Extremes.- Maximum discharge during year, 1,500 second-feet June 14 (gage height, 4.07 feet); minimum daily, 2.8 second-feet Nov. 1 to Feb. 28.
1909-45: Maximum discharge, 7,500 second-feet June 28, 1927 (gage height, 7.03 feet); minimum daily, 0.6 second-foot at times when reservoir was about empty and gates were closed.

Remarks.- Records excellent except those below 10 second-feet, which are fair. Flow regulated by Rio Grande Reservoir (capacity, 51,110 acre-feet).

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	63	2.8	2.8	2.8	2.8	3.0	3.5	162	575	880	263	99
2	74	2.8	2.8	2.8	2.8	3.0	3.5	5.2	675	960	348	91
3	82	2.8	2.8	2.8	2.8	3.0	3.5	4.8	705	1,020	340	82
4	76	2.8	2.8	2.8	2.8	3.0	3.5	5.2	749	960	219	79
5	71	2.8	2.8	2.8	2.8	3.0	3.5	5.4	896	896	204	74
6	71	2.8	2.8	2.8	2.8	3.0	3.5	91	1,110	723	210	69
7	71	2.8	2.8	2.8	2.8	3.0	3.5	286	1,220	636	240	68
8	71	2.8	2.8	2.8	2.8	3.0	3.5	329	1,040	670	228	62
9	71	2.8	2.8	2.8	2.8	3.0	3.5	376	717	735	202	61
10	57	2.8	2.8	2.8	2.8	3.0	3.5	416	865	798	178	58
11	52	2.8	2.8	2.8	2.8	3.0	4.0	310	969	798	160	57
12	52	2.8	2.8	2.8	2.8	3.0	4.0	234	969	742	216	54
13	52	2.8	2.8	2.8	2.8	3.0	4.0	216	1,150	699	183	52
14	52	2.8	2.8	2.8	2.8	3.0	4.0	303	1,470	648	160	51
15	52	2.8	2.8	2.8	2.8	3.0	4.0	376	1,430	664	143	50
16	52	2.8	2.8	2.8	2.8	3.0	4.0	364	1,070	711	131	58
17	54	2.8	2.8	2.8	2.8	3.0	4.0	394	705	735	118	69
18	54	2.8	2.8	2.8	2.8	3.0	4.0	540	969	770	116	55
19	54	2.8	2.8	2.8	2.8	3.0	4.0	615	1,040	711	116	60
20	66	2.8	2.8	2.8	2.8	3.5	4.0	555	1,100	425	123	64
21	79	2.8	2.8	2.8	2.8	3.5	4.0	412	1,160	247	108	55
22	82	2.8	2.8	2.8	2.8	3.5	4.0	360	1,190	202	99	51
23	84	2.8	2.8	2.8	2.8	3.5	4.0	364	1,250	289	93	47
24	84	2.8	2.8	2.8	2.8	3.5	4.0	485	1,030	412	89	48
25	77	2.8	2.8	2.8	2.8	3.5	40	675	880	340	95	43
26	84	2.8	2.8	2.8	2.8	3.5	162	777	952	237	91	42
27	84	2.8	2.8	2.8	2.8	3.5	228	756	944	180	131	42
28	84	2.8	2.8	2.8	2.8	3.5	228	805	944	191	125	50
29	86	2.8	2.8	2.8	-	3.5	228	850	865	202	99	61
30	84	2.8	2.8	2.8	-	3.5	237	842	828	266	102	66
31	18	-	2.8	2.8	-	3.5	-	711	-	279	97	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	2,093	86	18	67.5	4,150
November	84.0	2.8	2.8	2.80	167
December	86.8	2.8	2.8	2.80	172
Calendar year 1944	95,777.8	2,150	2.8	262	190,000
January	86.8	2.8	2.8	2.80	172
February	78.4	2.8	2.8	2.80	156
March	99.0	3.5	3.0	3.19	196
April	1,214.0	237	3.5	40.5	2,410
May	12,624.6	850	4.8	407	25,040
June	29,467	1,470	575	982	58,450
July	18,026	1,020	180	581	35,750
August	5,027	348	89	162	9,970
September	1,818	99	42	60.6	3,610
Water year 1944-45	70,704.6	1,470	2.8	194	140,200

Note.- No gage-height record Nov. 3 to Apr. 19; discharge computed on basis of gate openings at Rio Grande Reservoir.

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

Rio Grande at Wason, below Creede, Colo.

Location.- Water-stage recorder, lat. 37°49', long. 106°53', in NE¼ sec. 8, T. 41 N., R. 1 E., at Wason, 1½ miles downstream from Willow Creek and 3 miles southeast of Creede.

Drainage area.- 705 square miles.

Records available.- April 1907 to September 1913 and October 1933 to September 1945 in reports of Geological Survey. April 1907 to September 1945 in reports of State engineer.

Average discharge.- 38 years, 635 second-feet.

Extremes.- Maximum discharge during year, 2,770 second-feet June 15 (gage height, 3.63 feet); minimum daily, 89 second-feet Mar. 20.

1907-45: Maximum discharge, 9,750 second-feet June 28, 1927 (gage height, 7.65 feet); minimum not determined.

Remarks.- Records excellent except those for period of ice effect or no gage-height record, which are fair. Diversions above station for irrigation. Flow regulated by three reservoirs (total capacity, 122,900 acre-feet).

Rating table, water year 1944-45, except periods of ice effect (gage height, in feet, and discharge, in second-feet)

0.4	85	1.6	560
.5	105	1.9	790
.7	156	2.6	1,430
1.0	255	3.0	1,880
1.3	385	3.5	2,570

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	206	165	a138	115	110	*107	183	652	1,330	1,370	756	367
2	267	137	a144	110	120	101	209	730	1,330	1,440	798	349
3	248	132	a149	115	124	107	165	602	1,370	1,470	858	331
4	233	125	a140	118	113	107	115	652	1,410	1,430	730	279
5	219	129	a130	120	110	101	124	660	1,630	1,360	668	255
6	212	145	a130	125	112	115	145	675	1,830	1,200	722	237
7	212	134	a135	125	105	112	193	918	2,010	1,100	722	226
8	209	127	a130	130	110	117	263	1,080	1,940	1,070	722	219
9	209	122	a122	138	115	119	287	1,020	1,530	1,120	623	202
10	209	124	a118	137	118	117	226	1,150	1,480	1,250	574	199
11	196	124	a119	135	115	117	171	1,320	1,630	1,360	478	196
12	196	132	a122	130	105	115	162	1,120	1,720	1,280	534	189
13	196	134	a125	135	108	115	137	1,170	2,090	1,180	508	186
14	196	103	*a122	125	115	105	142	1,160	2,570	1,130	490	183
15	219	110	120	115	120	105	134	1,080	2,520	1,130	468	180
16	271	142	120	*118	118	95	124	987	2,010	1,150	446	189
17	267	140	118	125	a115	95	129	1,060	1,640	1,190	424	202
18	237	127	125	119	a115	95	165	1,300	1,680	1,240	484	193
19	226	93	130	110	*a108	99	255	1,370	1,870	1,250	495	186
20	216	103	138	102	105	89	372	1,340	1,800	1,070	508	189
21	230	107	142	98	101	97	440	1,130	1,880	850	490	186
22	230	119	140	94	99	105	434	1,040	1,980	652	407	177
23	233	148	155	92	107	110	376	1,050	2,050	714	372	174
24	230	*134	158	98	115	105	279	1,180	1,920	850	372	171
25	230	127	155	108	99	101	237	1,500	1,640	875	380	171
26	226	a116	150	120	117	107	358	1,670	1,660	730	376	165
27	226	a114	148	125	105	112	412	1,920	1,610	660	407	162
28	226	a121	152	118	115	101	434	1,890	1,560	581	424	174
29	226	a130	150	105	-	105	478	2,000	1,470	588	367	202
30	226	a135	148	94	-	115	560	1,960	1,370	588	358	206
31	216	-	120	102	-	137	-	1,650	-	690	358	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	6,943	271	196	224	13,770
November	3,799	165	93	127	7,540
December	4,193	158	118	135	8,320
Calendar year 1944	267,205	3,970	66	730	530,000
January	3,601	138	92	116	7,140
February	3,119	124	99	111	6,190
March	3,328	137	89	107	6,600
April	7,709	560	115	257	15,290
May	37,036	2,000	602	1,195	73,460
June	52,530	2,570	1,330	1,751	104,200
July	32,568	1,470	581	1,051	64,600
August	16,319	858	358	526	32,370
September	6,345	367	162	212	12,590
Water year 1944-45	177,490	2,570	89	486	352,100

* Winter discharge measurement made on this day.

a No gage-height record (stage-discharge relation affected by ice during most of period); discharge computed on basis of 2 discharge measurements and weather records.

Note.- Stage-discharge relation affected by ice Dec. 15 to Feb. 16, Feb. 20-25.

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

Rio Grande near Del Norte, Colo.

Location.- Water-stage recorder, lat. 37°41', long. 106°28", in NW¼ sec. 29, T. 40 N., R. 5 E., 5 miles upstream from Pinos Creek and 6 miles west of Del Norte. Datum of gage is 7,982.21 feet above mean sea level, datum of 1929.

Drainage area.- 1,320 square miles.

Records available.- July 1889 to November 1906 (at site 4 miles downstream), April 1908 to September 1913, and October 1933 to September 1945 in reports of Geological Survey. July 1889 to September 1906 and April 1908 to September 1945 in reports of State engineer. May to September 1907 (at site 4 miles downstream), unpublished, in files of State engineer.

Average discharge.- 56 years (1889-1945), 962 second-feet.

Extremes.- Maximum discharge during year, 4,030 second-feet June 15 (gage height, 3.90 feet); minimum daily, 132 second-feet Jan. 23.

1889-1945: Maximum discharge, 18,000 second-feet Oct. 5, 1911 (gage height, 6.80 feet), from rating curve extended above 6,000 second-feet; minimum daily, 90 second-feet Dec. 3, 1934.

Remarks.- Records excellent except those for periods of ice effect or no gage-height record, which are fair. Small diversions above station for irrigation. Flow regulated by three main reservoirs (total capacity, 122,900 acre-feet) and several smaller ones.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	302	296	215	136	160	*170	250	1,240	2,460	1,970	818	470
2	380	240	*215	137	*170	168	434	1,520	2,300	2,020	818	477
3	386	225	225	140	190	172	398	1,460	2,360	2,050	927	446
4	362	215	200	*142	179	175	235	1,550	2,430	1,980	872	410
5	338	220	180	152	169	170	215	1,620	2,790	1,870	762	368
6	326	245	180	160	171	175	235	1,550	3,080	1,710	826	350
7	314	255	195	155	150	185	338	1,620	3,140	1,590	916	326
8	308	230	188	170	160	195	491	1,970	3,100	1,480	1,020	320
9	302	200	170	190	170	205	610	1,870	2,570	1,520	960	302
10	296	205	155	185	178	208	526	2,050	2,370	1,660	850	285
11	285	210	165	184	178	210	380	2,460	2,500	1,760	722	280
12	265	230	165	182	170	210	338	2,260	2,550	1,540	746	270
13	265	240	170	182	160	208	285	2,290	3,000	1,480	786	250
14	265	200	*170	187	168	205	280	2,300	2,730	1,360	722	245
15	290	190	165	160	*174	205	265	1,980	2,840	1,330	666	245
16	422	240	165	*170	182	205	245	1,760	3,360	1,320	626	245
17	464	270	165	190	182	200	230	1,760	2,810	1,360	575	260
18	422	255	170	180	180	190	260	2,140	2,630	1,370	582	265
19	380	205	180	165	178	*190	416	2,320	2,910	1,430	610	260
20	368	205	185	152	174	190	642	2,300	2,730	1,280	626	260
21	356	190	190	140	170	205	826	2,020	2,790	1,050	642	260
22	362	190	190	133	166	230	938	1,920	2,950	850	582	255
23	368	210	210	132	166	230	960	2,000	3,080	810	512	245
24	350	*240	220	138	170	225	706	2,190	3,040	872	477	240
25	338	275	210	156	178	235	568	2,630	2,680	1,110	484	245
26	326	205	200	175	174	250	596	2,860	2,660	927	477	245
27	320	195	200	185	170	240	666	3,400	2,500	786	491	245
28	314	205	210	180	178	230	698	3,360	2,360	706	526	245
29	320	210	190	160	-	220	770	3,520	2,240	682	491	290
30	320	215	180	142	-	245	993	3,480	2,050	682	458	308
31	314	-	170	145	-	270	-	3,000	-	714	452	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	10,428	464	265	336	20,680
November	6,711	296	190	224	13,310
December	5,793	225	155	187	11,490
Calendar year 1944	428,878	6,470	140	1,172	850,700
January	5,005	190	132	161	9,930
February	4,815	190	150	172	9,550
March	6,416	270	168	207	12,730
April	14,794	993	215	493	29,340
May	68,400	3,520	1,240	2,206	135,700
June	81,010	3,360	2,050	2,700	160,700
July	41,369	2,050	682	1,334	82,050
August	21,022	1,020	452	678	41,700
September	8,912	477	240	297	17,680
Water year 1944-45	274,675	3,520	132	753	544,900

* Winter discharge measurement made on this day.

Note.- Stage-discharge relation affected by ice Nov. 29 to Jan. 4, Feb. 3 to Mar. 1. No gage-height record Jan. 5 to Feb. 2, Mar. 2-14 (stage-discharge relation affected by ice during most of period); discharge computed on basis of 2 discharge measurements and weather records.

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

Rio Grande near Monte Vista, Colo.

Location.- Water-stage recorder, lat. 37°37', long. 106°09', at west line of sec. 19, T. 39 N., R. 8 E., 2 miles north of Monte Vista. Datum of gage is 7,654.54 feet above mean sea level, datum of 1929.

Drainage area.- 1,590 square miles.

Records available.- October 1933 to September 1945 in reports of Geological Survey (no winter records in earlier years). May 1926 to September 1945 in reports of State engineer.

Average discharge.- 12 years (1933-45), 354 second-feet.

Extremes.- Maximum discharge during year, 1,600 second-feet June 14 (gage height, 3.70 feet); minimum daily, 6.1 second-feet Oct. 15.
1926-45: Maximum discharge, 18,500 second-feet June 30, 1927 (gage height, 7.85 feet); minimum daily, 4 second-feet Apr. 18, 1926.

Remarks.- Records excellent except those for periods of ice effect or no gage-height record, which are fair. Diversions above station for irrigation. Flow regulated by three main reservoirs (total capacity, 122,900 acre-feet) and several smaller ones.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	33	173	212	150	195	*214	15	296	829	705	155	16
2	33	200	*224	142	205	208	35	428	690	705	166	19
3	48	165	212	143	220	208	46	348	840	685	183	19
4	32	154	221	*143	205	216	38	269	770	630	143	18
5	15	151	208	150	210	211	141	266	873	621	110	23
6	9.6	184	203	160	205	190	128	244	917	578	116	25
7	7.5	227	224	160	200	164	25	198	1,000	480	193	18
8	7.5	212	206	172	210	178	34	405	1,050	394	290	15
9	8.2	*186	b195	190	215	188	*61	461	856	368	368	14
10	20	173	180	190	230	137	66	455	807	451	269	14
11	22	181	185	185	225	139	37	650	905	506	164	12
12	15	192	185	185	220	137	20	587	905	472	180	38
13	8.8	227	188	185	215	98	12	520	1,070	368	175	62
14	6.8	224	188	185	225	98	27	560	1,220	252	143	58
15	6.1	194	180	175	*247	98	68	463	1,120	178	93	66
16	32	224	178	185	b244	89	64	463	950	159	73	69
17	165	269	178	195	b240	80	48	506	790	157	49	80
18	200	260	180	190	b235	64	43	625	955	159	62	80
19	181	215	185	180	b230	63	46	592	980	208	98	69
20	148	205	190	170	b225	62	85	645	618	188	122	66
21	133	176	200	160	b220	61	166	585	802	128	139	64
22	129	189	200	150	b210	64	203	685	840	162	98	54
23	121	203	215	145	*b211	66	180	690	934	87	52	44
24	124	221	225	160	b208	71	78	690	939	120	52	41
25	133	249	220	170	b211	66	41	780	775	244	59	48
26	154	218	210	190	b208	66	43	700	785	198	51	48
27	146	173	205	200	b211	62	59	917	730	128	41	44
28	146	b185	215	195	219	54	75	900	780	118	43	41
29	151	b197	200	185	-	24	91	934	765	104	23	44
30	143	200	190	180	-	9.9	173	974	730	100	19	52
31	148	-	180	185	-	12	-	974	-	104	16	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	2,524.5	200	6.1	81.4	5,010
November	6,029	269	151	201	11,960
December	6,182	225	178	199	12,260
Calendar year 1944	204,635.5	5,580	6.1	559	405,900
January	5,355	200	142	173	10,820
February	6,099	247	195	218	12,100
March	3,397.9	216	9.9	110	6,740
April	2,148	203	12	71.6	4,260
May	17,900	974	198	577	35,500
June	26,428	1,220	690	881	52,420
July	9,757	705	87	315	19,350
August	3,746	368	16	121	7,430
September	1,271	80	12	42.4	2,520
Water year 1944-45	90,837.4	1,220	6.1	249	180,200

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

Note.- No gage-height record Nov. 18-20, Dec. 5, Dec. 10 to Feb. 15, Mar. 17-19 (stage-discharge relation affected by ice during most of period); discharge computed on basis of 2 discharge measurements and weather records.

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

Rio Grande at Alamosa, Colo.

Location.- Water-stage recorder, lat. 37°29', long. 105°53', in SE¼ sec. 4, T. 37 N., R. 10 E., a quarter of a mile northwest of Alamosa and 7 miles upstream from Alamosa Creek. Datum of gage is 7,532.66 feet above mean sea level, datum of 1929.

Drainage area.- 1,710 square miles.

Records available.- May 1912 to September 1913 and October 1933 to September 1945 in reports of Geological Survey. May 1912 to September 1945 in reports of State engineer.

Average discharge.- 33 years, 327 second-feet.

Extremes.- Maximum discharge during year, 341 second-feet June 15 (gage height, 2.45 feet); minimum daily, 3.5 second-feet Oct. 24-27.
1912-45: Maximum discharge, 14,000 second-feet July 1, 1927 (gage height, 9.37 feet); minimum daily, 2 second-feet Oct. 24-29, 1933.

Remarks.- Records good except those for periods of no gage-height record and those below 30 second-feet, which are fair. Many diversions above station for irrigation. During irrigation season low-water flow is water returned from irrigated lands above station.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	12	23				240	64	20	126	128	26	15
2	12	31				250	64	24	72	160	24	a15
3	13	a60				245	64	64	37	146	24	15
4	13	a68		(*)		240	82	59	64	118	24	15
5	13	a70				230	55	42	42	89	a18	16
6	13	a70				240	53	24	81	87	13	16
7	12	a70				230	63	22	85	82	13	16
8	12	*a68				220	54	22	68	73	14	16
9	12	a78				200	59	61	86	65	17	a15
10	12	a100				205	49	76	a75	58	20	13
11	12	a120				180	48	36	60	60	16	13
12	12	a118	(*)			160	31	35	133	64	a15	11
13	12	a119				150	29	a30	176	58	15	10
14	12	120				*157	35	25	209	48	17	10
15	13	127				156	46	23	274	47	17	20
16	13	126	215	190	215	149	52	20	221	45	17	a20
17	13	192				130	52	19	133	37	16	21
18	15	266				121	52	20	86	34	16	21
19	19	275			(*)	120	49	33	112	35	a16	20
20	10	260				114	44	32	124	33	16	21
21	9.4	241				100	42	32	78	33	16	19
22	4.1	233				90	48	48	82	a34	31	19
23	4.1	245				86	69	48	73	34	35	a19
24	3.5	266				86	64	37	87	32	31	19
25	3.5	279				83	48	22	93	31	29	19
26	3.5	292				82	31	14	53	32	a27	19
27	3.5	262				81	24	a20	46	32	25	19
28	4.9	231				72	24	27	32	31	24	19
29	10	223			-	70	22	48	73	a30	24	19
30	17	218			-	65	21	39	108	29	24	a19
31	17	-			-	64	-	48	-	29	24	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	335.5	19	3.5	10.8	665
November	4,851	292	23	162	9,620
December	6,665	-	-	215	13,220
Calendar year 1944	144,926.4	3,880	3.5	396	287,500
January	5,890	-	-	190	11,680
February	6,020	-	-	215	11,940
March	4,616	250	64	149	9,160
April	1,438	82	21	47.9	2,850
May	1,072	78	14	34.6	2,130
June	2,989	274	32	99.6	5,930
July	1,814	160	29	58.5	3,600
August	644	35	13	20.8	1,280
September	509	21	10	17.0	1,010
Water year 1944-45	36,843.5	292	3.5	101	73,080

* Winter discharge measurement made on this day.
a No gage-height record; discharge computed on basis of 1 discharge measurement and records for station near Monte Vista.
Note.- No gage-height record Nov. 30 to Mar. 13 (stage-discharge relation affected by ice during most of period); discharge computed on basis of 3 discharge measurements and weather records.
Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

Rio Grande above mouth of Trinchera Creek, near La Sauses, Colo.

Location.- Water-stage recorder, lat. 39°19', long. 105°45', in sec. 35, T. 36 N., R. 11 E., a quarter of a mile upstream from Trinchera Creek and 5 miles north of La Sauses.

Drainage area.- 5,740 square miles (includes 2,940 square miles in closed basin).

Records available.- May 1936 to September 1945.

Extremes.- Maximum discharge during year, 538 second-feet May 10 (gage height, 3.37 feet); minimum daily, 17 second-feet Aug. 27, 28.

1936-45: Maximum discharge, 4,740 second-feet June 28, 1941 (gage height, 8.77 feet), from rating curve extended above 4,000 second-feet; minimum daily, 0.4 second-foot July 4, 1940.

Remarks.- Records good except those for periods of ice effect or no gage-height record, which are fair. Storage and several diversions above station for irrigation. During irrigation season, low flow is water returned from irrigated lands above station.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	39	125	*240	230	225	300	160	178	171	147	36	33
2	43	140	280	220	245	370	150	183	222	130	34	32
3	38	138	320	225	255	b338	158	237	173	126	34	31
4	40	140	260	230	245	b325	155	318	155	140	27	31
5	42	138	280	235	235	b318	*187	370	153	147	28	32
6	42	131	280	240	230	b330	185	411	145	142	30	31
7	42	121	280	245	220	b320	208	453	134	140	31	30
8	39	132	280	250	230	b308	200	471	130	164	30	27
9	38	152	275	260	240	b301	168	489	134	166	35	23
10	38	*172	250	270	260	b322	158	524	145	142	56	21
11	39	177	240	270	250	b303	168	504	147	124	77	23
12	40	170	240	240	240	b296	166	486	156	124	79	33
13	44	172	240	220	235	b291	166	489	156	134	72	47
14	42	181	245	210	*244	b303	162	477	153	120	62	31
15	44	194	245	*225	250	b294	110	501	140	112	49	30
16	52	179	240	235	260	b296	191	492	133	100	41	29
17	55	185	240	250	245	279	200	447	124	92	36	30
18	52	279	240	230	240	279	202	384	133	92	32	31
19	80	318	240	220	235	258	200	329	124	90	30	32
20	93	306	250	200	230	*244	183	318	120	85	28	33
21	98	279	260	190	220	240	170	296	127	74	30	36
22	98	322	270	180	210	228	179	291	130	68	31	37
23	96	277	280	170	230	224	242	272	144	64	27	39
24	100	272	270	190	250	226	315	253	155	59	20	44
25	102	289	260	215	270	224	298	210	145	57	19	43
26	102	325	255	210	260	215	263	198	155	108	18	44
27	105	315	250	220	260	213	226	198	156	81	17	43
28	116	255	260	220	260	215	200	206	155	57	17	43
29	118	250	265	215	-	208	198	206	151	52	29	51
30	121	245	260	200	-	194	194	208	145	48	42	67
31	119	-	250	205	-	175	-	187	-	42	32	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	2,117	121	38	68.3	4,200
November	6,379	325	121	213	12,650
December	8,045	320	240	260	15,960
Calendar year 1944	177,956	3,360	22	486	352,900
January	6,920	270	170	223	13,730
February	6,774	270	210	242	13,440
March	8,437	370	175	272	16,730
April	5,762	315	110	192	11,430
May	10,586	524	178	341	21,000
June	4,411	222	120	147	8,750
July	3,227	166	42	104	6,400
August	1,129	79	17	36.4	2,240
September	1,057	67	21	35.2	2,100
Water year 1944-45	64,844	524	17	178	128,600

* Winter discharge measurement made on this day.

b Stage-discharge relation affected by ice.

Note.- No gage-height record Nov. 28 to Mar. 2, Apr. 4, 14, 15 (stage-discharge relation affected by ice during most of period); discharge computed on basis of 3 discharge measurements and weather records.

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

Rio Grande near Lobatos, Colo.

Location.- Water-stage recorder, lat. 37°05', long. 105°45', in sec. 22, T. 33 N., R. 11 E., 6 miles north of Colorado-New Mexico State line, 7 miles downstream from Culebra Creek, and 10 miles east of Lobatos. Datum of gage is 7,426.79 feet above mean sea level, datum of 1929.

Drainage area.- 7,700 square miles (includes 2,940 square miles in closed basin).

Records available.- June 1899 to September 1913 and October 1933 to September 1945 in reports of Geological Survey. June 1899 to September 1945 in reports of State engineer.

Average discharge.- 46 years (1899-1945), 744 second-feet.

Extremes.- Maximum discharge during year, 2,880 second-feet May 12 (gage height, 4.08 feet); minimum daily, 33 second-feet Sept. 21.

1899-1945: Maximum daily discharge, 13,100 second-feet June 8, 1905, from rating curve extended above 8,000 second-feet; minimum daily, 5.0 second-feet Aug. 4, 1940.

Remarks.- Records good except those for January to March, which are fair. Diversions above station for irrigation. Flow regulated by many reservoirs on headwaters.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	51	177	261	280	*308	408	218	414	1,070	341	54	61
2	54	186	324	260	325	*454	209	738	901	313	49	61
3	56	200	382	*265	340	434	209	1,110	814	290	51	61
4	51	200	297	268	310	402	195	1,550	788	270	56	58
5	54	204	376	275	300	402	242	1,920	822	255	54	56
6	63	204	382	280	290	427	232	2,240	901	240	56	56
7	63	200	382	285	280	389	237	2,570	928	230	66	54
8	66	186	382	300	300	364	256	2,550	797	220	63	54
9	71	200	376	320	315	347	228	2,580	714	205	68	44
10	74	232	341	340	325	359	218	2,610	627	185	85	39
11	71	252	341	345	320	359	204	2,660	596	159	134	38
12	71	252	347	330	300	341	213	2,730	544	151	134	38
13	74	252	*330	275	305	330	195	2,710	488	143	134	46
14	76	247	347	265	*320	330	190	2,640	544	134	120	58
15	79	252	347	*285	330	341	120	2,680	706	120	110	46
16	103	252	330	305	335	341	287	2,240	805	113	93	44
17	106	252	359	320	325	341	271	1,750	822	106	74	39
18	106	292	347	285	315	330	271	1,590	797	103	66	39
19	110	359	335	270	315	318	271	1,720	690	99	61	34
20	134	382	359	260	510	313	266	1,680	596	110	66	34
21	143	364	370	252	300	302	242	1,530	537	103	61	33
22	147	330	389	235	275	297	261	1,280	501	76	66	39
23	147	324	440	220	295	282	353	1,210	551	68	66	39
24	143	330	414	250	325	287	537	1,210	603	68	61	39
25	151	347	b400	300	345	287	530	1,220	611	66	54	44
26	155	359	b360	280	328	282	447	1,230	611	63	49	44
27	159	370	b360	310	325	276	389	1,140	611	116	44	49
28	164	292	b370	305	335	266	353	1,390	558	76	44	46
29	172	276	b375	275	-	266	324	1,490	481	61	44	46
30	177	271	b365	250	-	252	335	1,430	408	58	58	66
31	181	-	b360	270	-	242	-	1,340	-	56	66	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	5,272	181	51	106	6,490
November	8,074	389	177	269	16,010
December	11,168	440	261	360	22,150
Calendar year 1944	305,665	6,210	33	835	606,300
January	8,760	345	220	283	17,380
February	8,796	345	275	314	17,450
March	10,369	454	242	334	20,570
April	8,303	537	120	277	16,470
May	55,152	2,730	414	1,779	109,400
June	20,422	1,070	408	681	40,510
July	4,598	341	56	148	9,120
August	2,207	134	44	71.2	4,380
September	1,405	66	33	46.8	2,790
Water year 1944-45	142,526	2,730	33	390	282,700

* Winter discharge measurement made on this day.

b Stage-discharge relation affected by ice.

Note.- No gage-height record Jan. 1 to Feb. 28 (stage-discharge relation affected by ice during most of period), July 2-11; discharge computed on basis of 5 discharge measurements, weather records, and records for station near La Sauses.

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

Rio Grande below Taos Junction Bridge, near Taos, N. Mex.

Location.- Water-stage recorder, lat. 36°19'00", long. 105°45'30", in N½ sec. 15, T. 24 N., R. 11 E., 2 miles downstream from Taos Creek and bridge on Taos-Taos Junction highway and 12 miles southwest of Taos.

Drainage area.- 9,730 square miles (includes 2,940 square miles in closed basin in northern part of San Luis Valley, Colo.).

Records available.- October 1930 to September 1945 in reports of Geological Survey. July 1925 to December 1931 in reports of State engineer.

Average discharge.- 20 years (1925-1945), 887 second-feet.

Extremes.- Maximum discharge during year, 4,540 second-feet May 13 (gage height, 7.10 feet); minimum daily, 251 second-feet Sept. 23, 24.
1930-45: Maximum discharge, 9,630 second-feet May 17, 1941 (gage height, 9.41 feet); minimum daily, 140 second-feet (estimated) Aug. 21, 1931.

Remarks.- Records excellent except those for period of ice effect, which are fair. Diversions above station for irrigation.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	260	395	425	b480	539	705	497	1,170	2,460	906	332	393
2	270	395	490	b480	567	721	497	1,390	2,170	862	316	343
3	270	401	553	*518	737	713	497	2,040	1,970	819	316	316
4	270	419	616	511	721	713	458	2,680	1,850	761	305	305
5	270	419	532	497	630	705	425	3,340	1,810	705	305	300
6	265	438	b500	511	602	675	490	3,780	1,830	690	310	295
7	265	470	b570	511	567	660	511	4,060	1,890	675	338	290
8	275	444	b560	518	567	675	546	4,250	1,850	638	377	290
9	270	432	b550	532	588	668	616	4,250	1,670	595	365	285
10	275	432	b540	532	595	638	660	4,250	1,590	609	348	280
11	280	458	b490	532	588	652	595	4,250	1,470	602	338	280
12	285	484	b470	553	581	668	553	4,340	1,400	560	389	265
13	285	497	b470	546	602	638	539	4,440	1,290	518	413	265
14	290	484	b480	563	602	645	539	4,440	1,230	497	389	265
15	305	477	b480	560	623	645	532	4,250	1,290	504	377	275
16	464	484	b470	560	638	645	464	3,960	1,510	477	354	290
17	389	497	b470	581	652	609	497	3,260	1,610	458	338	275
18	401	490	b470	581	652	602	546	2,920	1,590	438	321	265
19	383	511	b470	588	652	602	588	3,000	1,530	413	310	265
20	360	602	b460	546	652	574	675	3,170	1,390	401	300	265
21	365	623	b460	574	713	546	769	3,080	1,280	395	338	260
22	371	588	b470	518	630	546	888	2,680	1,190	464	343	260
23	371	567	b500	525	675	539	1,000	2,460	1,140	419	316	251
24	371	574	b540	553	675	532	1,120	2,380	1,160	383	316	251
25	371	*595	b540	553	705	518	1,190	2,380	1,200	360	316	256
26	371	595	b520	560	698	525	1,180	2,380	1,250	360	310	256
27	377	553	b520	553	682	504	1,070	2,380	1,190	348	300	260
28	377	574	b530	553	675	484	1,020	2,460	1,150	338	285	260
29	377	484	b530	532	-	497	996	2,680	1,090	383	285	265
30	389	389	b500	511	-	497	1,060	2,760	996	348	280	275
31	395	-	b480	518	-	490	-	2,680	-	332	280	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	10,267	464	260	331	20,360
November	14,771	623	389	492	29,300
December	15,656	616	425	505	31,050
Calendar year 1944	446,969	7,860	251	1,221	886,500
January	16,640	588	480	537	33,000
February	17,808	737	539	636	35,320
March	18,831	721	484	607	37,350
April	21,018	1,190	425	701	41,690
May	97,560	4,440	1,170	3,147	193,500
June	45,046	2,460	996	1,502	89,350
July	16,258	906	332	524	32,250
August	10,210	413	280	329	20,250
September	8,401	393	251	280	16,660
Water year 1944-45	292,466	4,440	251	801	580,100

* Winter discharge measurement made on this day.
b Stage-discharge relation affected by ice.
Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

Rio Grande at Embudo, N. Mex.

Location.- Water-stage recorder, lat. 36°12'20", long. 105°57'40", in SW¼SW¼ sec. 23, T. 23 N., R. 9 E., a quarter of a mile downstream from bridge at Embudo and 2¼ miles downstream from Embudo Creek.

Drainage area.- 10,400 square miles (includes 2,940 square miles in closed basin in northern part of San Luis Valley, Colo.).

Records available.- January 1889 to December 1903, September 1912 to September 1916, and October 1930 to September 1945 in reports of Geological Survey. January 1889 to December 1903 and September 1912 to December 1931 in reports of State engineer.

Average discharge.- 45 years (1889-93, 1894-1903, 1912-16, 1917-45), 1,085 second-feet.

Extremes.- Maximum discharge during year, 5,380 second-feet May 14 (gage height, 8.16 feet); minimum daily, 230 second-feet Sept. 24.

1889-1903, 1912-45: Maximum discharge, 15,900 second-feet June 19, 1903 (gage height, 15.8 feet); minimum daily, 35 second-feet Dec. 31, 1903.

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

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	271	441	430	496	588	751	618	1,690	2,900	993	330	360
2	285	441	512	496	612	777	648	2,080	2,600	944	a330	568
3	290	441	564	518	733	758	636	2,650	2,360	888	a330	370
4	290	452	630	534	823	758	576	3,310	2,180	825	a330	340
5	295	463	570	524	706	751	558	3,860	2,130	751	a330	320
6	285	480	518	540	673	718	576	4,420	2,180	706	a340	310
7	280	512	600	540	612	699	642	4,660	2,180	692	a380	300
8	295	490	588	540	606	725	706	5,020	2,180	642	a420	295
9	295	480	582	552	630	712	853	5,020	2,180	594	a410	290
10	300	474	564	564	654	692	965	5,020	1,860	594	a400	285
11	300	490	518	570	642	706	832	5,140	1,730	606	a400	276
12	310	518	502	582	630	732	764	5,140	1,690	558	a460	262
13	305	534	507	576	636	725	732	5,260	1,530	502	a455	258
14	310	524	512	594	654	732	758	5,260	1,410	468	452	258
15	320	518	512	600	706	718	751	5,140	1,450	485	430	253
16	529	529	502	606	692	712	692	4,780	1,610	468	395	290
17	480	540	496	618	699	666	666	4,080	1,770	436	365	276
18	485	534	490	624	686	699	764	3,640	1,730	420	330	253
19	468	534	490	618	692	692	832	3,640	1,650	395	320	244
20	430	612	485	594	699	660	1,020	3,970	1,530	375	a310	240
21	425	648	496	612	744	636	1,180	3,860	1,450	375	a350	240
22	430	618	496	558	686	648	1,330	3,420	1,330	463	a360	240
23	430	600	529	552	699	642	1,530	3,100	1,290	446	a330	235
24	430	606	570	594	718	630	1,530	3,000	1,250	395	a340	230
25	430	630	570	588	751	618	1,650	3,000	1,330	360	a340	240
26	430	624	552	594	751	636	1,530	2,900	1,370	365	a330	240
27	430	600	552	606	732	624	1,410	3,000	1,330	345	a320	244
28	430	600	558	582	712	594	1,330	3,000	1,250	315	a310	244
29	430	540	558	576	-	594	1,290	3,200	1,180	390	a310	258
30	436	452	529	558	-	606	1,410	3,310	1,070	345	315	280
31	436	-	502	564	-	606	-	3,200	-	320	320	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	11,560	529	271	373	22,930
November	15,925	648	441	531	31,590
December	16,484	630	430	532	32,700
Calendar year 1944	466,315	8,470	240	1,274	925,000
January	17,670	624	496	570	35,050
February	19,166	823	588	684	38,020
March	21,217	777	594	684	42,080
April	28,779	1,650	558	959	57,080
May	118,770	5,260	1,690	3,831	235,600
June	51,700	2,900	1,070	1,723	102,500
July	16,461	993	315	531	32,650
August	11,142	460	310	359	22,100
September	8,499	568	230	283	16,860
Water year 1944-45	337,373	5,260	230	924	669,200

a No gage-height record; discharge computed on basis of weather records and records for stations near Taos and near San Ildefonso.

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

Rio Grande at Otowi Bridge, near San Ildefonso, N. Mex.

Location.- Water-stage recorder, lat. 35°52'25", long. 106°08'35", in San Ildefonso Pueblo Grant, 100 feet downstream from highway bridge, 1¾ miles southwest of San Ildefonso Pueblo, 2½ miles downstream from Rio Pojoaque, and 7 miles west of Pojoaque. Datum of gage is 5,488.48 feet above mean sea level, datum of 1929.

Drainage area.- 14,300 square miles (includes 2,940 square miles in closed basin in northern part of San Luis Valley, Colo.).

Records available.- February 1895 to December 1905, June 1909 to December 1914, and October 1930 to September 1945 in reports of Geological Survey. February 1895 to December 1905 and June 1909 to December 1931 in reports of State engineer. January 1941 to December 1945 in reports of Rio Grande Compact Commission.

Average discharge.- 18 years (1927-45), 1,630 second-feet.

Extremes.- Maximum discharge during year, 10,400 second-feet May 8 (gage height, 8.52 feet); minimum daily, 435 second-feet Oct. 11.

1930-45: Maximum discharge, 22,500 second-feet May 16, 1941; maximum gage height, 13.70 feet May 14, 1941; minimum daily discharge, 128 second-feet June 21, 1934.

Remarks.- Records good. Flow partly regulated by operation of El Vado Reservoir on upper Rio Chama which stores water for irrigation. Diversions above station for irrigation.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	530	622	547	628	688	851	742	3,440	4,990	1,410	1,000	1,010
2	536	604	652	616	748	886	788	4,390	4,230	1,370	1,310	1,160
3	598	592	712	646	795	900	935	5,460	3,790	1,410	1,150	1,060
4	569	592	823	640	1,070	886	872	6,180	3,520	1,280	1,110	963
5	547	598	795	640	935	900	742	6,660	3,340	1,170	1,070	949
6	530	652	664	634	928	858	652	8,440	3,320	1,110	1,040	921
7	514	652	712	628	851	816	724	9,460	3,340	1,070	1,050	893
8	503	592	736	646	795	816	830	9,900	3,610	986	1,110	872
9	508	552	718	658	760	823	1,140	9,540	3,190	914	1,260	886
10	476	542	700	664	781	795	1,460	9,260	2,990	900	1,240	872
11	435	547	664	670	795	809	1,390	9,490	2,820	914	938	865
12	440	558	616	688	837	844	1,150	9,540	2,660	1,390	1,480	844
13	602	592	622	688	823	893	1,010	9,760	2,300	1,480	1,190	851
14	682	598	646	688	816	914	1,010	9,790	2,040	1,450	986	858
15	736	592	640	700	920	928	1,090	9,540	1,940	1,450	851	1,170
16	1,680	604	646	706	1,190	914	1,030	9,200	2,220	1,470	774	1,230
17	1,310	604	652	730	1,130	872	928	6,590	2,660	1,440	676	1,260
18	1,280	610	616	748	1,050	844	1,090	5,590	2,780	1,440	963	1,220
19	1,320	616	610	736	935	872	1,180	5,200	2,560	1,400	1,070	1,210
20	837	652	598	730	949	858	1,570	6,160	2,080	1,320	1,040	1,220
21	742	724	628	700	994	788	2,170	7,010	1,850	1,220	1,090	1,140
22	712	712	628	700	935	781	2,680	6,850	1,710	1,190	1,240	748
23	688	676	658	592	865	788	3,180	6,200	1,660	1,240	1,070	718
24	676	706	736	646	858	809	2,980	5,770	1,590	1,160	986	706
25	658	754	788	682	865	760	3,020	5,530	1,590	1,150	1,190	688
26	634	760	760	718	886	754	2,950	5,550	1,650	1,150	1,030	676
27	628	748	767	724	879	767	2,540	5,690	1,590	1,100	986	676
28	622	724	748	694	844	767	2,380	5,410	1,580	1,060	970	682
29	622	712	748	670	-	760	2,390	5,510	1,680	978	935	706
30	616	628	736	640	-	767	2,770	5,690	1,510	956	921	963
31	622	-	664	640	-	754	-	5,790	-	935	935	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	21,853	1,680	435	705	43,340
November	19,115	760	542	637	37,910
December	21,230	823	547	685	42,110
Calendar year 1944	657,465	9,810	435	1,796	1,304,000
January	20,890	748	592	674	41,430
February	24,922	1,190	688	890	49,430
March	25,774	928	754	831	51,120
April	47,393	3,180	652	1,580	94,000
May	218,590	9,900	3,440	7,051	433,600
June	76,690	4,990	1,510	2,556	152,100
July	37,513	1,480	900	1,210	74,410
August	32,661	1,480	676	1,054	64,780
September	28,017	1,260	676	934	55,570
Water year 1944-45	574,648	9,900	435	1,574	1,140,000

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

Rio Grande at Cochiti, N. Mex.

Location.- Water-stage recorder, lat. 35°37'10", long. 106°19'10", in NE¼ sec. 17, T. 16 N., R. 3 E., at highway bridge, 1¼ miles northeast of Cochiti, 4 miles north of Pena Blanca, and 8 miles upstream from Galisteo Creek.

Drainage area.- 14,600 square miles (includes 2,940 square miles in closed basin in northern part of San Luis Valley, Colo.).

Records available.- October 1930 to September 1945 in reports of Geological Survey. January 1925 to December 1931 in reports of State engineer.

Average discharge.- 20 years (1925-45), 1,625 second-feet.

Extremes.- Maximum discharge during year, 10,900 second-feet May 8 (gage height, 7.78 feet); minimum daily, 326 second-feet Oct. 12.

1930-45: Maximum discharge, 23,400 second-feet May 15, 1941 (gage height, 10.93 feet); minimum daily, 1 second-foot Aug. 10-12, 1934.

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

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	560	547	609	682	769	870	690	3,260	a5,200	1,460	802	897
2	435	528	616	682	828	888	690	4,180	a4,600	1,300	1,130	1,050
3	424	528	675	690	897	888	810	5,070	a4,000	1,270	1,050	1,000
4	471	588	761	705	1,130	862	810	6,060	3,580	1,210	1,060	853
5	430	602	819	690	980	870	652	6,960	3,260	1,020	1,060	819
6	413	588	753	690	933	844	574	8,590	3,150	960	980	777
7	447	609	729	690	879	777	616	9,800	3,050	970	933	761
8	453	581	769	713	794	753	690	10,200	3,470	951	970	819
9	391	602	761	729	753	777	933	10,200	3,150	802	1,140	836
10	370	652	753	737	785	785	1,360	9,800	2,860	745	1,200	769
11	335	630	705	753	819	777	1,500	9,800	2,670	785	906	753
12	326	638	652	753	870	785	1,250	9,800	2,580	1,080	1,280	745
13	370	660	652	737	870	836	1,070	10,200	2,320	1,420	1,170	753
14	602	675	668	745	844	862	1,080	10,200	2,080	1,420	794	777
15	721	660	668	745	888	870	1,240	9,620	1,920	1,420	721	990
16	1,950	660	690	753	1,220	870	1,160	9,450	2,160	1,350	588	1,150
17	1,290	675	705	785	1,220	933	1,030	7,120	2,670	1,320	534	1,120
18	1,050	682	705	794	1,100	862	1,060	5,760	2,860	1,340	675	1,090
19	1,420	668	737	785	980	879	1,090	5,760	2,760	1,340	915	1,050
20	769	675	745	777	970	844	1,390	6,200	2,160	1,260	897	1,030
21	705	745	698	737	990	785	2,080	7,280	1,890	1,250	879	1,050
22	698	761	713	745	1,000	753	2,670	6,960	1,760	1,160	1,020	769
23	713	737	737	675	879	753	3,050	6,500	1,710	1,180	951	675
24	721	761	802	713	870	794	3,260	6,060	1,690	1,100	897	595
25	660	802	853	729	879	794	3,150	5,620	1,650	1,050	1,040	588
26	638	819	844	753	924	769	3,150	5,760	1,660	1,090	970	595
27	660	794	828	761	915	777	2,670	5,760	1,650	1,020	844	574
28	675	737	810	729	897	810	2,500	5,620	1,600	1,020	802	560
29	682	745	794	698	-	785	2,410	5,620	1,580	888	745	645
30	616	690	785	682	-	769	2,670	5,620	1,560	810	753	844
31	567	-	721	713	-	729	-	5,760	-	794	794	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	20,562	1,950	326	663	40,780
November	20,039	819	528	668	39,750
December	22,757	853	609	734	45,140
Calendar year 1944	647,062	10,100	326	1,770	1,283,000
January	22,570	794	675	728	44,770
February	25,883	1,220	753	924	51,340
March	25,350	933	729	818	50,280
April	47,305	3,260	574	1,580	93,830
May	224,590	10,200	3,260	7,240	445,500
June	77,250	5,200	1,560	2,580	153,200
July	34,785	1,460	745	1,120	69,000
August	28,500	1,280	534	919	56,530
September	24,934	1,150	560	831	49,460
Water year 1944-45	574,525	10,200	326	1,570	1,140,000

a No gage-height record; discharge computed on basis of records for stations at Otowi Bridge, near San Ildefonso and at San Felipe.

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

Rio Grande at San Felipe, N. Mex.

Location.- Water-stage recorder, lat. 35°26'30", long. 106°26'30", in NW¼SW¼ sec. 17, T. 14 N., R. 5 E., at highway bridge in San Felipe Grant, 2,000 feet downstream from Tonque Arroyo, half a mile upstream from San Felipe Pueblo, and 12 miles northeast of Bernalillo. Datum of gage is 5,110.38 feet above mean sea level, datum of 1929.

Drainage area.- 16,100 square miles (includes 2,940 square miles in closed basin in northern part of San Luis Valley, Colo.).

Records available.- October 1930 to September 1945 in reports of Geological Survey. March 1925 to December 1931 in reports of State engineer.

Average discharge.- 19 years (1926-45), 1,745 second-feet.

Extremes.- Maximum discharge during year, 11,200 second-feet May 8 (gage height, 7.05 feet); minimum daily, 358 second-feet Oct. 12, 13.
1930-45: Maximum discharge, 42,100 second-feet Aug. 21, 1935, from rating curve extended above 15,000 second-feet by logarithmic plotting; maximum gage height, 11.13 feet June 26, 1937; minimum daily discharge, 34 second-feet July 7, 1934.

Remarks.- Records good except those for periods of no gage-height record, and those above 6,000 second-feet, which are poor. Diversions above station for irrigation.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	640	660	660	797	720	914	808	3,210	5,380	1,620	902	1,100
2	502	640	600	742	854	950	819	3,950	4,640	1,470	1,200	1,280
3	502	640	720	720	998	902	854	4,880	4,060	1,390	1,210	1,330
4	580	640	819	731	1,170	902	854	5,760	a3,700	1,370	1,210	1,050
5	520	710	878	710	1,080	938	775	6,560	3,520	1,100	1,200	950
6	493	690	797	731	1,140	866	731	8,000	3,520	1,060	1,050	926
7	466	775	742	731	1,070	854	742	9,890	3,520	1,050	974	878
8	550	710	866	753	950	830	950	10,200	3,730	1,110	1,240	854
9	422	680	808	786	890	830	1,150	10,200	3,620	986	1,520	986
10	422	742	775	797	878	866	1,410	10,200	3,210	902	1,660	808
11	382	680	710	786	830	854	1,530	9,560	3,110	a860	1,140	797
12	358	680	700	797	854	878	1,520	9,560	3,010	1,080	1,470	786
13	358	700	710	830	962	938	1,250	9,890	2,720	1,600	1,410	797
14	660	700	700	819	914	986	1,060	9,890	2,490	1,500	1,050	830
15	842	680	700	830	974	962	1,050	9,890	2,180	1,540	a900	998
16	2,640	670	720	830	1,210	998	1,070	a9,000	2,180	1,440	a900	1,400
17	2,100	690	731	842	1,230	998	1,020	8,000	2,820	1,410	a700	1,360
18	1,460	710	753	854	1,140	926	1,010	6,290	3,110	1,460	a700	1,390
19	1,800	690	742	854	1,020	962	1,110	5,890	3,010	1,430	1,200	1,390
20	1,190	690	753	842	974	926	1,320	6,290	2,720	1,390	1,050	1,360
21	962	764	775	830	1,020	902	1,710	7,410	2,130	1,340	1,210	1,340
22	854	775	764	830	1,020	866	2,610	7,120	1,870	1,250	1,340	1,030
23	775	753	786	786	914	866	2,820	6,700	1,760	1,260	1,280	797
24	742	830	808	753	878	890	3,110	6,290	1,740	1,200	1,120	670
25	680	808	878	764	902	890	2,920	5,760	1,700	1,160	1,140	660
26	670	842	890	775	950	866	3,110	5,760	1,710	1,210	1,290	620
27	710	854	878	775	926	890	2,610	5,890	1,700	1,160	1,150	630
28	731	764	866	753	914	914	2,400	5,760	1,680	1,160	1,100	610
29	731	775	842	731	-	854	2,250	5,630	1,680	1,030	998	660
30	670	710	830	753	-	854	2,430	5,760	1,660	926	962	926
31	660	-	819	710	-	842	-	5,890	-	890	902	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	25,072	2,640	358	809	49,730
November	21,652	854	640	722	42,950
December	24,020	890	600	775	47,640
Calendar year 1944	679,828	10,600	358	1,857	1,348,000
January	24,242	854	710	782	48,080
February	27,382	1,230	720	978	54,310
March	27,914	998	830	900	55,370
April	47,003	3,110	731	1,567	93,230
May	225,080	10,200	3,210	7,261	446,400
June	83,880	5,380	1,660	2,796	166,400
July	38,354	1,620	860	1,237	76,070
August	35,078	1,660	700	1,132	69,580
September	29,213	1,400	610	974	57,940
Water year 1944-45	608,890	10,200	358	1,668	1,208,000

a No gage-height record; discharge computed on basis of weather records, and records for stations at Cochiti, near Bernalillo, and at Albuquerque.

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

Rio Grande near Bernalillo, N. Mex.

Location.- Water-stage recorder, lat. 35°17'05", long. 106°35'45", in Alameda Grant, 2 miles northwest of Sandia Pueblo, 3 miles southwest of Bernalillo, Sardoval County, 3.5 miles downstream from State Highway 44, and 8.5 miles downstream from Jemez Creek.

Records available.- May 1941 to September 1945.

Extremes.- Maximum discharge during year, 11,400 second-feet May 8 (gage height, 4.95 feet); minimum daily, 170 second-feet Oct. 13.

1941-45: Maximum discharge, 25,400 second-feet May 16, 1941; maximum gage height, 6.83 feet Sept. 20, 1941; minimum daily discharge, 166 second-feet Oct. 11, 1943.

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

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	534	445	376	744	688	792	784	3,190	5,300	1,350	421	696
2	295	393	376	760	808	808	508	4,170	4,380	832	494	876
3	228	421	631	800	867	800	603	4,720	4,280	1,040	876	776
4	256	488	675	776	1,000	776	704	5,420	3,100	930	645	603
5	242	645	610	704	1,110	832	631	6,430	2,840	768	1,050	620
6	242	398	589	696	1,010	858	547	8,240	2,920	624	576	a400
7	201	475	624	666	975	858	614	9,810	2,920	675	520	a370
8	410	514	776	688	930	849	957	10,500	3,010	942	944	a400
9	212	514	*744	666	849	858	1,110	10,100	3,010	488	1,320	a450
10	198	614	696	666	840	858	1,600	9,810	2,920	445	1,310	a400
11	184	388	b670	673	849	816	1,740	9,160	2,680	382	1,010	366
12	187	514	b660	712	849	800	1,440	8,850	2,440	398	1,240	345
13	170	376	b640	720	849	800	1,210	9,810	1,810	840	1,200	340
14	325	445	b630	728	867	858	1,090	9,810	1,680	921	a900	355
15	800	451	*631	736	876	876	1,120	9,160	1,810	1,320	a700	330
16	2,760	410	659	768	921	840	903	8,860	1,880	876	a600	930
17	2,300	410	659	792	1,060	760	849	7,100	2,300	948	a450	610
18	1,670	398	696	784	1,150	832	966	5,420	2,220	948	242	624
19	2,660	575	704	752	1,110	776	1,200	5,300	2,080	912	728	631
20	1,120	501	688	744	1,060	760	1,440	6,170	a1,850	867	596	652
21	688	501	680	736	1,020	728	2,010	6,830	a1,500	744	696	645
22	776	534	666	736	1,000	673	2,840	6,430	a1,500	1,070	673	520
23	645	475	680	728	957	824	3,190	6,430	a1,600	617	744	666
24	610	540	696	744	867	784	3,560	6,170	a1,400	680	631	260
25	617	508	776	752	832	768	3,370	5,540	a1,400	652	624	290
26	631	696	824	760	784	575	3,560	5,300	a1,300	736	1,000	242
27	527	610	832	776	760	561	3,190	5,540	1,140	712	501	215
28	582	575	824	728	760	596	3,190	4,830	1,110	720	494	224
29	673	568	816	704	-	603	3,370	4,720	1,150	948	475	246
30	451	494	608	704	-	582	3,010	5,300	1,060	427	415	645
31	445	-	792	673	-	610	-	5,540	-	421	415	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	21,639	2,760	170	698	42,920
November	14,776	696	376	493	29,310
December	21,028	832	376	678	41,710
Calendar year 1944	599,334	9,460	170	1,638	1,189,000
January	22,616	800	666	730	44,860
February	25,648	1,150	688	916	50,870
March	23,711	876	561	765	47,030
April	51,206	3,560	508	1,707	101,600
May	214,650	10,500	3,190	6,924	425,800
June	68,590	5,300	1,060	2,286	136,000
July	24,043	1,350	382	776	47,690
August	22,489	1,320	242	725	44,610
September	14,627	930	215	488	29,010
Water year 1944-45	525,023	10,500	170	1,438	1,041,000

* Winter discharge measurement made on this day.

a No gage-height record; discharge computed on basis of records for stations at Cochiti, at San Felipe, and at Albuquerque.

b Stage-discharge relation affected by ice.

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

Rio Grande at Albuquerque, N. Mex.

Location.- Water-stage recorder, lat. 35°05'20", long. 106°40'45", in SE¼ sec. 13, T. 10 N., R. 2 E (projected), at bridge on U. S. Highway 66, at Albuquerque, in Albuquerque Grant. Datum of gage is 4,948.10 feet above mean sea level, datum of 1929.

Records available.- January 1942 to September 1945.

Extremes.- Maximum discharge during year, 11,700 second-feet May 9; maximum gage height, 4.13 feet May 7; minimum daily discharge, 137 second-feet Oct. 11.

1942-45: Maximum discharge, 25,000 second-feet Apr. 24, 1942 (gage height, 4.07 feet), from rating curve extended above 13,900 second-feet by logarithmic plotting; minimum daily, 137 second-feet Nov. 14, 1942, Oct. 11, 1944.

Remarks.- Records fair except those for periods of no gage-height record, and those above 6,000 second-feet, which are poor. Diversions above station for irrigation.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	476	446	594	750	770	920	760	3,380	5,510	1,140	390	821
2	272	383	492	770	860	870	730	3,970	4,820	986	376	1,020
3	244	334	585	820	942	790	750	4,820	4,380	1,050	666	850
4	254	390	750	820	997	790	920	5,750	3,670	986	639	666
5	249	524	770	666	1,120	684	a860	6,760	3,200	820	702	a400
6	216	460	702	770	1,040	740	740	8,270	3,020	675	666	a370
7	190	460	621	760	1,050	740	666	9,760	3,020	549	404	a350
8	341	532	621	860	964	820	910	11,000	3,110	899	566	a350
9	260	492	693	780	870	790	975	a10,000	3,200	807	1,320	a420
10	170	439	711	711	850	730	1,320	a10,000	3,110	453	a1,100	a450
11	137	432	675	780	860	800	1,540	9,450	2,580	383	964	a250
12	142	524	684	740	840	790	1,570	9,150	a2,400	348	997	244
13	200	418	702	730	953	760	1,270	9,760	a2,200	535	a1,100	232
14	249	418	770	770	820	910	1,120	10,100	2,030	910	a900	272
15	630	418	760	820	750	964	1,380	9,450	1,960	964	a700	278
16	1,570	468	790	850	810	997	964	9,150	1,850	790	a500	546
17	1,910	492	740	910	1,130	964	964	8,270	2,170	630	a400	639
18	1,120	446	702	910	1,120	986	760	6,500	2,170	684	a300	567
19	2,110	585	730	860	1,100	780	1,030	6,000	2,170	850	317	612
20	1,010	411	760	830	997	740	1,410	6,000	1,970	820	476	612
21	740	355	760	840	1,030	730	1,900	7,710	1,550	750	a350	612
22	820	468	711	740	1,060	702	2,660	7,300	1,370	931	404	603
23	585	585	675	711	931	770	2,930	6,890	1,370	711	476	468
24	524	740	740	549	810	820	3,200	6,500	1,510	576	425	355
25	516	770	820	524	860	820	3,290	6,120	1,260	567	418	232
26	524	780	1,010	648	880	594	4,070	5,870	1,260	693	859	210
27	468	675	1,020	830	910	484	3,480	6,000	1,130	780	730	200
28	516	693	1,030	931	830	492	3,580	5,510	1,050	711	468	195
29	730	666	953	910	-	532	3,670	5,280	1,030	870	446	205
30	648	639	964	890	-	576	3,380	5,510	1,080	605	390	355
31	532	-	820	820	-	657	-	6,120	-	390	383	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	18,353	2,110	137	592	36,400
November	15,443	780	334	515	30,630
December	23,355	1,030	492	753	46,320
Calendar year 1944	609,983	10,700	137	1,667	1,210,000
January	24,300	931	524	784	48,200
February	26,154	1,130	750	934	51,880
March	23,742	997	484	766	47,090
April	52,799	4,070	666	1,760	104,700
May	226,350	11,000	3,380	7,302	449,000
June	71,150	5,510	1,030	2,372	141,100
July	22,863	1,140	348	738	45,350
August	18,832	1,320	300	607	37,350
September	13,384	1,020	195	446	26,550
Water year 1944-45	536,725	11,000	137	1,470	1,065,000

a No gage-height record; discharge computed on basis of records for stations at Cochiti, at San Felipe, and near Bernalillo.

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Rio Grande near Belen, N. Mex.

Location.- Water-stage recorder, lat. 34°39'10", long. 106°44'10", in Tome Claim, at bridge on State Highway 52, 2 miles east of Belen, Valencia County.

Records available.- January 1942 to September 1945.

Extremes.- Maximum discharge during year, 11,400 second-feet May 13 (gage height, 4.58 feet); minimum daily, 170 second-feet Sept. 16.

1942-45: Maximum discharge, 23,100 second-feet Apr. 24, 1942 (gage height, 5.05 feet), from rating curve extended above 12,500 second-feet by logarithmic plotting; minimum daily, 126 second-feet Aug. 1, 1943.

Remarks.- Records good except those for periods of no gage-height record and those above 5,000 second-feet, which are poor. Diversions above station for irrigation.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	416	a440	513	909	797	647	468	a2,500	5,060	455	231	315
2	387	a410	449	839	828	620	387	a3,500	4,660	577	205	620
3	348	398	422	797	818	714	343	4,620	4,740	675	184	513
4	381	370	468	851	909	704	301	4,900	3,620	568	238	a450
5	442	392	647	874	1,030	754	422	5,780	a3,000	628	292	a500
6	442	442	775	851	1,150	675	468	a7,000	a2,500	490	267	a350
7	288	483	1,020	775	1,060	775	375	a8,000	2,270	540	305	249
8	259	560	909	a770	1,030	685	284	a9,000	2,300	455	217	221
9	324	490	955	a780	980	603	348	a10,300	2,870	422	324	214
10	334	416	1,040	a800	943	513	611	8,920	2,920	370	1,770	224
11	245	353	1,000	a800	897	695	1,580	8,920	2,670	288	1,230	256
12	241	324	968	a800	909	528	1,470	9,570	2,200	224	897	178
13	245	513	862	a840	807	442	1,080	9,920	2,010	221	1,250	195
14	245	370	862	a860	807	449	754	9,920	1,400	217	1,420	221
15	238	329	862	a840	885	551	1,200	9,920	1,080	409	1,000	178
18	319	334	932	a880	862	637	1,110	9,570	920	666	594	170
17	3,330	370	909	a900	993	714	874	8,920	1,060	628	392	272
18	1,440	403	885	a940	1,140	754	723	4,500	2,270	468	280	280
19	2,660	429	897	993	993	862	560	4,580	1,840	449	231	241
20	1,670	490	885	968	874	528	611	5,740	1,750	568	245	259
21	839	462	862	955	909	513	1,400	6,170	1,450	468	334	256
22	723	359	874	993	885	403	2,500	6,670	851	422	276	297
23	839	364	885	920	851	628	2,400	5,650	647	536	292	301
24	568	429	874	885	862	568	2,540	5,560	675	398	288	301
25	594	594	920	775	797	765	2,820	5,200	1,000	245	276	292
26	483	675	1,110	874	828	603	2,950	4,980	521	245	280	224
27	455	a720	1,110	955	695	381	2,840	5,420	a450	381	568	211
28	455	a640	1,030	932	733	305	2,320	5,470	a400	449	386	195
29	435	a560	909	909	-	334	a2,400	5,240	a450	442	241	217
30	498	468	909	765	-	468	a2,300	5,140	528	462	214	271
31	462	-	885	744	-	462	-	4,900	-	387	201	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	20,605	3,330	238	665	40,870
November	13,587	720	324	453	26,950
December	26,628	1,110	422	859	52,820
Calendar year 1944	594,345	10,300	140	1,524	1,179,000
January	26,774	993	744	864	53,110
February	25,272	1,150	695	903	50,130
March	18,280	862	305	590	36,260
April	38,439	2,950	284	1,281	76,240
May	206,480	10,300	2,500	6,661	409,500
June	58,112	5,060	400	1,937	115,300
July	13,753	675	217	444	27,280
August	14,927	1,770	184	482	29,610
September	8,471	620	170	282	16,800
Water year 1944-45	471,328	10,300	170	1,291	934,900

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

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

Rio Grande near Bernardo, N. Mex.

Location.- Water-stage recorder, lat. 34°25'00", long. 106°47'50", in W½NW¼ sec. 12, T. 2 N., R. 1 E. (projected), at bridge on U. S. Highway 60, 2¼ miles east of Bernardo and 3½ miles upstream from Rio Puerco. Auxiliary water-stage recorders on San Francisco riverside drain and Bernardo interior drain. Datum of gage is 4,723.95 feet above mean sea level, datum of 1929.

Drainage area.- 19,230 square miles (includes 2,940 square miles in closed basin in northern part of San Luis Valley, Colo.).

Records available.- June 1936 to January 1939, October 1941 to September 1945.

Extremes.- Maximum daily discharge during year, 10,100 second-feet May 15; minimum daily, 175 second-feet Sept. 14.

1936-39, 1941-45: Maximum discharge not determined, probably occurred Apr. 25, 1942; maximum daily discharge, 19,600 second-feet Apr. 25, 1942; maximum gage height, 6.90 feet Apr. 25, 1942; minimum daily discharge, 36 second-feet July 26, 1936.

Remarks.- Records fair except those for periods of no gage-height record and those above 3,000 second-feet, which are poor. Records of discharge obtained by summing the discharge of three channels carrying river flow. Many diversions above station for irrigation.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	635	573	664	891	774	832	559	2,260	5,230	545	328	287
2	571	560	691	831	774	774	559	2,920	a5,000	560	a286	383
3	558	522	637	773	760	802	497	3,900	a5,000	739	235	540
4	464	475	651	759	802	860	417	4,960	a4,000	603	227	556
5	417	474	774	773	920	860	546	5,680	a3,000	694	286	541
6	405	560	861	802	1,210	831	663	6,530	a2,700	663	286	422
7	439	663	921	773	1,020	831	623	8,210	a2,400	560	315	355
8	416	624	891	759	982	773	498	9,400	2,270	618	338	a283
9	372	650	832	745	951	759	463	9,660	2,530	516	337	a253
10	394	637	891	759	860	704	664	9,840	3,030	516	1,550	294
11	330	610	921	773	831	690	1,350	9,800	2,600	410	1,100	309
12	286	572	890	773	831	717	1,430	9,600	1,980	a337	939	249
13	286	559	890	773	831	690	984	9,860	1,680	271	829	192
14	300	609	832	773	831	623	832	9,720	1,480	263	1,140	175
15	320	533	803	802	831	650	804	10,100	1,110	351	1,100	210
16	375	485	803	773	802	745	1,760	9,520	1,010	514	a807	235
17	a2,430	545	832	832	831	802	862	8,300	946	662	574	267
18	a1,960	545	803	832	1,180	802	804	6,780	1,540	588	a427	412
19	a1,830	558	803	861	1,210	860	718	4,980	1,460	545	a307	347
20	a2,680	546	803	891	1,050	831	637	5,240	1,450	573	a356	352
21	1,040	623	802	861	951	690	999	5,490	1,280	587	a406	376
22	a840	534	803	861	1,050	623	1,990	6,340	1,040	529	a396	376
23	a810	510	803	831	1,020	597	3,040	5,940	a760	486	a346	386
24	a870	573	803	802	920	597	3,140	5,970	a710	602	338	428
25	a710	651	832	759	832	650	3,580	5,280	a800	358	343	389
26	a660	718	952	705	831	704	3,110	5,310	a960	311	293	333
27	652	732	1,050	832	802	623	3,350	5,640	a530	316	354	a253
28	636	760	1,020	860	832	a506	2,820	5,530	a460	471	512	221
29	610	691	921	890	-	a456	2,580	5,110	502	454	298	241
30	624	664	921	831	-	a476	2,680	5,450	487	486	244	331
31	665	-	891	803	-	546	-	5,440	-	471	209	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	23,585	2,680	286	761	46,780
November	17,756	760	474	592	35,220
December	25,991	1,050	637	838	51,550
Calendar year 1944	593,425	10,700	181	1,621	1,177,000
January	24,983	891	705	806	49,550
February	25,519	1,210	760	911	50,620
March	21,904	860	456	707	43,450
April	42,959	3,580	417	1,432	85,210
May	208,760	10,100	2,260	6,734	414,100
June	57,945	5,230	460	1,932	114,900
July	15,599	739	263	503	30,940
August	15,506	1,550	209	500	30,760
September	9,996	556	175	333	19,830
Water year 1944-45	490,503	10,100	175	1,344	972,900

a No gage-height record at one or both auxiliary gages; discharge computed on basis of available record and records for Rio Grande near Belen and at San Acacia, and Rio Puerco near Bernardo.

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

Rio Grande at San Acacia, N. Mex.

Location.- Water-stage recorder, lat. 34°15'20", long. 106°53'30", in NE¼ sec. 1, T. 1 S., R. 1 W., 0.2 mile downstream from San Acacia diversion dam, half a mile east of San Acacia, and 2 miles downstream from Rio Salado. Datum of gage is 4,660.16 feet above mean sea level, datum of 1929.

Drainage area.- 26,770 square miles (includes 2,940 square miles in closed basin in northern part of San Luis Valley, Colo.).

Records available.- April 1936 to September 1945 in reports of Geological Survey. February to December 1925, January 1926 to September 1927 (gage heights and discharge measurements only) in reports of State engineer. January 1941 to December 1945 in reports of Rio Grande Compact Commission.

Extremes.- Maximum discharge during year, 11,000 second-feet May 14; maximum gage height, 6.17 feet Oct. 19; minimum daily discharge, 80 second-feet Sept. 13.

1936-45: Maximum discharge, 27,400 second-feet Aug. 5, 1936 (gage height, 8.35 feet; datum of gage, 4,662.56 feet), from rating curve extended above 18,000 second-feet by logarithmic plotting; minimum daily, 1 second-foot June 23, 1939.

Remarks.- Records good. Diversions above station for irrigation. Records of water analyses for water year 1945 are given in Water-Supply Paper 1030.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	663	483	642	871	834	872	440	2,310	5,110	399	231	256
2	448	448	632	1,110	705	815	440	2,570	4,590	407	119	270
3	368	407	623	770	705	781	440	3,200	4,830	492	110	383
4	302	399	603	684	826	826	324	4,420	3,480	448	98	518
5	226	391	747	641	839	781	368	5,260	2,840	509	98	555
6	256	448	781	736	1,320	804	465	6,010	2,490	545	151	407
7	324	564	933	826	1,030	770	465	7,320	2,180	456	127	250
8	296	584	826	798	1,120	716	424	8,210	2,180	440	584	197
9	263	594	770	736	945	613	256	8,950	2,470	309	555	191
10	244	530	826	623	872	652	244	9,730	3,150	309	1,590	136
11	250	416	933	694	908	694	674	9,140	2,630	220	1,260	106
12	237	492	860	726	792	632	1,560	9,140	2,090	127	920	127
13	214	500	872	804	815	694	1,050	9,340	1,880	102	1,970	80
14	220	613	792	866	826	584	747	9,530	1,540	165	1,820	87
15	250	500	770	849	804	613	826	9,530	1,110	250	1,190	106
16	208	448	781	855	792	584	1,690	9,530	1,080	440	758	106
17	2,870	492	908	826	826	684	957	8,950	896	509	483	98
18	2,650	518	736	757	1,160	837	815	7,670	1,260	584	289	250
19	2,390	500	716	736	1,280	792	574	5,550	1,440	424	191	191
20	3,940	536	726	694	1,110	758	416	5,700	1,530	424	136	180
21	1,480	584	726	805	860	613	492	5,860	1,280	465	165	208
22	1,250	518	674	804	945	555	1,630	6,480	933	360	309	208
23	758	509	736	815	896	527	3,290	6,170	694	338	375	237
24	705	492	837	849	860	632	2,780	5,700	545	391	186	256
25	574	527	896	626	896	594	3,360	5,400	632	331	180	263
26	574	603	945	584	792	642	3,020	5,110	684	191	186	231
27	663	872	1,110	758	747	555	3,290	5,400	399	270	237	180
28	584	747	994	795	945	424	2,760	4,970	346	331	375	119
29	518	642	896	770	-	375	2,410	4,420	353	324	208	197
30	500	652	872	792	-	440	2,590	4,150	338	353	98	302
31	536	-	781	792	-	456	-	4,550	-	309	109	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	24,761	3,940	208	799	49,110
November	16,009	872	391	534	31,750
December	24,944	1,110	603	805	49,480
Calendar year 1944	552,135	9,930	44	1,509	1,095,000
January	23,992	1,110	584	774	47,590
February	25,450	1,320	705	909	50,480
March	20,315	872	375	655	40,290
April	38,797	3,360	244	1,293	76,950
May	200,270	9,730	2,310	6,460	397,200
June	54,980	5,110	338	1.833	109,100
July	11,222	584	102	362	22,260
August	15,108	1,970	98	487	29,970
September	6,695	555	80	223	13,280
Water year 1944-45	462,543	9,730	80	1,267	917,500

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

Rio Grande at San Marcial, N. Mex.

Location.- Water-stage recorder, lat. 33°40'50", long. 106°59'15", in Pedro Armendaris Grant 33, at Atchison, Topeka & Santa Fe Railway bridge, 1.1 miles downstream from San Marcial, Socorro County. Datum of gage is 4,455.38 feet above mean sea level (levels by International Boundary Commission).

Drainage area.- 27,700 square miles (including 2,940 square miles in closed basin in northern part of San Luis Valley, Colo.).

Records available.- January 1895 to September 1945 in reports of Geological Survey. Prior to January 1922 at site 0.3 mile upstream; January 1922 to February 1932 at highway bridge half a mile northeast of San Marcial and 1.8 miles above present site.

Average discharge.- 49 years (1896-1945), 1,555 second-feet.

Extremes.- Maximum discharge during year, 9,620 second-feet May 10 (gage height, 14.00 feet); minimum daily, 34 second-feet Sept. 1.
1895-1945: Maximum discharge, about 50,000 second-feet Oct. 11, 1904; no flow at times.

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

Cooperation.- Records furnished by International Boundary Commission, United States and Mexico, U. S. Section.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	971	514	668	836	795	749	484	2,460	4,260	206	226	34
2	735	554	646	836	784	793	476	2,060	4,610	274	204	119
3	511	478	642	825	745	801	445	2,500	4,150	301	134	112
4	408	444	620	764	715	741	459	3,330	3,500	349	74	210
5	371	395	548	736	717	731	437	4,270	2,520	417	60	369
6	285	341	564	741	770	770	398	5,340	1,950	365	55	347
7	279	403	713	764	986	787	417	6,470	2,030	425	47	278
8	275	511	734	805	1,150	805	484	7,510	1,750	436	62	178
9	273	578	743	771	1,080	785	440	8,420	1,980	316	119	136
10	265	554	724	746	1,010	754	333	9,270	2,230	348	315	113
11	228	530	700	732	908	688	302	9,540	3,720	359	734	104
12	238	472	734	735	827	635	366	9,300	2,720	243	1,000	86
13	213	429	764	732	776	634	1,080	8,800	1,700	168	759	70
14	195	399	767	747	776	634	1,190	9,160	1,280	136	1,390	64
15	194	457	730	748	775	633	906	9,060	1,180	102	1,470	40
16	250	462	703	750	775	640	797	9,010	885	76	878	35
17	458	476	703	763	768	645	969	8,880	675	80	574	49
18	2,070	505	702	810	761	652	1,220	8,480	547	215	385	54
19	2,660	498	683	775	799	725	876	6,780	1,010	427	285	44
20	2,260	482	670	733	952	759	674	5,160	1,330	269	198	102
21	3,200	476	689	742	997	792	581	5,490	1,360	251	161	101
22	1,460	508	673	796	1,020	708	560	5,700	944	280	186	87
23	926	529	684	798	965	593	957	6,210	549	298	273	109
24	718	557	687	796	933	546	2,300	5,840	353	264	421	117
25	680	557	718	813	852	562	3,180	5,450	387	212	274	135
26	607	577	781	798	819	534	3,270	4,940	328	273	197	161
27	593	622	845	763	771	556	3,100	4,490	401	210	156	165
28	680	687	925	749	759	598	3,120	4,740	278	161	93	126
29	620	707	903	784	-	549	2,860	4,510	234	161	136	77
30	575	706	942	807	-	464	2,480	4,300	205	190	151	85
31	526	-	902	810	-	451	-	4,330	-	239	76	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	23,724	3,200	194	765	47,060
November	15,410	708	341	514	30,570
December	22,507	942	548	726	44,640
Calendar year 1944	516,283	9,460	28	1,411	1,024,000
January	24,007	836	732	774	47,620
February	24,005	1,150	715	857	47,610
March	20,714	805	451	668	41,090
April	35,163	3,270	302	1,172	69,740
May	191,820	9,540	2,080	6,188	380,500
June	49,066	4,610	205	1,636	97,320
July	8,053	436	78	260	15,970
August	11,093	1,470	47	358	22,000
September	3,706	369	34	124	7,350
Water year 1944-45	429,268	9,540	34	1,176	851,500

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

Rio Grande below Elephant Butte Dam, N. Mex.

Location.- Water-stage recorder, lat. 33°09'05", long. 107°12'10", in N½ sec. 25, T. 13 S., R. 4 W. (projected), 3,800 feet downstream from Elephant Butte Dam in Pedro Armendaris Grant.

Records available.- October 1916 to September 1945.

Average discharge.- 29 years, 1,206 second-feet.

Extremes.- Maximum daily discharge during year, 1,660 second-feet Aug. 11; minimum daily, 857 second-feet Oct. 15.
1916-45: Maximum daily discharge, 8,220 second-feet May 22, 1942; no flow at times.

Remarks.- Records good. Many diversions above station for irrigation. Flow regulated by Elephant Butte Reservoir (see p. 196).

Cooperation.- Records furnished by Bureau of Reclamation.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	890	1,120	1,250	1,020	1,100	1,170	871	955	1,170	992	1,440	1,280
2	993	1,130	911	1,080	1,150	1,190	980	943	1,150	1,140	1,450	1,050
3	1,120	1,130	1,050	1,080	1,110	1,230	1,080	950	1,080	1,130	1,380	961
4	1,060	1,090	1,220	1,140	958	903	1,110	1,040	1,200	1,000	1,480	1,140
5	1,130	937	1,250	1,140	1,060	1,040	1,140	1,070	1,260	1,180	1,290	1,200
6	1,060	1,030	1,300	1,120	1,130	1,130	1,090	1,000	1,310	1,190	1,510	1,220
7	1,060	1,120	1,350	928	1,070	1,130	1,100	1,100	1,280	1,150	1,560	1,410
8	934	1,160	1,430	1,080	1,040	1,140	1,030	954	1,300	1,050	1,420	1,540
9	1,020	1,110	1,370	1,140	1,150	1,170	1,070	925	1,280	1,210	1,420	1,300
10	1,150	1,110	1,060	1,100	1,160	1,190	1,180	894	1,050	1,160	1,530	1,560
11	1,140	1,090	1,300	1,100	950	1,040	1,170	950	988	1,210	1,660	1,540
12	1,180	898	1,430	1,110	1,140	1,140	1,100	1,020	1,220	1,190	1,200	1,490
13	1,150	1,140	1,390	1,050	1,220	1,180	1,180	890	1,380	1,320	1,430	1,480
14	1,090	1,210	1,320	890	1,220	1,210	1,170	978	1,360	1,330	1,320	1,340
15	857	1,230	1,270	1,120	1,180	1,230	1,050	986	1,210	1,170	1,200	1,040
16	1,030	1,270	1,180	1,210	1,150	1,250	1,140	1,100	1,330	1,290	1,250	960
17	1,210	1,290	1,020	1,230	1,140	1,210	1,220	1,050	1,210	1,470	1,500	1,060
18	1,140	1,210	1,310	1,230	974	988	1,160	1,120	1,360	1,380	1,410	1,140
19	1,130	1,000	1,400	1,140	1,090	1,120	1,090	1,030	1,370	1,360	1,250	1,110
20	1,150	1,130	1,570	1,190	1,120	1,150	1,100	937	1,270	1,270	1,400	1,150
21	1,110	1,210	1,590	1,030	1,150	1,180	1,110	1,040	1,270	1,220	1,570	1,080
22	991	1,130	1,510	1,120	1,160	1,160	948	1,050	1,250	1,140	1,570	1,110
23	1,150	1,100	1,350	1,250	1,150	1,210	1,100	1,080	1,160	1,210	1,380	885
24	1,220	1,090	1,120	1,100	1,100	1,200	1,090	1,070	1,080	1,430	1,300	954
25	1,170	1,040	984	1,110	1,040	1,010	1,160	1,080	986	1,190	1,260	1,070
26	1,160	918	1,240	1,150	1,130	1,190	1,110	1,100	1,010	1,160	1,160	1,030
27	1,100	1,000	1,240	1,090	1,150	1,210	1,070	1,030	1,200	1,440	1,250	1,090
28	1,100	1,170	1,290	903	1,150	1,260	1,100	1,100	1,120	1,270	1,270	1,090
29	974	1,210	1,260	1,070	-	1,320	1,050	1,130	1,120	1,210	1,300	1,140
30	1,080	1,200	1,450	1,160	-	1,340	1,060	1,100	1,050	1,270	1,270	867
31	1,200	-	1,110	1,160	-	1,250	-	1,090	-	1,450	1,270	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	33,749	1,220	857	1.089	66,940
November	33,473	1,290	898	1.116	66,390
December	39,525	1,590	911	1,275	78,400
Calendar year 1944	443,060	1,770	675	1,211	878,800
January	34,241	1,250	890	1,105	67,920
February	31,142	1,220	950	1,112	61,770
March	36,141	1,340	903	1,166	71,680
April	32,829	1,220	871	1.094	65,120
May	31,762	1,130	890	1,025	63,000
June	36,044	1,380	986	1.201	71,490
July	38,202	1,470	992	1.232	75,770
August	42,700	1,660	1,160	1,377	84,690
September	35,287	1,560	867	1,176	69,990
Water year 1944-45	425,095	1,660	857	1,165	843,200

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

Rio Grande below Caballo Dam, N. Mex.

Location.- Water-stage recorder, lat. 32°53'05", long. 107°17'30", in NE¼SW¼ sec. 30, T. 16 S., R. 4 W., 600 feet upstream from Bojarquez bridge, 4,200 feet downstream from Caballo Dam, 1 1/3 miles upstream from Percha diversion dam, 3 miles northeast of Arrey, and 5 miles south of Caballo. Datum of gage is 4,145.9 feet above mean sea level.

Records available.- January 1938 to September 1945.

Extremes.- Maximum daily discharge during year, 2,680 second-feet July 28; minimum daily, 4.2 second-feet Oct. 8-14.
1938-45: Maximum daily discharge, 7,650 second-feet May 20, 1942; minimum daily, 1.3 second-feet Nov. 18-21, Dec. 12-27, 1940.

Remarks.- Records good. Considerable diversion above station for irrigation. Flow regulated by Caballo Reservoir (capacity, 345,900 acre-feet) and Elephant Butte Reservoir (capacity, 2,219,000 acre-feet).

Cooperation.- Records furnished by Bureau of Reclamation.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	567	5.0	5.0	5.0	29	693	2,120	1,820	1,760	2,370	2,400	2,100
2	648	4.9	5.0	5.1	30	626	2,130	1,880	1,880	2,110	2,360	2,390
3	752	4.9	64	5.2	31	924	2,290	1,870	2,080	1,600	2,280	2,370
4	747	5.0	178	5.3	410	1,060	2,380	1,790	2,070	1,950	2,270	2,320
5	348	4.9	146	5.5	698	1,040	2,180	2,060	2,020	2,080	2,270	2,210
6	11	4.9	129	5.7	732	944	2,040	2,180	1,950	1,950	2,270	2,090
7	4.6	4.9	82	6.1	594	838	2,290	2,170	1,910	2,180	2,200	1,960
8	4.2	4.9	258	6.2	514	682	2,460	2,080	1,900	2,420	2,150	2,130
9	4.2	4.8	773	6.5	433	666	2,440	1,960	2,030	2,390	2,150	2,190
10	4.2	4.7	773	7.0	250	867	2,290	1,700	2,140	2,290	2,140	2,200
11	4.2	4.6	678	7.4	141	920	2,180	1,600	2,130	2,190	2,300	2,200
12	4.2	4.5	465	7.7	141	877	2,230	1,710	2,010	2,080	2,410	2,010
13	4.2	4.3	318	8.0	214	1,020	2,310	1,780	1,910	1,960	2,410	1,730
14	4.2	4.3	104	8.5	289	1,060	2,470	1,780	1,870	2,060	2,380	1,540
15	642	4.3	6.9	9.0	289	1,060	2,440	1,750	1,770	2,120	2,160	1,410
16	993	4.3	5.3	9.2	289	1,350	2,300	1,600	1,930	2,130	2,000	1,410
17	940	4.6	5.3	9.4	228	1,620	2,190	1,440	2,110	2,130	2,010	1,410
18	915	4.6	5.3	9.7	299	1,650	2,350	1,330	2,110	2,240	2,070	1,410
19	762	4.6	5.2	10	446	1,680	2,180	1,560	2,110	2,370	2,180	1,300
20	492	4.6	5.1	10	393	1,640	1,960	1,760	2,110	2,380	2,200	1,260
21	199	4.6	5.1	11	334	1,640	2,210	1,790	1,980	2,520	2,200	1,260
22	6.2	4.6	5.1	11	318	1,550	2,220	1,700	1,860	2,600	2,080	1,260
23	5.3	4.7	5.2	11	245	1,710	2,290	1,690	2,060	2,560	1,900	1,270
24	5.3	4.8	5.2	13	635	2,150	2,200	1,690	2,230	2,560	1,870	1,270
25	5,2	4.9	5.3	15	840	2,040	2,000	1,630	2,300	2,560	2,000	1,270
26	5.2	4.9	5.3	17	913	2,020	1,630	1,790	2,350	2,550	2,030	1,220
27	5.2	4.9	5.2	18	616	2,250	1,600	1,970	2,270	2,600	2,030	1,120
28	5.2	5.0	5.1	20	804	2,250	1,820	2,070	2,180	2,680	2,000	1,120
29	5.2	5.0	5.1	22	-	2,130	1,820	2,150	2,100	2,600	1,970	1,090
30	5.0	5.0	5.0	25	-	1,940	1,840	2,080	2,290	2,580	1,900	1,020
31	5.0	-	5.0	28	-	2,080	-	1,950	-	2,510	1,810	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	8,102.8	993	4.2	261	16,070
November	142	5.0	4.3	4.73	282
December	4,087.7	773	5.0	132	8,110
Calendar year 1944	436,723.8	3,000	3.1	1,193	866,300
January	337.5	28	5.0	10.9	669
February	11,555	913	29	413	22,920
March	42,977	2,250	626	1,386	85,240
April	65,260	2,470	1,800	2,175	129,400
May	56,350	2,180	1,330	1,818	111,800
June	61,440	2,350	1,760	2,048	121,900
July	71,310	2,680	1,600	2,300	141,400
August	66,400	2,410	1,810	2,142	131,700
September	49,540	2,390	1,020	1,651	98,260
Water year 1944-45	437,502.0	2,680	4.2	1,199	867,800

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

Reservoirs in the Rio Grande Basin

Elephant Butte Reservoir.- Water-stage recorder, lat. 33°09'15", long. 107°11'30", at dam on Rio Grande in NW¼ sec. 30, T. 13 S., R. 3 W. (surveys by Bureau of Reclamation), 1 mile west of Elephant Butte, N. Mex., and 4 miles northeast of Hot Springs. Datum of gage is 43.3 feet above mean sea level. Records available, January 1940 to September 1945. Maximum daily contents during year, 1,519,700 acre-feet June 13-15; maximum daily gage height, 4,385.60 feet June 13, 14; minimum daily contents, 1,196,500 acre-feet Apr. 23-25; minimum daily gage height, 4,372.28 feet Apr. 24. Maximum daily contents during period 1940-45, 2,303,000 acre-feet June 16-18, 1942 (gage height, 4,409.19 feet); minimum daily, 418,500 acre-feet Sept. 21-23, 1940 (gage height, 4,323.20 feet).

Reservoir is formed by concrete dam; storage began Jan. 6, 1915; dam completed May 13, 1916. Capacity, 2,219,000 acre-feet between gage heights 4,231.5 feet (sill of lower outlet gate) and 4,407.0 feet (spillway crest), survey of 1940. No dead storage. Figures given herein represent usable contents. Water is used for power development and irrigation on Rio Grande project of Bureau of Reclamation. Contents as here given are computed from mean daily gage heights.

Gage-height record and capacity table furnished by Bureau of Reclamation.

Caballo Reservoir.- Water-stage recorder, lat. 32°53'45", long. 107°17'30", at dam on Rio Grande, in SE¼SW¼ sec. 19, T. 16 S., R. 4 W., 0.5 mile downstream from mouth of Apache Canyon, 0.9 mile upstream from Bojarquez Bridge, 2 miles upstream from Percha diversion dam, 3.5 miles northeast of Arrey, and 4.5 miles south of Caballo, N. Mex. Datum of gage is 43.3 feet above mean sea level. Records available, February 1938 to September 1945. Maximum daily contents during year, 302,000 acre-feet Mar. 15 (gage height, 4,178.08 feet); minimum daily, 5,130 acre-feet Sept. 27 (gage height, 4,120.64 feet). Maximum daily contents during period 1938-45, 347,000 acre-feet Mar. 4, 1942 (gage height, 4,182.06 feet); minimum daily, 118 acre-feet Oct. 14, 1938 (gage height, 4,108.1 feet).

Reservoir is formed by earth-fill dam; storage began Feb. 8, 1938; dam completed Sept. 19, 1938. Capacity, 345,900 acre-feet between gage heights 4,104 feet (bottom of tunnel entrance to gates) and 4,182 feet (maximum gage height at which spillway gates operate automatically). No dead storage. Figures given herein represent usable contents. Water released from Elephant Butte Reservoir for power development is stored in Caballo Reservoir and released for irrigation on Rio Grande project of Bureau of Reclamation. Contents as here given are computed from mean daily gage heights.

Gage-height record and capacity table furnished by Bureau of Reclamation.

Carson Reservoir.- Water-stage recorder, lat. 36°25', long. 105°50', in NW¼ sec. 12, T. 25 N., R. 10 E., on Aguaje de la Petaca, 4½ miles northwest of Carson, N. Mex. Records available, January 1940 to September 1945. Maximum daily contents during year, 519 acre-feet May 4 (gage height, 19.0 feet); no storage most of year. Maximum contents during period 1940-45, 3,620 acre-feet May 6, 1941 (gage height, 38.5 feet); no storage for extended periods.

Reservoir is formed by earth-fill dam, stone-faced, completed in 1935. Capacity, 5,684 acre-feet between gage heights 8.0 feet (sill of outlet gate) and 45 feet (crest of spillway). Dead storage negligible. Water used for irrigation in Carson Irrigation District near Carson, N. Mex. Gage heights and contents at 12 p.m.

El Vado Reservoir.- Water-stage recorder (records stages above spillway floor only) and staff gage, lat. 36°35'45", long. 106°43'55", in SE¼ sec. 4, T. 27 N., R. 2 E. (projected), at left end of El Vado Dam on Rio Chama, 2 miles downstream from old town of El Vado and 13 miles southwest of Tierra Amarilla, N. Mex. Datum of gage is 9,565 feet above mean sea level, datum of 1929. Records available, January 1935 to September 1945. Maximum daily contents during year, 204,000 acre-feet June 6, 7 (gage height, 6,903.1 feet), surcharge due to heavy inflow and spillway gate partly opened; minimum daily, 79,330 acre-feet, Nov. 3-5 (gage height, 6,852.6 feet). Maximum daily contents during period 1935-45, that of June 6, 7, 1945; minimum daily, 56 acre-feet Jan. 1, 1935.

Reservoir is formed by rock-fill dam, steel-faced; storage began in January 1935. Capacity, 200,300 acre-feet between gage heights 6,740.0 feet (bottom of trash rack) and 6,902.0 feet (top of spillway gate). Dead storage unknown. Figures given herein represent usable contents. Water is used for irrigation by Middle Rio Grande Conservancy District. Gage read daily about 7:30 a.m. Continuous recorder registers gage height above 6,879.3 feet (floor of spillway). Contents given herein are those at 7:30 a.m. Staff-gage readings and capacity table furnished by Middle Rio Grande Conservancy District.

Nichols Reservoir.- Water-stage recorder, lat. 35°41'20", long. 105°52'40", in E½NE¼ sec. 21, T. 17 N., R. 10 E., at dam on Santa Fe Creek, three-quarters of a mile upstream from lower storage reservoir, 2½ miles downstream from upper storage reservoir of New Mexico Power Co., and 3½ miles east of Santa Fe, N. Mex. Datum of gage is 7,313.2 feet above mean sea level, datum of 1929. Records available, December 1942 to September 1945. Maximum daily contents during year, 704 acre-feet Apr. 21-23, May 2-14 (gage height, 167.6 feet); minimum daily, 365 acre-feet Sept. 30 (gage height, 154.5 feet). Maximum daily contents 1942-45, 816 acre-feet May 23-25, 1944 (gage height, 171.2 feet); minimum daily, 16 acre-feet Feb. 11 to Mar. 10, 1944 (gage height, 121.8 to 122.0 feet).

Reservoir is formed by earth-fill dam. Storage began Mar. 16, 1943. Capacity, 796 acre-feet between gage heights 121.2 feet (bottom of lower operational gate) and 171.0 feet (top of flashboards in spillway). Dead storage, 14 acre-feet. Figures given here represent total contents. Water is used for municipal consumption by city of Santa Fe. Contents given herein are those for 12 p.m. Capacity table computed from survey furnished by New Mexico Power Co.

Alamogordo Reservoir.- Mercury gage, lat. 34°36'30", long. 104°23'10", in SW¼ sec. 34, T 5 N., R. 24 E., at Alamogordo Dam on Pecos River, 5 miles northeast of Guadalupe, 12 miles northwest of Fort Sumner, N. Mex. Datum of gage is at mean sea level, Bureau of Reclamation datum. Drainage area, 4,390 square miles (contributing area). Records available, January 1939 to September 1945. Maximum daily contents during year, 49,300 acre-feet Mar. 27 (elevation, 4,245.30 feet); minimum daily, 5,600 acre-feet June 26 (elevation, 4,210.15 feet). Maximum daily contents during period 1939-45, 149,400 acre-feet Apr. 19, 20, 1942 (elevation, 4,275.30 feet); minimum daily, 3,000 acre-feet Aug. 5, 1940 (elevation, 4,205.9 feet).

Reservoirs in the Rio Grande Basin--Continued

Reservoir is formed by Alamogordo Dam; completed and storage began in 1938. Capacity, 148,000 acre-feet between elevations 4,200.0 feet (sill of outlet gates) and 4,275.0 feet (top of spillway gates) above mean sea level. Dead storage, 8,750 acre-feet. Figures given herein represent usable contents. Contents computed from once-daily gage readings at 8 a.m. Gage-height record and capacity curve furnished by Bureau of Reclamation.

Lake McMillan.- Staff gage, lat. 32°35'45", long. 104°20'55", in SE¼ sec. 2, T. 20 S., R. 26 E., at McMillan Dam on Pecos River, 3 miles southeast of Lakewood, N. Mex. Datum of gage is 3,241.6 feet above mean sea level, Bureau of Reclamation datum. Drainage area, 16,990 square miles (contributing area). Records available, January 1939 to September 1945. Maximum daily contents during year, 12,340 acre-feet Apr. 19, 20 (gage height, 20.0 feet); no storage June 3-23, July 27 to Aug. 30, Sept. 15-30. Maximum daily contents during period 1939-45, 68,500 acre-feet Sept. 26, 1941 (gage height, 29.95 feet); no storage Aug. 16-23, 1944, June 3-23, July 27 to Aug. 30, Sept. 15-30, 1945.

Lake is formed by McMillan Dam, completed and storage began in 1906. Capacity, 38,660 acre-feet between gage heights 0.0 foot (sill of outlet gate) and 26.1 feet (crest of spillway 1). No dead storage. Figure given herein represent usable contents. Water is used for irrigation on Carlsbad project of Bureau of Reclamation. Contents computed from daily readings at 6 a.m. Gage-height record.and capacity table furnished by Bureau of Reclamation.

Lake Avalon.- Staff gage, lat. 32°29'25", long. 104°15'00", in SW¼ sec. 12, T. 21 S., R. 26 E., at Avalon Dam on Pecos River, 5 miles north of Carlsbad, N. Mex. Datum of gage is 3,157.0 feet above mean sea level, Bureau of Reclamation datum. Drainage area, 18,070 square miles (contributing area). Records available, January 1939 to September 1945. Maximum daily contents during year, 6,050 acre-feet Mar. 14-28 (gage height, 20.45 feet); no storage June 5-19, July 28 to Aug. 21, Sept. 17-30. Maximum daily contents during period 1939-45, 11,000 acre-feet May 22, 1941 (gage height, 25.0 feet); no storage Sept. 7, Oct. 2-11, 1940, June 7, 8, Aug. 8-24, 1944, June 5-19, July 28 to Aug. 21, Sept. 17-30, 1945, when natural flow was passing through reservoir.

Lake is formed by Avalon Dam; storage began in 1906. Capacity, 6,600 acre-feet between gage heights 0.0 foot (sill of outlet gates) and 21.0 feet (crest of spillway 1). No dead storage. Figures given herein represent usable contents. Water is used for irrigation on Carlsbad project of Bureau of Reclamation. Contents computed from once-daily readings at 6 a.m. Gage-height record and capacity curve furnished by Bureau of Reclamation.

Red Bluff Reservoir.- Staff gage, lat. 31°54'05", long. 103°54'40", at right end of Red Bluff Dam on Pecos River, 3 miles upstream from Salt (Screwbean) Draw, 4.5 miles north of Orla, Reeves County, Tex. Datum of gage is 0.30 foot below mean sea level, datum of 1929. Subtract 0.30 foot from elevations given herein to obtain elevation above mean sea level, datum of 1929. Contributing drainage area, 20,720 square miles. Records available, February 1937 to September 1945. Maximum contents observed during year, 159,800 acre-feet Feb. 15 (elevation, 2,826.1 feet); minimum observed, 28,000 acre-feet Sept. 28, 30 (elevation, 2,794.8 feet). Maximum contents observed during period 1937-45, 352,000 acre-feet Sept. 27, 28, 1941 (elevation, 2,846.2 feet observed on staff gage at service spillway, affected by variable draw-down due to flow through taintor gates); minimum observed, 28,000 acre-feet Sept. 17, 23-28, 1940, Sept. 28, 30, 1945 (elevation, 2,794.8 feet).

Reservoir is formed by earth-fill dam, riprap faced; storage began in 1936; dam completed early in 1937. Capacity, 307,000 acre-feet between elevations 2,764.0 feet (penstock intake sill) and 2,842.0 feet (top of taintor gates). Dead storage, 3,000 acre-feet. Figures given herein represent total contents. Water is used for power development and for irrigation from Mentone to Grandfalls. Contents computed from intermittent gage readings. Elevation record and capacity curve furnished by Red Bluff Water Power Control District.

Monthly gage height and contents, water year October 1944 to September 1945

Date	Elephant Butte Reservoir			Caballo Reservoir		
	Elevation or gage height (feet)	Contents (acre-feet)	Change in contents during month (acre-feet)	Elevation or gage height (feet)	Contents (acre-feet)	Change in contents during month (acre-feet)
Sept.30	4,380.76	1,393,000	-	4,134.53	30,800	-
Oct. 31	4,379.60	1,364,500	-28,500	4,149.11	81,140	+50,340
Nov. 30	4,377.91	1,323,400	-41,100	4,159.72	143,600	+62,460
Dec. 31	4,376.48	1,290,600	-32,800	4,168.03	207,100	+63,500
Calendar year 1944	-	-	+40,000	-	-	+26,600
Jan. 31	4,375.69	1,272,100	-18,500	4,174.68	268,300	+61,200
Feb. 28	4,375.06	1,257,400	-14,700	4,177.68	297,800	+29,500
Mar. 31	4,373.56	1,223,900	-33,500	4,176.01	281,000	-16,800
Apr. 30	4,372.90	1,209,600	-14,300	4,169.46	218,900	-62,100
May 31	4,384.29	1,484,600	+275,000	4,163.43	171,200	-47,700
June 30	4,384.74	1,496,800	+12,200	4,156.66	123,200	-48,000
July 31	4,381.96	1,423,200	-73,600	4,145.52	60,020	-57,180
Aug. 31	4,379.07	1,351,200	-72,000	4,133.23	27,550	-38,470
Sept.31	4,375.70	1,272,100	-79,100	4,121.08	5,620	-21,930
Water year 1944-45	-	-	-120,900	-	-	-25,180

Reservoirs in the Rio Grande Basin--Continued

Monthly gage height and contents of reservoirs in Rio Grande Basin, water year October 1944 to September 1945

Date	Carson Reservoir			El Vado Reservoir		
	Elevation or gage height (feet)	Contents (acre-feet)	Change in contents during month (acre-feet)	Elevation or gage height (feet)	Contents (acre-feet)	Change in contents during month (acre-feet)
Sept. 30	-	0	-	6,857.1	87,110	-
Oct. 31	-	0	0	6,952.9	79,830	-7,280
Nov. 30	-	0	0	6,854.3	82,220	+2,390
Dec. 31	-	0	0	6,856.0	85,160	+2,940
Calendar year 1944	-	- -	0	-	-	+54,350
Jan. 31	-	0	0	6,857.7	88,180	+3,020
Feb. 28	-	0	0	6,859.4	91,280	+3,100
Mar. 31	-	0	0	6,863.3	98,650	+7,370
Apr. 30	16.7	334	+334	6,881.4	139,300	+40,650
May 31	-	0	-334	6,902.4	201,700	+62,400
June 30	-	0	0	6,902.6	202,300	+600
July 31	-	0	0	6,892.4	170,100	-32,200
Aug. 31	-	0	0	6,880.5	137,000	-33,100
Sept. 30	-	0	0	6,863.3	98,650	-38,350
Water year 1944-45	-	- -	0	-	-	+11,540
Date	Nichols Reservoir			Alamogordo Reservoir		
Sept. 30	165.7	646	-	11.85	6,740	-
Oct. 31	166.4	667	+21	19.50	12,800	+6,060
Nov. 30	166.9	682	+15	27.20	20,730	+7,930
Dec. 31	-	672	-10	34.10	29,440	+8,710
Calendar year 1944	-	-	+655	-	-	-8,160
Jan. 31	-	665	-7	39.30	37,780	+8,340
Feb. 28	-	665	0	42.85	44,260	+6,480
Mar. 31	165.9	652	+13	44.00	46,550	+2,290
Apr. 30	167.5	701	+49	13.80	8,120	-38,430
May 31	167.4	698	-3	32.70	27,500	+19,380
June 30	167.1	688	-10	10.55	5,860	-21,640
July 31	166.7	676	-12	17.20	10,800	+4,940
Aug. 31	160.4	502	-174	28.10	21,750	+10,950
Sept. 30	154.5	365	-137	12.25	7,020	-14,730
Water year 1944-45	-	- -	-281	-	-	+280
Date	Lake McMillan			Lake Avalon		
Sept. 30	16.8	3,550	-	15.25	1,850	-
Oct. 31	17.8	5,870	+2,320	18.65	4,400	+2,550
Nov. 30	17.6	5,370	-500	20.20	5,810	+1,410
Dec. 31	17.1	4,200	-1,170	20.20	5,810	0
Calendar year 1944	-	-	-2,730	-	-	+190
Jan. 31	16.6	3,140	-1,060	20.15	5,760	-50
Feb. 29	15.7	1,650	-1,490	19.20	4,880	-800
Mar. 31	15.6	1,520	-130	19.35	5,020	+140
Apr. 30	18.8	8,620	+7,100	16.00	2,350	-2,670
May 31	15.2	1,050	-7,570	13.85	1,080	-1,270
June 30	17.0	3,980	+2,930	15.40	1,950	+870
July 31	-	0	-3,980	2.00	0	-1,950
Aug. 31	12.0	10	+10	14.20	1,250	+1,250
Sept. 30	-	0	-10	2.00	0	-1,250
Water year 1944-45	-	-	-3,550	-	-	-1,850
Date	Red Bluff Reservoir					
Sept. 30	2,819.2	116,200	-			
Oct. 31	2,820.2	122,200	+6,000			
Nov. 30	2,821.7	131,200	+9,000			
Dec. 31	-	a142,200	+11,000			
Calendar year 1944	-	-	-66,000			
Jan. 31	2,825.5	155,500	+13,300			
Feb. 28	-	a156,200	+700			
Mar. 31	-	a144,200	-12,000			
Apr. 30	2,820.6	124,600	-19,600			
May 31	2,816.9	103,500	-21,100			
June 30	-	a77,800	-25,700			
July 31	2,807.8	62,800	-15,000			
Aug. 31	-	a39,500	-23,300			
Sept. 30	-	a28,000	-11,500			
Water year 1944-45	-	-	-88,200			

a No gage-height record; contents estimated on basis of gage heights for adjacent days.

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Clear Creek below Continental Reservoir, Colo.

Location.- Water-stage recorder and Parshall flume, lat. 37°53', long. 107°11', in sec. 22, T. 42 N., R. 3 W., 1,000 feet downstream from Continental Reservoir and 15 miles west of Creede.

Drainage area.- 51.7 square miles.

Records available.- October 1933 to September 1945 in reports of Geological Survey. May 1929 to September 1945 in reports of State engineer.

Average discharge.- 16 years, 30.4 second-feet.

Extremes.- Maximum discharge during year, 200 second-feet June 5 (gage height, 2.67 feet); minimum daily, 2.6 second-feet Sept. 21.

1929-45: Maximum discharge, 313 second-feet May 4, 1937 (gage height, 3.41 feet); no flow June 22, 23, 1935.

Remarks.- Records good above 35 second-feet and fair below. Flow regulated by Continental Reservoir (capacity, 26,700 acre-feet).

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5.2	6.1	6.1	6.1	6.1	6.1	6.1	67	86	43	47	26
2	5.2							67	73	39	54	25
3	5.5							81	56	38	57	24
4	5.5							126	87	37	59	24
5	5.2							164	195	37	58	20
6	5.2							163	198	37	57	14
7	5.2							150	196	38	59	12
8	5.2							135	194	37	53	13
9	5.2							131	191	41	46	12
10	5.5							126	190	49	37	11
11	5.5							126	158	52	26	8.5
12	5.5							128	129	47	25	7.8
13	5.5							127	69	44	25	7.1
14	5.5							126	86	44	22	6.8
15	5.8							127	87	38	21	7.4
16	5.8							124	76	34	28	6.8
17	5.8							96	68	34	35	5.7
18	5.8							96	68	34	34	4.4
19	5.8							97	68	39	32	3.8
20	6.1							87	70	42	32	2.9
21	6.1							79	70	43	32	2.6
22	6.1							70	70	42	33	6.0
23	6.1							42	79	43	32	8.2
24	6.1							26	80	51	33	8.2
25	6.1							58	80	55	37	6.5
26	6.1							83	80	58	37	8.5
27	6.1						7.4	99	74	61	36	8.2
28	6.1						18	119	63	53	29	8.5
29	6.1				-		47	141	47	44	27	9.4
30	6.1				-		53	148	43	42	26	9.4
31	6.1	-			-		-	118	-	43	26	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	177.1	6.1	5.2	5.71	351
November	183.0	-	-	6.1	363
December	189.1	-	-	6.1	375
Calendar year 1944	12,500.4	178	-	34.2	24,790
January	189.1	-	-	6.1	375
February	170.8	-	-	6.1	339
March	189.1	-	-	6.1	375
April	284.0	53	-	9.47	563
May	3,327	164	26	107	6,600
June	3,031	198	43	101	6,010
July	1,339	61	34	43.2	2,660
August	1,155	59	21	37.3	2,290
September	319.7	26	2.6	10.7	634
Water year 1944-45	10,553.9	198	2.6	28.9	20,940

Note.- No gage-height record Oct. 25 to Apr. 26; discharge computed on basis of gate openings at Continental Reservoir.

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

Goose Creek near Wagon Wheel Gap, Colo.

Location.- Water-stage recorder, lat. 37°41', long. 106°50', in NW¼ sec. 26, T. 40 N., R. 1 E., 1½ miles downstream from Roaring Fork and 6 miles south of Wagon Wheel Gap.

Drainage area.- 53.6 square miles.

Records available.- October 1939 to September 1945 (no winter records after October 1941). October 1924 to July 1926 at site 1 mile upstream.

Extremes.- Maximum discharge during year, 303 second-feet June 13 (gage height, 2.04 feet); minimum daily recorded, 7.8 second-feet Apr. 1, 5, 6.
1924-26, 1939-45: Maximum discharge, 780 second-feet June 23, 1941 (gage height, 2.99 feet), from rating curve extended above 500 second-feet; minimum daily recorded, that of Apr. 1, 5, 6, 1945.

Remarks.- Records excellent except those for periods of no gage-height record, which are fair. Lake Humphreys (capacity, 842 acre-feet), has slight effect on flow.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	19	18					7.8	100	137	122	47	29
2	30	16					8.4	106	137	118	41	26
3	23	16					8.0	116	130	112	41	23
4	18	15					6.5	125	152	100	41	20
5	18	16					7.8	125	185	88	38	20
6	18	20					7.8	114	185	81	44	19
7	17	17					14	102	172	78	49	19
8	16	16					29	116	169	73	52	19
9	16	11					33	112	155	70	44	18
10	17	12					30	130	152	70	43	18
11	17	-					21	152	144	67	37	18
12	17	-					16	150	155	64	39	18
13	16	-					16	164	217	62	39	17
14	18	-					15	150	249	63	35	17
15	25	-					17	118	253	60	33	17
16	32	-					16	104	233	58	30	12
17	36	-					16	112	198	58	29	9.9
18	30	-					16	132	192	58	28	14
19	23	-					25	127	179	60	28	14
20	20	-					40	118	164	55	29	14
21	20	-					52	112	169	53	29	13
22	20	-					59	116	192	50	32	14
23	21	-					56	130	195	49	29	16
24	19	-					50	152	188	50	28	16
25	19	-					43	166	179	53	32	16
26	19	-					37	175	161	50	28	16
27	17	-					36	209	150	46	32	16
28	19	-					36	213	142	43	30	17
29	19	-					48	217	134	42	27	20
30	17	-					62	198	125	41	28	22
31	17	-					-	155	-	41	26	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	633	36	16	20.4	1,260
November 1-10	157	20	11	15.7	311
December	-	-	-	-	-
Calendar year	-	-	-	-	-
January	-	-	-	-	-
February	-	-	-	-	-
March	-	-	-	-	-
April	831.3	62	7.8	27.7	1,650
May	4,316	217	100	139	8,560
June	5,193	253	125	173	10,300
July	2,035	122	41	65.6	4,040
August	1,088	52	26	35.1	2,160
September	527.9	29	9.9	17.6	1,050
Water year	-	-	-	-	-

Note.- No gage-height record Oct. 6-18, Apr. 1-5, 14, 23-27, Aug. 11; discharge computed on basis of weather records and records for South Fork Rio Grande at South Fork.

Time basis; Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

South Fork Rio Grande at South Fork, Colo.

Location.- Water-stage recorder, lat. 37°40', long. 106°39', in sec. 4, T. 39 N., R. 3 E., 1¼ miles upstream from mouth and 1½ miles southwest of village of South Fork. Datum of gage is 8,221.79 feet above mean sea level, datum of 1929.

Drainage area.- 216 square miles.

Records available.- August 1910 to September 1913 and May 1936 to September 1945 in reports of Geological Survey. August 1910 to September 1922 and May 1936 to September 1945 in reports of State engineer. Records for 1910-22 at site 1 mile downstream.

Average discharge.- 21 years (1910-22, 1936-45), 239 second-feet.

Extremes.- Maximum discharge during year, 1,250 second-feet May 29 (gage height, 4.68 feet); minimum daily, 34 second-feet Dec. 10, 12, Sept. 12, 23, 24.

1910-22, 1936-45: Maximum discharge, 8,000 second-feet Oct. 5, 1911 (gage height, 9.7 feet, from floodmarks, site and datum now in use), from rating curve extended above 1,500 second-feet; minimum daily, 20 second-feet Jan. 1, 2, 8, 17, 23-25, 1915, Dec. 20, 1937.

Remarks.- Records excellent except those for period of ice effect or no gage-height record, which are fair. A few small diversions above station for irrigation and several small storage reservoirs.

Rating table, water year 1944-45, except period of ice effect
(gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Nov. 6-13, Sept. 3-30)

1.0	28	2.0	150	3.4	555
1.2	45	2.2	187	3.9	795
1.3	55	2.6	282	4.4	1,080
1.6	92	3.0	405		

Discharge, in second-feet, water year October 1944 to September 1946

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	47	64	41	36	44	*40	83	419	730	523	99	68
2	75	54	42	39	46	40	83	499	695	523	92	69
3	62	50	41	41	47	40	68	535	665	503	113	67
4	53	61	43	43	46	42	60	564	765	483	96	61
5	53	55	41	45	44	41	60	578	900	464	88	48
6	52	62	44	46	45	42	73	560	938	461	105	44
7	48	53	43	45	43	44	102	503	866	460	155	44
8	44	51	43	48	46	45	129	551	828	433	150	43
9	43	*47	42	47	49	48	142	560	735	430	129	39
10	44	49	34	47	50	52	134	645	705	425	130	37
11	44	52	36	47	49	52	113	735	665	380	113	37
12	43	53	34	48	48	52	105	740	695	331	135	34
13	42	48	37	49	46	54	93	785	861	290	129	35
14	42	46	*41	47	47	52	89	735	1,000	242	106	35
15	60	49	40	44	49	51	87	560	1,030	222	99	35
16	96	53	39	*45	47	50	79	483	984	201	93	37
17	109	49	38	46	46	46	78	479	888	185	87	40
18	96	46	39	43	44	47	100	543	806	179	83	37
19	83	39	40	40	*42	*46	142	568	765	181	77	36
20	78	42	42	40	42	47	196	564	730	158	79	38
21	75	42	43	42	42	49	256	527	730	162	93	36
22	73	42	43	40	41	53	307	555	817	146	93	36
23	72	44	44	40	40	55	307	622	861	142	78	34
24	71	43	45	43	42	59	244	655	834	164	68	34
25	62	40	43	44	45	57	196	775	806	171	72	39
26	53	40	41	45	44	67	186	828	755	150	66	37
27	53	40	40	47	42	67	173	1,010	680	117	69	35
28	53	36	41	46	41	57	169	1,050	618	110	69	38
29	54	37	42	44	-	48	210	1,080	573	107	61	47
30	53	42	41	42	-	51	310	1,060	535	114	60	51
31	51	-	38	43	-	60	-	844	-	100	61	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	1,884	109	42	60.8	3,740
November	1,409	62	36	47.0	2,790
December	1,261	45	34	40.7	2,500
Calendar year 1944	91,550	1,450	28	250	181,600
January	1,362	49	36	43.9	2,700
February	1,257	50	40	44.9	2,490
March	1,554	67	40	60.1	3,080
April	4,373	310	60	146	8,670
May	20,612	1,080	419	665	40,880
June	23,460	1,030	535	782	46,520
July	8,548	523	100	276	16,950
August	2,947	155	60	95.1	5,850
September	1,251	69	34	41.7	2,480
Water year 1944-45	69,918	1,080	34	192	138,600

* Winter discharge measurement made on this day.

Note.- Stage-discharge relation affected by ice Nov. 14 to Mar. 26 (no gage-height record Dec. 15 to Mar. 22); discharge computed on basis of 4 discharge measurements and weather records.

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

Pinos Creek near Del Norte, Colo.

Location.- Water-stage recorder and Parshall flume, lat. 37°27', long. 106°35', in sec. 29, T. 39 N., R. 5 E., just downstream from Bennett Creek and 8 miles southwest of Del Norte.

Drainage area.- 53 square miles.

Records available.- May 1936 to September 1945 in reports of Geological Survey. May 1919 to September 1924 and May 1936 to September 1945 in reports of State engineer. (No winter records most years.)

Extremes.- Maximum discharge during year, 330 second-feet Aug. 1 (gage height, 3.07 feet); from rating curve extended above 230 second-feet; minimum observed, 3.6 second-feet Nov. 9 (discharge measurement), but may have been less during period of no gage-height record.

1919-24, 1936-45: Maximum daily discharge, 2,400 second-feet June 3, 1922; minimum, 3.6 second-feet Oct. 27, 1939, Nov. 9, 1944 (discharge measurement).

Remarks.- Records good above 30 second-feet and fair below. One small diversion above station.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	6.8	4.8	4.0	4.2	4.5	5.0	14	51	94	53	35	23
2	7.6						14	68	91	53	42	23
3	7.6						10	79	91	49	50	14
4	7.2						8.8	84	104	46	37	16
5	7.6						8.5	84	118	44	31	15
6	7.6						11	75	115	42	67	14
7	7.6						15	71	105	40	79	14
8	7.2						18	89	98	38	68	14
9	7.6	(*)					19	95	92	41	52	14
10	7.2						15	104	91	39	49	13
11	7.2						7.6	116	84	39	51	12
12	6.8						8.5	117	94	33	63	12
13	6.8						9.5	126	105	32	48	12
14	6.2						7.2	120	109	31	45	12
15	8.2						7.6	85	112	31	42	12
16	12						11	71	111	30	38	12
17	12						12	80	102	29	36	12
18	9.3						9.5	96	93	36	38	11
19	8.6						15	102	90	36	35	10
20	7.9						23	95	83	30	34	10
21	7.9						30	81	79	29	39	9.5
22	8.2						39	84	79	27	37	10
23	8.2						37	93	75	26	30	9.5
24	7.9						24	98	73	28	34	9.5
25	7.9						20	101	78	32	35	9.5
26	7.9					6.8	20	108	78	37	28	9.5
27	7.9					6.4	19	124	68	26	28	9.5
28	8.2					6.4	19	116	64	23	27	9.5
29	8.2				-	6.8	22	128	61	30	25	10
30	7.6				-	7.6	34	126	55	30	23	12
31	7.2	-			-	10	-	106	-	27	25	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	246.1	12	6.2	7.94	488
November	144.0	-	-	4.8	286
December	124.0	-	-	4.0	246
Calendar year 1944	13,446.1	265	-	36.7	26,670
January	130.2	-	-	4.2	258
February	126.0	-	-	4.5	250
March	169.0	-	-	5.45	335
April	508.2	39	7.2	16.9	1,010
May	2,973	128	51	95.9	5,900
June	2,692	118	55	89.7	5,340
July	1,087	53	23	35.1	2,160
August	1,271	79	23	41.0	2,520
September	373.5	23	9.5	12.4	741
Water year 1944-45	9,844.0	128	-	27.0	19,530

Note.- No gage-height record Nov. 1 to Mar. 25 (stage-discharge relation affected by ice during most of period), Apr. 4-8, July 15; discharge computed on basis of weather records and records for South Fork Rio Grande at South Fork.

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

Rock Creek near Monte Vista, Colo.

Location.- Water-stage recorder and 8-foot Parshall flume, lat. 37°29', long. 106°16', in SE¼ sec. 36, T. 38 N., R. 6 E., 3 miles downstream from North Fork and 9 miles southwest of Monte Vista.

Drainage area.- 33.6 square miles.

Records available.- May 1935 to September 1945 in reports of Geological Survey. April 1919 to September 1924 and May 1935 to September 1945 in reports of State engineer. (No winter records.)

Extremes.- Maximum discharge during year, 64 second-feet May 13 (gage height, 1.42 feet); minimum daily discharge recorded, 3.0 second-feet Nov. 8.
1935-45: Maximum discharge, 178 second-feet May 15, 1944 (gage height, 2.88 feet); minimum daily recorded, 1.6 second-feet Oct. 27-31, 1921.

Remarks.- Records excellent above 20 second-feet and good below. Diversions above station for irrigation.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3.8	3.8				-	8.3	30	34	17	11	11
2	3.8	3.8				-	7.3	33	33	18	11	11
3	3.8	3.8				-	4.0	38	31	17	14	8.7
4	4.0	3.8				-	a4.2	40	33	16	11	8.0
5	3.8	3.8				-	4.6	42	34	16	9.4	7.3
6	4.0	3.8				-	5.3	42	33	15	14	7.0
7	4.0	3.3				-	7.6	41	32	15	19	7.6
8	4.0	3.0				-	11	42	30	15	20	7.3
9	4.0	3.3				-	11	44	30	14	18	6.6
10	4.0	b3.5				-	9.8	45	28	15	18	6.3
11	4.0	b3.6				-	7.3	48	26	14	19	5.6
12	3.8	3.8				-	7.3	48	22	12	19	5.3
13	3.8	3.5				-	5.6	51	26	12	17	5.1
14	3.8	-				-	5.1	51	27	12	16	5.3
15	4.8	-				-	5.6	44	28	12	16	5.1
16	8.3	-				-	5.6	39	28	10	15	5.1
17	7.0	-				-	7.3	38	26	9.0	13	5.1
18	5.1	-				-	6.6	41	25	10	13	4.8
19	4.6	-				-	9.0	44	24	11	17	4.8
20	3.8	-				-	14	42	24	10	18	4.8
21	3.8	-				-	20	39	22	9.4	19	4.8
22	4.0	-				-	22	38	22	10	18	4.6
23	3.8	-				-	22	37	21	9.0	15	4.6
24	3.8	-				-	17	38	21	10	15	4.6
25	3.8	-				-	16	38	22	15	16	4.3
26	3.8	-				3.5	15	39	21	16	13	4.3
27	3.8	-				3.8	15	42	20	11	13	4.0
28	3.8	-				-	15	41	19	10	13	4.3
29	3.5	-				-	17	42	18	11	12	4.6
30	3.5	-				4.3	22	41	18	12	11	5.1
31	3.5	-				7.3	-	36	-	9.8	10	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	129.3	8.3	3.5	4.17	256
November 1-13	46.8	3.8	3.0	3.60	93
December	-	-	-	-	-
Calendar year	-	-	-	-	-
January	-	-	-	-	-
February	-	-	-	-	-
March	-	-	-	-	-
April	327.5	22	4.0	10.9	650
May	1,274	51	30	41.1	2,530
June	778	34	18	25.9	1,540
July	393.2	18	9.0	12.7	780
August	463.4	20	9.4	14.9	919
September	177.0	11	4.0	5.90	351
Water year	-	-	-	-	-

a No gage-height record; discharge computed on basis of weather records and records for South Fork Rio Grande at South Fork.
b Stage-discharge relation affected by ice.
Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

Closed basin in San Luis Valley, Colo.

Kerber Creek at Ashley Ranch, near Villa Grove, Colo.

Location.- Water-stage recorder, lat. 38°15', long. 106°08', in sec. 7, T. 45 N., R. 8 E., at Ashley Ranch, 10 miles west of Villa Grove.

Drainage area.- 38 square miles.

Records available.- May 1936 to September 1945 in reports of Geological Survey. June 1923 to September 1926 and May 1936 to September 1945 in reports of State engineer. (No winter records some years.)

Extremes.- Maximum discharge during year, 110 second-feet May 28 (gage height, 3.18 feet); minimum daily recorded, 1.2 second-feet Oct. 4, but may have been less during period of no record.

1923-26, 1936-45: Maximum discharge, 407 second-feet May 14, 1941 (gage height, 3.88 feet), from rating curve extended above 150 second-feet; minimum daily recorded, 1.2 second-feet Aug. 14, 16, 17, 1940, Oct. 4, 1944.

Remarks.- Records poor. No diversion above station.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.3	5.0						a17	49	13	6.7	4.3
2	1.4	4.6						a19	41	12	6.7	4.3
3	1.4	5.0						a21	35	10	8.9	4.1
4	1.2	5.0						24	32	10	6.7	3.6
5	1.4	5.3						24	35	9.2	7.4	3.6
6	1.3	4.8						26	38	9.6	11	3.6
7	1.3	4.6						28	35	9.6	8.2	3.8
8	1.3	3.6						28	35	9.2	8.2	3.8
9	1.3	2.5						30	29	10	7.1	3.8
10	1.3	a3.2						34	27	10	5.3	3.8
11	1.3	-						49	25	7.4	2.6	3.8
12	1.5	-					*5.6	44	25	6.4	2.5	3.8
13	1.5	-						49	26	6.7	3.8	a3.5
14	1.4	-						56	32	7.1	4.1	3.4
15	1.8	-						72	34	7.4	3.8	3.3
16	3.4	-						43	31	7.1	3.4	3.6
17	4.6	-						36	27	8.2	3.4	3.4
18	5.8	-						40	23	8.5	3.8	3.1
19	6.0	-						46	23	9.6	4.1	3.1
20	5.5	-						49	21	11	4.8	3.3
21	a5.0	-						43	20	12	4.8	3.0
22	4.6	-						35	21	12	4.8	3.0
23	4.8	-						32	22	9.6	4.8	3.0
24	4.6	-						33	21	9.2	5.5	3.0
25	4.6	-						41	22	8.9	5.0	2.6
26	4.6	-						55	20	8.2	5.0	2.6
27	4.6	-						77	18	8.9	a4.8	2.6
28	4.8	-						79	17	8.5	a4.5	2.6
29	5.0	-						79	15	8.2	4.1	2.6
30	5.0	-						68	14	7.1	4.1	2.8
31	4.6	-						60	-	6.7	4.1	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	98.2	6.0	1.2	3.17	195
November 1-10	43.6	5.3	2.5	4.36	86
December	-	-	-	-	-
Calendar year	-	-	-	-	-
January	-	-	-	-	-
February	-	-	-	-	-
March	-	-	-	-	-
April	-	-	-	-	-
May	1,337	79	17	43.1	2,650
June	813	49	14	27.1	1,610
July	281.3	13	6.4	9.07	558
August	164.0	11	2.5	5.29	325
September	100.8	4.3	2.6	3.36	200
Water year	-	-	-	-	-

* Winter discharge measurement made on this day.

a No gage-height record; discharge computed on basis of discharge measurements on Nov. 10 and May 3 and records for stations on nearby streams.

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

Closed basin in San Luis Valley, Colo.

Saguache Creek near Saguache, Colo.

Location.- Water-stage recorder, lat. 38°09', long. 106°19', in sec. 11, T. 45 N., R. 6 E., 10 miles northwest of Saguache.

Drainage area.- 595 square miles.

Records available.- August 1910 to September 1912 and October 1933 to September 1945 in reports of Geological Survey August 1910 to September 1912 and June 1914 to September 1945 in reports of State engineer. (No winter records some years.)

Extremes.- Maximum discharge during year, 182 second-feet Aug. 6 (gage height, 1.46 feet); minimum daily recorded, 16 second-feet Nov. 14, but may have been less during period of no gage-height record.

1910-12, 1914-45: Maximum discharge, 746 second-feet June 15, 1921 (gage height, 3.45 feet, datum then in use); minimum daily, 12 second-feet Dec. 11, 1943.

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

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	26	30	23	28	28	b33	43	80	133	72	102	93
2	28	31				b36	52	109	133	74	109	91
3	31	30				b33	42	120	142	76	93	124
4	31	29				b33	19	122	127	75	101	106
5	26	30				b34	21	119	122	69	91	83
6	25	38				33	33	109	126	62	158	80
7	26	46				32	43	104	124	60	158	78
8	25	38				30	64	116	122	66	151	69
9	24	28				33	96	114	122	67	147	64
10	24	24				37	83	110	115	83	115	62
11	24	29				39	44	127	115	93	101	61
12	25	29				38	33	131	112	74	112	56
13	25	33			32	38	30	134	114	66	104	52
14	26	16				*37	33	138	126	61	110	50
15	34	24				b34	30	166	127	78	114	50
16	52	36				b30	29	131	124	74	94	56
17	46	40				b22	30	114	115	74	86	64
18	36	33				b24	29	117	107	67	83	55
19	33	30				b28	36	117	107	80	90	49
20	30	33				b26	66	119	110	83	104	48
21	28	40				b31	106	115	110	86	114	48
22	29	41				b42	114	110	119	88	94	44
23	29	43				31	104	110	126	82	82	43
24	28	31				36	70	110	115	82	77	43
25	29	19				30	48	114	109	90	82	44
26	29	20			*30	34	44	122	104	85	83	43
27	29	21			b30	40	52	138	88	72	99	43
28	30	*20			b28	25	52	149	80	64	102	42
29	31	17			-	*34	43	154	77	60	80	46
30	33	19			-	31	54	158	77	61	77	60
31	30	-			-	34	-	151	-	62	80	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	922	52	24	29.7	1,830
November	898	46	16	29.9	1,780
December	713	-	-	23	1,410
Calendar year 1944	31,670	478	-	86.5	62,820
January	868	-	-	28	1,720
February	840	-	-	30	1,670
March	1,016	42	22	32.8	2,020
April	1,543	114	19	51.4	3,060
May	3,817	158	80	123	7,570
June	3,428	142	77	114	6,800
July	2,288	93	60	73.8	4,540
August	3,193	158	77	103	6,330
September	1,847	124	42	61.6	3,660
Water year 1944-45	21,375	158	-	58.6	42,390

* Winter discharge measurement made on this day.

b Stage-discharge relation affected by ice.

Note.- No gage-height record Nov. 22 to Feb. 26, Mar. 6-14 (stage-discharge relation affected by ice during most of period); discharge computed on basis of 3 discharge measurements and weather records

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

Closed basin in San Luis Valley, Colo.

North Crestone Creek near Crestone, Colo.

Location.- Water-stage recorder, lat. 38°01', long. 105°41', in sec. 5, T. 43 N., R. 12 E., 1½ miles upstream from Crestone and 3 miles upstream from South Crestone Creek.

Drainage area.- 10.7 square miles.

Records available.- May 1936 to September 1945 (no winter records).

Extremes.- Maximum discharge during year, 71 second-feet May 26 (gage height, 1.71 feet); minimum daily recorded, 0.4 second-foot Apr. 3, but may have been less during period of no record.

1936-45: Maximum discharge, 735 second-feet Aug. 6, 1936 (gage height, 4.33 feet), by slope-area method; minimum daily recorded, that of Apr. 3, 1945.

Remarks.- Records good except those below 10 second-feet and those for periods of no gage-height record; which are fair. No diversion above station.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.0	3.8				2.1 (*)	0.7	11	30	21	9.5	7.0
2	2.4	3.5					.8	17	30	22	9.2	7.8
3	2.4	3.8					.4	21	25	20	9.2	7.5
4	2.3	3.5					.6	26	27	18	8.0	6.8
5	2.4	3.8					*1.2	26	36	18	9.2	6.2
6	2.1	4.4					1.7	24	40	18	10	5.8
7	2.0	4.6					2.0	22	37	17	10	5.1
8	1.9	4.6					2.9	24	36	16	11	4.9
9	2.0	4.2					3.4	23	29	16	10	4.7
10	2.0	*4.2					3.7	29	25	16	9.2	4.5
11	2.0	4.4					2.9	34	23	15	8.3	4.3
12	2.0	4.2					2.6	30	25	15	8.9	4.3
13	2.0	4.0					2.2	35	40	13	8.3	3.9
14	2.0	3.5					2.2	30	50	13	8.3	4.3
15	2.4	4.2					2.2	23	50	13	7.8	3.5
16	4.4	4.2					2.3	20	43	11	7.2	3.7
17	4.8	3.8					2.3	22	37	11	6.5	3.7
18	3.8	3.7					2.3	26	38	10	6.2	3.5
19	3.3	3.6					2.8	25	34	11	6.2	3.5
20	3.3	3.9					4.9	23	31	11	7.2	3.4
21	3.5	4.3					7.2	20	31	18	8.6	3.0
22	3.3	4.5					7.5	18	33	42	8.0	2.9
23	3.5	4.7					6.8	20	32	24	8.3	2.8
24	3.3	4.3					5.5	25	33	20	7.2	2.8
25	3.5	4.0					4.7	35	33	16	8.0	2.8
26	3.3	3.7				1.4	4.3	43	29	15	7.2	2.8
27	3.1	3.5					4.3	56	27	13	7.5	2.6
28	3.3	3.4					4.3	53	25	12	6.8	2.9
29	3.8	3.3				*1.0	4.7	50	24	11	6.0	3.0
30	3.8	3.4				.6	6.5	47	21	9.8	6.0	3.4
31	3.5	-				.5	-	37	-	10	5.3	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	89.4	4.8	1.9	2.88	177
November	119.0	4.7	3.3	3.97	236
December	-	-	-	-	-
Calendar year	-	-	-	-	-
January	-	-	-	-	-
February	-	-	-	-	-
March	58.8	-	-	1.90	117
April	99.9	7.5	.4	3.33	198
May	895	56	11	28.9	1,780
June	974	50	21	32.5	1,930
July	495.8	42	9.8	16.0	983
August	249.1	11	5.3	8.04	494
September	127.4	7.8	2.6	4.25	253
Water year	-	-	-	-	-

* Winter discharge measurement made on this day.

Note.- No gage-height record Nov. 18-30, Mar. 1-29 (stage-discharge relation affected by ice during most of period), June 22-27; discharge computed on basis of 1 discharge measurement, weather records, and records for stations on nearby streams.

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

Closed basin in San Luis Valley, Colo.

Carnero Creek near La Garita, Colo.

Location.- Water-stage recorder, lat. 37°52', long. 106°20', in sec. 26, T. 42 N., R. 6 E., 3 miles northwest of La Garita.

Drainage area.- 117 square miles.

Records available.- October 1933 to September 1945 in reports of Geological Survey. April 1919 to September 1945 in reports of State engineer. (No winter records most years.)

Extremes.- Maximum discharge during year, 1,600 second-feet July 21 (gage height, 5.75 feet), from rating curve extended above 170 second-feet; minimum daily recorded, 2.5 second-feet Oct. 8-10, but may have been less during period of no record.

1919-45: Maximum discharge, that of July 21, 1945; minimum daily, 0.5 second-foot July 9, 1940.

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

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3.0	3.2				-	b20	30	15	4.8	7.6	12
2	3.0	3.0				-	b22	29	15	5.6	12	12
3	3.2	3.0				-	b8.4	27	18	5.9	15	14
4	3.0	3.0				-	a10	24	16	5.2	9.5	12
5	3.0	3.5				-	a18	24	14	4.5	10	10
6	2.8	4.2				-	a20	21	13	4.0	16	14
7	2.8	3.8				-	20	22	12	4.0	24	13
8	2.5	3.0				-	26	22	12	4.2	26	9.5
9	2.5	3.0				-	29	20	12	4.5	24	8.1
10	2.5	3.0				-	26	21	12	8.0	20	7.2
11	2.8	4.0				-	17	22	13	8.8	18	6.8
12	2.8	3.2				-	13	21	13	5.9	25	5.8
13	2.8	3.8				-	8.8	20	11	4.5	19	5.4
14	3.0	-				-	8.0	22	10	4.2	20	5.4
15	4.2	-				-	8.4	23	10	5.2	17	5.4
16	9.2	-				-	*5.6	26	10	5.9	15	5.4
17	8.4	-				-	8.0	26	10	6.6	14	6.2
18	7.0	-				-	8.8	23	9.2	5.2	13	5.8
19	5.2	-				-	20	21	8.8	7.3	15	5.4
20	4.5	-				-	35	21	8.8	53	18	5.0
21	4.2	-				-	38	20	8.4	257	18	4.5
22	4.0	-				*a5.5	35	19	8.0	18	15	4.2
23	4.0	-				b6.6	29	18	8.0	12	13	4.2
24	4.0	-				b7.0	13	18	7.0	13	12	4.5
25	3.8	-				b7.3	12	18	6.2	12	14	5.0
26	3.8	-			*2.6	b8.8	11	16	7.3	9.5	12	5.0
27	3.5	-				b5.9	11	16	6.2	6.8	14	4.5
28	3.5	*3.0				b5.2	12	16	5.6	5.8	14	4.5
29	3.2	-				*b4.8	16	16	5.2	5.0	12	5.0
30	3.2	-				b3.8	24	16	5.2	5.8	13	7.2
31	2.8	-				b7.0	-	16	-	6.3	13	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	118.2	9.2	2.5	3.81	234
November 1-13	43.7	4.2	3.0	3.36	87
December	-	-	-	-	-
Calendar year	-	-	-	-	-
January	-	-	-	-	
February	-	-	-	-	-
March 22-31	61.9	8.8	3.8	6.19	123
April	533.0	38	5.6	17.8	1,060
May	654	30	16	21.1	1,300
June	309.9	18	5.2	10.3	615
July	508.5	257	4.0	16.4	1,010
August	488.1	26	7.6	15.7	968
September	217.6	14	4.2	7.25	432
Water year	-	-	-	-	-

* Winter discharge measurement made on this day.

a No gage-height record (stage-discharge relation affected by ice during most of period); discharge computed on basis of weather records.

b Stage-discharge relation affected by ice.

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

Closed basin in San Luis Valley, Colo.

La Garita Creek near La Garita, Colo.

Location.- Water-stage recorder, lat. 37°49', long. 106°18', in sec. 10, T. 41 N., R. 6 E., 4 miles southwest of La Garita.

Drainage area.- 61 square miles.

Records available.- October 1933 to September 1945 in reports of Geological Survey. April 1919 to September 1945 in reports of State engineer. (No winter records most years.)

Extremes.- Maximum discharge during year, 209 second-feet Aug. 7 (gage height, 1.87 feet), from rating curve extended above 50 second-feet; minimum daily determined, 2.7 second-feet Nov. 14, but may have been less during period of no record.

1919-45: Maximum discharge, 457 second-feet May 16, 1941 (gage height, 5.11 feet), from rating curve extended above 220 second-feet; minimum daily, 0.7 second-foot Aug. 29, 1940.

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

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4.7	5.1				4.5	8.4	32	23	9.8	12	18
2	4.9	4.9				4.6	9.8	40	23	11	11	10
3	5.1	4.5				4.6	8.0	48	25	10	24	12
4	5.1	4.7				4.5	4.5	50	23	9.0	14	11
5	5.1	4.9				4.4	5.2	46	23	8.5	13	11
6	4.9	5.8				4.3	7.4	30	20	8.2	25	9.4
7	4.9	4.9				4.3	9.0	37	18	8.2	38	9.4
8	4.7	4.2				4.1	12	46	17	8.2	36	9.4
9	4.7	3.6				4.0	17	35	17	8.2	28	7.8
10	5.1	4.0				4.8	17	39	17	16	23	7.5
11	5.1	4.2				4.9	9.4	42	17	9.8	19	7.5
12	4.9	3.8				4.8	9.0	34	18	8.2	22	7.2
13	4.9	4.7				4.6	5.2	35	16	8.2	19	6.8
14	4.9	2.7				4.4	5.9	36	15	7.5	20	5.5
15	6.5	3.4				4.3	6.8	33	15	7.8	17	6.5
16	9.4	4.0				4.0	5.2	34	16	7.5	17	6.5
17	8.4	5.4				3.4	7.2	37	15	7.5	14	8.5
18	7.4	5.0				3.7	6.2	35	15	7.2	14	7.5
19	5.8	3.9				3.9	11	32	14	8.2	18	7.2
20	6.3	4.0				3.7	32	30	14	7.5	19	7.2
21	5.8	4.2				4.4	33	25	14	6.8	17	6.8
22	6.3	4.6				*5.0	30	26	14	11	14	6.5
23	5.8	5.4				4.5	24	26	13	8.5	11	6.2
24	4.9	5.6				5.4	14	26	12	7.5	11	5.9
25	4.9	5.2				4.8	13	27	12	10	12	5.5
26	4.9	4.9				5.6	14	28	13	12	11	5.2
27	4.9	4.7				6.8	14	30	12	7.8	11	5.2
28	4.9	*4.9				4.5	15	28	11	7.2	13	5.2
29	5.1	4.2				*6.2	20	28	11	7.2	10	5.2
30	4.7	4.5				5.6	28	27	10	10	14	8.2
31	4.5	-				6.8	-	25	-	8.2	10	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	170.5	9.4	4.5	5.50	338
November	135.9	5.8	2.7	4.53	270
December	-	-	-	-	-
Calendar year	-	-	-	-	-
January	-	-	-	-	-
February	-	-	-	-	-
March	145.4	6.8	3.4	4.69	288
April	401.2	33	4.5	13.4	796
May	1,047	50	25	33.8	2,080
June	483	25	10	16.1	958
July	272.7	16	6.8	8.80	541
August	537	38	10	17.3	1,070
September	236.8	18	5.2	7.89	470
Water year	-	-	-	-	-

* Winter discharge measurement made on this day.

Note.- No gage-height record Nov. 14-30, Mar. 1 to Apr. 8 (stage-discharge relation affected by ice during most of period); discharge computed on basis of 3 discharge measurements and weather records.

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

Alamosa Creek above Terrace Reservoir, Colo.

Location.- Water-stage recorder, lat. 37°23', long. 106°21', in sec. 8, T. 36 N., R. 6 E., 3 miles upstream from Terrace Reservoir Dam and 15 miles northwest of Capulin.

Drainage area.- 107 square miles.

Records available.- September 1911 to June 1912 and October 1934 to September 1945 in reports of Geological Survey. April 1915 to October 1919, October 1923 to September 1927, and October 1934 to September 1945 in reports of State engineer. (No winter records most years.)

Extremes.- Maximum discharge during year, 944 second-feet May 28 (gage height, 3.33 feet); minimum discharge not determined.
1911-12, 1915-19, 1923-27, 1934-45: Maximum discharge, 5,200 second-feet Oct. 5, 1911 (gage height, 11.0 feet, datum then in use, from floodmark), computed by weir formula; minimum not determined.

Remarks.- Records excellent except those for period of no gage-height record, which are fair. No diversion above station.

Rating table, water year 1944-45 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Mar. 16 to Apr. 3, Sept. 3-30)

0.9	14	1.3	47	2.1	237
1.0	20	1.5	76	2.4	360
1.1	27	1.6	94	2.7	515
1.2	36	1.8	143	3.1	770

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	19	24	17	15	13.5	13	27	210	410	279	103	68
2	22	23					31	260	425	279	103	66
3	24	23					26	307	450	256	120	50
4	23	21					19	346	587	227	99	44
5	22	22					21	380	654	203	83	39
6	21	23					24	365	617	194	90	38
7	21	21					30	328	645	194	155	38
8	21	*18					45	380	504	188	172	34
9	19	16					58	405	445	191	122	32
10	20	17					62	476	430	191	120	29
11	20	16					45	557	400	175	99	28
12	19	16					37	545	425	160	120	27
13	19						34	599	581	146	103	25
14	19						31	575	629	138	87	25
15	23						30	400	617	133	78	26
16	39					14	27	324	569	125	73	26
17	39					19	26	324	504	120	68	26
18	34					19	30	400	460	115	64	23
19	32	17				18	39	425	455	133	58	21
20	29					19	72	410	440	117	62	21
21	27					18	125	356	425	133	83	20
22	26					20	158	395	455	110	81	21
23	26				(*)	19	158	482	445	101	62	19
24	26					19	106	563	435	106	57	19
25	26					18	81	617	426	117	62	19
26	26					19	74	629	390	146	51	18
27	25					*19	70	770	360	103	51	18
28	25					18	66	770	342	89	58	18
29	26				-	20	78	770	315	85	46	20
30	25				-	20	130	694	291	106	43	24
31	22	-			-	22	-	488	-	90	46	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	764	39	19	24.6	1,520
November	540	24	-	18.0	1,070
December	527	-	-	17	1,050
Calendar year 1944	54,233	1,080	-	148	107,600
January	465	-	-	15	922
February	378	-	-	13.5	750
March	496	22	-	16.0	984
April	1,760	158	19	58.7	3,490
May	14,550	770	210	469	28,860
June	14,030	654	291	468	27,830
July	4,750	279	85	153	9,420
August	2,619	172	43	84.5	5,190
September	881	68	18	29.4	1,750
Water year 1944-45	41,760	770	-	114	82,840

* Winter discharge measurement made on this day.

Note.- No gage-height record Nov. 12 to Mar. 15 (stage-discharge relation probably affected by ice during most of period); discharge computed on basis of 1 discharge measurement and weather records.

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

Alamosa Creek below Terrace Reservoir, Colo.

Location.- Water-stage recorder, lat. 37°21', long. 106°17', in sec. 23, T. 36 N., R. 6 E., half a mile downstream from Terrace Reservoir and 11 miles northwest of Capulin.

Drainage area.- 116 square miles.

Records available.- April 1909 to June 1912 and October 1933 to September 1945 in reports of Geological Survey. April 1909 to November 1912, April to October 1915, February 1917 to October 1920, and April 1922 to September 1945 in reports of State engineer.

Average discharge.- 27 years (1909-10, 1915-18, 1922-45), 123 second-feet.

Extremes.- Maximum discharge during year, 627 second-feet June 6 (gage height, 4.12 feet); minimum daily, 8.9 second-feet Mar. 2-16.
1909-12, 1915, 1917-20, 1922-45: Maximum daily discharge, 1,450 second-feet June 16-18, 1917; minimum daily, 0.2 second-foot Nov. 13, 1942.

Remarks.- Records good. No diversion above station. Flow regulated by Terrace Reservoir (capacity, 17,700 acre-feet).

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	26	27	25	9.7	9.7	9.7	17	130	567	271	140	85
2	24	27	25	9.7	9.7	8.9	18	130	543	271	140	85
3	24	26	25	9.7	9.7	8.9	20	182	539	268	148	85
4	24	26	25	9.7	9.7	8.9	20	225	535	262	140	92
5	25	26	25	9.7	9.7	8.9	19	262	591	258	140	90
6	26	26	25	9.7	9.7	8.9	19	271	623	228	140	78
7	26	26	25	9.7	9.7	8.9	19	296	607	193	137	88
8	26	*26	25	9.7	9.7	8.9	37	315	587	185	137	94
9	26	26	25	9.7	9.7	8.9	39	357	559	172	137	94
10	25	26	25	9.7	9.7	8.9	61	377	547	172	122	94
11	24	26	18	9.7	9.7	8.9	66	402	539	172	120	63
12	25	25	*11	9.7	9.7	8.9	52	398	499	177	125	29
13	25	25	11	9.7	9.7	8.9	37	394	511	180	125	32
14	26	25	11	9.7	9.7	8.9	37	419	571	180	135	31
15	26	25	11	9.7	9.7	8.9	36	422	603	182	145	31
16	27	25	11	9.7	9.7	8.9	36	422	607	182	140	31
17	26	25	11	9.7	9.7	9.6	37	422	571	202	135	32
18	24	25	11	9.7	9.7	9.6	36	374	503	188	132	31
19	24	25	11	9.7	9.7	9.6	37	370	495	142	113	31
20	25	25	11	9.7	9.7	9.6	43	374	487	140	113	30
21	26	25	11	9.7	9.7	9.6	65	374	454	140	113	28
22	27	25	11	9.7	9.7	9.6	66	374	450	140	113	30
23	28	25	11	9.7	*9.7	9.6	130	377	450	130	120	31
24	28	25	11	9.7	9.7	9.6	130	426	450	130	113	28
25	28	25	11	9.7	9.7	9.6	132	511	447	140	98	27
26	26	25	11	9.7	9.7	10	130	503	426	158	92	27
27	25	25	11	9.7	9.7	*10	132	511	388	158	92	27
28	25	25	11	9.7	9.7	10	130	563	363	135	85	26
29	26	25	11	9.7	-	10	130	579	331	132	88	23
30	27	25	11	9.7	-	11	127	587	290	122	90	23
31	27	-	11	9.7	-	14	-	571	-	135	94	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	797	28	24	25.7	1,580
November	763	27	25	25.4	1,510
December	488	25	11	15.7	968
Calendar year 1944	53,071.5	855	3.1	145	105,300
January	300.7	9.7	9.7	9.70	596
February	271.6	9.7	9.7	9.70	539
March	294.6	14	8.9	9.50	584
April	1,858	132	17	61.9	3,690
May	11,918	587	130	384	23,640
June	15,133	623	290	504	30,020
July	5,545	271	122	179	11,000
August	3,762	148	85	121	7,460
September	1,496	94	23	49.9	2,970
Water year 1944-45	42,626.9	623	8.9	117	84,560

* Winter discharge measurement made on this day.

Note.- No gage-height record Nov. 13 to Mar. 14; discharge computed on basis of 2 discharge measurements and gate openings at Terrace Reservoir.

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

La Jara Creek at Gallegos Ranch, near Capulin, Colo.

Location.- Water-stage recorder, lat. 37°09', long. 106°13', in NE¼ sec. 32, T. 34 N., R. 7 E., 2 miles upstream from former station (published as La Jara Creek near Capulin), 2¼ miles upstream from Canyon del Rancho, 11 miles southwest of Capulin, and 11½ miles downstream from La Jara Reservoir.

Drainage area.- 79 square miles.

Records available.- May 1936 to September 1945 (no winter records).

Extremes.- Maximum discharge during year, 527 second-feet July 31 (gage height, 5.21 feet), from rating curve extended above 150 second-feet; minimum daily recorded, 7.4 second-feet Nov. 9, but may have been less during period of no record.
1936-45: Maximum discharge, 653 second-feet Apr. 15, 1937 (gage height, 5.94 feet), from rating curve extended above 220 second-feet; minimum daily recorded, 3.5 second-feet Nov. 28, 1936.

Remarks.- Records good. Small diversions above station for irrigation. Flow regulated by La Jara Reservoir (capacity, 14,040 acre-feet).

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	9.8	14				-	13	139	21	8.9	67	20
2	10	14				-	13	183	20	9.2	65	20
3	10	15				-	11	198	20	9.2	63	19
4	11	15				-	11	191	18	10	59	19
5	10	15				-	12	241	17	9.6	55	16
6	10	9.4				-	11	230	16	9.6	59	15
7	10	8.6				-	12	195	15	9.6	38	11
8	10	8.2				-	14	175	14	10	32	10
9	10	7.4				-	17	168	14	10	25	10
10	11	8.2				-	17	154	14	12	18	9.6
11	11	8.6				-	14	157	14	11	20	10
12	11	-				-	14	146	14	10	23	10
13	11	-				-	12	140	13	10	14	10
14	11	-				-	11	122	13	12	12	11
15	11	-				15	11	90	11	11	11	11
16	27	-				13	11	83	11	9.6	11	11
17	27	-				15	11	69	11	9.6	15	11
18	22	-				14	11	73	11	9.6	20	11
19	22	-				13	13	67	11	10	22	11
20	22	-				13	16	54	11	9.2	21	13
21	22	-				17	25	48	12	9.6	17	14
22	22	-				14	47	47	12	8.9	16	14
23	22	-				14	48	40	13	9.2	16	14
24	22	-				11	35	35	12	20	19	15
25	22	-				13	33	32	11	30	21	20
26	22	-				11	34	30	12	32	20	22
27	16	-				11	28	28	10	27	20	23
28	14	-				11	30	25	9.6	27	21	25
29	15	-				13	49	24	9.6	29	20	27
30	14	-				11	83	22	8.9	22	20	29
31	14	-				13	-	22	-	45	20	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	481.8	27	9.8	15.5	956
November 1-11	123.4	15	7.4	11.2	245
December	-	-	-	-	-
Calendar year	-	-	-	-	-
January	-	-	-	-	-
February	-	-	-	-	-
March 15-31	222	17	11	13.1	440
April	667	83	11	22.2	1,320
May	3,228	241	22	104	6,400
June	399.1	21	8.9	13.3	792
July	459.8	45	8.9	14.8	912
August	860	67	11	27.7	1,710
September	461.6	29	9.6	15.4	916
Water year	-	-	-	-	-

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

Trinchera Creek above Turners Ranch, near Fort Garland, Colo.

Location.- Water-stage recorder, lat. 37°22', long. 105°19', in sec. 2, T. 31 S., R. 71 W., just upstream from Turners Ranch and 7 miles southeast of Fort Garland.

Drainage area.- 45 square miles.

Records available.- October 1933 to September 1945 in reports of Geological Survey. April 1923 to September 1945 in reports of State engineer. (No winter records most years.)

Extremes.- Maximum discharge during year, 138 second-feet May 13 (gage height, 2.83 feet); minimum daily recorded, 9.7 second-feet Oct. 1, 14, but may have been less during period of no record.

1923-45: Maximum discharge, 689 second-feet May 27, 1942, from rating curve extended above 240 second-feet; maximum gage height, 3.47 feet May 15, 1944; minimum daily discharge, 3.0 second-feet Oct. 3, 1942.

Remarks.- Records good. No diversion or regulation above station.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	9.7	12					-	35	108	50	34	19
2	10	12					-	51	99	50	26	19
3	10	11					-	65	92	48	24	18
4	10	11					-	68	90	42	21	17
5	10	11					-	78	90	40	19	16
6	10	12					-	79	90	39	35	16
7	10	12					-	88	90	37	42	16
8	10	-					-	92	88	36	33	16
9	10	-					-	93	86	34	32	16
10	10	-					-	97	83	33	30	15
11	10	-					-	102	84	36	29	14
12	10	-					-	104	78	29	28	14
13	10	-					-	111	73	29	26	14
14	9.7	-					-	120	73	31	26	14
15	11	-					-	106	75	31	27	14
16	15	-					-	90	78	31	27	14
17	15	-					-	86	78	31	25	14
18	13	-					-	95	78	31	24	14
19	12	-					-	115	76	30	24	14
20	12	-					23	135	75	28	29	14
21	12	-					36	123	69	27	25	13
22	11	-					35	106	68	27	25	12
23	11	-					35	99	66	28	24	12
24	11	-					28	99	64	27	24	12
25	12	-					24	104	63	29	24	13
26	12	-					21	106	63	27	22	13
27	12	-					19	118	63	24	22	12
28	12	-					18	126	59	24	22	14
29	12	-					19	129	57	24	21	14
30	12	-					27	126	52	24	21	14
31	12	-					-	120	-	36	19	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	346.4	15	9.7	11.2	687
November 1-7	81	12	11	11.6	161
December	-	-	-	-	-
Calendar year	-	-	-	-	-
January	-	-	-	-	-
February	-	-	-	-	-
March	-	-	-	-	-
April 20-30	285	36	18	25.9	565
May	3,066	135	35	98.9	6,080
June	2,308	108	52	76.9	4,580
July	1,013	50	24	32.7	2,010
August	810	42	19	26.1	1,610
September	437	19	12	14.6	867
Water year	-	-	-	-	-

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

Trinchera Creek above Mountain Home Reservoir, near Fort Garland, Colo.

Location.- Water-stage recorder upstream from rating flume, lat. 37°24', long. 105°32', in sec. 31, T. 30 S., R. 71 W., 1½ miles upstream from Mountain Home Reservoir Dam and 4 miles southeast of Fort Garland.

Drainage area.- 61 square miles.

Records available.- October 1933 to September 1945 in reports of Geological Survey. May 1923 to September 1945 in reports of State engineer. (No winter records most years.)

Extremes.- Maximum discharge during year, 136 second-feet May 27 (gage height, 1.63 feet); minimum daily determined, 4.5 second-feet Mar. 7, but may have been less during period of no gage-height record.

1923-45: Maximum discharge, 391 second-feet May 27, 1942 (gage height, 3.83 feet), from rating curve extended above 220 second-feet; minimum not determined.

Remarks.- Records good May to September; others fair. Diversions above station for irrigation.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5.4	8.7	6.0	5.6	5.0	6.0	7.6	30	103	37	34	14
2	5.9	8.7				5.6	8.9	45	94	38	23	15
3	6.2	8.4				5.2	8.9	60	85	40	22	12
4	6.5	8.4				5.1	8.2	64	82	35	18	12
5	6.4	8.9				5.0	8.8	83	78	31	18	11
6	6.3	9.3				4.7	10	86	78	30	20	9.8
7	6.0	10				4.5	12	84	72	29	29	10
8	6.0	9.8				4.7	13	85	74	27	26	10
9	5.9	8.9				4.8	14	75	72	26	26	9.8
10	6.0	9.1				5.0	17	70	68	26	23	9.4
11	6.3	9.5				5.2	14	71	66	24	21	9.0
12	6.5	9.3				5.1	14	76	61	23	21	11
13	6.7	9.1				*5.0	13	77	56	23	20	9.4
14	6.5	8.2				5.8	12	93	55	23	18	9.0
15	6.8	8.4				5.6	12	79	54	23	19	8.6
16	9.6	9.4				5.6	11	67	55	22	18	8.6
17	10	9.4				5.2	11	60	56	21	17	9.0
18	9.3	8.6				5.9	11	66	56	21	16	7.8
19	8.6	8.0				5.5	13	83	56	21	16	7.4
20	8.6	7.6			(*)	5.4	19	107	53	20	17	7.8
21	8.4	7.8				6.2	24	104	52	18	23	7.4
22	8.4	8.2				6.5	24	90	52	18	19	7.4
23	8.4	9.0				6.4	24	84	52	19	16	6.6
24	8.4	8.6				6.0	21	79	51	18	15	6.6
25	8.2	7.4				6.2	19	85	48	19	16	6.6
26	8.2	6.0				6.3	17	94	48	20	14	6.6
27	8.2	*5.8	(*)			6.5	17	130	47	17	14	6.6
28	8.4	5.6				5.9	16	120	46	17	14	7.4
29	8.4	5.4			-	6.2	16	115	41	15	14	8.2
30	8.4	5.7			-	6.4	23	115	37	16	14	9.0
31	8.6	-			-	6.7	-	111	-	17	12	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	231.5	10	5.4	7.47	459
November	247.2	10	5.4	8.24	490
December	186.0	-	-	6.0	369
Calendar year 1944	9,318.7	246	-	25.5	18,480
January	173.6	-	-	5.6	344
February	140.0	-	-	5.0	278
March	174.2	6.7	4.5	5.62	346
April	439.4	24	7.6	14.6	872
May	2,588	130	30	83.5	5,130
June	1,848	103	37	61.6	3,670
July	734	40	15	23.7	1,460
August	593	34	12	19.1	1,180
September	273.0	15	6.6	9.10	541
Water year 1944-45	7,627.9	130	-	20.9	15,140

* Winter discharge measurement made on this day.

Note.- No gage-height record Nov. 15 to Mar. 12 (stage-discharge relation affected by ice during most of period), Apr. 5; discharge computed on basis of 3 discharge measurements and weather records.

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

Trinchera Creek below Smith Reservoir, near Blanca, Colo.

Location.- Water-stage recorder, lat. 37°23', long. 105°35', in sec. 5, T. 31 S., R. 73 W., 1 mile downstream from Smith Reservoir and 5 miles southwest of Blanca.

Drainage area.- 396 square miles.

Records available.- October 1933 to September 1945 in reports of Geological Survey. October 1929 to September 1945 in reports of State engineer. (No winter records most years.)

Extremes.- Maximum discharge during year, 245 second-feet May 7 (gage height, 3.33 feet); minimum daily, 0.1 second-foot Sept. 28-30.
1929-45: Maximum daily discharge, 1,340 second-feet May 11, 1942; minimum daily recorded, 0.1 second-foot Nov. 3, 1937, to Feb. 28, 1938, Sept. 28-30, 1945.

Remarks.- Records good above 10 second-feet and fair below. Diversions above station for irrigation. Flow regulated by Smith Reservoir (capacity, 5,335 acre-feet).

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.8	0.6	0.8	0.8	0.8	15	27	67	22	3.1	6.4	0.6
2	.8	.6	.8	.8	.8	17	32	96	19	2.5	6.4	.6
3	.8	.6	.8	.8	.8	17	46	137	15	2.7	6.7	.6
4	.8	.6	.8	.8	.8	16	25	168	13	4.6	7.1	.6
5	.8	.6	.8	.8	.8	17	22	196	12	4.9	7.5	.6
6	.6	.8	.8	.8	.8	17	32	222	12	4.6	5.5	.6
7	.6	.8	.8	.8	.8	16	39	228	12	5.7	2.1	.6
8	.6	.8	.8	.8	.8	16	39	229	11	6.7	4.1	.6
9	.9	.8	.8	.8	.8	16	44	228	11	6.4	6.4	.6
10	1.0	.8	.8	.8	.8	16	50	215	11	6.4	5.7	.6
11	1.0	.8	.8	.8	.8	17	55	207	10	6.7	5.7	.6
12	1.5	.8	.8	.8	.8	23	52	202	10	6.7	5.7	.6
13	1.5	.8	.8	.8	.8	32	54	192	10	6.7	5.7	.6
14	1.5	.8	.8	.8	.8	41	53	193	6.7	6.7	5.5	.6
15	1.5	.8	.8	.8	.8	44	13	201	1.5	6.7	5.5	.6
16	2.9	.8	.8	.8	.8	44	40	186	1.3	6.7	5.5	.6
17	3.2	.8	.8	.8	.8	37	43	159	1.3	7.5	5.5	.6
18	.6	.8	.8	.8	2.0	35	42	129	1.3	7.5	5.7	.6
19	.6	.8	.8	.8	10	26	40	112	1.3	7.1	5.7	.6
20	.6	.8	.8	.8	*14	28	41	105	1.3	7.1	6.0	.6
21	.6	.8	.8	.8	14	27	50	102	2.7	7.1	5.2	.6
22	.6	.8	.8	.8	14	25	67	91	6.4	6.7	4.4	.7
23	.6	.8	.8	.8	14	26	92	82	5.7	6.7	3.1	.7
24	.6	.8	.8	.8	15	26	92	67	5.5	6.7	1.1	.7
25	.6	.8	.8	.8	15	24	84	57	5.2	6.7	.8	.7
26	.6	.8	.8	.8	15	24	74	48	4.9	6.7	.8	.7
27	.6	*.8	*.8	.8	*15	29	70	41	4.6	6.7	.7	.3
28	.6	.8	.8	.8	15	32	70	51	4.6	6.7	.6	.1
29	.6	.8	.8	.8	-	29	74	52	4.4	6.7	.6	.1
30	.6	.8	.8	.8	-	24	66	41	4.4	6.4	.6	.1
31	.6	-	.8	.8	-	24	-	27	-	6.4	.6	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	29.2	3.2	0.6	0.94	58
November	23.0	.8	.6	.77	46
December	24.8	.8	.8	.80	49
Calendar year 1944	11,504.0	640	.4	31.4	22,810
January	24.8	.8	.8	.80	49
February	156.6	15	.8	5.59	311
March	780	44	15	25.2	1,550
April	1,528	92	13	50.9	3,030
May	4,131	229	27	133	8,190
June	231.1	22	1.3	7.70	458
July	190.5	7.5	2.5	6.15	378
August	132.9	7.5	.6	4.29	264
September	16.7	.7	.1	.56	33
Water year 1944-45	7,268.6	229	.1	19.9	14,420

* Winter discharge measurement made on this day.

Note.- No gage-height record Nov. 23 to Feb. 19, Feb. 21-26, Aug. 31 to Sept. 18; discharge computed on basis of 2 discharge measurements and records of flow from Smith Reservoir.

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

Sangre de Cristo Creek near Fort Garland, Colo.

Location.- Water-stage recorder, lat. 37°26', long. 105°24', in sec. 23, T. 30 S., R. 72 W., 1½ miles east of Fort Garland and 4 miles upstream from Ute Creek.

Drainage area.- 187 square miles.

Records available.- October 1933 to September 1945 in reports of Geological Survey. March to October 1916 and May 1923 to September 1945 in reports of State engineer. (No winter records most years.)

Extremes.- Maximum discharge during year, 297 second-feet May 5 (gage height, 6.32 feet); minimum daily, 0.7 second-feet Sept. 24.

1916, 1923-45: Maximum discharge, 1,520 second-feet Aug. 31, 1936, by slope-area method; maximum gage height, 7.65 feet May 10, 1942, from floodmarks; no flow at times during 1934-36, 1939-40, 1943.

Remarks.- Records good June to September; others fair. A few diversions above station for irrigation.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3.6	7.0				22	42	143	93	20	a18	4.2
2	4.0	7.0				21	53	221	95	21	a17	5.1
3	5.2	7.0				20	50	241	90	21	14	3.9
4	6.1	6.7				20	29	244	82	18	9.5	2.8
5	7.0	6.7				21	30	263	73	18	8.4	2.6
6	6.1	9.0				20	31	254	64	17	24	2.1
7	5.5	13				20	24	244	59	16	26	1.8
8	5.5	11				21	33	246	56	15	24	1.8
9	5.5	10				21	49	226	54	15	17	1.5
10	5.5	9.8				22	62	221	52	15	14	1.5
11	6.1	10				24	38	221	60	15	12	1.3
12	6.4	10				25	38	221	64	15	10	1.1
13	6.4	9.0				*27	32	214	50	15	9.5	1.4
14	6.4	10				34	28	226	46	16	13	2.0
15	7.0	10				31	28	226	44	16	18	1.6
16	16	11				23	28	202	40	14	9.5	1.2
17	19	11				16	23	165	42	13	7.8	1.6
18	12	10				22	25	151	38	12	7.0	.8
19	11	9.4				18	34	151	35	12	6.7	1.0
20	9.8	9.2				16	58	158	35	11	7.0	1.0
21	8.6	9.0				21	92	160	34	10	12	1.0
22	7.8	9.4				23	140	154	31	10	10	1.2
23	7.8	10				22	157	140	30	12	8.1	.8
24	8.2	9.8				17	114	127	27	13	7.4	.7
25	7.8	9.4				24	88	121	24	13	10	1.0
26	7.4	9.0				22	78	118	24	39	7.0	1.4
27	7.4	*7.8				24	70	112	21	11	5.7	1.5
28	7.4	7.4				*17	68	111	20	23	5.7	2.6
29	7.4	7.2				17	68	107	20	12	4.8	2.7
30	7.4	7.6				24	98	105	19	a14	4.5	4.2
31	7.4	-				30	-	98	-	a15	4.2	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	238.7	19	3.6	7.70	473
November	273.4	13	6.7	9.11	542
December	-	-	-	-	-
Calendar year	-	-	-	-	-
January	-	-	-	-	-
February	-	-	-	-	-
March	685	34	16	22.1	1,360
April	1,708	157	23	56.9	3,390
May	5,591	263	98	180	11,090
June	1,422	95	19	47.4	2,820
July	487	39	10	15.7	966
August	351.8	26	4.2	11.3	698
September	57.4	5.1	.7	1.91	114
Water year	-	-	-	-	-

* Winter discharge measurement made on this day.

a No gage-height record; discharge computed on basis of records for stations on nearby streams.

Note.- No gage-height record Nov. 15-30, Mar. 1-12, 21, 22, Apr. 3-5, 14 (stage-discharge relation probably affected by ice during most periods); discharge computed on basis of 1 discharge measurement and weather records.

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

Ute Creek near Fort Garland, Colo.

Location.- Water-stage upstream from rating flume, lat. 37°28', long. 105°24', in sec. 2, T. 30 S., R. 72 W., 2½ miles north of Fort Garland and 6 miles upstream from mouth.

Drainage area.- 32 square miles.

Records available.- October 1933 to September 1945 in reports of Geological Survey. March to October 1916 and May 1923 to September 1945 in reports of State engineer. (No winter records some years.)

Extremes.- Maximum discharge during year, 124 second-feet May 5, 14 (gage height, 2.03 feet); minimum daily, 1.9 second-feet Oct. 1.
1916, 1923-45: Maximum daily discharge, 630 second-feet May 15, 1941; minimum daily, 1.5 second-feet Sept. 23, 1944.

Remarks.- Records excellent above 15 second-feet and fair below. A few diversions above station for irrigation.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.9	6.8				9.1	16	55	69	39	35	18
2	2.8	6.4				8.9	17	80	70	40	29	18
3	3.4	6.1				8.8	8.4	89	64	39	27	16
4	4.4	5.8				8.6	b8.0	99	67	35	25	14
5	4.0	5.8				8.4	10	118	76	35	25	13
6	3.7	7.2				8.5	18	114	78	32	34	12
7	3.7	7.2				8.6	14	113	71	30	31	13
8	3.7	8.0				8.6	17	113	70	29	39	12
9	3.7	8.0				8.6	22	103	61	30	32	12
10	3.7	8.8				8.8	23	103	61	26	29	12
11	3.7	8.8				9.2	17	109	62	25	25	11
12	3.7	8.4				9.4	15	101	52	26	27	10
13	3.7	7.5				*10	13	105	58	25	26	11
14	3.7	6.8				13	8.4	117	71	26	23	11
16	4.7	7.5				11	19	99	72	25	23	9.8
16	11	8.4				9.0	16	81	70	22	23	9.8
17	12	8.0				8.2	14	71	58	19	22	10
18	8.4	7.5				9.0	13	72	56	20	19	9.3
19	7.5	7.2				8.5	15	78	57	26	18	8.8
20	7.2	7.5				8.0	24	85	54	30	23	8.8
21	7.2	b9.0				9.4	35	80	54	39	38	8.8
22	7.2	b11				*9.8	42	72	61	43	28	8.4
23	7.2	12				8.8	43	66	58	39	24	8.0
24	7.2	11				8.0	34	70	62	33	27	8.4
25	8.0	10				11	28	78	62	35	32	8.4
26	7.5	9.8				11	28	79	57	44	26	8.0
27	7.5	*9.1				12	29	95	51	32	26	8.4
28	8.0	8.6				*13	26	101	47	27	23	8.8
29	8.0	8.0				11	27	97	42	24	20	9.3
30	7.5	8.5				11	38	93	38	27	20	11
31	7.2	-				12	-	82	-	27	19	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	183.1	12	1.9	5.91	363
November	244.7	12	5.8	8.16	485
December	-	-	-	-	-
Calendar year	-	-	-	-	-
January	-	-	-	-	-
February	-	-	-	-	-
March	299.2	13	8.0	9.65	593
April	637.8	43	8.0	21.3	1,270
May	2,818	118	55	90.9	5,590
June	1,829	78	38	61.0	3,630
July	954	44	19	30.8	1,890
August	818	39	18	26.4	1,620
September	327.0	18	8.0	10.9	649
Water year	-	-	-	-	-

* Winter discharge measurement made on this day.
b Stage-discharge relation affected by ice.
Note.- No gage-height record Nov. 23-30, Mar. 1-22, 25-28, Apr. 5 (stage-discharge relation affected by ice during most of periods); discharge computed on basis of 4 discharge measurements and weather records.
Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

Conejos River at Platoro, Colo.

Location.- Water-stage recorder, lat. 37°21'00", long. 106°31'30", in sec. 22, T. 36 N., R. 4 E., half a mile east of Platoro and 5 miles downstream from Adams Fork.

Drainage area.- 44.4 square miles.

Records available.- April 1937 to September 1945 (no winter records).

Extremes.- Maximum discharge during year, 808 second-feet June 13 (gage height, 2.70 feet); minimum daily recorded, 8.2 second-feet Sept. 24-27, but may have been less during period of no record.

1937-45: Maximum discharge, 1,310 second-feet June 25, 1941 (gage height, 3.15 feet), from rating curve extended above 850 second-feet; minimum daily recorded, 3.5 second-feet Oct. 20, 1943.

Remarks.- Records good June to September, others fair. No diversion above station.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	10	21						160	287	370	74	37
2	22	24						200	329	370	76	39
3	22	24						250	415	342	64	28
4	18	25						280	525	306	72	24
5	21	31						290	575	265	59	21
6	21	34						270	550	248	61	19
7	19	24						230	490	252	81	21
8	17	24						235	460	235	115	24
9	14	36						244	375	252	78	25
10	13	31						310	385	228	74	26
11	11	30						342	342	213	64	25
12	10	24						315	410	192	85	24
13	10	b23						342	615	176	100	18
14	10	b24						310	681	163	74	14
15	22	27						260	655	151	64	14
16	34	30						235	625	145	55	18
17	42	29						230	570	131	50	19
18	30	27						272	535	126	47	14
19	25	24						275	525	148	40	13
20	25	22						265	505	120	40	12
21	25	25						248	585	128	47	12
22	24	29						270	585	104	55	13
23	21	32						306	555	104	42	9.1
24	22	35						375	550	115	39	8.2
25	24	32						405	510	128	45	8.2
26	22	30						425	470	131	33	8.2
27	20	28						550	445	95	36	8.2
28	21	27						570	425	89	39	10
29	22	26						560	390	85	31	16
30	20	27						515	375	76	29	26
31	20	-						361	-	81	33	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	637	42	10	20.5	1,260
November	825	36	21	27.5	1,640
December	-	-	-	-	-
Calendar year	-	-	-	-	-
January	-	-	-	-	-
February	-	-	-	-	-
March	-	-	-	-	-
April	-	-	-	-	-
May	9,990	570	160	319	19,640
June	14,744	681	287	491	29,240
July	5,569	370	76	180	11,050
August	1,802	115	29	58.1	3,570
September	553.9	39	8.2	18.5	1,100
Water year	-	-	-	-	-

b Stage-discharge relation affected by ice.

Note.- No gage-height record Nov. 15-30, May 1-8, 15-22; discharge computed on basis of records for station at Counsellors Cabin near Mogote.

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

Conejos River at Counsellors Cabin, near Mogote, Colo.

Location.- Water-stage recorder, lat. 37°07'30", long. 106°20'00", in SE¼ sec. 5, T. 33 N., R. 6 E., half a mile east of Counsellors Cabin, 2 miles downstream from Elk Creek, and 14 miles northwest of Mogote. Datum of gage is 8,606.23 feet above mean sea level (Bureau of Reclamation bench mark).

Drainage area.- 211 square miles.

Records available.- October 1943 to September 1945 (no winter records).

Extremes.- Maximum discharge during year, 2,020 second-feet May 28, June 14 (gage height, 4.15 feet); minimum daily recorded, 37 second-feet Sept. 27, 28, but probably less during period of no gage-height record.
1943-45: Maximum discharge, 2,440 second-feet June 1, 2, 1944 (gage height, 4.62 feet); minimum daily determined, 27 second-feet Nov. 28, 1943, but may have been less during periods of no gage-height record.

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

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	57	62				-	79	594	1,120	782	252	98
2	69	61				-	100	742	1,160	756	200	112
3	73	60				-	81	896	1,300	756	216	98
4	67	58				-	73	1,030	1,500	664	192	81
5	66	59				-	75	1,160	1,700	587	174	75
6	66	63				-	77	1,120	1,710	519	161	69
7	64	62				-	96	988	1,500	519	200	66
8	62	57				-	130	1,070	1,440	495	295	64
9	60	54				-	152	1,100	1,150	495	238	60
10	58	56				-	167	1,210	1,180	507	207	57
11	57	58				-	130	1,390	1,080	454	185	53
12	57	57				-	114	1,350	1,040	426	207	51
13	55	51				-	100	1,440	1,490	387	216	50
14	55	48				-	96	1,480	1,770	371	188	50
15	62	50				-	85	1,140	1,760	340	185	48
16	109	b62				-	81	903	1,650	320	149	47
17	127	b58				-	77	896	1,500	305	135	50
18	109	b56				-	81	1,120	1,340	276	130	48
19	98	b50				-	109	1,130	1,330	320	119	43
20	93	b42				-	192	1,060	1,280	290	122	42
21	85	*b48				-	305	938	1,270	290	143	42
22	81	b57				-	371	996	1,400	281	170	42
23	78	b59				-	355	1,130	1,320	257	146	42
24	74	b64				-	271	1,280	1,300	286	122	40
25	73	b68				-	238	1,440	1,240	320	127	40
26	72	b52				-	216	1,400	1,130	345	114	39
27	71	b50				-	196	1,790	1,020	257	109	37
28	69	b48				-	200	1,850	945	220	135	37
29	68	b47				-	262	1,830	868	216	112	40
30	65	b48				*46	409	1,750	788	207	98	51
31	64	-				60	-	1,370	-	192	91	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	2,264	127	55	73.0	4,490
November	1,655	64	47	55.2	3,280
December	-	-	-	-	-
Calendar year	-	-	-	-	-
January	-	-	-	-	-
February	-	-	-	-	-
March	-	-	-	-	-
April	4,918	409	73	164	9,750
May	37,593	1,850	594	1,213	74,560
June	39,281	1,770	788	1,309	77,910
July	12,440	782	192	401	24,670
August	5,138	295	91	166	10,190
September	1,672	112	37	55.7	3,320
Water year	-	-	-	-	-

* Winter discharge measurement made on this day.
b Stage-discharge relation affected by ice.
Note.- No gage-height record Oct. 23 to Nov. 15 (stage-discharge relation affected by ice during part of period); discharge computed on basis of weather records and records for station near Mogote.
Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

Conejos River near Mogote, Colo.

Location.- Water-stage recorder, lat. 37°03', long. 106°11', in SE¼ sec. 34, T. 33 N., R. 7 E., three-quarters of a mile downstream from Fox Creek and 5½ miles west of Mogote.

Drainage area.- 282 square miles.

Records available.- September 1899 to March 1900, April 1903 to September 1917, and October 1933 to September 1945 in reports of Geological Survey. September 1899 to March 1900 and April 1903 to September 1945 in reports of State engineer.

Average discharge.- 43 years (1902-45), 376 second-feet.

Extremes.- Maximum discharge during year, 2,170 second-feet May 29 (gage height, 4.36 feet); minimum daily, 29 second-feet Dec. 10.

1899-1900, 1903-45: Maximum discharge, 9,000 second-feet Oct. 5, 1911 (gage height, 8.50 feet, site and datum then in use), from rating curve extended above 3,500 second-feet; minimum, 18 second-feet (discharge measurement) Dec. 19, 1939.

Remarks.- Records good except those for period of ice effect, which are fair. No diversion or regulation.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	70	63	*51	34	*41	49	79	645	1,260	770	245	86
2	77	62	62	42	42	*47	102	850	1,280	750	207	96
3	84	61	66	*43	43	41	89	1,070	1,430	740	224	84
4	80	58	51	46	44	48	69	1,250	1,620	663	204	73
5	76	58	30	48	42	49	69	1,480	1,650	592	184	67
6	74	63	38	49	44	46	73	1,500	1,880	513	173	63
7	70	64	34	49	41	50	89	1,360	1,660	506	197	59
8	66	58	35	49	48	48	120	1,500	1,590	499	270	59
9	63	55	34	49	50	52	140	1,530	1,280	492	234	56
10	61	55	29	49	48	55	159	1,650	1,300	520	207	53
11	56	57	31	50	43	57	131	1,820	1,170	457	188	47
12	56	58	37	49	46	61	116	1,770	1,110	438	200	50
13	53	58	*38	44	44	63	106	1,820	1,560	396	210	49
14	53	48	40	43	*46	71	102	1,880	1,860	379	188	48
15	58	49	40	*43	48	*64	96	1,470	1,850	352	167	48
16	96	66	40	42	47	48	87	1,140	1,770	330	149	48
17	118	62	42	42	40	43	84	1,080	1,590	320	138	50
18	111	59	42	36	40	55	92	1,350	1,400	306	129	49
19	97	50	43	37	46	56	115	1,380	1,380	330	118	46
20	94	42	46	38	40	66	181	1,290	1,340	306	116	44
21	87	*49	43	41	43	69	278	1,110	1,310	306	138	44
22	82	57	41	37	40	70	368	1,160	1,430	291	154	44
23	80	57	42	41	36	63	362	1,300	1,380	270	147	43
24	76	67	42	42	40	64	278	1,440	1,370	296	124	42
25	74	59	41	43	46	66	242	1,590	1,300	316	125	40
26	74	55	38	40	44	66	220	1,580	1,180	330	115	40
27	73	51	37	41	41	63	207	1,950	1,070	266	104	40
28	70	50	39	42	39	63	204	1,990	956	231	120	41
29	70	49	41	42	-	63	245	1,990	880	231	104	47
30	66	50	42	41	-	59	384	1,950	780	224	92	59
31	64	-	34	41	-	63	-	1,560	-	204	86	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	2,329	118	53	75.1	4,620
November	1,690	67	42	56.3	3,350
December	1,249	56	29	40.	2,480
Calendar year 1944	148,828	2,700	29	407	295,200
January	1,333	50	34	43.	2,640
February	1,212	50	36	43.	2,400
March	1,778	71	41	57.	3,530
April	4,887	384	69	163	9,690
May	45,455	1,990	645	1,466	90,160
June	41,836	1,880	780	1,395	82,980
July	12,623	770	204	407	25,040
August	5,057	270	86	163	10,030
September	1,615	96	40	53.	3,200
Water year 1944-45	121,064	1,990	29	332	240,100

* Winter discharge measurement made on this day,

Note.- Stage-discharge relation affected by ice Nov. 29 to Mar. 10.

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

Conejos River near La Sauses, Colo.

Location.- Two water-stage recorders (two channels), lat. 37°23', long. 105°45', in sec. 2, T. 35 N., R. 11 E., half a mile upstream from mouth and 2 miles north of La Sauses. Datum of gage (north channel) is 7,495.02 feet above mean sea level (Colorado State Highway Department bench mark).

Drainage area.- 887 square miles.

Records available.- October 1933 to September 1945 in reports of Geological Survey. March 1921 to September 1945 in reports of State engineer.

Average discharge.- 24 years, 248 second-feet.

Extremes.- Maximum discharge during year, 2,690 second-feet May 12; minimum daily, 0.7 second-foot July 22-24.

1921-45: Maximum discharge, 3,890 second-feet May 15, 1941; no flow July 21 to Sept. 8, 1934.

Remarks.- Records good except those for periods of ice effect or no gage-height record on main channel, and those below 10 second-feet, which are fair. Diversions above station for irrigation.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	11	36	39	b50	62	69	45	342	785	164	2.5	17
2	12	40	39	b53	62	69	45	629	600	155	2.1	19
3	12	40	40	*56	61	67	42	925	576	126	10	21
4	14	40	42	56	63	64	39	1,340	650	108	9.7	23
5	13	40	42	56	63	63	42	1,720	680	92	1.3	24
6	12	41	44	59	63	63	42	2,050	755	62	1.6	24
7	11	41	44	59	63	63	40	2,290	709	30	1.1	24
8	14	41	45	59	63	61	38	2,200	580	27	2.8	17
9	29	41	45	59	64	61	33	2,240	499	22	15	15
10	28	41	44	56	64	61	28	2,230	443	18	80	17
11	32	40	44	56	64	61	34	2,230	422	19	68	16
12	32	40	44	57	65	61	34	2,670	368	16	61	16
13	32	40	*44	55	64	57	35	a2,500	361	5.2	52	17
14	32	40	43	55	64	54	37	a2,250	480	3.7	44	17
15	32	40	40	57	66	54	40	2,120	652	2.3	36	15
16	40	40	39	54	71	55	43	1,510	729	1.4	15	14
17	41	40	39	53	78	56	59	1,130	706	1.3	12	13
18	38	40	39	53	77	52	67	1,170	614	2.3	11	1.6
19	37	40	39	51	77	53	65	1,360	482	3.1	9.0	.8
20	37	40	40	53	81	52	55	1,290	406	1.5	9.8	.9
21	35	42	40	53	81	51	57	1,090	353	1.0	8.0	1.1
22	38	41	40	50	77	51	128	880	331	.7	6.3	1.2
23	39	41	40	47	70	47	202	819	374	.7	8.0	1.1
24	40	42	46	50	71	50	222	889	383	.7	6.2	1.0
25	39	42	48	53	71	47	173	961	361	.8	5.2	1.3
26	39	42	50	53	71	47	138	904	361	1.0	4.3	1.8
27	39	42	50	57	70	47	128	920	320	1.0	4.3	1.8
28	40	41	52	54	69	45	129	1,180	282	1.0	5.2	2.5
29	40	41	54	54	-	45	132	1,240	236	1.0	17	3.4
30	40	41	55	54	-	45	166	1,160	193	1.5	20	9.5
31	38	-	b47	54	-	45	-	1,040	-	1.5	20	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	936	41	11	30.2	1,860
November	1,216	42	36	40.5	2,410
December	1,357	55	39	43.8	2,690
Calendar year 1944	112,749.7	3,090	4.6	308	223,600
January	1,686	59	47	54.4	3,340
February	1,915	81	61	68.4	3,800
March	1,716	69	45	55.4	3,400
April	2,338	222	28	77.9	4,640
May	45,279	2,670	342	1,461	89,810
June	14,691	785	193	490	29,140
July	870.7	164	.7	28.1	1,730
August	548.4	80	1.1	17.7	1,090
September	337.0	24	.8	11.2	668
Water year 1944-45	72,890.1	2,670	.7	200	144,600

* Winter discharge measurement made on this day.

a No gage-height record on main channel; discharge computed on basis of records for secondary channel.

b Stage-discharge relation affected by ice.

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

San Antonio River at Ortiz, Colo.

Location.- Water-stage recorder, lat. 37°00', long. 106°02', in New Mexico, in sec. 19, T. 32 N., R. 9 E., a quarter of a mile south of Colorado-New Mexico State line, half a mile south of Ortiz, and half a mile upstream from Los Pinos Creek.

Drainage area.- 110 square miles.

Records available.- October 1933 to September 1945 in reports of Geological Survey. January to October 1915, May 1919 to October 1920, and October 1924 to September 1945 in reports of State engineer. (No winter records most years.)

Extremes.- Maximum discharge during year, 1,070 second-feet May 6 (gage height, 4.11 feet); no flow July 18, 19, Sept. 10-30.
1915, 1919-20, 1924-45: Maximum discharge, 1,750 second-feet Apr. 15, 1937 (gage height, 5.38 feet), from rating curve extended above 1,100 second-feet; no flow at times in most years.

Remarks.- Records fair. A few small diversions above station for irrigation.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.6	2.4	(*)		(*)		19	315	39	0.5	12	1.0
2	.8	2.6					21	276	37	.4	3.0	1.4
3	.9	*2.6		(*)			20	356	35	.3	15	4.0
4	2.1	2.6					*21	512	32	.4	5.2	2.3
5	2.1	2.6					19	632	29	.6	2.1	.9
6	1.7	2.8					19	774	26	.6	5.0	.4
7	1.4	4.7					20	616	22	.6	9.6	.2
8	1.0	5.0					22	628	20	.4	21	.1
9	.6	4.7					23	552	18	.5	9.9	.1
10	.5	6.8					24	512	17	.7	16	0
11	.4	7.2					23	534	15	.7	11	0
12	.4	5.0					21	438	14	.5	9.2	0
13	.8	6.2	(*)				19	438	13	.4	13	0
14	.8	8.2					15	408	11	.2	12	0
15	1.0	2.6					14	294	8.8	.2	6.8	0
16	5.5	5.5	1.8	2.0	2.5	*5.6	14	259	8.2	.1	3.8	0
17	17	9.2					*14	267	7.8	.1	2.1	0
18	9.2	b6.5					17	270	7.5	0	.9	0
19	5.2	b6.8					39	262	6.8	0	2.3	0
20	4.2	b4.5					107	215	5.9	.2	10	0
21	3.3	b5.0					178	170	5.9	1.9	12	0
22	2.8	*b4.0					226	155	5.9	6.2	8.5	0
23	2.3	b3.0					212	140	6.5	2.6	4.5	0
24	2.3	b3.5					122	120	5.9	1.5	2.8	0
25	2.3	b4.5					97	109	4.0	.9	8.5	0
26	2.3	b3.3					76	86	3.0	5.9	5.0	0
27	2.3	b3.0					74	82	2.6	7.2	2.1	0
28	2.3	2.8					81	74	1.7	2.4	.9	0
29	2.4	2.5			-		148	64	1.0	.8	.5	0
30	2.6	2.0			-		250	55	.8	.8	4.0	0
31	2.6	-			-		-	45	-	1.7	2.4	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	83.7	17	0.4	2.70	166
November	132.1	9.2	2.0	4.40	262
December	55.8	-	-	1.8	111
Calendar year 1944	11,379.3	640	0	31.1	22,580
January	62.0	-	-	2.0	123
February	70.0	-	-	2.5	139
March	173.6	-	-	5.6	344
April	1,955	250	14	65.2	3,880
May	9,658	774	45	312	19,160
June	410.3	39	.8	13.7	814
July	39.3	7.2	0	1.27	78
August	221.1	21	.5	7.13	439
September	10.4	4.0	0	.35	21
Water year 1944-45	12,871.3	774	0	35.3	25,540

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

Note.- No gage-height record Nov. 28 to Apr. 17 (stage-discharge relation affected by ice during most of period); discharge computed on basis of 7 discharge measurements and weather records.

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

San Antonio River at mouth, near Manassa, Colo.

Location.- Water-stage recorder, lat. 37°11', long. 105°53', in sec. 21, T. 34 N., R. 10 E., 1 mile upstream from mouth and 2½ miles east of Manassa.

Drainage area.- 348 square miles.

Records available.- October 1933 to September 1945 in reports of Geological Survey. April 1923 to September 1945 in reports of State engineer.

Average discharge.- 22 years, 103 second-feet.

Extremes.- Maximum discharge during year, 1,470 second-feet May 11 (gage height, 5.89 feet); no flow Oct. 1-29, Sept. 17-30.
1923-45: Maximum discharge, 2,620 second-feet May 14, 1941 (gage height, 6.26 feet), from rating curve extended above 2,200 second-feet; no flow at times in most years.

Remarks.- Records good above 10 second-feet and fair below. Diversions above station for irrigation.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	0.1				3.0	1.5	328	431	67	9.7	2.2
2	0	.1				3.0	1.6	491	383	63	27	1.8
3	0	.1				3.0	2.1	728	365	53	61	1.5
4	0	.1				3.0	2.6	1,030	352	44	32	1.2
5	0	.2				3.0	2.6	1,270	302	36	18	1.0
6	0	.2				3.5	2.4	1,410	305	21	16	.7
7	0	*.4				3.5	2.1	1,410	292	12	40	.6
8	0	.3				3.5	2.2	1,390	265	6.8	61	.5
9	0	.3				3.5	2.7	1,400	234	5.8	73	.4
10	0	.3				3.5	10	1,370	208	4.5	54	.2
11	0	.4				4.0	10	1,380	204	4.0	38	.2
12	0	.4				4.0	7.6	1,340	198	3.2	34	.2
13	0	.4	(*)			4.0	6.0	1,290	188	3.8	29	.2
14	0	.3			(*)	4.0	6.0	1,280	198	4.0	26	.1
15	0	.3				*4.2	5.8	1,110	204	4.7	24	.1
16	0	.4	0.2	1.5	3.0	4.3	6.6	860	212	5.4	16	.1
17	0	.4				4.2	10	756	217	6.0	10	0
18	0	.4				3.8	14	935	202	6.8	5.4	0
19	0	.3				3.6	11	990	172	7.6	5.2	0
20	0	.2				3.8	19	920	157	5.0	5.8	0
21	0	.1				3.5	66	736	143	4.2	6.8	0
22	0	*.1				3.3	130	676	139	6.0	5.8	0
23	0	.1				2.7	169	712	158	7.0	6.6	0
24	0	.1				2.8	133	700	150	13	5.2	0
25	0	.1				3.0	115	684	148	14	4.0	0
26	0	.1				2.6	99	551	146	18	3.8	0
27	0	.1				2.4	96	646	129	19	4.0	0
28	0	.1				2.2	95	660	109	22	3.0	0
29	0	.1			-	2.2	108	628	95	16	2.7	0
30	.1	.1			-	1.6	169	587	82	13	2.6	0
31	.1	-			-	1.6	-	512	-	12	3.2	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	0.2	0.1	0	0.01	0.4
November	6.6	.4	.1	.22	13
December	6.2	-	-	.2	12
Calendar year 1944	47,739.8	1,600	0	130	94,700
January	46.5	-	-	1.5	92
February	84.0	-	-	3.0	167
March	100.5	4.3	1.6	3.24	199
April	1,305.8	169	1.5	43.5	2,590
May	28,780	1,410	328	928	57,080
June	6,388	431	82	213	12,670
July	506.8	67	3.2	16.3	1,010
August	632.8	73	2.6	20.4	1,260
September	11.0	2.2	0	.37	22
Water year 1944-45	37,868.4	1,410	0	104	75,120

* Winter discharge measurement made on this day.

Note.- No gage-height record Nov. 19 to Mar. 14 (stage-discharge relation affected by ice during most of period); discharge computed on basis of 3 discharge measurements and weather records.

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

Los Pinos River near Ortiz, Colo.

Location.- Water-stage recorder, lat. 36°58', long. 106°03', in New Mexico, in N½ sec. 34, T. 32 N., R. 8 E., 1 mile south of Colorado-New Mexico State line, 2 miles southwest of Ortiz, and 2½ miles upstream from mouth.

Drainage area.- 167 square miles.

Records available.- October 1933 to September 1945 in reports of Geological Survey. January 1914 to November 1920 and October 1924 to September 1945 in reports of State engineer. (No winter records most years.)

Extremes.- Maximum discharge during year, 2,180 second-feet May 10 (gage height. 5.13 feet), from rating curve extended above 1,200 second-feet; minimum daily recorded, 11 second-feet Nov. 8, 14, Sept. 8-29, but may have been less during period of no gage-height record.

1914-20, 1924-45: Maximum discharge, 3,160 second-feet May 12, 1941 (gage height, 5.77 feet), from rating curve extended above 1,600 second-feet; minimum daily, 5 second-feet Aug. 11, Sept. 19, 1934.

Remarks.- Records good except those for period of ice effect or no gage-height record, which are fair. Diversions above station for irrigation.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	14	16	(*)		(*)		34	419	499	138	47	15
2	15	16					36	602	483	133	41	22
3	22	*15		(*)			32	824	483	128	53	18
4	19	14					*31	1,070	507	121	38	14
5	18	14					29	1,290	535	110	31	14
6	18	16					30	1,300	523	100	34	13
7	17	17					34	1,260	479	92	36	12
8	15	11					41	1,380	443	86	41	11
9	14	15					48	1,350	361	81	36	11
10	14	17					56	1,440	354	96	28	11
11	15	16					48	1,500	337	79	27	11
12	15	19					44	1,410	313	69	37	11
13	14	19	(*)			27	40	1,460	358	64	36	11
14	14	11					38	1,260	395	58	30	11
15	17	16	14.5	18.5	22	(*)	42	808	395	56	27	11
16	27	29					36	660	375	52	26	11
17	39	23					33	769	331	48	24	11
18	30	22					35	1,030	298	46	24	11
19	24	20					46	988	280	51	27	11
20	21	19					81	847	268	43	24	11
21	20	18					135	695	256	45	28	11
22	19	*17					184	742	271	41	27	11
23	19	19					189	786	262	42	30	11
24	18	19					138	813	250	39	26	11
25	18	20					121	780	238	38	25	11
26	17	23				25	118	758	233	66	22	11
27	17	20				25	118	883	204	40	21	11
28	17	17				22	128	835	184	38	21	11
29	18	16			-	24	182	764	169	41	19	11
30	18	15			-	26	283	705	145	42	17	14
31	17	-			-	27	-	580	-	44	14	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	580	39	14	18.7	1,150
November	529	29	11	17.6	1,050
December	450	-	-	14.5	893
Calendar year 1944	58,026	1,920	-	159	115,100
January	574	-	-	18.5	1,140
February	616	-	-	22	1,220
March	824	-	-	26.6	1,630
April	2,410	283	29	80.3	4,780
May	30,008	1,500	419	968	59,520
June	10,229	535	145	341	20,290
July	2,127	138	38	68.6	4,220
August	917	53	14	29.6	1,820
September	364	22	11	12.1	722
Water year 1944-45	49,628	1,500	-	138	98,440

* Winter discharge measurement made on this day.

Note.- No gage-height record Dec. 1 to Mar. 15 (stage-discharge relation affected by ice during entire period); discharge computed on basis of 5 discharge measurements and weather records. Stage-discharge relation affected by ice Nov. 20-30, Mar. 16-25.

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

Culebra Creek at San Luis, Colo.

Location.- Water-stage recorder and 12-foot Parshall flume, lat. 37°11', long. 105°26', in sec. 35, T. 3 N., R. 72 W., Beaubien Grant survey, 1 mile southeast of San Luis and 1½ miles upstream from Rito Seco.

Drainage area.- 220 square miles.

Records available.- January 1910 to December 1911 and October 1933 to September 1945 in reports of Geological Survey. May 1909 to December 1910 and April 1927 to September 1945 in reports of State engineer. 1911-19 (unpublished) in files of State engineer.

Average discharge.- 28 years (1909-19, 1927-45), 66.5 second-feet.

Extremes.- Maximum discharge during year, 413 second-feet Aug. 6 (gage height, 3.78 feet); minimum daily, 15 second-feet Jan. 1, May 3, 4, 13.

1909-19, 1927-45: Maximum discharge, 595 second-feet May 30, 1942 (gage height, 4.84 feet), from rating curve extended above 300 second-feet; minimum daily, 5 second-feet Sept. 14-16, 1934.

Remarks.- Records excellent except those for Oct. 1 to May 14, which are good. Diversions above station for irrigation. Flow regulated by Sanchez Reservoir on Ventero Creek (capacity, 103,000 acre-feet).

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	24	30	31	15	32	28	18	28	167	165	238	135
2	24	30	31	16	31	28	29	16	170	164	231	111
3	27	30	31	28	30	28	29	15	172	118	196	116
4	31	29	32	29	19	17	29	15	194	65	196	152
5	31	20	32	26	31	21	31	26	236	130	185	147
6	31	32	31	26	32	29	31	18	264	187	234	124
7	31	35	31	24	31	28	31	50	241	199	90	96
8	30	34	32	26	31	28	21	105	238	158	84	96
9	30	31	29	26	31	28	29	52	236	172	92	96
10	29	31	23	26	29	26	28	24	224	189	73	98
11	29	31	24	26	18	17	28	17	224	179	88	115
12	29	26	29	27	30	29	28	18	232	175	94	115
13	29	25	28	27	32	29	26	15	233	164	142	100
14	26	30	28	28	32	30	20	18	229	153	140	51
15	20	30	28	28	33	29	25	24	211	116	140	28
16	24	31	29	28	32	29	25	32	a206	115	129	27
17	25	31	29	28	31	28	24	30	a187	115	142	33
18	30	31	29	28	20	18	24	30	182	140	157	46
19	29	31	29	28	31	29	22	30	201	142	148	46
20	29	31	29	26	29	29	30	18	225	157	177	42
21	28	31	28	19	31	29	30	16	218	163	159	32
22	20	31	28	31	29	29	25	30	208	139	117	30
23	24	31	28	31	29	29	23	51	183	163	107	29
24	29	31	23	29	28	28	22	46	182	179	115	30
25	29	30	28	28	17	19	24	63	189	181	136	30
26	29	22	a28	27	28	31	22	53	211	179	142	30
27	29	31	29	26	28	29	22	32	211	176	166	30
28	28	31	28	26	28	29	21	49	210	175	165	30
29	22	32	28	a24	-	29	25	114	202	172	148	30
30	24	31	28	a32	-	29	18	134	198	205	141	30
31	30	-	26	32	-	29	-	160	-	227	140	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	850	31	20	27.4	1,690
November	900	35	20	30.0	1,790
December	887	32	23	28.6	1,760
Calendar year 1944	27,515	318	15	75.2	54,580
January	821	32	15	26.5	1,630
February	803	33	17	28.7	1,590
March	838	31	17	27.0	1,660
April	760	31	18	25.3	1,510
May	1,329	160	15	42.9	2,640
June	6,284	264	167	209	12,460
July	4,962	227	65	160	9,840
August	4,512	238	73	146	8,950
September	2,075	152	27	69.2	4,120
Water year 1944-45	25,021	264	15	68.6	49,640

a No gage-height record; discharge computed on basis of 1 discharge measurement, weather records, and records for station below San Luis.

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

Culebra Creek below San Luis, Colo.

Location.- Water-stage recorder, lat. 37°12', long. 105°26', in sec. 27, T. 3 N., R. 72 W., Beaubien Grant survey, 500 feet downstream from bridge on State Highway 160, 600 feet downstream from Rito Seco, and a quarter of a mile southwest of San Luis.

Drainage area.- 255 square miles.

Records available.- August 1938 to September 1945 (no winter records most years).

Extremes.- Maximum discharge during year, 426 second-feet Aug. 6 (gage height, 3.18 feet); minimum daily, 22 second-feet Jan. 2, Apr. 26.

1938-45: Maximum discharge, 866 second-feet May 30, 1942 (gage height, 4.54 feet), from rating curve extended above 400 second-feet; minimum daily, 15 second-feet Sept. 20, 1943.

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

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	27	38	40	23	44	42	28	39	155	155	238	129
2	30	38	44	22	43	42	38	28	152	160	222	95
3	31	38	44	35	42	42	39	24	150	116	188	106
4	44	38	42	36	30	30	40	26	180	70	180	142
5	43	27	44	34	43	35	41	35	219	120	158	135
6	42	42	44	34	44	39	41	30	270	177	228	118
7	43	42	44	27	43	41	45	53	244	197	116	94
8	42	40	43	37	43	38	33	102	240	140	92	90
9	41	39	39	38	43	41	39	61	235	158	100	94
10	41	40	27	39	41	39	37	33	225	180	75	92
11	42	39	30	38	30	31	38	29	225	174	85	104
12	43	35	38	37	43	41	36	26	235	163	90	111
13	43	33	38	37	42	42	35	25	235	152	140	104
14	38	36	38	37	44	41	28	31	230	142	135	65
15	29	37	38	38	45	42	34	56	212	107	135	44
16	42	39	38	39	44	42	34	62	191	106	127	41
17	38	40	38	40	42	40	34	61	160	107	129	45
18	43	40	39	40	31	32	32	61	177	131	150	52
19	42	39	40	39	43	40	31	67	203	133	145	50
20	42	38	41	38	*44	40	40	57	228	150	180	51
21	40	38	42	b27	43	41	39	55	222	158	158	45
22	28	37	42	43	43	40	35	76	219	129	118	44
23	33	38	37	43	43	40	33	99	185	152	107	40
24	40	39	27	41	42	39	28	97	182	177	109	39
25	41	36	38	40	31	32	23	116	194	177	127	38
26	41	27	38	39	41	41	22	107	212	171	129	41
27	41	39	*38	38	42	39	28	73	212	165	152	39
28	38	40	39	38	42	38	26	80	216	160	152	39
29	28	38	37	34	-	38	31	140	200	163	140	39
30	31	42	36	*44	-	39	24	158	203	197	133	41
31	38	-	35	44	-	40	-	150	-	222	133	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	1,185	44	27	38.2	2,350
November	1,132	42	27	37.7	2,250
December	1,198	44	27	38.6	2,380
Calendar year 1944	30,054	319	27	82.1	59,620
January	1,139	44	22	36.7	2,260
February	1,151	45	30	41.1	2,280
March	1,207	42	30	38.9	2,390
April	1,012	45	22	33.7	2,010
May	2,057	158	24	66.4	4,080
June	6,211	270	150	207	12,320
July	4,709	222	70	152	9,340
August	4,371	238	75	141	8,670
September	2,167	142	38	72.2	4,300
Water year 1944-45	27,539	270	22	75.4	54,630

* Winter discharge measurement made on this day.

b Stage-discharge relation affected by ice.

Note.- No gage-height record Jan. 22 to Feb. 11, June 8-14, Aug. 9-13; discharge computed on basis of 2 discharge measurements, weather records, and records for station at San Luis.

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

Costilla Creek above reservoir, near Costilla, N. Mex.

Location.- Water-stage recorder and concrete control, lat. 36°54'25", long. 105°15'00", in Sangre de Cristo Grant, 2¾ miles by road upstream from Costilla Dam and 17 miles southeast of Costilla, Taos County.

Records available.- April 1937 to September 1945 (irrigation seasons only).

Extremes.- Maximum discharge recorded during year, 72 second-feet May 5 (gage height, 0.85 feet); minimum daily recorded, 1.2 second-feet Nov. 7.

1937-45: Maximum discharge recorded, 346 second-feet May 11, 1944 (gage height, 1.60 feet); maximum gage height, 1.90 feet May 15, 1938, former site and datum; minimum daily discharge recorded, that of Nov. 7, 1944.

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

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.9	1.4						a45	28	7.3	7.3	3.4
2	1.9	1.7							26	7.3	5.9	2.9
3	*2.2	1.7							24	6.8	4.6	2.9
4	2.4	1.7							24	6.4	4.6	2.7
5	2.2	1.9						46	24	6.8	6.8	2.4
6	1.9	2.4						38	24	7.3	12	2.7
7	1.7	1.2						38	22	7.3	19	2.9
8	1.7	b2						38	19	6.8	7.3	2.4
9	1.9							35	18	7.3	5.9	2.4
10	1.9							36	16	7.7	5.0	2.4
11	1.9							36	22	8.2	5.0	2.2
12	1.7							36	18	5.5	4.1	2.2
13	1.7							36	15	5.6	3.6	2.4
14	1.7							39	14	7.7	6.8	2.4
15	2.2	a2						34	15	7.3	5.5	2.2
18	5.5							34	15	6.8	4.6	2.2
17	4.6							28	15	6.8	3.4	2.2
18	3.4							30	13	5.9	3.4	1.7
19	2.9							35	12	5.9	3.6	1.9
20	2.4							34	12	5.0	4.6	2.2
21	2.2	*b2						31	11	4.6	5.9	2.4
22	2.2	-						30	13	5.9	3.6	2.4
23	2.2	-						31	11	8.2	3.4	1.9
24	2.2	-						30	10	7.3	4.6	1.9
25	1.9	-						31	11	7.3	4.1	1.9
26	1.9	-						31	12	6.8	3.6	2.2
27	1.9	-						34	8.2	7.7	3.4	2.2
28	1.9	-						34	7.7	6.8	3.4	2.7
29	1.9	-						34	6.4	10	4.6	3.4
30	1.7	-						34	5.9	6.8	3.6	4.6
31	1.7	-						32	-	7.7	4.1	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	69.4	5.5	1.7	2.24	138
November 1-21	40.0	2.4	1.2	1.90	79
December	-	-	-	-	-
Calendar year	-	-	-	-	-
January	-	-	-	-	-
February	-	-	-	-	-
March	-	-	-	-	-
April	-	-	-	-	-
May	1,105	46	28	35.6	2,190
June	472.2	28	5.9	15.7	937
July	214.7	10	4.6	6.93	426
August	167.3	19	3.4	5.40	332
September	74.3	4.6	1.7	2.48	147
Water year	-	-	-	-	-

* Winter discharge measurement made on this day.

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

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

Costilla Creek below reservoir, near Costilla, N. Mex.

Location.- Water-stage recorder and concrete control, lat. 36°52'25", long. 105°16'55", in Sangre de Cristo Grant, 125 feet downstream from outlet of reservoir at Costilla Dam and 18 miles southeast of Costilla, Taos County.

Records available.- April 1937 to September 1945 (irrigation seasons only prior to 1945).

Extremes.- Maximum discharge during year, 186 second-feet July 30 (gage height, 1.91 feet); minimum daily not determined.
1937-45: Maximum discharge recorded, 286 second-feet May 9, 10, 1942; (gage height, 2.65 feet); no flow at times.

Remarks.- Records good except those for periods of no gage-height record, which are poor. No diversion above station. Flow regulated by Costilla Reservoir (capacity, 15,700 acre-feet).

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	26	8.0	1.9	1.7					19	39	181	23
2	29	8.0	1.9				0.5	0.8	68	126	168	23
3	7.5	8.0	1.9	1.7					56	133	68	54
4	7.5	8.0	1.7		1.7	1.7			38	145	12	63
5	7.5	8.0	1.5					.8	67	150	56	24
6	7.5	8.0	1.5	1.7				.8	83	75	181	22
7	7.5	8.0	1.7		1.7	1.7		.8	35	15	81	16
8	7.5	8.0	1.7					.8	15	61	15	12
9	7.5	8.0	1.7					.8	.8	168	11	12
10	7.5	8.0	1.7	1.7	1.7		.6	.8	13	167	11	43
11	7.5	8.0	1.7			1.7		.8	58	157	11	45
12	8.0	8.0	1.7					.8	69	154	56	12
13	8.0	8.0	1.7					.8	79	67	172	12
14	8.0	8.0	1.7	1.7	1.7			.8	93	13	77	12
15	8.0	8.0	1.7					.8	40	57	23	12
18	8.0	8.0	1.7			1.0		.8	1.0	172	23	12
17	8.0	8.0	1.7	1.7	1.7			.8	23	169	23	27
18	8.0	8.0	1.7					.8	104	168	23	55
19	8.0	8.0	1.7					.8	18	164	58	26
20	8.0	7.5	1.5	1.7		.4		.8	24	71	73	10
21	8.0	4.1	1.5		1.7			.8	138	12	24	10
22	7.5	1.9	1.5					.8	146	52	24	10
23	7.5	1.9	1.5				.7	.8	138	174	24	10
24	7.5	1.9	1.5	1.7				.8	140	172	24	10
25	7.5	1.9	1.5		1.7			.8	138	172	24	10
28	7.5	1.9	1.6					.8	137	171	62	28
27	7.5	1.9	1.7	1.7		.5		.8	140	65	77	27
28	7.5	1.9			1.7			.8	162	13	24	7.5
29	7.5	1.9	1.7		-			.8	70	55	23	7.5
30	7.5	1.9			-		.8	.8	12	175	23	7.5
31	8.0	-		1.7	-		-	.8	-	183	23	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	278.0	29	7.5	8.97	551
November	180.7	8.0	1.9	6.02	358
December	51.6	1.9	1.5	1.66	102
Calendar year	-	-	-	-	-
January	52.7	-	-	1.70	105
February	47.6	-	-	1.70	94
March	33.4	-	-	1.08	66
April	19.3	-	-	.64	38
May	24.8	.8	.8	.80	49
June	2,124.8	162	.8	70.8	4,210
July	3,515	183	12	113	6,970
August	1,675	181	11	54	3,320
September	642.5	63	7.5	21.4	1,270
Water year 1944-45	8,645.4	183	-	23.7	17,130

Note.- No gage-height record Dec. 26 to May 4; discharge computed on basis of once-weekly staff-gage readings Dec. 26 to Mar. 7, and record of regulation of Costilla Reservoir furnished by caretaker.

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

Costilla Creek near Costilla, N. Mex.

Location.- Water-stage recorder, lat. 36°56'30", long. 105°30'10", in Sangre de Cristo Grant, half a mile upstream from diversion dam and 2 miles southeast of Costilla, Taos County.

Records available.- March 1936 to September 1945.

Extremes.- Maximum discharge during year, 278 second-feet May 2 (gage height, 3.30 feet); minimum daily not determined.

1936-45: Maximum discharge, 1,150 second-feet May 11, 1942 (gage height, 5.37 feet, site and datum then in use); minimum daily discharge recorded, 6 second-feet (estimated) Feb. 21, Mar. 6, 1944.

Remarks.- Records good October, March to September, others fair except those for periods of ice effect or no gage-height record, which are poor. Discharge regulated by Costilla reservoir. Diversions above station for irrigation.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	21	21	a7	a9	a14	15	28	150	152	66	183	32
2	*49	21	a8			13	b26	176	175	150	173	33
3	24	20	a9			8.5	31	195	187	163	135	31
4	23	21	a8			14	a17	193	156	175	44	87
5	21	22	a8			*14	25	200	163	173	38	35
6	21	25	a7.5	a11	a13	10	26	206	193	156	156	32
7	19	26	a7.5			13	27	193	150	66	156	29
8	18	25	a7			13	38	198	133	59	66	24
9	17	21				12	57	191	102	164	46	21
10	17	b20				15	82	191	94	183	38	20
11	16	b20		a12	b12	17	49	195	141	183	35	68
12	16	b19			*b12	19	44	198	159	171	37	23
13	16	b16			13	20	40	208	154	144	143	21
14	16	14			17	22	37	220	167	59	123	20
15	16	14			19	21	31	202	145	51	50	20
16	33	b16		a13	19	20	29	191	90	163	42	20
17	36	b14			18	15	29	167	85	171	38	20
18	26	b13	(*)		16	23	32	161	152	173	37	49
19	24	b12	7.4	*b13	17	19	58	179	120	175	38	50
20	22	*10	8.0	*b12	16	16	118	195	73	145	107	23
21	21	b10	8.5	b11	15	17	145	189	150	56	53	22
22	21	b9	b8	b10	12	22	152	177	189	53	43	21
23	21	b9	a8.5	b9	11	20	132	171	183	170	38	19
24	20	15	a9	b10	12	19	72	167	181	191	36	19
25	20	12	a9	a12	b12	19	68	169	179	187	37	18
26	20	b7	a9	a12	b11	20	62	169	185	183	34	19
27	20	a8	a8.5		b10	21	64	179	179	139	101	46
28	20	a8	a8		8.8	16	64	177	191	51	38	20
29	21	a8	a7.5		-	16	80	177	168	48	35	19
30	21	a7	a7		-	19	116	173	72	152	35	21
31	20	-	a7		-	19	-	163	-	183	32	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	676	49	16	21.8	1,340
November	463	26	7	15.4	918
December	237.4	9	-	7.66	471
Calendar year 1944	28,070.4	559	6	76.7	55,680
January	348	-	-	11.2	690
February	385.8	19	8.8	13.8	765
March	527.5	23	8.5	17.0	1,050
April	1,779	152	17	59.3	3,530
May	5,720	220	150	185	11,350
June	4,468	193	72	149	8,860
July	4,203	191	48	136	8,340
August	2,167	183	32	69.9	4,300
September	882	87	18	29.4	1,750
Water year 1944-45	21,856.7	220	-	59.9	43,360

* Winter discharge measurement made on this day.

a No gage-height record; discharge computed on basis of weather records and records for Rio Hondo near Valdez.

b Stage-discharge relation affected by ice.

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

Costilla Creek at Garcia, Colo.

Location.- Water-stage recorder, lat. 36°59'40", long. 105°32'00", in Sangre de Cristo Grant, 300 feet upstream from New Mexico-Colorado State line and half a mile south of Garcia.

Records available.- June 1944 to September 1945 (no winter records).

Extremes.- Maximum discharge during period not determined; no flow at times.

Remarks.- Records good except those for periods of ice effect or doubtful or no gage-height record, which are poor. Diversions above station for irrigation. Flow regulated by Costilla Reservoir (capacity, 15,700 acre-feet).

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	0.7					-	d130	27	2.1	14	0.1
2	.6	.7					-	d160	29	3.6	11	.1
3	.2	0					-	d180	38	.6	5.8	.1
4	.6	0					-	d180	25	.3	1.8	.3
5	3.4	0					-	183	21	.3	.9	.4
6	1.6	.8					-	204	29	1.5	4.2	.6
7	.4	2.8					-	183	20	1.3	15	.6
8	.3	1.8					-	183	13	1.2	14	.6
9	0	.3					-	175	21	1.0	8.1	.5
10	0	.2					-	175	18	3.6	4.7	.4
11	.1	.1					-	187	11	5.0	2.6	.3
12	0	.4					-	d180	11	.9	5.0	.2
13	0	1.0					-	d190	10	1.7	2.8	.1
14	0	0					20	d200	7.7	.9	2.0	0
15	0	.3					18	d180	4.2	.6	.9	0
16	6.4	4.7					16	d160	5.0	.9	.2	0
17	11	b4.5					15	d120	5.0	1.7	0	0
18	5.8	b4.5					15	d95	2.1	1.8	0	0
19	3.6	b4					27	d100	3.4	2.6	0	0
20	2.1	*b4					70	d110	5.0	3.1	.3	.6
21	1.0	-					97	d100	2.3	.9	1.3	1.0
22	0	-					d125	d95	9.4	2.2	.6	a.7
23	.8	-					d100	d75	12	7.3	.5	.4
24	.9	-					d45	a60	8.9	12	.5	.4
25	1.3	-					d40	a55	8.5	9.4	.4	0
26	1.0	-					d35	a55	8.1	11	.4	.1
27	1.0	-					d40	a60	3.9	6.2	.6	.1
28	1.0	-					d40	a55	5.0	1.2	.1	0
29	1.5	-					d60	53	7.7	1.7	0	.1
30	1.8	-					d90	47	4.5	5.4	.1	.4
31	1.3	-					-	37	-	7.3	.1	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	47.7	11	0	1.54	95
November 1-20	30.8	4.7	0	1.54	61
December	-	-	-	-	-
Calendar year	-	-	-	-	-
January	-	-	-	-	-
February	-	-	-	-	-
March	-	-	-	-	-
April 14-30	853	125	15	50.2	1,690
May	3,967	204	37	128	7,870
June	375.7	38	2.1	12.5	745
July	99.3	12	.3	3.20	197
August	97.9	15	0	3.16	194
September	8.1	1.0	0	.27	16
Water year	-	-	-	-	-

* Winter discharge measurement made on this day.
a No gage-height record; discharge computed on basis of records for Costilla Creek near Costilla, Acequia Madre, and Cerro Canal near Costilla.
b Stage-discharge relation affected by ice.
d Doubtful gage-height record; discharge computed as explained in footnote a.
Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

Casias Creek near Costilla, N. Mex.

Location.- Water-stage recorder and concrete control, lat. 36°54'05", long. 105°15'30", in Sangre de Cristo Grant, 200 feet downstream from road crossing, 2.5 miles by road upstream from Costilla Dam, and 17 miles southeast of Costilla, Taos County.

Records available.- April 1937 to September 1945 (irrigation seasons only).

Extremes.- Maximum discharge recorded during year, 64 second-feet May 29 (gage height, 1.17 feet); minimum daily recorded, 3.5 second-feet Oct. 12.
1937-45: Maximum discharge recorded, 121 second-feet Aug. 10, 1943; maximum gage height recorded, 1.90 feet June 14, 1938 (backwater from Costilla Reservoir); minimum daily recorded, 3.0 second-feet Aug. 14, 1939.

Remarks.- Records good except those for periods of no gage-height record, which are poor. No diversion above station.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4.2							-	52	26	10	9.5
2	4.5							-	50	26	13	9.1
3	4.8							-	48	25	16	8.6
4	4.8							-	47	23	16	8.6
5	4.5							34	48	23	17	8.1
6	4.2							31	45	22	22	8.6
7	4.2							30	43	22	25	8.1
8	3.8							30	38	22	17	7.6
9	3.8							31	34	24	16	7.6
10	3.8							33	32	36	15	6.7
11	4.2	a4						33	34	22	15	6.7
12	3.5							33	30	19	14	6.7
13	3.8							35	30	19	13	6.7
14	3.8							39	32	19	15	6.2
15	4.5							37	34	17	13	6.2
16	8.1							39	36	16	13	5.7
17	6.7							32	38	15	11	5.4
18	5.1							31	39	15	11	5.1
19	4.8							33	39	15	11	5.4
20	4.5							35	39	13	16	5.4
21	4.5	-						36	38	13	17	5.7
22	4.5	-						35	38	15	14	5.7
23	4.5	-						35	a35	17	13	5.4
24	4.5	-						35	a30	17	14	5.1
25	4.5	-						38	a25	16	13	5.4
26	a4	-						42	a25	15	13	5.1
27	a4	-						48	a30	14	12	5.1
28	a4	-						52	a27	12	12	5.7
29	a4	-						56	26	14	12	6.2
30	a4	-						57	27	10	11	6.7
31	a4	-						57	-	10	10	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	138.1	8.1	4	4.45	274
November 1-21	84	-	-	4.0	167
December	-	-	-	-	-
Calendar year	-	-	-	-	-
January	-	-	-	-	-
February	-	-	-	-	-
March	-	-	-	-	-
April	-	-	-	-	-
May 5-31	1,027	57	30	38.0	2,040
June	1,089	52	25	36.3	2,160
July	572	36	10	18.5	1,130
August	440	25	10	14.2	873
September	198.1	9.5	5.1	6.60	393
Water year	-	-	-	-	-

Peak discharge.- May 5 (7 p.m.) 41 sec.-ft.; May 29 (8 a.m.) 64 sec.-ft.; Aug. 6 (11 p.m.) 40 sec.-ft.

a No gage-height record; discharge computed on basis of weather records and records for Costilla Creek above reservoir and Santistevan Creek near Costilla.

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

Santistevan Creek near Costilla, N. Mex.

Location.- Water-stage recorder and metal Parshall flume, lat. 36°53'05", long. 105°16'50", in Sangre de Cristo Grant, 200 feet upstream from road crossing, 0.9 mile upstream from Costilla Dam, and 16 miles southeast of Costilla, Taos County.

Records available.- April 1937 to September 1945 (irrigation seasons only).

Extremes.- Maximum discharge recorded during year, 7.9 second-feet June 11 (gage height, 0.99 foot); minimum daily recorded, 0.7 second-foot Nov. 1-4, 7-9, 13, 19-21.
1937-45: Maximum discharge recorded, 18 second-feet Aug. 11, 1941 (gage height, 1.73 feet); minimum daily recorded, 0.5 second-foot Oct. 23, 1938, Apr. 13, 16, 1943.

Remarks.- Records good. No diversion above station.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.9	0.7						-	7.0	5.2	3.1	1.4
2	.9	.7						-	6.9	5.0	2.9	1.4
3	*.9	.7						-	6.9	4.7	2.7	1.2
4	1.0	.7						-	7.2	4.4	2.6	1.2
5	.9	.8						3.3	7.3	4.3	2.8	1.2
6	.9	.8						3.2	7.5	4.1	3.3	1.2
7	.8	.7						3.2	7.6	3.9	3.3	1.2
8	.9	.7						3.3	7.3	3.7	2.7	1.0
9	.9	b.7						3.3	7.2	3.6	2.6	1.1
10	.9	b.8						3.4	7.0	3.5	2.6	1.0
11	.9	.8						3.4	7.3	3.5	2.5	1.0
12	.8	.8						3.5	6.8	3.2	2.4	1.0
13	.8	.7						3.6	6.6	3.1	2.3	1.1
14	.8	.8						3.6	6.4	3.2	2.4	1.0
15	.9	a.8						3.3	6.4	2.9	2.2	1.0
16	1.2	a.8						3.5	6.7	2.7	2.1	1.0
17	1.0	a.8						3.4	6.8	2.6	2.0	1.0
18	.9	a.8						3.4	6.9	2.6	2.1	1.0
19	.9	a.7						3.7	6.7	2.5	2.0	1.0
20	.9	a.7						3.9	6.7	2.3	2.3	.9
21	.9	*.7						4.0	6.6	2.4	2.2	1.0
22	.9	-						3.9	6.6	2.6	2.0	.9
23	.9	-						4.0	6.3	3.4	1.9	.9
24	.9	-						4.1	6.1	3.0	2.0	.9
25	.8	-						4.3	6.0	3.1	1.9	.9
26	.8	-						4.7	6.0	3.1	1.9	.9
27	.8	-						5.2	5.9	2.9	1.8	.9
28	.8	-						6.0	5.9	2.7	1.7	.9
29	.8	-						6.4	5.7	3.1	1.6	.9
30	.8	-						7.0	5.4	3.0	1.5	1.0
31	.8	-						7.2	-	3.2	1.4	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	27.3	1.2	0.8	0.88	54
November 1-21	15.7	.8	.7	.75	31
December	-	-	-	-	-
Calendar year	-	-	-	-	-
January	-	-	-	-	-
February	-	-	-	-	-
March	-	-	-	-	-
April	-	-	-	-	-
May 5-31	111.8	7.2	3.2	4.14	222
June	199.7	7.6	5.4	6.66	396
July	103.5	5.2	2.3	3.34	205
August	70.8	3.3	1.4	2.28	140
September	31.1	1.4	.9	1.04	62
Water year	-	-	-	-	-

* Winter discharge measurement made on this day.
a No gage-height record; discharge computed on basis of weather records.
b Stage-discharge relation affected by ice.
Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

Principal diversions from Costilla Creek, N. Mex. and Colo.

Records of discharge are collected at nine gaging stations on four diversions from Costilla Creek. Each of these stations is equipped with a water-stage recorder and a Parshall flume. Water diverted is used for irrigation in the Sangre de Cristo Grant in New Mexico and Colorado below the gaging station near Costilla. Records are collected during irrigation seasons only.

Acequia Madre near Costilla, N. Mex.- Lat. 36°58'00", long. 105°30'50", 275 feet downstream from diversion dam. Records available, May 1944 to September 1945. Acequia diverts from right bank of Costilla Creek.

Mesa ditch near Garcia, Colo.- Lat. 36°59'50", long. 105°30'45", 429 feet north of milepost No. 136+54 on New Mexico-Colorado State line. Records available, June 1944 to September 1945. Ditch diverts from right bank of Acequia Madre for irrigation in Colorado.

Middle ditch at Garcia, Colo.- Lat. 36°59'50", long. 105°31'25", 300 feet north of New Mexico-Colorado State line. Records available, July 1944 to September 1945. Ditch diverts from Acequia Madre for irrigation in Colorado.

Cordillera ditch at Garcia, Colo.- Lat. 36°59'40", long. 105°31'40", 570 feet south of New Mexico-Colorado State line. Records available, June 1944 to September 1945. Ditch diverts from Acequia Madre for irrigation in Colorado.

Cerro Canal near Costilla, N. Mex.- Lat. 36°57'50", long. 105°31'10", 1,400 feet downstream from diversion dam. Records available, April 1944 to September 1945. Canal diverts from left bank of Costilla Creek.

Cerro Canal near Jaroso, Colo.- Lat. 36°59'35", long. 105°34'35". Records available, June 1944 to September 1945. Flow measured is delivered to Colorado and to New Mexico branch of Cerro Canal.

New Mexico Branch Cerro Canal near Jaroso, Colo.- Lat. 36°59'35", long. 105°34'45", 225 feet downstream from head gate. Records available, June 1944 to September 1945. Canal diverts from left bank of Cerro Canal for irrigation in New Mexico.

Alire ditch at Garcia, Colo.- Lat. 36°59'45", long. 105°32'05", 430 feet southeast of mile post No. 137+64 on New Mexico-Colorado State line. Records available, June 1944 to September 1945. Ditch diverts from left bank of Costilla Creek for irrigation in Colorado.

Eastdale No. 1 intake canal near Jaroso, Colo.- Lat. 37°02'40", long. 105°37'00", 1,100 feet downstream from head gate. Records available, June 1944 to September 1945. Canal diverts from right bank of Costilla Creek to Eastdale Reservoir No. 1 for irrigation in Colorado.

Diversion, in acre-feet, by Middle ditch, July to September 1944

July 21-31.....	0.4
August.......	48
September....	16

Diversions, in acre-feet, water year October 1944 to September 1945

Month	Acequia Madre	Mesa ditch	Middle ditch	Cordillera ditch	Cerro Canal near Costilla	Cerro Canal at Jaroso, Colo.	New Mexico branch Cerro Canal	Alire ditch	Eastdale No. 1 intake
October..	205	0	0.4	101	727	442	75	0	16
November.	a86	b0	c2.0	c46	d548	b237	b78	b0	b3.0
December.	-	-	-	-	-	-	-	-	-
January..	-	-	-	-	-	-	-	-	-
February.	-	-	-	-	-	-	-	-	-
March....	-	-	-	-	e162	-	-	-	-
April....	f38	-	-	-	534	-	-	f6.5	-
May......	959	g156	g0	g103	1,780	-	h293	6.7	h602
June.....	2,300	716	15	110	4,280	3,290	779	22	39
July.....	2,390	657	21	134	4,530	3,470	810	17	22
August...	1,920	544	25	66	1,870	1,170	264	6.3	5.4
September	790	5.8	2.8	48	711	325	75	3.6	21

a Nov. 1-22.
b Nov. 1-20.
c Nov. 1-19.
d Nov. 1-26.
e Mar. 21-31.
f Apr. 15-30.
g May 4-31.
h May 6-31.

Latir Creek near Cerro, N. Mex.

Location.- Water-stage recorder and concrete Parshall flume, lat. 36°49'45", long. 105°32'45", in S½SW¼ sec. 15, T. 30 N., R. 13 E., at mouth of canyon, 100 feet upstream from heading of Cerro community ditch and 6 miles northeast of Cerro.

Records available.- April 1937 to September 1945 (irrigation seasons only).

Extremes.- Maximum gage height recorded during year, 4.2 feet (log jam) July 19, discharge not determined; minimum daily discharge determined, 2.3 second-feet Dec. 31.
1937-45: Maximum discharge determined, 121 second-feet June 3, 1942, from rating curve extended above 56 second-feet by logarithmic plotting; maximum gage height, that of July 19, 1945; minimum daily discharge recorded, 0.6 second-foot May 9, 1937.

Remarks.- Records good except those for periods of no gage-height record, which are poor. No diversion above station.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3.4	3.1	2.8			-	3.1	9.7	37	24	a10	5.7
2	4.1	3.1	2.8			-	3.1	12	36	25	a10	5.3
3	4.0	3.0	2.8			-	2.8	17	36	24	a9.5	5.1
4	3.8	3.1	2.6			-	2.8	20	38	23	a9.2	4.9
5	3.8	3.3	2.6			-	2.6	23	40	24	a9.0	4.7
6	3.8	3.0	2.6			-	2.6	22	41	23	10	4.7
7	3.6	3.1	2.6			-	2.6	21	41	21	11	4.7
8	3.6	3.3	2.8			-	3.0	22	38	20	10	4.7
9	3.4	2.8	2.8			-	4.0	24	36	19	9.7	4.7
10	3.4	3.0	2.6			-	3.8	26	34	18	9.0	4.5
11	3.4	3.0	2.6			-	3.3	30	34	17	8.7	4.5
12	3.4	2.8	2.6			-	3.0	29	32	17	8.2	4.3
13	3.3	3.0	2.6			-	2.8	31	35	16	7.7	4.5
14	3.3	a3.0	2.6			-	2.8	25	38	16	7.3	4.3
15	3.8	a2.9	2.6			-	2.6	19	41	15	7.0	4.1
16	5.5	a2.9	2.6			-	2.6	19	43	15	6.8	4.1
17	5.5	a2.9	2.5			-	2.5	20	42	14	6.6	4.1
18	4.5	a2.8	2.6			-	2.8	23	39	13	6.4	4.0
19	4.1	2.8	2.6			-	3.6	28	38	a30	6.1	4.1
20	3.8	2.6	2.6			-	5.5	26	36	a20	8.5	4.1
21	3.8	2.8	2.8			2.8	6.4	23	36	a17	6.4	4.5
22	3.6	2.8	2.6			2.8	7.3	23	35	a20	5.5	4.5
23	3.6	2.8	2.8			2.6	6.4	25	35	a19	5.1	4.1
24	3.4	2.8	2.6			2.8	4.7	27	36	a16	6.8	4.1
25	3.4	2.8	2.5			2.8	4.3	26	36	a15	7.0	4.0
26	3.4	2.8	2.5			2.8	3.8	31	38	a14	6.1	4.0
27	3.3	2.8	2.5			2.6	3.8	39	34	a13	5.9	4.0
28	3.4	2.8	2.5			2.5	4.0	40	30	a12	5.7	4.1
29	3.3	2.8	a2.5			2.5	5.7	42	27	a11	5.7	4.3
30	3.0	2.8	a2.5			2.6	8.2	42	25	a11	5.5	4.5
31	3.0	-	a2.3			2.8	-	38	-	a11	5.5	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	114.7	5.5	3.0	3.70	228
November	87.5	3.3	2.6	2.92	174
December	81.0	2.8	2.3	2.61	161
Calendar year	-	-	-	-	-
January	-	-	-	-	-
February	-	-	-	-	-
March 21-31	29.6	2.8	2.5	2.69	59
April	116.5	8.2	2.5	3.88	231
May	802.7	42	9.7	25.9	1,590
June	1,087	43	25	36.2	2,160
July	553	30	11	17.8	1,100
August	235.9	11	5.1	7.61	468
September	133.2	5.7	4.0	4.44	264
Water year	-	-	-	-	-

a No gage-height record; discharge computed on basis of weather records and records for Rio Hondo at Arroyo Hondo and near Valdez.

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

Rio Colorado near Red River, N. Mex.

Location.- Water-stage recorder, lat. 36°37'20", long. 105°23'20", in NE¼ sec. 36, T. 28 N., R. 14 E., 100 feet downstream from confluence of Middle and East Forks and 6 miles south of Red River.

Records available.- July 1940 to September 1945 (no winter records prior to 1944).

Extremes.- Maximum discharge during year, 132 second-feet Aug. 20 (gage height, 2.59 feet); minimum daily, 3.5 second-feet Jan. 20, 21.

1940-45: Maximum discharge recorded, 218 second-feet June 19, 1941 (gage height, 2.92 feet), from rating curve extended above 160 second-feet by logarithmic plotting; minimum daily recorded, that of Jan. 20, 21, 1945.

Remarks.- Records good except those for periods of ice effect, which are poor. No diversion above station.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	6.8	6.0	6.0	b4.0	4.8	4.2	6.0	20	99	78	27	17
2	8.3	6.0	5.7	b4.2	4.6	b4.0	5.0	26	96	77	24	18
3	7.9	5.7	5.7	b4.5	4.2	3.9	4.8	34	94	77	23	15
4	7.9	5.7	5.4	b4.8	4.2	4.2	4.5	41	99	70	22	14
5	7.9	6.0	b5.4	b4.8	4.2	b4.2	5.0	48	107	66	22	13
6	7.5	6.4	5.4	b4.5	4.5	b4.0	5.0	54	107	61	22	13
7	7.5	3.9	5.4	b4.5	4.2	4.2	5.4	54	105	59	32	13
8	7.5	5.4	5.4	b4.8	4.5	b4.0	6.0	56	103	59	33	12
9	7.2	5.4	5.0	5.0	4.2	4.2	7.2	59	96	56	27	12
10	7.2	6.0	b4.5	5.0	4.2	4.2	7.5	60	88	54	24	11
11	7.2	6.4	b4.5	4.5	4.2	4.2	6.8	63	85	54	23	11
12	6.8	6.0	b4.8	4.5	4.2	4.5	6.4	70	75	52	21	10
13	6.8	5.0	b5.0	4.5	4.2	4.5	6.4	77	78	49	20	10
14	6.8	5.7	b5.0	4.5	4.2	4.8	6.4	73	94	47	19	10
15	7.9	5.4	b5.0	4.5	4.5	4.8	5.7	59	101	43	18	10
16	13	6.0	b5.0	4.5	4.5	b5.0	5.7	48	109	42	17	10
17	13	6.0	b5.0	4.5	4.5	b4.5	5.7	46	107	41	16	10
18	10	6.0	b5.0	*4.2	4.5	b4.5	6.0	49	97	39	17	9.6
19	9.6	5.7	b4.8	3.6	4.8	4.8	7.5	60	94	36	17	9.6
20	8.7	5.7	5.0	b3.5	4.5	4.8	9.6	66	94	34	26	9.6
21	*8.3	5.0	5.0	b3.5	4.5	5.0	12	63	94	34	20	9.1
22	7.2	5.4	5.0	b3.7	4.2	4.8	16	61	92	34	17	9.1
23	7.2	5.4	b5.2	b4.0	4.2	5.0	17	64	90	36	17	8.7
24	6.8	5.7	b6.0	b4.2	4.2	5.0	15	69	97	33	18	8.7
25	6.8	5.7	5.4	b4.5	4.2	4.8	14	72	105	32	17	8.3
26	6.4	5.4	5.7	4.8	4.2	5.0	13	75	117	35	16	8.3
27	6.4	5.4	5.4	4.8	3.9	4.8	12	94	109	30	15	8.3
28	6.4	b5.0	5.4	4.8	b3.6	4.5	12	101	99	28	14	8.3
29	6.4	b4.5	4.8	b4.5	-	4.5	13	109	87	28	15	8.7
30	6.4	5.7	b4.5	b4.0	-	4.8	15	115	80	25	14	9.1
31	6.0	-	b4.0	4.5	-	4.8	-	113	-	28	14	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	239.8	13	6.0	7.74	476
November	167.6	6.4	3.9	5.59	332
December	159.4	6.0	4.0	5.14	316
Calendar year 1944	7,994.1	153	3.7	21.8	15,860
January	136.2	5.0	3.5	4.39	270
February	120.6	4.8	3.6	4.31	239
March	140.5	5.0	3.9	4.53	279
April	260.6	17	4.5	8.69	517
May	1,999	115	20	64.5	3,960
June	2,898	117	75	96.6	5,750
July	1,437	78	25	46.4	2,850
August	627	33	14	20.2	1,240
September	324.4	18	8.3	10.8	643
Water year 1944-45	8,510.1	117	35	23.3	16,870

Peak discharge.- June 25 (11 p.m.) 130 sec.-ft.; Aug. 20 (1 p.m.) 132 sec.-ft.

* Winter discharge measurement made on this day.

b Stage-discharge relation affected by ice.

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

Rio Colorado near Questa, N. Mex.

Location.- Water-stage recorder and concrete control, lat. 36°42'10", long. 105°34'00", in SW¼ sec. 33, T. 29 N., R. 13 E. (projected), 1¼ miles upstream from Cabresto Creek and 2 miles east of Questa. Datum of gage is 7,449.88 feet above mean sea level.

Drainage area.- 112 square miles.

Records available.- October 1912 to August 1915 (fragmentary) and October 1930 to September 1945 in reports of Geological Survey. October 1912 to December 1931 in reports of State engineer.

Average discharge.- 29 years (1915-25, 1926-45), 67.0 second-feet.

Extremes.- Maximum discharge during year, 527 second-feet May 13 (gage height, 1.62 feet); minimum daily, 14 second-feet Jan. 22.

1930-45: Maximum discharge, 886 second-feet May 25, 1942 (gage height, 2.32 feet), from rating curve extended above 450 second-feet by logarithmic plotting; minimum daily, 6.3 second-feet Nov. 24, 25, 1931.

Remarks.- Records good except those for periods of ice effect or no gage-height record, which are poor. Diversions above station for irrigation.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	23	26	21	a15	a20	21	24	132	310	147	58	46
2	26	26	23	a15	a22	21	26	191	291	153	53	50
3	26	25	26	a16	a23	b18	24	198	310	147	52	46
4	25	25	26	a17	a21	20	19	265	300	137	50	45
5	25	25	b20	19	a19	*20	20	300	282	132	50	42
6	23	28	b21	20	a18	19	24	320	310	132	53	40
7	23	27	b20	17	a17	18	26	310	300	122	70	40
8	23	26	b20	19	a18	18	31	310	282	117	68	39
9	23	24	b21	19	a19	18	39	360	265	117	60	38
10	22	24	b20	20	*20	18	46	390	256	112	53	37
11	22	25	20	20	19	19	40	400	265	112	53	35
12	22	25	19	20	20	20	38	380	238	104	52	30
13	21	25	19	20	19	20	35	400	230	104	49	29
14	22	24	20	20	20	21	34	410	238	104	47	28
15	22	22	21	20	20	22	30	300	247	100	46	27
16	47	25	20	20	20	20	29	256	247	94	45	25
17	45	25	21	*20	20	19	27	247	247	90	43	26
18	38	*25	20	20	19	23	29	256	238	87	45	25
19	35	23	*20	20	19	22	39	310	230	84	46	25
20	32	b20	17	20	19	18	53	380	221	82	66	26
21	30	b21	16	b18	20	21	64	340	212	79	74	26
22	30	b22	16	b14	19	24	82	340	212	84	56	24
23	29	24	18	b15	18	23	117	340	205	84	52	24
24	29	27	18	b16	19	21	94	330	212	84	52	26
25	28	26	20	b17	21	22	87	320	230	82	52	28
26	27	b21	21	18	20	22	84	350	230	79	47	28
27	28	b22	20	a20	18	23	82	380	205	77	46	28
28	28	b21	21	a19	b17	19	70	390	198	72	46	28
29	27	b19	22	a17	-	19	77	421	184	68	45	30
30	27	b20	20	a18	-	22	100	421	165	64	45	32
31	26	-	19	a19	-	22	-	380	-	60	45	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	854	47	21	27.5	1,690
November	718	28	19	23.9	1,420
December	626	26	16	20.2	1,240
Calendar year 1944	24,347	380	15	66.5	48,270
January	568	20	14	18.3	1,130
February	544	23	17	19.4	1,080
March	633	24	18	20.4	1,260
April	1,490	117	19	49.7	2,960
May	10,127	421	132	327	20,090
June	7,360	310	165	245	14,600
July	3,110	153	60	100	6,170
August	1,619	74	43	52.2	3,210
September	973	50	24	32.4	1,930
Water year 1944-45	28,622	421	14	78.4	56,780

* Winter discharge measurement made on this day.

a No gage-height record; discharge computed on basis of weather records and records for Rio Colorado near Red River and Rio Hondo at Arroyo Hondo.

b Stage-discharge relation affected by ice.

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

Cabresto Creek near Questa, N. Mex.

Location.- Water-stage recorder and 3-foot concrete Parshall flume, lat. 36°43'45", long. 105°33'10", in SE¼SE¼ sec. 21, T. 29 N., R. 13 E., a quarter of a mile downstream from Llano ditch heading, 3 miles northeast of Questa, and 3½ miles upstream from mouth.

Records available.- September 1943 to September 1945.

Extremes.- Maximum discharge during year, 135 second-feet May 13 (gage height, 3.32 feet); minimum daily, 3.2 second-feet Dec. 31.

1943-45: Maximum discharge, that of May 13, 1945; minimum daily, 2.7 second-feet Feb. 11, 1944.

Remarks.- Records fair except those for periods of doubtful or no gage-height record, which are poor. Llano ditch (see below) diverts water a quarter of a mile above station for irrigation.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4.8	5.8	5.0	3.7	5.0	5.0	7.1	33	72	d15	15	12
2	5.6	6.4	5.0	4.4	5.0	5.0	8.4	41	65	d15	14	12
3	5.8	7.9	4.9	4.8	5.0	4.1	7.4	64	61	d14	14	12
4	5.8	7.8	4.8	5.2	4.9	5.2	5.5	76	56	d14	13	11
5	5.6	7.6	5.0	5.8	4.6	5.2	6.4	87	54	d14	14	11
6	5.2	7.8	5.2	5.9	5.0	4.8	7.6	98	50	d14	16	10
7	5.0	7.1	5.0	5.8	4.6	4.6	8.1	95	48	a13	20	10
8	4.9	6.8	5.2	5.6	4.9	4.2	9.6	98	45	a13	17	9.8
9	5.0	6.0	3.6	5.6	5.0	4.5	12	97	38	a12	14	9.6
10	5.0	5.9	4.0	5.5	5.0	5.0	15	100	33	a12	14	9.3
11	5.0	6.0	4.2	5.6	4.9	5.5	13	104	30	12	14	8.8
12	5.0	5.9	4.4	5.3	4.9	5.8	11	104	28	13	13	8.2
13	4.9	6.0	a4.7	5.5	4.8	6.2	10	113	25	13	13	8.2
14	4.9	6.0	a5.0	5.5	5.0	6.4	10	94	24	14	14	7.9
15	5.3	5.3	a4.8	5.5	5.0	6.0	9.1	79	23	13	15	7.8
16	8.4	5.8	a4.8	5.3	5.0	5.9	8.6	72	23	14	14	7.4
17	8.9	5.8	a4.8	5.2	5.0	5.0	8.1	70	22	14	14	7.6
18	8.6	5.0	a4.8	5.0	5.0	6.2	8.8	76	d20	14	14	7.3
19	7.8	3.7	5.0	5.0	5.0	5.9	12	84	d18	14	14	7.3
20	7.3	4.5	4.9	5.0	5.2	4.6	18	86	d17	14	14	7.4
21	6.8	4.2	4.9	5.5	5.2	5.9	22	83	d17	14	15	7.1
22	6.5	4.9	4.9	4.2	4.6	6.5	27	82	d18	14	13	7.0
23	6.2	5.3	5.0	4.9	4.4	6.5	30	86	d19	14	13	6.6
24	6.2	5.2	5.5	5.6	4.8	5.6	26	86	d21	15	13	6.6
25	6.0	5.3	5.5	5.3	5.0	6.4	23	86	d24	14	13	6.6
26	5.9	5.2	5.3	5.3	4.8	6.4	21	86	d22	14	12	6.5
27	5.9	5.2	5.2	5.5	4.8	6.5	19	89	d20	14	12	6.5
28	5.9	4.5	5.2	5.2	4.2	5.2	19	90	d18	13	12	6.5
29	5.9	4.9	5.3	4.5	-	5.6	21	90	d16	13	12	7.0
30	5.9	4.9	5.3	4.8	-	6.2	28	89	d15	13	11	7.3
31	5.9	-	3.2	5.0	-	6.2	-	84	-	14	12	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	185.9	8.9	4.8	6.00	369
November	172.7	7.9	3.7	5.76	343
December	150.4	5.5	3.2	4.85	298
Calendar year 1944	4,002.0	55	2.7	10.9	7,940
January	161.0	5.9	3.7	5.19	319
February	136.6	5.2	4.2	4.88	271
March	172.1	6.5	4.1	5.55	341
April	431.7	30	5.5	14.4	856
May	2,622	113	33	84.6	5,200
June	942	72	15	31.4	1,870
July	423	15	12	13.6	839
August	428	20	11	13.8	849
September	252.3	12	6.5	8.41	500
Water year 1944-45	6,077.7	113	3.2	16.7	12,060

a No gage-height record; discharge computed on basis of records for Llano ditch near Questa, Rio Colorado near Red River, Rio Hondo near Valdez, and Latir Creek near Cerro.

d Doubtful gage-height record; discharge computed on basis of 1 discharge measurement and records for stations on nearby streams.

Llano ditch near Questa, N. Mex.

Location.- Water-stage recorder and 3-foot Parshall flume, lat. 36°43'45", long. 105°33'00", in SE¼SE¼ sec. 21, T. 29 N., R. 13 E., 3¼ miles northeast of Questa and 3¼ miles upstream from mouth of Cabresto Creek.

Records available.- September 1943 to September 1945 (irrigation season only).

Extremes.- Maximum daily discharge recorded, 32 second-feet, June 7-11, 16-18; no flow at times.

1943-45: Maximum daily discharge recorded, that of June 7, 11, 16-18, 1945; no flow at times.

Remarks.- Records good. Ditch diverts water from right bank of Cabresto Creek for irrigation near Questa.

Monthly discharge May to September 1945

Month	Maximum	Minimum	Mean	Runoff in acre-feet
May 10-31	24	1.8	15.8	689
June	32	23	28.6	1,700
July	22	4.5	12.0	738
August	6.3	.1	2.44	150
September	.3	.1	.15	8.9

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

Rio Hondo near Valdez, N. Mex.

Location.- Water-stage recorder and concrete control, lat. 36°32'20", long. 105°33'30", in S½ sec. 28, T. 27 N., R. 13 E. (projected), a quarter of a mile upstream from Forest Service gate, 1½ miles east of Valdez, and 9 miles upstream from mouth.

Records available.- August 1934 to September 1945. October 1930 to September 1934 at site half a mile downstream, below two diversions.

Average discharge.- 11 years (1934-45), 46.6 second-feet.

Extremes.- Maximum discharge during year, 424 second-feet May 30 (gage height, 2.34 feet); minimum daily, 9 second-feet Jan. 22.
1934-45: Maximum discharge, 541 second-feet May 13, 1941, from rating curve extended above 300 second-feet by logarithmic plotting; maximum gage height, 5.59 feet, datum then in use, Dec. 15, 1936 (ice jam); minimum daily discharge, 3.0 second-feet Jan. 21, 1935.

Remarks.- Records good except those for periods of ice effect, which are poor. No diversion above station.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	15	16	b13	b10	12	12	19	91	246	144	44	28
2	17	16	14	b10	12	12	22	108	239	135	42	28
3	16	16	14	b10	12	b11	21	146	212	128	41	27
4	16	15	14	b11	12	12	19	174	205	118	40	26
5	15	15	b14	b11	b11	11	b18	183	215	111	39	26
6	15	17	b14	12	11	11	19	192	234	102	40	26
7	15	16	b14	b11	b10	b10	19	180	228	98	45	26
8	15	17	b14	b11	b10	b11	24	189	205	96	40	25
9	14	17	14	b11	10	12	32	183	212	91	39	24
10	14	16	b13	12	*10	13	*38	186	208	87	37	23
11	14	16	b13	12	10	14	31	199	183	83	37	23
12	15	16	b13	12	10	15	28	228	163	80	37	22
13	15	16	b13	b12	10	16	24	246	186	74	36	22
14	15	16	b13	12	10	16	23	265	215	71	36	21
15	16	16	b12	12	11	16	21	215	234	67	35	21
16	25	16	b13	12	12	15	21	186	234	64	34	21
17	28	16	b13	*13	12	14	20	177	228	62	32	21
18	23	16	b13	13	12	14	21	205	212	60	31	20
19	21	16	b13	13	12	*13	27	261	218	61	30	20
20	19	15	*14	12	12	13	42	318	212	58	33	20
21	19	14	13	b11	12	14	60	269	202	71	34	20
22	18	b14	13	b9	12	16	78	234	199	85	32	19
23	17	15	14	b10	13	16	83	232	196	76	31	19
24	17	*16	13	b11	12	13	71	250	199	66	33	19
25	17	15	15	12	12	16	56	269	199	62	32	19
26	16	14	14	12	12	15	52	269	205	61	30	19
27	16	14	13	12	12	15	47	326	189	56	29	18
28	16	b13	13	11	b11	b14	45	368	174	51	28	19
29	16	b12	13	b10	-	b14	55	368	160	48	28	19
30	16	b14	13	b10	-	15	76	382	152	48	28	19
31	16	-	b11	b11	-	15	-	272	-	47	28	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	527	28	14	17.0	1,050
November	461	17	12	15.4	914
December	413	15	11	13.3	819
Calendar year 1944	17,880	300	6	48.9	35,480
January	351	13	9	11.3	696
February	317	13	10	11.3	629
March	424	16	10	13.7	841
April	1,112	83	18	37.1	2,210
May	7,171	382	91	231	14,220
June	6,164	246	152	205	12,230
July	2,461	144	47	79.4	4,880
August	1,081	45	28	34.9	2,140
September	660	28	18	22.0	1,310
Water year 1944-45	21,142	382	9	57.9	41,940

* Winter discharge measurement made on this day.
b Stage-discharge relation affected by ice.
Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

Rio Hondo at Arroyo Hondo, N. Mex.

Location.- Water-stage recorder and concrete control, lat. 36°31'55", long. 105°41'05", in sec. 32, T. 27 N., R. 12 E., 1 mile downstream from Arroyo Hondo and 1¼ miles upstream from mouth.

Records available.- April 1910 to August 1915 (at site 200 yards above mouth, published as Rio Hondo near Arroyo Hondo) and January 1932 to September 1945 in reports of Geological Survey. April 1910 to December 1928 in reports of State engineer.

Average discharge.- 13 years (1932-45), 33.8 second-feet.

Extremes.- Maximum discharge during year, 219 second-feet May 30 (gage height, 2.43 feet); minimum daily, 7.4 second-feet Sept. 28.

1932-45: Maximum discharge, 2,510 second-feet Aug. 23, 1935 (gage height, 5.45 feet, datum then in use), from rating curve extended above 170 second-feet by logarithmic plotting; minimum daily, 4.0 second-feet July 13-16, 1934.

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

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	8.3	18	18	14	21	17	18	82	185	74	13	11
2	11	18	17	17	21	17	23	105	155	71	15	11
3	12	18	19	17	23	16	25	148	148	66	14	11
4	12	17	21	18	20	17	b18	158	148	63	14	10
5	12	17	21	19	19	18	b17	105	155	61	13	11
6	12	19	22	19	19	17	b19	188	158	57	14	9.7
7	12	18	21	17	16	16	21	177	163	55	14	9.7
8	11	18	21	18	19	16	23	177	160	49	14	9.7
9	11	18	21	18	*19	17	29	168	145	46	15	10
10	11	18	18	19	19	18	*36	160	140	45	13	9.7
11	12	18	18	20	19	18	34	166	135	44	12	9.7
12	13	18	19	20	19	19	30	182	122	42	12	9.2
13	13	18	19	19	19	21	28	188	122	39	11	8.8
14	13	17	20	19	19	23	27	194	117	43	11	8.8
15	15	17	19	19	20	23	27	168	117	50	11	7.9
16	22	17	19	21	21	21	26	138	124	48	9.7	8.3
17	23	17	19	*21	20	19	24	131	126	46	9.7	8.3
18	30	18	19	21	20	19	25	148	124	43	9.7	8.3
19	27	17	19	21	19	19	27	188	117	28	9.7	8.3
20	25	17	21	21	19	*18	40	207	111	27	10	8.3
21	23	17	20	21	19	19	55	188	105	31	11	8.3
22	21	18	20	13	17	20	73	163	102	39	11	8.3
23	20	18	22	15	16	21	86	158	100	48	10	7.9
24	19	19	21	b16	18	21	74	166	100	34	11	7.9
25	19	19	21	b17	16	23	64	171	104	26	12	7.9
26	19	18	21	18	16	21	57	171	117	25	11	7.9
27	19	18	20	21	16	19	51	185	94	18	11	7.9
28	19	18	21	b18	15	18	48	204	89	16	11	7.4
29	19	17	21	b16	-	18	56	204	84	13	9.7	8.8
30	19	20	20	b17	-	18	71	213	77	13	10	9.7
31	19	-	14	18	-	17	-	204	-	13	9.7	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	521.3	30	8.3	16.8	1,030
November	535	20	17	17.8	1,060
December	612	22	14	19.7	1,210
Calendar year 1944	12,957.5	210	7.9	35.4	25,690
January	568	21	13	18.3	1,130
February	524	23	15	18.7	1,040
March	584	23	16	18.8	1,160
April	1,152	86	17	38.4	2,280
May	5,205	213	82	168	10,320
June	3,746	185	77	125	7,430
July	1,275	74	13	41.1	2,530
August	362.2	15	9.7	11.7	718
September	270.7	11	7.4	9.02	637
Water year 1944-45	15,355.2	213	7.4	42.1	30,440

* Winter discharge measurement made on this day.

b Stage-discharge relation affected by ice.

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

Rio Taos at Los Cordovas, N. Mex.

Location.- Water-stage recorder, lat. 36°23'20", long. 105°38'00", in N½ sec. 23, T. 25 N., R. 12 E. (projected), in Martinez Grant, 50 feet downstream from Rio Ranchos de Taos and Arroyo Seco, half a mile northeast of Los Cordovas, and 3½ miles west of Taos.

Drainage area.- 359 square miles.

Records available.- April 1910 to August 1915 and October 1930 to September 1945 in reports of Geological Survey. April 1910 to December 1931 in reports of State engineer.

Average discharge.- 34 years (1910-25, 1926-45), 66.7 second-feet.

Extremes.- Maximum discharge during year, 875 second-feet May 6 (gage height, 4.46 feet); minimum daily, 14 second-feet Oct. 1, Sept. 16, 19, 20.

1930-45: Maximum discharge, 1,830 second-feet May 14, 1941 (gage height, 5.81 feet), from rating curve extended above 1,300 second-feet by logarithmic plotting; minimum daily, 1.4 second-feet Aug. 5, 10, 1934.

Remarks.- Records good. Several diversions above station for irrigation.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	14	23	34	30	42	45	63	449	469	71	23	29
2	18	23	36	34	47	46	79	560	407	68	23	32
3	16	23	39	33	109	36	85	660	374	62	22	25
4	15	23	38	33	85	42	68	720	338	59	21	22
5	15	23	34	33	61	45	68	780	312	52	18	21
6	15	28	34	34	53	41	79	825	315	50	21	18
7	15	33	35	32	41	36	85	760	300	49	45	19
8	15	29	38	33	43	35	110	760	280	47	54	17
9	15	28	36	34	47	35	154	740	258	49	43	17
10	15	29	32	33	47	39	200	700	230	42	39	16
11	15	29	29	36	43	42	158	680	204	36	33	18
12	17	29	32	38	43	46	136	700	180	33	42	17
13	18	30	32	36	43	47	123	700	147	29	34	15
14	17	27	32	39	47	53	123	760	135	26	29	16
15	24	28	29	39	47	54	123	680	144	25	27	15
16	78	28	29	41	47	58	117	560	155	22	25	14
17	43	28	30	42	46	47	107	458	157	20	23	15
18	38	28	29	43	42	58	110	476	142	19	20	15
19	38	28	30	42	42	61	144	580	130	18	20	14
20	30	27	33	41	41	50	225	680	124	16	21	14
21	27	26	35	38	41	53	290	620	114	32	24	16
22	24	24	34	33	41	56	386	508	108	37	26	16
23	24	27	45	36	39	56	434	466	108	30	26	15
24	24	38	51	38	45	54	386	452	105	27	26	15
25	24	36	54	41	50	53	377	466	100	31	29	16
26	24	34	45	34	47	57	298	455	105	30	25	15
27	24	29	42	41	43	56	272	490	96	27	23	15
28	23	29	39	38	36	50	260	525	89	23	23	16
29	22	29	38	46	-	47	275	525	83	20	21	17
30	22	33	39	43	-	53	338	542	73	23	19	21
31	22	-	32	38	-	54	-	525	-	23	18	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	731	78	14	23.6	1,450
November	849	38	23	28.3	1,680
December	1,115	54	29	36.0	2,210
Calendar year 1944	26,046.6	836	7.4	71.2	51,670
January	1,152	46	30	37.2	2,280
February	1,358	109	36	48.5	2,690
March	1,605	61	36	48.5	2,990
April	5,673	434	63	189	11,250
May	18,802	825	449	607	37,290
June	5,782	469	73	193	11,470
July	1,096	71	16	35.4	2,170
August	843	54	18	27.2	1,670
September	530	32	14	17.7	1,050
Water year 1944-45	39,436	825	14	108	78,200

Peak discharge.- Oct. 16 (8 a.m.) 154 sec.-ft.; Feb. 3 (6 p.m.) 328 sec.-ft.; Feb. 4 (7 p.m.) 142 sec.-ft.; May 6 (3 a.m.) 875 sec.-ft.; July 21 (8 p.m.) 87 sec.-ft.; Aug. 7 (8 p.m.) 262 sec.-ft.

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

Embudo Creek at Dixon, N. Mex.

Location.- Water-stage recorder, lat. 36°12'35", long. 105°54'35", in NW¼SW¼ sec. 20, T. 23 N., R. 10 E., at bridge on U. S. Highway 64, 0.5 mile upstream from mouth, three-quarters of a mile east of Embudo, and 1¼ miles northwest of Dixon.

Drainage area.- 305 square miles.

Records available.- October 1930 to September 1945 in reports of Geological Survey. October 1923 to December 1931 in reports of State engineer.

Average discharge.- 22 years (1923-45), 96.4 second-feet.

Extremes.- Maximum discharge during year, 905 second-feet May 6 (gage height, 5.50 feet); minimum daily, 10 second-feet Oct. 1.

1930-45: Maximum gage height, 6.95 feet July 8, 1936, site and datum then in use (discharge not determined); minimum daily discharge, 1 second-foot July 23, 24, 1932.

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

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	10	30	26	b19	35	36	76	520	398	72	12	49
2	17	31	31	b22	36	36	104	663	372	80	11	57
3	18	31	40	b25	40	26	93	717	354	72	11	36
4	20	30	36	*b28	32	32	68	779	349	62	11	27
5	18	30	24	b30	30	34	62	821	336	56	11	26
6	18	36	25	b31	36	27	70	870	a310	52	13	25
7	17	44	31	b30	24	25	86	765	a280	49	11	24
8	17	38	27	31	27	27	139	735	a260	46	13	24
9	17	36	26	32	32	28	214	711	a240	42	27	22
10	13	34	b20	32	35	35	252	663	a220	40	36	a21
11	12	34	b17	35	28	42	170	639	a200	38	28	a20
12	14	34	b19	35	30	47	147	633	a180	32	62	a20
13	13	35	b20	32	*30	54	126	639	a170	24	42	a20
14	13	28	b21	34	38	59	153	639	170	18	38	a19
15	15	28	b21	*34	47	52	139	609	176	18	31	a19
16	63	36	b21	35	47	47	116	541	188	15	26	a19
17	64	34	b22	36	46	27	106	485	214	11	17	a19
18	62	35	b23	34	36	56	128	480	176	11	13	a18
19	64	32	b24	30	41	50	161	500	164	13	17	a18
20	54	28	b26	27	40	40	271	530	142	14	16	a20
21	47	26	30	b23	36	47	372	495	136	20	21	a20
22	44	24	28	b20	31	59	460	455	128	27	26	a18
23	44	27	38	b24	28	54	505	435	144	42	24	a17
24	42	38	41	34	35	49	421	408	124	30	24	a16
25	40	*36	35	32	40	47	450	403	118	22	31	a17
28	38	34	31	32	38	56	390	408	147	22	21	a18
27	38	28	26	35	32	62	349	426	116	18	18	a18
28	38	24	35	b30	24	50	308	430	104	15	17	a20
29	36	20	28	b25	-	50	340	435	95	14	15	a22
30	34	25	32	b25	-	59	416	440	80	12	15	25
31	31	-	21	b30	-	57	-	435	-	16	15	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	971	64	10	31.3	1,930
November	946	44	20	31.5	1,880
December	845	41	17	27.3	1,680
Calendar year 1944	39,041	975	6	107	77,440
January	922	36	19	29.7	1,830
February	974	47	24	34.8	1,930
March	1,370	62	25	44.2	2,720
April	6,692	505	62	223	13,270
May	17,709	870	403	571	35,130
June	6,091	398	80	203	12,080
July	1,003	80	11	32.4	1,990
August	673	62	11	21.7	1,330
September	694	57	16	23.1	1,380
Water year 1944-45	38,890	870	10	107	77,150

Peak discharge.- Oct. 16 (11 a.m.) 136 sec.-ft.; May 6 (4 a.m.) 905 sec.-ft.; July 23 (1 a.m.) 84 sec.-ft.; Aug. 12 (3:30 p.m.) 828 sec.-ft.; Sept. 1 (10:30 p.m.) 275 sec.-ft.

* Winter discharge measurement made on this day.

a No gage-height record; discharge computed on basis of records for Rio Santa Cruz at Cundiyo.

b Stage-discharge relation affected by ice.

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

Rio Chama at Park View, N. Mex.

Location.- Water-stage recorder, lat. 36°44'15", long. 106°34'40", in Tierra Amarilla Grant, at bridge on State Highway 51, just below present mouth (shifts position) of Rio Brazos and half a mile northwest of Park View, Rio Arriba County.

Drainage area.- 405 square miles.

Records available.- November 1912 to September 1916 and October 1930 to September 1945 in reports of Geological Survey. November 1912 to September 1916 and August 1924 to December 1931 in reports of State engineer. Records include flow of Rio Brazos.

Average discharge.- 22 years (1913-15, 1925-45), 392 second-feet.

Extremes.- Maximum discharge during year, 5,760 second-feet sometime during period May 7-20 (gage height, 8.10 feet, from recorded range in stage); minimum daily, 21 second-feet Sept. 16.

1930-45: Maximum discharge, 8,530 second-feet Apr. 16, 1937; maximum gage height, 8.12 feet May 26, 1941, site and datum then in use; minimum daily discharge, 3 second-feet July 6, 7, 1934.

Remarks.- Records fair except those for periods of ice effect or no gage-height record, and those above 1,000 second-feet, which are poor. Diversions above station for irrigation.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	26	38	*56	b40	a50	a56	190	1,850	1,130	288	88	46
2	40	40	b53	b45	a50	a54	246	2,080	1,080	288	70	43
3	48	40	49	a47	a50	b53	194	2,420	1,050	276	78	40
4	48	38	b49	a47	a50	a52	125	2,700	1,040	242	72	36
5	40	41	b50	a47	a50	*52	138	3,000	1,060	225	66	33
6	34	44	b50	a47	a50	47	187	3,220	1,050	204	61	31
7	31	52	b50	a47	*b45	b42	309	a3,000	972	190	64	25
8	29	48	b50	a47	b45	b45	474	a3,000	909	181	86	25
9	29	44	b45	a50	b50	b50	714	a3,200	778	172	72	25
10	28	45	b45	a50	b50	b58	738	a3,400	746	178	61	24
11	27	47	b45	a50	b50	b65	412	a3,700	674	150	61	23
12	27	52	50	a50	b50	b75	264	a3,500	615	135	92	22
13	27	53	49	a50	b50	88	208	a3,600	674	120	97	23
14	31	38	49	a50	b50	94	187	a3,200	738	104	74	24
15	36	40	49	*b45	57	83	160	a2,800	754	94	66	22
16	92	57	50	a50	57	79	142	a2,300	730	86	59	21
17	152	53	50	a50	54	a76	155	a2,500	674	83	52	22
18	92	52	47	a50	44	a76	218	a2,500	608	79	52	22
19	64	44	a50	a50	48	a76	412	a2,500	566	83	50	22
20	53	34	a50	a50	53	b76	770	a2,600	545	79	52	23
21	45	33	a50	a47	53	b82	1,160	2,330	545	80	66	24
22	38	32	a50	a45	*b48	*96	1,290	2,240	566	69	82	25
23	37	41	a50	a48	b48	88	1,290	2,240	545	67	82	24
24	36	53	a50	a50	b50	74	981	2,160	517	66	58	24
25	34	48	a50	a50	b54	79	837	1,940	486	72	55	23
26	35	a45	a50	a50	a53	77	666	1,860	468	97	52	24
27	36	a40	a50	a50	a52	92	738	2,000	412	69	56	24
28	37	a40	a50	a50	b51	72	650	1,920	370	61	58	24
29	38	a40	*b50	a48	-	74	909	1,730	340	61	47	26
30	38	a50	b45	a48	-	96	1,460	1,590	309	59	42	38
31	37	-	b40	a48	-	130	-	1,320	-	67	39	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	1,365	152	26	44.0	2,710
November	1,322	57	32	44.1	2,620
December	1,521	56	40	49.1	3,020
Calendar year 1944	127,866	3,650	5	349	253,600
January	1,496	50	40	48.3	2,970
February	1,412	57	44	50.4	2,800
March	2,257	130	42	72.8	4,480
April	16,224	1,460	125	541	32,180
May	78,400	3,700	1,320	2,529	155,500
June	20,951	1,130	309	698	41,560
July	4,025	288	59	130	7,980
August	2,010	97	39	64.8	3,990
September	808	46	21	26.9	1,600
Water year 1944-45	131,791	3,700	21	361	261,400

* Winter discharge measurement made on this day.

a No gage-height record; discharge computed on basis of recorded range in stage, weather records, inflow-outflow studies of El Vado Reservoir, and records for San Juan River at Pagosa Springs, Colo.

b Stage-discharge relation affected by ice.

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

Rio Chama near Tierra Amarilla, N. Mex.

Location.- Water-stage recorder, lat. 36°34'50", long. 106°43'30", in NW¼ sec. 15, T. 27 N., R. 2 E. (projected), 1.5 miles downstream from El Vado Dam, 2.7 miles upstream from Rio Nutrias, and 13 miles southwest of Tierra Amarilla.

Records available.- October 1935 to September 1945 in reports of Geological Survey. October 1913 to November 1916 at site 1.5 miles upstream (records of unregulated flow) published as Rio Chama near El Vado and near Tierra Amarilla in reports of Geological Survey. October 1913 to September 1916 and February 1920 to December 1924 in reports of State engineer.

Extremes (regulated).- Maximum discharge during year, 3,000 second-feet May 14 (gage height, 5.33 feet); minimum daily, 6.3 second-feet Jan. 29, 30, Feb. 1, 2.

1935-45: Maximum discharge, 6,010 second-feet May 17, 1941 (gage height, 6.89 feet); maximum gage height, 9.63 feet May 30, 1937, site and datum then in use; minimum daily discharge, 1.2 second-feet Dec. 3, 1939, Feb. 12, 1944.

Remarks.- Records excellent. Diversions above station for irrigation. Flow regulated by El Vado Reservoir (see p. 196).

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	166	94	6.8	8.4	6.3	8.4	10	15	1,140	415	984	647
2	166	94	6.8	8.4	6.3	8.4	10	16	968	425	800	635
3	166	94	6.8	8.4	6.8	9.3	10	20	975	405	800	623
4	166	63	6.8	8.4	6.8	9.3	10	21	975	405	793	629
5	163	10	6.8	8.4	6.8	9.3	11	902	975	405	793	629
6	163	9.3	6.8	8.4	6.8	9.3	10	1,910	1,030	376	786	629
7	163	9.3	6.8	8.4	6.8	9.3	10	2,350	1,370	316	793	629
8	137	8.4	6.8	8.4	7.6	9.3	10	2,480	1,060	311	772	629
9	110	8.4	6.8	8.4	7.6	9.3	12	2,600	915	316	661	629
10	110	8.4	6.8	8.4	8.4	8.4	14	2,670	915	375	371	629
11	181	8.4	6.8	7.6	7.6	8.4	14	2,740	793	1,030	343	629
12	381	7.6	6.8	7.6	7.6	8.4	14	2,800	548	1,020	366	629
13	325	7.6	6.8	7.6	8.4	8.4	13	2,930	467	1,020	318	658
14	334	7.6	6.8	7.6	12	9.3	13	3,000	489	1,010	241	924
15	334	7.6	7.6	6.8	13	9.3	13	3,000	702	1,010	237	960
16	334	7.6	7.6	6.8	11	9.3	12	1,760	1,010	1,010	290	968
17	194	7.6	7.6	6.8	10	9.3	12	1,010	1,080	998	705	960
18	115	7.6	7.6	6.8	11	10	12	1,010	664	990	699	960
19	115	7.6	7.6	6.8	11	9.3	12	1,190	457	982	699	952
20	113	7.6	7.6	6.8	9.3	8.4	12	2,670	431	862	692	794
21	113	7.6	7.6	6.8	9.3	8.4	12	2,670	431	772	692	451
22	113	8.4	7.6	6.8	8.4	8.4	12	2,670	436	765	692	446
23	113	8.4	8.4	6.8	8.4	8.4	12	2,410	436	765	692	446
24	113	9.3	9.3	6.8	8.4	8.4	13	2,290	441	765	692	446
25	113	8.4	9.3	6.8	8.4	8.4	13	2,290	441	765	686	446
26	113	7.6	8.4	6.8	9.3	8.4	13	2,290	446	766	679	446
27	97	6.8	8.4	7.6	9.3	9.3	14	2,090	534	673	679	446
28	94	6.8	8.4	6.8	8.4	9.3	14	1,940	539	563	673	474
29	94	6.8	8.4	6.3	-	9.3	14	1,960	539	557	667	635
30	94	6.8	8.4	6.3	-	9.3	14	2,180	467	557	660	629
31	94	-	8.4	6.8	-	9.3	-	1,640	-	601	654	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	5,087	381	94	164	10,090
November	552.5	94	6.8	18.4	1,100
December	233.4	9.3	6.8	7.53	463
Calendar year 1944	113,921.1	2,050	1.2	311	226,000
January	229.8	8.4	6.3	7.41	456
February	241.0	13	6.3	8.61	478
March	277.3	10	8.4	8.95	550
April	365	14	10	12.2	724
May	59,524	3,000	15	1,920	118,100
June	21,674	1,370	431	722	42,990
July	21,229	1,030	311	685	42,110
August	19,609	984	237	633	38,890
September	19,607	968	446	654	38,890
Water year 1944-45	148,629	3,000	6.3	407	294,800

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

Rio Chama near Abiquiu, N. Mex.

Location.- Water-stage recorder, lat. 36°13'00", long. 106°15'00", at bridge on State Highway 96 in Juan Jose Lobato Grant, 1¾ miles upstream from El Rito Creek, 5 miles downstream from Abiquiu, Rio Arriba County, and 13.5 miles downstream from Abiquiu dam site.

Records available.- January 1942 to September 1945.

Extremes.- Maximum discharge during year not determined (occurred during period of no gage-height record); minimum daily, 21 second-feet Jan. 1, 2, 28.

1942-45: Maximum discharge, 6,330 second-feet Apr. 23, 1942 (gage height, 5.80 feet), from rating curve extended above 3,300 second-feet by logarithmic plotting; minimum daily, 12 second-feet Dec. 29, 1943, Jan. 5, 1944.

Remarks.- Records good except those for periods of ice effect or no gage-height record, which are poor. Diversions above and below station for irrigation. Flow regulated by El Vado Reservoir (see p. 196).

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	178	109	26	b21	32	36	38	885	1,510	508	890	685
2	185	109	*b26	b21	34	36	68	990	1,160	539	907	721
3	221	107	b25	b22	50	42	120	1,040	1,140	621	852	658
4	182	109	b24	b23	67	40	90	1,010	1,130	396	841	649
5	178	112	b23	b23	100	36	55	958	1,110	378	810	649
6	174	78	25	b23	136	37	45	2,300	1,110	378	810	640
7	171	47	25	b22	114	32	59	3,010	1,280	354	830	632
8	171	38	b22	b23	*67	29	134	3,010	1,420	300	863	624
9	161	36	b22	b25	62	30	238	3,120	1,040	295	896	632
10	122	31	b24	b27	68	28	327	a3,200	1,050	310	604	632
11	120	27	b24	b26	122	39	261	a3,100	1,040	532	396	640
12	161	25	b25	b25	136	74	164	a3,200	820	1,000	852	640
13	344	24	b25	26	97	80	122	a3,400	584	976	434	649
14	316	25	b25	b25	94	88	109	a3,500	539	964	327	760
15	360	25	b25	b22	371	80	145	a3,300	616	976	252	1,000
16	616	25	b24	b26	384	95	148	a2,000	770	976	238	988
17	476	27	b25	b25	261	74	142	a1,600	1,120	968	348	988
18	280	26	b25	b24	168	56	136	a1,500	1,120	1,010	703	1,000
19	225	27	b26	b24	128	86	247	a1,700	804	1,020	703	1,010
20	161	26	b25	b25	158	70	372	a2,200	455	988	703	1,010
21	145	*26	*b25	23	131	52	576	a2,800	414	820	790	684
22	139	25	b27	24	78	46	616	a2,900	420	800	810	462
23	139	25	b28	a23	53	53	703	2,900	420	810	740	462
24	136	29	b30	*a31	45	58	576	2,500	414	800	740	462
25	134	34	b27	36	47	49	539	2,500	408	780	770	455
26	131	36	b25	28	43	54	560	2,500	408	810	712	455
27	125	29	b25	25	45	70	462	2,400	414	760	703	455
28	125	25	b24	21	39	70	441	2,070	497	624	703	455
29	112	23	b24	25	-	55	504	2,010	490	560	703	525
30	107	25	b23	23	-	42	703	2,300	490	568	703	685
31	109	-	b23	26	-	37	-	2,120	-	560	730	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	6,204	616	107	200	12,310
November	1,310	112	23	43.7	2,600
December	772	30	22	24.9	1,530
Calendar year 1944	134,783	2,380	12	368	267,300
January	763	36	21	24.6	1,510
February	3,130	384	32	112	6,210
March	1,674	95	28	54.0	3,320
April	8,700	703	38	290	17,260
May	72,023	3,500	885	2,323	142,900
June	24,193	1,510	408	806	47,990
July	21,401	1,020	295	690	42,450
August	21,363	907	238	689	42,370
September	20,307	1,010	455	677	40,280
Water year 1944-45	181,840	3,500	21	498	360,700

* Winter discharge measurement made on this day.

a No gage-height record; discharge computed on basis of records for stations near Tierra Amarilla and near Ohamita.

b Stage-discharge relation affected by ice.

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

Rio Chama near Chamita, N. Mex.

Location.- Water-stage recorder, lat. 36°04'20", long. 106°06'40", in NE¼ sec. 8, T. 21 N., R. 8 E., 200 feet downstream from Espanola-Ojo Caliente highway bridge, 2¼ miles upstream from mouth, and 2¼ miles northwest of Chamita.

Records available.- October 1912 to June 1915 and October 1930 to September 1945 in reports of Geological Survey. October 1912 to December 1931 in reports of State engineer.

Average discharge.- 31 years (1913-17, 1918-45), 698 second-feet.

Extremes.- Maximum discharge during year, 5,490 second-feet May 7 (gage height, 5.56 feet); minimum daily, 32 second-feet Nov. 23.
1930-45: Maximum discharge, 9,910 second-feet May 14, 1941; maximum gage height, 8.11 feet May 16, 1941; no flow at times.

Remarks.- Records good except those for periods of ice effect or no gage-height record, which are poor. Diversions above station for irrigation. Flow regulated by El Vado Reservoir (see p. 196).

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	202	138	*34	*33	60	75	112	1,780	1,640	430	750	678
2	210	134	37	33	70	75	138	2,280	1,200	406	831	696
3	255	138	43	35	80	73	194	2,720	1,140	524	777	620
4	210	145	40	37	94	78	190	2,900	1,090	400	786	628
5	190	145	40	39	102	78	152	2,900	1,080	370	a780	620
6	182	166	40	38	162	71	131	4,240	1,080	382	a780	636
7	182	112	42	37	138	71	141	4,730	1,210	382	786	644
8	178	88	44	40	124	53	270	4,730	1,450	322	786	644
9	170	80	*42	*48	134	53	394	4,610	1,260	305	831	660
10	131	60	40	52	138	49	500	4,490	1,210	310	636	644
11	115	51	40	52	138	62	444	4,610	1,120	322	376	636
12	118	40	40	50	148	86	322	4,610	940	860	939	636
13	278	35	40	45	141	102	245	4,730	741	890	532	628
14	340	35	40	46	152	115	215	4,860	596	900	394	669
15	352	34	40	45	280	121	265	4,380	548	962	270	850
16	708	44	*40	50	300	124	220	4,260	678	962	240	900
17	532	57	40	50	245	124	202	2,110	920	962	235	880
18	465	66	43	48	215	115	186	2,040	930	984	714	880
19	358	64	43	45	170	99	321	1,980	813	984	687	870
20	220	62	42	43	190	94	500	2,580	500	940	687	890
21	194	62	40	40	190	91	777	3,190	458	813	750	714
22	178	46	40	40	124	94	1,010	3,190	465	786	a760	444
23	163	32	42	40	99	97	1,260	3,190	458	795	a720	437
24	156	48	45	45	80	124	1,090	2,810	472	759	a700	430
25	156	*66	45	50	83	108	1,230	2,630	430	723	796	444
26	156	68	40	*50	83	97	1,170	2,540	412	763	705	458
27	152	57	38	50	83	118	1,020	2,540	376	723	678	465
28	156	44	38	45	80	124	940	2,200	418	644	669	458
29	145	39	37	45	-	128	973	2,120	418	543	678	493
30	134	34	35	50	-	124	1,280	2,280	424	548	669	678
31	134	-	35	54	-	112	-	2,280	-	564	687	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	7,120	708	116	230	14,120
November	2,190	166	32	73.0	4,340
December	1,245	45	34	40.2	2,470
Calendar year 1944	164,173	2,720	27	449	325,600
January	1,374	54	33	44.3	2,730
February	3,893	300	60	139	7,720
March	2,935	128	49	94.7	5,820
April	15,892	1,280	112	530	31,520
May	100,510	4,860	1,780	3,242	199,400
June	24,477	1,640	376	816	48,550
July	20,268	984	305	654	40,200
August	20,628	939	235	665	40,920
September	19,330	900	430	644	38,340
Water year 1944-45	219,862	4,860	32	602	436,100

* Winter discharge measurement made on this day.

a No gage-height record; discharge computed on basis of records for stations near Tierra Amarilla and near Abiquiu.

Note.- Stage-discharge relation affected by ice Dec. 3-5, Dec. 7 to Feb. 3.

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

Willow Creek near Park View, N. Mex.

Location.- Water-stage recorder, lat. 36°40'20", long. 106°42'10", in Tierra Amarilla Grant, 400 feet upstream from Willow Creek dam site, 0.3 mile downstream from Horse Lake Creek, and 7 miles southwest of Park View, Rio Arriba County.

Records available.- May 1936 to September 1945.

Extremes.- Maximum discharge during year, 1,400 second-feet Aug. 21 (gage height, 6.25 feet); no flow at times.
1936-45: Maximum discharge, 4,500 second-feet Apr. 23, 1942 (gage height, 10.49 feet), by slope-area method; no flow at times.

Remarks.- Records good except those for periods of ice effect or no gage-height record, which are poor. Diversions above station for irrigation.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3.1	0.6	0.2	b0.2	a0.3	b4.5	172	96	1.8	0.8	60	4.1
2	4.1	.6	.1	.1	a.4	b4.0	186	81	1.6	2.4	9.2	11
3	3.8	.6	.1	0	a1.0	3.8	125	70	1.6	3.1	4.8	5.6
4	3.8	.5	.2	b.2	a1.0	3.8	44	62	2.0	1.3	2.7	3.6
5	3.8	.5	.3	b.2	a.8	*3.6	61	53	2.4	1.3	1.8	1.8
6	3.3	.5	.2	.1	a.8	3.3	168	44	1.6	1.1	1.9	1.2
7	3.1	.8	.2	0	a.7	2.9	274	38	1.1	1.0	.8	.8
8	2.9	1.5	.2	0	a.8	2.5	334	31	1.0	.8	1.4	.6
9	2.9	1.2	.2	0	a1.0	4.1	413	28	1.0	.6	6.1	.6
10	3.1	.8	.2	0	a1.5	12	222	24	1.0	.8	4.8	.6
11	2.9	.7	.1	0	a1.3	24	72	21	1.0	.8	3.6	.4
12	2.9	.6	.1	0	a1.2	43	48	20	1.0	1.0	13	.3
13	2.7	.6	0	b.2	a2.0	37	49	18	1.0	.5	13	.3
14	3.3	.7	0	b.2	a3.0	45	64	17	1.0	.3	7.3	.3
15	4.8	.6	0	b.2	a4.0	48	84	19	1.0	.1	3.8	.2
16	10	.6	0	b.2	a4.0	41	93	22	1.0	0	2.0	.2
17	7.6	.6	0	b.2	a4.0	23	73	16	1.2	0	1.5	.1
18	5.9	.5	0	a.2	a3.0	31	124	12	1.5	0	1.1	.1
19	6.4	.4	0	a.2	a3.0	36	205	10	1.4	.3	.8	0
20	4.8	.4	0	a.2	a4.0	30	215	a7	.9	.1	15	0
21	4.3	.3	0	a.2	a4.0	40	192	a5	.9	.3	180	0
22	4.1	.2	0	a.1	*b3.5	40	147	4.3	1.2	.5	76	0
23	4.1	.1	0	a.1	b3.0	27	129	4.1	1.8	4.0	23	0
24	4.1	.4	0	a.2	b3.2	28	106	3.1	1.8	2.5	14	0
25	4.1	.8	.4	a.2	b3.5	46	177	3.1	1.4	13	12	0
26	3.8	.8	.6	a.2	3.3	58	97	5.9	1.2	11	10	0
27	2.4	.7	.3	a.2	3.3	50	132	4.3	.8	4.1	12	0
28	1.0	.6	.6	a.2	3.3	27	101	5.6	.7	2.2	10	0
29	1.0	.3	*.3	a.2	-	26	89	4.6	.5	1.6	10	.5
30	1.0	.3	.3	a.1	-	53	102	3.1	.5	1.5	7.6	1.3
31	.8	-	.3	a.2	-	97	-	2.4	-	20	5.4	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	115.9	10	0.8	3.74	230
November	17.8	1.5	.1	.59	35
December	4.9	.6	0	.16	9.7
Calendar year 1944	4,454.9	300	0	12.2	8,840
January	4.3	.2	0	.14	8.5
February	64.9	4.0	.3	2.32	129
March	894.5	97	2.5	28.9	1,770
April	4,298	413	44	143	8,520
May	734.5	96	2.4	23.7	1,460
June	36.9	2.4	.5	1.23	73
July	77.0	20	0	2.48	153
August	514.6	180	.8	16.6	1,020
September	33.6	11	0	1.12	67
Water year 1944-45	6,796.9	413	0	18.6	13,480

* Winter discharge measurement made on this day.
a No gage-height record; discharge computed on basis of weather records and records for El Rito Creek near El Rito and Rio Ojo Caliente at La Madera.
b Stage-discharge relation affected by ice.
Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

El Rito Creek near El Rito, N. Mex.

Location.- Water-stage recorder, lat. 36°23'30", long. 106°14'20", in NW¼ sec. 19, T. 25 N., R. 7 E., three-quarters of a mile upstream from boundary of Carson National Forest and 3 miles northwest of El Rito.

Records available.- May 1931 to September 1945 (no winter records 1937-41).

Average discharge.- 10 years (1931-37, 1941-45), 21.1 second-feet.

Extremes.- Maximum discharge during year, 782 second-feet May 3 (gage height, 3.52 feet); minimum daily, 0.5 second-foot Sept. 11-13, 16.

1931-45: Maximum discharge not determined; minimum daily recorded, 0.3 second-foot June 21-23, 1934.

Remarks.- Records good except those for periods of ice effect or no gage-height record, which are poor. One diversion above station for irrigation.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	a1.3	a1.5	1.9	a1.1	a2.1	3.2	9.0	255	31	3.9	2.8	1.5
2	a1.5	a1.5	*b1.8	a1.2	b2.2	2.8	13	377	29	4.2	1.7	1.1
3	a1.4	a1.4	b1.8	a1.4	2.4	b2.7	9.7	440	26	4.6	1.8	1.0
4	a1.4	1.4	b1.5	a1.6	b2.6	b2.9	7.0	467	25	3.9	1.5	.8
5	a1.1	1.5	b1.4	a1.6	b2.4	2.8	7.6	478	22	3.7	1.3	.6
6	.9	1.9	b1.7	a1.6	2.3	*b2.7	9.7	420	21	3.7	1.5	.6
7	.9	3.2	b1.8	a1.5	b2.1	b2.7	20	324	20	3.9	1.5	.6
8	.9	2.6	b1.8	a2.2	*2.3	b2.9	43	303	18	3.4	3.1	.6
9	.9	2.5	a1.3	a2.1	b2.5	b3.2	76	222	16	3.6	2.2	.6
10	a.8	a2.2	a1.5	a2.1	2.4	b3.9	59	197	15	3.7	1.5	.6
11	a.7	a2.1	a1.5	*2.0	2.3	4.2	34	248	14	3.1	1.4	.5
12	a.7	a2.0	a1.7	1.8	2.5	4.6	24	241	14	2.6	2.9	.5
13	a1.0	a1.8	a1.8	1.6	2.5	5.1	20	244	13	2.4	2.2	.5
14	a1.8	a1.6	a1.7	1.7	2.6	6.0	18	192	12	2.3	1.6	.7
15	a4.2	a1.8	a1.6	1.7	2.9	5.3	14	147	11	2.2	1.4	.6
16	a3.6	a1.8	a1.6	1.7	2.6	3.9	11	131	10	2.3	1.2	.5
17	a3.0	a1.7	a1.7	1.7	2.9	3.9	10	140	9.3	1.9	1.2	.7
18	2.6	a2.0	a1.8	1.9	b2.6	4.4	20	178	8.1	2.0	1.0	.7
19	2.8	a1.7	a1.8	1.9	b2.9	4.4	53	157	7.6	2.3	1.0	.6
20	a2.3	a1.6	a1.7	2.0	b2.8	3.6	119	119	7.0	1.7	1.4	.7
21	a2.0	1.7	*a1.7	2.0	b2.6	4.6	145	93	6.7	1.6	2.9	.8
22	a1.9	1.7	a1.8	2.0	b2.1	6.0	162	96	6.4	1.9	1.8	.9
23	a1.9	1.7	a1.9	2.0	*b2.4	*5.1	147	94	6.2	2.0	1.7	.8
24	a1.8	1.9	a1.8	*2.2	b2.5	4.4	105	89	5.5	2.0	1.4	.7
25	a1.8	2.0	a2.0	2.0	b2.4	4.9	113	76	5.5	1.9	1.4	.9
26	a1.7	b1.4	a1.6	2.0	b2.7	4.9	80	71	5.3	2.3	1.2	.9
27	a1.9	1.6	a1.7	2.2	b2.6	5.1	84	70	4.6	1.8	1.2	.9
28	a1.8	b1.6	a1.6	2.0	b2.6	3.4	96	58	4.2	1.8	1.1	1.1
29	a1.7	1.5	a1.6	2.0	-	4.0	149	50	4.0	1.7	.9	1.4
30	a1.6	b1.7	a1.4	a2.0	-	4.6	228	45	3.9	2.0	.9	2.8
31	a1.6	-	a1.4	a2.1	-	5.3	-	37	-	2.8	1.1	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	53.5	4.2	0.7	1.73	106
November	54.6	3.2	1.4	1.82	108
December	51.9	2.0	1.3	1.67	103
Calendar year 1944	5,865.3	280	.4	16.0	11,640
January	56.9	2.2	1.1	1.84	113
February	69.8	2.9	2.1	2.49	138
March	127.5	6.0	2.7	4.11	253
April	1,886	228	7.0	62.9	3,740
May	6,059	478	37	195	12,020
June	381.3	31	3.9	12.7	756
July	83.2	4.6	1.6	2.68	165
August	49.8	3.1	.9	1.61	99
September	25.2	2.8	.5	.84	50
Water year 1944-45	8,898.7	478	.5	24.4	17,650

* Winter discharge measurement made on this day.

a No gage-height record; discharge computed on basis of weather records and records for San Juan River at Pagosa Springs and Rio Ojo Caliente at La Madera.

b Stage-discharge relation affected by ice.

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

Rio Ojo Caliente at La Madera, N. Mex.

Location.- Water-stage recorder, lat. 36°20'45", long. 106°02'50", in NE¼ sec. 1, T. 24 N., R. 8 E., 2.5 miles south of La Madera, 3 miles downstream from confluence of Rio Vallecitos and Rio Tusas, and 4 miles north of Ojo Caliente.

Records available.- April 1932 to September 1945.

Average discharge.- 13 years, 87.2 second-feet.

Extremes.- Maximum discharge during year, 1,690 second-feet May 6 (gage height, 4.43 feet); minimum daily, 1.4 second-feet July 15.

1932-45: Maximum discharge, 2,980 second-feet Apr. 23, 1942, from rating curve extended above 1,300 second-feet by logarithmic plotting; maximum gage height, 7.60 feet, site and datum then in use, July 15, 1933; minimum daily discharge, 1 second-foot at times.

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

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	7.5	19	15	17	19	27	70	756	128	15	11	4.5
2	7.5	20	18	20	20	28	85	945	117	21	4.7	4.2
3	7.5	19	18	19	31	22	68	1,080	106	18	4.0	4.2
4	7.5	17	17	18	30	26	57	1,230	99	16	4.0	4.0
5	7.5	16	14	19	26	28	55	1,270	94	14	4.5	3.6
6	8.0	20	13	18	26	24	64	1,230	85	11	4.7	3.4
7	7.5	18	16	17	21	22	76	1,080	78	11	5.3	3.4
8	8.0	12	16	17	21	22	99	1,050	72	8.9	7.5	2.9
9	8.0	9.3	16	18	25	23	122	910	70	7.1	19	3.1
10	8.4	11	15	18	*27	26	155	845	63	6.7	18	3.1
11	8.4	15	14	18	24	32	125	910	61	5.8	13	3.4
12	8.4	16	15	18	22	35	106	871	52	4.0	14	3.6
13	8.4	14	16	17	22	39	99	864	49	2.5	14	3.6
14	8.4	12	16	19	27	45	96	786	45	1.9	13	3.8
15	8.9	11	15	19	35	49	87	594	44	1.4	11	4.2
16	25	14	15	19	35	47	89	572	42	1.5	11	4.5
17	30	15	16	21	35	35	81	550	42	1.6	9.3	4.7
18	30	17	17	20	27	47	94	583	38	1.5	8.9	4.9
19	30	17	a17	20	31	41	134	522	35	2.0	8.4	5.3
20	20	15	a18	18	32	36	211	460	30	2.2	8.4	6.2
21	19	15	a19	18	30	38	305	341	27	2.5	10	6.2
22	20	15	19	15	25	44	359	328	22	2.7	8.0	6.2
23	22	15	25	15	22	44	420	318	22	4.0	7.5	6.7
24	22	20	26	*22	25	47	350	305	20	4.2	7.5	6.7
25	21	18	23	21	28	45	465	292	19	3.6	11	6.7
26	19	15	21	18	26	45	377	246	18	3.8	5.8	6.2
27	17	13	18	22	27	55	382	271	15	4.2	4.9	6.2
28	18	13	20	b15	23	49	368	242	13	4.2	4.7	6.7
29	19	11	20	b12	-	47	415	207	12	3.8	4.5	7.1
30	20	13	21	b11	-	55	550	189	13	4.9	4.5	8.4
31	18	-	14	16	-	57	-	159	-	8.4	5.3	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	469.9	30	7.5	15.2	932
November	455.3	20	9.3	15.2	903
December	543	26	13	17.5	1,080
Calendar year 1944	26,953.2	1,230	2.1	73.6	53,460
January	555	22	11	17.9	1,100
February	742	35	19	26.5	1,470
March	1,180	57	22	38.1	2,340
April	5,964	550	55	199	11,830
May	20,006	1,270	159	645	39,680
June	1,531	128	12	51.0	3,040
July	199.4	21	1.4	6.43	396
August	267.4	19	4.0	8.63	530
September	147.7	8.4	2.9	4.92	293
Water year 1944-45	32,060.7	1,270	1.4	87.8	63,590

* Winter discharge measurement made on this day.

a No gage-height record; discharge computed on basis of records for San Juan River at Pagosa Springs.

b Stage-discharge relation affected by ice.

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

Rio Santa Cruz at Cundiyo, N. Mex.

Location.- Water-stage recorder, lat. 35°57'40", long. 105°54'10", in SE¼NW¼ sec. 17, T. 20 N., R. 10 E., 135 feet downstream from highway bridge at confluence of Rio Medio and Rio Frijoles and a quarter of a mile northwest of Cundiyo.

Records available.- September 1931 to September 1945 in reports of Geological Survey. September 1915 to December 1931 (published as Rio Medio at Cundiyo and Rio Santa Cruz above Chimayo) in reports of State engineer.

Average discharge.- 28 years (1916-29, 1930-45), 35.2 second-feet.

Extremes.- Maximum discharge during year, 530 second-feet Sept. 1 (gage height, 3.44 feet); minimum daily, 7 second-feet Nov. 22.
1931-45: Maximum discharge, 2,610 second-feet Sept. 24, 1931 (gage height, 8.20 feet, datum then in use), from rating curve extended above 170 second-feet by logarithmic plotting; minimum daily, 3 second-feet Feb. 3, 1932, Jan. 21, 1935.

Remarks.- Records good except those for periods of ice effect, or no gage-height record, which are poor. Diversions above station for irrigation.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	11	12	b11	b8	9.8	15	38	130	142	42	17	45
2	12	12	b11	b9	11	14	51	156	132	43	16	25
3	12	12	11	b9	10	12	45	189	124	40	17	21
4	12	12	10	a9	9.6	14	39	198	120	37	18	19
5	12	12	b10	a9.5	b9	14	37	209	115	37	16	17
6	11	15	b11	a9.5	9.8	13	39	209	112	36	15	15
7	11	14	b11	a9.5	9.2	13	47	198	108	34	16	15
8	11	13	b10	a9.5	10	13	65	201	105	34	19	15
9	11	11	b10	a9.5	10	16	82	195	98	33	18	14
10	10	12	b10	*9.6	9.8	18	85	186	94	31	20	13
11	10	12	b8	10	9.6	22	67	184	97	30	26	13
12	10	12	b8.5	10	9.6	26	57	184	97	27	40	13
13	10	11	b8.5	b10	10	32	51	189	85	26	25	15
14	10	*8.3	b9	b10	11	33	53	195	82	24	21	12
15	10	11	b9	b10	*11	30	54	181	78	24	21	12
16	21	12	a9	10	12	27	48	163	78	23	18	12
17	33	11	a9	10	14	22	45	161	78	22	16	12
18	22	11	a9	9.8	13	27	52	166	74	24	14	11
19	21	10	a9.5	b9	15	25	65	181	70	24	15	11
20	20	8.5	a9.5	b9.5	14	24	91	198	65	22	18	12
21	17	7.5	a10	b8	14	31	102	189	65	25	29	12
22	15	b7	*10	b7.5	15	38	108	173	67	31	28	11
23	14	b9.5	9.4	b7.5	16	36	112	163	67	24	21	10
24	14	13	9.2	b8	16	31	97	161	58	22	21	9.4
25	14	11	9.4	b8	15	31	96	156	58	21	20	10
26	13	10	8.9	b8	15	34	94	152	56	22	17	a10
27	13	b10	b9	b8.5	15	40	94	152	51	20	15	11
28	13	b9	b9	b8.5	13	37	87	152	48	19	14	10
29	13	b9	b9	b8.5	-	34	96	156	45	19	14	12
30	12	b10	b9	b8.5	-	32	112	156	42	18	17	13
31	12	-	b9	b8.5	-	31	-	154	-	18	18	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	430	33	10	13.9	853
November	327.8	15	7	10.9	650
December	295.9	11	8	9.55	587
Calendar year 1944	12,363.9	247	6	33.8	24,520
January	279.9	10	7.5	9.03	555
February	336.4	16	9.2	12.0	667
March	785	40	12	25.3	1,560
April	2,109	112	37	70.3	4,180
May	5,437	209	130	175	10,780
June	2,511	142	42	83.7	4,980
July	852	43	18	27.5	1,690
August	600	40	14	19.4	1,190
September	428.4	45	9.4	14.3	850
Water year 1944-45	14,392.4	209	7	39.4	28,540

* Winter discharge measurement made on this day.
a No gage-height record; discharge computed on basis of weather records and records for Embudo Creek at Dixon.
b Stage-discharge relation affected by ice.
Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

Rio Santa Cruz at Riverside, N. Mex.

Location.- Water-stage recorder, lat. 35°59'15", long. 106°04'05", in SW¼ sec. 2, T. 20 N., R. 8 E., at bridge on U. S. Highway 285, at south edge of Riverside, half a mile upstream from mouth and three-quarters of a mile east of Espanola.

Records available.- January 1942 to September 1945.

Extremes.- Maximum discharge during year, 325 second-feet Aug. 11 (gage height, 4.21 feet); no flow at times.
1942-45: Maximum discharge, 643 second-feet Apr. 24, 1942; maximum gage height, 4.85 feet June 7, 1942; no flow at times.

Remarks.- Records fair except those for periods of ice effect, which are poor. Diversions above station for irrigation. Flow partly regulated by Santa Cruz Reservoir (capacity, 4,614 acre-feet, original survey).

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	0	3	b15	10	0	17	108	59	0	1	5
2	3	0	5	b10	11	0	33	110	56	0	0	1
3	0	0	2	b8	10	0	87	121	65	0	0	2
4	0	0	0	*b8	9	0	68	145	50	0	0	2
5	0	0	0	b8	8	0	25	148	40	0	0	0
6	0	0	0	b8	7	0	14	143	31	0	0	2
7	0	0	0	b8	6	0	11	103	22	1	0	2
8	0	0	0	b8	3	0	10	116	15	0	0	3
9	0	0	*1	b8	2	1	23	123	14	0	8	4
10	0	0	2	b8	2	0	65	118	32	0	4	2
11	0	0	b2	9	2	0	73	114	15	1	10	1
12	0	0	b2	10	2	0	62	126	21	1	4	3
13	0	0	b3	8	2	0	49	140	17	1	1	3
14	0	0	b4	8	2	2	40	128	8	0	2	3
15	0	0	b5	*8	1	4	38	128	2	0	3	5
16	16	0	*b5	7	1	3	39	114	1	0	5	5
17	18	0	b5	7	1	5	31	99	2	0	2	3
18	31	0	b5	7	1	7	24	95	1	0	1	1
19	37	3	b5	7	1	11	14	103	0	1	1	0
20	21	2	b5	6	1	15	25	116	0	1	3	0
21	19	1	b6	*5	0	15	60	99	0	0	2	1
22	16	1	b8	b4	0	17	86	89	2	0	1	1
23	11	1	10	b7	1	18	82	84	1	0	0	2
24	8	0	15	b8	1	21	95	74	1	0	0	3
25	8	0	21	b8	0	19	93	70	1	0	0	2
26	7	0	32	*b8	0	19	93	66	1	0	0	0
27	4	0	39	9	0	21	87	80	0	0	2	0
28	1	0	44	7	0	22	80	59	0	0	0	0
29	0	1	46	6	-	38	76	57	5	0	0	0
30	0	1	45	7	-	31	84	59	1	0	0	0
31	0	-	b35	8	-	23	-	63	-	0	3	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	200	37	0	6.5	397
November	10	3	0	.3	20
December	355	46	0	11.5	704
Calendar year 1944	5,096	176	0	13.9	10,100
January	243	15	4	7.8	482
February	84	11	0	3.0	167
March	292	38	0	9.4	579
April	1,584	95	10	52.8	3,140
May	3,198	148	57	103	6,340
June	463	65	0	15.4	918
July	6	1	0	.2	12
August	53	10	0	1.7	105
September	56	5	0	1.9	111
Water year 1944-45	6,544	148	0	17.9	12,980

* Winter discharge measurement made on this day.
b Stage-discharge relation affected by ice.
Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

Santa Fe Creek near Santa Fe, N. Mex.

Location.- Water-stage recorder and sharp-crested concrete control, lat. 35°41'15", long. 105°50'10", in NW¼SW¼ sec. 24, T. 17 N., R. 10 E., 300 feet downstream from Granite Point Dam and 6 miles east of Santa Fe.

Records available.- May to June 1910 (at site 3 miles downstream), April 1913 to December 1914 (at site 2 miles downstream), and October 1930 to September 1945 in reports of Geological Survey. January 1913 to November 1930 (at site 2 miles downstream) and November 1930 to December 1931 in reports of State engineer. January 1943 to December 1945 in reports of Rio Grande Compact Commission.

Average discharge.- 15 years (1930-45), 8.73 second-feet.

Extremes.- Maximum discharge during year, 56 second-feet May 6 (gage height, 1.31 feet); minimum daily, 2.1 second-feet Jan. 24, Jan. 29 to Feb. 10.
1930-45: Maximum discharge, 418 second-feet Apr. 23, 1942 (gage height, 3.51 feet), from rating curve extended above 150 second-feet; minimum daily, 0.2 second-foot Dec. 3-14, 16-29, 1943.

Remarks.- Records good except those for periods of no gage-height record, which are fair. Flow regulated by Granite Point Reservoir (capacity, 648 acre-feet). No diversion above station.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4.3	3.2	3.6	3.2	2.1	a3.9	15	47	27	6.7	4.9	4.4
2	4.3	3.2	3.6	3.2	2.1	a3.9	15	a48	25	6.7	4.9	4.6
3	4.1	3.2	3.6	3.2	2.1	a3.9	a14	a50	23	6.7	4.9	4.6
4	4.1	3.2	3.6	3.2	2.1	a3.9	a14	51	22	6.4	4.9	4.4
5	3.9	3.2	3.6	3.2	2.1	a3.9	a13	52	23	6.4	4.9	4.4
6	3.6	3.2	3.6	3.2	2.1	a3.9	12	53	22	6.1	4.9	4.4
7	3.6	3.2	3.6	3.2	2.1	a3.9	a15	50	22	6.1	4.9	4.4
8	3.6	3.2	3.6	3.2	2.1	3.9	18	47	20	5.8	4.9	4.4
9	3.6	3.2	3.6	3.2	2.1	4.1	18	46	18	5.5	4.9	4.4
10	3.2	3.2	3.6	2.5	2.1	4.6	a17	43	17	5.5	4.9	4.4
11	3.2	3.4	3.6	2.2	2.3	4.9	a16	40	17	5.5	4.6	4.4
12	3.2	3.4	3.6	2.2	2.9	4.9	a16	40	16	5.5	4.6	4.4
13	3.4	3.4	3.6	2.2	3.2	5.2	15	43	14	5.5	4.9	4.9
14	3.4	3.4	3.6	2.2	3.4	5.5	15	43	14	5.5	5.2	4.9
15	3.4	3.4	3.6	2.2	3.9	6.1	14	40	13	5.2	5.2	4.9
16	3.4	3.2	3.6	2.2	3.9	6.4	14	34	13	4.9	5.5	4.6
17	3.6	3.2	3.6	2.2	4.1	6.4	14	32	13	4.9	5.5	4.6
18	3.6	3.2	3.6	2.2	4.4	6.7	15	32	12	4.9	5.5	4.6
19	3.6	3.2	3.6	2.2	4.6	7.0	33	35	11	4.9	5.2	4.6
20	3.6	3.2	3.6	2.2	4.4	7.3	a36	38	10	4.9	5.2	4.6
21	3.6	3.2	3.6	2.2	4.1	9.6	a38	35	9.8	4.6	5.2	4.6
22	3.6	3.2	3.6	2.2	4.1	a9.7	41	33	8.9	4.6	4.9	4.6
23	3.2	3.4	3.6	2.2	4.1	a9.9	45	32	8.2	4.6	4.9	4.6
24	3.2	3.4	3.6	2.1	4.1	10	35	31	7.6	4.6	4.6	4.6
25	3.2	3.4	3.6	2.3	3.9	12	27	29	7.3	4.6	4.6	4.6
26	3.2	3.4	3.4	2.3	a3.9	12	a28	29	7.0	4.6	4.4	4.4
27	3.2	3.4	3.2	2.3	a3.9	13	28	30	7.0	4.6	4.1	4.4
28	3.2	3.4	3.2	2.3	a3.9	a13	25	30	7.0	4.6	4.1	4.4
29	3.2	3.4	3.2	2.1	-	a12	a36	30	7.0	4.4	4.1	4.4
30	3.2	3.6	3.2	2.1	-	12	47	30	7.0	4.6	4.4	4.4
31	3.2	-	3.2	2.1	-	a13	-	28	-	4.9	4.4	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	108.7	4.3	3.2	3.51	216
November	98.8	3.6	3.2	3.29	196
December	109.4	3.6	3.2	3.53	217
Calendar year 1944	2,558.2	36	.7	6.99	5,070
January	77.5	3.2	2.1	2.50	154
February	90.1	4.6	2.1	3.22	179
March	226.5	13	3.9	7.31	449
April	689	47	12	23.0	1,370
May	1,201	53	28	38.7	2,380
June	428.6	27	7.0	14.3	850
July	164.3	6.7	4.4	5.30	326
August	150.1	5.5	4.1	4.84	298
September	135.9	4.9	4.4	4.53	270
Water year 1944-45	3,479.9	53	2.1	9.53	6,900

a No gage-height record; discharge computed on basis of operation record of Granite Point Reservoir.

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

Galisteo Creek at Domingo, N. Mex.

Location.- Water-stage recorder, lat. 35°30'45", long. 106°18'55", in SW¼ sec. 21, T. 15 N., R. 6 E., in Santo Domingo Pueblo Grant, at highway bridge, 0.3 mile northeast of Domingo, 2¾ miles east of Santo Domingo Pueblo, and 4 miles upstream from mouth.

Records available.- October 1941 to September 1945.

Extremes.- Maximum discharge during year, 3,740 second-feet July 2 (gage height, 5.02 feet), from rating curve extended above 740 second-feet by logarithmic plotting; no flow at times.

1941-45: Maximum discharge, 10,400 second-feet July 27, 1942 (gage height, 6.10 feet), from rating curve extended above 740 second-feet by logarithmic plotting; no flow at times.

Remarks.- Records poor. Several small diversions above station for irrigation.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	0	0	0	0					0	1	30
2	0	0	0	0	0					42	1	a4
3	0	0	0	0	17					23	0	0
4	0	0	1	0	8					0	0	0
5	0	0	0	0	3					0	0	0
6	0	1	0	0	2					0	0	0
7	0	4	0	0	0					1	28	0
8	0	3	0	0	0					0	a75	0
9	0	2	0	0	0					0	a80	0
10	0	1	0	0	0					0	a60	0
11	0	1	0	0	0					0	a10	0
12	0	1	0	2	0					0	a1	0
13	0	0	0	1	0					0	a0	0
14	0	0	0	1	0					0	0	0
15	11	1	0	0	0					0	0	0
16	35	1	0	1	0					0	1	0
17	a5	1	0	1	0					0	0	0
18	a2	1	0	1	0					30	0	0
19	a3	1	0	0	0					0	0	0
20	a1	0	0	1	0					0	0	0
21	a0	0	0	0	0					35	39	0
22	a0	0	0	0	0					a6	a2	0
23	0	0	0	0	0					0	a0	0
24	0	3	0	0	0					0	a0	0
25	0	1	1	0	0					0	a0	0
26	0	0	1	0	0					0	a0	a0
27	0	0	1	1	0					10	0	a0
28	0	0	0	0	0					a19	0	a0
29	0	0	0	0	-					a3	0	a1
30	0	0	0	0	-					0	0	a5
31	0	-	0	0	-					0	33	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	57	35	0	1.8	113
November	22	4	0	.7	44
December	4	1	0	.1	8
Calendar year 1944	1,298	413	0	3.5	2,570
January	9	2	0	.3	18
February	30	17	0	1.1	60
March	0	0	0	0	0
April	0	0	0	0	0
May	0	0	0	0	0
June	0	0	0	0	0
July	169	42	0	5.5	335
August	339	80	0	10.9	672
September	40	30	0	1.3	79
Water year 1944-45	670	80	0	1.8	1,330

Peak discharge.- July 2 (11:40 p.m.) 3,740 sec.-ft.; July 21 (8:30 p.m.) 918 sec.-ft.; Aug. 8 (1 a.m.) 1,220 sec.-ft.; Aug. 9 (8 a.m.) 2,140 sec.-ft.; Aug. 10 (1 a.m.) 2,160 sec.-ft.; Aug. 31 (10 p.m.) 710 sec.-ft.

a No gage-height record; discharge computed on basis of range in stage and weather records.

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

Jemez Creek near Bernalillo, N. Mex.

Location.- Water-stage recorders on right and left banks, lat. 35°23'40", long. 106°32'25", in S½ sec. 32, T. 14 N., R. 4 E., about 2 miles upstream from mouth and 6.2 miles north of Bernalillo. Datum of gage is 5,120.11 feet above mean sea level, datum of 1929.

Records available.- March 1936 to January 1938 and March 1943 to September 1945.

Extremes.- Maximum discharge during year, 15,300 second-feet Oct. 18 (gage height, 3.80 feet), from rating curve extended above 3,000 second-feet by logarithmic plotting; no flow at times.

1936-38, 1943-45: Maximum discharge, that of Oct. 18, 1944; no flow at times.

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

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	20	34	20	15	34	16	52	608	71	0	0	
2	16	43	20	18	30	22	57	608	62	0	0	
3	14	43	19	20	29	25	67	888	52	0	0	
4	19	35	25	14	25	23	96	676	39	0	0	
5	26	35	16	13	23	26	67	920	30	0	0	
6	23	42	17	14	20	24	78	592	26	0	0	
7	15	39	25	18	14	25	117	584	28	0	0	
8	a12	35	34	30	19	23	145	560	24	0	0	
9	a11	38	20	34	26	17	465	490	18	0	1,030	
10	a10	24	14	34	22	23	1,120	360	13	0	74	
11	a9	30	14	38	22	29	726	450	17	0	33	
12	a9	29	19	39	16	42	746	450	14	0	96	
13	8	22	21	30	29	53	620	500	10	0	71	
14	8	27	14	29	34	71	634	662	6	0	19	
15	10	21	12	23	31	46	586	420	0	0	5	
16	1,170	21	9	21	38	39	352	400	0	0	0	
17	278	29	7	28	35	28	440	430	0	0	0	
18	562	26	14	23	25	26	392	392	0	0	0	
19	1,290	29	8	14	24	31	512	292	0	0	0	
20	36	27	8	23	24	35	941	430	0	0	1	
21	36	26	7	24	31	25	1,030	202	0	0	0	
22	35	34	7	27	30	39	1,230	226	0	0	0	
23	40	39	10	25	22	45	1,310	158	0	0	0	
24	38	78	14	55	23	53	1,030	120	0	0	0	
25	38	43	19	48	25	50	821	104	0	1	0	
26	42	39	21	42	26	53	939	93	0	0	0	
27	40	42	26	52	28	46	718	85	0	0	0	
28	36	34	31	43	24	43	662	90	0	0	0	
29	a34	29	46	34	-	45	548	117	0	0	0	
30	33	26	42	36	-	46	824	93	0	0	0	
31	38	-	22	30	-	57	-	93	-	0	0	

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	3,956	1,290	8	128	7,850
November	1,019	78	21	34.0	2,020
December	581	46	7	18.7	1,150
Calendar year 1944	26,312	1,290	0	71.9	52,190
January	894	55	13	28.8	1,770
February	728	38	14	26.0	1,440
March	1,126	71	16	36.3	2,230
April	17,325	1,310	52	578	34,360
May	12,093	920	85	390	23,990
June	410	71	0	13.7	813
July	1	1	0	0.0	2.0
August	1,328	1,030	0	42.8	2,630
September	0	0	0	0	0
Water year 1944-45	39,461	1,310	0	108	78,260

Peak discharge.- Oct. 16 (11 a.m.) 5,100 sec.-ft.; Oct. 18 (12 p.m.) 15,300 sec.-ft.; Oct. 19 (3 a.m.) 14,900 sec.-ft.; Aug. 9 (6 a.m.) 12,400 sec.-ft.

a No gage-height record; discharge computed on basis of weather records and records for Rio Puerco near Cabezon.

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

Tijeras Creek near Albuquerque, N. Mex.

Location.- Water-stage recorder and concrete control, lat. 35°03'40", long. 106°29'40", in SW¼ sec. 26, T. 10 N., R. 4 E., at Mann diversion dam and 9 miles east of Albuquerque.

Records available.- April 1943 to September 1945 in reports of Geological Survey. January 1921 to January 1922 in reports of State engineer.

Extremes.- Maximum discharge during year not determined (probably occurred Aug. 9); minimum daily, 0.2 second-foot June 10.

1943-45: Maximum discharge, 6,410 second-feet July 19, 1944 (gage height, 8.75 feet), from rating curve extended above 1,100 second-feet; minimum daily, that of June 10, 1945.

Remarks.- Records fair October to May, others poor. Several diversions above station for irrigation.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.6	1.2	2.5	3.4	*1.6	2.5	*1.3	1.2	a0.6	0.4	a1	1.9
2	1.9	1.1	2.5	3.4	6.9	2.5	1.3	1.0	.6	.5	a1	1.3
3	1.5	1.0	2.5	2.6	6.1	2.2	1.5	.6	.7	.9	a1	1.1
4	1.9	1.2	2.5	*1.8	3.2	2.2	1.4	.7	.5	3.0	a.9	1.0
5	1.3	1.1	2.8	1.9	2.2	2.2	b1.3	.6	.5	1.8	a1	.9
6	1.3	1.4	2.8	1.8	2.2	2.2	*1.5	.8	.6	1.5	a1	a.8
7	1.5	1.9	2.4	1.8	2.1	2.1	1.4	1.0	.4	2.2	a3	a.8
8	1.6	1.8	2.1	1.8	2.4	2.2	1.3	.9	.3	2.2	a6	a.8
9	1.3	1.8	2.2	1.8	2.4	2.1	1.2	1.0	.3	1.9	20	a.7
10	1.3	1.8	1.8	1.8	2.4	1.9	1.2	1.0	.2	1.8	a8	a.7
11	1.4	1.6	1.9	*1.8	2.4	2.1	1.1	1.1	.4	3.4	a4	a.7
12	1.2	1.6	1.9	1.8	2.6	2.4	.9	.8	.4	1.5	a3	a.6
13	1.4	1.8	1.9	1.8	2.8	2.4	.9	.4	.7	1.5	a3	a.6
14	1.9	1.9	*2.1	1.8	2.8	2.5	1.3	.4	.6	a1.0	a4	a.6
15	2.1	1.9	1.5	1.8	2.8	2.4	2.1	.4	.4	a1.5	a3	a.5
16	5.4	2.1	1.8	1.8	2.8	2.1	1.8	1.1	.4	2.1	a2.5	a.7
17	2.2	2.1	1.5	2.1	2.6	1.9	1.8	1.0	.9	2.2	a2	a.7
18	2.5	1.9	1.5	1.8	2.5	2.2	1.9	1.0	.9	2.2	a2	a.7
19	1.6	1.9	b1.5	1.6	2.4	2.2	2.5	1.3	.5	1.9	a2	a.5
20	1.4	2.1	1.5	1.8	2.6	2.1	2.2	1.0	.3	1.6	a2	.5
21	1.3	2.2	1.3	1.8	3.0	2.1	2.5	.8	.4	a1.0	a3	a.5
22	1.3	2.4	2.1	1.8	2.5	2.1	2.5	.8	.9	a3	a2.5	a.5
23	1.3	2.2	*2.1	b1.8	2.5	2.1	2.6	1.3	.5	a2	a2.5	a.5
24	1.2	4.2	2.4	*1.8	2.4	1.9	2.2	1.2	.4	a3	a2.5	a.5
25	1.0	2.6	3.2	1.8	2.4	1.8	1.9	1.1	.5	a5	2.5	a.5
26	.6	2.6	2.6	1.9	2.5	1.6	1.2	.9	.8	8	2.1	a.5
27	1.2	2.5	2.2	1.9	2.6	1.5	1.1	.8	.8	a5	1.4	a.5
28	1.2	2.5	2.1	1.8	2.8	1.6	1.1	a.7	.8	a1.3	.8	a.7
29	1.2	2.4	2.8	1.8	-	1.5	1.2	a.7	.7	a2	a.7	a1.5
30	1.2	2.5	2.6	b1.6	-	1.5	1.3	a.7	.4	a1.5	.8	a1.5
31	1.2	-	2.5	1.6	-	1.4	-	a.6	-	a1	1.6	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	49.0	5.4	0.6	1.58	97
November	59.3	4.2	1.0	1.98	118
December	67.1	3.2	1.3	2.16	133
Calendar year 1944	1,167.6	240	.3	3.19	2,320
January	59.8	3.4	1.6	1.93	119
February	78.5	6.9	1.6	2.80	156
March	63.5	2.5	1.4	2.05	126
April	47.5	2.6	.9	1.58	94
May	26.9	1.3	.4	.87	53
June	16.4	.9	.2	.55	33
July	67.9	8	.4	2.19	135
August	90.8	20	.7	2.93	180
September	23.4	1.9	.5	.78	46
Water year 1944-45	650.1	20	.2	1.78	1,290

* Winter discharge measurement made on this day.

a No gage-height record; discharge computed on basis of 4 discharge measurements and weather records.

b Stage-discharge relation affected by ice.

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

Rio Puerco near Cabezon, N. Mex.

Location.- Water-stage recorder and concrete control, lat. 35°42'10", long. 107°00'40", in SE¼ sec. 14, T. 17 N., R. 2 W., 1½ miles downstream from San Luis diversion dam, 2½ miles northeast of San Luis, 7 miles northeast of Cabezon, and 15 miles upstream from Chico Arroyo.

Drainage area.- 360 square miles.

Records available.- February 1943 to September 1945.

Extremes.- Maximum discharge during year, 1,170 second-feet Oct. 16 (gage height, 4.75 feet); no flow at times.
1943-45: Maximum discharge, 4,400 second-feet June 28, 1943 (gage height, 10.6 feet, by slope-area method); no flow at times.

Remarks.- Records good except those for periods of ice effect or no gage-height record, which are poor. Diversions above station for irrigation.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	a0.5	0.3	b0.5	a1.5	b0.1	1.5	a5.0	125	a8.0	0	0	a0.1
2	23	.2	b.5	a1.0	161	*b1.2	*7.4	155	a6.0	0	0	a.1
3	a10	.2	b.5	*b1.0	243	b1.0	6.4	172	a4.0	0	0	a.1
4	6.9	.2	*b.5	b1.0	141	b1.0	b1.6	220	a3.0	0	0	a.1
5	2.2	.2	b.4	1.3	57	b.8	b2.0	255	a2.3	0	0	a.1
6	a1.0	.3	b.3	1.0	*36	b.6	2.0	264	a1.5	0	0	a.1
7	a.5	.4	b.2	b1.2	18	b.5	2.1	200	.9	0	0	a0
8	a.3	.8	b.2	1.3	10	b.4	4.3	172	.8	0	.3	a0
9	.2	.6	b.1	*1.6	15	.4	*6.6	158	.7	0	153	a0
10	.2	.5	0	b1.5	23	1.3	16	151	.8	0	4.0	a0
11	.2	.4	0	b1.5	18	3.2	18	134	.9	0	15	a0
12	.2	.3	0	b2.0	9.5	*3.5	8.8	123	.7	0	92	a0
13	.2	.3	*0	b3.0	*8.0	4.5	1.9	120	.4	0	2.6	a0
14	7.0	.3	0	b4.5	38	9.9	2.2	112	.2	0	a1.0	a0
15	20	.2	0	7.8	74	11	12	101	.2	0	a.5	a0
16	280	.3	b.1	*6.9	70	10	12	66	.1	0	a.2	a0
17	21	.3	b.2	6.9	29	8.8	20	38	.1	.1	a.1	a0
18	a6	.3	b.2	11	15	12	13	53	0	0	a.1	a0
19	174	.3	*b.2	9.1	12	*30	21	70	.1	0	a.1	a0
20	a10	.3	b.2	4.9	a10	8.4	33	79	0	0	14	a0
21	a3	.3	b.3	1.9	a5	7.2	53	57	0	0	65	a0
22	a1	.4	b.4	b1.0	a3	7.2	68	22	0	0	35	a0
23	.5	.7	b1.6	*b.5	*b2.0	8.4	78	15	0	0	a2	a0
24	.5	*1.8	57	b.3	b1.6	10	77	12	0	0	a.5	a0
25	.5	b1.6	61	b.2	b2.0	7.8	93	13	0	0	a.1	a0
26	.4	b1.0	*34	b.2	b1.6	*32	85	16	0	.3	a.1	a0
27	.4	b.8	15	b.1	b1.4	20	68	18	0	.2	a.1	a0
28	.3	b.7	b8	b.1	b1.2	a9.0	64	22	0	0	a.1	a0
29	.4	b.6	b4	b.1	-	a6.0	70	14	0	0	a.2	a0
30	.4	b.6	b3	*b0	-	a5.5	89	12	0	0	a1.0	a0
31	.3	-	a2	b.1	-	a5.0	-	10	-	0	a.2	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	571.1	280	0.2	18.4	1,130
November	15.1	1.8	.2	.50	30
December	190.4	61	0	6.14	378
Calendar year 1944	4,456.2	747	0	12.2	8,840
January	74.5	11	0	2.40	148
February	1,005.4	243	.1	35.9	1,990
March	228.1	32	.4	7.36	452
April	935.3	93	1.6	31.2	1,860
May	2,979	264	10	96.1	5,910
June	30.7	8.0	0	1.02	61
July	.6	.3	0	.02	1.2
August	387.2	153	0	12.5	768
September	.6	.1	0	.02	1.2
Water year 1944-45	6,418.0	280	0	17.6	12,730

Peak discharge.- Oct. 16 (5:30 a.m.) 1,170 sec.-ft.; Oct. 19 (1:30 a.m.) 975 sec.-ft.; Feb. 2 (9 p.m.) 875 sec.-ft.; Feb. 3 (10:30 p.m.) 555 sec.-ft.; Aug. 9 (3 a.m.) 955 sec.-ft.; Aug. 11 (11:30 p.m.) 450 sec.-ft.

* Winter discharge measurement made on this day.

a No gage-height record; discharge computed on basis of weather records and records for nearby stations.

b Stage-discharge relation affected by ice.

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

Rio Puerco at Rio Puerco, N. Mex.

Location.- Water-stage recorder and concrete control, lat. 34°47'35", long. 106°59'15", in W½ sec. 31, T. 7 N., R. 1 W. (projected), in hamlet of Rio Puerco in San Clemente Grant, at Atchison, Topeka & Santa Fe Railway bridge, 7 miles downstream from San Jose River.

Drainage area.- 5,160 square miles.

Records available.- September 1910 to October 1911, August 1912 to December 1914 (records fragmentary, gage heights only prior to March 1913), and March 1934 to September 1945 in reports of Geological Survey. January 1913 to December 1925 and September 1926 to December 1927 in reports of State engineer.

Average discharge.- 20 years (1913-17, 1919-20, 1921-24, 1926-27, 1934-45), 98.7 second-feet.

Extremes.- Maximum discharge during year, 7,640 second-feet Oct. 19 (gage height, 3.57 feet); no flow at times.

1934-45: Maximum discharge, 28,000 second-feet Aug. 21, 1935 (gage height, 7.24 feet), by computation of flow over dam; no flow at times.

Remarks.- Records poor. Several diversions above station for irrigation.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	26	0	0	0	1	4	7	14		2	0	50
2	14	0	0	0	2	4	4	20		2	0	20
3	6	0	1	0	2	4	3	58		0	0	5
4	12	0	3	0	120	4	1	80		0	0	2
5	20	0	2	0	514	4	1	100		0	0	1
6	11	0	1	0	188	3	0	179		0	0	0
7	6	2	0	0	93	2	1	213		0	0	0
8	2	2	0	1	28	2	0	230		0	10	0
9	1	1	0	2	16	2	0	196		0	20	0
10	0	1	0	2	12	3	0	119		0	5	0
11	0	1	0	2	12	3	0	100		0	20	0
12	0	1	0	1	12	2	0	93		0	10	0
13	0	1	0	2	12	1	0	86		0	1,370	0
14	0	0	0	1	12	1	0	86		0	414	0
15	6	0	0	1	10	1	0	80		0	100	0
16	558	0	0	1	6	2	1	70		0	5	10
17	1,100	1	0	2	31	0	1	50		0	1	2
18	106	2	0	3	39	1	1	26		0	1	0
19	1,930	3	0	4	22	3	2	10		0	1	0
20	556	2	0	2	16	4	4	4		0	20	0
21	62	1	0	0	14	9	3	10		0	40	0
22	22	1	0	0	d8	7	2	25		0	150	0
23	12	1	1	0	d5	14	4	10		0	50	0
24	3	4	4	0	d5	11	36	9		0	5	0
25	2	48	3	0	d5	9	48	3		0	3	0
26	1	11	2	0	d3	7	42	1		0	1	0
27	0	3	1	2	d3	7	66	0		48	0	0
28	1	1	1	1	d4	3	39	0		7	0	0
29	1	1	0	1	-	4	15	0		2	0	10
30	2	0	1	2	-	4	14	0		0	0	2
31	1	-	1	1	-	8	-	0		0	0	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	4,461	1,930	0	144	8,850
November	88	48	0	2.9	175
December	21	4	0	.7	42
Calendar year 1944	24,861	5,580	0	67.9	49,310
January	31	4	0	1.0	61
February	1,195	514	1	42.7	2,370
March	133	14	0	4.3	264
April	295	66	0	9.8	585
May	1,872	230	0	60.4	3,710
June	0	0	0	0	0
July	61	48	0	2.0	121
August	2,226	1,370	0	71.8	4,420
September	102	50	0	3.4	202
Water year 1944-45	10,485	1,930	0	28.7	20,800

Peak discharge.- Oct. 16 (11:30 p.m.) 3,580 sec.-ft.; Oct. 19 (8 a.m.) 7,640 sec.-ft.; Aug. 13 (7:30 a.m.) 2,950 sec.-ft.

d Doubtful gage-height record; discharge computed on basis of weather records and records for Rio Puerco near Bernardo and San Jose River at Correo.

Note.- No gage-height record Mar. 1-12, May 15-31, July 1, 2, 28, 29, Aug. 8-12, Aug. 15 to Sept. 30; discharge computed on basis of weather records, 2 discharge measurements, 8 field observations, and records for Rio Puerco near Bernardo and San Jose River at Correo.

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

Rio Puerco near Bernardo, N. Mex.

Location.- Water-stage recorder, lat. 34°24'30", long. 106°51'10", in Sevilleta Grant, at bridge on U. S. Highway 85, 1.2 miles southwest of Bernardo, 3 miles upstream from mouth, and 16 miles south of Belen.

Records available.- November 1939 to September 1945. September 1910 to August 1914 (fragmentary gage heights only), at site at Atchison, Topeka & Santa Fe Railway bridge, 1½ miles downstream, published as Rio Puerco near La Joya.

Extremes.- Maximum discharge during year, 11,500 second-feet Oct. 19 (gage height, 8.40 feet); no flow for extended periods.

1939-45: Maximum discharge, 18,800 second-feet Sept. 23, 1941 (gage height, 9.80 feet), from rating curve extended above 7,800 second-feet by logarithmic plotting; no flow for extended periods.

Remarks.- Records poor. Many diversions above station for irrigation.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	68	0	0	0	0	1	0	14			0	1
2	11	0	0	0	0	1	0	14			0	0
3	6	0	0	0	0	2	0	32			0	25
4	1	0	0	0	0	2	0	104			46	13
5	0	0	0	0	391	1	0	118			2	2
6	4	0	0	0	574	1	0	134			1	1
7	3	0	0	0	d200	2	0	146			0	0
8	2	0	0	0	d100	1	0	142			44	0
9	1	0	0	0	d30	2	0	158			14	0
10	1	0	0	0	d20	1	0	170			29	0
11	0	0	0	0	d15	1	0	146			7	0
12	0	0	0	0	d10	0	0	122			22	0
13	0	0	0	0	15	0	0	98			1,320	0
14	0	0	0	0	24	0	0	95			773	0
15	5	0	0	0	21	0	0	92			167	0
16	658	0	0	0	11	0	0	86			56	0
17	1,890	0	0	1	4	0	0	58			17	0
18	302	0	0	2	17	0	0	34			5	0
19	2,220	0	0	1	56	0	0	16			4	0
20	1,150	0	0	0	42	0	0	7			2	0
21	464	1	0	0	25	0	0	1			29	0
22	122	0	0	0	15	0	0	7			137	0
23	40	0	0	0	11	0	0	22			122	0
24	17	0	0	0	5	0	0	10			40	0
25	8	1	0	0	4	1	4	5			16	0
26	3	6	1	0	4	2	40	2			4	0
27	1	12	1	1	4	1	52	0			1	0
28	2	2	0	0	2	0	83	0			0	0
29	1	0	0	0	-	0	35	0			0	0
30	0	0	0	0	-	0	17	0			0	0
31	0	-	0	0	-	0	-	0			1	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	6,980	2,220	0	225	13,840
November	22	12	0	.7	44
December	2	1	0	.1	40
Calendar year 1944	28,081	6,730	0	76.7	55,700
January	5	2	0	.2	9.9
February	1,600	574	0	57.1	3,170
March	19	2	0	.6	38
April	231	83	0	7.7	458
May	1,833	170	0	59.1	3,640
June	0	0	0	0	0
July	0	0	0	0	0
August	2,859	1,320	0	92.2	5,670
September	42	25	0	1.4	83
Water year 1944-45	13,593	2,220	0	37.2	26,960

Peak discharge.- Oct. 16 (9 p.m.) 3,730 sec.-ft.; Oct. 17 (5:30 p.m.) 6,180 sec.-ft.; Oct. 19 (4 p.m.) 11,500 sec.-ft.; Aug. 13 (2:30 p.m.) 3,620 sec.-ft.

d Doubtful gage-height record; discharge computed on basis of weather records and records for Rio Puerco at Rio Puerco and Rio Grande at San Acacia.

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

Chico Arroyo near Guadalupe, N. Mex.

Location.- Water-stage recorder and concrete control, lat. 35°35'30" (corrected), long. 107°11'05", in W½ sec. 29, T. 16 N., R. 3 W., a quarter of a mile upstream from mouth, 5 miles northwest of Guadalupe, 8.1 miles by road west of Cabezon.

Drainage area.- 1,390 square miles.

Records available.- November 1943 to September 1945.

Extremes.- Maximum discharge during year, 2,350 second-feet Aug. 21 (gage height, 5.62 feet); no flow at times.

1943-45: Maximum discharge, 12,700 second-feet July 21, 1944 (gage height, 12.72 feet), from rating curve extended above 2,500 second-feet by logarithmic plotting; no flow at times.

Remarks.- Records poor. No diversion above station.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	a5	0.1	0.2	0.1	0	0	0			0	1.0	
2	a20	.1	.2	.1	0	0	0			0	a0	
3	13	.1	.1	*.1	54	0	0			0	a0	
4	4.0	.1	.2	.1	325	.1	0			0	a.5	
5	2	.1	.1	.1	280	.1	0			0	89	
6	a1	.1	.2	.1	130	.1	0			0	14	
7	a.7	.1	.1	.1	54	.1	0			0	21	
8	a.4	0	.1	.1	26	.1	0			0	33	
9	a.2	0	.1	.1	21	.1	0			0	16	
10	.7	0	.2	.1	50	.1	0			0	7.5	
11	.4	0	.1	.1	21	.1	0			0	118	
12	.2	0	.1	0	a5	.1	0			0	528	
13	.1	0	*.1	.1	1.9	.1	0			0	600	
14	.1	0	.1	.1	1.2	1.1	0			0	a50	
15	80	0	b0	.1	.2	5.6	.6			0	a10	
16	346	.1	b0	.1	32	1.9	.5			0	a2	
17	a20	.1	b0	.2	46	.8	1.2			0	a.5	
18	a5	.2	b0	.2	17	.7	1.4			0	a.2	
19	221	.1	*b0	.1	1.8	.8	.7			0	a0	
20	a15	.1	b0	.1	1.6	.2	.4			0	a0	
21	a2	.1	.1	0	1.8	0	.4			0	379	
22	a.5	0	.1	0	1.4	0	.3			0	a20	
23	.2	.1	.1	0	1.1	0	.2			0	a5	
24	.2	.2	.1	0	.7	0	.2			0	a1	
25	.2	.1	.2	0	.4	0	.4			0	a.5	
26	.1	.1	*.2	0	.2	0	.2			0	a.3	
27	.2	.1	.2	0	.2	0	.1			4.8	a.2	
28	.2	.1	.2	0	.1	0	.4			3.4	a.1	
29	.2	.2	b.1	0	-	0	.1			a0	a.1	
30	.1	.2	b.1	0	-	0	0			5.1	a.1	
31	.1	-	b.1	0	-	0	-			16	a.1	

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	738.8	346	0.1	23.8	1,470
November	2.5	.2	0	.08	5.0
December	3.4	.2	0	.11	6.7
Calendar year 1944	7,207.7	2,490	0	19.7	14,310
January	2.1	.2	0	.07	4.2
February	1,073.6	325	0	38.3	2,130
March	12.1	5.6	0	.39	24
April	7.1	1.4	0	.24	14
May	0	0	0	0	0
June	0	0	0	0	0
July	29.3	16	0	.95	58
August	1,897.1	600	0	61.2	3,760
September	0	0	0	0	0
Water year 1944-45	3,766.0	600	0	10.3	7,470

Peak discharge.- Oct. 16 (6 a.m.) 1,040 sec.-ft.; Aug. 5 (5 a.m.) 660 sec.-ft.; Aug. 11 (10:30 p.m.) 2,330 sec.-ft.; Aug. 13 (2:30 a.m.) 1,890 sec.-ft.; Aug. 21 (5 a.m.) 2,330 sec.-ft.

* Winter discharge measurement made on this day.

a No gage-height record; discharge computed on basis of weather records, engineer's notes, and records for Rio Puerco near Cabezon.

b Stage-discharge relation affected by ice.

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

Bluewater Creek near Bluewater, N. Mex.

Location.- Water-stage recorder, lat. 35°17'50", long. 108°01'40", in W½SW¼ sec. 5, T. 12 N., R. 11 W., 2½ miles northwest of Bluewater and 8 miles downstream from storage reservoir of Bluewater-Toltec Irrigation District.

Drainage area.- 235 square miles.

Records available.- May 1912 to December 1914 and October 1930 to September 1945 in reports of Geological Survey. May 1912 to June 1919 and April 1921 to December 1931 in reports of State engineer.

Average discharge.- 15 years (1930-45), 16.1 second-feet (unadjusted).

Extremes.- Maximum discharge during year, 117 second-feet Aug. 19 (gage height, 3.96 feet); minimum daily not determined.
1930-45: Maximum discharge, 1,010 second-feet Sept. 1, 1936 (gage height, 6.15 feet, site and datum then in use), from rating curve extended above 65 second-feet by logarithmic plotting; no flow Mar. 9, 1931, Feb. 3, 1935.

Remarks.- Records good except those for period of ice effect, which are poor. Flow regulated by Bluewater-Toltec Reservoir (capacity, 46,000 acre-feet).

Discharge, in second-feet, wster year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.0	0.7	0.4	0.4	0.2	0.2	0.3	17	30	19	6.7	1.1
2	1.2	.7				.3	.2	18	30	20	6.5	.6
3	1.1	.7				.3	.3	19	29	19	6.5	.5
4	1.0	.7				.3	.4	20	29	17	6.3	.4
5	.8	.7			(*)	.3	.4	21	28	14	6.2	.3
6	.8	*.8				.4	.4	21	28	14	6.2	.3
7	.7	.9				*.3	.4	21	28	14	6.2	.4
8	.6	.8		(*)		.3	.4	21	23	13	6.2	3.6
9	.6	.8				.3	.5	21	20	13	5.8	5.0
10	.7	.8				.2	.6	26	19	7.5	5.6	4.8
11	.7	.8	.3			.2	.8	27	15	6.9	10	8.3
12	1.4	.8	(*)			.2	.8	27	12	12	9.8	7.6
13	.9	.8				.2	1.0	27	11	12	9.5	2.9
14	.7	.8				.4	1.1	27	11	12	9.5	.7
15	.7	.8				.4	1.5	28	11	12	8.5	2.6
16	.7	.8				.4	1.5	29	11	12	2.3	3.5
17	.6	.8				.4	1.4	28	11	16	1.5	2.9
18	.6	.9				.4	1.5	28	11	16	1.4	2.5
19	.6	.8			.2	.5	1.6	30	11	16	5.8	2.4
20	.7	.8			.2	.4	1.7	32	11	14	5.6	1.2
21	.6	.8		.3	.2	.4	1.8	32	11	10	5.6	.5
22	.7	.7			.2	.3	1.9	31	11	5.2	5.4	.3
23	.8	.7			.2	.4	2.1	31	11	4.6	5.0	.2
24	.8	.8			.2	.5	2.6	30	11	4.4	7.3	.2
25	.7	.7			.2	.4	2.4	30	11	7.6	8.1	.2
26	.7	.6			.2	.4	2.6	30	15	10	7.8	.5
27	.7	.5			.2	.3	10	30	15	9.5	9.3	.6
28	.7	.5			.2	.4	10	30	15	7.3	7.3	.7
29	.8	.5			-	.3	10	30	16	8.3	6.9	.8
30	.8	.5			-	.3	10	30	17	8.5	3.0	.6
31	.7	-			-	.3	-	30	-	7.6	.9	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	24.1	1.4	0.6	0.78	48
November	22	.9	.5	.73	44
December	10.3	-	-	.33	20
Calendar year 1944	4,040.6	49	-	11.0	8,020
January	11.3	-	-	.36	22
February	5.6	-	-	.20	11
March	10.4	.5	.2	.34	21
April	70.2	10	.2	2.34	139
May	822	32	17	26.5	1,630
June	512	30	11	17.1	1,020
July	362.4	20	4.4	11.7	719
August	192.7	10	.9	6.22	382
September	56.2	8.3	.2	1.87	111
Water year 1944-45	2,099.2	32	-	5.75	4,170

* Winter discharge measurement made on this day.
Note.- Stage-discharge relation affected by ice Nov. 25 to Feb. 18.
Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

San Jose River near Grants, N. Mex.

Location.- Water-stage recorder and concrete control, lat. 35°04', long. 107°44', in SE¼SE¼ sec. 23, T. 10 N., R. 9 W., at west boundary of Acoma Indian Reservation and 8½ miles southeast of Grants.

Records available.- June 1936 to September 1945.

Extremes.- 1941-42: Maximum discharge during water year, 57 second-feet Oct. 3 (gage height, 1.29 feet); minimum daily, 4.4 second-feet Sept. 19-21.

1942-43: Maximum discharge during water year, 222 second-feet June 30 (gage height, 2.38 feet); minimum daily, 2.5 second-feet May 7-10.

1943-44: Maximum discharge during water year, 120 second-feet July 21 (gage height, 1.85 feet); minimum daily, 3.7 second-feet Nov. 4.

1944-45: Maximum discharge during water year, 101 second-feet Oct. 16 (gage height, 1.69 feet); minimum daily, 4.9 second-feet July 9-11, 14, 15, 18-22.

1936-45: Maximum discharge, 530 second-feet Apr. 30, 1941 (gage height, 3.20 feet); minimum daily, that of May 7-10, 1943.

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

Discharge, in second-feet, 1941-45

1941-42

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	6.1	5.8	5.5	8.2	8.6	10	8.2	5.5	6.1	6.7	6.1	4.7
2	5.5	5.8	5.5	10	8.6	11	8.2	5.5	6.1	6.7	6.1	4.7
3	14	5.5	5.5	9.3	9.3	11	8.6	5.2	6.1	6.7	6.4	4.7
4	7.6	5.5	5.5	8.2	11	10	8.6	5.2	5.8	6.7	6.1	4.7
5	6.1	5.2	5.2	6.7	11	9.8	8.6	5.2	6.1	6.7	5.5	4.7
6	5.5	5.2	5.2	5.8	10	9.8	8.6	5.2	6.1	6.7	5.5	4.7
7	5.2	5.2	5.5	6.1	10	10	7.9	5.2	6.1	6.7	5.2	4.7
8	5.0	5.2	5.5	6.7	9.8	9.8	7.3	5.0	6.1	6.7	5.2	4.7
9	5.0	5.2	5.5	7.6	9.8	11	6.4	5.2	5.8	6.4	5.5	4.7
10	5.0	5.2	5.8	7.9	9.0	11	6.1	5.2	5.8	6.4	5.5	5.0
11	5.0	5.2	5.8	8.2	9.3	11	5.8	5.5	5.8	6.4	5.2	4.7
12	5.8	5.2	6.1	9.0	10	11	6.1	5.5	5.8	6.4	5.0	4.7
13	5.2	5.5	7.0	11	9.8	11	6.1	5.8	5.8	6.4	5.0	4.7
14	5.2	5.5	8.6	13	9.8	6.4	6.1	5.5	5.8	6.1	5.0	5.5
15	5.2	5.5	8.6	13	9.3	9.8	5.8	5.8	5.8	6.4	5.0	6.1
16	5.2	5.5	8.6	13	9.0	9.8	5.8	5.8	5.8	6.4	5.0	5.2
17	5.2	5.5	8.6	14	8.2	7.3	5.5	5.8	5.8	6.1	5.0	5.0
18	5.2	5.5	8.2	11	7.9	9.0	5.5	5.8	6.1	6.1	5.0	5.0
19	5.0	5.5	7.6	12	8.6	9.0	5.8	5.5	6.1	6.1	5.0	4.4
20	5.0	5.5	7.6	10	7.9	9.8	5.8	5.5	6.1	6.1	4.7	4.4
21	5.0	5.5	7.9	10	8.6	9.3	5.8	5.5	6.1	6.1	4.7	4.4
22	5.0	5.5	7.9	10	6.4	9.0	5.8	5.5	6.4	6.1	4.7	4.7
23	5.2	5.2	8.6	10	11	9.8	5.8	5.8	6.4	6.1	4.7	4.7
24	5.2	5.2	8.2	9.8	12	10	6.1	5.8	6.4	6.1	4.7	4.7
25	5.2	5.5	7.0	11	11	10	6.4	5.8	6.7	6.1	4.7	4.7
26	5.2	5.2	7.3	10	11	10	6.1	5.8	6.7	6.1	4.7	4.7
27	5.2	5.2	7.0	10	9.8	9.3	6.4	5.8	6.7	6.1	4.7	4.7
28	6.1	5.2	6.7	10	10	9.0	6.1	6.1	6.7	6.1	5.0	4.7
29	6.4	5.5	7.3	9.8	-	8.6	5.8	6.1	6.7	6.1	5.0	4.7
30	6.4	5.5	7.6	8.6	-	8.6	5.8	6.1	6.7	6.1	5.0	4.7
31	5.8	-	7.9	9.3	-	7.6	-	6.1	-	6.1	5.0	-

Discharge, in second-feet, of San Jose River near Grants, N. Mex., 1941-45--Continued

1942-43

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4.7	4.7	5.5	5.5	8.2	6.7	6.1	5.2	3.7	17	5.1	6.9
2	4.7	4.7	5.5	5.5	8.2	6.7	6.4	4.7	3.7	7.2	4.9	5.4
3	4.7	4.4	5.5	5.5	8.6	7.0	7.3	4.4	4.0	5.7	4.9	5.4
4	4.7	4.4	5.2	5.5	7.6	7.3	7.3	4.7	4.0	5.1	4.9	5.4
5	4.7	4.4	5.5	5.5	7.6	8.2	7.3	5.0	4.0	5.4	5.1	5.4
6	4.4	4.4	5.5	5.2	6.4	9.3	7.3	4.0	4.0	5.4	5.1	5.4
7	4.4	4.4	5.5	5.2	6.4	9.0	7.3	2.5	4.2	5.1	5.1	5.1
8	4.4	4.4	5.5	5.2	6.1	9.0	7.0	2.5	4.2	5.1	5.1	5.1
9	4.4	4.7	5.8	5.2	5.5	7.9	6.4	2.5	4.8	5.1	5.1	5.1
10	4.4	4.7	5.8	5.2	5.0	6.4	7.0	2.5	6.7	5.4	5.1	5.1
11	4.7	4.7	5.5	5.2	5.0	5.8	6.7	2.7	6.1	5.1	5.1	5.1
12	5.0	4.7	5.2	5.2	4.7	5.8	6.4	2.9	6.1	5.1	5.1	5.1
13	4.7	4.7	5.2	5.2	5.2	6.1	5.8	2.9	5.8	5.1	5.1	5.1
14	4.7	5.0	5.2	5.2	6.1	6.1	5.8	2.9	5.8	6.3	7.3	5.4
15	4.7	5.0	5.0	4.7	7.0	6.4	5.8	2.9	6.4	5.4	10	5.4
16	4.7	4.7	5.2	4.7	7.0	7.0	5.8	3.1	6.7	5.4	5.7	5.7
17	4.7	4.7	5.2	4.7	7.0	6.4	5.8	3.1	6.7	5.1	5.1	5.7
18	4.7	5.0	5.2	4.7	6.4	5.5	5.8	3.3	6.4	5.1	5.4	5.7
19	5.0	5.2	5.2	4.7	4.7	6.4	5.5	3.3	6.4	5.1	5.4	5.7
20	4.7	5.0	5.2	4.7	6.1	5.8	5.5	3.3	6.4	5.4	5.4	5.7
21	4.7	5.0	5.2	4.7	4.4	5.8	5.5	3.3	6.1	5.7	5.4	5.7
22	4.7	5.0	5.2	4.7	4.7	6.1	5.2	3.3	5.8	5.4	5.4	5.7
23	4.7	5.0	5.2	4.7	7.3	6.4	5.2	3.3	5.8	5.4	12	5.7
24	4.7	5.0	5.2	4.7	6.1	8.2	5.2	3.5	5.5	5.1	20	5.7
25	4.7	5.2	5.2	5.0	5.5	9.3	5.2	3.5	5.8	5.1	7.9	5.7
26	4.7	5.2	5.2	5.0	5.5	8.2	5.2	3.5	5.5	5.1	26	5.7
27	4.4	5.2	5.2	5.0	5.2	8.2	5.2	3.5	5.5	5.4	14	5.7
28	4.7	5.2	5.2	6.1	6.1	6.7	5.2	3.5	5.2	5.4	9.5	5.7
29	4.7	5.2	5.5	6.4	-	6.4	5.2	3.5	5.9	5.4	7.2	5.7
30	4.7	5.5	5.5	6.7	-	6.4	5.5	3.7	80	5.1	9.1	5.7
31	4.7	-	5.5	7.6	-	6.4	-	3.7	-	5.1	10	-

1943-44

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	6.0	3.9	4.4	6.0	15	11	5.7	4.9	5.1	5.4	5.4	5.7
2	6.0	3.9	4.9	6.0	14	11	6.0	4.9	5.4	5.7	5.4	5.7
3	6.0	3.9	4.9	6.6	14	11	5.4	4.9	5.7	5.7	5.4	5.7
4	6.3	3.7	4.9	6.9	13	11	6.3	4.9	5.7	5.7	5.4	5.7
5	6.0	3.9	4.9	6.6	13	11	6.3	5.1	5.7	30	5.4	5.7
6	6.0	4.2	4.9	6.3	12	11	5.4	5.1	5.7	7.2	5.4	5.7
7	6.0	3.9	4.9	6.3	12	9.2	6.0	5.1	6.0	5.4	5.4	5.7
8	6.0	3.9	4.9	6.6	12	9.5	6.3	5.4	6.0	5.7	5.7	5.7
9	6.0	3.9	4.9	6.6	12	10	5.7	5.1	6.0	5.7	5.7	5.7
10	6.0	3.9	4.6	6.3	11	11	4.9	5.1	5.7	5.7	6.6	5.7
11	5.7	3.9	4.9	6.0	10	11	4.6	5.1	5.4	5.7	6.3	5.7
12	5.7	4.2	4.9	6.0	11	11	4.4	5.1	5.7	5.7	6.0	5.7
13	5.4	4.2	4.6	6.0	11	9.8	5.1	5.1	5.4	5.7	5.7	5.7
14	5.4	4.2	4.9	6.0	10	10	5.4	5.1	5.7	5.7	5.7	5.7
15	6.7	4.4	5.4	6.0	11	9.2	5.4	5.1	5.4	5.7	5.7	5.7
16	5.4	4.4	5.7	6.0	11	9.5	5.4	5.1	5.7	5.7	5.7	6.3
17	5.4	4.4	6.0	6.0	11	9.8	5.4	5.4	6.0	5.4	6.8	6.6
18	5.4	4.4	6.3	6.0	11	9.5	5.4	5.1	5.7	5.4	35	6.0
19	5.4	4.4	6.9	6.6	10	9.8	5.4	5.1	5.7	5.4	11	5.7
20	5.4	4.4	6.9	7.5	11	11	5.4	5.4	6.0	29	7.2	5.7
21	5.1	4.2	6.9	9.5	11	10	5.1	5.4	6.0	63	6.6	5.7
22	5.1	4.2	7.2	11	9.8	9.8	5.1	5.7	6.0	9.2	6.0	5.7
23	4.9	4.4	7.2	12	9.8	8.8	5.4	5.7	5.7	6.9	6.0	5.7
24	4.9	4.4	6.9	14	11	9.2	5.1	5.7	5.4	9.2	6.9	6.0
25	4.6	4.4	7.2	14	12	9.5	5.1	5.7	5.4	6.3	6.3	6.0
26	4.6	4.4	6.9	14	12	9.2	5.1	5.4	5.7	5.7	5.7	6.0
27	4.6	4.4	5.7	13	12	6.9	5.1	5.4	5.7	5.4	6.0	8.0
28	4.6	4.4	6.3	13	12	5.4	4.9	5.4	5.4	5.4	5.7	6.3
29	4.6	4.4	6.3	13	11	5.7	4.9	5.1	5.4	5.4	5.7	6.3
30	4.2	4.4	6.9	12	-	5.7	4.9	5.1	5.7	5.4	5.7	6.0
31	4.2	-	6.3	14	-	6.9	-	5.1	-	5.4	5.7	-

Peak discharge.- July 5 (3:30 a.m.) 74 sec.-ft.; July 21 (3 a.m.) 120 sec.-ft.; July 21 (11 a.m.) 101 sec.-ft.; Aug. 18 (2:30 p.m.) 89 sec.-ft.

Discharge, in second-feet, of San Jose River near Grants, N. Mex., 1941-45--Continued

1944-45

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	6.3	6.3	5.4	9.2	12	8.4	9.5	5.7	6.0	5.4	5.7	5.7
2	6.0	6.3	5.4	9.2	12	8.4	9.8	5.7	6.0	5.4	5.7	6.0
3	6.0	6.3	5.4	8.8	12	8.4	9.5	5.7	6.0	5.4	5.4	6.0
4	6.0	6.3	5.4	9.5	12	8.1	8.4	5.7	6.0	5.1	5.4	6.0
5	6.0	6.0	5.4	9.8	11	8.1	8.8	5.7	6.0	5.1	5.4	6.0
6	6.0	6.3	5.1	11	11	8.4	9.2	5.7	6.3	5.1	5.1	6.0
7	6.0	6.3	5.4	10	10	8.1	9.5	5.7	6.3	5.1	5.1	6.0
8	5.7	6.3	5.1	11	10	7.5	9.8	5.7	6.6	5.1	5.1	6.0
9	5.7	6.3	5.1	10	11	7.8	9.5	5.7	6.6	4.9	5.4	6.0
10	5.7	6.3	5.1	11	7.8	8.4	8.1	5.4	6.6	4.9	5.4	6.0
11	5.7	6.3	5.1	11	7.2	8.4	8.8	5.7	6.6	4.9	5.4	5.7
12	5.7	6.0	5.1	11	7.8	8.8	8.4	5.7	6.6	5.1	5.4	5.7
13	6.0	6.0	5.4	10	8.8	8.8	6.9	5.4	6.9	5.1	5.4	5.7
14	5.7	6.0	5.4	11	9.2	9.5	6.6	5.4	6.9	4.9	5.4	6.0
15	6.9	6.0	5.4	10	9.8	9.8	7.2	5.4	6.6	4.9	5.4	6.0
16	13	6.0	5.4	11	9.5	11	6.9	5.4	6.6	5.1	5.4	6.0
17	7.2	6.0	5.4	11	9.5	11	6.6	5.4	6.3	5.1	5.4	6.0
18	6.9	6.0	5.4	13	9.5	10	6.3	5.4	6.3	4.9	5.4	6.0
19	6.0	6.0	5.7	12	8.4	10	6.3	5.4	6.3	4.9	5.7	6.0
20	6.0	6.0	5.7	12	6.0	10	6.0	5.4	6.0	4.9	5.7	6.0
21	5.7	6.0	5.7	10	7.2	9.5	6.0	5.7	6.0	4.9	5.7	6.0
22	5.7	6.0	5.7	9.5	7.2	9.5	5.7	5.7	6.3	4.9	5.7	6.0
23	5.7	6.0	6.3	8.4	6.9	11	5.7	5.7	6.3	5.1	5.7	6.0
24	5.7	5.4	8.1	9.8	6.6	11	5.7	5.7	6.3	5.4	5.7	6.0
25	6.3	5.4	9.5	9.8	7.8	11	5.7	5.7	6.0	5.4	5.7	6.0
26	6.3	5.4	9.2	10	8.4	10	5.7	5.7	6.0	5.4	5.7	6.0
27	6.3	5.4	9.2	13	8.8	11	5.7	5.7	6.0	5.4	5.7	6.0
28	6.3	5.4	9.2	10	8.8	9.5	5.7	5.7	6.0	5.4	5.7	6.0
29	6.3	5.4	9.5	11	-	9.5	5.7	6.0	5.7	5.4	5.7	6.0
30	6.3	5.4	9.5	11	-	8.1	5.7	6.0	5.7	5.4	5.7	6.0
31	6.3	-	8.1	11	-	9.2	-	6.0	-	5.4	6.0	-

Monthly discharge, in second-feet, 1941-45

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October 1941	177.7	14	5.0	5.73	352
November	161.7	5.8	5.2	5.39	321
December	214.8	8.6	5.2	6.93	426
Calendar year 1941	7,108.4	448	4.4	19.5	14,100
January 1942	299.2	14	5.8	9.65	593
February	266.7	12	6.4	9.52	529
March	298.7	11	6.4	9.64	592
April	196.9	8.6	5.5	6.56	391
May	173.3	6.1	5.0	5.59	344
June	184.5	6.7	5.8	6.15	366
July	196	6.7	6.1	6.32	389
August	159.9	6.4	4.7	5.16	317
September	143.7	6.1	4.4	4.79	285
Water year 1941-42	2,473.1	14	4.4	6.78	4,900
October 1942	144.5	5.0	4.4	4.66	287
November	145.4	5.5	4.4	4.85	288
December	165.5	5.8	5.0	5.34	328
Calendar year 1942	2,374.3	14	4.4	6.50	4,710
January 1943	163.1	7.6	4.7	5.26	324
February	173.6	8.6	4.4	6.20	344
March	216.9	9.3	5.5	7.00	430
April	180.9	7.3	5.2	6.03	359
May	106.7	5.2	2.5	3.44	212
June	237.2	80	3.7	7.91	470
July	177.8	17	5.1	5.74	353
August	236.5	26	4.9	7.63	469
September	165.9	6.9	5.1	5.53	329
Water year 1942-43	2,114.0	80	2.5	5.79	4,190

Monthly discharge, in second-feet, of San Jose River near Grants, N. Mex., 1941-45--Continued

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October 1943	166.6	6.3	4.2	5.37	330
November	125.6	4.4	3.7	4.19	249
December	178.5	7.2	4.4	5.76	354
Calendar year 1943	2,129.3	80	2.5	5.83	4,220
January 1944	265.8	14	6.0	8.57	527
February	335.6	16	9.8	11.6	666
March	293.4	11	5.4	9.46	582
April	160.6	6.3	4.4	5.35	319
May	161.8	5.7	4.9	6.22	321
June	170.1	6.0	5.1	5.67	337
July	288.9	63	5.4	9.32	573
August	217.2	35	5.4	7.01	431
September	177.5	8.0	5.7	5.92	352
Water year 1943-44	2,541.6	63	3.7	6.94	5,040
October 1944	195.4	13	5.7	6.30	388
November	178.8	6.3	5.4	5.96	355
December	196.8	9.5	5.1	6.35	390
Calendar year 1944	2,641.9	63	4.4	7.22	5,240
January 1945	325.0	13	8.4	10.5	645
February	256.2	12	6.0	9.15	508
March	288.2	11	7.5	9.30	572
April	219.4	9.8	5.7	7.31	435
May	174.9	6.0	5.4	5.64	347
June	187.8	6.9	5.7	6.26	372
July	159.4	5.4	4.9	5.14	316
August	171.3	6.0	5.1	5.53	340
September	178.8	6.0	5.7	5.96	355
Water year 1944-45	2,532.0	13	4.9	6.94	5,020

Time basis: Mountain standard time except 2 a.m., Feb. 9, 1942, to Sept. 30, 1945, when mountain war time was used. To convert war time to standard time, subtract 1 hour.

San Jose River at Correo, N. Mex.

Location.- Water-stage recorder and concrete control, lat. 34°58'00", long. 107°10'10", in NE¼ sec. 32, T. 9 N., R. 3 W., 0.6 mile upstream from U. S. Highway 66, 0.7 mile northeast of Correo, and 13 miles upstream from mouth.

Records available.- April 1943 to September 1945.

Extremes.- Maximum discharge during year, 550 second-feet Aug. 22 (gage height, 2.70 feet); no flow at times.
1943-45: Maximum discharge, 8,010 second-feet May 26, 1944 (gage height, 9.20 feet), from rating curve extended above 1,700 second-feet by logarithmic plotting; no flow at times.

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

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.4	0.9	b0.5	*0	*b2.0	5.5	4.5			6.2	0	a20
2	.5	.8	b.8	0	b3.0	6.7	3.0			2.3	0	a.5
3	.2	.8	b1.5	b.8	3.3	6.4	*2.6			.2	0	0
4	0	.8	b.7	b1.0	b2.5	5.7	b1.0			0	0	0
5	0	.9	b.6	b1.5	*b2.0	6.4	b1.4			0	0	0
6	0	1.6	*b.3	b1.4	3.3	4.3	1.2			0	0	0
7	0	1.6	b.2	b2.1	b1.0	*4.3	.2			0	0	0
8	0	1.2	b.2	*b3.0	b2.2	3.0	0			0	22	0
9	0	1.2	b.1	b1.5	3.1	5.0	0			0	7.2	0
10	0	1.1	b.1	b1.0	3.0	5.0	0			0	4.7	0
11	0	1.1	b0	b1.0	3.1	4.7	0			0	7.2	0
12	0	1.1	*0	b1.5	3.1	3.0	0			0	a1.0	0
13	0	1.0	b.3	b1.0	3.1	*2.8	0			0	14	0
14	0	.6	b.3	b1.0	2.8	4.3	0			0	7.3	0
15	0	.7	b.5	*b1.6	2.6	4.3	0			0	a1.0	0
16	46	1.1	b.3	1.9	2.6	3.1	.5			0	a0	0
17	37	3.3	b.3	3.3	6.4	*b4.0	.6			0	0	0
18	4.9	3.3	b.3	4.7	5.2	4.5	.1			0	0	0
19	18	3.0	b.3	1.8	5.5	6.7	0			0	0	0
20	5.0	*1.9	*b.5	b.8	*4.7	6.0	0			0	0	0
21	2.4	1.9	b.7	b.2	b3.0	*5.7	0			0	0	0
22	1.4	1.8	b1.0	*0	b2.5	5.0	0			0	44	0
23	1.2	1.9	b.8	0	b3.0	4.7	0			0	a.4	0
24	1.1	79	b2.0	b1.0	b3.5	5.2	0			0	0	0
25	.9	19	3.0	b2.0	4.0	6.7	0			0	0	0
26	.8	5.5	2.3	b1.5	b3.0	b5.0	0			0	0	0
27	.8	3.5	*1.6	*b3.0	*5.2	b4.5	0			0	0	0
28	2.3	*b1.5	b1.0	b2.0	6.0	*b4.0	0			0	0	0
29	1.9	.4	b.7	b1.2	-	4.5	0			0	0	0
30	1.2	.5	b.4	b1.0	-	5.2	0			0	0	0
31	1.1	-	b.2	b1.2	-	5.5	-			0	0	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	129.1	46	0	4.16	256
November	143.0	79	.4	4.77	284
December	21.4	3.0	0	.69	42
Calendar year 1944	4,367.4	936	0	11.9	8,670
January	44.0	4.7	0	1.42	87
February	94.7	6.4	1.0	3.38	188
March	151.7	6.7	2.8	4.89	301
April	15.1	4.5	0	.50	30
May	0	0	0	0	0
June	0	0	0	0	0
July	8.7	6.2	0	.28	17
August	108.8	44	0	3.51	216
September	20.5	20	0	.68	41
Water year 1944-45	737.0	79	0	2.02	1,460

Peak discharge.- Oct. 16 (10 p.m.) 290 sec.-ft.; Nov. 24 (4 p.m.) 234 sec.-ft.; July 1 (8 p.m.) 124 sec.-ft.; Aug. 8 (3 p.m.) 144 sec.-ft.; Aug. 22 (2 a.m.) 550 sec.-ft.; Sept. 1 (1 p.m.) 218 sec.-ft.

* Winter discharge measurement made on this day.

a No gage-height record; discharge computed on basis of weather records and records for nearby stations.

b Stage-discharge relation affected by ice.

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

Socorro main canal north at San Acacia, N. Mex.

Location.- Water-stage recorder, lat. 34°15'15", long. 106°53'50", in SE¼NW¼ sec. 1, T. 1 S., R. 1 W., at San Acacia, half a mile downstream from point of diversion from Rio Grande. Datum of gage is 4,659.74 feet above mean sea level, datum of 1929.

Records available.- April 1936 to September 1945.

Extremes.- Maximum daily discharge during year, 195 second-feet Aug. 6; no flow at times. 1936-45: Maximum daily discharge, 234 second-feet Aug. 26, 1938; no flow at times.

Remarks.- Records fair. Canal diverts water from right bank of Rio Grande for irrigation. Three acequias, together irrigating about 300 acres, divert water from canal above station.

Monthly discharge, in second-feet, water year October 1944 to September 1945

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October		162	0	117	7,220
November		155	0	93.3	5,550
December		119	0	40.5	2,490
Calendar year 1944		175	0	105	76,120
January		101	0	71.0	4,370
February		122	1	82.0	4,550
March		172	1	113	6,920
April		181	123	160	9,520
May		176	96	137	8,410
June		187	58	147	8,730
July		186	88	164	10,080
August		195	1	153	9,380
September		172	50	140	8,320
Water year 1944-45		195	0	118	85,540

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

Pecos River near Pecos, N. Mex.

Location.- Water-stage recorder, lat. 35°42'25", long. 105°41'00", in NE¼NE¼ sec. 17, T. 17 N., R. 12 E., at bridge on private road, 600 feet upstream from Indian Creek, 2 miles downstream from Holy Ghost Creek, and 11 miles north of Pecos.

Drainage area.- 189 square miles (contributing area).

Records available.- March 1910 to December 1914 (published as Pecos River near Cowles) and October 1930 to September 1945 in reports of Geological Survey. March 1910 to December 1931 (published as Pecos River near Cowles prior to 1926) in reports of State engineer.

Average discharge.- 15 years (1930-45), 114 second-feet.

Extremes.- Maximum discharge recorded during year, 646 second-feet May 13 (gage height, 3.46 feet), but may have been greater during period of no gage-height record May 3-7; minimum daily, 15 second-feet Jan. 1, 22.

1930-45: Maximum discharge, 1,960 second-feet May 14, 1941 (gage height, 4.57 feet); minimum daily, 6.1 second-feet Jan. 16, 1934.

Remarks.- Records good except those for periods of ice effect or no gage-height record, which are poor. Diversions above station for irrigation.

Rating table, water year 1944-45, except periods of ice effect (gage height, in feet, and discharge, in second-feet)

1.5	18	2.0	68	2.7	259
1.6	24	2.2	105	3.0	392
1.8	42	2.4	157	3.4	610

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	33	38	b33	b15	b35	32	58	304	458	110	57	107
2	33	38	b35	b20	b40	30	75	417	422	122	52	89
3	33	37	a40	*b30	49	27	65	a500	397	115	50	70
4	34	36	a45	b25	39	31	58	a580	373	103	52	62
5	33	37	a40	b25	40	28	54	a620	359	99	53	58
6	32	50	a45	b25	40	29	57	a600	345	99	55	55
7	31	47	a45	b26	36	28	58	a590	327	93	68	54
8	30	43	a40	b27	40	28	76	580	309	93	75	52
9	30	37	a40	b26	34	32	110	568	288	93	62	49
10	30	39	a40	b25	31	34	137	534	267	93	67	48
11	30	39	a35	b27	32	38	112	528	280	95	60	46
12	30	38	a30	b32	32	42	99	539	296	82	70	43
13	29	*39	a35	b30	32	44	89	580	267	76	80	42
14	29	33	a35	b30	32	46	95	586	248	73	55	41
15	31	36	a35	b30	32	43	89	534	240	70	61	40
16	68	40	a30	34	33	40	80	474	237	67	54	43
17	103	39	a30	a35	33	34	76	447	229	71	53	44
18	75	38	*b30	b30	32	41	85	468	219	83	53	39
19	65	35	b30	b30	35	37	112	528	208	71	54	38
20	60	b35	b32	b25	33	34	163	562	198	64	67	38
21	53	b33	b33	b20	*34	40	185	522	188	61	97	36
22	48	b33	b35	b15	33	48	198	495	191	76	89	35
23	47	b33	b35	b20	31	46	240	479	191	65	87	33
24	44	42	b35	b25	33	47	205	468	166	61	80	32
25	44	39	b35	b30	32	44	191	474	163	60	78	32
26	43	b35	32	b40	30	42	179	484	160	62	68	32
27	42	b37	b23	b40	28	47	172	506	146	61	64	32
28	42	b38	b28	b30	28	41	169	506	137	65	61	32
29	41	b35	b28	*b25	-	42	198	522	124	68	61	34
30	39	b33	b25	b25	-	47	250	517	117	65	58	41
31	38	-	b20	b30	-	46	-	500	-	60	71	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	1,320	103	29	42.6	2,620
November	1,132	50	33	37.7	2,250
December	1,054	45	20	34.0	2,090
Calendar year 1944	40,624	690	-	111	80,590
January	847	40	15	27.3	1,680
February	959	49	28	34.2	1,900
March	1,188	48	27	38.3	2,360
April	3,735	250	54	124	7,410
May	16,012	620	304	517	31,760
June	7,550	458	117	252	14,980
July	2,476	122	60	79.9	4,910
August	1,992	97	50	64.3	3,950
September	1,397	107	32	46.6	2,770
Water year 1944-45	39,662	620	15	109	78,680

* Winter discharge measurement made on this day.

a No gage-height record; discharge computed on basis of weather records and records for station near Anton Chico.

b Stage-discharge relation affected by ice.

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

Pecos River near Anton Chico, N. Mex.

Location.- Water-stage recorder, lat. 35°10'50", long. 105°06'20", in Anton Chico Grant, 2 miles upstream from Canyon Blanco, 2¼ miles southeast of Anton Chico, and 10 miles downstream from Tecolote Creek.

Drainage area.- 1,050 square miles (contributing area).

Records available.- April 1910 to December 1914 and October 1930 to September 1945 in reports of Geological Survey. April 1910 to December 1931 in reports of State engineer. Prior to July 2, 1937, station was at five different sites during successive periods ranging from a sixth of a mile to 5 miles upstream from present site.

Average discharge.- 15 years (1930-45), 161 second-feet.

Extremes.- Maximum discharge during year, 6,960 second-feet Aug. 21 (gage height, 8.02 feet), from rating curve extended above 2,800 second-feet on basis of slope-area determination at gage height 20.34 feet; minimum daily, 10 second-feet Jan. 2.
1930-45: Maximum discharge, 40,300 second-feet June 1, 1937 (gage height, 20.34 feet, present site and datum), by slope-area method; no flow at times.

Remarks.- Records good except those for periods of ice effect or no gage-height record, which are poor. Diversions above station for irrigation.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	18	35	27	15	31	46	64	300	462	55	35	713
2	17	35	31	10	36	44	84	438	420	59	34	396
3	18	35	44	21	44	55	117	566	390	82	28	255
4	19	33	49	*24	58	52	138	643	355	125	21	158
5	18	33	b49	23	51	46	95	714	318	83	17	112
6	18	41	42	27	43	48	95	762	304	60	14	73
7	18	39	*46	25	40	51	89	786	283	66	24	58
8	18	43	b41	27	45	49	81	730	271	91	158	51
9	18	42	b43	27	42	46	86	682	259	57	381	44
10	18	37	b41	25	45	46	115	666	244	45	a500	36
11	18	35	b36	24	48	52	182	629	263	562	456	29
12	17	33	b30	29	47	58	176	601	279	119	a300	26
13	16	31	31	32	42	62	158	622	275	122	a400	23
14	16	32	37	29	37	78	155	643	252	60	a450	23
15	75	*31	37	29	38	95	142	666	202	189	a350	20
16	36	31	33	30	41	97	130	622	185	44	a250	19
17	46	32	30	33	44	89	106	552	185	107	a200	19
18	75	34	34	35	46	83	89	510	185	133	a150	28
19	106	34	31	32	47	70	98	510	158	46	a150	24
20	95	34	31	28	48	81	102	552	152	45	a200	19
21	89	31	33	27	52	69	185	566	142	37	a2,700	16
22	81	31	34	19	53	58	252	538	132	28	a600	16
23	70	28	35	12	49	70	304	498	138	20	a300	16
24	49	28	38	18	51	83	350	474	158	16	a250	16
25	45	32	35	21	48	86	295	462	126	16	a200	15
26	42	36	b35	28	51	81	275	462	106	64	173	14
27	44	36	b24	36	54	79	267	468	100	72	128	13
28	44	34	b21	43	49	83	252	480	84	52	95	11
29	42	29	28	30	-	89	230	480	78	94	76	15
30	40	32	27	23	-	83	241	492	72	53	60	18
31	38	-	21	29	-	86	-	480	-	40	63	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	1,264	106	16	40.8	2,510
November	1,017	43	28	33.9	2,020
December	1,074	49	21	34.6	2,130
Calendar year 1944	39,674.5	730	7.5	108	78,700
January	811	43	10	26.2	1,610
February	1,280	58	31	45.7	2,540
March	2,115	97	44	68.2	4,200
April	4,973	350	81	166	9,860
May	17,594	786	300	568	34,900
June	6,578	462	72	219	13,050
July	2,642	562	16	85.2	5,240
August	8,763	2,700	14	283	17,380
September	2,276	713	11	75.9	4,510
Water year 1944-45	50,387	2,700	10	138	99,950

Peak discharge.- Oct. 15 (8 p.m.) 1,270 sec.-ft.; July 11 (3:30 a.m.) 1,430 sec.-ft.; July 15 (7 p.m.) 2,520 sec.-ft.; July 17 (10 p.m.) 1,290 sec.-ft.; Aug. 14 (10 p.m.) 2,100 sec.-ft.; Aug. 21 (8 a.m.) 6,960 sec.-ft.

* Winter discharge measurement made on this day.

a No gage-height record; discharge computed on basis of weather records, gage-height record for peak stages, and records for stations at Santa Rosa and near Puerto de Luna.

b Stage-discharge relation affected by ice.

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

Pecos River at Santa Rosa, N. Mex.

Location.- Water-stage recorder and concrete control, lat. 34°56'05", long. 104°41'25", in SW¼SW¼ sec. 2, T. 8 N., R. 21 E., at bridge on U. S. Highway 66, at Santa Rosa, 1 mile upstream from Rio Agua Negra Chiquita.

Drainage area.- 2,650 square miles (contributing area).

Records available.- May 1903 to December 1906 (gage heights only), February 1910 to July 1911, September 1912 to December 1914, and October 1930 to September 1945 in reports of Geological Survey. February 1910 to July 1911 and September 1912 to December 1931 in reports of State engineer.

Average discharge.- 26 years (1912-14, 1916-23, 1928-45), 179 second-feet.

Extremes.- Maximum discharge during year, 8,290 second-feet Aug. 21 (gage height, 7.76 feet); minimum daily, 26 second-feet Mar. 27, 28.

1930-45: Maximum discharge, 55,200 second-feet June 2, 1937 (gage height, 25.7 feet), from rating curve extended above 35,000 second-feet by logarithmic plotting; minimum daily, 2.7 second-feet June 25, 1937.

Remarks.- Records good except those for periods of no gage-height record, which are poor. Several diversions above station for irrigation.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	37	48	38	34	33	32	31	90	270	41	44	43
2	40	47	40	36	33	31	31	159	245	50	45	307
3	41	47	43	33	32	31	32	340	218	47	44	179
4	43	47	45	33	32	32	34	399	183	47	43	104
5	41	48	51	33	34	33	35	482	135	47	43	65
6	38	50	48	33	34	33	47	528	101	51	44	40
7	38	48	44	34	33	34	36	528	90	48	45	37
8	37	55	43	35	33	33	33	505	74	50	51	36
9	35	45	43	34	33	34	33	440	62	50	341	35
10	35	44	43	34	32	34	32	433	64	51	301	35
11	34	44	41	34	33	33	32	419	346	90	321	35
12	35	45	38	34	31	33	50	381	351	336	376	35
13	36	44	36	33	30	33	87	381	135	315	179	35
14	37	40	36	35	30	32	67	433	124	115	268	36
15	38	40	37	35	30	32	71	426	90	62	365	38
16	1,100	41	37	36	30	31	74	399	55	482	245	37
17	a200	41	35	41	31	30	64	357	44	104	183	41
18	a100	41	36	44	31	31	50	306	41	78	64	40
19	a110	40	34	36	31	31	36	290	43	239	38	40
20	a100	40	34	37	31	30	32	334	47	74	34	40
21	a100	38	33	38	33	30	31	375	51	44	2,310	41
22	a90	37	34	36	32	29	34	340	50	41	915	43
23	a80	38	34	36	32	29	104	318	47	44	285	43
24	a70	38	34	35	31	29	183	306	47	45	306	44
25	a50	40	35	34	31	30	204	290	44	44	222	45
26	a60	38	36	35	31	29	167	275	41	45	138	44
27	47	37	36	35	32	26	155	280	40	56	92	45
28	48	36	37	34	32	26	141	280	41	62	64	47
29	48	37	36	32	-	29	115	290	41	56	48	67
30	48	37	36	33	-	31	95	285	41	48	48	60
31	48	-	36	33	-	31	-	290	-	58	45	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	2,864	1,100	34	92.4	5,680
November	1,271	55	36	42.4	2,520
December	1,189	51	33	38.4	2,360
Calendar year 1944	28,602	611	29	78.1	56,730
January	1,085	44	32	35.0	2,150
February	891	34	30	31.8	1,770
March	962	34	26	31.0	1,910
April	2,136	204	31	71.2	4,240
May	10,959	528	90	354	21,740
June	3,161	351	40	105	6,270
July	2,920	482	41	94.2	5,790
August	7,547	2,310	34	243	14,970
September	1,737	307	35	57.9	3,450
Water year 1944-45	36,722	2,310	26	101	72,850

Peak discharge.- Oct. 16 (4:45 a.m.) 5,470 sec.-ft.; June 11 (9:45 p.m.) 2,270 sec.-ft.; July 16 (6:45 a.m.) 1,800 sec.-ft.; Aug. 14 (8:15 p.m.) 3,900 sec.-ft.; Aug. 2 (3:45 p.m.) 8,290 sec.-ft.

a No gage-height record; discharge computed on basis of weather records and records for stations near Anton Chico and near Puerto de Luna.

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. [illegible] to standard time, subtract 1 hour.

Pecos River near Puerto de Luna, N. Mex.

Location.- Water-stage recorder and concrete control, lat. 34°43', long. 104°32', in sec. 29, T. 6 N., R. 23 E., 10 miles southeast of Puerto de Luna and 14 miles upstream from Alamogordo Dam.

Drainage area.- 3,970 square miles (contributing area).

Records available.- April 1938 to September 1945.

Extremes.- Maximum discharge during year, 6,770 second-feet Aug. 21 (gage height, 4.41 feet); minimum daily, 85 second-feet Aug. 4.
1938-45: Maximum discharge, 48,600 second-feet Sept. 1, 1942 (gage height, 17.00 feet), from rating curve extended above 7,400 second-feet on basis of flow at Santa Rosa; minimum daily, 59 second-feet Aug. 23, 1938.

Remarks.- Records good except those for periods of no gage-height record, which are poor. Many diversions above station for irrigation. Discharge represents inflow to Alamogordo Reservoir (capacity 157,000 acre-feet).

Cooperation.- Gage-height record collected in cooperation with Bureau of Reclamation.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	a120	122	115	129	122	115	106	178	288	91	109	115
2	a120	129	115	140	118	115	97	170	276	97	91	207
3	a120	126	126	129	118	112	106	258	264	106	94	246
4	a130	129	126	115	118	118	112	363	240	100	85	195
5	a120	126	136	122	122	118	103	434	230	100	91	166
6	115	140	136	126	122	118	103	470	205	122	94	143
7	118	143	140	122	122	115	115	586	174	170	100	122
8	122	118	132	122	122	115	100	748	158	103	792	106
9	126	118	132	122	122	112	91	610	140	115	474	100
10	122	122	129	122	126	112	94	530	126	136	533	97
11	126	122	126	122	129	106	91	480	129	118	342	88
12	126	118	132	122	129	109	88	434	690	268	580	97
13	126	118	132	126	126	115	126	418	264	358	397	106
14	118	112	129	126	118	106	150	442	220	469	264	106
15	118	112	129	118	118	103	150	470	186	256	814	109
16	1,340	122	129	126	118	103	158	470	158	641	562	109
17	394	126	122	140	118	109	154	450	122	287	363	115
18	225	122	122	150	122	109	146	386	112	154	282	112
19	240	118	129	136	122	109	129	342	157	214	186	97
20	182	112	129	140	129	112	109	349	126	205	143	109
21	186	115	126	136	129	109	106	370	118	140	1,510	109
22	178	112	132	129	126	100	94	370	115	115	1,940	103
23	162	112	132	126	118	103	100	342	115	97	787	103
24	154	118	136	129	118	106	210	328	118	103	434	103
25	143	126	132	122	115	103	258	321	106	103	386	109
26	150	122	140	129	115	103	246	300	91	97	258	106
27	190	109	143	132	122	103	235	276	94	103	186	115
28	143	115	143	129	115	100	230	282	88	115	162	103
29	136	115	143	122	-	103	210	282	88	126	136	140
30	132	112	136	126	-	106	200	270	91	118	122	154
31	126	-	132	126	-	106	-	270	-	103	118	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	5,908	1,340	115	191	11,720
November	3,611	143	109	120	7,160
December	4,061	143	115	131	8,050
Calendar year 1944	61,493	1,610	78	168	122,000
January	3,961	150	115	128	7,860
February	3,399	129	115	121	6,740
March	3,373	118	100	109	6,690
April	4,217	258	88	141	8,360
May	11,999	748	170	387	23,800
June	5,289	690	88	176	10,490
July	5,330	641	91	172	10,570
August	12,435	1,940	85	401	24,660
September	3,690	246	88	123	7,320
Water year 1944-45	67,273	1,940	85	184	133,400

Peak discharge.- Oct. 16 (11 a.m.) 4,260 sec.-ft.; July 14 (9 p.m.) 3,320 sec.-ft.; July 16 (12 m.) 2,260 sec.-ft.; Aug. 15 (2 a.m.) 2,960 sec.-ft.; Aug. 21 (11 p.m.) 6,770 sec.-ft.; Sept. 2 (5 p.m.) 2,710 sec.-ft.

a No gage-height record; discharge computed on basis of records for station at Santa Rosa.

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

Pecoe River below Alamogordo Dam, N. Mex.

Location.- Water-stage recorder, lat. 34°36'20", long. 104°23'10", in lot 1 sec. 2, T. 4 N., R. 24 E., 1,200 feet downstream from Alamogordo Dam, 1½ miles downstream from Alamogordo Creek, and 4½ miles northeast of Guadalupe. Datum of gage is 4,142.67 feet above mean sea level (Bureau of Reclamation datum).

Drainage area.- 4,390 square miles (contributing area).

Records available.- October 1912 to December 1914, October 1930 to September 1936 (at site 1½ miles upstream), and September 1936 to September 1945 in reports of Geological Survey. October 1912 to December 1931 in reports of State engineer.

Average discharge.- 21 years (1913-16, 1918-25, 1926-37), 264 second-feet (prior to completion of Alamogordo Dam).

Extremes.- Maximum discharge during year, 1,700 second-feet Mar. 31 (gage height, 3.46 feet); minimum daily, 0.1 second-foot Feb. 14.
1930-45: Maximum discharge, 42,800 second-feet Sept. 1, 1942, by computation of flow over spillway and through outlet gates of Alamogordo Dam by Bureau of Reclamation; maximum gage height, 13.58 feet Sept. 22, 1941, from floodmark; no flow at times.

Remarks.- Records good except those below 5 second-feet, which are fair. Diversions above station for irrigation. Flow regulated by Alamogordo Reservoir (see p. 196). Records of water analyses for water year 1945 are given in Water-Supply Paper 1030.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	93	1.7	1.7	1.4	1.1	1.1	1,640	94	112	106	106	1,240
2	93	1.9	1.7	1.4	1.0	1.1	1,550	99	112	106	106	1,190
3	94	1.7	1.9	1.4	1.0	1.2	1,610	107	113	107	106	1,130
4	94	1.7	1.7	1.4	1.1	1.4	1,580	109	110	107	106	1,130
5	94	57	1.7	1.4	1.1	1.4	1,580	109	98	107	106	1,080
6	94	93	1.7	1.4	1.0	1.2	1,550	110	98	108	106	445
7	95	57	1.7	1.7	.8	1.1	1,520	108	98	109	107	96
8	96	1.9	1.7	1.4	.7	1.1	1,490	106	108	112	107	103
9	96	1.9	2.2	1.4	.7	.8	1,460	114	110	123	108	104
10	95	1.9	2.2	1.4	.7	.6	1,380	94	110	133	108	105
11	95	1.7	1.9	1.4	.7	.6	1,300	102	111	107	103	98
12	96	1.7	1.9	1.4	.6	.6	1,210	104	113	99	92	86
13	96	1.4	1.9	1.4	.5	.6	1,190	110	113	101	92	86
14	95	1.4	1.7	1.4	.1	.6	704	100	114	101	92	87
15	94	1.7	1.7	1.4	.2	.6	102	107	109	100	92	88
16	95	1.4	1.9	1.7	.4	.6	102	117	189	100	93	88
17	97	1.7	1.9	1.7	.4	2.4	101	117	1,320	102	92	88
18	98	1.7	1.9	1.7	.5	1.7	101	118	1,300	102	92	88
19	98	1.7	1.9	1.7	.5	2.2	101	119	1,270	102	92	88
20	97	1.4	1.7	1.7	.6	2.2	101	120	1,210	103	92	89
21	97	1.4	1.7	1.7	.7	1.9	103	120	1,190	103	93	90
22	97	1.7	1.7	1.4	.7	1.7	129	111	1,190	102	98	90
23	96	1.7	1.4	1.2	.7	2.4	131	112	1,130	100	91	89
24	96	1.4	1.4	1.2	.7	1.9	128	112	1,080	100	106	89
25	95	1.4	1.4	1.2	.8	1.9	121	112	997	102	103	90
26	96	1.7	1.4	1.1	.7	2.2	109	101	169	102	96	90
27	96	1.9	1.4	1.1	.8	60	107	99	110	102	202	91
28	97	1.9	1.4	1.2	1.0	126	100	99	105	105	1,380	90
29	97	1.9	1.4	1.1	-	127	93	99	106	107	1,350	78
30	42	1.9	1.4	1.1	-	675	94	103	106	105	1,320	3.4
31	2.2	-	1.4	1.1	-	1,520	-	112	-	106	1,300	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	2,816.2	98	2.2	90.8	5,590
November	252.4	93	1.4	8.41	501
December	52.6	2.2	1.4	1.70	104
Calendar year 1944	73,453.5	2,110	0	201	145,700
January	43.2	1.7	1.1	1.39	86
February	19.8	1.1	.1	.71	39
March	2,543.1	1,520	.6	82.0	5,040
April	21,487	1,640	93	716	42,620
May	3,344	120	94	108	6,630
June	13,101	1,320	98	437	25,990
July	3,269	133	99	105	6,480
August	8,137	1,380	91	262	16,140
September	8,309.4	1,240	3.4	277	16,480
Water year 1944-45	63,374.7	1,640	.1	174	125,700

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

Pecos River near Acme, N. Mex.

Location.- Water-stage recorder, lat. 33°32'10", long. 104°22'40", in NW¼ sec. 14, T. 9 S., R. 25 E., 1 mile southeast of Melena railroad station, 3½ miles downstream from Salt Creek, 5 miles southwest of Acme, and 13 miles northeast of Roswell.

Drainage area.- 11,380 square miles (contributing area).

Records available.- July 1937 to September 1945 in reports of Geological Survey. August 1921 to July 1923 in reports of State engineer.

Extremes.- Maximum discharge during year, 1,330 second-feet Apr. 3 (gage height, 4.92 feet); no flow at times.

1937-44: Maximum discharge, 45,000 second-feet Sept. 23, 1941 (gage height, 13.71 feet), from rating curve extended above 15,000 second-feet by logarithmic plotting; no flow at times.

Maximum discharge during flood of May 28, 1937, 53,000 second-feet (gage height, 14.82 feet, from floodmarks, site and datum then in use), by slope-area method.

Remarks.- Records fair. Diversions above station for irrigation. Flow regulated by Alamogordo Reservoir (see p. 196). Records of water analyses for water year 1945 are given in Water-Supply Paper 1030.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	50	126	32	31	18	3.8	232	36	0	27	0	936
2	35	166	27	27	17	3.4	1,100	26	0	19	0	928
3	38	139	29	23	15	3.1	1,240	20	0	15	0	944
4	a45	97	30	22	14	2.0	1,150	17	0	6.0	0	936
5	a60	52	30	20	13	1.7	e1,140	19	0	1.8	0	896
6	79	38	30	20	11	1.2	e1,120	15	0	.7	0	856
7	61	30	36	17	8.7	1.2	1,100	18	0	.1	0	816
8	52	26	36	15	7.6	1.2	1,130	17	0	0	0	380
9	59	22	29	13	a6	1.2	e1,150	12	0	0	0	183
10	54	20	22	13	a6.5	1.4	e1,130	13	0	0	0	99
11	48	18	19	14	a6	1.4	1,100	15	0	0	0	72
12	46	16	17	14	5.7	1.2	1,050	13	0	0	0	34
13	44	15	16	14	4.9	1.4	1,060	9.5	0	0	0	19
14	44	15	18	14	3.8	1.6	1,070	9.1	0	0	0	13
15	79	14	22	14	3.3	1.3	1,090	8.0	0	0	0	7.2
16	664	14	*25	14	3.3	.8	716	6.5	0	7.1	0	3.4
17	135	19	b20	15	3.3	.5	288	6.0	0	25	0	1.7
18	59	22	17	17	3.3	.5	155	5.7	0	3.8	0	.5
19	68	25	b16	17	3.3	.6	103	5.2	612	0	0	0
20	145	26	*b14	22	3.8	.7	99	11	928	0	0	0
21	173	25	14	26	4.6	.6	88	8.0	936	0	9.3	0
22	142	24	14	26	3.8	.4	63	4.9	904	0	238	0
23	100	22	14	29	3.8	.3	56	3.1	928	0	205	0
24	81	21	15	29	3.8	.3	40	1.9	920	0	242	0
25	77	a21	15	27	3.3	.4	40	3.8	872	0	128	0
26	79	a21	15	24	3.3	.2	39	6.2	840	0	69	0
27	180	a21	20	23	3.8	.1	44	3.6	778	0	27	0
28	330	39	*28	21	4.1	.1	43	2.4	274	0	14	0
29	192	68	34	21	-	.1	38	1.2	111	0	8.0	1.2
30	170	46	34	19	-	.2	33	.5	41	0	816	2.2
31	135	-	35	19	-	.3	-	0	-	0	978	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	3,524	664	35	114	6,990
November	1,208	166	14	40.3	2,400
December	723	36	14	23.3	1,430
Calendar year 1944	49,625.3	1,460	0	136	98,430
January	620	31	13	20.0	1,230
February	188.0	18	3.3	6.71	373
March	33.2	3.8	.1	1.07	66
April	17,707	1,240	33	590	35,120
May	317.6	36	0	10.2	630
June	8,144	936	0	271	16,150
July	105.5	27	0	3.40	209
August	2,734.3	978	0	88.2	5,420
September	7,128.2	944	0	238	14,140
Water year 1944-45	42,432.8	1,240	0	116	84,160

* Winter discharge measurement made on this day.

a No gage-height record; discharge computed on basis of range in stage and records for stations near Lake Arthur and near Artesia.

e Stage-discharge relation indefinite; discharge computed on basis of records for stations near Lake Arthur and near Artesia.

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

Pecos River near Lake Arthur, N. Mex.

Location.- Water-stage recorder, lat. 32°59'25", long. 104°19'10", on line between secs. 26 and 27, T. 15 S., R. 26 E., 1,100 feet upstream from highway bridge, 3 miles east of Lake Arthur, 10 miles upstream from Cottonwood Creek, and 11 miles northeast of Artesia.

Drainage area.- 14,760 square miles (contributing area).

Records available.- August 1938 to September 1945.

Extremes.- Maximum discharge during year, 1,200 second-feet Apr. 6 (gage height, 4.67 feet); minimum daily, 0.7 second-foot Aug. 2, 20.

1938-45: Maximum discharge, 49,600 second-feet Sept. 24, 1941 (gage height, 21.90 feet), from rating curve extended above 16,100 second-feet on basis of slope-area determination at gage height 21.77 feet and logarithmic plotting; minimum daily, that of Aug. 5, 20, 1945.

Flood of May 30, 1937, reached a stage of 21.77 feet (discharge, 51,500 second-feet, by slope-area method); may have been exceeded by floods of 1904 and 1919.

Remarks.- Records excellent except those below 20 second-feet and those for periods of doubtful gage-height record, which are good. Diversions above station for irrigation. Flow partly regulated by Alamogordo Reservoir, 150 miles above station (see p. 196).

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	178	189	130	130	107	80	60	100	26	107	2.3	906
2	166	175	128	130	100	77	91	93	25	69	1.3	936
3	145	166	120	130	100	76	992	89	35	76	1.6	928
4	130	218	118	128	102	74	1,120	84	36	60	.9	920
5	128	192	116	125	102	76	1,120	82	22	50	.7	892
6	132	163	128	116	100	71	1,160	82	18	91	.8	864
7	160	140	132	111	98	71	1,160	78	14	60	1.4	843
8	145	128	135	109	85	71	1,160	58	9.8	50	1.8	829
9	132	135	138	102	94	65	1,120	51	7.2	46	1.9	506
10	125	130	135	98	96	72	1,080	55	14	41	1.2	254
11	130	118	128	96	94	76	1,080	52	22	37	.8	157
12	128	105	122	96	94	77	1,080	53	14	36	8.1	122
13	122	113	118	102	91	74	1,050	53	11	37	11	96
14	118	113	116	96	87	76	1,000	58	9.0	34	5.1	71
15	116	116	113	96	87	68	1,050	51	5.1	40	4.2	55
16	646	116	113	94	87	58	1,060	48	4.6	40	2.7	51
17	596	109	113	100	84	61	493	53	7.2	30	1.2	48
18	317	113	118	105	82	62	274	53	9.4	28	1.3	34
19	234	116	116	98	85	74	175	45	6.6	25	.9	21
20	192	116	111	100	80	74	154	49	295	31	.7	20
21	182	118	109	100	82	65	140	48	822	16	1.0	20
22	258	118	107	100	85	62	132	34	d830	11	41	16
23	234	113	111	105	89	60	135	36	d810	16	178	20
24	210	113	116	107	84	60	116	44	d830	12	148	22
25	186	113	116	107	82	65	109	48	d800	6.3	262	22
26	175	122	118	109	82	65	96	56	d760	4.6	154	23
27	172	132	116	109	82	58	93	52	d720	4.6	111	21
28	196	118	125	109	84	57	96	56	655	3.2	84	16
29	317	107	132	107	-	56	113	45	246	4.2	58	45
30	242	107	138	102	-	55	111	35	148	11	43	68
31	210	-	132	105	-	57	-	32	-	3.2	600	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	6,422	646	116	207	12,740
November	3,932	218	105	131	7,800
December	3,768	138	107	122	7,470
Calendar year 1944	73,971.1	1,460	1.3	202	146,700
January	3,322	130	94	107	6,590
February	2,525	107	80	90.2	5,010
March	2,093	80	55	67.5	4,150
April	17,620	1,160	60	587	34,950
May	1,773	100	32	57.2	3,520
June	7,211.9	830	4.6	240	14,300
July	1,100.1	107	3.2	35.5	2,180
August	1,729.9	600	.7	55.8	3,430
September	8,826	936	16	294	17,510
Water year 1944-45	60,322.9	1,160	.7	165	119,600

d Doubtful gage-height record; discharge computed on basis of records for stations near Acme and near Artesia.

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

Pecos River near Artesia, N. Mex.

Location.- Water-stage recorder, lat. 32°50'10", long. 104°19'30", in W½NW¼ sec. 18, T. 17 S., R. 27 E., at bridge on Artesia-Lovington highway, 4.2 miles east of Artesia, 6.5 miles north of mouth of Rio Penasco and 16.5 miles north of McMillan Dam.

Drainage area.- 15,300 square miles (contributing area).

Records available.- March 1905 to September 1925 and October 1931 to February 1936 (published as Pecos River near Dayton), and February 1936 to September 1945 in reports of Geological Survey. March 1905 to December 1931 in reports of State engineer.

Extremes.- Maximum discharge during year, 1,160 second-feet Apr. 8 (gage height, 7.40 feet); minimum daily, 0.1 second-foot Aug. 20.

1905-45: Maximum gage height, 15.9 feet Sept. 18, 1919, site and datum then in use (discharge not determined). Flood of May 30, 1937, reached a gage height of 14.7 feet (discharge, 51,500 second-feet, by slope-area method); no flow Aug. 17-24, 1934.

Remarks.- Records good except those for periods of no gage-height record, which are fair. Diversions above station for irrigation. Flow partly regulated by Alamogordo Reservoir (see p. 196). Discharge represents inflow to Lake McMillan, which stores water for irrigation of about 25,000 acres of Carlsbad project. Records of water analyses for water year 1945 are given in Water-Supply Paper 1030.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	215	225	137	164	132	93	67	116	29	136	5.8	840
2	197	206	161	167	129	89	66	94	24	115	3.6	900
3	186	198	154	165	124	86	581	96	23	87	2.8	900
4	167	217	148	164	124	82	1,040	93	36	76	1.7	900
5	153	231	141	161	126	84	1,100	83	33	56	.6	900
6	151	208	140	149	120	a86	1,140	a85	21	173	.4	880
7	154	176	157	140	120	a84	1,140	a85	18	108	.4	820
8	184	157	159	135	110	a84	1,160	a70	14	67	1.4	802
9	164	156	156	128	100	a82	1,140	58	10	60	2.4	508
10	146	159	159	124	113	82	1,080	54	8.6	55	.8	266
11	148	153	153	122	114	92	1,060	55	16	51	.5	184
12	148	a135	149	117	117	96	1,080	48	23	48	.4	123
13	151	137	148	123	112	93	1,040	50	16	47	.7	104
14	148	137	146	119	102	92	980	53	12	44	5.3	80
15	145	137	140	117	102	89	1,020	54	9.3	45	3.8	60
16	685	140	145	116	100	78	1,040	50	5.3	49	2.0	49
17	650	141	141	120	102	72	682	54	5.0	45	1.5	45
18	418	134	148	132	99	78	360	59	6.6	40	.3	40
19	272	138	148	126	103	82	251	54	6.1	38	.2	24
20	237	140	148	119	100	92	190	49	31	35	.1	a20
21	204	137	143	122	99	88	162	57	610	37	.2	15
22	285	141	141	122	106	77	149	50	768	20	12	10
23	262	137	140	123	109	73	154	38	785	17	75	9.7
24	245	141	146	129	103	a75	139	40	802	18	a170	17
25	227	140	146	130	100	a78	120	43	840	18	a230	14
26	204	135	148	132	99	75	111	49	785	12	a200	17
27	200	154	151	135	98	71	99	51	750	9.3	130	15
28	200	157	153	132	95	65	99	52	716	8.3	82	14
29	392	135	159	134	-	60	108	51	315	7.3	63	25
30	279	132	169	132	-	59	118	39	196	6.6	44	64
31	243	-	172	129	-	60	-	33	-	9.7	224	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	7,460	685	145	241	14,800
November	4,734	231	132	158	9,390
December	4,646	172	137	150	9,220
Calendar year 1944	78,570.5	1,480	.5	215	155,800
January	4,128	167	116	133	8,190
February	3,058	132	95	109	6,070
March	2,497	96	59	80.5	4,950
April	17,476	1,160	66	583	34,660
May	1,863	116	33	60.1	3,700
June	6,913.9	840	5.0	230	13,710
July	1,538.2	173	6.6	49.6	3,050
August	1,264.9	230	.1	40.8	2,510
September	8,645.7	900	9.7	288	17,150
Water year 1944-45	64,224.7	1,160	.1	176	127,400

a No gage-height record; discharge computed on basis of records for station near Lake Arthur.

Note.- Discharge Oct. 7-29 computed on basis of once-daily staff-gage readings.

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

Pecos River at dam site 3, near Carlsbad, N. Mex.

Location.- Water-stage recorder, lat. 32°30'45", long. 104°19'50", in lot 14, sec. 6, T. 21 S., R. 26 E., at dam site 3 of Carlsbad project of Bureau of Reclamation, about a mile upstream from flow line of Lake Avalon, 1.3 miles downstream from Rocky Arroyo, and 8 miles northwest of Carlsbad. Prior to Aug. 10, 1944, at site 1,000 feet downstream at same datum.

Drainage area.- 17,620 square miles (contributing area).

Records available.- August 1939 to December 1940, August 1944 to September 1945.

Extremes.- 1944: Maximum discharge during period August to September, 1,240 second-feet Sept. 5 (gage height, 2.31 feet); minimum daily, 53 second-feet Aug. 27.

1944-45: Maximum discharge during water year 1,920 second-feet July 15 (gage height, 3.91 feet); minimum daily, 26 second-feet Aug. 28, 29, Aug. 31 to Sept. 2.

1939-40, 1944-45: Maximum discharge, 5,600 second-feet Oct. 13, 1940 (gage height, 7.05 feet, former site), from rating curve extended above 510 second-feet on basis of slope-area determination at gage height 3.12 feet; minimum daily, that of Aug. 28, 29, Aug. 31, to Sept. 2, 1945.

Remarks.- Records excellent except those for periods of no gage-height record, which are fair. Flow regulated by storage in Alamogordo Reservoir and Lake McMillan (see p. 196). Many diversions above station for irrigation. Discharge represents inflow to Lake Avalon.

Discharge, in second-feet, 1944-45

1944

Day	Aug.	Sept.	Day	Aug.	Sept.	Day	Aug.	Sept.	Day	Aug.	Sept.
1	-	224	9	-	55	17	90	124	25	111	155
2	-	220	10	114	58	18	87	127	28	55	155
3	-	127	11	114	68	19	82	134	27	53	158
4	-	84	12	111	84	20	76	137	28	71	155
5	-	386	13	102	96	21	65	144	29	196	151
6	-	102	14	99	105	22	58	148	30	253	151
7	-	60	15	93	117	23	55	151	31	224	-
8	-	55	16	117	120	24	216	158			

1944-45

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	155	180	180	177	174	131	66	200	93	580	48	26
2	158	177	180	177	170	128	68	200	176	654	46	26
3	162	177	183	177	170	128	68	196	71	174	43	27
4	166	177	180	177	174	126	73	193	62	161	41	27
5	166	180	180	177	174	123	75	189	57	158	38	134
6	170	177	180	177	174	123	181	183	52	382	38	445
7	173	174	180	177	170	120	445	186	48	203	37	482
8	170	180	180	177	170	116	501	183	43	161	36	501
9	170	180	180	177	170	111	525	186	41	161	35	520
10	170	180	180	177	170	109	534	183	39	161	a34	585
11	173	180	177	174	170	106	539	286	38	161	32	482
12	173	183	177	177	170	104	530	491	37	158	30	486
13	173	180	177	177	167	104	501	486	35	147	29	482
14	173	180	177	177	164	100	491	454	32	136	34	463
15	170	180	177	177	164	100	472	414	38	526	30	322
16	170	183	177	177	164	106	454	330	38	114	27	167
17	167	180	177	177	161	106	432	279	38	100	27	142
18	167	180	177	177	155	100	436	249	38	96	27	118
19	167	180	177	174	150	98	427	200	37	92	27	100
20	170	177	177	174	142	94	409	155	37	86	27	92
21	174	177	177	170	142	92	409	142	37	80	a100	80
22	174	177	177	170	142	88	409	131	36	75	a500	75
23	174	177	180	170	142	88	414	118	35	70	a60	64
24	174	180	177	170	139	90	392	106	34	66	a30	60
25	174	180	180	174	133	98	371	98	35	62	a30	56
26	177	183	177	174	131	100	306	90	48	151	a30	52
27	177	183	180	174	133	92	203	82	70	252	a28	48
28	177	183	180	170	131	88	200	77	88	63	28	46
29	180	183	180	174	-	82	203	71	457	57	26	46
30	180	180	180	170	-	77	203	64	895	54	27	42
31	180	-	177	174	-	71	-	60	-	51	26	-

a No gage-height record; discharge computed on basis of range-in stage and contents record for Lake Avalon.

Monthly discharge, in second-feet, 1944-45

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
August 10-31, 1944	2,442	253	53	111	4,840
September	4,009	386	55	134	7,950
October 1944	5,304	180	155	171	10,520
November	5,388	183	174	180	10,690
December	5,538	183	177	179	10,980
Calendar year	-	-	-	-	-
January 1945	5,421	177	170	175	10,750
February	4,416	174	131	158	8,760
March	3,199	131	71	103	6,350
April	10,337	539	66	345	20,500
May	6,282	491	60	203	12,460
June	2,785	895	32	92.8	5,520
July	5,392	654	51	174	10,690
August	1,569	500	26	50.6	3,110
September	6,196	585	26	207	12,290
Water year 1944-45	61,827	895	26	169	122,600

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

Pecos River at Carlsbad, N. Mex.

Location.- Water-stage recorder, lat. 32°24'50", long. 104°13'20", in NW¼SE¼ sec. 6, T. 22 S., R. 27 E., at Green Street Bridge in Carlsbad and half a mile upstream from Dark Canyon. Datum of gage is 3,080.38 feet above mean sea level, datum of 1929.

Drainage area.- 18,100 square miles (contributing area).

Records available.- May 1903 to March 1908, May 1914 to September 1925, October 1928 to September 1930, and October 1931 to September 1945 in reports of Geological Survey. June 1903 to December 1906, May 1914 to December 1928, and January 1930 to December 1931 in reports of State engineer.

Extremes.- Maximum discharge during year, 263 second-feet Jan. 18; maximum gage height, 4.09 feet Aug. 22 (backwater from Hackberry Draw); minimum daily, 65 second-feet July 30 to Aug. 1.

1903-8, 1914-45: Maximum discharge, 85,700 second-feet Aug. 7, 1916 (gage height, about 21.0 feet), from rating curve extended above 34,000 second-feet by logarithmic plotting; no flow May 9, 1904.

Remarks.- Records good. Flow regulated by Alamogordo Reservoir, Lake McMillan, Lake Avalon, and at low stages by power plant above station. Many diversions above station for irrigation. Records of water analyses for water year 1944 are given in Water-Supply Paper 1030.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	a75	77	165	153	174	84	87	89	77	70	65	68
2	a75	77	161	174	174	87	84	87	80	70	66	66
3	a75	77	165	170	165	87	84	84	80	72	68	66
4	a75	77	165	165	161	87	82	87	80	70	68	68
5	75	77	165	170	97	87	82	89	77	68	66	66
6	75	77	165	179	89	82	82	87	77	68	66	68
7	75	77	170	165	87	87	84	87	75	68	66	68
8	75	77	170	165	84	122	84	87	75	68	68	68
9	75	117	170	161	84	125	84	87	75	68	66	68
10	72	188	170	161	87	122	89	82	75	68	68	68
11	72	188	170	161	87	122	87	82	75	66	68	68
12	72	183	170	161	87	116	89	82	77	68	68	70
13	72	183	110	161	87	94	89	82	75	70	66	68
14	75	188	103	161	89	89	92	80	77	70	68	70
15	75	188	106	161	89	87	87	82	77	70	66	70
16	75	193	100	165	89	92	87	82	77	70	66	70
17	75	161	103	170	89	94	87	82	77	70	66	70
18	75	116	103	258	89	97	87	84	77	70	66	70
19	75	116	103	247	89	97	87	84	77	70	66	70
20	75	110	100	157	89	94	87	82	77	70	66	72
21	75	110	100	153	87	92	89	80	77	70	68	70
22	77	110	100	153	87	92	87	80	75	72	74	70
23	77	133	100	153	87	92	89	82	75	70	70	70
24	77	188	97	153	87	92	89	82	75	70	68	70
25	77	197	116	153	87	89	87	80	72	70	68	70
26	77	157	157	157	84	87	87	80	70	72	68	70
27	77	157	165	179	84	89	87	80	70	70	68	70
28	77	157	193	211	84	92	87	80	68	66	68	70
29	77	161	193	193	-	89	87	82	68	66	68	72
30	77	161	188	188	-	87	89	80	68	65	66	72
31	77	-	149	165	-	87	-	80	-	65	66	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	2,333	77	72	75.3	4,630
November	4,078	197	77	136	8,090
December	4,392	193	97	142	8,710
Calendar year 1944	40,724	392	70	111	80,780
January	5,323	258	153	172	10,560
February	2,773	174	84	99.0	5,500
March	2,940	125	82	94.8	5,830
April	2,599	92	82	86.6	5,160
May	2,574	89	80	83.0	5,110
June	2,255	80	68	75.2	4,470
July	2,140	72	65	69.0	4,240
August	2,085	74	65	67.3	4,140
September	2,076	75	66	69.2	4,120
Water year 1944-45	35,568	258	65	97.4	70,560

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

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

Pecos River near Malaga, N. Mex.

Location.- Water-stage recorder, lat. 32°12'30", long. 104°01'30", in NW¼NW¼ sec. 19, T. 24 S., R. 29 E., 3 miles southeast of Malaga and 3 miles downstream from Black River. Datum of gage is 2,898.68 feet above mean sea level, datum of 1929.

Drainage area.- 19,190 square miles (contributing area).

Records available.- May 1920 to September 1925 and October 1931 to September 1945 in reports of Geological Survey. January 1921 to December 1931 in reports of State engineer.

Extremes.- Maximum discharge during year, 4,270 second-feet Aug. 22 (gage height, 6.45 feet); minimum daily, 22 second-feet Aug. 7, 13, 20.

1920-45: Maximum discharge, 63,700 second-feet Sept. 21, 1941, from rating curve extended above 22,500 second-feet by logarithmic plotting; maximum gage height, 32.1 feet May 22, 1941, from floodmark; no flow Aug. 20-22, 1934.

Remarks.- Records excellent except those for periods of no gage-height record, which are fair. Flow regulated by Alamogordo Reservoir, Lake McMillan, Lake Avalon, and by several small diversion dams that divert for power and irrigation. Many diversions above station for irrigation. Records of water analyses for water year 1945 are given in Water-Supply Paper 1030.

Cooperation.- Gage-height record collected in cooperation with Bureau of Reclamation.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	133	158	234	232	234	122	156	98	66	80	49	78
2	137	149	242	244	232	125	118	113	88	78	59	75
3	132	150	241	252	241	112	90	108	78	150	64	67
4	142	162	237	258	220	110	110	80	100	217	62	75
5	153	166	219	256	233	113	98	90	88	133	33	71
6	155	162	230	262	221	112	104	90	86	113	a22	73
7	150	148	234	264	222	128	106	102	94	113	23	72
8	145	140	230	258	160	130	102	84	76	81	40	69
9	158	168	234	250	156	134	120	94	80	83	50	70
10	150	136	228	250	170	167	92	88	75	94	41	76
11	140	248	230	248	166	164	92	86	76	100	40	88
12	156	254	231	244	200	168	86	110	78	104	28	80
13	145	252	227	246	187	142	98	92	82	121	22	70
14	143	249	240	244	174	137	116	110	79	98	44	68
15	154	255	218	246	183	121	96	134	84	72	104	74
16	155	293	218	238	246	110	100	153	72	94	97	93
17	152	299	189	258	242	102	101	143	80	86	83	100
18	167	244	222	282	242	104	110	149	51	94	97	114
19	182	206	194	329	194	120	120	152	55	92	71	120
20	183	209	218	310	151	104	104	138	70	65	22	118
21	157	190	214	236	146	132	122	128	71	53	30	116
22	124	203	222	238	138	131	132	119	73	55	1,370	113
23	155	182	244	228	122	125	121	132	72	a30	262	119
24	172	210	156	236	126	121	100	134	62	40	120	115
25	164	260	203	224	136	127	101	134	46	62	78	100
26	170	253	174	226	139	130	106	142	88	60	86	94
27	173	230	236	233	102	100	82	125	126	56	92	93
28	164	236	256	250	127	116	114	129	124	57	76	98
29	178	231	259	272	-	114	96	94	122	a40	78	104
30	178	234	278	258	-	170	122	80	116	a25	86	132
31	176	-	260	254	-	146	-	66	-	a30	78	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	4,843	183	124	156	9,610
November	6,277	299	136	209	12,450
December	7,018	278	156	226	13,920
Calendar year 1944	62,147	418	55	170	123,300
January	7,826	329	224	252	15,520
February	5,110	246	102	182	10,140
March	3,937	170	100	127	7,810
April	3,215	156	82	107	6,380
May	3,497	153	66	113	6,940
June	2,458	126	46	81.9	4,880
July	2,576	217	25	83.1	5,110
August	3,407	1,370	22	110	6,760
September	2,735	132	67	91.2	5,420
Water year 1944-45	52,899	1,370	22	145	104,900

a No gage-height record; discharge computed on basis of regularity of weekly regulation and records for station at Red Bluff.

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

Pecos River at Red Bluff, N. Mex.

Location.- Water-stage recorder, lat. 32°04'40", long. 104°02'20", at Red Bluff, Eddy County, just downstream from Red Bluff Creek and 5¼ miles upstream from Delaware River. Datum of gage is 2,850.0 feet above mean sea level, datum of 1929.

Drainage area.- 19,540 square miles (contributing area).

Records available.- October 1937 to September 1945. May 1914 to September 1937 at site 6 miles downstream near Angeles, Tex.; records comparable to combined flow of Pecos River at Red Bluff and Delaware River near Red Bluff.

Extremes.- Maximum discharge during year, 3,070 second-feet Aug. 22 (gage height, 7.51 feet); minimum, 28 second-feet Aug. 8 (gage height, 2.83 feet).

1937-45: Maximum discharge, 52,600 second-feet May 24, 1941 (gage height, 28.3 feet), by slope-area method; minimum, that of Aug. 8, 1945.

Maximum stage known prior to 1941, 28.0 feet in October 1904, from information by chief engineer of Panhandle & Santa Fe Railway.

Remarks.- Records excellent except those for period of no gage-height record, which are fair. Flow regulated to large extent by reservoirs above Carlsbad. Many diversions above station for irrigation. Records of water analysis for water year 1945 are given in Water-Supply Paper 1030.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	137	159	199	254	243	116	169	108	84	104	34	96
2	144	144	238	243	205	114	147	91	86	80	50	100
3	129	138	199	211	264	112	95	106	96	114	59	93
4	143	154	247	257	214	106	100	96	95	206	62	82
5	140	153	193	214	247	106	98	80	110	161	60	89
6	154	165	202	257	208	108	98	86	102	122	42	76
7	161	140	243	214	243	112	106	91	102	108	30	76
8	135	135	190	264	190	124	106	95	100	114	29	72
9	154	139	237	214	152	127	114	67	89	95	39	72
10	154	154	188	250	169	140	120	96	67	95	52	74
11	137	160	230	233	159	166	96	91	84	112	50	80
12	146	238	193	208	180	166	91	98	82	114	47	84
13	149	237	237	254	180	140	95	108	62	124	44	69
14	140	222	214	208	174	133	110	102	84	124	35	68
15	136	247	208	250	166	127	106	118	80	110	47	66
16	149	255	211	208	202	108	95	147	76	95	100	71
17	144	294	185	261	243	102	98	144	65	100	95	89
18	161	276	196	250	240	95	95	127	76	102	82	104
19	164	202	182	279	223	110	98	149	51	100	93	114
20	171	202	207	317	159	96	106	138	60	100	76	116
21	164	185	188	266	156	106	96	129	74	80	95	112
22	138	198	196	250	142	122	114	116	74	66	1,190	110
23	124	169	230	205	133	122	112	118	80	66	797	110
24	159	191	177	233	122	118	102	124	76	47	233	110
25	156	201	179	205	133	118	95	124	62	51	123	108
26	156	234	162	226	149	127	96	140	48	59	98	96
27	161	243	186	247	116	106	91	133	87	59	112	93
28	156	199	254	202	116	108	67	127	114	56	114	96
29	159	237	220	283	-	118	96	120	112	58	102	g98
30	169	216	272	243	-	120	95	96	110	42	102	g98
31	164	-	237	272	-	169	-	89	-	35	110	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	4,656	171	124	150	9,240
November	5,887	294	135	196	11,680
December	6,500	272	162	210	12,890
Calendar year 1944	60,451	391	79	165	119,900
January	7,480	317	202	241	14,840
February	5,128	264	116	183	10,170
March	3,746	169	95	121	7,430
April	3,129	169	87	104	6,210
May	3,476	149	80	112	6,890
June	2,528	114	48	84.3	5,010
July	2,899	206	35	93.5	5,750
August	4,202	1,190	29	136	8,330
September	2,722	116	66	90.7	5,400
Water year 1944-45	52,353	1,190	29	143	103,800

g Computed from graph based on once-daily staff-gage readings 2½ miles downstream.

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Pecos River near Orla, Tex.

Location.- Water-stage recorder, lat. 31°49', long. 103°48', 600 feet upstream from Pasotex pipe-line crossing, 6 miles southeast of Orla, Reeves County, 11 miles downstream from Salt (Screwbean) Draw, and 14 miles downstream from Red Bluff Dam. Datum of gage is 2,718.0 feet above mean sea level, datum of 1929.

Drainage area.- 21,300 square miles (contributing area).

Records available.- May 1937 to September 1945.

Extremes (regulated).- Maximum discharge during year, 2,130 second-feet July 4 (gage height, 4.88 feet); minimum, 8.2 second-feet Dec. 19.
1937-45: Maximum discharge, 23,700 second-feet Sept. 29, 1941 (gage height, 20.74 feet); minimum daily, 2.0 second-feet June 3, 1937, Dec. 27, 1940.

Remarks.- Records excellent. Flow regulated by Red Bluff Reservoir (see p. 196). Occasional runoff from draws between dam and station. Many diversions above station for irrigation. Records of water analysis for water year 1945 are given in Water-Supply Paper 1030.

Rating table, water year 1944-45 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Oct. 1 to Mar. 20)

0.8	7.0	1.3	71	2.4	495
.9	14	1.4	94	2.8	712
1.0	24	1.6	151	3.2	976
1.1	37	1.8	225		
1.2	52	2.0	305		

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	19	17	52	10	78	14	362	567	420	510	594	434
2	17	15	52	10	36	14	253	475	420	449	594	434
3	16	14	53	23	29	12	249	470	420	554	588	429
4	40	14	49	10	12	12	245	470	415	930	588	429
5	46	14	49	10	11	114	245	415	420	253	583	420
6	46	14	51	10	10	258	245	400	420	138	583	420
7	45	24	52	10	10	259	241	395	415	142	578	424
8	46	92	54	10	10	281	241	395	415	154	588	424
9	43	48	41	9.4	10	311	241	395	405	87	610	420
10	15	46	12	9.4	9.4	293	245	386	297	29	610	410
11	14	47	10	9.4	9.4	255	245	390	415	19	594	415
12	14	46	9.4	9.4	10	255	322	395	424	18	578	410
13	22	46	9.4	9.4	84	258	376	395	515	18	572	335
14	83	49	8.8	9.4	40	267	376	395	515	11	572	151
15	48	79	8.8	9.4	123	279	515	400	515	34	572	148
16	43	107	8.8	9.4	408	298	531	400	515	198	562	148
17	24	88	8.8	12	429	294	515	400	515	322	562	151
18	15	60	8.8	16	293	294	454	395	515	459	562	151
19	14	45	9.6	17	298	292	480	372	515	459	557	148
20	14	19	28	12	220	296	495	400	515	459	551	145
21	13	16	26	11	393	434	551	400	515	464	551	148
22	13	15	25	10	292	429	551	400	480	470	590	154
23	13	15	38	10	294	434	551	400	510	470	206	148
24	13	15	43	10	295	410	551	400	510	485	186	145
25	13	14	11	10	296	367	551	367	510	536	208	145
26	13	13	12	9.4	246	362	546	318	510	551	415	92
27	13	13	29	34	51	362	520	318	510	551	444	56
28	12	25	12	29	16	362	464	326	495	551	444	54
29	26	87	12	12	-	362	464	415	505	546	459	48
30	53	47	11	10	-	372	444	420	505	557	475	19
31	77	-	11	62	-	420	-	420	-	588	464	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	883	83	12	28.5	1,750
November	1,144	107	13	38.1	2,270
December	805.4	54	8.8	26.0	1,600
Calendar year 1944	83,108.8	1,580	8.8	227	164,800
January	432.6	62	9.4	14.0	858
February	4,012.8	429	9.4	143	7,960
March	8,670	434	12	280	17,200
April	12,069	551	241	402	23,940
May	12,494	567	318	403	24,780
June	14,056	515	297	469	27,880
July	11,012	930	11	355	21,840
August	16,040	610	186	517	31,810
September	7,455	434	19	248	14,790
Water year 1944-45	89,073.8	930	8.8	244	176,700

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Pecos River at Pecos, Tex.

Location.- Water-stage recorder, lat. 31°26', long. 103°28', 70 feet upstream from Texas & Pacific Railway bridge, 1.7 miles east of Pecos, Reeves County, and 11 miles upstream from Toyah Creek. Datum of gage is 2,554.0 feet above mean sea level, datum of 1929.

Drainage area.- 22,100 square miles (contributing area).

Records available.- August 1939 to September 1945. January 1898 to June 1907 at flume of Barstow Irrigation Co. (old Marguerratta Canal Co.), 6.4 miles upstream, published as Pecos River near Pecos. April 1914 to August 1915 at site 7 miles downstream, published as Pecos River near Barstow. March 1922 to July 1926 at site about 10 miles upstream, published as Pecos River above Barstow.

Extremes.- Maximum discharge during year, 828 second-feet (regulated) July 5 (gage height, 7.14 feet); minimum daily, 9.2 second-feet (regulated) Feb. 13, 14.

1898-1907, 1914-15, 1922-26, 1939-45: Maximum gage height, about 18 feet, present site and datum, Oct. 5, 1904 (discharge not determined); flood of Sept. 30, 1941, reached a stage of 17.68 feet (discharge, 22,200 second-feet, regulated); minimum daily not determined, affected by diversions.

Flood of August 1893 reached approximately the same stage as that of Oct. 5, 1904, from information by local residents.

Remarks.- Records excellent. Flow regulated to large extent by reservoirs above Orla. Several diversions between Orla and this station for irrigation.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	74	16	31	24	11	39	394	282	250	274	266	250
2	58	18	18	23	14	42	362	346	242	338	250	258
3	44	17	17	23	33	39	266	314	234	402	258	250
4	37	15	15	22	22	34	205	258	224	484	258	250
5	32	16	15	22	18	29	176	242	200	655	266	242
6	19	15	14	23	14	30	170	282	202	185	266	207
7	17	13	15	24	11	95	173	282	205	108	266	197
8	18	15	13	22	10	120	172	274	207	80	282	208
9	36	13	12	21	9.9	131	166	266	213	86	338	220
10	52	15	12	21	9.5	196	161	242	250	67	378	221
11	52	17	26	21	9.5	226	161	234	182	40	402	223
12	39	16	31	21	9.5	220	156	234	210	34	434	212
13	33	12	30	21	9.2	215	140	250	210	28	434	208
14	29	12	25	21	9.2	221	182	282	215	26	314	218
15	19	12	23	20	16	223	188	282	234	23	266	158
16	17	14	23	21	63	226	234	274	242	21	258	130
17	20	14	23	15	105	250	250	258	258	18	258	123
18	19	21	22	14	216	250	250	250	322	68	250	107
19	17	21	22	13	148	242	213	250	362	168	250	75
20	15	14	22	12	118	224	213	274	354	196	242	53
21	15	34	22	12	113	212	218	298	346	197	250	47
22	21	37	22	12	104	290	250	290	354	207	274	50
23	23	33	29	12	143	322	266	282	322	215	338	56
24	23	30	21	12	123	322	290	250	354	196	161	84
25	22	28	14	12	155	322	290	258	362	167	78	64
26	21	25	21	12	152	298	282	258	322	186	53	72
27	20	23	18	12	119	298	282	266	306	200	147	104
28	18	20	15	11	46	306	306	258	298	212	215	68
29	18	21	12	11	-	306	314	258	290	250	205	53
30	20	21	12	11	-	314	290	282	290	266	213	86
31	17	-	20	11	-	330	-	266	-	266	234	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	865	74	15	27.9	1,720
November	578	37	12	19.3	1,150
December	615	31	12	19.8	1,220
Calendar year 1944	50,298	1,140	11	137	99,770
January	532	24	11	17.2	1,060
February	1,810.8	216	9.2	64.7	3,590
March	6,372	330	29	206	12,640
April	7,020	394	140	234	13,920
May	8,342	346	234	269	16,550
June	8,060	362	182	269	15,990
July	5,663	655	18	183	11,230
August	8,104	434	53	261	16,070
September	4,494	258	47	150	8,910
Water year 1944-45	52,455.8	655	9.2	144	104,000

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Pecos River below Grandfalls, Tex.

Location.- Water-stage recorder, lat. 31°18', long. 102°46', at bridge on county road between Grandfalls and Imperial, 7.1 miles southeast of Grandfalls, Ward County, and 10 miles downstream from Chacatori Draw. Datum of gage is 2,373.0 feet above mean sea level, datum of 1929 (levels by Corps of Engineers, U. S. Army).

Drainage area.- 27,820 square miles (contributing area).

Records available.- August 1939 to September 1945. December 1921 to July 1926 at site about 12 miles downstream, published as Pecos River near Buena Vista.

Extremes (regulated).- Maximum discharge during year, 1,200 second-feet July 7 (gage height 7.74 feet); minimum daily, 30 second-feet June 5.

1921-26, 1939-45: Maximum discharge, 22,000 second-feet Oct. 2, 1941 (gage height, 20.98 feet); minimum daily, 8.0 second-feet July 27, 1925.

Flood of 1915 was the largest known, and that of September or October 1932 reached a stage of 18 feet, from information by local residents.

Remarks.- Records excellent except those for periods of no gage-height record, which are fair. Flow regulated to large extent by reservoirs above Orla. Many diversions between Orla and this station for irrigation.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	82	75	74	78	69	45	136	53	35	36	76	51
2	97	76	74	78	73	41	149	46	34	50	77	51
3	131	73	76	80	73	39	102	38	36	82	62	54
4	120	72	83	80	72	37	92	43	32	75	65	63
5	108	72	81	80	86	68	68	44	30	90	65	53
6	100	72	76	80	92	86	68	42	32	714	64	51
7	91	70	73	78	83	80	75	40	36	1,180	50	52
8	60	69	78	78	87	76	73	38	42	683	46	52
9	70	68	77	80	80	100	72	37	41	331	46	50
10	80	67	72	78	72	111	60	36	37	186	51	49
11	84	68	70	76	67	50	54	36	41	156	60	50
12	102	68	87	75	64	42	50	36	37	158	70	52
13	106	69	82	74	64	39	50	36	34	122	81	50
14	102	73	86	73	66	38	54	35	31	96	101	56
15	94	72	83	73	66	36	55	38	32	106	94	51
16	89	68	82	73	65	35	54	36	33	108	80	43
17	83	74	77	74	63	36	48	37	35	105	61	42
18	77	78	76	76	83	36	47	36	36	92	50	42
19	80	80	75	81	87	38	47	36	43	67	51	42
20	81	78	75	80	73	118	42	42	43	63	60	42
21	80	91	74	76	74	50	36	40	59	69	49	44
22	76	98	75	73	48	37	34	38	84	87	48	43
23	75	98	74	74	42	35	33	37	49	80	50	41
24	76	97	74	75	40	42	32	34	52	59	56	40
25	80	92	75	74	46	55	31	36	50	57	53	42
26	81	86	80	73	47	37	32	34	39	64	53	43
27	78	83	82	70	45	35	33	32	37	65	50	39
28	77	81	94	69	53	32	34	34	38	58	50	39
29	77	78	100	68	-	31	38	33	43	54	49	39
30	77	77	91	69	-	32	42	36	39	54	50	40
31	76	-	80	67	-	53	-	33	-	77	52	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	2,690	131	60	86.8	5,340
November	2,323	98	67	77.4	4,610
December	2,456	100	70	79.2	4,870
Calendar year 1944	24,710	512	29	67.5	49,010
January	2,333	81	67	75.3	4,630
February	1,880	92	40	67.1	3,730
March	1,590	118	31	51.3	3,150
April	1,741	149	31	58.0	3,450
May	1,172	53	32	37.8	2,320
June	1,210	84	30	40.3	2,400
July	5,224	1,180	36	169	10,360
August	1,870	101	46	60.3	3,710
September	1,406	63	39	46.9	2,790
Water year 1944-45	25,895	1,180	30	70.9	51,360

Note.- No gage-height record Dec. 30 to Jan. 2, Apr. 4-23; discharge computed on basis of records for station near Girvin.

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Pecos River near Girvin, Tex.

Location.- Water-stage recorder, lat. 31°05', long. 102°22', at bridge on U. S. Highway 67, about half a mile downstream from Panhandle & Santa Fe Railway bridge, 2.1 miles east of Girvin, Pecos County, and 6½ miles downstream from Comanche Creek. Datum of gage is 2,269.7 feet above mean sea level, unadjusted.

Drainage area.- 29,560 square miles (contributing area).

Records available.- August 1939 to September 1945.

Extremes (regulated).- Maximum discharge during year, 1,080 second-feet July 8 (gage height, 6.12 feet); minimum daily, 43 second-feet June 8.
1939-45: Maximum discharge, 20,000 second-feet Oct. 5, 1941 (gage height, 20.49 feet); minimum daily, 30 second-feet July 31, 1940.

Remarks.- Records good except those for periods of no gage-height record, which are fair. Flow regulated to large extent by reservoirs above Orla. Many diversions above station for irrigation. Some water from drain and two wasteways returns to river between station below Grandfalls and this station.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	96	98	101	106	90	69	77	58	49	46	62	58
2	99	96	99	101	88	74	110	61	53	58	77	61
3	104	94	101	98	90	69	164	73	44	58	80	61
4	112	84	101	96	93	66	164	70	46	67	80	61
5	134	93	99	98	94	65	135	61	53	88	69	63
6	125	91	104	98	94	62	123	61	46	202	69	72
7	116	90	102	96	106	90	99	65	44	229	126	69
8	107	88	98	94	107	104	96	63	43	945	82	65
9	100	86	96	94	104	102	98	61	48	901	63	63
10	82	86	101	94	106	102	98	60	53	500	57	66
11	88	85	99	96	101	128	91	58	66	310	52	65
12	92	85	94	94	96	125	79	57	53	230	53	63
13	96	85	96	93	91	86	72	54	54	203	56	63
14	117	85	106	93	88	74	70	53	52	210	66	66
15	121	86	104	91	88	67	70	52	50	186	74	66
16	117	91	107	91	88	66	73	52	45	142	93	70
17	114	94	106	93	86	65	74	54	44	139	90	72
18	110	96	102	96	88	63	73	56	46	132	80	63
19	104	102	101	94	86	63	66	53	45	126	66	60
20	101	101	99	96	104	63	63	54	48	112	67	58
21	102	99	98	99	102	71	65	49	52	96	53	58
22	102	99	94	96	98	126	63	53	72	86	60	60
23	99	109	94	91	94	88	60	56	223	90	56	57
24	98	115	94	90	77	70	58	53	76	98	54	74
25	96	116	93	93	72	65	57	52	60	91	56	61
26	96	114	93	94	65	66	57	49	57	76	63	62
27	98	109	99	94	67	80	54	49	57	73	65	61
28	99	106	110	93	72	70	56	46	49	74	63	60
29	98	104	109	90	-	63	58	46	48	74	61	57
30	98	102	117	90	-	60	57	44	46	69	60	58
31	98	-	118	88	-	61	-	45	-	66	58	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	3,219	134	82	104	6,380
November	2,898	115	85	96.6	5,750
December	3,135	118	93	101	6,220
Calendar year 1944	32,537	347	33	88.9	64,520
January	2,930	106	88	94.5	5,810
February	2,535	107	65	90.5	5,030
March	2,423	128	60	78.2	4,810
April	2,480	164	54	82.7	4,920
May	1,718	73	44	55.4	3,410
June	1,722	223	43	57.4	3,420
July	5,777	945	46	186	11,460
August	2,101	126	52	67.8	4,170
September	1,903	74	57	63.4	3,770
Water year 1944-45	32,841	945	43	90	65,150

Note.- No gage-height record Oct. 1-15, May 8-15; discharge computed on basis of records for stations below Grandfalls and near Sheffield.

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Pecos River near Sheffield, Tex.

Location.- Water-stage recorder, lat. 30°39', long. 101°45', at bridge on U. S. Highway 290, 3½ miles southeast of Sheffield, Pecos County, and 4 miles upstream from Liveoak Creek. Datum of gage is 2,026.3 feet above mean sea level, datum of 1929.

Drainage area.- 31,660 square miles (contributing area).

Records available.- October 1921 to April 1925, October 1939 to September 1945.

Extremes.- Maximum discharge during year, 1,480 second-feet July 7 (gage height, 5.22 feet); minimum, 51 second-feet (partly regulated) May 30.

1921-25, 1939-45: Maximum discharge, 13,800 second-feet Oct. 8, 1941 (gage height, 16.75 feet); minimum, 15 second-feet Aug. 15, 1923.

Maximum stage known, about 23.5 feet in September 1916, at site and datum used prior to May 1, 1925, from information by local residents.

Remarks.- Records good. Flow regulated to large extent by reservoirs above Orla. Many diversions between Orla and this station for irrigation.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	103	106	118	134	116	91	94	71	53	69	87	66
2	103	105	116	132	115	93	91	70	54	71	82	64
3	108	105	121	124	115	91	87	69	58	67	80	62
4	109	105	129	120	115	93	106	70	57	77	85	62
5	112	105	121	118	116	93	150	76	58	70	91	62
6	123	105	118	118	120	87	150	81	55	115	89	62
7	140	103	116	115	120	82	134	74	84	303	87	60
8	137	101	121	114	120	81	126	70	88	737	85	60
9	132	101	120	114	131	94	110	78	62	534	112	64
10	127	101	115	112	134	112	105	72	59	870	101	61
11	123	101	114	110	132	112	108	71	57	560	85	60
12	108	101	118	110	137	112	103	69	57	350	77	60
13	102	101	118	112	129	129	102	66	59	256	71	58
14	109	101	114	112	121	127	96	63	63	216	69	57
15	112	101	114	110	118	105	86	61	58	207	69	57
16	121	100	121	110	115	92	83	59	57	200	76	58
17	124	102	123	114	112	86	83	61	57	172	81	58
18	123	110	123	115	112	82	85	59	58	151	92	58
19	118	114	121	116	112	81	85	58	56	145	93	59
20	115	114	118	118	112	78	86	59	55	142	87	58
21	112	115	115	115	109	77	86	59	54	137	80	56
22	109	115	115	115	121	74	81	58	55	129	74	58
23	108	115	114	118	121	77	80	57	55	115	68	58
24	108	123	114	116	120	110	79	56	76	105	68	57
25	108	127	114	116	116	93	76	58	166	103	69	56
26	106	126	112	115	100	83	73	59	98	108	69	53
27	105	126	120	116	93	78	73	57	80	106	70	59
28	103	124	129	118	92	78	73	56	69	100	72	55
29	105	121	126	116	-	85	72	54	68	105	77	59
30	106	120	129	116	-	83	68	53	64	92	72	59
31	106	-	131	115	-	87	-	53	-	91	68	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	3,525	140	102	114	6,990
November	3,294	127	100	110	6,530
December	3,698	131	112	119	7,330
Calendar year 1944	39,514	346	54	108	78,370
January	3,604	134	110	116	7,150
February	3,274	137	92	117	6,490
March	2,846	129	74	91.8	5,640
April	2,831	150	68	94.4	5,620
May	1,977	81	53	63.8	3,920
June	1,990	166	53	66.3	3,950
July	6,493	870	59	209	12,880
August	2,486	112	68	80.2	4,930
September	1,786	66	55	59.5	3,540
Water year 1944-45	37,804	870	53	104	74,970

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Gallinas River near Montezuma, N. Mex.

Location.- Water-stage recorder, lat. 35°39'00", long. 105°19'10", in Las Vegas Grant, 2 miles west of Montezuma, San Miguel County, and 6 miles northwest of Las Vegas.

Drainage area.- 84 square miles.

Records available.- October 1930 to September 1945 in reports of Geological Survey. March 1915 to December 1931 (1915-26, no winter records) in reports of State engineer.

Average discharge.- 19 years (1926-45), 22.3 second-feet.

Extremes.- Maximum discharge during year, 466 second-feet Aug. 21 (gage height, 3.35 feet); minimum daily, 2.5 second-feet July 21, 22.
1930-45: Maximum discharge, 3,310 second-feet Sept. 23, 1941 (gage height, 7.78 feet), from rating curve extended above 350 second-feet by logarithmic plotting; minimum daily, 0.8 second-foot Aug. 15-18, 21, 25, 26, 30, 1934, Jan. 20, 1938.

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

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3.0	7.4	b6.5	b4.0	b5.0	8.5	14	60	21	5.3	6.6	77
2	3.0	7.7	b6.0	b4.5	b7.0	7.4	18	a70	22	7.1	5.7	57
3	3.4	7.1	6.6	b4.0	8.8	6.4	18	a75	19	5.7	5.0	41
4	3.5	5.7	b7.5	b4.0	8.5	7.4	15	a85	17	3.9	4.8	31
5	3.4	6.4	*b6.0	b4.0	*8.5	8.2	15	89	16	6.6	4.8	25
6	3.0	11	b5.5	b4.5	8.8	6.9	16	90	12	6.0	4.8	22
7	2.9	19	b6.5	b4.0	b8.0	6.9	17	a80	12	6.6	10	19
8	2.9	15	b7.0	b4.5	b7.0	7.1	19	*a72	13	5.5	25	16
9	2.9	13	b7.5	b4.5	8.2	8.2	22	a70	11	3.2	34	14
10	3.2	11	b6.0	b5.0	7.9	9.1	29	68	9.1	14	46	12
11	3.2	9.3	b5.5	*b5.0	7.7	11	24	61	17	12	35	11
12	2.9	8.8	b6.5	b5.0	7.9	12	20	59	17	7.9	32	9.3
13	2.7	8.2	b6.5	b4.5	8.2	14	20	59	13	6.0	21	9.1
14	2.7	7.4	b6.0	b5.0	7.9	15	21	58	8.5	5.3	14	8.8
15	3.2	*7.7	b5.5	5.5	8.5	16	20	60	7.9	4.1	17	7.9
16	26	8.2	b5.5	5.5	9.1	16	20	57	9.6	2.9	13	7.7
17	29	8.2	b5.5	5.5	9.1	13	19	50	9.6	5.3	11	9.3
18	21	7.7	b5.5	*5.3	8.8	15	19	45	8.5	6.4	9.3	7.7
19	24	7.4	b5.0	5.0	9.3	13	22	46	6.6	5.5	9.6	a7.0
20	28	8.2	b5.5	5.3	8.8	11	28	48	5.0	4.3	41	a6.6
21	20	7.4	b6.0	b4.5	8.2	13	31	44	5.5	2.5	322	6.6
22	16	b6.0	b6.0	b4.0	b7.0	15	41	41	9.3	2.5	187	6.4
23	14	b5.5	b6.5	b3.5	*b6.5	14	49	36	12	2.6	132	5.7
24	12	7.9	6.0	b4.0	b7.5	13	45	32	9.9	2.9	a90	5.3
25	12	8.8	5.7	b4.0	8.5	13	45	33	10	6.2	65	5.5
26	9.3	7.4	5.5	b4.5	7.4	14	44	30	17	14	48	5.5
27	7.4	b6.5	b5.0	b4.5	b6.5	14	42	27	7.1	6.2	39	5.5
28	8.5	b6.0	5.5	b4.0	b6.0	13	37	28	4.6	6.0	34	5.6
29	9.3	b5.5	b5.0	b4.0	-	13	39	26	7.1	14	29	a6.0
30	8.5	b6.0	b5.5	b4.0	-	14	49	25	5.3	9.1	33	a8.0
31	7.7	-	b5.0	b4.5	-	12	-	24	-	7.7	49	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	298.6	29	2.7	9.63	592
November	251.4	19	5.5	8.38	499
December	183.8	7.5	5.0	5.93	365
Calendar year 1944	5,500.2	116	2.2	15.0	10,910
January	140.1	5.5	3.5	4.52	278
February	220.6	9.3	5.0	7.88	438
March	360.1	16	6.4	11.6	714
April	818	49	14	27.3	1,620
May	1,648	90	24	53.2	3,270
June	342.6	22	4.6	11.4	680
July	197.3	14	2.5	6.36	391
August	1,377.6	322	4.8	44.4	2,730
September	458.4	77	5.3	15.3	909
Water year 1944-45	6,296.5	322	2.5	17.3	12,490

Peak discharge.- July 10 (2:30 p.m.) 158 sec.-ft.; July 26 (3:30 p.m.) 146 sec.-ft.; Aug. 20 (5:30 p.m.) 327 sec.-ft.; Aug. 21 (4 a.m.) 466 sec.-ft.

* Winter discharge measurement made on this day.

a No gage-height record; discharge computed on basis of weather records and records for station at Montezuma.

b Stage-discharge relation affected by ice.

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

Gallinas River at Montezuma, N. Mex.

Location.- Water-stage recorder, lat. 35°39'15", long. 105°16'30", in Las Vegas Grant, at highway bridge half a mile downstream from Montezuma, San Miguel County, and 5 miles northwest of Las Vegas.

Drainage area.- 87 square miles.

Records available.- August 1903 to December 1914 (prior to October 1904, gage heights only) and October 1930 to September 1945 in reports of Geological Survey. October 1904 to December 1931 in reports of State engineer (prior to 1930, published as Gallinas River near Las Vegas).

Average discharge.- 38 years (1905-11, 1913-45), 22.2 second-feet.

Extremes.- Maximum discharge during year, 594 second-feet Aug. 21 (gage height, 4.92 feet); minimum daily, 0.7 second-foot Oct. 1, 2, 5-9, July 24.

1930-45: Maximum discharge, 2,590 second-feet Sept. 23, 1941 (gage height, 6.23 feet), from rating curve extended above 1,000 second-feet by logarithmic plotting; no flow (result of regulation) Oct. 4-7, 1934.

Remarks.- Records fair. Flow regulated by reservoirs owned by New Mexico Power Co. Several diversions above station for irrigation and municipal water supply.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.7	5.2	5.5	2.8	2.8	7.4	10	48	17	2.4	2.2	77
2	.7	5.2	5.2	3.3	3.6	7.4	16	63	17	2.6	2.1	55
3	.9	6.1	5.8	2.9	4.0	6.1	20	69	16	2.6	1.9	34
4	.8	4.2	6.4	3.1	8.1	5.8	9.7	77	12	2.4	1.5	25
5	.7	4.2	4.7	2.9	6.7	7.4	14	82	12	2.2	1.2	19
6	.7	8.5	4.4	3.3	7.4	6.1	17	82	8.9	2.2	1.0	16
7	.7	18	5.5	3.3	5.2	5.8	18	77	6.7	2.2	1.1	14
8	.7	14	5.8	3.3	3.6	5.8	21	66	6.4	2.8	16	12
9	.7	12	6.4	3.6	3.3	6.4	24	66	7.1	2.2	36	11
10	1.0	10	4.7	3.6	3.6	7.7	28	62	4.7	9.1	41	9.7
11	.9	8.1	4.4	3.8	3.6	9.7	22	58	14	14	35	8.9
12	.8	7.7	5.8	3.8	3.6	11	18	55	17	6.1	30	7.4
13	.8	7.1	5.8	3.3	3.6	12	18	55	9.7	2.2	14	6.7
14	.8	5.8	5.2	3.6	3.6	14	19	56	6.1	1.9	8.5	4.7
15	1.0	5.5	5.0	3.8	3.6	14	19	58	5.5	1.9	9.7	4.2
16	2.8	6.4	5.0	3.8	3.8	14	18	52	6.1	1.3	14	4.7
17	30	4.4	4.7	4.0	3.6	8.9	17	47	6.1	1.0	7.1	6.1
18	25	3.3	5.0	4.0	3.6	14	17	44	5.0	1.3	3.8	5.5
19	22	6.7	4.0	3.6	3.6	11	18	44	4.2	1.7	3.6	4.4
20	29	6.7	5.2	3.8	3.6	8.9	21	46	3.3	1.2	29	3.6
21	20	6.1	5.2	3.6	3.6	11	24	44	2.9	1.0	371	3.1
22	16	4.7	5.2	2.9	3.3	14	32	40	2.6	.9	215	3.6
23	13	4.2	6.1	2.4	3.1	13	42	36	2.6	.8	153	2.9
24	12	6.1	5.8	2.8	3.1	12	46	32	5.0	.7	88	2.4
25	10	7.7	5.2	2.8	3.3	9.7	42	32	4.7	.9	59	2.1
26	9.7	6.7	5.0	2.8	3.1	11	35	30	16	1.8	38	2.1
27	7.7	5.8	4.0	2.9	2.9	12	34	27	6.4	4.2	27	1.9
28	5.8	5.8	4.7	2.9	3.1	11	30	23	2.2	1.5	30	2.1
29	3.1	4.0	4.2	2.9	-	10	30	22	1.7	4.5	21	3.8
30	4.0	5.0	4.4	2.8	-	11	3.9	21	1.9	4.2	22	6.7
31	5.5	-	3.8	2.8	-	9.3	-	19	-	2.9	40	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	227.5	30	0.7	7.34	451
November	205.2	18	3.3	6.84	407
December	158.1	6.4	3.8	5.10	314
Calendar year 1944	4,488.3	127	.4	12.3	8,900
January	101.2	4.0	2.4	3.26	201
February	110.0	8.1	2.8	3.93	218
March	307.4	14	5.8	9.92	610
April	718.7	46	9.7	24.0	1,430
May	1,533	82	19	49.5	3,040
June	230.8	17	1.7	7.69	458
July	86.7	14	.7	2.80	172
August	1,322.7	371	1.0	42.7	2,620
September	359.6	77	1.9	12.0	713
Water year 1944-45	5,360.9	371	.7	14.7	10,630

Peak discharge.- May 6 (8 a.m.) 99 sec.-ft.; Aug. 20 (9 p.m.) 246 sec.-ft.; Aug. 21 (7 a.m.) 594 sec.-ft.

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

Rio Ruidoso at Hondo, N. Mex.

Location.- Water-stage recorder, lat. 33°23'00", long. 105°16'30", in NE¼SW¼ sec. 4, T. 11 S., R. 17 E., a quarter of a mile upstream from confluence with Rio Bonito and half a mile southwest of Hondo.

Drainage area.- 307 square miles.

Records available.- October 1930 to September 1945 in reports of Geological Survey. August 1930 to December 1931 in reports of State engineer.

Average discharge.- 15 years (1930-45), 26.1 second-feet.

Extremes.- Maximum discharge during year, 33 second-feet Aug. 9 (gage height, 1.09 feet); minimum daily, 0.6 second-foot July 22-24.
1930-44: Maximum discharge, 12,400 second-feet Sept. 29, 1941 (gage height, 21.13 feet), from rating curve extended above 130 second-feet on basis of velocity-area studies; no flow Aug. 15, 16, 1935.

Remarks.- Records fair. Many diversions above station for irrigation.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	15	16	17	16	15	12	3.6	15	1.3	1.3	0.7	0.8
2	16	16	17	16	15	12	3.4	18	1.3	1.8	.7	.9
3	17	15	17	16	15	13	3.2	18	1.3	1.8	.7	1.0
4	17	15	17	15	15	13	3.2	16	1.3	1.7	.7	1.0
5	17	15	17	15	16	12	3.4	15	1.3	2.0	.7	1.1
6	16	15	16	15	15	12	3.6	15	1.4	2.0	.8	1.0
7	15	15	15	15	14	12	2.9	15	1.4	2.0	.8	.9
8	15	15	15	14	13	13	2.5	13	1.3	2.0	.8	.8
9	15	16	16	14	13	12	2.4	12	1.4	2.0	2.5	.8
10	15	16	16	14	12	11	2.0	11	1.3	1.8	.9	2.8
11	14	16	15	14	13	9.0	2.2	9.6	1.4	1.8	.8	.8
12	15	15	15	13	13	6.9	2.1	9.0	1.4	1.8	.9	.8
13	15	15	14	13	9.0	9.3	2.2	11	1.3	1.7	.9	.7
14	16	14	14	14	6.9	8.7	2.5	11	1.3	1.3	.9	.7
15	14	14	14	13	6.6	8.1	2.9	11	1.3	1.4	.9	.7
16	15	15	13	12	8.1	9.0	3.8	10	1.3	1.4	1.5	.7
17	16	16	13	12	10	9.3	2.9	7.5	1.3	1.4	.8	.7
18	16	15	13	13	12	14	2.2	4.4	1.3	1.0	.8	.7
19	17	15	14	12	16	16	2.2	1.6	1.3	.7	.8	.7
20	17	15	15	15	15	18	1.7	1.5	1.4	.7	.8	.7
21	17	15	14	16	16	16	3.2	1.7	1.4	.7	.9	.7
22	17	15	14	14	15	12	5.7	1.3	1.6	.6	5.5	.7
23	16	14	14	13	15	11	12	1.3	1.7	.6	8.4	.7
24	15	14	14	12	14	15	12	1.3	1.8	.6	3.5	.8
25	16	16	15	12	14	16	16	1.3	1.8	.7	.8	.8
26	15	16	15	13	14	16	16	1.4	1.8	.7	.8	.8
27	16	16	15	13	15	17	18	1.4	1.5	.7	.8	.8
28	16	16	16	13	12	16	16	1.3	1.1	.7	.8	.8
29	16	17	17	13	-	16	16	1.4	1.1	.7	.8	.8
30	15	17	16	13	-	12	15	1.4	1.1	.7	.8	.8
31	16	-	16	13	-	4.1	-	1.4	-	.7	.8	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	488	17	14	15.7	968
November	460	17	14	15.3	912
December	469	17	13	15.1	930
Calendar year 1944	5,695.4	71	.8	15.6	11,300
January	426	16	12	13.7	845
February	367.6	16	6.6	13.1	729
March	381.4	18	6.9	12.3	756
April	184.8	18	1.7	6.16	367
May	239.8	18	1.3	7.74	476
June	41.5	1.8	1.1	1.38	82
July	39.0	2.0	.6	1.26	77
August	42.3	8.4	.7	1.37	84
September	26.0	2.8	.7	.87	52
Water year 1944-45	3,165.4	18	.6	8.67	6,280

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

Rio Hondo at Diamond A Ranch near Roswell, N. Mex.

Location.- Water-stage recorder, lat. 33°20'40", long. 104°51'10", in NE¼ sec. 20, T. 11 S., R. 21 E., at Diamond A Ranch, 8 miles upstream from Rocky Arroyo and 18 miles west of Roswell.

Drainage area.- 960 square miles (contributing area).

Records available.- May 1939 to September 1945 in reports of Geological Survey. May 1906 to August 1909 in reports of State engineer.

Extremes.- Maximum discharge during year, 304 second-feet July 16 (gage height, 7.70 feet, from high-water marks); no flow at times.
1939-45: Maximum discharge, 27,000 second-feet Sept. 22, 1941 (gage height, 28.78 feet), by slope-area method; no flow at times.

Remarks.- Records good except those for periods of no gage-height record, which are poor. Many diversions above station for irrigation.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	22	15	25	23	15	9.3	0	0	1.6	0	0	1.1
2	18	15	25	24	13	7.9	0	0	2.6	0	0	1.3
3	16	13	25	24	10	9.3	1.6	0	3.5	0	0	1.4
4	16	11	25	23	15	11	7.9	0	.2	0	0	1.8
5	14	10	26	23	15	10	5.0	0	.1	0	0	0
6	11	9.3	25	23	15	11	4.7	.1	.1	0	0	0
7	11	13	22	23	14	10	5.3	3.0	.4	0	0	0
8	10	17	20	23	14	9.0	8.8	2.0	.3	0	0	0
9	9.3	15	21	22	14	9.0	9.6	1.6	.1	0	0	0
10	9.0	18	22	22	15	7.3	3.5	.2	0	0	0	0
11	8.6	19	22	23	12	5.9	.2	.8	0	0	0	0
12	12	22	21	21	9.6	4.8	.2	5.4	0	.7	0	0
13	9.0	22	22	7.6	11	3.4	0	8.6	0	4.3	13	0
14	6.2	20	20	5.4	9.3	3.6	2.6	8.6	0	4.8	20	0
15	4.8	20	21	9.3	8.3	0	6.5	10	0	4.8	11	0
16	10	22	21	5.6	7.9	0	5.9	7.6	0	f92	9.0	0
17	7.6	26	21	16	9.6	0	2.3	7.2	0	a30	6.9	0
18	1.8	25	22	18	10	1.4	.1	11	0	a15	5.9	0
19	8.1	23	21	9.6	10	1.8	0	9.0	0	a5.0	7.9	0
20	1.4	23	22	8.3	9.0	3.0	0	8.6	0	a3.0	3.1	0
21	15	25	22	19	12	2.8	0	9.3	0	1.0	a3.5	0
22	13	28	22	20	17	2.3	0	6.6	0	.1	a3.5	0
23	13	26	22	20	13	1.7	0	0	0	0	a3.5	0
24	11	28	22	15	9.0	3.6	0	.5	0	0	a3.5	0
25	8.0	26	22	18	6.8	9.0	0	2.5	0	0	a3.5	0
26	9.0	26	23	21	7.6	6.0	0	1.6	0	0	3.2	0
27	12	25	23	21	13	2.0	0	1.8	0	0	4.0	0
28	17	25	25	20	11	2.5	0	1.1	0	0	2.6	0
29	20	25	24	18	-	3.2	0	2.5	0	0	2.1	0
30	17	25	24	18	-	.3	0	2.3	0	0	1.0	0
31	10	-	23	17	-	0	-	1.1	-	0	.7	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	350.8	22	1.4	11.3	696
November	617.3	28	9.3	20.6	1,220
December	701	26	20	22.6	1,390
Calendar year 1944	5,722.4	130	0	15.6	11,360
January	560.8	24	5.4	18.1	1,110
February	326.1	17	6.8	11.6	647
March	151.1	11	0	4.87	300
April	64.2	9.6	0	2.14	127
May	113	11	0	3.65	224
June	8.9	3.5	0	.30	18
July	160.7	92	0	5.18	319
August	107.9	20	0	3.48	214
September	5.6	1.8	0	.19	11
Water year 1944-45	3,167.4	92	0	8.68	6,280

a No gage-height record; discharge computed on basis of recorded range in stage and weather records.

f Computed on basis of partly estimated gage-height record.

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

Rio Bonito at Hondo, N. Mex.

Location.- Water-stage recorder and concrete control, lat. 33°23'20", long. 105°16'30", in NE¼NW¼ sec. 4, T. 11 S., R. 17 E., at Hondo, half a mile upstream from confluence with Rio Ruidoso.

Drainage area.- 306 square miles (contributing area).

Records available.- October 1930 to September 1945 in reports of Geological Survey. August 1930 to December 1931 in reports of State engineer.

Average discharge.- 15 years (1930-45), 13.2 second-feet.

Extremes.- Maximum discharge during year, 3,100 second-feet July 16 (gage height, 9.20 feet); no flow at times.
1930-45: Maximum discharge, 11,000 second-feet Sept. 28 or 29, 1941 (gage height, 20.92 feet), from rating curve extended above 214 second-feet on basis of slope-area determination at gage-height 19.0 feet; no flow at times.

Remarks.- Records good. Many diversions above station for irrigation.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4.8	4.2	4.5	0	0.2	0		0		0	0	1.6
2	3.7	3.7	4.5	0	.1	1.0		0		0	0	1.2
3	3.3	3.7	4.5	0	.1	1.0		0		0	0	1.3
4	3.3	3.3	4.2	0	.1	.5		1.3		0	0	1.3
5	2.9	3.3	3.3	0	.1	.2		.3		0	0	.9
6	2.7	3.3	1.6	0	.1	.8		.6		0	0	.5
7	2.5	4.0	1.6	0	.1	.7		.7		0	0	1.2
8	2.5	4.0	1.2	0	.2	.6		.5		0	0	1.2
9	2.5	3.3	0	.1	.3	.8		.9		0	.4	1.2
10	2.4	3.3	0	.1	.3	.5		.9		0	0	1.0
11	2.2	3.1	0	.2	.2	0		.1		0	1.4	.9
12	2.2	2.9	0	.1	0	0		0		0	39	.9
13	2.0	2.9	0	.1	0	0		0		2.5	20	.9
14	1.8	3.3	0	.1	0	0		0		0	5.2	.8
15	1.8	3.3	0	0	0	0		0		71	16	.8
16	6.5	3.7	.9	.1	0	0		.1		30	8.0	.7
17	7.6	4.2	2.7	.1	0	0		0		9.1	6.4	.5
18	6.0	3.7	1.2	.1	0	0		0		6.0	6.0	.7
19	6.4	3.7	.4	.1	0	0		0		4.5	6.4	.6
20	6.8	3.5	0	.3	0	0		0		2.3	7.2	.7
21	5.2	3.7	0	.2	0	0		0		.5	4.8	.6
22	5.2	3.7	0	.4	0	0		.1		.4	5.2	.6
23	5.2	3.7	0	.4	0	0		0		.3	4.8	.5
24	5.2	4.5	0	.3	0	.4		0		.4	4.0	.5
25	5.2	4.8	0	.2	0	.4		0		.1	3.7	.6
26	5.2	4.8	0	.2	0	.6		0		.3	3.1	.6
27	5.2	4.5	0	.2	0	.2		0		5.5	2.9	.5
28	5.2	4.5	0	.2	0	0		0		.9	2.2	.6
29	5.2	4.2	0	.2	-	0		0		0	1.9	.8
30	4.8	4.5	0	.1	-	0		0		.1	1.4	.8
31	4.8	-	0	.1	-	0		0		0	1.3	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	130.3	7.6	1.8	4.20	258
November	113.3	4.8	2.9	3.78	225
December	30.6	4.5	0	.99	61
Calendar year 1944	1,411.4	60	0	3.86	2,800
January	3.9	.4	0	.13	7.7
February	1.8	.3	0	.06	3.6
March	7.7	1.0	0	.25	15
April	0	0	0	0	0
May	5.5	1.3	0	.18	11
June	0	0	0	0	0
July	133.9	71	0	4.32	266
August	151.3	39	0	4.88	300
September	25.0	1.6	.5	.83	50
Water year 1944-45	603.3	71	0	1.65	1,200

Peak discharge.- July 15 (8:30 p.m.) 3,100 sec.-ft.; Aug. 12 (8 p.m.) 272 sec.-ft.; Aug. 15 (5 a.m.) 58 sec.-ft.

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

Rio Felix at old highway bridge, near Hagerman, N. Mex.

Location.- Water-stage recorder, lat. 33°07'30", long. 104°20'40", in SW¼ sec. 4, T. 14 S., R. 26 E., on downstream side of bridge, 1¼ miles northwest of Hagerman and 2½ miles upstream from mouth.

Drainage area.- 932 square miles (contributing area).

Records available.- April 1939 to September 1945. March 1932 to April 1939 at site 1 mile downstream. Records for periods of low flow not equivalent.

Extremes.- Maximum discharge during year, 56 second-feet Oct. 16 (gage height, 2.24 feet); minimum daily, 0.2 second-foot Sept. 25, 26.

1939-45: Maximum discharge, 20,000 second-feet Sept. 22, 1941 (gage height, 23.0 feet), from rating curve extended above 5,100 second-feet by logarithmic plotting; minimum daily, that of Sept. 25, 26, 1945.

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

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	14	15	8.0	20	1.6	1.1	1.1	0.7	0.9	1.3	0.4	0.6
2	22	14	7.5	20	1.6	1.1	1.8	.9	.9	1.6	.4	.6
3	20	7.5	7.5	19	1.3	1.1	1.3	.7	.7	1.1	.4	.6
4	18	2.1	7.5	17	1.3	1.1	1.1	.7	.7	1.1	.4	.7
5	18	2.1	16	7.0	1.3	1.1	1.1	.7	.7	1.6	.4	.7
6	18	2.1	28	1.3	1.3	1.1	1.1	.7	.7	1.1	.4	.7
7	18	2.4	28	1.3	1.3	1.1	1.1	.7	.7	1.1	.3	.7
8	17	2.4	28	1.1	1.6	1.1	.9	.6	.7	1.1	.4	.7
9	17	2.1	25	1.1	1.6	1.8	.9	.6	.7	1.1	.4	.7
10	21	1.8	19	1.3	1.6	1.3	.9	.6	.7	1.1	.4	.7
11	28	3.3	18	1.6	1.6	1.1	.9	.6	.7	.9	.4	.7
12	25	25	18	14	1.6	1.1	.9	.6	.7	.9	.4	.7
13	21	29	17	4.0	1.3	1.1	.9	.6	.7	.9	.4	.7
14	21	29	11	4.0	1.3	.9	1.1	.6	.7	.9	.4	.7
15	21	27	12	3.7	1.3	.9	.9	.6	.7	3.3	.4	.6
16	38	13	6.5	3.7	1.1	.9	.7	.6	.7	.6	.4	.6
17	44	16	16	3.7	1.3	.9	.7	.6	.7	.6	.4	.4
18	33	16	16	3.7	1.1	.9	.6	.6	.7	.6	.4	.4
19	30	14	15	2.4	1.1	.9	.6	.4	.7	.6	.4	.4
20	30	16	12	2.4	1.1	.9	.6	.4	.7	.4	.4	.3
21	27	15	11	2.7	4.3	.9	.6	.4	.7	.4	.4	.3
22	29	10	13	2.4	13	.9	.7	.4	.7	.4	.4	.3
23	31	14	20	2.1	1.8	.9	.6	.4	.7	.4	.4	.3
24	21	11	21	2.1	1.6	1.1	.6	.6	.9	.4	.4	.3
25	21	18	22	2.1	1.1	1.1	.6	.6	.9	.4	.4	.2
26	21	35	18	2.1	1.1	1.1	.6	.6	.7	.4	.4	.2
27	18	25	23	2.1	1.1	.9	.6	.7	.9	.4	.6	.3
28	13	12	25	1.8	1.1	1.1	.6	.7	1.1	.4	.6	.3
29	13	11	29	1.8	-	1.1	.6	.7	1.1	.4	.6	.4
30	14	10	21	1.6	-	1.1	.7	.7	1.1	.4	.6	.4
31	14	-	17	1.6	-	1.1	-	.7	-	.4	.6	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	696	44	13	22.5	1,380
November	400.8	35	1.8	13.4	796
December	536	29	6.5	17.3	1,060
Calendar year 1944	2,206.7	44	.7	6.03	4,370
January	154.7	20	1.1	4.99	307
February	52.4	13	1.1	1.87	104
March	32.8	1.8	.9	1.06	65
April	25.4	1.8	.6	.85	50
May	19.0	.9	.4	.61	38
June	23.2	1.1	.7	.77	46
July	26.3	3.3	.4	.85	52
August	13.3	.6	.3	.43	26
September	15.2	.7	.2	.51	30
Water year 1944-45	1,995.1	44	.2	5.47	3,950

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

Cottonwood Creek near Lake Arthur, N. Mex.

Location.- Water-stage recorder and concrete control, lat. 32°55'00", long. 104°22'00", in SW¼SE¼ sec. 15, T. 16 S., R. 26 E., 1½ miles upstream from mouth and 6 miles south of town of Lake Arthur.

Drainage area.- 1,922 square miles (contributing area).

Records available.- March 1932 to September 1945.

Average discharge.- 13 years (1932-45) 10.8 second-feet.

Extremes.- Maximum discharge during year, 46 second-feet July 6 (gage height, 3.73 feet); minimum daily, 0.2 second-foot June 7-10, Aug. 4.

1932-45: Maximum discharge, 1,100 second-feet June 13, 1935, from rating curve extended above 15 second-feet by logarithmic plotting; maximum gage height, 13.5 feet May 30, 1937 (present datum, from floodmarks), affected by backwater from Pecos River; no flow at times.

Remarks.- Records good except those for period of no gage-height record, which are poor. Diversions above station for irrigation.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	16	18	17	22	15	7.7	7.3	4.7	a1	2.2	0.9	2.0
2	16	18	18	22	15	7.3	7.3	4.4	a2	1.4	1.2	.6
3	16	18	18	24	15	7.3	7.5	3.6	a2	.6	.8	.5
4	16	18	18	25	16	6.5	6.9	3.2	a2	.6	a.2	.7
5	16	18	18	20	16	6.7	6.9	2.8	a1	1.1	.3	.5
6	16	17	19	17	14	a6.5	6.9	5.3	.3	25	1.3	.6
7	16	16	19	17	15	a6.5	6.7	2.4	.2	8.1	1.3	.5
8	16	16	19	17	9.6	a6.5	6.5	3.1	.2	7.5	1.3	.7
9	17	16	19	17	8.3	a6	6.3	2.2	a.2	7.5	1.1	2.1
10	17	16	19	17	8.5	a6	6.7	2.1	a.2	7.1	1.4	1.2
11	17	16	19	17	9.1	a6	6.7	2.6	a.5	7.1	.8	.5
12	18	16	20	17	9.1	6.0	5.2	1.4	a.8	7.5	.6	.5
13	18	16	20	16	8.8	6.0	3.2	1.9	a.6	7.3	1.4	.6
14	18	15	20	16	8.8	6.2	2.0	2.0	a.5	7.3	.6	.5
15	18	15	20	16	7.9	6.0	3.5	2.2	.7	8.3	.8	1.2
16	18	15	20	17	6.5	6.0	3.7	2.4	.9	8.1	1.8	2.1
17	18	16	21	17	6.7	5.7	3.4	2.2	2.2	8.3	.6	2.0
18	18	16	21	19	7.1	5.7	2.1	2.6	2.1	8.3	.6	2.0
19	18	17	21	17	7.5	5.8	2.6	3.0	2.0	8.5	.6	2.0
20	19	17	21	17	7.9	6.2	2.4	4.8	2.0	8.3	.9	2.0
21	18	17	21	18	10	6.9	3.4	4.6	a2	6.3	2.4	1.9
22	17	17	22	17	12	6.9	6.0	3.3	a2	5.7	3.0	1.8
23	17	17	21	17	7.7	6.3	6.2	1.4	a2	4.8	1.7	1.7
24	17	18	21	17	7.7	5.8	7.9	1.9	a2	3.9	.7	1.7
25	17	16	21	17	7.7	5.7	5.7	1.5	a2	3.0	.7	1.7
26	17	17	21	17	7.1	5.8	3.8	a1	1.9	1.6	2.5	1.6
27	17	17	21	16	7.5	5.8	3.9	a2	2.1	1.6	1.6	1.7
28	17	17	22	16	7.3	5.5	3.8	a2	2.0	1.2	1.2	1.7
29	17	17	22	16	-	5.2	5.8	a1	2.0	4.3	.8	2.7
30	17	17	23	17	-	5.5	5.0	a1	2.2	1.2	.9	2.6
31	18	-	22	16	-	6.0	-	a1	-	.8	2.5	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	531	19	16	17.1	1,050
November	500	18	15	16.7	992
December	624	23	17	20.1	1,240
Calendar year 1944	4,255.5	25	.4	11.6	8,440
January	551	25	16	17.8	1,090
February	278.8	16	6.5	9.9	553
March	192.0	7.7	5.2	6.1	381
April	154.9	7.9	2.0	5.1	307
May	79.6	5.3	1.0	2.57	158
June	41.6	2.2	.2	1.3	83
July	174.5	25	.6	5.6	346
August	36.5	3.0	.2	1.1	72
September	41.9	2.7	.5	1.4	83
Water year 1944-45	3,206.8	25	.2	8.7	6,360

a No gage-height record; discharge computed on basis of range in stage and weather records.

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

Delaware River near Red Bluff, N. Mex.

Location.- Water-stage recorder and concrete control, lat. 32°01', long. 104°03', sec. 23, T. 26 S., R. 28 E., at bridge on U. S. Highway 285, 3½ miles upstream from mouth and 4 miles south of Red Bluff, Eddy County. Datum of gage is 2,900.7 feet above mean sea level, datum of 1929.

Drainage area.- 967 square miles.

Records available.- October 1937 to September 1945. April 1912 to September 1913 at site 3 miles upstream (published as Delaware River near Malaga, N. Mex.). May 1914 to June 1915 at site 2½ miles downstream (published as Delaware River near Angeles, Tex.).

Extremes.- Maximum discharge during year, 2,080 second-feet July 6 (gage height, 4.90 feet); no flow at times.

1912-13, 1914-15, 1937-45: Maximum discharge, 34,600 second-feet June 27, 1938 (gage height, 18.00 feet, from floodmarks), by slope-area method; no flow at times.

Remarks.- Records good. No diversion above station.

Rating table, water year 1944-45 (gage height, in feet, and discharge, in second-feet)

0.52	0	1.2	3.9	2.0	27
.60	.1	1.3	5.4	2.2	44
.70	.2	1.4	7.1	2.4	72
.90	1.1	1.5	9.2	2.6	130
1.0	1.7	1.6	12	2.9	245
1.1	2.7	1.8	18		

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4.9	3.6	4.5	4.6	4.5	4.0	5.9	70	0.5	0	0.2	1.5
2	4.5	3.4	4.6	4.5	4.3	4.0	4.9	6.8	.5	.9	.2	1.3
3	4.0	3.4	4.9	4.5	4.2	3.8	3.9	3.6	.5	70	.1	1.2
4	3.9	3.4	4.8	4.5	4.0	3.8	3.1	2.9	.5	15	.1	1.1
5	3.8	3.6	4.6	4.5	4.2	3.6	3.0	2.4	.5	5.0	.1	1.0
6	3.6	3.6	4.6	4.5	4.2	3.5	3.1	2.2	.4	179	0	.9
7	3.6	3.5	4.6	4.5	4.0	3.6	3.1	1.9	.4	5.4	0	.9
8	3.8	3.2	4.6	4.3	4.0	3.5	3.2	1.8	.4	3.0	.2	.9
9	3.9	3.5	4.6	4.3	4.0	3.6	3.0	1.7	.3	2.2	.7	.9
10	4.0	3.6	4.5	4.3	3.9	3.8	2.7	1.6	.3	1.9	.8	20
11	4.0	3.6	4.5	4.3	3.9	3.8	2.6	1.6	.2	1.6	.5	3.5
12	4.0	3.6	4.6	4.3	3.9	3.6	2.6	1.5	.3	1.6	.5	1.9
13	4.0	3.5	4.6	4.3	4.0	3.6	2.4	1.4	.4	1.7	.4	2.2
14	3.9	3.5	4.6	4.3	3.8	3.6	2.4	1.2	.5	1.4	.2	1.6
15	3.6	3.6	4.6	4.3	3.8	3.4	2.4	1.4	.3	7.2	.2	1.2
16	3.4	5.4	4.5	4.3	3.8	3.1	2.4	1.5	.2	8.8	.2	1.1
17	a3.4	7.9	4.5	6.1	3.9	3.1	2.6	1.7	.3	3.8	.1	.9
18	a3.6	8.5	4.5	9.4	4.0	3.1	2.7	1.6	.8	2.0	.1	.9
19	a3.5	6.9	4.5	5.9	4.0	3.1	2.7	1.4	.9	1.3	.1	.7
20	a3.5	6.7	4.5	5.1	4.2	3.2	2.7	1.1	.8	1.1	0	.7
21	a3.6	5.2	4.5	4.6	3.8	3.2	2.7	.9	.7	.9	194	.8
22	a3.6	4.9	4.5	4.5	3.9	3.4	2.6	.9	.8	.8	243	.9
23	a3.6	4.9	4.5	4.5	3.9	3.1	2.4	1.1	.8	.8	30	.9
24	a3.6	4.9	4.5	4.5	4.0	2.9	2.2	1.3	.6	.7	10	.8
25	a3.6	4.3	4.5	4.3	4.0	2.8	1.8	1.6	.4	.6	5.6	.7
26	a3.6	4.5	4.6	4.3	3.9	2.8	1.8	1.6	.2	.5	3.5	.8
27	a3.8	4.5	5.1	4.5	3.9	2.8	2.0	1.3	.1	.4	2.6	.9
28	3.8	4.5	5.9	4.3	3.9	2.8	2.1	1.1	0	.4	2.2	.8
29	4.0	4.6	5.7	4.5	-	2.9	2.1	.9	0	.4	2.0	1.6
30	4.0	4.5	5.4	4.3	-	3.0	2.4	.8	0	.4	1.7	2.2
31	3.8	-	4.9	4.3	-	4.5	-	.6	-	.4	1.6	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	117.8	4.9	3.4	3.80	234
November	133.6	8.5	3.2	4.45	265
December	145.8	5.9	4.5	4.70	289
Calendar year 1944	2,909.4	375	.3	7.95	5,780
January	145.4	9.4	4.3	4.69	288
February	111.9	4.5	3.8	4.00	222
March	105.0	4.5	2.8	3.39	208
April	83.5	5.9	1.8	2.78	166
May	121.4	70	.6	3.92	241
June	12.6	.9	0	.42	25
July	319.2	179	0	10.3	633
August	500.9	243	0	16.2	994
September	54.8	20	.7	1.83	109
Water year 1944-45	1,851.9	243	0	5.07	3,670

Peak discharge.- July 6 (5:10 a.m.) 2,080 sec.-ft.; Aug. 21 (7:30 p.m.) 2,020 sec.-ft.

a No gage-height record; discharge computed on basis of range in stage.

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Salt (Screwbean) Draw near Orla, Tex.

Location.- Water-stage recorder and low-water control, lat. 31°52'40", long. 103°56'50", at bridge on U. S. Highway 285, 157 feet upstream from Panhandle & Santa Fe Railway bridge, 2.7 miles southwest of Red Bluff Dam, 4.1 miles northwest of Orla, Reeves County, and 5 miles upstream from mouth. Datum of gage is 2,804.2 feet above mean sea level, datum of 1929.

Drainage area.- 455 square miles (contributing area).

Records available.- August 1939 to December 1940, October 1943 to September 1945.

Extremes.- Maximum discharge during year, 2,900 second-feet July 3 (gage height, 13.70 feet), from rating curve extended above 460 second-feet; no flow at times.

1939-40, 1943-45: Maximum discharge, 3,040 second-feet Aug. 18, 1944 (gage height, 13.88 feet), from rating curve extended above 460 second-feet; no flow at times. Floods have reached a stage of 18 or 19 feet, from information by local residents.

Remarks.- Records fair. No diversion above station.

Rating table, water year 1944-45 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Oct. 21 to Nov. 10, May 2-20, Aug. 23 to Sept. 22)

1.62	0	3.0	35	9.0	520
1.7	.1	4.0	70	9.5	659
1.9	1.2	5.0	108	10.0	832
2.0	3.0	6.0	156	11.0	1,280
2.1	5.6	7.0	221	12.0	1,840
2.2	8.8	8.0	321	13.0	2,450
2.4	15	8.5	408	13.7	2,900

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.8	0.1	0.4	0.8	0.4	0.3	2.3	125		2.5	0	0
2	1.1	.1	.4	.8	.4	.3	1.6	5.6		3.6	0	0
3	.9	0	.5	.7	.4	.3	.9	2.0		929	0	0
4	.6	0	.5	.6	.4	.3	.5	1.1		364	0	0
5	.4	0	.4	.5	.5	.3	.4	.8		29	0	0
6	.3	0	.4	.5	.5	.2	.3	.5		54	0	0
7	.3	0	.4	.5	.4	.2	.3	.3		6.9	0	0
8	.2	0	.4	.4	.4	.2	.2	.2		3.4	0	0
9	.2	0	.4	.4	.4	.2	.2	.1		2.2	0	0
10	.2	0	.3	.4	.3	.2	.1	0		1.3	0	0
11	.2	0	.3	.4	.3	.3	.1	0		1.0	0	3.8
12	.2	0	.3	.4	.3	.3	0	0		.8	13	1.2
13	.2	0	.4	.4	.3	.3	0	0		.8	4.0	.5
14	.2	0	.4	.4	.3	.3	0	0		.6	1.1	.3
15	.1	0	.4	.3	.3	.3	0	.1		.4	.4	.1
16	.1	.4	.4	.4	.3	.3	0	0		.3	.2	0
17	.1	2.2	.4	5.1	.3	.2	0	0		.3	0	0
18	0	5.3	.4	8.5	.3	.2	0	0		.2	0	0
19	0	5.3	.4	3.0	.3	.2	0	0		.1	0	0
20	0	2.6	.4	1.5	.4	.1	0	0		.1	0	0
21	0	1.6	.4	1.0	.3	.1	0	0		0	6.9	0
22	0	1.2	.3	.8	.3	.1	0	0		0	142	0
23	0	1.0	.4	.8	.3	.1	0	0		0	7.2	0
24	0	.8	.4	.7	.3	.1	0	0		0	2.2	0
25	0	.6	.4	.6	.3	.1	0	0		0	1.0	0
26	0	.5	.5	.5	.2	.1	0	0		0	.6	0
27	0	.5	.8	.5	.3	0	0	0		0	.5	0
28	0	.4	1.2	.5	.3	0	0	0		0	.3	0
29	0	.4	1.8	.5	-	0	0	0		0	.2	0
30	.1	.4	1.5	.5	-	0	8.7	0		0	.1	0
31	.1	-	1.0	.4	-	.1	-	0		0	-	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	7.3	1.8	0	0.24	14
November	23.4	5.3	0	.78	46
December	16.6	1.8	.3	.54	33
Calendar year 1944	1,859.3	1,120	0	5.08	3,690
January	32.8	8.5	.3	1.06	65
February	9.5	.5	.2	.34	19
March	5.7	.3	0	.18	11
April	15.6	8.7	0	.52	31
May	135.7	125	0	4.38	269
June	0	0	0	0	0
July	1,400.5	929	0	45.2	2,780
August	179.7	142	0	5.80	356
September	5.9	3.8	0	.20	12
Water year 1944-45	1,832.7	929	0	5.02	3,640

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Principal diversions from Pecos River between Red Bluff Reservoir and Imperial, Tex.

Records of discharge are collected for eight canals that divert water from Pecos River between Red Bluff Reservoir and Imperial, Tex. Each of these canals is equipped with a water-stage recorder for collecting gage-height records. All stations are located within 2 miles of canal head gate except as noted herein. Water diverted by these canals is used for irrigation of lands on both sides of Pecos River in Reeves, Ward, and Pecos Counties. Stations prior to 1941 were published separately (daily discharge figures for the earlier records). Gage-height records collected in cooperation with Red Bluff Water Power Control District, Pecos, Tex.

Reeves County Water Improvement District No. 2 Canal near Mentone, diverts from right bank, lat. 31°38', long. 103°34'. Records available, February 1922 to July 1925 (published as Farmers Independent Canal near Porterville, Tex.) and August 1939 to September 1945.

Ward County Water Improvement District No. 3 Canal near Barstow, diverts from left bank, lat. 31°34', long. 103°31'. Records available, August 1939 to September 1945.

Ward County Irrigation District No. 1 Canal near Barstow, diverts from left bank, lat. 31°33', long. 103°29'. Records available, February 1922 to September 1925 at site about half a mile upstream (published as Barstow Canal near Barstow, Tex.), and August 1939 to September 1945.

Grandfalls-Big Valley Canal near Barstow, diverts from left bank, lat. 31°25', long. 103°15'. Records available, March 1922 to November 1925, September 1939 to September 1945. Water diverted through Ward County Water Improvement District No. 2 Canal irrigates most of lands formerly supplied by this canal.

Pecos County Water Improvement District No. 2 upper diversion canal near Grandfalls, diverts from right bank, lat. 31°18', long. 102°55' (gage 15 miles downstream from head gates). Records available, March 1922 to July 1925 at site 11 miles upstream (published as Imperial High-line Canal near Grandfalls, Tex.), and August 1939 to September 1945.

Pecos County Water Improvement District No. 2 Canal near Imperial, diverts from right bank, lat. 31°16', long. 102°45' (gage 7½ miles below outlet head gate at Imperial Reservoir). Records available, April 1940 to September 1945.

Ward County Water Improvement District No. 2 Canal near Grandfalls, diverts from left bank, lat. 31°22', long. 103°01'. Records available, August 1939 to September 1945.

Pecos County Water Improvement District No. 3 Canal near Imperial, diverts from Pecos County Water Improvement District No. 2 Canal above station near Imperial on that canal, lat. 31°18', long. 102°45'. Records available, March 1940 to September 1945.*

Several smaller diversions (pumps) divert water between Red Bluff Reservoir and Imperial for irrigation of lands adjacent to Pecos River, but no records for them were obtained.

Diversions, in acre-feet, water year October 1944 to September 1945

Month	Reeves County District 2 Canal near Mentone	Ward County District 3 Canal near Barstow	Ward County District 1 Canal near Barstow	Grandfalls Big-Valley Canal near Barstow
October	223	165	760	0
November	303	333	962	0
December	113	177	1,110	0
Calendar year 1944	12,250	13,480	41,070	7,160
January	.2	6.7	532	0
February	281	1,050	2,900	0
March	270	501	1,590	267
April	1,770	2,800	5,420	1,530
May	1,580	1,780	4,780	2,240
June	1,650	2,280	5,920	1,310
July	1,770	2,910	6,330	1,040
August	3,060	3,050	8,550	1,430
September	a2,040	1,440	4,460	1,090
Water year 1944-45	13,060	16,490	43,310	8,910

Month	Pecos County District 2 Canal (upper diver.) near Grandfalls	Pecos County District 2 Canal near Imperial*	Ward County District 2 Canal near Grandfalls	Pecos County District 3 Canal near Imperial*
October	a1.3	a588	928	893
November	4.6	134	9.3	0
December	4.2	449	7.9	0
Calendar year 1944	51,900	22,700	35,400	21,840
January	.2	0	0	0
February	2,950	1,390	0	783
March	7,580	44	3,580	39
April	7,330	4,560	5,640	4,610
May	10,070	3,280	5,610	4,690
June	7,920	2,050	6,570	1,800
July	5,130	3,780	6,680	3,440
August	7,940	5,170	7,600	5,240
September	7,050	2,060	2,830	2,630
Water year 1944-45	55,930	23,500	39,460	24,120

* Combined flow of Pecos County Water Improvement District No. 2 Canal near Imperial and Pecos County Water Improvement District No. 3 Canal near Imperial represents released water from Imperial Reservoir (fed by Pecos County Water Improvement District No. 2 upper diversion canal) plus water diverted from Pecos River by Pecos County Water Improvement District No. 2 lower diversion canal.

a No gage-height record part of month; discharge computed on basis of recorded range in stage, head-gate operation, and engineers' notes.

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Madera Canyon near Toyahvale, Tex.

Location.- Water-stage recorder, lat. 30°52', long. 103°58', in Jeff Davis County, 11 miles upstream from Aguja Canyon and 12 miles southwest of Toyahvale, Reeves County.

Drainage area.- 54 square miles.

Records available.- July 1932 to September 1945.

Average discharge.- 13 years, 5.10 second-feet.

Extremes.- Maximum discharge during year, 2,360 second-feet July 2 (gage height, 5.55 feet), from rating curve extended above 100 second-feet on basis of slope-area determination at gage height 6.8 feet; no flow at times.
1932-45: Maximum discharge, 5,120 second-feet Sept. 29, 1932 (gage height, 8.00 feet, from floodmark), from rating curve extended above 200 second-feet on basis of slope-area determination at gage height 6.8 feet; no flow at times.

Remarks.- Records fair except those for period of no gage-height record, which are poor. No diversion above station.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	32	0.9	0.4	0.4		0	1.4			0	0.5	
2	25	.9	.4	.4		0	.8			289	2.2	
3	19	.8	.4	.4		0	1.0			a199	1.0	
4	18	.8	.4	.4		0	1.1			a143	.6	
5	14	.7	.4	.3		0	1.2			a92	.3	
6	10	.6	.4	.2		0	1.1			a83	.2	
7	8.4	.6	.4	.2		0	1.0			a81	.1	
8	6.8	.6	.3	.2		0	.9			a63	.1	
9	5.7	.6	.3	.2		0	.8			a47	.1	
10	4.8	.6	.3	.2		0	.7			a35	.1	
11	4.2	.6	.2	.2		0	.7			a26	.1	
12	3.5	.5	.2	.2		0	.6			a20	0	
13	3.1	.4	.2	.2		0	.6			12	0	
14	2.7	.4	.2	.2		0	.6			10	0	
15	2.3	.4	.2	.2		0	.6			8.8	0	
16	2.0	.8	.2	.2		0	.6			6.4	0	
17	2.9	1.2	.2	.2		0	.6			4.8	0	
18	2.3	1.2	.2	.2		0	.5			3.8	0	
19	2.0	1.5	.2	.2		0	.5			3.1	0	
20	1.9	1.3	.2	.2		0	.4			2.3	0	
21	1.7	1.0	.2	.2		0	.2			2.0	0	
22	1.6	.8	.2	.2		0	0			1.9	.2	
23	1.5	.7	.1	.2		0	0			1.7	0	
24	1.4	.6	.2	.2		0	0			1.5	0	
25	1.3	.6	.2	.2		0	0			1.2	0	
26	1.3	.5	.2	.1		0	0			.9	0	
27	1.2	.5	.4	.1		0	0			.7	0	
28	1.1	.4	.9	0		0	0			.5	0	
29	1.1	.4	.6	0		0	0			.4	0	
30	1.1	.4	.5	0		0	0			.6	0	
31	1.0	-	.4	0		1.9	-			.7	0	

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	184.9	32	1.0	5.96	367
November	21.3	1.5	.4	.71	42
December	9.6	.9	.1	.31	19
Calendar year 1944	3,143.2	639	0	8.59	6,240
January	6.1	.4	0	.20	12
February	0	0	0	0	0
March	1.9	1.9	0	.06	3.8
April	15.9	1.4	0	.53	32
May	0	0	0	0	0
June	0	0	0	0	0
July	1,141.3	289	0	36.8	2,260
August	5.5	2.2	0	.18	11
September	0	0	0	0	0
Water year 1944-45	1,386.5	289	0	3.80	2,750

a No gage-height record; discharge computed on basis of recorded range in stage, weather records, and information by local resident.

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Toyah Creek near Pecos, Tex.

Location.- Water-stage recorder and low-water wooden control, lat. 31°17', long. 103°28', at bridge on U. S. Highway 285, 0.8 mile upstream from Toyah Lake and 10 miles southeast of Pecos, Reeves County.

Drainage area.- 1,024 square miles (contributing area).

Records available.- August 1939 to December 1940, October 1943 to October 1945 (discontinued).

Extremes.- Maximum discharge during period Oct. 1, 1944, to Oct. 25, 1945, 12,000 second-feet July 3 (gage height, 13.64 feet), by slope-area method; minimum, 0.2 second-foot June 28 to July 1.

1939-40, 1943-45: Maximum discharge, that of July 3, 1945; no flow at times.

Flood of October 1941 reached a stage of 12.4 feet by levels to floodmark identified by State Highway Department employee.

Remarks.- Records good except those above 100 second-feet, which are fair. Several diversions for irrigation above station. Flood flow materially affected by spread-out dams above station.

Discharge, in second-feet, 1944-45

1944-45

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3.7	1.1	9.2	14	8.9	6.0	68	2.0	0.6	0.2	2.2	0.6
2	2.9	1.0	9.9	14	8.7	6.8	22	1.8	.6	.7	2.2	.6
3	2.9	.8	11	14	8.4	6.4	13	1.6	.6	2,540	2.2	.6
4	2.7	.8	11	14	8.0	6.4	11	1.8	.6	4,880	2.0	.6
5	2.4	.8	9.1	14	8.0	6.8	8.7	1.8	.5	716	2.0	.6
6	2.2	.9	6.4	15	8.0	6.4	4.6	1.6	.5	177	1.6	.5
7	2.2	1.0	6.4	14	6.8	6.0	4.6	1.5	.5	69	1.6	.5
8	2.4	1.1	7.6	14	6.8	6.0	4.6	1.2	.4	29	1.8	.4
9	2.7	1.3	9.2	14	7.2	6.4	4.3	1.2	.4	16	4.6	.4
10	2.4	1.6	8.9	14	6.4	7.2	3.7	1.1	.4	12	4.3	.4
11	2.2	1.8	8.4	13	6.4	7.6	2.9	1.1	.4	8.2	2.9	.5
12	2.4	2.0	8.4	12	7.2	6.8	2.7	1.1	.4	5.3	2.0	.5
13	2.4	2.2	8.9	12	6.8	6.4	2.2	1.0	.4	3.7	1.5	.4
14	2.4	2.2	8.7	12	6.0	6.8	2.2	.9	.4	3.2	1.2	.4
15	2.0	2.2	8.4	11	6.0	6.4	2.2	.9	.4	3.2	1.2	.4
16	2.0	3.7	8.9	11	6.0	5.7	2.0	.9	.4	3.2	1.1	.4
17	1.8	4.3	8.9	13	6.4	5.0	2.2	.9	.4	3.2	1.1	.4
18	1.8	5.3	7.6	16	6.4	5.3	2.4	.9	.4	2.9	1.0	.4
19	2.0	6.0	8.0	13	6.8	5.3	2.4	.9	.4	3.2	1.0	.4
20	1.8	5.7	9.4	11	8.0	4.6	2.4	.8	.4	3.2	.9	.4
21	1.8	5.0	9.7	10	7.2	5.0	2.4	.7	.4	3.2	.9	.6
22	1.6	5.0	11	9.2	6.4	5.3	2.4	.7	.6	3.2	.9	1.0
23	1.5	5.0	11	8.9	6.4	5.0	2.2	.7	.5	3.2	.9	.8
24	1.5	4.0	10	9.2	6.8	4.0	1.8	.8	.4	3.2	.9	.7
25	1.3	5.3	10	8.9	6.0	3.2	1.8	1.5	.3	3.2	.9	.6
26	1.3	5.7	12	8.4	5.0	4.0	1.8	1.1	.3	3.2	.8	.6
27	1.3	6.4	16	8.7	4.6	4.0	2.0	.9	.3	2.9	.8	.6
28	1.3	9.2	28	8.4	5.3	4.3	2.0	.8	.2	2.7	.8	.6
29	1.3	9.7	21	8.7	-	3.7	2.0	.7	.2	2.7	.8	.7
30	1.5	9.2	16	8.7	-	3.4	2.0	.7	.2	2.4	.7	.9
31	1.5	-	14	8.9	-	30	-	.6	-	2.4	.6	-

1945

Day	Discharge	Day	Discharge	Day	Discharge	Day	Discharge	Day	Discharge
Oct. 1	0.9	Oct. 6	3.2	Oct. 11	2.4	Oct. 16	1.8	Oct. 21	1.5
2	1.6	7	3.2	12	2.2	17	1.8	22	1.5
3	2.9	8	2.7	13	2.2	18	1.6	23	1.6
4	5.0	9	4.6	14	2.0	19	1.6	24	1.6
5	2.4	10	3.2	15	1.8	20	1.6	25	1.6

Monthly discharge, in second-feet, 1944-45

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October 1944	63.0	3.7	1.3	2.03	125
November	110.3	9.7	.8	3.68	219
December	333.0	28	6.4	10.7	660
Calendar year 1944	1,730.1	514	.1	4.73	5,430
January 1945	363.0	16	8.4	11.7	720
February	190.9	8.9	4.6	6.82	379
March	196.2	30	3.2	6.33	389
April	188.5	68	1.8	6.28	374
May	34.2	2.0	.6	1.10	68
June	12.5	.6	.2	.42	25
July	8,511.5	4,880	.2	275	16,880
August	47.4	4.6	.6	1.53	94
September	16.5	1.0	.4	.55	33
Water year 1944-45	10,067.0	4,880	.2	27.6	19,970
October 1-25, 1945	57.4	5.0	.9	2.30	114

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Toyah Creek below Toyah Lake, near Pecos, Tex.

Location.- Water-stage recorder, lat. 31°21', long. 103°24', at bridge on county road between Pecos and Grandfalls, at lower end of Toyah Lake, 6 miles upstream from mouth and 7.4 miles southeast of Pecos, Reeves County.

Drainage area.- 3,709 square miles (contributing area).

Records available.- August 1939 to September 1945.

Extremes.- Maximum discharge during year, 4,160 second-feet July 4 (gage height, 3.89 feet); no flow at times.
1939-45: Maximum discharge, 5,850 second-feet Aug. 7, 1940 (gage height, 4.17 feet); no flow at times.
Flood of September 1932 reached a stage of 7.7 feet, from information by local residents.

Remarks.- Records good. Several diversions above station for irrigation. Flood flow materially affected by use of spread-out dams above station.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1				0	1.8	0	37			0		
2				0	2.7	0	37			0		
3				0	2.6	0	33			0		
4				0	1.4	0	26			2,140		
5				0	2.0	0	20			2,520		
6				0	3.9	0	26			792		
7				0	1.1	0	11			435		
8				0	3.0	0	7.8			265		
9				0	1.9	0	5.0			181		
10				0	.4	0	2.6			114		
11				0	.3	0	.9			91		
12				0	.5	0	.8			80		
13				0	1.6	0	.2			70		
14				.8	.4	0	0			57		
15				.5	.3	0	0			33		
16				.8	.2	0	0			26		
17				1.0	0	0	0			17		
18				3.7	0	0	0			8.7		
19				6.4	0	0	0			3.9		
20				7.4	.1	0	0			1.8		
21				7.8	1.5	0	0			1.0		
22				5.7	.2	0	0			.6		
23				4.7	.2	0	0			.4		
24				5.5	0	0	0			.2		
25				3.9	0	0	0			0		
26				2.3	0	0	0			0		
27				5.0	0	0	0			0		
28				1.2	0	0	0			0		
29				2.3	-	0	0			0		
30				.8	-	0	0			0		
31				1.0	-	3.2	-			0		

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	0	0	0	0	0
November	0	0	0	0	0
December	0	0	0	0	0
Calendar year 1944	710.9	181	0	1.94	1,410
January	60.8	7.8	0	1.96	121
February	26.1	3.9	0	.93	52
March	3.2	3.2	0	.10	6.3
April	207.3	37	0	6.91	411
May	0	0	0	0	0
June	0	0	0	0	0
July	6,817.6	2,520	0	220	13,520
August	0	0	0	0	0
September	0	0	0	0	0
Water year 1944-45	7,115.0	2,520	0	19.5	14,110

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Salt Draw near Pecos, Tex.

Location.- Water-stage recorder and low-water control, lat. 31°19', long. 103°29', 88 feet upstream from U. S. Highway 285, 1 mile upstream from Toyah Lake (revised), and 7½ miles south of Pecos, Reeves County. Station is at same site and datum as that which was discontinued Dec. 31, 1940.

Drainage area.- 1,882 square miles (contributing area).

Records available.- August 1939 to December 1940, October 1943 to September 1945. (discontinued).

Extremes.- 1943-44: Maximum discharge during water year, 1,280 second-feet May 30 (gage height, 5.22 feet); minimum, 0.1 second-foot May 2, 5, 6, July 4, Aug. 1, 2.

1944-45: Maximum discharge during water year, 88 second-feet Mar. 31 (gage height, 2.92 feet); minimum, 0.1 second-foot during several periods.

1939-40, 1944-45: Maximum discharge, 19,900 second-feet Aug. 6, 1940 (gage height, 11.46 feet, from floodmark), from rating curve extended above 2,950 second-feet on basis of slope-area determinations at gage heights 9.06 and 11.46 feet; minimum, 0.1 second-foot during several periods.

Maximum flood, that of Aug. 6, 1940, from information by local residents.

Remarks.- Records fair except those for period of no gage-height record, and those above 5 second-feet, which are poor. Flood flow affected by spread-out dams for irrigation. Records of water analyses for 1944 water year are given in Water-Supply Paper 1022.

Discharge, in second-feet, 1943-45

1943-44

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.5	0.2	e0.3	0.6	0.4	0.4	0.4	0.2	1.0	0.2	0.2	0.2
2	.3	.2	e.3	.5	.4	.4	.4	.2	.6	.2	.1	.2
3	.2	.2	.3	.4	.4	.4	.4	.2	.5	.2	.2	.2
4	.2	.2	.3	.4	.3	.4	.4	.2	.5	.2	.2	.2
5	.2	.2	.3	.4	.4	.4	.4	.2	.4	.2	.2	7.1
6	.2	.2	.3	.4	.4	.4	.5	.2	.4	.2	.2	17
7	.2	.2	.3	.4	.4	.4	.4	.2	.5	.2	.2	5.4
8	.2	.2	.3	.4	.6	.4	.5	.2	.6	.2	.2	.9
9	.2	.2	.3	.4	.4	.4	.5	.3	.5	.2	.2	.6
10	.2	.2	.3	.4	.4	.4	.5	1.2	.4	.2	.2	.5
11	.2	.2	.3	.4	.4	.4	.5	1.3	.6	.2	.2	.5
12	.2	.2	.3	.5	.3	.4	.5	.6	151	.2	.2	.4
13	.2	.2	.3	.6	.2	.4	.5	.4	19	.2	.2	.4
14	.2	.2	.3	.7	.2	.5	.5	.4	3.4	.3	.2	.4
15	.2	.2	.3	.8	.2	.5	.5	.4	.9	.3	.2	.4
16	.2	.2	.4	.6	.2	.4	.4	.4	.7	.3	.2	.3
17	.2	.3	.4	.5	.2	.4	.4	.4	.6	.4	.2	2.4
18	.2	.2	.4	.5	.2	.4	.4	.4	.5	.4	.2	2.3
19	.2	.2	.4	.5	.2	.4	.4	.4	.5	.4	.2	.6
20	.2	.2	.4	.4	.2	.5	.4	.4	.5	.3	.2	.6
21	.2	.3	.4	.4	.2	.5	.4	.4	.5	.3	.2	.6
22	.2	.2	.4	.4	.3	.5	.4	.4	.4	.3	.2	.6
23	.2	.3	.4	.4	.3	.5	.4	.4	.4	1.5	.2	.6
24	.2	.3	.4	.4	.4	.4	.4	.4	.4	3.2	.2	.6
25	.2	.3	.4	.4	.4	.4	.4	.3	.4	.4	.2	.6
26	.2	.4	.4	.4	.4	.4	.4	.3	.3	.2	.9	.6
27	.2	.4	.4	.4	.4	.4	.4	.3	.3	.2	.6	2.0
28	.2	.4	.4	.4	.4	.4	.3	.2	.2	.2	.2	.7
29	.2	.3	.4	.4	.4	.4	.2	.3	.2	.2	.2	.6
30	.2	.3	.4	.4	-	.5	.2	82	.2	.2	.2	.6
31	.2	-	.4	.4	-	.5	-	6.9	-	.2	.2	-

e Stage-discharge relation indefinite; discharge interpolated.

Note.- Discharge Oct. 28 to Nov. 22 computed on basis of once-daily gage readings.

Discharge, in second-feet, of Salt Draw near Pecos, Tex., 1943-45--Continued

1944-45

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.6	0.3	0.4	0.5	0.5	0.4	13	0.4	0.2	0.1	0.1	0.1
2	.6	.3	.4	.5	.5	.4	1.2	.4	.2	1.4	.1	.1
3	.6	.4	.4	.5	.5	.4	.7	.4	.2	2.7	.1	.1
4	.6	.4	.4	.5	.5	.4	.6	.4	.2	.6	.1	.1
5	.6	.4	.4	.5	.5	.4	.6	.4	.2	.3	.1	.1
6	.6	.4	.4	.5	.5	.4	.6	.4	.2	.3	.1	.1
7	.5	.5	.4	.5	.5	.4	.6	.4	.2	.3	.1	.1
8	.5	.5	.4	.5	.5	.4	.5	.4	.3	.3	.1	.1
9	.5	.5	.4	.5	.5	.4	.5	.4	.3	.2	.1	.1
10	.4	.5	.4	.5	.5	.4	.5	.4	.3	.2	.1	.1
11	.4	.6	.4	.5	.5	.4	.5	.4	.3	.2	.1	.1
12	.4	.5	.4	.5	.5	.4	.5	.4	.3	.2	.1	.1
13	.4	.6	.4	.5	.5	.4	.5	.3	.3	.2	.1	.1
14	.3	.5	.4	.5	.5	.5	.5	.3	.3	.2	.1	.1
15	.4	.5	.4	.4	.5	.5	a.5	.3	.3	.2	.1	.1
16	.3	1.8	.4	.4	.5	.5	a.5	.3	.3	.2	.1	.1
17	.3	.6	.4	1.0	.5	.5	a.5	.3	.3	.2	.1	.1
18	.2	.7	.4	1.2	.5	.5	a.4	.3	.3	.2	.1	.1
19	.2	.7	.4	.6	.5	.5	a.4	.3	.3	.2	.1	.1
20	.2	.5	.4	.5	.5	.5	a.4	.3	.3	.2	.1	.1
21	.2	.5	.4	.5	.5	.5	a.4	.3	.2	.2	.1	.1
22	.1	.5	.4	.5	.5	.5	a.4	.3	2.0	.2	.1	.4
23	.1	.4	.4	.5	.5	.5	a.4	.3	.4	.2	.1	.2
24	.1	.5	.4	.5	.5	.5	.4	.2	.3	.2	.1	.1
25	.1	.5	.4	.5	.4	.4	.4	.2	.2	.2	.1	.1
26	.1	.5	.4	.5	.4	.4	.4	.3	.2	.2	.1	.1
27	.1	.5	.5	.5	.4	.4	.4	.3	.1	.2	.1	4.0
28	.1	.5	1.2	.5	.4	.4	.4	.2	.1	.1	.1	4.1
29	.1	.5	.6	.5	-	.5	.4	.2	.1	.1	.1	a.4
30	.2	.4	.6	.5	-	.5	.4	.2	.1	.1	.1	a.1
31	.2	-	.5	.5	-	19	-	.2	-	.1	.1	-

a No gage-height record; discharge computed on basis of recorded range in stage and weather records.

Monthly discharge, in second-feet, 1943-45

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October 1943	6.6	0.5	0.2	0.21	13
November	7.3	.4	.2	.24	14
December	10.9	.4	.3	.35	22
Calendar year	-	-	-	-	-
January 1944	14.2	.8	.4	.46	28
February	9.6	.6	.2	.33	19
March	13.2	.5	.4	.43	26
April	12.4	.5	.2	.41	25
May	100.1	82	.2	3.23	199
June	186.4	151	.2	6.21	370
July	11.9	3.2	.2	.38	24
August	7.2	.9	.1	.23	14
September	48.1	17	.2	1.60	95
Water year 1943-44	427.9	151	.1	1.17	849
October 1944	10.0	.6	.1	.32	20
November	16.0	1.8	.3	.53	32
December	13.8	1.2	.4	.45	27
Calendar year 1944	442.9	151	.1	1.21	879
January 1945	16.6	1.2	.4	.54	33
February	13.6	.5	.4	.49	27
March	32.3	19	.4	1.04	64
April	27.5	13	.4	.92	55
May	9.9	.4	.2	.32	20
June	9.0	2.0	.1	.30	18
July	10.2	2.7	.1	.33	20
August	3.1	.1	.1	.10	6.1
September	11.6	4.1	.1	.39	23
Water year 1944-45	173.6	19	.1	.48	345

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

San Solomon Springs at Toyahvale, Tex.

Location.- Water-stage recorder and sharp-crested weir, lat. 30°56', long. 103°47', on South Canal at Toyahvale, Reeves County, and 540 feet downstream from spring pool. Datum of gage is 3,311.0 feet above mean sea level, datum of 1929.

Records available.- October 1931 to December 1933, March 1941 to September 1945. 1900, 1904, 1919, 1922-25, 1934-36 (occasional discharge measurements published as miscellaneous measurements).

Extremes.- Maximum daily discharge during year, 60 second-feet July 6, 7; minimum daily, 34 second-feet Feb. 4, June 19-24, June 28 to July 1.

1931-33, 1941-45: Maximum daily discharge, 71 second-feet Oct. 7-9, 1932, Oct. 26-30, 1941; minimum daily, 30 second-feet Nov. 5-11, 1931, Jan. 22 to Feb. 23, 1932.

Maximum discharge measured during years when occasional measurements were made, 46 second-feet Sept. 5, 1900, July 21, 1904.

Remarks.- Records good. Discharge represents total flow of springs and is determined by combining flows in South Canal and two additional outlets (flow measured periodically), Middle and North Canals. Flow into each canal regulated by operation of head gates. Water used for irrigation in vicinity of Balmorhea.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	54	45	40	38	35	36	37	36	36	34	52	45
2	54	45	40	38	35	36	37	36	36	43	52	44
3	54	45	40	38	35	36	37	36	36	49	51	44
4	53	45	40	38	34	37	37	36	36	54	51	44
5	54	45	40	37	35	37	37	36	36	58	51	44
6	54	45	40	37	37	37	37	36	36	60	51	44
7	53	44	40	37	37	37	37	36	36	60	51	44
8	52	44	40	37	37	37	38	36	36	59	51	44
9	52	44	39	37	37	37	37	36	35	59	51	44
10	51	44	39	37	37	37	37	36	35	58	50	44
11	51	44	39	37	37	37	37	36	35	58	50	44
12	52	44	39	37	37	37	37	36	36	58	50	43
13	51	44	39	37	37	38	36	36	35	58	50	43
14	51	43	39	36	37	38	36	36	35	58	50	43
15	50	43	39	36	37	38	36	37	35	58	50	43
16	50	43	39	36	37	38	36	37	35	58	50	43
17	50	43	39	36	37	38	36	37	35	57	50	43
18	50	43	39	36	37	38	36	37	35	57	49	42
19	49	42	39	36	37	38	36	37	34	56	48	42
20	49	42	39	36	37	38	36	37	34	56	48	42
21	49	42	38	36	37	38	35	37	34	56	48	42
22	48	42	38	36	36	38	36	37	34	55	47	41
23	48	42	38	36	36	38	36	36	34	56	47	41
24	48	42	38	35	36	38	36	36	34	56	47	41
25	48	42	38	35	36	38	36	36	35	56	47	40
26	47	42	38	35	36	38	36	36	35	55	47	40
27	46	42	38	35	36	38	36	36	35	54	46	40
28	46	42	38	35	36	38	36	36	34	54	46	40
29	46	42	38	35	-	38	36	36	34	54	46	40
30	46	42	38	35	-	38	36	36	34	53	46	39
31	46	-	38	35	-	38	-	36	-	53	45	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	1,550	54	45	50.0	3,070
November	1,297	45	42	43.2	2,570
December	1,206	40	38	38.9	2,390
Calendar year 1944	13,817	56	32	37.8	27,400
January	1,125	38	35	36.3	2,230
February	1,018	37	34	36.4	2,020
March	1,163	38	36	37.5	2,310
April	1,093	38	36	36.4	2,170
May	1,124	37	36	36.3	2,230
June	1,049	36	34	35.0	2,080
July	1,710	60	34	55.2	3,390
August	1,518	52	45	49.0	3,010
September	1,273	45	39	42.4	2,520
Water year 1944-45	15,126	60	34	41.4	29,990

Note.- Water diverted from South Canal and no gage-height record Feb. 5-21; discharge computed on basis of 1 discharge measurement, trend of flow, and engineer's notes.

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Comanche Springs at Fort Stockton, Tex.

Location.- Water-stage recorder, lat. 30°53', long. 102°52', on outlet canal of Pecos County Water Improvement District No. 1, in eastern outskirts of Fort Stockton, Pecos County, a quarter of a mile upstream from bridge on U. S. Highway 290 and 0.5 mile downstream from head of springs. Datum of gage is 2,922.8 feet above mean sea level, datum of 1929.

Records available.- February 1941 to September 1945. 1899, 1904, 1919, 1922, 1924-25, 1932-41 (occasional discharge measurements published as miscellaneous measurements).

Extremes.- Maximum daily discharge during year, 46 second-feet Mar. 9-28; minimum daily, 39 second-feet Aug. 12 to Sept. 21.

1941-45: Maximum daily discharge, 54 second-feet Jan. 30, 1942; minimum daily, that of Aug. 12 to Sept. 21, 1945.

Maximum discharge measured prior to 1941, 66 second-feet June 23, 1899; minimum measured, 38.7 second-feet July 14, 1936.

Remarks.- Records good. Discharge represents total flow of springs exclusive of surface runoff from precipitation. Spring flow fluctuates slowly and aquatic growth changes stage-discharge relation frequently; daily discharge interpolated between measurements. About 6,000 acres of land irrigated below station.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	42	43	43	44	44	45	45	44	42	42	41	39
2	42	43	43	44	44	45	45	44	42	42	40	39
3	43	43	43	44	44	45	45	44	42	42	40	39
4	43	43	43	44	44	45	45	44	42	42	40	39
5	43	43	43	45	44	45	45	44	42	42	40	39
6	43	43	43	45	44	45	45	43	42	43	40	39
7	43	44	43	45	44	45	45	43	42	43	40	39
8	43	44	43	45	44	45	45	43	42	43	40	39
9	43	44	43	45	44	46	45	43	42	43	40	39
10	43	44	43	45	44	46	45	43	41	43	40	39
11	43	44	43	45	44	46	45	43	41	43	40	39
12	43	44	43	45	44	46	45	43	41	43	39	39
13	43	44	43	45	44	46	45	43	41	43	39	39
14	43	44	43	45	44	46	45	43	41	42	39	39
15	43	44	43	45	44	46	45	43	41	42	39	39
16	43	44	44	45	44	46	45	43	41	42	39	39
17	43	44	44	45	44	46	45	43	41	42	39	39
18	43	44	44	45	45	46	45	43	41	42	39	39
19	43	44	44	45	45	46	44	43	41	42	39	39
20	43	44	44	45	45	46	44	43	41	42	39	39
21	43	44	44	45	45	46	44	43	41	42	39	39
22	43	44	44	44	45	46	44	42	41	42	39	40
23	43	44	44	44	45	46	44	42	41	42	39	40
24	43	44	44	44	45	46	44	42	41	41	39	40
25	43	44	44	44	45	46	44	42	42	41	39	40
26	43	44	44	44	45	46	44	42	42	41	39	40
27	43	43	44	44	45	46	44	42	42	41	39	40
28	43	43	44	44	45	46	44	42	42	41	39	40
29	43	43	44	44	-	45	44	42	42	41	39	40
30	43	43	44	44	-	45	44	42	42	41	39	40
31	43	-	44	44	-	45	-	42	-	41	39	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	1,331	43	42	42.9	2,640
November	1,310	44	43	43.7	2,600
December	1,349	44	43	43.5	2,680
Calendar year 1944	15,731	47	40	43.0	31,200
January	1,381	45	44	44.5	2,740
February	1,243	45	44	44.4	2,470
March	1,415	46	45	45.6	2,810
April	1,338	45	44	44.6	2,650
May	1,328	44	42	42.8	2,630
June	1,245	42	41	41.5	2,470
July	1,302	43	41	42.0	2,580
August	1,221	41	39	39.4	2,420
September	1,179	40	59	39.3	2,340
Water year 1944-45	15,642	46	39	42.9	31,030

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Devils River near Juno, Tex.

Location.- Water-stage recorder, lat. 29°58', long. 101°09', 500 feet downstream from Walter Baker ranch house, 2 miles upstream from Phillips Creek, and 13¼ miles southwest of Juno, Val Verde County. Datum of gage is 1,489.7 feet above mean sea level, datum of 1929 (Corps of Engineers, U. S. Army, bench mark).

Drainage area.- 2,733 square miles.

Records available.- May 1925 to September 1945.

Average discharge.- 20 years, 194 second-feet.

Extremes.- Maximum discharge during year, 357 second-feet July 7 (gage height, 3.07 feet); minimum, 55 second-feet June 26-28.

1925-45: Maximum discharge, 370,000 second-feet Sept. 1, 1932 (gage height, 31.3 feet, from floodmarks), by slope-area method; minimum, 48 second-feet June 4-6, 1930.

Remarks.- Records good except those above 150 second-feet, which are fair. No diversion above station.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	95	80	69	74	77	69	76	65	62	59	69	63
2	95	79	69	74	76	68	74	65	62	59	69	63
3	95	79	68	74	76	68	72	65	60	59	68	62
4	92	79	68	76	76	68	72	65	63	63	68	62
5	90	79	68	76	76	68	71	63	62	63	66	62
6	90	79	66	76	76	66	71	65	62	90	66	62
7	88	79	65	76	76	66	71	65	62	198	68	60
8	86	77	63	76	74	68	71	63	63	145	68	60
9	86	77	63	76	74	66	72	63	63	117	66	60
10	85	77	65	76	74	66	72	65	62	107	66	59
11	85	77	66	77	74	68	72	63	60	101	66	59
12	85	77	66	77	82	68	71	63	60	95	66	59
13	85	77	66	77	76	68	71	62	60	90	66	59
14	83	77	66	77	74	71	71	62	60	86	65	59
15	83	77	66	77	74	72	71	62	59	85	66	59
16	83	77	68	76	76	72	71	60	59	85	66	59
17	83	77	68	80	72	74	71	62	60	82	65	59
18	83	79	68	85	72	76	69	60	62	80	65	59
19	83	79	68	79	72	76	71	62	62	79	65	59
20	83	77	68	77	72	74	80	62	60	77	65	60
21	83	77	69	77	72	74	72	63	60	77	66	60
22	82	77	71	77	71	76	69	62	60	76	66	63
23	82	79	71	77	71	76	68	62	60	76	66	62
24	82	77	71	77	71	74	68	62	59	74	66	60
25	82	77	71	77	71	74	66	62	58	72	63	59
26	82	76	71	77	71	74	66	62	58	72	66	59
27	82	72	71	77	71	74	66	62	56	71	68	59
28	82	72	72	77	69	74	66	60	58	71	66	63
29	82	71	72	76	-	74	65	60	59	71	65	77
30	82	69	72	77	-	74	65	60	58	69	63	74
31	82	-	74	76	-	77	-	62	-	69	66	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	2,641	95	82	85.2	5,240
November	2,306	80	69	76.9	4,570
December	2,119	74	63	68.4	4,200
Calendar year 1944	37,231	5,410	61	102	73,840
January	2,381	85	74	76.8	4,720
February	2,066	82	69	73.8	4,100
March	2,213	77	66	71.4	4,390
April	2,111	80	65	70.4	4,190
May	1,939	65	60	62.5	3,850
June	1,809	63	56	60.3	3,590
July	2,617	198	59	84.4	5,190
August	2,049	69	63	66.1	4,060
September	1,840	77	59	61.3	3,650
Water year 1944-45	26,091	198	56	71.5	51,750

Note.- No gage-height record Dec. 16 to Jan. 9; discharge computed on basis of recorded range in stage and engineer's notes.

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

Las Moras Springs at Brackettville, Tex.

Location.- Staff gage, lat. 29°18', long. 100°25', in spring pool at Brackettville, Kinney County, a quarter of a mile upstream from bridge on Brackettville-Fort Clark road. Datum of gage is 1,095.0 feet above mean sea level (Texas Highway Department bench mark).

Records available.- December 1895 to August 1938 (occasional miscellaneous discharge measurements), September 1938 to September 1945 (discharge measurements only).

Extremes.- 1895-1945: Maximum discharge measured, 60 second-feet (by Prof. T. U. Taylor) June 30, 1899; minimum measured, 5.7 second-feet July 21, 1945.

Remarks.- Discharge measurements represent total flow of springs. Springs issue from limestone in the Balcones fault zone and respond to rainfall on Edwards Plateau. Elevation of pool is regulated by outlet gate which materially affects discharge. City of Brackettville and U. S. Army (about 1 second-foot for Fort Clark) divert water from spring pool for domestic and recreational uses.

Discharge measurements, in second-feet, of Las Moras Springs at Brackettville, Tex., water year October 1944 to September 1945

Date	Gage height (feet)	Discharge (second-feet)	Date	Gage height (feet)	Discharge (second-feet)
Oct. 10	†5.45	30.4	May 11	††5.56	10.8
Nov. 22	†5.03	15.2	June 14	††5.45	9.30
Jan. 9	†5.00	11.9	July 21	††5.28	5.67
Feb. 17	‡3.72	25.0	Sept. 9	††5.71	5.97
Apr. 1	†5.10	14.4			

† Outlet gate closed; water flowing over top of gate.
‡ Outlet gate open; water flowing under gate and effective head on springs increased.
†† Outlet gate closed and, in addition, one or more flashboards have been added.

Note.- Gage heights indicate elevation of water surface in spring pool. Variation of head on pool has a material effect on spring discharge.

MIMBRES RIVER BASIN

Mimbres River near Mimbres, N. Mex.

Location.- Water-stage recorder and concrete control, lat. 32°52'20", long. 107°59'00", in NE¼SW¼ sec. 33, T. 16 S., R. 11 W., a quarter of a mile downstream from Bear Canyon and 1½ miles northwest of Mimbres.

Drainage area.- 183 square miles.

Records available.- October 1930 to September 1945 in reports of Geological Survey. May 1921 to December 1931 in reports of State engineer.

Average discharge.- 22 years (1921-24, 1926-45), 12.5 second-feet.

Extremes.- Maximum discharge during year, 270 second-feet Aug. 21 (gage height, 3.80 feet, from floodmarks), from rating curve extended above 120 second-feet by logarithmic plotting; minimum daily, 3.5 second-feet Aug. 13, Sept. 14, 15.

1930-45: Maximum discharge, 2,230 second-feet Aug. 19, 1944 (gage height, 5.54 feet), from rating curve extended above 120 second-feet by logarithmic plotting; minimum daily discharge, 1.3 second-feet June 20, 1944.

Remarks.- Records good except those for period of no gage-height record, which are poor. Flow partly regulated by Bear Canyon Reservoir (capacity, 700 acre-feet). Diversions above station for irrigation.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	14	10	9.9	8.8	9.2	13	18	24	9.6	16	14	16
2	14	10	9.9	8.8	9.2	13	19	23	8.8	14	8.2	17
3	13	10	9.9	8.8	9.9	13	19	25	8.4	18	12	17
4	13	10	9.9	8.8	12	13	19	22	8.0	17	8.0	18
5	12	10	9.9	8.8	12	13	19	20	8.0	11	7.3	22
6	12	11	9.9	8.8	12	13	19	19	7.7	7.7	6.9	18
7	12	11	9.9	8.8	12	13	19	17	7.7	6.6	6.6	9.9
8	11	10	9.9	8.8	13	13	19	17	13	6.9	7.9	7.7
9	11	10	9.9	8.8	14	13	19	16	11	8.0	10	6.1
10	11	10	9.9	8.8	14	13	20	14	9.2	8.8	13	5.5
11	13	10	9.9	8.8	14	14	20	14	8.0	7.3	23	5.5
12	14	10	9.9	8.8	15	13	20	13	6.9	6.1	5.8	4.7
13	13	10	9.6	8.8	14	13	20	13	6.6	5.5	3.5	3.9
14	13	10	9.2	8.8	14	13	20	11	5.8	4.7	4.7	3.5
15	12	10	9.2	8.8	14	13	20	9.2	5.8	4.4	5.5	3.5
16	12	10	9.2	9.6	15	14	19	8.8	8.0	4.7	4.4	3.7
17	12	11	9.2	10	14	16	18	8.8	9.2	5.2	5.8	3.9
18	12	10	9.2	9.6	13	17	17	8.8	9.2	4.4	5.2	3.7
19	12	10	8.8	9.6	13	17	17	9.6	8.8	3.7	5.5	3.7
20	12	10	8.8	9.6	13	16	17	11	8.4	4.1	6.9	4.7
21	11	9.9	8.8	9.6	13	16	19	17	6.6	4.4	f25	4.4
22	11	9.9	8.8	9.6	12	16	22	19	6.6	4.9	9.2	4.4
23	11	10	8.8	8.8	12	17	25	19	6.6	4.9	5.8	4.4
24	11	11	8.8	8.8	12	17	26	15	6.6	4.9	8.9	4.7
25	10	11	9.2	8.8	12	17	27	15	6.3	8.4	11	4.7
26	11	10	9.6	9.2	12	17	31	15	5.5	8.8	8.8	4.7
27	11	10	9.2	9.6	12	17	35	14	5.5	6.6	8.4	4.9
28	14	10	8.8	9.6	12	17	32	12	6.3	f8.0	8.4	5.2
29	14	10	8.8	9.6	-	17	29	9.6	9.1	f25	8.8	5.5
30	12	9.9	8.8	9.6	-	18	26	9.6	14	a10	8.0	5.5
31	11	-	8.8	9.2	-	18	-	9.9	-	a8.0	11	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	375	14	10	12.1	744
November	304.7	11	9.9	10.2	604
December	290.4	9.9	8.8	9.37	576
Calendar year 1944	3,474.1	324	1.3	9.49	6,890
January	282.8	10	8.8	9.12	561
February	353.3	15	9.2	12.6	701
March	463	18	13	14.9	918
April	650	35	17	21.7	1,290
May	459.3	25	8.8	14.8	911
June	241.2	14	5.5	8.04	478
July	258	25	3.7	8.32	512
August	277.5	25	3.5	8.95	550
September	226.4	22	3.5	7.55	449
Water year 1944-45	4,181.6	35	3.5	11.6	8,290

Peak discharge.- Oct. 11 (10:30 p.m.) 89 sec.-ft.; July 29 (5:30 p.m.) 265 sec.-ft.; Aug. 9 (11:30 p.m.) 66 sec.-ft.; Aug. 11 (6 a.m.) 86 sec.-ft.; Aug. 21 (2 p.m.) 270 sec.-ft.; Sept. 20 (7 p.m.) 99 sec.-ft.

a No gage-height record; discharge computed on basis of weather records and records for station near Faywood.

f Computed on basis of partly estimated gage-height record.

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

Mimbres River near Faywood, N. Mex.

Location.- Water-stage recorder, lat. 32°35'10", long. 107°55'10", in NW¼ sec. 7, T. 20 S., R. 10 W., 6 miles northeast of Faywood Hot Springs, 10 miles northeast of Faywood, and 12 miles upstream from San Vicente Arroyo.

Drainage area.- 485 square miles.

Records available.- April 1908 to December 1914 and October 1930 to September 1945 in reports of Geological Survey. April 1908 to December 1931 in reports of State engineer.

Average discharge.- 29 years (1908-10, 1912-17, 1919-24, 1926-27, 1929-45), 21.9 second-feet.

Extremes.- Maximum discharge during year, 1,980 second-feet Aug. 10 (gage height, 5.00 feet), from rating curve extended above 320 second-feet by logarithmic plotting; minimum daily, 2.0 second-feet July 25, Aug. 8, 9.

1930-45: Maximum discharge not determined; maximum gage height, 11.0 feet, present datum, Aug. 4, 1939; no flow at times.

Remarks.- Records fair except those for periods of no gage-height record, which are poor. Several diversions above station for irrigation.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	a25	20	18	22	34	22	20	6.2	3.2	2.4	5.3	3.0
2	18	18	18	20	35	20	18	6.5	3.8	2.4	12	2.8
3	17	16	19	19	48	9.2	16	5.3	3.4	2.4	14	2.8
4	14	14	18	19	65	8.4	12	6.2	3.2	2.4	29	2.8
5	11	13	22	19	63	11	8.8	6.2	3.0	2.4	a10	2.8
6	7.6	13	20	18	58	13	13	6.2	3.0	2.4	a5	2.6
7	5.0	12	20	18	53	16	14	5.6	3.0	2.4	a3	2.6
8	4.3	11	19	18	50	16	14	5.8	3.2	2.6	2.0	2.6
9	3.8	11	18	18	50	14	12	4.8	3.2	2.4	2.0	2.8
10	3.4	11	17	18	51	9.6	8.4	4.3	3.0	2.4	80	2.4
11	3.4	10	17	18	51	8.0	7.2	4.3	3.0	2.4	58	2.4
12	19	9.6	16	18	50	8.8	5.6	4.1	3.0	2.4	26	2.6
13	19	9.6	14	19	50	7.6	5.8	3.6	3.0	2.3	13	2.6
14	13	9.6	17	19	49	9.6	5.8	3.8	2.8	2.3	9.2	2.6
15	10	10	17	18	48	12	6.2	3.8	2.8	2.1	48	2.4
16	9.2	10	15	20	46	14	6.5	3.8	2.8	2.6	20	2.3
17	6.8	14	15	24	44	19	6.5	3.6	2.8	2.8	15	2.1
18	5.8	14	14	25	43	23	10	3.8	2.8	2.3	6.8	2.1
19	5.6	13	13	24	40	24	10	3.8	2.8	2.1	3.8	2.1
20	6.5	14	13	24	38	24	9.2	3.4	2.8	2.1	12	2.1
21	5.6	13	13	22	35	22	5.8	3.4	2.6	2.1	22	6.5
22	4.3	13	13	22	34	17	8.0	3.4	2.3	2.1	56	6.8
23	5.6	14	12	22	32	18	8.0	3.2	2.1	2.1	18	4.1
24	3.8	22	13	20	29	23	7.2	3.0	2.1	2.1	8.4	3.0
25	5.0	28	14	18	28	22	6.2	3.4	2.1	2.0	4.1	2.6
26	5.8	25	18	22	24	22	5.6	3.8	2.3	4.5	3.2	2.4
27	8.4	23	27	29	22	19	7.2	3.2	2.1	12	3.0	2.4
28	45	21	29	30	22	18	7.2	3.2	2.1	20	3.0	2.3
29	56	20	27	29	-	18	6.8	3.2	2.1	30	2.8	2.3
30	37	19	24	29	-	20	6.2	3.2	2.3	14	2.8	2.1
31	27	-	22	29	-	22	-	3.2	-	8.8	2.8	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	410.7	56	3.4	13.2	815
November	450.8	28	9.6	15.0	894
December	552.0	29	12	17.8	1,090
Calendar year 1944	5,240.1	1,440	.1	14.3	10,380
January	670	30	18	21.6	1,330
February	1,192	65	22	42.6	2,360
March	510.2	24	7.6	16.5	1,010
April	277.2	20	5.6	9.24	550
May	131.3	6.5	3.0	4.24	260
June	82.7	3.8	2.1	2.76	164
July	147.3	30	2.0	4.75	292
August	500.2	80	2.0	16.1	992
September	85.0	6.8	2.1	2.83	169
Water year 1944-45	5,009.4	80	2.0	13.7	9,930

Peak discharge.- July 29 (4:30 p.m.) 245 sec.-ft.; Aug. 10 (7:30 p.m.) 1,980 sec.-ft.; Aug. 15 (5:30 p.m.) 695 sec.-ft.; Aug. 21 (11:30 p.m.) 140 sec.-ft.

a No gage-height record; discharge computed on basis of weather records and normal recession pattern.

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

Bear Canyon near Mimbres, N. Mex.

Location.- Water-stage recorder and concrete Parshall flume, lat. 32°53', long. 107°59', in NW¼SW¼ sec. 28, T. 16 S., R. 11 W., 100 feet downstream from bridge on State Highway 167, 200 feet downstream from Bear Canyon Dam, and 2 miles northwest of Mimbres.

Records available.- October 1937 to September 1945.

Extremes (regulated).- Maximum daily discharge during year, 15 second-feet Sept. 4 (gage height, 1.48 feet); no flow at times.
1937-45: Maximum discharge, 76 second-feet Sept. 29, 1941 (gage height, 2.88 feet), from rating curve extended above 21 second-feet by logarithmic plotting; no flow at times.

Remarks.- Records good. Flow regulated by Bear Canyon Reservoir (capacity, 700 acre-feet). One small diversion above station for irrigation.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.9	0.8	0.4	0.6	0.6	0.2	0.2	0.1	0.4	11	0.1	13
2	.9	.8	.4	.6	.6	.2	.2	.1	.3	11	.1	14
3	1.0	.8	.4	.6	.6	.2	.2	.1	.2	7.5	.1	14
4	1.0	.8	.4	.6	.7	.1	.2	.1	.2	.3	.1	15
5	1.0	.8	.4	.5	.7	.1	.2	.1	.2	.2	.1	14
6	1.0	.8	.4	.6	.7	.1	.2	.1	.2	.2	0	10
7	.9	.8	.4	.5	.7	0	.2	.1	.2	.1	.1	5.2
8	.8	.8	.4	.5	.7	0	.2	.2	.2	0	.1	4.2
9	.8	.8	.4	.5	.7	0	.2	.2	.2	0	.1	0
10	.8	.8	.4	.5	.7	.1	.2	.2	.1	0	.1	0
11	.8	.8	.4	.5	.7	.1	.2	.2	.1	.1	.1	0
12	.8	.8	.5	.5	.7	.1	.2	.2	.1	.1	.1	0
13	.8	.8	.4	.5	.7	.1	.2	.2	.1	0	.1	0
14	.8	.8	.5	.5	.7	.1	.2	.2	.1	0	.1	.1
15	.8	.8	.5	.5	.7	.1	.2	.2	.1	0	.1	.1
16	.8	.8	.4	.5	.5	.2	.2	.2	.1	0	.2	.1
17	.8	.8	.5	.5	.5	.2	.2	.2	.1	0	.2	.1
18	.8	.8	.5	.5	.5	.2	.2	.2	.1	0	.2	.1
19	.8	.8	.5	.5	.6	.2	.2	.2	.1	0	.2	.1
20	.8	.8	.5	.6	.6	.3	.2	.2	.2	0	.2	.1
21	.8	.7	.5	.6	.6	.3	.2	.1	.2	0	.2	.1
22	.8	.6	.5	.6	.6	.3	.3	3.6	.2	0	.2	.1
23	.8	.7	.6	.5	.6	.3	.2	5.0	.2	0	.2	0
24	.8	.7	.5	.6	.6	.2	0	3.4	.2	0	5.4	0
25	.8	.7	.5	.6	.5	.2	0	3.0	.2	0	8.5	0
26	.8	.6	.5	.6	.2	.2	0	1.4	.2	0	5.7	0
27	.8	.6	.5	.6	.2	.2	0	.4	.2	0	4.9	.1
28	.8	.5	.5	.6	.2	.2	0	.3	2.0	0	4.4	.1
29	.8	.5	.5	.6	-	.2	0	.3	6.9	0	4.3	.1
30	.8	.4	.6	.6	-	.2	.1	.3	11	0	4.2	.1
31	.8	-	.6	.6	-	.2	-	.4	-	0	8.2	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	25.9	1.0	0.8	0.84	51
November	22.0	.8	.4	.73	44
December	14.4	.6	.4	.46	29
Calendar year 1944	177.6	11	0	.49	353
January	17.0	.6	.5	.55	34
February	16.4	.7	.2	.59	33
March	5.1	.3	0	.16	10
April	4.8	.3	0	.16	9.5
May	21.5	5.0	.1	.69	43
June	24.6	11	.1	.82	49
July	30.5	11	0	.98	60
August	48.6	8.5	0	1.57	96
September	90.7	15	0	3.02	180
Water year 1944-45	321.5	15	0	.88	638

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

Rio Tularosa near Tularosa, N. Mex.

Location.- Water-stage recorder and concrete control, lat. 33°05'35", long. 105°58'35", in SE¼SE¼ sec. 16, T. 14 S., R. 10 E., 200 feet upstream from diversion dam for Tularosa Community ditch and 3 miles northeast of Tularosa.

Records available.- December 1912 to December 1914 and October 1931 to September 1945 in reports of Geological Survey. December 1912 to December 1914 and October 1916 to July 1917 in reports of State engineer.

Average discharge.- 12 years (1932-37, 1938-45), 14.5 second-feet.

Extremes.- Maximum discharge during year, 1,860 second-feet Aug. 15 (gage height, 3.30 feet), from rating curve extended above 23 second-feet on basis of slope-area determinations at gage heights 3.4 and 8.5 feet; minimum daily, 7.0 second-feet June 17, July 16.

1931-45: Maximum discharge, 9,640 second-feet Sept. 3, 1938 (gage height, 8.50 feet, from floodmarks), by slope-area method; minimum daily, 1 second-foot July 31, Aug. 1, 1934.

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

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	16	17	16	18	18	18	17	14	10	7.1	13	14
2	16	17	17	18	18	17	16	14	11	9.4	43	13
3	16	17	17	17	19	18	17	13	8.2	7.8	26	13
4	16	16	16	18	19	18	16	13	8.9	13	22	13
5	16	16	16	18	19	18	15	14	8.6	14	14	13
6	16	20	16	18	18	18	14	9.4	13	14	12	12
7	16	17	17	18	18	18	14	11	13	14	15	14
8	16	17	17	18	20	17	13	14	13	14	13	13
9	15	16	17	18	20	17	13	16	13	15	12	9.3
10	15	16	17	18	17	18	17	16	13	16	13	12
11	16	16	16	17	17	16	18	15	11	14	14	14
12	16	16	16	17	18	19	17	16	9.8	14	11	14
13	16	14	16	17	19	17	17	16	10	14	10	14
14	15	14	16	18	18	17	17	14	9.8	13	9.6	14
15	16	15	16	18	17	14	18	15	9.8	8.4	71	13
16	16	17	16	18	18	17	17	14	9.8	7.0	a25	13
17	16	18	16	21	18	18	16	12	7.0	9.8	a18	12
18	16	18	16	20	18	16	16	12	8.6	14	a14	12
19	16	18	16	19	18	17	16	12	8.1	14	a13	11
20	17	17	16	20	18	17	17	7.3	13	13	13	12
21	16	17	16	18	18	18	17	9.3	13	14	17	12
22	13	16	16	18	18	18	11	13	13	14	17	12
23	14	17	17	19	18	18	12	14	13	12	15	8.2
24	12	18	17	18	17	19	16	14	13	12	14	7.8
25	14	18	17	18	18	18	17	14	11	13	14	8.2
26	16	17	20	19	17	18	17	14	9.4	13	13	12
27	17	17	18	20	16	16	17	14	9.3	14	13	12
28	17	17	18	19	17	15	17	11	9.5	14	11	12
29	17	16	18	18	-	16	16	9.7	9.2	8.4	15	13
30	17	16	18	18	-	16	14	9.4	11	9.0	14	13
31	17	-	18	18	-	17	-	11	-	9.3	14	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	488	17	12	15.7	968
November	501	20	14	16.7	994
December	519	20	16	16.7	1,030
Calendar year 1944	6,000	25	8.6	16.4	11,900
January	567	21	17	18.3	1,120
February	504	20	16	18.0	1,000
March	534	19	14	17.2	1,060
April	475	18	11	15.8	942
May	399.1	16	7.3	12.9	792
June	320	13	7.0	10.7	635
July	376.2	16	7.0	12.1	746
August	538.6	71	9.6	17.4	1,070
September	365.5	14	7.8	12.2	725
Water year 1944-45	5,587.4	71	7.0	16.3	11,080

Peak discharge.- Aug. 2 (4 p.m.) 1,320 sec.-ft.; Aug. 3 (7:30 p.m.) 940 sec.-ft.; Aug. 4 (6 p.m.) 584 sec.-ft.; Aug. 15 (3 p.m.) 1,860 sec.-ft.

a No gage-height record; discharge computed on basis of weather records and records for Rio Ruidoso at Hondo.

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

Alamogordo-La Luz ditch at La Luz, N. Mex.

Location.- Water-stage recorder and concrete Parshall flume, lat. 32°58'50", long. 105°56'15", in SW¼ sec. 25, T. 15 S., R. 10 E., a quarter of a mile upstream from La Luz and half a mile downstream from head gate.

Records available.- October 1934 to September 1945.

Average discharge.- 11 years, 7.00 second-feet.

Extremes.- Maximum daily discharge during year, 15 second-feet Oct. 5, Feb. 11-13; minimum daily, 0.2 second-foot Aug. 5.
1934-45: Maximum daily discharge, 22 second-feet Feb. 2, 3, 5-13, 1942; no flow at times.

Remarks.- Records good. Ditch diverts water from left bank of Rio La Luz for irrigation.

Monthly discharge, in second-feet, water year October 1944 to September 1945

Month	Maximum	Minimum	Mean	Runoff in acre-feet
October	15	11	12.8	785
November	8.7	6.3	7.05	420
December	8.3	6.8	7.75	476
Calendar year 1944	19	.4	10.4	7,560
January	11	5.7	7.00	451
February	15	1.4	10.1	563
March	13	1.3	9.21	566
April	12	8.5	10.7	638
May	9.2	5.7	6.87	422
June	7.6	4.1	5.79	344
July	10	2.3	7.09	436
August	11	.2	6.13	377
September	9.6	5.3	6.58	392
Water year 1944-45	15	.2	8.08	5,850

Alamogordo water supply near Alamogordo, N. Mex.

Location.- Water-stage recorder and rectangular contracted weir, lat. 32°52'2[illegible]", long. 105°55'40", in NW¼ sec. 33, T. 16 S., R. 10 E., at lower end of pipe line, about a mile downstream from Alamo Canyon and 2 miles southeast of Alamogordo.

Records available.- October 1932 to September 1945.

Average discharge.- 13 years, 1.94 second-feet.

Extremes.- Maximum daily discharge during year, 2.4 second-feet Oct. 1 to Dec. 18, Dec. 20, 21, Jan. 10-12; minimum daily, 1.7 second-feet Sept. 12-30.
1932-45: Maximum daily discharge, 4.2 second-feet Sept. 15, 1942; no flow July 7, 1933 and Sept. 29, 1941.

Remarks.- Records good.

Monthly discharge, in second-feet, water year October 1944 to September 1945

Month	Maximum	Minimum	Mean	Runoff in acre-feet
October	2.4	2.4	2.40	148
November	2.4	2.4	2.40	143
December	2.4	2.2	2.36	145
Calendar year 1944	3.0	2.2	2.58	1,880
January	2.4	2.2	2.30	141
February	2.2	2.0	2.02	112
March	2.0	2.0	2.00	123
April	2.1	2.0	2.02	120
May	2.0	2.0	2.00	123
June	2.0	1.9	1.97	117
July	2.0	1.9	1.91	117
August	1.8	1.8	1.80	111
September	1.8	1.7	1.74	103
Water year 1944-45	2.4	1.7	2.08	1,500

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

Measurements of stream flow in the western Gulf of Mexico basins made at points other than gaging stations are given in the following table:

Miscellaneous discharge measurements in western Gulf of Mexico basins during water year October 1944 to September 1945*

Mermentau River Basin

Date	Stream	Tributary to or diverting from--	Locality	Discharge (sec.-ft.)
Aug. 15	Bayou Queue de Tortue.	Mermentau River..	Sec. 18, T. 11 S., R. 1 W. Louisiana meridian, at bridge on State Highway 128, 100 feet below Southern Pacific R. R. bridge and ½ mile northeast of Riceville, La.	649

Calcasieu River Basin

Aug. 17	Houston River...	Calcasieu River..	Sec. 4, T. 9 S., R. 11 W. Louisiana meridian, at bridge on State Highway 380, 5 miles north of Edgerly, La.	12.6

Sabine River Basin

Apr. 21	Sabine River....	Gulf of Mexico...	At bridge on U. S. Highway 90, at Orange, Tex.	81,100
Oct. 20	Little Cow Creek	Sabine River.....	At bridge on State Highway 87, above McGraw Creek and ½ mile south of Burkeville, Tex.	32.3
Dec. 17	....do..........	....do..........	....do..........	42.7
Jan. 28	....do..........	....do..........	....do..........	54.0
Feb. 16	....do..........	....do..........	....do..........	58.5
Mar. 29	....do..........	....do..........	....do..........	49.9
June 12	....do..........	....do..........	....do..........	44.1
Sept.10	....do..........	....do..........	....do..........	40.4
Oct. 20	McGraw Creek....	Little Cow Creek.	1 mile above mouth and 2 miles southeast of Burkeville, Tex.	14.1
Dec. 17	....do..........	....do..........	....do..........	20.5
Jan. 25	....do..........	....do..........	....do..........	30.7
Feb. 16	....do..........	....do..........	....do..........	41.9
Mar. 29	....do..........	....do..........	....do..........	29.1
June 12	....do..........	....do..........	....do..........	23.6
Sept.10	....do..........	....do..........	....do..........	24.6
Oct. 21	Quicksand Creek.	Sabine River.....	At U. S. Highway 190, 0.7 mile above mouth and 1¼ miles east of Bon Wier, Tex.	21.7
Nov. 16	....do..........	....do..........	....do..........	21.6
Dec. 17	....do..........	....do..........	....do..........	32.3
June 12	....do..........	....do..........	....do..........	40.9
Sept.10	....do..........	....do..........	....do..........	29.4

San Jacinto River Basin

Aug. 30	South Mayde Creek.	Buffalo Bayou....	Lat. 29°47', long. 95°37', at bridge on U. S. Highway 90, 0.6 mile above Buffalo Bayou and 1 mile east of Addicks, Tex.	3,270

Oyster Creek Basin

June 5	Oyster Creek....	Gulf of Mexico...	Lat. 29°07', long. 95°29', at Snipe, Tex., 100 feet below Missouri-Pacific R. R. bridge.	24.4

Brazos River Basin

Nov. 12	Double Mountain Fork Brazos River.	Brazos River.....	At county road crossing, sec. 61, block S, Gulf, Colorado & Santa Fe R. R. Co. Survey, 4¼ miles northeast of Slaton, Tex.	a0.8
June 21	....do..........	....do..........	....do..........	b116
22	....do..........	....do..........	....do..........	b4.33
July 25	....do..........	....do..........	....do..........	0
Sept. 8	....do..........	....do..........	....do..........	0
July 30	Dove Creek......	Salt Fork Brazos River.	6 miles above mouth and 17 miles northwest of Aspermont, Tex.	a0.25
June 30	....do..........	....do..........	At mouth, 15 miles northwest of Aspermont, Tex.	0
Nov. 23	Walnut Creek....	Leon River.......	50 feet above mouth and 2.1 miles northeast of Hasse, Tex.	a0.40
Jan. 24	....do..........	....do..........	....do..........	a0.28
May 8	....do..........	....do..........	....do..........	4.16
June 5	Dow Chemical Co.'s diversion.	South Texas Canal Co.'s canal (diversion from Brazos River).	Dow Chemical Co.'s discharge into Oyster Creek, lat. 29°27', long. 95°30', about 400 feet above Dow Chemical Co.'s weir on Oyster Creek, near Juliff, Tex.	40.9

a Field estimate.
b Result of rain on June 20, 1945.

Colorado River Basin

1944 Aug. 30	Pedernales River	Colorado River...	Pedernales River at Stonewall, Tex..........	c71,000

c Slope-area measurement; gage height, about 23 feet; datum of gage maintained July 1924 to September 1934.

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* Includes measurement in Colorado River Basin in water year 1944.

Miscellaneous discharge measurements in western Gulf of Mexico basins during water year October 1944 to September 1945--Continued

Guadalupe River Basin

Date	Stream	Tributary to or diverting from--	Locality	Discharge (sec.-ft.)
Jan. 22	Hueco Springs...	Guadalupe River..	Lat. 29°45'35", long. 98°08'25", 3.8 miles north of New Braunfels, Tex.	90.3
Feb. 16	....do..........	....do..........	....do....................................	92.4
Mar. 23	....do..........	....do..........	....do....................................	80.4
Apr. 27	....do..........	....do..........	....do....................................	84.5
May 31	....do..........	....do..........	....do....................................	77.7
July 5	....do..........	....do..........	....do....................................	59.0
Aug. 9	....do..........	....do..........	....do....................................	32.1
Sept.13	....do..........	....do..........	....do....................................	23.3
Oct. 27	San Marcos Springs (San Marcos River).	....do..........	At San Marcos, Tex.........................	d157
Dec. 10	....do..........	....do..........	....do....................................	d155
Jan. 13	....do..........	....do..........	....do....................................	d164
Feb. 17	....do..........	....do..........	....do....................................	d228
Mar. 24	....do..........	....do..........	....do....................................	d233
Apr. 28	....do..........	....do..........	....do....................................	d252
June 1	....do..........	....do..........	....do....................................	d228
July 7	....do..........	....do..........	....do....................................	d184
Aug. 11	....do..........	....do..........	....do....................................	d163
Sept.15	....do..........	....do..........	....do....................................	d157

d Total flow of springs.

Nueces River Basin

Date	Stream	Tributary to or diverting from--	Locality	Discharge (sec.-ft.)
Oct. 9	Frio River......	Nueces River.....	Near Texas & New Orleans R. R. bridge, 0.6 mile above Dry Frio and 10 miles northeast of Uvalde, Tex.	e0
June 26	Hondo River.....	Frio River.......	1/3 mile below road crossing to Rothe School, about 5 miles southeast of Tarpley, Tex.	8.30
Aug. 2	Leona River.....	....do..........	1 mile below Kincaid Dam and 13.5 miles below Uvalde, Tex.	11.0
2	Kincaid Canal...	Leona River......	300 feet below head gates. Diversion from Leona River 10 miles below Uvalde, Tex.	2.87
3	Batesville Canal	....do..........	At Batesville, Tex. Diversion from Leona River.	1.99

e Observations of no flow also made on following dates: Nov. 20, Jan. 8, Feb. 18, Mar. 30, May 9, June 15, July 22, and Sept. 11.

Rio Grande Basin

Date	Stream	Tributary to or diverting from--	Locality	Discharge (sec.-ft.)
Sept.24	Rio Grande......	Gulf of Mexico...	Lat. 37°05', long. 105°45', in sec. 22, T. 33 N., R. 11 E., at Lobatos Bridge, 6 miles north of Colorado-New Mexico State line, 7 miles below Culebra Creek, and 10 miles east of Lobatos, Colo.	f43.6
24	....do..........	....do..........	At Ute Mountain dam site, in NW¼ sec. 25, T. 31 N., R. 11 E., 12 miles southwest of Costilla, N. Mex.	f88.0
24	....do..........	....do..........	At Chiflo dam site in N½ sec. 20, T. 29 N., R. 12 E., 5½ miles northwest of Questa, N. Mex.	f95.7
24	....do..........	....do..........	In SE¼ sec. 6, T. 28 N., R. 12 E., 2.9 miles above Rio Colorado and 6 miles west of Questa, N. Mex.	126
24	....do..........	....do..........	In NW¼ sec. 8, T. 28 N., R. 12 E., 2 miles above Rio Colorado and 5½ miles southwest of Questa, N. Mex.	156
24	Rio Colorado....	Rio Grande.......	At bridge on New Mexico State Route 3, in SW¼NW¼ sec. 6, T. 28 N., R. 13 E., 1 mile southwest of Questa, N. Mex.	28.1
24	....do..........	....do..........	In W½NW¼ sec. 10, T. 28 N., R. 12 E., near State fish hatchery, 4 miles southwest of Questa, N. Mex.	55.1
24	....do..........	....do..........	In SE¼SE¼ sec. 17, T. 28 N., R. 12 E., 5¾ miles southwest of Questa, N. Mex.	64.2
Oct. 12	Santa Fe Creek..	....do..........	Lat. 35°41', long. 105°50', in sec. 24, T. 17 N., R. 10 E., above upper reservoir, 6½ miles east of Santa Fe, N. Mex.	1.41
Nov. 3	....do..........	....do..........	....do....................................	2.65
28	....do..........	....do..........	....do....................................	1.52
Jan. 23	....do..........	....do..........	....do....................................	2.57
Mar. 8	....do..........	....do..........	....do....................................	7.21
May 4	....do..........	....do..........	....do....................................	52.4
11	....do..........	....do..........	....do....................................	40.7
June 7	....do..........	....do..........	....do....................................	20.4
July 9	....do..........	....do..........	....do....................................	3.96
Aug. 10	....do..........	....do..........	....do....................................	2.49
Sept.12	....do..........	....do..........	....do....................................	3.35
12	....do..........	....do..........	....do....................................	2.96
May 3	Bluewater Creek at spillway.	San Jose River...	In NE¼NW¼ sec. 9, T. 12 N. R. 12 W., near Bluewater, N. Mex.	16.7
4	....do..........	....do..........	....do....................................	19.0
3	Bluewater Creek at inlet gates.	....do..........	In SW¼NE¼ sec. 8, T. 12 N., R. 11 W., near Bluewater, N. Mex.	15.6
4	....do..........	....do..........	....do....................................	18.3
3	Bluewater main canal.	Bluewater Creek..	In NE¼NW¼ sec. 9, T. 12 N., R. 11 W., near Bluewater, N. Mex.	14.5
4	....do..........	....do..........	....do....................................	16.8
3	Bluewater main canal at division gate.	....do..........	In NE¼SE¼ sec. 9, T. 12 N., R. 11 W., near Bluewater, N. Mex.	13.5
4	....do..........	....do..........	....do....................................	16.4

f Furnished by Corps of Engineers, U. S. Army.

Miscellaneous discharge measurements in western Gulf of Mexico basins during water year October 1944 to September 1945--Continued

Rio Grande Basin--Continued

Date	Stream	Tributary to or diverting from--	Locality	Discharge (sec.-ft.)
May 3	Bluewater middle main canal.	Bluewater Creek..	In NE¼SW¼ sec. 10, T. 12 N., R. 11 W., near Bluewater, N. Mex.	9.18
4	....do.........	....do...........	....do....................................	11.9
3	Bluewater middle canal at turnout 37.	....do...........	In SE¼NE¼ sec. 5, T. 11 N., R. 10 W., near Bluewater, N. Mex.	6.89
4	....do.........	....do...........	....do....................................	8.61
3	Bluewater west side canal.	....do...........	In NE¼SE¼ sec. 9, T. 12 N., R. 11 W., near Bluewater, N. Mex.	3.68
4	....do.........	....do...........	....do....................................	4.49
4	Bluewater west side canal at lateral 113.	....do...........	In SE¼SW¼ sec. 15, T. 12 N., R. 11 W., near Bluewater, N. Mex.	3.72
5	....do.........	....do...........	....do....................................	3.27
5	Frank Wilson pump ditch.	....do...........	In NE¼NW¼ sec. 16, T. 11 N., R. 10 W., near Grants, N. Mex.	3.49
Oct. 19	Rio Salado.....	Rio Grande.......	Lat. 34°16'05", long. 106°52'10", in Sevilleta Grant, at Santa Fe R. R. bridge, 1,000 feet above mouth and 2 miles northeast of San Acacia, N. Mex.	a20
Nov. 7	....do.........	....do...........	....do....................................	0
15	....do.........	....do...........	....do....................................	0
28	....do.........	....do...........	....do....................................	0
Dec. 3	....do.........	....do...........	....do....................................	0
12	....do.........	....do...........	....do....................................	0
19	....do.........	....do...........	....do....................................	0
20	....do.........	....do...........	....do....................................	0
27	....do.........	....do...........	....do....................................	0
Jan. 1	....do.........	....do...........	....do....................................	0
10	....do.........	....do...........	....do....................................	0
31	....do.........	....do...........	....do....................................	0
Feb. 28	....do.........	....do...........	....do....................................	0
Apr. 1	....do.........	....do...........	....do....................................	0
May 2	....do.........	....do...........	....do....................................	0
17	....do.........	....do...........	....do....................................	0
July 3	....do.........	....do...........	....do....................................	a1.0
13	....do.........	....do...........	....do....................................	a4.0
27	....do.........	....do...........	....do....................................	126
Aug. 8	....do.........	....do...........	....do....................................	612
9	....do.........	....do...........	....do....................................	137
11	....do.........	....do...........	....do....................................	101
21	....do.........	....do...........	....do....................................	a5.0
30	....do.........	....do...........	....do....................................	0
Sept. 29	....do.........	....do...........	....do....................................	0
Mar. 31	Pecos River....	....do...........	Lat. 33°22'25", long. 104°24'00", in NE¼ sec. 9, T. 11 S., R. 25 E., just below Rio Hondo, 6 miles east of Roswell, N. Mex.	25.1
Apr. 1	....do.........	....do...........	....do....................................	26.6
Mar. 31	....do.........	....do...........	Lat. 33°13', long. 104°20', in SE¼ sec. 4, T. 13 S., R. 26 E., 2,000 feet above Dexter Bridge and 2¼ miles northeast of Dexter, N. Mex.	45.1
Apr. 1	....do.........	....do...........	....do....................................	47.9
1	....do.........	....do...........	Lat. 33°07'10", long. 104°17'00", in NW¼ sec. 7, T. 14 S., R. 27 E., 1,000 feet below State Highway 61 and 2.5 miles east of Hagerman, N. Mex.	57.2
2	....do.........	....do...........	....do....................................	51.0
17	Fort Sumner Canal.	Pecos River......	In SW¼SW¼ sec. 1, T. 3 N., R. 25 E., 5 feet below bridge, 200 feet below head and 3½ miles northwest of Fort Sumner, N. Mex.	93.1
May 3	....do.........	....do...........	....do....................................	92.4
13	....do.........	....do...........	....do....................................	93.6
June 9	....do.........	....do...........	....do....................................	88.6
July 7	....do.........	....do...........	....do....................................	91.6
Apr. 17	....do.........	....do...........	In NW¼ sec. 12, T. 3 N., R. 25 E., 2,215 feet below head and 3 miles northwest of Fort Sumner, N. Mex.	88.5
May 3	....do.........	....do...........	....do....................................	89.6
13	....do.........	....do...........	....do....................................	90.7
Apr. 17	....do.........	....do...........	In SW¼ sec. 12, T. 3 N., R. 25 E., 5,300 feet below head and 2½ miles northwest of Fort Sumner.	90.1
May 3	....do.........	....do...........	....do....................................	75.4
13	....do.........	....do...........	....do....................................	91.4
Apr. 17	....do.........	....do...........	At concrete wasteway in SW¼SE¼ sec. 12, T. 3 N., R. 25 E., 8,000 feet below head and 2¼ miles northwest of Fort Sumner, N. Mex.	91.2
May 3	....do.........	....do...........	....do....................................	75.1
13	....do.........	....do...........	....do....................................	90.5
Apr. 18	....do.........	....do...........	In NE¼SE¼ sec. 13, T. 3 N., R. 25 E., 100 feet above Santa Fe R. R. bridge, 10,600 feet below head, and 1½ miles northwest of Fort Sumner, N. Mex.	94.6
May 14	....do.........	....do...........	....do....................................	93.5
June 9	....do.........	....do...........	....do....................................	84.6
July 7	....do.........	....do...........	....do....................................	86.0
Apr. 18	....do.........	....do...........	In S½ sec. 18, T. 3 N., R. 26 E., 250 feet below pump to Highline ditch, 14,000 feet below head, and 1 mile northwest of Fort Sumner, N. Mex.	79.6
May 14	....do.........	....do...........	....do....................................	80.8

a Field estimate.

Miscellaneous discharge measurements in western Gulf of Mexico basins during water year October 1944 to September 1945--Continued

Rio Grande Basin--Continued

Date	Stream	Tributary to or diverting from--	Locality	Discharge (sec.-ft.)
June 9	Fort Sumner Canal.	Pecos River	In S½ sec. 18, T. 3 N., R. 26 E., 250 feet below pump to Highline ditch, 14,000 feet below head, and 1 mile northwest of Fort Sumner, N. Mex.	85.9
July 7	do	do	do	71.6
Apr. 18	do	do	In NW¼ sec. 19, T. 3 N., R. 26 E., just below sharp bend in canal, ¾ mile northwest of Fort Sumner, N. Mex., and 16,800 feet below head.	76.7
May 14	do	do	do	80.0
June 9	do	do	do	79.0
July 8	do	do	do	82.6
Apr. 17	Fort Sumner Canal sluiceway.	Fort Sumner Canal	In NW¼ sec. 12, T. 3 N., R. 25 E., 2,140 feet below canal heading and 3 miles northwest of Fort Sumner, N. Mex.	2.64
May 13	do	do	do	.40
Apr. 16	Highline Canal	do	In SE¼SE¼ sec. 18, T. 3 N., R. 26 E., at downstream end of siphon, 2,000 feet below head and ½ mile northwest of Fort Sumner.	13.4
May 14	do	do	do	14.2
June 10	do	do	do	13.0
Apr. 16	do	do	In NW¼NW¼ sec. 20, T. 3 N., R. 26 E., in flume, 200 feet below U. S. Highway 84 and 3,500 feet below head, at Fort Sumner, N. Mex.	12.7
18	do	do	do	12.6
May 14	do	do	do	12.7
June 10	do	do	do	13.0
10	do	do	do	12.8
Apr. 16	do	do	In SE¼NW¼ sec. 20, T. 3 N., R. 26 E., 20 feet above concrete drop at Fort Sumner, N. Mex., and 5,800 feet below head.	13.8
May 14	do	do	do	13.2
June 10	do	do	do	14.0
Mar. 31	Rio Hondo	Pecos River	Lat. 33°22', long. 104°24', in E½ sec. 9, T. 11 S., R. 25 E., ¼ mile above mouth and 7 miles east of Roswell, N. Mex.	6.94
Apr. 1	do	do	do	6.69
Mar. 31	Hagerman Canal	Rio Hondo	Lat. 33°24'20", long. 104°26'20", in NE¼ sec. 31, T. 10 S., R. 25 E., at head, 5 miles east of Roswell, N. Mex.	41.4
Apr. 1	do	do	do	42.8
2	do	do	do	32.1
1	Rio Felix	Pecos River	Lat. 33°08'35", long. 104°19'10", in SW¼ sec. 35, T. 13 S., R. 26 E., ½ mile above mouth and 2 miles north of Hagerman, N. Mex.	2.98
2	do	do	do	2.21
1	Walnut Draw	do	Lat. 32°58', long. 104°22', in lot 2, sec. 2, T. 16 S., R. 26 E., 3 miles south of Lake Arthur, N. Mex.	2.28
2	do	do	do	a.10
Oct. 19	Phantom Lake Spring.	Phantom Lake Irrigation System Canal.	Lat. 30°56', long. 103°51', at source (mouth of cave), 3.7 miles west-southwest of Toyahvale, Tex.	26.6
Nov. 16	do	do	do	18.2
Dec. 14	do	do	do	16.3
Jan. 8	do	do	do	16.0
Feb. 10	do	do	do	15.4
Mar. 17	do	do	do	14.4
Apr. 26	do	do	do	15.0
May 18	do	do	do	14.6
June 22	do	do	do	14.3
July 13	do	do	do	58.0
Aug. 14	do	do	do	19.7
Nov. 16	Giffin Springs	Main canal of Reeves County Water Improvement District No. 1.	In middle of northeast boundary, sec. 20, block 13, Houston & Great Northern R. R. Survey, at Toyahvale, Tex.	5.93
Jan. 9	do	do	do	5.48
Apr. 26	do	do	do	4.96
June 22	do	do	do	5.52
Aug. 14	do	do	do	6.90
Nov. 15	West Sandia Spring.	Canal of Reeves County Water Improvement District No. 1.	At head of feeder canal, 800 feet south of U. S. Highway 290, at Balmorhea, Tex.	1.84
Jan. 9	do	do	do	1.66
Apr. 26	do	do	do	1.89
June 22	do	do	do	1.34
Aug. 14	do	do	do	2.76
Nov. 15	East Sandia Spring.	do	At former gaging station just below small dam, 1 mile east of Balmorhea, Tex.	.94
Apr. 26	do	do	do	1.39
June 22	do	do	do	1.12
Aug. 14	do	do	do	1.60

a Field estimate.

Miscellaneous discharge measurements in western Gulf of Mexico basins during water year October 1944 to September 1945--Continued

Tularosa Valley

Date	Stream	Tributary to or diverting from--	Locality	Discharge (sec.-ft.)
Oct. 16	La Luz ditch....	Alamogordo-La Luz ditch.	Lat. 32°58'45", long. 105°56'20", in SW¼ sec. 25, T. 15 S., R. 10 E., at head, ½ mile above La Luz and 6 miles north of Alamogordo, N. Mex.	1.02
Nov. 6	....do..........	....do..........	....do..........	1.04
22	....do..........	....do..........	....do..........	.97
Dec. 7	....do..........	....do..........	....do..........	.99
22	....do..........	....do..........	....do..........	.98
Jan. 4	....do..........	....do..........	....do..........	1.00
18	....do..........	....do..........	....do..........	1.02
Feb. 1	....do..........	....do..........	....do..........	1.02
15	....do..........	....do..........	....do..........	.97
Mar. 2	....do..........	....do..........	....do..........	1.01
15	....do..........	....do..........	....do..........	.97
Apr. 3	....do..........	....do..........	....do..........	.94
21	....do..........	....do..........	....do..........	.86
28	....do..........	....do..........	....do..........	.86
May 11	....do..........	....do..........	....do..........	.75
28	....do..........	....do..........	....do..........	.80
June 11	....do..........	....do..........	....do..........	.84
22	....do..........	....do..........	....do..........	.91
July 9	....do..........	....do..........	....do..........	.85
23	....do..........	....do..........	....do..........	.84
Aug. 3	....do..........	....do..........	....do..........	1.10
20	....do..........	....do..........	....do..........	1.24
Sept.10	....do..........	....do..........	....do..........	.94
15	....do..........	....do..........	....do..........	1.00

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