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SURFACE WATER SUPPLY *of the* UNITED STATES 1941

PART 9
COLORADO RIVER BASIN

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SURFACE WATER SUPPLY OF THE COLORADO RIVER BASIN, 1941

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, 1941. 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 9,120 gaging stations in the United States and also at many gaging stations in Alaska and Hawaii. In July 1941, 4,850 gaging stations were being maintained by the Geological Survey and cooperating organizations. Miscellaneous discharge measurements were made 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 on page 10.

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.

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 on plate 1.

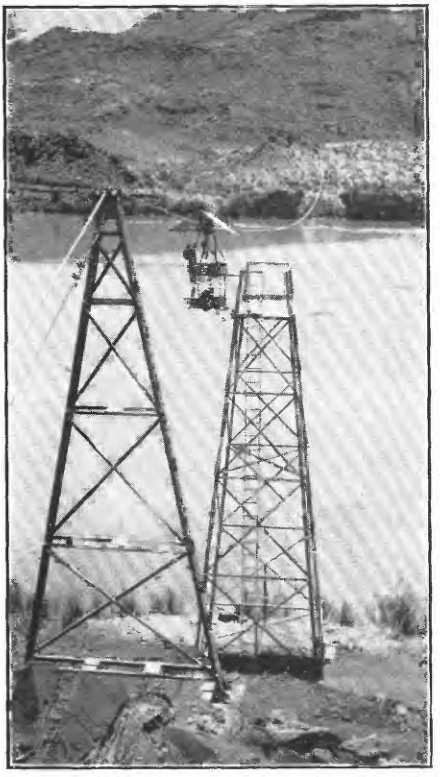
Rating tables giving the discharge for any stage are prepared from the discharge measurements. The application of the daily mean gage height to these rating tables gives the daily mean discharge, from which the monthly and the yearly mean discharge are computed. If the stage-discharge relation is subject 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 are used in applying the gage heights to the rating tables.

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.

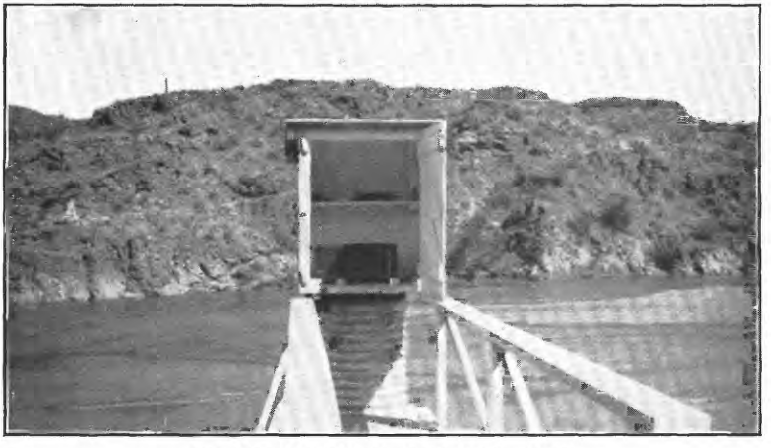
At most gaging stations in the northern part of the United States and at some in the mountainous regions of other parts the stage-discharge relation is affected by ice during the winter, which makes it impossible to compute the discharge in the usual manner. Discharge for periods of ice effect is computed 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. The days included in the periods of ice effect and the days during the winter period on which discharge measurements were made are indicated in the table by symbols referring to footnotes.

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 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 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



A. COLORADO RIVER AT LEES FERRY, ARIZ.
Note landing tower.



B. WILLIAMS RIVER AT PLANET, ARIZ.

GAGING-STATION STRUCTURES.

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 stations having drainage areas of less than 10 square miles or more than 10,000 square miles or if the peak discharges usually exceed the corresponding mean discharges for the day by less than 10 percent.

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 flashy floods the daily mean discharge is determined from gage-height graphs based on gage readings made once or twice daily or oftener, as stated in the station description. 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.

In the table of monthly discharge the column headed "Second-foot-days" gives the sum for each month of the figures given in the table of daily discharge. The column headed "Maximum" gives the maximum daily discharge and 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 a few of the more important lakes and 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.

ACCURACY OF FIELD DATA AND COMPUTED RESULTS

The accuracy of stream-flow data depends primarily on (1) the permanency of the stage-discharge relation 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 daily records are accurate within 5 percent; "good," within 10 percent; "fair," within 15 percent; and "poor," within 20 or a higher percent.

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 of reservoirs or for other changes incident to use and control. Figures of second-feet per square mile and runoff in inches are also omitted if the drainage area includes large noncontributing areas or if the average annual rainfall over the drainage area is less than 20 inches.

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

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

PUBLICATIONS

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

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

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

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

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

3. Sets are available for consultation in the local 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., 5 North Rhodes Center.
Augusta, Maine, Statehouse.
Baton Rouge, La., 124 Geology Building, Louisiana State University.
Boston, Mass., 945 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., Engineering Building, University of Maryland.
Columbia, S. C., 119 United States Courthouse.
Columbus, Ohio, 404 Engineering Experiment Station, Ohio State University.
Harrisburg, Pa., 490 Education Building.
Hartford, Conn., 225 Capitol Building, 410 Asylum Street.
Indianapolis, Ind., 511 Board of Trade Building.
Jackson, Miss., 208 Millsaps Building.

Louisville, Ky., 652 Federal Building.
Madison, Wis., 666 State Office Building.
Montgomery, Ala., 507 Post Office Building.
Ocala, Fla., 302 Post Office Building.
St. Paul, Minn., 808 New Post Office Building.
Trenton, N. J., 228 Federal Building.
Urbana, Ill., 14 Post Office Annex, Elm Street.

West of the Mississippi River:
Austin, Tex., 302 West 15th Street.
Boise, Idaho, 429 Federal Building.
Denver, Colo., 230 Customhouse.
Fort Smith, Ark., 6 Post Office Building.
Helena, Mont., 408 Federal Building.
Honolulu, Hawaii, 225 Federal Building.
Idaho Falls, Idaho, 204 Federal Building.
Iowa City, Iowa, 506 Hydraulic Laboratory, University of Iowa.
Lincoln, Nebr., 1404 Statehouse.
Los Angeles, Calif., G-31 United States Post Office and Courthouse.
Oklahoma City, Okla., 303 Capitol Office Building.
Portland, Oreg., 606 Post Office Building.
Rolla, Mo., Missouri Geological Survey Building, Missouri School of Mines and Metallurgy.
St. Louis, Mo., 926 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., 1100 Washington 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.

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

Stream-flow data in reports of the Geological Survey

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

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

Note.- Reports containing records for years after 1901 are given in table on page 6.

The table on the following page gives, by years and drainage basins, the numbers of the papers on surface water supply published from 1889 to 1941. The data for any particular station will, in general be found in the reports covering the years during

Numbers of water-supply papers containing results of stream measurements, 1899-1941

(For basins included see p. 4)

Year	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1899 a...	35	b35, 36	36	36	36	c36, 37	37	37	d37, 38	38, e39	38, f39	38	38	38
1900 g...	47, h48	48	48, 149	49	49	49, j50	50	50	50	51	51	51	51	51
1901.....	65, 75	65, 75	65, 75	65, 75	k65, 66, 75	66, 75	k65, 66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75
1902.....	82	b82, 83	83	m82, 83	k83, 85	84	k83, 84	84	85	85	85	85	85	85
1903.....	97	b97, 98	98	97	k98, 99, n100	99	k98, 99	99	100	100	100	100	100	100
1904.....	o124, p125, q126	q126, 127	128	129	k128, 130	130, r131	k128, 131	132	133	133, s134	134	135	135	135
1905.....	o165, p166, q167	q167, 168	169	170	171	172	k169, 173	174	175, t177	176, s177	177	178	178	u177, 178
1906.....	o201, p202, q203	q203, 204	205	206	207	208	k205, 209	210	211, t213	212, s213	213	214	214	214
1907-8...	241	242	243	244	245	246	247	248	249	250, s251	251	252	252	252
1909.....	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	304	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

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

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, 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. 6), contains a summary of yearly discharge at gaging stations in the area covered by that report. Gaging stations at which 10 or more complete years of record have been collected are represented. These summaries are available also as separate reprints.

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

Reports containing compilation of discharge by States and drainage basins

Water-Supply Paper	Year ending	State or drainage basin and title
		STATE
107	1903	Alabama, Water powers of, with an appendix on stream measurements in Mississippi.
298	1912	California, Water resources of, part 1, Stream measurements in Sacramento River Basin.
299	1912	California, Water resources of, part 2, Stream measurements in San Joaquin River Basin.
300	1912	California, Water resources of, part 3, Stream measurements in the Great Basin and Pacific coast river basins.
447	1918	California, southern, Surface water supply of Pacific slope of.
597-E	1927	California, Surface water supply of Sacramento River Basin.
636-D	1927	California, Surface water supply of San Joaquin River Basin.
636-E	1927	California, southern, Surface water supply of Pacific slope basins in.
637-A	1927	California, Surface water supply of minor San Francisco Bay, northern Pacific, and Great basins in.
74	1900	Colorado, Water resources of.
197	1905	Georgia, Water resources of.
415	1915	Massachusetts, Surface waters of.
230	1906	Nebraska, Surface water supply of.
370	1910	Oregon, Surface water supply of.
850	1937	Texas, Summary of records of surface waters of.
424	1916	Vermont, Surface waters of.
492	1919	Washington, Summary of hydrometric data in.
870	1935	Washington, Summary of records of surface waters of.
469	1921	Wyoming, Surface waters of, and their utilization.
		DRAINAGE BASIN
395	1914	Colorado River (Ariz., Colo., N. Mex., Utah, Wyo.) and its utilization.
617	1927	Colorado River, upper (Colo., Utah), and its utilization.
517	1920	Great Salt Lake Basin, Water powers of.
618	1928	Green River (Utah, Wyo.) and its utilization.
198	1906	Kennebec River Basin (Maine), Water resources of.
491	1917	Milk River. (See St. Mary and Milk Rivers.)
536	1920	New-Kanawha River Basin (N. C., Va., W. Va.), Surface Water Supply of.
279	1909	Penobscot River Basin (Maine), Water resources of.
192	1906	Potomac River Basin (D. C., Md., W. Va.)
358	1913	Rio Grande Basin (Colo., N. Mex., Tex.), Water resources of, 1888-1913.
491	1917	St. Mary and Milk Rivers (Mont., Canada), Water supply of.
109	1904	Susquehanna River Basin (Pa., Md.,), Hydrography of.

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 table on following page contains a list of these reports.

State reports containing compilation of records of discharge

State	Year ending	Report	Issued by
Alabama.....	1915	Bull. 17, Water powers of Alabama....	Geological Survey of Alabama.
Arkansas....	1928	Stream-gaging Report 1.....	Arkansas Geological Survey.
Connecticut.	1926	Bull. 44, Water resources of Connecticut.	State Geological and Natural History Survey.
Do.....	1933[a]	5th biennial report.....	Connecticut State Water Commission.
Georgia.....	1906	Bull. 16, Water powers of Georgia.....	Geological Survey of Georgia.
Do.....	1920[b]	Bull. 38, Water powers of Georgia....	Do.
Illinois....	1911	Water resources of Illinois.....	Rivers and Lakes Commission.
Do.....	1934	Stream-flow data of Illinois.....	Division of Waterways.
Indiana.....	1927	Pub. 72, Surface water supply of Indiana.	Department of Conservation.
Do.....	1930[c]	Pub. 112, Surface water supply of Indiana.	Do.
Iowa.....	1932	Stream-flow records of Iowa.....	Iowa State Planning Board.
Kansas.....	1919	Surface waters of Kansas.....	Kansas Water Commission.
Do.....	1924[d]	....do.....	Do.
Do.....	1928[e]	....do.....	Kansas State Board of Agriculture.
Do.....	1935[f]	Stream-flow data of Kansas.....	Do.
Do.....	1939[g]	....do.....	Do.
Kentucky....	1920	Surface waters of Kentucky.....	Kentucky Geological Survey.
Maryland....	1937	Flow data and draft storage curves for major streams in Maryland.	State Planning Commission and Water Resources Commission.
Minnesota...	1912	Water-resources investigation of Minnesota.	State Drainage Commission.
Missouri....	1926	Vol. 20, 2d series, Water resources of Missouri.	Missouri Geological Survey and Water Resources.
Do.....	1939[h]	Vol. 26, 2d series, Surface waters of Missouri.	Do.
Nebraska....	1914	1st hydrographic report.....	Bureau of Water Power, Irrigation, and Drainage.
Do.....	1928[i]	2d hydrographic report.....	Do.
New Jersey..	1928	Bull. 33, Surface water supply of New Jersey.	Department of Conservation and Development.
Do.....	1934[j]	Special Report 5, Surface water supply of New Jersey.	State Water Policy Commission.
New Mexico..	1925	Surface water supply of New Mexico...	Office of the State Engineer.
North Carolina.	1923	Bull. 34, Discharge records of North Carolina streams.	Department of Conservation and Development.
Do.....	1936[k]	Bull. 39, Discharge records of North Carolina streams.	Do.
North Dakota	1920	Report to Governor of North Dakota on flood control.	State chief engineer.
Do.....	1927[l]	Surface water in North Dakota.....	State Planning Board.
Ohio.....	1921[m]	Bull. 73, Ohio stream flow.....	Engineering Experiment Station, Ohio State University.
Do.....	1939[n]	Bull. 200, Compilation of stream-flow records of Ohio.	Department of Agriculture, Division of Conservation and Natural Resources.
Oregon.....	1914	Bull. 4, Water resources of the State of Oregon.	Office of the State Engineer.
Do.....	1924[o]	Bull. 7, Water resources of the State of Oregon.	Do.
Do.....	1930[p]	Bull. 8, Water resources of the State of Oregon.	Do.
Do.....	1936[q]	Bull. 9, Water resources of the State of Oregon.	Do.
Pennsylvania	1911	Report of the Water Supply Commission of Pennsylvania.	Water Supply Commission of Pennsylvania.
Do.....	1932[r]	Stream-flow records of Pennsylvania..	Department of Forests and Waters.
Tennessee...	1924	Bull. 34, Water resources of Tennessee.	Department of Education.
Do.....	1930[s]	Bull. 40, Surface waters of Tennessee.	Do.
Utah.....	1905	5th biennial report, State Engineer..	Office of the State Engineer.
Do.....	1910	7th biennial report, State Engineer..	Do.
Do.....	1916	10th biennial report, State Engineer.	Do.
Virginia....	1927	Bull. 31, Water resources of Virginia.	Conservation Commission.
Washington..	1933	Bull. 5, Monthly and yearly summaries of hydrometric data.	Department of Conservation and Development.
Wisconsin...	1914	1st report of Railroad Commission of Wisconsin to Legislature on water powers.	Railroad Commission of Wisconsin.
Do.....	1923[t]	2d report of Railroad Commission of Wisconsin to Legislature on water powers.	Do.

a Includes records of monthly discharge in second-feet per square mile for years 1912-33.
b Includes records for years 1907-18.
c Includes records for years 1927-30.
d Includes records for years 1919-24.
e Includes records for years 1924-28.
f Includes records for years 1928-35.
g Includes records for years 1935-39.
h Includes records for years 1927-39.
i Includes records for years 1914-28.
j Includes records for years 1928-34.
k Includes records for years 1889-1936; records of daily and monthly discharge are not included.
l Includes records for years 1882-1937.
m Includes all available records prior to 1921.
n Includes records for years 1902-39.
o Includes records for years 1914-24.
p Includes records for years 1924-30.
q Includes records for years 1930-36.
r Includes records for years 1928-32.
s Includes average weekly discharge for years 1920-30.
t Includes records for years 1914-23.

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

RECORDS OF DISCHARGE COLLECTED BY AGENCIES OTHER THAN THE GEOLOGICAL SURVEY

The following table contains a list of gaging stations for the area covered by this report at which records of daily discharge were collected during the water year October 1940 to September 1941 by agencies other than the Geological Survey. The records for these stations are not contained in publications of the Geological Survey, nor have they been published elsewhere, but they are available in the files of the organizations named.

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

Stream	Location	Period	Collected by
Ash Creek	Rainbow Bridge, near New Harmony, Utah.	1939-41	Bureau of Reclamation.
Ashley Creek	Above Springs, near Vernal, Utah	1941	Do.
Do	Below Dry Fork, near Vernal, Utah	1939-41	Do.
Big (Kolob) Creek	Kolob Mountain, near Virgin, Utah	1939-41	Do.
Boulger Creek	Near proposed diversion, 9 miles east of Fairview, Utah.	1938-41	Do.
Brush Creek	Buckle Ranch, near Jensen, Utah	1939-41	Do.
Do	Tyzach Ranch, near Vernal, Utah	1939-41	Do.
Cascade Creek	Near Tacoma, Colo.†	1926-41	Western Colorado Power Co.
Dry Fork	Above sinks, near Vernal, Utah	1939-40	Bureau of Reclamation.
Do	Below Springs, near Vernal, Utah	1941	Do.
Gooseberry Creek	Gooseberry upper dam site, near Fairview, Utah.	1928-29, 1931, 1935-41	Bureau of Reclamation and Water Storage Commission.
Do	At Mamouth dam site near Scofield, Utah.†	1940-41	Bureau of Reclamation.
Moody Creek	Lower dam site, near Central, Utah	1939-41	Do.
Santa Clara Creek	Below Winsor Dam, near Santa Clara, Utah.	1939-41	Do.
Do	Near Gunlock, Utah	1939-41	Do.
Do	Near Central, Utah	1939-41	Do.
Do	Pine Valley, Utah	1939-41	Do.
Sheep Creek (North Fork).	Above Lucerne Valley canal, near Manila, Utah.	1939-41	Do.

† Former Geological Survey station.

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

Stream	Location	Period	Collected by
Sheep Creek (North Fork).	Below Lucerne Valley canal, near Manila, Utah.	1939-41	Bureau of Reclamation.
Sheep Creek (South Fork).	Above Lucerne Valley canal, near Manila, Utah.	1939-41	Do.
White River.....	Below Left Fork, 1 mile east of Soldier Summit, Utah.	1938-41	Do.
White River (Left Fork).	Above forks, near Soldier Summit, Utah.	1938-41	Do.

Note.- The Soil Conservation Service began in 1936 to make studies of run-off from four areas comprising less than 3,000 acres each, two areas comprising between 3,000 and 10,000 acres each, and two areas comprising between 10,000 and 21,000 acres each in the vicinity of Mexican Springs, N. Mex. The records are in the files of that organization.

COOPERATION

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

Arizona (all stations except Virgin River at Littlefield): Office of the State Water Commissioner, J. C. Wanslee; Salt River Valley Water Users' Association; Metropolitan Water District of Southern California (for certain stations on Colorado River below Boulder Dam and on Williams River); the San Carlos Irrigation and Drainage District; and Maricopa County Municipal Water Conservation District No. 1.

Colorado: Office of the State engineer, M. C. Hinderlider; and the Colorado Water Conservation Board, C. H. Stone, director.

New Mexico: Office of the State engineer, T. M. McClure; and the New Mexico Interstate Stream Commission, T. M. McClure, secretary.

Utah: Office of the State engineer, T. H. Humpherys succeeded by E. H. Watson.

Wyoming: Office of the State engineer, L. C. Bishop; and the State Planning and Water Conservation Board, L. C. Bishop, president.

Financial assistance was furnished by the Corps of Engineers, U. S. Army, for the operation of 10 gaging stations in Arizona and 1 in New Mexico.

Financial assistance was also furnished by the Bureau of Reclamation, United States Department of the Interior.

Assistance in collecting the records was rendered also by the following municipalities, organizations, corporations, and individuals:

Arizona: Gila water commissioner, Charles A. Firth, appointed by the United States District Court.

Colorado: Denver Board of Water Commissioners, Bureau of Reclamation, and Uncompahgre Valley Water Users' Association.

New Mexico: Office of Indian Affairs.

Utah: National Park Service, Bureau of Reclamation and Utah Power & Light Co.

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 sngineer, and Rudolph G. Kasel, chief of the division of surface waters. The data for the stations in the several States were collected and prepared for publication under supervision of district engineers as follows: In Arizona (except for Virgin River at Littlefield), in California, in Nevada, and for Puerco River at Gallup, N. Mex., and

Gila River below Blue Creek, near Virden, N. Mex., J. H. Gardiner; in Colorado (except for Los Pinos River at Ignacio), Robert Follansbee, the work being done in collaboration with M. C. Hinderlider, State engineer, and L. T. Burgess, State chief hydrographer; in New Mexico (except for the stations named above) and for Los Pinos River at Ignacio, Colo., Berkeley Johnson; in Utah (except for the stations named below) and for Virgin River at Littlefield, Ariz., A. B. Purton; in Wyoming and for Green River near Linwood, Utah, and White River near Watson, Utah, Robert Follansbee.

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

461676 O-42-2

COLORADO RIVER BASIN

COLORADO RIVER MAIN STEM

Colorado River near Grand Lake, Colo.

Location.- Water-stage recorder, lat. 40°14', long. 105°51', in sec. 13, T. 3 N., R. 75 W., half a mile upstream from Grand Lake outlet and 3 miles south of Grand Lake.

Drainage area.- 101 square miles.

Records available.- July 1904 to September 1909, September 1910 to September 1918, May 1934 to September 1941.

Average discharge.- 20 years, 123 second-feet.

Extremes.- Maximum discharge during year, 602 second-feet May 13 (gage height, 4.82 feet); minimum daily, 13 second-feet Jan. 8, Feb. 3, 9-17.
1904-9, 1910-18, 1934-41: Maximum discharge, 1,640 second-feet June 15, 16, 1918 (gage height, 7.0 feet, site and datum then in use); minimum, 1.6 second-feet July 17, 1934 (gage height, 1.32).

Remarks.- Records good except those for periods of ice effect, which are fair. Diversions above station for irrigation. Transmountain diversions by Grand River ditch through La Poudre Pass to Cache la Poudre River Basin.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	80	29	21	17	14	15	20	189	307	150	27	22
2	66	31	21	18	14	14	21	224	294	154	27	26
3	57	26	20	16	14	14	20	238	296	124	27	23
4	50	31	20	16	14	14	20	266	296	107	27	22
5	48	33	19	16	14	14	22	266	291	104	26	21
6	57	35	19	14	13	14	20	217	273	98	31	22
7	53	36	19	14	14	13	21	130	232	86	30	24
8	44	34	19	13	14	13	21	120	310	81	34	43
9	44	*35	19	14	13	14	21	226	275	77	32	48
10	47	34	19	15	13	16	22	308	262	71	35	50
11	43	30	19	14	*13	18	23	378	245	65	35	51
12	40	28	18	14	13	16	24	424	221	65	36	49
13	37	26	18	14	13	24	28	504	233	66	38	45
14	38	18	18	14	13	14	24	532	233	65	31	54
15	34	20	16	15	13	14	26	462	240	60	30	52
16	33	22	19	15	13	14	36	381	257	52	36	46
17	31	28	16	14	13	14	28	384	286	49	46	41
18	31	28	16	14	14	14	25	424	310	47	61	40
19	33	26	16	14	14	15	31	384	338	47	47	37
20	33	26	16	14	14	15	23	351	340	49	40	32
21	32	24	17	15	14	16	28	321	338	47	35	31
22	32	24	17	15	14	16	23	349	315	40	35	32
23	30	23	16	*16	14	16	29	335	310	35	36	40
24	31	22	16	16	14	17	35	354	288	29	33	41
25	31	21	17	15	14	*18	51	357	273	27	35	42
26	30	20	17	15	16	17	56	366	255	32	38	44
27	30	20	16	14	16	18	68	360	230	29	32	40
28	32	20	16	14	13	18	*92	321	213	27	27	38
29	31	21	16	15	-	18	122	307	186	27	25	35
30	33	21	16	14	-	19	157	294	160	27	24	38
31	31	-	16	14	-	20	-	307	-	27	22	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	1,240	80	30	40.0	2,460
November	789	36	18	26.3	1,560
December	550	21	16	17.7	1,090
Calendar year 1940	20,717	364	10	56.6	41,070
January	458	18	13	14.8	908
February	388	16	13	13.9	770
March	485	20	14	15.6	962
April	1,139	157	20	38.0	2,260
May	10,084	532	120	325	20,000
June	8,146	349	160	272	16,160
July	1,964	184	27	63.4	3,900
August	1,039	61	22	33.5	2,060
September	1,129	84	21	37.6	2,240
Water year 1940-41	27,411	532	13	75.1	54,370

* Winter discharge measurement made on this day.
Note.- Stage-discharge relation affected by ice Nov. 10, 11, 14-17, 20-27, Dec. 1, 3-6, 8, 9, 11, 13, 14, 21-23, 26, 29, Jan. 1-6, 14, 17-20, 26-28, Feb. 1-9, Mar. 27, 29, 31, and Apr. 1, 2, 8-10.

Colorado River near Granby, Colo.

Location.- Water-stage recorder, lat. 40°07', long. 105°54', in sec. 22, T. 2 N., R. 76 W., 1½ miles upstream from Willow Creek and 4 miles northeast of Granby.

Drainage area.- 322 square miles.

Records available.- June 1908 to September 1911, May 1934 to September 1941.

Extremes.- Maximum discharge during year, 2,070 second-feet May 14 (gage height, 3.82 feet); minimum daily, 24 second-feet Dec. 27.
1908-11, 1934-41: Maximum discharge, 4,100 second-feet June 20, 1909 (gage height, 5.5 feet, datum then in use); minimum occurred during period of incomplete record in winter.

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 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	234	89	52	58	39	38	100	310	1,400	703	166	102
2	226	82	52	50	33	39	92	360	1,370	696	156	100
3	218	80	50	40	33	40	85	410	1,350	612	145	98
4	206	87	50	38	33	40	82	468	1,390	570	142	90
5	198	80	51	37	34	39	82	486	1,380	550	136	86
6	214	*89	52	40	34	40	84	445	1,290	528	145	82
7	195	87	54	43	34	42	80	365	1,180	498	152	86
8	184	87	57	47	35	43	80	320	1,340	504	166	115
9	195	89	58	49	36	42	90	385	1,280	504	173	124
10	198	89	52	50	36	38	110	504	1,150	492	176	127
11	195	62	50	50	*37	38	136	742	1,010	445	173	133
12	180	51	47	48	37	42	170	1,150	902	435	180	139
13	166	44	43	47	37	44	136	1,600	902	400	176	145
14	156	42	34	47	36	46	110	1,970	934	365	162	156
15	147	45	32	46	35	47	115	1,830	1,060	335	148	166
16	137	50	33	45	36	47	133	1,440	1,250	320	145	159
17	131	62	34	43	35	48	127	1,310	1,400	310	148	152
18	123	60	40	42	37	50	105	1,470	1,600	291	166	139
19	114	54	45	42	38	55	92	1,460	1,850	286	184	133
20	112	52	42	42	39	58	88	1,290	1,830	282	176	124
21	106	50	40	*43	40	65	98	1,170	1,710	282	170	115
22	104	45	45	44	40	70	112	1,390	1,660	268	166	110
23	99	47	50	45	40	70	121	1,370	1,660	247	162	112
24	96	54	47	46	42	68	121	1,460	1,550	227	156	115
25	94	58	43	42	40	72	127	1,620	1,400	223	148	127
26	94	55	44	42	42	80	159	1,740	1,300	231	148	124
27	92	52	24	42	42	84	180	1,730	1,180	223	139	118
28	94	51	45	40	38	82	*231	1,550	1,050	208	124	115
29	92	50	54	38	-	*82	268	1,410	902	201	118	112
30	89	50	58	38	-	84	300	1,310	790	190	110	112
31	89	-	62	39	-	86	-	1,330	-	180	105	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	4,578	234	89	148	9,080
November	1,893	89	42	63.1	3,750
December	1,440	62	24	46.5	2,860
Calendar year 1940	94,035	1,800	24	257	186,500
January	1,363	58	37	44.0	2,700
February	1,038	42	33	37.1	2,060
March	1,719	86	38	55.5	3,410
April	3,814	300	80	127	7,560
May	34,395	1,970	310	1,110	68,220
June	39,070	1,850	790	1,302	77,490
July	11,614	703	180	375	23,040
August	4,761	184	105	154	9,440
September	3,616	166	82	121	7,170
Water year 1940-41	109,301	1,970	24	299	216,800

* Winter discharge measurement made on this day.
Note.- Stage-discharge relation affected by ice Nov. 14 to Apr. 10.

Colorado River at Hot Sulphur Springs, Colo.

Location.- Water-stage recorder, lat. 40°05', long. 106°05', in sec. 1, T. 1 N., R. 78 W., 1 mile east of Hot Sulphur Springs and 3 miles upstream from Beaver Creek.
Drainage area.- 782 square miles.
Records available.- July 1904 to September 1909, September 1910 to September 1924, October 1925 to September 1928, and October 1933 to September 1941 in reports of U. S. Geological Survey. July 1904 to September 1909, September 1910 to September 1924, and October 1925 to September 1941 in reports of State engineer.
Average discharge.- 35 years (1904-9, 1910-24, 1925-41), 698 second-feet.
Extremes.- Maximum discharge during year, 3,790 second-feet May 14 (gage height, 3.83 feet); minimum daily, 70 second-feet Dec. 14, 15.
1904-9, 1910-24, 1925-41: Maximum discharge, 10,300 second-feet June 15, 1921 (gage height, 8.7 feet, site and datum then in use); minimum not determined, occurred during period of no record in winter.
Remarks.- Records excellent except those for period of ice effect, which are fair. Diversions above station for irrigation. Transmountain diversion through Pioneer bore of Moffat tunnel from Fraser River Basin to South Platte River Basin. Total flow diverted during water year 1940-41 was 36,290 acre-feet (see p. 39) for record by months). Transmountain diversion by Grand River ditch through la Poudre Pass to Cache la Poudre River Basin.

Rating table, water year 1940-41, except period of ice effect (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Apr. 24 to May 5)

0.4	100	1.2	450	2.8	2,080
.5	130	1.4	570	3.2	2,670
.6	165	1.6	720	4.0	4,100
.8	245	2.0	1,100		
1.0	340	2.4	1,560		

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	351	162	96	94	76	100	368	783	2,110	970	245	158
2	335	158	96	90	76	100	245	855	2,040	980	233	154
3	315	162	92	84	78	98	217	990	1,970	837	221	151
4	295	177	90	80	78	96	213	1,170	1,980	765	213	140
5	236	134	90	76	80	96	221	1,080	2,000	747	201	134
6	330	*158	90	76	80	100	237	1,020	1,900	704	272	130
7	305	173	92	78	82	102	197	828	1,800	664	233	127
8	286	169	*94	80	82	104	177	747	2,010	648	254	181
9	290	189	94	82	82	104	197	980	1,910	648	250	217
10	300	173	90	84	80	102	229	1,280	1,770	626	268	213
11	290	124	84	84	80	100	245	1,850	1,600	584	272	213
12	272	100	80	84	80	100	335	2,220	1,400	558	305	221
13	258	82	74	84	80	104	384	2,980	1,460	546	300	217
14	237	74	70	82	80	118	281	3,630	1,420	522	254	229
15	225	78	70	80	82	118	276	3,430	1,510	528	237	245
16	225	86	72	80	84	120	290	2,720	1,780	486	250	233
17	250	100	76	78	84	122	320	2,420	1,970	444	286	221
18	225	102	80	78	86	130	276	2,740	2,190	428	300	205
19	221	100	80	76	88	150	229	2,540	2,640	417	305	197
20	213	92	78	76	*89	155	229	2,250	2,670	406	286	185
21	209	86	80	76	90	165	245	2,010	2,480	400	272	181
22	201	86	86	76	92	165	286	2,220	2,320	368	263	169
23	197	88	88	78	92	180	340	2,210	2,320	325	254	173
24	193	94	84	*79	92	190	378	2,350	2,190	305	241	181
25	185	100	82	80	92	200	384	2,460	2,050	286	225	189
26	185	96	84	80	94	195	428	2,690	1,840	325	225	193
27	185	94	80	80	96	205	486	2,640	1,660	320	221	185
28	181	92	82	78	98	250	591	2,320	1,460	310	197	177
29	177	92	88	78	-	*312	680	2,190	1,280	286	185	173
30	177	96	90	76	-	300	720	2,040	1,080	276	181	173
31	181	-	96	76	-	290	-	2,050	-	263	169	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	7,580	351	177	245	15,030
November	3,517	189	74	117	6,980
December	2,628	96	70	84.8	5,210
Calendar year 1940	150,822	2,640	69	412	299,200
January	2,483	94	76	80.1	4,920
February	2,373	98	76	84.8	4,710
March	4,671	312	96	151	9,260
April	9,704	720	177	323	19,250
May	61,693	3,630	747	1,990	122,400
June	56,810	2,670	1,080	1,894	112,700
July	15,972	980	263	515	31,680
August	7,618	305	169	246	15,110
September	5,565	245	127	186	11,040
Water year 1940-41	180,614	3,630	70	495	358,300

* Winter discharge measurement made this day.
Note.- Stage-discharge relation affected by ice Nov. 12 to Mar. 29.

Colorado River near Dotsero, Colo.

Location.- Water-stage recorder, lat. 39°39', long. 107°05', in sec. 6, T. 5 S., R. 86 W., 1½ miles west of Dotsero and 1½ miles downstream from Eagle River.

Drainage area.- 4,390 square miles.

Records available.- December 1940 to September 1941.

Extremes.- Maximum discharge during period, 13,300 second-feet May 15 (gage height, 9.66 feet), from rating curve extended above 8,300 second-fest; minimum daily, 380 second-feet Dec. 15.

Remarks.- Records excellent except those for periods of ice sffect, which are fair.

Cooperation.- Gage-height record furnished by The Public Service Co. of Colorado.

Rating table, water year 1940-41, except periods of ice effect (gage height, in feet, and discharge, in second-feet)

1.4	530	2.8	1,440	7.0	7,380
1.6	600	3.2	1,800	8.0	9,400
1.8	700	4.1	2,790	9.9	13,860
2.0	820	5.0	4,000		
2.2	960	6.0	5,550		

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1			736	540	500	610	1,140	2,530	8,220	4,260	1,300	876
2			724	500	520	635	1,270	2,710	8,020	3,930	1,200	841
3			675	470	480	635	1,190	3,380	7,860	3,790	1,130	808
4			665	450	480	615	1,100	4,540	7,940	3,550	1,070	784
5			645	470	490	615	1,180	4,690	8,100	3,360	1,040	748
6			655	430	490	605	1,220	4,120	7,740	3,180	1,010	718
7			650	460	480	588	1,140	3,690	7,480	3,010	1,100	724
8			640	520	500	592	976	3,310	7,500	3,000	1,260	932
9			655	540	480	620	897	3,760	7,300	2,870	1,180	1,020
10			665	470	520	542	918	4,990	6,460	2,740	1,190	1,090
11			620	450	560	584	1,020	6,490	6,560	2,590	1,180	1,160
12			640	480	620	536	1,060	8,080	5,640	2,450	1,340	1,190
13			695	490	592	588	1,250	10,300	5,050	2,500	1,360	1,150
14			554	500	592	605	1,500	12,500	5,040	2,440	1,380	1,170
15			380	500	592	568	1,290	12,800	5,230	2,260	1,260	1,190
16			390	480	596	572	1,210	11,400	5,690	2,180	1,230	1,190
17			420	460	588	588	1,180	10,100	6,440	2,160	1,300	1,130
18			500	480	600	610	1,230	10,500	7,540	2,070	1,460	1,080
19			600	500	615	695	1,160	11,200	8,800	1,970	1,420	1,040
20			580	500	620	742	1,020	9,800	9,360	2,060	1,390	1,010
21			560	480	625	730	925	8,360	9,150	2,100	1,330	960
22			554	560	635	802	932	8,360	8,720	1,980	1,300	939
23			548	580	625	1,010	968	8,720	8,340	1,830	1,280	960
24			540	540	630	1,170	1,100	9,230	8,300	1,730	1,220	984
25			620	500	620	1,100	1,260	9,710	8,060	1,670	1,170	1,100
26			610	560	592	984	1,380	9,770	7,920	1,600	1,100	1,100
27			600	540	554	897	1,570	10,200	6,790	1,600	1,040	1,070
28			600	540	568	883	1,820	9,600	6,060	1,630	1,020	1,020
29			600	520	-	1,020	2,060	8,720	5,420	1,550	960	992
30			610	540	-	1,220	2,340	8,220	4,770	1,460	925	984
31			620	560	-	1,170	-	8,060	-	1,380	911	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	-	-	-	-	-
November	-	-	-	-	-
December	18,551	736	380	598	36,800
Calendar year	-	-	-	-	-
January	15,610	580	430	504	30,960
February	15,764	635	480	563	31,270
March	23,131	1,220	536	746	45,880
April	37,306	2,340	897	1,244	74,000
May	239,860	12,800	2,530	7,737	475,800
June	215,500	9,360	4,770	7,183	427,400
July	74,920	4,280	1,380	2,417	148,600
August	37,056	1,460	911	1,195	73,500
September	29,960	1,190	718	999	59,420
The period	-	-	-	-	1,404,000

Note.- Stage-discharge relation affected by ice Dec. 15-21, Dec. 24 to Feb. 12.

Colorado River at Glenwood Springs, Colo.

Location.- Water-stage recorder, lat. 39°33', long. 107°19', in sec. 9, T. 6 S., R. 89 W., at Glenwood Springs, half a mile upstream from Roaring Fork. Datum of gage is 5,720.71 feet above mean sea level, adjustment of 1912.

Drainage area.- 4,560 square miles.

Records available.- January 1900 to September 1941. May to July 1899, at site just above Roaring Fork.

Average discharge.- 42 years, 2,969 second-feet.

Extremes.- Maximum discharge during year, 14,900 second-feet May 15 (gage height, 9.00 feet); minimum daily, 392 second-feet Dec. 15.
1900-41: Maximum discharge, 30,100 second-feet June 14, 15, 1918 (gage height, 12.55 feet); minimum daily, 286 second-feet Jan. 22, 1935.

Remarks.- Records excellent except those for period June 18 to Sept. 30, which are good. Diversions above station for irrigation. During low-water period, flow is regulated by Shoshone power plant, 6 miles above station.

Rating table, water year 1940-41 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used June 18 to Sept. 30)

2.6	380	4.2	1,770	7.0	8,200
3.0	620	4.8	2,720	8.0	11,440
3.4	910	5.4	3,860	9.0	14,900
3.8	1,300	6.0	5,220		

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,390	795	825	663	588	620	1,380	2,900	8,970	4,820	1,530	1,050
2	1,470	1,010	828	677	614	692	1,430	3,120	8,900	4,210	1,380	891
3	1,450	848	882	492	555	734	1,500	3,800	9,780	4,060	1,200	871
4	1,450	750	823	490	556	748	1,390	4,960	8,780	3,880	1,150	839
5	1,430	945	767	421	581	713	1,230	5,430	9,000	3,660	1,170	855
6	1,380	865	771	468	588	741	1,440	4,860	8,620	3,420	1,180	755
7	1,210	871	810	547	568	634	1,450	4,320	8,390	3,250	1,210	774
8	1,330	865	731	584	633	661	1,330	3,980	8,230	3,230	1,410	991
9	1,320	1,020	676	669	581	695	1,050	4,350	8,100	3,120	1,410	1,080
10	1,350	1,040	750	551	652	566	982	5,680	7,260	3,010	1,500	1,190
11	1,330	915	774	508	672	482	1,080	7,380	7,290	2,830	1,360	1,330
12	1,390	905	752	556	770	699	1,210	9,160	6,450	2,690	1,500	1,360
13	1,360	560	724	571	748	659	1,290	11,800	5,650	2,700	1,520	1,400
14	1,100	568	667	594	706	658	1,530	14,100	5,790	2,670	1,580	1,450
15	1,140	589	392	594	727	594	1,590	14,500	6,000	2,620	1,520	1,360
16	1,160	798	417	594	713	594	1,520	13,200	6,510	2,430	1,480	1,410
17	1,100	652	451	538	692	620	1,390	11,500	7,260	2,400	1,410	1,360
18	996	764	603	543	620	713	1,370	11,900	8,390	2,280	1,430	1,270
19	1,150	1,000	792	594	741	650	1,370	12,600	9,610	2,140	1,590	1,160
20	1,060	747	729	581	755	894	1,280	10,900	10,400	2,300	1,530	1,030
21	826	981	621	555	762	748	1,050	9,420	9,800	2,380	1,500	1,090
22	1,020	923	542	706	770	838	982	9,290	9,290	2,270	1,460	1,040
23	958	854	517	713	770	1,020	1,130	9,670	8,840	2,110	1,460	1,060
24	952	844	626	655	770	1,260	1,150	10,200	8,710	1,940	1,450	1,080
25	912	813	749	555	770	1,270	1,240	10,600	8,550	1,870	1,440	1,290
26	1,050	798	712	659	672	1,170	1,370	10,800	8,420	1,800	1,280	1,290
27	915	761	698	607	652	1,040	1,650	11,100	7,320	1,800	1,230	1,270
28	828	812	685	646	633	946	2,060	10,600	6,570	1,810	1,200	1,180
29	975	809	685	620	-	1,070	2,380	9,510	5,820	1,760	1,120	1,140
30	839	810	741	633	-	1,320	2,700	8,970	5,150	1,640	1,050	1,120
31	917	-	765	755	-	1,400	-	8,900	-	1,560	937	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	35,811	1,470	926	1,155	71,030
November	24,912	1,040	560	830	49,410
December	21,405	989	392	690	42,460
Calendar year 1940	674,024	10,600	392	1,842	1,337,000
January	18,369	755	421	593	36,430
February	18,858	770	555	674	37,400
March	25,456	1,400	482	821	50,490
April	42,664	2,760	932	1,422	84,620
May	269,500	14,500	2,900	8,694	534,500
June	236,750	10,400	5,150	7,892	469,600
July	82,360	4,620	1,560	2,657	163,400
August	42,187	1,590	937	1,361	83,660
September	33,986	1,450	755	1,133	67,410
Water year 1940-41	852,268	14,500	392	2,335	1,690,000

Colorado River near Cameo, Colo.

Location.- Water-stage recorder, lat. 39°13', long. 108°15', in sec. 6, T. 10 S., R. 97 W., 3.4 miles upstream from Plateau Creek and 6.7 miles northeast of Cameo.

Drainage area.- 8,055 square miles.

Records available.- October 1933 to September 1941.

Extremes.- Maximum discharge during year, 27,500 second-feet May 14 (gage height, 9.96 feet); minimum daily, 790 second-feet Jan. 5.
1933-41: Maximum discharge, 36,000 second-feet June 16, 1935 (gage height, 10.91 feet); minimum daily, 700 second-feet Dec. 29, 1939.

Remarks.- Records excellent except those for periods of ice effect, which are good. Many diversions above station for irrigation.

Rating tables, water year 1940-41, except period of ice effect (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Mar. 24 to Apr. 30)

Oct. 1 to Jan. 30

1.4	1,030	3.7	4,120
2.2	1,890	4.5	5,720
2.6	2,400	5.0	6,920

Note.- Same as following table above 5.0 feet.

Jan. 31 to Sept. 30

1.2	880	6.0	9,620
1.8	1,490	7.0	13,000
2.6	2,570	8.0	17,500
4.2	5,180	10.0	27,700
5.0	6,920		

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2,670	1,510	1,370	1,310	1,160	1,050	1,940	4,730	14,600	8,890	2,630	1,660
2	2,500	1,420	1,370	1,170	1,010	1,250	1,920	5,160	14,400	7,930	2,520	1,660
3	2,420	1,630	1,350	1,040	1,040	1,400	1,970	6,040	14,300	7,540	2,380	1,590
4	2,360	1,640	1,360	920	1,090	1,240	2,000	8,610	14,500	7,310	2,170	1,500
5	2,790	1,500	1,310	790	1,110	1,190	1,890	10,700	14,900	7,130	2,060	1,470
6	2,760	1,530	1,270	820	1,010	1,130	1,940	10,000	14,900	6,780	2,040	1,440
7	2,400	1,470	1,310	900	1,060	1,130	1,960	9,280	14,400	6,380	2,100	1,320
8	2,180	1,480	1,310	960	1,030	1,060	1,890	8,950	14,600	6,330	2,140	1,360
9	2,300	1,450	1,250	1,060	1,070	1,080	1,760	9,400	13,700	6,220	2,600	1,660
10	2,300	1,630	1,230	1,120	1,090	1,120	1,620	11,300	12,000	6,000	2,960	1,850
11	2,220	1,630	1,240	1,050	1,160	990	1,680	14,400	10,900	5,740	2,560	1,960
12	2,140	1,500	1,310	1,100	1,480	925	1,820	17,400	10,500	5,420	2,380	2,080
13	2,140	1,370	1,270	1,100	1,530	1,140	1,990	21,600	9,280	5,260	2,500	2,170
14	2,080	1,080	1,250	1,080	1,280	1,220	2,130	25,800	8,950	5,260	2,440	2,510
15	1,880	1,100	950	1,080	1,190	1,200	2,320	26,000	9,120	5,000	2,440	2,750
16	1,870	1,210	800	1,060	1,310	1,140	2,320	23,400	9,680	4,690	2,520	2,460
17	1,850	1,370	920	1,000	1,290	1,100	2,250	20,500	10,900	4,480	2,580	2,360
18	1,750	1,350	1,100	990	1,210	1,120	2,180	20,700	12,900	4,400	2,640	2,290
19	1,680	1,430	1,200	990	1,370	1,220	2,170	21,600	15,600	4,260	2,640	2,270
20	1,770	1,560	1,200	1,060	1,290	1,250	2,110	19,800	17,000	4,420	2,640	2,220
21	1,700	1,420	1,120	1,060	1,250	1,390	1,970	15,900	17,400	4,590	2,580	2,140
22	1,530	1,560	1,080	1,100	1,280	1,370	1,740	15,000	17,000	4,350	2,510	2,600
23	1,630	1,480	1,100	1,140	1,220	1,510	1,850	15,700	16,600	4,060	2,440	2,310
24	1,570	1,440	1,180	1,100	1,270	2,010	2,040	16,500	16,700	3,810	2,350	2,280
25	1,560	1,410	1,200	1,070	1,420	1,960	2,270	17,800	16,300	3,570	2,250	2,220
26	1,510	1,370	1,200	1,080	1,230	1,850	2,520	18,400	15,800	3,420	2,150	2,360
27	2,060	1,340	1,180	1,100	1,100	1,710	2,880	19,200	14,600	3,310	1,960	2,320
28	1,660	1,290	1,180	1,100	1,060	1,590	3,470	18,600	12,500	3,230	1,890	2,270
29	1,520	1,350	1,180	1,100	-	1,530	4,160	16,400	11,100	3,140	1,830	2,210
30	1,880	1,370	1,200	1,120	-	1,680	4,370	14,800	9,840	2,980	1,810	2,180
31	1,530	-	1,250	1,160	-	1,870	-	14,400	-	2,770	1,730	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	61,910	2,790	1,510	1,997	122,800
November	42,890	1,640	1,080	1,430	85,070
December	37,240	1,370	800	1,201	73,860
Calendar year 1940	1,030,670	15,700	800	2,816	2,044,000
January	32,730	1,310	790	1,056	64,920
February	33,580	1,530	1,010	1,199	66,600
March	41,425	2,010	925	1,336	82,170
April	67,130	4,370	1,620	2,238	133,200
May	478,070	26,000	4,730	15,420	948,200
June	404,970	17,400	8,950	13,500	803,200
July	158,640	8,890	2,770	5,117	314,700
August	72,420	2,960	1,730	2,336	143,600
September	61,470	2,750	1,320	2,049	121,900
Water year 1940-41	1,492,475	26,000	790	4,089	2,960,000

Note.- Stage-discharge relation affected by ice Dec. 14-30, Jan. 3-30.

Colorado River near Cisco, Utah

Location.- Water-stage recorder, lat. 38°49', long. 109°18', in NW¼ sec. 17, T. 23 S., R. 24 E., 1 mile downstream from Dolores River and 11 miles south of Cisco.

Drainage area.- 24,100 square miles.

Records available.- November 1914 to September 1917, October 1922 to September 1941. October 1913 to November 1914 at site near Moab, 30 miles downstream, published as Colorado River near Moab, Utah. Records equivalent.

Average discharge.- 23 years, 8,268 second-feet.

Extremes.- Maximum discharge during year, 64,400 second-feet May 15 (gage height, 18.84 feet); minimum, 1,480 second-feet Sept. 8 (gage height, 1.54 feet).
1914-17, 1922-41: Maximum discharge, 76,800 second-feet June 19, 1917 (gage height, 19.7 feet); minimum recorded, 558 second-feet July 21, 1934 (gage height, 0.44 foot).

Remarks.- Records excellent except those for periods of no gage-height record, which are fair. Diversions above station for irrigation and power.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	10,900	3,120	2,940	2,760	2,590	2,500	6,100	22,500	27,100	16,900	a3,800	a2,000
2	8,780	3,030	2,850	2,760	2,590	2,500	7,180	22,900	26,200	15,800	a3,800	a2,000
3	8,220	3,030	2,850	2,420	2,390	2,940	6,690	22,900	26,200	14,300	a3,800	1,990
4	7,690	3,580	2,760	2,190	2,220	3,120	a6,400	27,900	26,200	13,600	2,940	1,930
5	7,430	3,490	2,760	1,860	2,090	2,940	a6,000	40,500	26,600	13,300	2,760	1,920
6	9,070	3,210	2,760	1,700	2,110	2,760	a5,800	40,500	27,100	12,900	2,500	1,840
7	6,450	3,030	2,680	1,840	2,190	2,680	5,650	37,000	27,500	11,900	2,500	1,740
8	5,320	2,940	2,680	2,010	2,280	2,590	5,540	34,400	31,800	11,600	3,600	1,680
9	5,100	3,030	2,680	2,030	2,320	2,500	5,540	34,800	32,200	11,200	4,370	1,630
10	5,100	3,030	2,590	2,060	2,400	2,500	6,220	38,300	30,500	11,200	8,690	1,800
11	4,580	3,210	2,590	2,170	2,350	2,500	6,810	42,800	27,100	10,900	6,690	2,120
12	4,370	3,210	2,760	2,270	2,850	2,370	6,450	47,700	24,100	10,900	6,100	2,220
13	4,170	2,940	2,940	2,340	3,400	2,350	6,340	52,800	21,300	10,300	5,320	2,420
14	a3,970	2,760	2,680	2,400	3,490	2,680	6,220	59,700	19,700	9,960	5,000	3,300
15	a3,780	2,370	2,340	2,390	2,940	2,940	a6,280	63,400	19,300	9,660	4,580	3,780
16	3,580	2,270	2,120	2,420	2,500	2,850	6,340	57,400	20,100	9,070	4,780	4,170
17	3,490	2,590	1,700	2,350	2,680	2,940	6,340	48,200	21,300	8,500	5,880	3,870
18	3,400	3,030	1,640	2,250	2,940	2,760	5,990	45,000	22,900	7,950	5,880	3,680
19	3,300	2,850	1,900	2,120	2,940	2,760	a5,800	46,400	25,400	7,430	5,650	3,870
20	3,210	3,300	2,420	2,010	2,940	3,030	a5,600	45,000	a28,400	7,690	4,890	4,170
21	3,300	3,400	2,500	2,270	3,210	3,300	a5,400	33,900	31,300	7,950	4,580	3,970
22	3,210	3,210	2,280	2,300	3,120	3,780	a5,200	28,800	31,300	7,950	4,270	7,850
23	2,940	3,300	2,150	2,420	3,120	4,070	5,000	27,900	30,500	7,180	a3,800	12,600
24	3,030	3,120	2,250	2,500	3,030	4,890	5,100	31,300	30,500	6,690	a3,300	8,220
25	2,850	3,030	2,400	2,420	3,300	5,540	5,990	33,500	30,900	6,450	a3,000	a7,000
26	2,940	3,030	2,680	2,340	3,400	5,100	7,950	35,700	38,800	5,990	2,760	a6,000
27	4,580	2,940	2,680	2,320	3,030	4,680	11,200	36,100	27,900	5,650	2,500	a5,400
28	4,170	2,850	2,500	2,250	2,680	4,370	15,800	37,400	24,600	5,320	2,220	a5,400
29	3,400	2,760	2,590	2,250	-	4,270	19,700	34,400	21,700	5,100	a2,200	5,210
30	3,120	2,850	2,590	2,370	-	4,680	19,700	30,500	19,300	4,580	a2,100	5,430
31	3,210	-	2,680	2,420	-	5,210	-	27,900	-	4,170	a2,100	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	148,660	10,900	2,850	4,795	294,900
November	90,510	3,580	2,270	3,017	179,500
December	77,940	2,940	1,640	2,514	154,600
Calendar year 1940	1,849,393	25,000	704	5,053	3,668,000
January	70,210	2,760	1,700	2,265	139,300
February	77,100	3,490	2,090	2,754	152,900
March	104,100	5,540	2,350	3,358	206,500
April	224,300	19,700	5,000	7,477	444,900
May	1,167,500	63,400	22,500	38,310	2,355,000
June	797,800	38,800	19,300	26,590	1,582,000
July	292,090	16,900	4,170	9,422	579,400
August	126,360	8,690	2,100	4,076	250,600
September	119,260	12,600	1,630	3,975	236,500
Water year 1940-41	3,315,830	63,400	1,630	9,084	6,576,000

a No gage-height record; discharge interpolated or computed on basis of records for station on Green River at Green River, Utah.

Colorado River at Lees Ferry, Ariz.

Location.- Water-stage recorder, lat. 36°51'45", long. 111°36'15", in NE¼SE¼ sec. 13, T. 40 N., R. 7 E., at head of Marble Gorge, at Lees Ferry, just upstream from Paria River, 28 miles downstream from Utah-Arizona State line, 79 miles downstream from San Juan River, and 355 miles upstream from Boulder Dam. Datum of gage is 3,106.16 feet, datum of 1929, or 3,106.35 feet, adjustment of 1912, above mean sea level.

Drainage area.- 107,900 square miles.

Records available.- June 1921 to September 1941.

Average discharge.- 20 years, 17,370 second-feet.

Extremes.- Maximum discharge during year, 120,400 second-feet May 17 (gage height, 20.51 feet); minimum, 3,630 second-feet Dec. 20 (gage height, 6.32 feet).

1921-41: Maximum discharge, 220,000 second-feet June 18, 1921 (gage height, 26.5 feet, from floodmarks), from rating curve extended above 120,000 second-feet on basis of rating curve for station near Grand Canyon; minimum, 750 second-feet Dec. 27, 1924 (gage height, 4.2 feet).

Maximum discharge known, about 300,000 second-feet July 7, 1884 (gage height, 31.5 feet, present site and datum, from floodmark at mouth of Paria River), from rating curve extended above 120,000 second-feet, verified at 220,000 second-feet by comparison with rating curve for station near Grand Canyon.

Remarks.- Records excellent. Diversions above station for irrigation. During the year 96 discharge measurements were made.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	20,600	8,060	6,020	6,930	6,020	11,900	13,600	40,300	74,100	52,600	13,300	6,800
2	23,400	6,930	5,810	7,880	6,020	11,600	13,800	40,300	70,500	45,900	12,400	6,310
3	16,400	6,370	5,670	8,030	5,960	11,300	14,500	44,200	68,400	43,600	11,300	6,310
4	15,500	6,400	5,610	7,140	5,870	10,300	16,800	49,500	66,800	40,200	10,500	6,970
5	14,000	6,340	5,640	6,400	5,930	11,000	16,800	51,900	66,900	37,500	9,830	7,240
6	19,100	6,060	5,640	6,090	5,780	11,400	16,100	65,800	67,300	35,700	9,500	6,760
7	19,800	5,930	5,670	5,810	5,610	10,800	15,300	78,200	67,400	34,400	8,790	6,370
8	14,600	6,150	5,720	5,500	5,360	10,700	15,800	71,700	69,300	34,300	9,020	6,180
9	16,900	6,470	5,930	5,140	5,330	10,600	17,200	73,600	75,200	32,300	9,100	5,780
10	14,200	6,470	5,900	4,820	5,750	9,300	17,900	77,300	82,300	30,200	9,870	5,440
11	12,500	6,180	5,810	4,450	5,640	8,480	17,900	80,100	80,600	29,300	15,800	5,330
12	11,600	6,150	6,500	4,400	5,720	8,400	18,200	83,700	74,000	28,400	24,100	5,140
13	11,000	6,180	7,200	4,420	5,960	8,100	20,900	87,800	66,300	27,600	19,500	5,110
14	10,200	6,280	7,100	4,570	6,210	7,480	20,900	94,100	60,400	27,100	17,200	6,210
15	9,500	6,210	7,280	5,220	6,400	7,480	20,100	105,000	55,900	25,900	15,700	8,330
16	8,980	6,340	6,760	5,520	6,660	9,030	18,700	118,600	54,500	24,600	15,500	9,180
17	8,710	6,090	6,280	6,060	7,200	10,000	17,700	117,500	54,300	23,300	15,400	11,400
18	8,250	5,750	5,440	5,670	7,590	9,540	16,800	110,200	54,200	22,200	15,900	10,700
19	7,880	5,750	4,450	5,470	7,520	9,910	16,800	102,200	56,600	22,200	15,900	9,910
20	7,420	8,290	3,740	5,250	7,990	10,100	16,700	97,100	60,500	20,900	17,400	11,100
21	7,170	10,700	4,470	5,060	8,900	10,200	16,700	95,900	68,400	21,400	16,700	10,100
22	6,970	9,060	4,160	4,800	10,100	10,400	16,300	89,300	74,400	21,500	15,000	10,900
23	6,730	7,420	4,280	4,600	11,600	10,300	15,500	80,000	74,800	21,500	13,200	12,200
24	6,600	7,310	4,850	4,800	12,000	11,500	16,100	76,900	73,200	19,800	13,100	17,500
25	6,530	6,970	5,250	5,500	11,600	12,000	17,600	81,900	70,900	20,600	12,600	26,800
26	6,150	6,700	6,120	5,870	11,400	12,700	19,400	79,500	72,000	18,500	11,500	20,900
27	6,120	6,660	7,990	6,090	11,600	14,000	17,800	82,400	71,600	17,900	10,500	16,900
28	6,180	6,600	6,760	6,370	11,500	15,400	22,200	83,900	67,000	17,100	9,300	16,200
29	7,200	6,340	6,150	5,930		15,500	29,000	86,000	63,000	15,200	8,670	14,800
30	7,170	6,120	6,150	5,810	-	13,900	37,100	84,200	57,700	14,400	8,140	13,700
31	7,880	-	6,020	5,990	-	13,700	-	78,700	-	14,000	7,450	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	345,240	23,400	6,120	11,140	684,800
November	202,280	10,700	5,750	6,743	401,200
December	180,370	7,990	3,740	5,818	357,800
Calendar year 1940	3,825,880	45,700	1,700	10,480	7,589,000
January	175,590	8,030	4,400	5,664	348,300
February	213,220	12,000	5,330	7,615	422,900
March	337,020	15,500	7,480	10,870	668,500
April	550,200	37,100	13,600	18,340	1,091,000
May	2,507,800	118,600	40,300	80,900	4,974,000
June	2,018,800	82,300	54,200	67,290	4,004,000
July	840,100	52,600	14,000	27,100	1,666,000
August	402,170	24,100	7,450	12,970	797,700
September	306,570	26,800	5,110	10,220	608,100
Water year 1940-41	8,079,360	118,600	3,740	22,140	16,020,000

Colorado River at Bright Angel Creek, near Grand Canyon, Ariz.

Location.- Water-stage recorder, lat. 36°05'55", long. 112°05'30", at Kaibab Bridge, a quarter of a mile upstream from Bright Angel Creek, 11 miles by trail northeast of Grand Canyon Village, Coconino County, and 267 miles upstream from Boulder Dam. Datum of gage is 2,418.7 feet above mean sea level, preliminary datum of 1929.

Drainage area.- 137,800 square miles.

Records available.- October 1922 to September 1941.

Average discharge.- 19 years, 17,720 second-feet.

Extremes.- Maximum discharge during year, 120,400 second-feet May 17 (gage height, 28.86 feet); minimum, 4,240 second-feet Dec. 21 (gage height, 2.61 feet).

1922-41: Maximum discharge, 127,000 second-feet July 2, 1927 (gage height, 29.25 feet); minimum, 700 second-feet Dec. 28, 1924 (gage height, -0.70 foot).

Maximum discharge known, 300,000 second-feet about July 8, 1884 (computed on basis of flood studies at Lees Ferry). Crest discharge of flood of June 19, 1921, 220,000 second-feet (gage height 37.5 feet, from floodmarks), from rating curve extended above 120,000 second-feet by logarithmic plotting.

Remarks.- Records excellent. During the year 47 discharge measurements were made. Diversions above station for irrigation.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	22,300	8,750	6,590	7,940	6,490	13,600	15,800	39,900	78,700	56,200	14,200	7,740
2	26,200	8,310	6,410	10,600	6,590	13,400	16,700	40,100	75,100	50,400	13,400	7,140
3	19,200	7,360	6,200	11,300	6,580	13,300	16,300	41,300	72,200	45,700	12,400	6,730
4	17,200	6,970	6,020	9,700	6,440	12,600	18,100	44,600	70,700	42,600	11,500	6,790
5	16,900	6,860	6,020	8,170	6,410	12,600	20,000	50,900	69,000	40,200	10,700	7,520
6	16,800	6,750	6,090	7,340	6,410	14,000	19,300	56,900	67,400	37,800	10,100	7,650
7	23,100	6,490	6,080	6,690	6,280	12,800	18,500	76,800	66,800	36,400	10,000	7,180
8	17,700	6,440	6,130	6,330	6,020	12,100	18,000	73,600	67,700	36,100	9,380	6,790
9	17,300	6,760	6,270	5,930	5,800	11,700	18,600	73,300	72,300	34,500	9,780	6,610
10	17,000	6,830	6,440	5,610	6,370	11,100	19,600	76,400	81,700	32,200	9,610	6,120
11	14,400	6,770	6,420	5,340	7,040	10,100	19,700	79,200	83,500	30,100	11,400	5,760
12	13,000	6,550	6,410	5,540	6,760	9,540	19,800	82,700	77,700	29,400	23,500	5,540
13	12,000	6,410	7,030	13,500	6,730	9,050	21,700	86,800	70,200	28,400	23,500	5,350
14	11,400	6,450	7,540	7,590	6,870	8,720	22,900	98,300	63,000	27,900	18,900	7,150
15	10,600	6,520	7,770	6,630	7,920	8,410	23,400	101,600	58,600	26,800	17,300	8,460
16	9,850	6,610	8,250	6,730	7,890	22,100	22,200	112,500	56,700	25,700	17,800	10,100
17	9,300	6,660	7,580	5,790	8,090	19,100	21,400	119,200	56,300	24,100	19,100	11,000
18	8,920	6,360	6,910	6,910	9,060	15,100	20,900	114,500	56,000	23,000	18,400	12,400
19	8,520	6,140	5,910	6,490	11,300	14,000	20,200	103,700	57,200	22,400	17,100	12,700
20	8,070	6,220	4,830	6,220	10,800	13,500	20,000	99,100	59,800	21,600	17,500	11,600
21	7,680	9,810	4,300	5,880	11,300	13,100	19,400	99,200	64,700	20,700	18,100	12,400
22	7,440	10,500	5,940	5,540	11,600	13,100	19,100	94,800	72,400	21,900	16,900	10,700
23	7,300	8,770	5,320	5,320	14,800	13,200	18,300	83,500	75,100	21,300	14,900	12,200
24	7,110	7,700	5,320	5,310	16,900	13,100	17,100	76,600	74,700	22,300	13,400	13,600
25	6,890	7,860	7,520	5,520	16,100	15,000	18,500	80,100	74,000	20,400	13,700	23,300
26	6,800	7,650	6,720	6,290	14,900	14,900	20,500	83,100	73,700	20,300	12,600	25,700
27	6,870	7,350	9,140	6,380	14,300	16,000	20,600	82,700	74,900	19,100	11,500	19,300
28	6,680	7,200	8,740	6,980	13,700	17,100	21,800	84,900	70,100	18,600	10,500	16,800
29	7,070	7,070	7,560	7,010	-	18,000	29,300	86,700	66,100	17,200	9,450	16,500
30	7,920	6,770	7,110	6,650	-	16,500	33,000	87,500	60,600	15,600	8,890	21,200
31	8,190	-	7,140	6,410	-	15,600	-	84,200	-	14,800	8,430	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	381,710	26,200	6,680	12,310	757,100
November	216,690	10,500	6,140	7,230	430,200
December	205,710	9,140	4,300	6,636	408,000
Calendar year 1940	4,051,220	45,500	2,320	11,070	8,035,000
January	218,640	13,500	5,310	7,053	433,700
February	259,450	16,900	5,800	9,266	514,600
March	422,420	22,100	8,410	13,630	837,900
April	609,700	33,000	15,700	20,320	1,209,000
May	2,508,700	119,200	39,900	80,930	4,976,000
June	2,066,900	83,500	56,000	68,900	4,100,000
July	883,700	56,200	14,800	28,510	1,753,000
August	433,940	23,500	8,430	14,000	860,700
September	332,030	25,700	5,330	11,070	658,600
Water year 1940-41	8,539,790	119,200	4,300	23,400	16,940,000

Lake Mead at Boulder Dam, Ariz.-Nev.

Location.- Water-stage indicator, lat. 36°00'59", long. 114°44'10", in SW¼ sec. 3, T. 30 N., R. 23 W., Gila and Salt River meridian, on State line, in center of Boulder dam on Colorado River. Datum of gage is at mean sea level, adjustment of 1912, or 0.21 foot above mean sea level, datum of 1929. Elevations given herein are referred to adjustment of 1912.

Drainage area.- 167,800 square miles.

Records available.- February 1935 to September 1941.

Extremes.- Maximum contents during year, 27,790,000 acre-feet July 29, 30 (elevation, 1,220.45 feet); minimum, 20,150,000 acre-feet Feb. 15, 16, 18, 19 (elevation, 1,166.75 feet).

1935-41: Maximum contents, that of July 29, 30, 1941; minimum has increased each year since storage began in 1935.

Remarks.- Reservoir is formed by concrete arch-gravity type dam; storage began Feb. 1, 1935; dam completed Mar. 1, 1936. Total capacity, 32,359,000 acre-feet, consisting of the following: dead storage, 3,207,000 acre-feet below elevation 895.0 feet (gage sills in outlet towers); usable contents, 27,935,000 acre-feet between elevations 895.0 feet and 1,221.4 feet (top of automatic spillway gates in raised position); uncontrolled storage, 1,217,000 acre-feet between elevations 1,221.4 feet and 1,229.0 feet. Reservoir is used to store water for irrigation, municipal water supply, and power development, and for flood control. Figures given herein represent usable contents. Records computed on basis of Pacific standard time.

Cooperation.- Records collected and prepared in cooperation with Bureau of Reclamation.

Usable contents, at 12 p.m., in thousands of acre feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	21,130	21,050	20,670	20,320	20,190	20,280	20,630	21,400	24,970	27,090	27,780	27,130
2	21,130	21,030	20,650	20,310	20,200	20,300	20,640	21,440	25,060	27,150	27,770	27,080
3	21,160	20,030	20,640	20,310	20,190	20,320	20,660	21,510	25,140	27,180	27,760	27,050
4	21,170	21,010	20,630	20,310	20,180	20,320	20,670	21,590	25,210	27,240	27,760	27,000
5	21,180	20,990	20,610	20,320	20,180	20,340	20,690	21,660	26,290	27,320	27,740	26,940
6	21,190	20,980	20,600	20,310	20,160	20,340	20,710	21,760	25,340	27,360	27,720	26,900
7	21,200	20,970	20,590	20,310	20,180	20,360	20,730	21,870	25,400	27,390	27,700	26,870
8	21,210	20,950	20,580	20,300	20,160	20,370	20,760	21,990	25,460	27,430	27,680	26,620
9	21,220	20,930	20,560	20,300	20,180	20,380	20,760	22,090	26,520	27,460	27,650	26,780
10	21,230	20,930	20,550	20,260	20,170	20,380	20,780	22,260	25,600	27,500	27,640	26,730
11	21,230	20,910	20,530	20,280	20,160	20,380	20,820	22,310	25,690	27,530	27,620	26,690
12	21,240	20,890	20,520	20,280	20,160	20,390	20,840	22,430	25,750	27,550	27,590	26,650
13	21,240	20,670	20,500	20,280	20,160	20,390	20,880	22,540	25,860	27,570	27,590	26,610
14	21,240	20,860	20,480	20,270	20,160	20,400	20,900	22,670	25,920	27,600	27,590	26,570
15	21,220	20,860	20,470	20,280	20,150	20,410	20,930	22,830	25,970	27,620	27,560	26,530
16	21,220	20,830	20,460	20,270	20,150	20,410	20,960	22,990	26,020	27,640	27,570	26,490
17	21,210	20,820	20,450	20,270	20,160	20,430	20,990	23,170	26,060	27,660	27,560	26,460
18	21,200	20,810	20,440	20,260	20,150	20,450	21,010	23,350	26,090	27,680	27,540	26,420
19	21,180	20,800	20,430	20,260	20,150	20,460	21,030	23,510	26,140	27,690	27,530	26,390
20	21,180	20,780	20,410	20,260	20,160	20,480	21,070	23,660	26,190	27,710	27,500	26,360
21	21,160	20,780	20,390	20,250	20,160	20,490	21,090	23,800	26,250	27,710	27,480	26,340
22	21,160	20,760	20,360	20,250	20,170	20,500	21,110	23,940	26,320	27,720	27,450	26,300
23	21,140	20,750	20,360	20,240	20,190	20,510	21,140	24,060	26,390	27,720	27,440	26,260
24	21,140	20,750	20,360	20,230	20,200	20,520	21,160	24,190	26,490	27,730	27,420	26,240
25	21,130	20,740	20,360	20,220	20,220	20,520	21,170	24,260	26,580	27,750	27,390	26,210
26	21,110	20,720	20,350	20,220	20,240	20,540	21,190	24,370	26,660	27,760	27,360	26,200
27	21,100	20,710	20,340	20,210	20,250	20,550	21,230	24,460	26,750	27,770	27,320	26,200
28	21,100	20,700	20,310	20,210	20,250	20,560	21,250	24,570	26,850	27,760	27,280	26,190
29	21,080	20,690	20,330	20,200	-	20,580	21,270	24,670	26,940	27,790	27,230	26,170
30	21,070	20,670	20,320	20,200	-	20,600	21,340	24,770	27,020	27,790	27,200	26,150
31	21,060	-	20,320	20,200	-	20,620	-	24,870	-	27,780	27,170	-

Monthly elevation and contents, water year October 1940 to September 1941

Date	Elevation (feet)†	Contents (acre-feet)	Change in contents during month (acre-feet)
Sept. 30	1,174.45	21,140,000	-
Oct. 31	1,173.75	21,060,000	-80,000
Nov. 30	1,170.8	20,670,000	-390,000
Dec. 31	1,168.05	20,320,000	-350,000
Calendar year 1940	-	-	-840,000
Jan. 31	1,167.1	20,200,000	-120,000
Feb. 28	1,167.55	20,250,000	+50,000
Mar. 31	1,170.35	20,620,000	+370,000
Apr. 30	1,175.86	21,340,000	+720,000
May 31	1,201.25	24,870,000	+3,530,000
June 30	1,215.35	27,020,000	+2,150,000
July 31	1,220.4	27,780,000	+760,000
Aug. 31	1,216.5	27,170,000	-610,000
Sept. 30	1,209.85	26,160,000	-1,020,000
Water year 1940-41	-	-	+5,010,000

† Elevation at midnight.

Colorado River below Boulder Dam, Ariz.-Nev.

Location.- Water-stage recorder, lat. 36°00'15", long. 114°44'35", in SW¼NE¼ sec. 10, T. 30 N., R. 23 W., Gila and Salt River meridian, or NW¼NE¼ sec. 32, T. 22 S., R. 65 E., Mount Diablo meridian, 1 mile downstream from Boulder Dam. Datum of gage is 599.96 feet above mean sea level, datum of 1929, used locally as 600.00 feet as originally determined.

Drainage area.- 167,800 square miles at Boulder Dam.

Records available.- April 1934 to September 1941. April 1934 to November 1939 collected at site 9 miles downstream (published as Colorado River near Willow Beach, Ariz.).

Extremes.- Maximum discharge during year, 38,200 second-feet June 16 (gage height, 52.26 feet); minimum, 3,360 second-feet Apr. 27 (gage height, 39.00 feet); minimum daily, 5,290 second-feet Apr. 27.

1935-41 (regulated): Maximum discharge, 51,200 second-feet Feb. 13, 1939 (gage height, 54.96 feet, present site and datum); no flow Feb. 10, 1935, at present site.

Remarks.- Records excellent. Diversions above Boulder Dam for irrigation. Discharge completely regulated at Boulder Dam since Feb. 1, 1935. Records computed on basis of Pacific time. During the year 192 discharge measurements were made.

Cooperation.- Records collected in cooperation with Bureau of Reclamation.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	13,300	13,300	10,800	7,670	8,290	8,400	9,430	9,420	32,400	20,100	15,000	26,000
2	14,000	13,500	13,300	9,910	6,230	7,060	9,430	10,300	29,900	20,200	14,700	29,400
3	13,500	12,700	13,500	10,100	8,600	10,100	9,380	9,780	34,300	19,100	14,800	28,600
4	13,700	14,000	13,600	9,650	9,010	10,600	10,300	10,400	34,400	17,600	14,900	29,500
5	13,600	13,000	13,400	8,780	9,450	9,640	9,860	9,740	34,400	15,300	15,100	32,000
6	12,000	12,900	13,000	11,100	9,470	9,120	9,380	9,850	33,300	15,100	17,800	30,200
7	13,700	13,600	12,200	11.400	9,280	9,210	8,760	11,600	33,900	15,300	21,300	24,600
8	13,300	14,300	9,660	11,000	8,240	8,550	8,730	23,000	33,900	15,000	24,300	25,100
9	13,200	13,800	13,400	10,700	6,320	7,440	10,100	24,400	32,500	15,000	22,000	26,700
10	13,300	11,900	14,100	10,000	8,910	10,000	10,100	24,700	34,500	15,000	18,700	27,000
11	14,000	13,600	14,800	8,540	9,620	10,000	9,970	24,400	34,500	14,900	25,100	26,200
12	13,300	14,700	14,400	6,930	8,940	10,500	9,090	24,600	34,200	14,700	26,700	23,400
13	11,900	13,500	14,600	9,820	9,110	9,910	6,060	24,900	33,900	14,600	25,100	25,500
14	14,000	13,500	13,700	9,790	10,000	9,620	9,160	24,500	35,500	14,900	21,400	24,200
15	13,700	13,400	12,300	9,440	8,850	8,150	9,320	25,400	35,200	14,700	23,800	26,400
16	13,900	12,400	14,800	9,510	7,250	6,950	9,020	24,600	31,300	14,800	25,500	26,400
17	13,400	10,800	14,100	9,230	9,700	9,420	9,000	25,800	34,400	14,700	22,700	26,000
18	13,500	13,200	14,800	8,230	9,790	9,660	8,970	26,100	33,500	14,900	25,400	25,900
19	14,100	13,100	14,600	6,820	10,100	9,380	7,310	27,100	32,400	15,000	26,800	25,600
20	12,700	13,500	14,700	9,210	9,710	9,120	5,320	27,300	28,900	14,600	27,600	25,200
21	14,200	10,900	13,800	10,100	10,200	8,940	7,980	27,600	30,300	14,600	26,900	24,400
22	12,300	12,900	11,000	10,200	8,330	8,210	8,500	28,500	29,300	15,200	26,900	26,900
23	11,900	12,200	13,200	10,700	6,970	6,710	8,150	28,800	27,900	15,100	24,600	27,200
24	11,600	10,000	13,000	11,000	9,750	9,160	8,470	28,700	26,100	15,000	20,900	26,600
25	12,800	13,200	10,500	10,100	9,570	9,260	8,520	28,100	24,100	14,900	26,900	25,400
26	11,100	13,900	11,900	8,290	9,590	9,300	7,070	28,300	24,200	14,800	29,800	25,300
27	9,260	13,900	12,000	10,200	9,570	9,240	5,290	28,400	22,700	14,600	28,200	26,100
28	12,200	13,500	12,400	9,790	11,300	9,610	8,960	30,600	20,100	14,900	28,400	24,900
29	12,500	13,400	10,100	9,670	-	8,380	9,870	31,100	20,100	14,800	27,800	27,200
30	12,700	12,500	12,600	9,660	-	6,900	9,740	32,700	20,200	15,100	26,700	26,900
31	12,800	-	11,000	9,520	-	9,750	-	32,700	-	14,900	24,500	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	401,460	14,200	9,260	12,950	796,300
November	391,100	14,700	10,000	13,040	775,700
December	401,260	14,800	9,660	12,940	795,900
Calendar year 1940	4,019,730	18,000	5,090	10,980	7,973,000
January	297,060	11,400	6,820	9,583	589,200
February	252,150	11,300	6,230	9,005	500,100
March	278,290	10,600	6,710	8,977	552,000
April	261,230	10,300	5,290	8,708	518,100
May	723,390	32,700	9,420	23,340	1,435,000
June	912,300	35,500	20,100	30,410	1,810,000
July	479,400	20,200	14,600	15,460	950,900
August	720,300	29,800	14,700	23,240	1,429,000
September	794,800	32,000	23,400	26,490	1,576,000
Water year 1940-41	5,912,740	35,500	5,290	16,200	11,730,000

Colorado River at Needles, Calif.

Location.- Water-stage recorder, lat. 34°50'50", long. 114°36'15", in NW¼ sec. 29, T. 9 N., R. 23 E., San Bernardino meridian, at Needles, Calif., 18 miles upstream from gaging station near Topock, Ariz., 57.5 miles upstream from Parker Dam, and 98 miles downstream from Boulder Dam. Datum of gage is 466.23 feet, datum of 1929, or 466.39 feet, adjustment of 1912, above mean sea level; gage readings have been reduced to elevation above mean sea level, datum of 1929.

Drainage area.- 170,600 square miles.

Records available.- April 1931 to September 1941 (elevations only).

Extremes.- Maximum elevation during year, 472.77 feet June 16; minimum, 468.25 feet Feb. 17.
1931-41: Maximum elevation, that of June 16, 1941; minimum, 466.53 feet Oct. 2, 1934.

Remarks.- Records excellent except those for periods of no gage-height record, which are fair. Flow completely regulated by Lake Mead above Boulder Dam.

Daily mean elevation, in feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	469.45	470.05	469.94	469.53	469.19	a469.3	469.31	469.98	472.30	471.47	470.77	471.70
2	469.80	470.10	469.70	468.99	469.01	a469.1	469.61	469.87	472.21	471.46	470.77	471.85
3	469.93	470.16	469.90	468.96	468.61	a468.8	469.50	470.10	472.19	471.42	470.80	472.16
4	469.86	470.09	470.05	469.08	468.70	a469.1	469.47	470.08	472.45	471.30	470.80	472.10
5	469.93	470.20	470.03	469.04	469.10	a469.1	469.56	470.05	472.44	471.17	470.81	472.16
6	470.08	470.01	470.00	468.96	469.17	a469.2	469.73	470.04	472.45	470.90	470.86	472.33
7	469.90	469.98	469.97	469.03	469.22	469.18	469.49	470.03	472.41	470.87	471.04	472.15
8	470.05	469.97	469.87	469.40	469.18	469.21	469.11	470.15	472.48	470.89	471.59	471.76
9	469.95	470.05	469.55	469.36	469.04	469.24	469.47	471.39	472.50	470.86	471.89	471.82
10	469.85	470.09	469.87	469.36	468.70	469.07	469.56	471.45	472.45	470.69	471.69	471.96
11	469.89	469.72	470.02	469.29	468.82	469.17	469.81	471.39	c472.6	470.95	471.21	472.07
12	469.92	469.90	470.13	468.97	469.22	469.35	469.77	471.41	c472.6	470.97	471.84	471.91
13	469.91	470.17	470.09	468.73	469.16	469.48	469.74	471.32	c472.7	471.03	472.01	471.65
14	469.69	470.00	470.14	468.98	469.09	469.56	469.36	471.25	c472.6	471.01	471.86	471.82
15	469.80	470.02	470.09	469.29	469.15	469.45	469.47	471.29	c472.7	470.99	471.43	471.64
16	469.69	469.92	469.94	469.24	469.00	469.23	469.92	471.49	472.71	470.93	471.67	471.85
17	469.69	469.90	470.13	469.22	468.70	469.01	469.91	471.45	472.54	470.90	471.95	471.87
18	469.64	469.70	470.14	469.19	468.82	469.20	469.88	471.64	472.65	470.96	471.66	471.79
19	469.65	469.90	470.23	469.06	469.19	469.43	469.86	471.69	472.61	470.96	471.84	471.68
20	469.89	469.94	470.20	468.80	469.27	469.36	469.75	471.76	472.56	471.00	472.03	471.59
21	469.62	469.93	470.16	468.93	469.24	469.33	469.30	471.90	472.39	470.90	472.14	471.63
22	469.89	469.71	470.06	469.32	a469.2	469.24	469.29	471.92	472.50	470.84	472.14	471.54
23	469.43	469.82	469.73	469.40	a468.9	469.28	469.74	472.04	472.45	470.89	472.00	471.79
24	469.39	469.79	469.77	469.48	a468.7	469.05	469.73	472.15	472.36	470.89	471.76	471.87
25	469.30	469.53	469.84	469.58	a469.0	469.14	469.74	472.13	472.16	470.87	471.26	471.77
26	469.53	469.77	469.47	469.41	a469.1	469.54	469.79	471.94	472.00	470.84	471.97	471.67
27	469.28	470.01	469.60	469.16	a469.1	469.53	469.83	471.99	471.91	470.80	472.15	471.63
28	468.98	470.06	469.46	469.12	a469.2	469.51	469.58	471.97	471.81	470.64	472.02	471.67
29	469.55	470.08	469.64	469.25	-	469.51	469.46	472.16	471.56	470.63	472.01	471.53
30	469.75	470.07	469.45	469.26	-	469.51	470.04	472.19	471.50	470.78	472.02	471.81
31	469.95	-	469.82	469.22	-	469.21	-	472.32	-	470.78	471.91	-

Colorado River near Topock, Ariz.

Location.- Water-stage recorder, lat. 34°41'15", long. 114°27'45", in NW¼ sec. 13, T. 15 N., R. 21 W., Gila and Salt River meridian, in Mohave Canyon, 3 miles downstream from Topock, 40 miles upstream from Parker Dam, and 116 miles downstream from Boulder Dam. Datum of gage is 423.02 feet above mean sea level, datum of 1929, or 423.08 feet above mean sea level, adjustment of 1912. Auxiliary water-stage recorder, used in determining fall, lat. 34°42'55", long. 114°29'10", in NE¼ sec. 3, T. 15 N., R. 21 W., at highway bridge at Topock, 2.7 miles upstream.

Drainage area.- 172,300 square miles.

Records available.- February 1917 to September 1941.

Extremes.- Maximum daily discharge during year, 34,500 second-feet June 16; maximum gage height, 25.94 feet June 1; minimum daily discharge, 5,500 second-feet Apr. 29; minimum gage height, 20.62 feet Mar. 11.

1917-34 (unregulated): Maximum discharge probably exceeded 200,000 second-feet June 22, 1921; minimum, 1,480 second-feet Aug. 17, 1934.

1935-41 (regulated): Maximum discharge, 34,900 second-feet Feb. 2, 1939; minimum, 375 second-feet Feb. 14, 1935; minimum daily, 422 second-feet Feb. 14, 1935.

Discharge of about 300,000 second-feet (based on determination at Lees Ferry gaging station) occurred about July 10, 1884. Discharge in excess of 400,000 second-feet (estimated) probably occurred within the period 1857-68 and most likely in the high years 1862 or 1867.

Remarks.- Records good. Records computed on basis of mountain standard time. Discharge computed by using fall as determined by auxiliary water-stage recorder as a factor. Diversions above station for irrigation. Flow regulated at Boulder Dam; no regulation between Boulder Dam and this station. Elevations given in the following table are in agreement with datum of 1929

Daily mean elevation, in feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	445.52	445.65	445.71	445.51	444.95	444.44	444.13	444.70	448.88	446.58	444.91	446.90
2	446.02	445.60	445.52	445.23	444.91	444.64	444.43	444.56	448.81	446.51	444.88	446.78
3	446.10	445.62	445.29	444.72	444.63	444.43	444.47	444.46	448.38	446.30	444.86	446.92
4	446.12	445.57	445.47	445.01	444.05	444.05	444.45	444.53	448.31	446.15	444.75	447.17
5	446.10	445.46	445.55	444.99	444.40	444.23	444.36	444.52	448.51	445.86	444.70	447.24
6	446.08	445.52	445.56	444.95	444.69	444.15	444.42	444.53	448.37	445.58	444.81	447.50
7	446.03	445.44	445 51	444.76	444.89	443.97	444.43	444.51	448.20	445.28	444.91	447.78
8	445.93	445.44	445.46	445.02	444.97	443.82	444.27	444.52	448.16	445.14	445.47	447.58
9	446.02	445.62	445.32	445.12	444.96	443.84	444.19	445.17	448.13	445.14	445.68	447.10
10	446.00	445.80	445.15	444.99	444.69	443.82	444.24	446.75	447.95	445.04	445.63	447.02
11	446.00	445.84	445.48	444.89	444.07	443.70	444.45	447.82	447.94	444.98	445.46	447.12
12	445.99	445.77	445.65	444.68	444.42	444.02	444.62	448.17	447.97	444.86	445.53	447.19
13	446.08	445.95	445.74	444.34	444.85	444.31	444.72	448.04	447.83	444.65	446.08	446.95
14	446.06	446.15	445.73	444.01	444.90	444.58	444.52	448.04	447.57	444.80	446.23	446.79
15	445.92	446.12	445.73	444.40	444.89	444.80	444.11	448.06	447.35	444.85	446.04	446.83
16	446.03	446.08	445.62	444.55	444.98	444.82	444.41	448.02	447.33	444.87	445.85	446.79
17	446.10	446.06	445.59	444.59	444.86	444.50	444.56	448.07	447.03	444.75	445.94	446.93
18	446.12	445.95	445.76	444.61	444.47	444.14	444.59	448.10	446.83	444.72	445.96	446.95
19	446.05	445.83	445.80	444.57	444.66	444.35	444.63	448.20	446.89	444.71	445.94	446.92
20	446.05	445.99	445.86	444.41	444.90	444.45	444.62	448.35	446.91	444.76	446.13	446.92
21	446.10	446.03	445.78	444.14	444.94	444.45	444.38	448.45	446.73	444.74	446.45	446.93
22	445.97	446.00	445.81	444.52	444.85	444.40	443.97	448.55	446.83	444.64	446.68	446.91
23	445.96	445.76	445.67	444.81	444.73	444.39	444.32	448.68	447.09	444.71	446.71	446.93
24	445.74	445.86	445.45	444.91	444.46	444.22	444.54	448.70	447.26	444.82	446.57	447.13
25	445.68	445.78	445.69	445.03	444.18	443.99	444.59	448.82	447.37	444.92	446.26	447.18
26	445.66	445.53	445.59	444.98	444.45	444.34	444.63	448.68	447.33	444.92	446.16	447.12
27	445.76	445.73	445.49	444.83	444.49	444.56	444.69	448.45	447.21	444.89	446.68	447.10
28	445.52	445.90	445.50	444.52	444.44	444.60	444.57	448.44	447.20	444.82	446.99	447.03
29	445.22	445.93	445.59	444.68	-	444.60	444.08	448.39	446.99	444.64	447.09	446.97
30	445.49	445.83	445.65	444.85	-	444.53	444.44	448.57	446.72	445.00	447.09	446.95
31	445.63	-	445.35	444.91	-	444.36	-	448.73	-	444.91	447.10	-

Note.- Elevations are to datum of 1929.

Discharge, in second-feet, of Colorado River near Topock, Ariz., water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	10,400	12,600	12,700	12,400	9,700	10,000	7,660	9,400	31,700	20,000	14,700	28,200
2	12,100	12,700	12,000	11,000	9,530	10,900	8,880	9,300	32,000	20,000	14,700	24,500
3	12,700	13,000	11,400	9,000	8,520	10,100	9,300	9,200	30,900	20,000	14,800	25,400
4	13,000	13,100	12,000	10,000	6,790	8,710	9,400	9,840	31,700	19,500	14,300	27,000
5	12,900	12,900	12,300	9,960	7,790	10,100	9,500	9,730	34,200	18,900	14,200	27,200
6	13,000	13,100	12,500	9,900	8,400	10,300	9,700	9,650	34,000	17,400	14,800	28,800
7	13,000	12,900	12,800	9,210	9,040	9,520	9,900	9,500	33,500	16,100	15,600	30,400
8	12,500	12,800	12,800	10,600	9,330	8,910	9,400	9,680	33,000	15,400	18,900	28,800
9	12,900	13,000	12,400	11,000	9,430	8,640	9,000	12,100	32,700	15,100	20,700	26,300
10	12,800	13,200	11,900	10,800	8,720	8,380	9,000	19,900	32,800	14,700	21,400	24,500
11	12,800	13,000	12,900	10,400	6,790	7,660	9,500	23,200	32,000	14,500	20,400	25,000
12	12,800	12,700	13,700	9,680	7,920	8,700	9,940	24,400	33,600	13,900	20,600	25,800
13	13,100	13,100	14,200	8,460	9,230	9,670	10,200	23,800	33,800	14,100	23,700	24,600
14	12,900	13,600	14,200	7,540	9,290	10,700	9,280	24,000	34,000	14,000	24,600	24,100
15	12,500	13,400	14,100	9,170	9,270	11,100	7,430	24,400	34,000	14,500	23,400	24,600
16	12,900	13,200	14,000	9,570	9,710	10,700	8,680	24,000	34,500	14,800	22,000	24,200
17	13,100	13,000	13,800	9,540	9,330	9,450	9,000	24,400	34,000	14,500	23,000	25,300
18	13,300	12,400	14,600	9,460	7,960	8,180	8,900	24,600	33,000	14,600	24,000	25,300
19	13,000	12,000	14,600	9,250	8,740	9,020	8,800	25,500	34,000	14,600	23,500	25,200
20	13,100	12,700	14,600	8,610	9,690	9,370	8,700	25,800	32,600	14,800	24,000	25,500
21	13,300	12,800	14,500	7,680	10,200	9,210	7,700	26,600	31,500	14,700	25,200	25,000
22	13,200	12,900	14,500	9,110	10,000	8,870	6,400	27,100	29,800	14,200	26,600	24,700
23	13,100	12,200	13,800	10,200	9,860	8,750	7,500	27,500	29,400	14,400	26,400	24,400
24	12,400	12,500	13,000	10,400	8,800	8,180	8,200	27,700	26,800	14,700	25,400	25,700
25	12,300	12,400	13,700	10,900	7,850	7,280	6,200	28,800	26,600	14,900	23,100	25,900
26	12,200	11,700	13,200	10,500	9,140	8,490	8,200	28,600	25,500	14,900	22,000	25,400
27	12,500	12,400	12,200	9,900	9,650	9,160	8,100	27,700	24,500	14,600	25,500	24,500
28	11,700	13,100	12,100	8,470	9,780	9,310	7,600	28,100	24,000	14,300	27,400	24,600
29	10,700	13,200	12,400	9,060	-	9,370	5,500	28,000	22,500	13,500	27,800	24,400
30	11,800	13,000	12,500	9,450	-	9,280	7,900	29,600	20,500	14,900	27,500	24,600
31	12,400	-	11,600	9,700	-	8,600	-	30,800	-	14,700	27,400	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	390,400	13,300	10,400	12,590	774,300
November	384,600	13,600	11,700	12,820	762,800
December	407,000	14,600	11,400	13,130	807,300
Calendar year 1940	3,927,730	17,200	4,980	10,730	7,790,000
January	300,920	12,400	7,540	9,707	596,900
February	250,450	10,200	6,790	8,945	496,800
March	286,810	11,100	7,280	9,252	568,900
April	257,470	10,200	5,500	8,582	510,700
May	662,600	30,800	9,200	21,370	1,314,000
June	923,100	34,500	20,500	30,770	1,831,000
July	481,200	20,000	13,500	15,520	954,400
August	677,600	27,800	14,200	21,860	1,344,000
September	766,600	30,400	24,100	25,550	1,521,000
Water year 1940-41	5,788,750	34,500	5,500	15,860	11,480,000

Note.- Slope-stage-discharge relation unstable Apr. 3-11, Apr. 17 to May 3, June 10-23, June 27 to July 4, Aug. 17-20, and Sept. 10-12; discharge computed on basis of records for Lake Havasu after adjusting for known inflow and outflow and for Colorado River below Boulder Dam.

Lake Havasu near Parker Dam, Ariz.-Calif.

Location.- Water-stage recorder, lat. 34°19', long. 114°09', in SW¼ sec. 28, T. 3 N., R. 27 E., San Bernardino meridian, at intake pumping plant of Metropolitan Water District of Southern California, 1.8 miles upstream from Parker Dam on Colorado River, which is 156 miles downstream from Boulder Dam. Datum of gage is 400.54 feet above mean sea level, datum of 1929; 400.00 feet above mean sea level, adjustment of 1912; or 400.83 feet above mean sea level, datum of Metropolitan Water District of Southern California; gage readings have been reduced to elevations above mean sea level, datum of 1929.

Drainage area.- 178,800 square miles at Parker Dam.

Records available.- July 1938 to September 1941.

Extremes.- Maximum contents during year, 516,300 acre-feet June 27 (elevation of water surface, 442.78 feet); minimum, 278,200 acre-feet June 12 (elevation, 429.32 feet).
1938-41: Maximum contents, 622,500 acre-feet Sept. 7, 1939 (elevation of water surface, 447.72 feet).

Remarks.- Lake is formed by concrete-arch dam; dam completed and storage began July 1, 1938. Usable capacity, 688,000 acre-feet, between elevations 400.54 feet (sill of regulating gates) and 450.54 feet (top of regulating gates) above mean sea level. Dead storage, 28,600 acre-feet below elevation 400.54 feet. Drawdown below elevation 440.54 feet (contents, 472,000 acre-feet) not legally permissible except by consent of the Metropolitan Water District of Southern California or in an emergency affecting the safety of the dam. Lake is used for flood control, for re-regulation of river for irrigation demand, and as a basin from which water is pumped by Metropolitan Water District of Southern California to Colorado River aqueduct (see p. 234). Figures given herein represent usable contents.

Elevation, in feet, at 12 p.m., water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	440.54	438.06	438.16	437.58	437.50	437.22	436.16	436.14	431.22	441.16	439.64	439.30
2	440.38	438.08	438.10	437.46	437.54	438.84	436.16	436.14	430.76	440.76	439.60	439.16
3	440.42	438.24	437.98	437.06	437.54	438.22	436.20	436.22	430.20	440.44	439.52	439.22
4	440.52	438.32	437.96	436.84	437.38	437.38	436.24	436.34	429.76	440.28	439.46	439.32
5	440.56	438.34	438.00	436.64	437.38	436.94	436.34	436.44	429.64	440.16	439.40	439.40
6	440.64	438.48	438.04	436.32	437.42	437.00	436.36	436.56	429.54	440.02	439.34	439.54
7	440.66	438.86	438.10	435.84	437.54	436.88	436.54	436.64	429.52	439.94	439.28	439.90
8	440.60	439.32	438.14	435.54	437.68	436.84	436.54	436.68	429.44	439.86	439.34	440.04
9	440.60	439.92	438.10	435.54	437.70	436.92	436.42	436.76	429.46	439.82	439.54	440.02
10	440.54	440.40	437.90	435.64	437.38	436.96	436.36	436.94	429.42	439.78	439.72	439.64
11	440.48	440.88	437.78	435.64	437.44	436.88	436.50	437.22	429.34	439.60	439.90	439.26
12	440.46	441.10	437.96	435.82	437.52	437.04	437.02	437.28	429.42	439.48	439.92	439.00
13	440.46	441.14	438.08	435.98	437.52	437.30	437.30	437.08	429.58	439.32	440.10	438.74
14	440.44	441.10	438.22	436.06	437.50	439.06	437.80	437.12	430.22	439.16	440.12	438.78
15	440.32	440.98	438.36	436.30	437.48	440.40	436.98	437.16	431.22	439.04	439.98	438.80
16	440.28	440.88	438.94	436.66	437.50	439.74	437.00	437.18	432.58	438.92	439.72	438.72
17	440.26	440.72	438.84	436.96	437.48	438.66	436.84	437.16	434.08	438.82	439.58	438.70
18	440.22	440.68	438.80	437.28	437.40	437.50	436.84	437.24	435.58	438.82	439.50	438.70
19	440.14	440.34	438.80	437.52	437.50	437.10	436.90	437.18	437.06	438.78	439.36	438.68
20	440.08	440.12	438.84	437.68	437.58	436.92	436.96	437.12	438.40	438.78	439.30	438.70
21	440.06	439.96	438.84	437.68	437.88	436.78	436.82	436.88	439.52	438.78	439.44	438.66
22	439.96	439.94	438.78	437.66	437.76	436.68	436.56	436.68	440.48	438.84	439.60	438.54
23	439.86	439.60	438.60	437.56	437.68	436.66	436.42	436.76	441.34	439.10	439.70	438.48
24	439.68	439.38	438.48	437.58	437.48	436.62	436.34	436.60	441.98	439.46	439.68	438.52
25	439.40	439.12	439.48	437.74	437.62	436.42	436.30	436.42	442.48	439.74	439.48	438.64
26	439.24	438.68	439.46	437.60	437.14	436.34	436.34	435.98	442.52	439.76	439.24	438.78
27	439.12	438.42	438.98	437.56	437.08	436.34	436.54	435.14	442.66	439.76	439.28	438.74
28	438.86	438.30	438.44	437.52	437.06	436.32	436.70	434.20	442.44	439.80	439.36	438.72
29	438.46	438.24	437.94	437.50	-	436.36	436.30	433.20	442.10	439.68	439.48	438.56
30	438.16	438.18	437.44	437.50	-	436.40	436.12	432.40	441.62	439.70	439.52	438.38
31	438.04	-	437.30	437.50	-	436.38	-	431.76	-	439.68	439.50	-

Note.- Elevations are mean sea level, datum of 1929. Mountain standard time used.

Usable contents, in thousands of acre-feet, at 12 p.m., of Lake Havasu near Parker Dam, Ariz.-Calif. water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	471.50	424.7	426.5	416.1	414.6	409.7	390.5	390.1	307.2	484.1	454.4	447.9
2	468.5	425.2	425.6	414.2	415.5	439.0	390.7	390.3	300.0	476.3	453.4	445.3
3	469.2	428.1	423.4	406.7	415.3	427.6	391.4	391.7	291.4	469.6	451.9	446.2
4	471.1	429.4	423.1	402.9	412.6	412.4	392.1	393.9	284.8	466.4	450.8	448.3
5	471.7	429.9	423.6	399.3	412.4	404.7	393.7	395.7	283.0	464.1	449.6	449.6
6	473.3	432.2	424.3	393.5	413.2	405.6	394.3	397.7	281.4	461.6	448.5	452.5
7	473.9	439.4	425.6	384.9	415.5	403.6	397.3	399.1	281.2	460.1	447.4	459.2
8	472.7	448.3	426.3	379.5	417.8	402.9	397.5	400.0	280.0	458.4	448.7	461.8
9	472.5	459.5	425.6	379.3	418.4	404.2	395.3	401.5	280.3	457.6	452.3	461.6
10	471.5	468.8	422.0	381.1	412.4	404.9	394.3	404.5	279.7	457.1	455.9	454.4
11	470.2	478.1	419.6	381.3	413.5	403.4	396.8	409.7	278.4	453.6	459.2	447.2
12	469.8	482.5	423.1	384.4	415.0	406.3	406.1	408.8	279.6	451.2	459.7	442.2
13	470.0	483.3	425.2	387.4	415.0	411.2	411.0	407.0	282.1	448.1	463.1	437.1
14	469.6	482.5	427.6	388.7	414.8	443.4	420.2	407.8	291.6	445.1	463.5	438.1
15	467.3	480.3	430.3	393.0	414.4	468.6	405.2	408.7	307.2	442.8	460.7	438.4
16	466.4	478.3	441.1	399.7	414.8	456.1	405.8	409.0	329.2	440.5	455.9	436.7
17	466.0	474.9	439.0	405.1	414.4	435.8	402.9	408.5	354.5	438.6	453.3	436.4
18	465.2	474.1	438.4	410.6	413.0	414.8	402.7	409.9	380.0	438.6	451.7	436.4
19	463.9	467.7	438.4	415.1	414.6	407.6	404.0	408.8	406.9	437.9	449.1	436.2
20	462.8	463.3	439.2	417.8	416.2	404.3	404.9	407.9	431.0	438.1	447.9	436.4
21	462.2	460.5	439.0	417.8	421.4	401.6	402.4	403.6	451.9	438.1	450.4	435.8
22	460.3	460.1	437.9	417.5	419.3	400.0	397.7	399.8	470.4	439.0	453.6	433.5
23	458.6	453.4	434.6	415.7	417.8	399.7	395.2	401.5	487.5	444.0	455.5	432.4
24	455.0	449.5	432.4	416.0	414.2	398.8	393.9	398.6	500.3	451.0	455.2	433.1
25	449.6	444.3	451.2	419.1	416.9	395.2	393.2	395.2	510.1	456.1	451.2	435.2
26	446.8	436.2	451.0	416.6	408.3	393.9	393.7	387.2	510.9	456.7	446.6	437.9
27	444.3	431.2	441.7	415.7	407.2	393.7	397.5	372.5	514.2	456.7	447.6	437.1
28	439.6	429.0	431.5	415.1	406.7	393.4	400.2	356.6	509.3	457.2	448.9	436.9
29	431.9	427.9	422.5	414.8	-	394.3	393.2	339.7	502.5	455.2	451.2	433.7
30	426.7	426.8	413.7	414.6	-	395.0	389.8	326.3	492.9	455.5	451.9	430.6
31	424.5	-	411.0	414.8	-	394.6	-	315.9	-	455.0	451.6	-

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Colorado River below Parker Dam, Ariz.-Calif.

Location.- Water-stage recorder, lat. 34°15'30", long. 114°09'10", in NE¼ sec. 32, T. 11 N., R. 18 W., Gila and Salt River meridian, or NE¼SW¼ sec. 16, T. 2 N., R. 27 E., San Bernardino meridian, 4.1 miles downstream from Parker Dam, 11 miles northeast of Parker, Ariz., and 160 miles downstream from Boulder Dam. Datum of gage is 346.16 feet, datum of 1929; or 345.61 feet, adjustment of 1912, above mean sea level.

Drainage area.- 178,800 square miles.

Records available.- February to December 1934 (gage heights and fragmentary discharge records), January 1935 to September 1941.

Extremes.- Maximum discharge during year, 35,600 second-feet May 28 (gage height, 29.60 feet); minimum, 180 second-feet Feb. 11 (gage height, 14.3 feet); minimum daily, 6,200 second-feet Apr. 27.

1935-41 (regulated): Maximum discharge, 42,400 second-feet Feb. 8, 1937; minimum, that of Feb. 11, 1941; minimum daily, 1,440 second-feet Feb. 15, 1935.

An unregulated discharge of probably less than 1,350 second-feet occurred Aug. 18, 1934 (lowest unregulated discharge since 1917 and probably since a much earlier date).

Remarks.- Records excellent. Diversions above station for irrigation. Flow regulated at Boulder and Parker Dams. Records computed on basis of mountain standard time. Water spilled from Gene Reservoir on Colorado River aqueduct returned to Lake Havasu above station. No return surface flow from Copper Basin Reservoir during year. Some water probably returned to river both above and below station by percolation from both reservoirs. During the year 204 discharge measurements were made.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	12,200	12,000	13,500	13,900	10,100	9,380	9,180	8,990	36,000	23,800	15,000	27,000
2	12,200	11,600	12,900	14,000	9,260	14,300	9,160	8,990	35,600	23,200	15,000	25,300
3	12,200	11,600	12,500	13,600	8,870	19,600	9,180	8,990	35,100	22,700	15,100	25,200
4	12,200	11,800	12,500	12,300	8,220	17,600	9,180	8,990	34,600	21,100	15,200	26,200
5	12,300	12,100	12,600	12,200	8,170	15,400	9,180	9,000	33,900	19,600	15,200	26,700
6	12,300	11,800	12,600	12,800	8,170	12,000	9,200	9,000	33,900	18,100	15,200	26,700
7	12,300	9,240	12,600	13,200	8,150	11,900	9,220	9,020	33,900	16,800	15,200	26,800
8	12,300	8,120	12,600	13,500	8,510	10,700	9,240	9,040	32,800	16,000	16,400	26,400
9	12,800	8,300	12,600	11,100	9,300	8,970	9,240	10,700	32,700	15,700	18,500	24,700
10	13,100	8,340	12,500	10,900	11,400	8,660	9,240	17,100	32,700	15,700	19,700	27,800
11	13,100	8,400	12,500	10,800	6,920	8,640	9,240	19,700	32,600	16,000	20,200	27,600
12	13,100	9,570	12,500	9,420	7,800	8,620	9,580	24,100	32,300	15,900	20,200	27,500
13	13,100	11,700	12,600	8,420	9,320	8,910	17,400	24,000	31,800	15,900	20,900	27,200
14	13,100	13,500	12,500	7,990	9,300	14,500	21,000	24,000	29,100	15,900	24,000	25,900
15	13,000	14,000	12,700	7,490	9,280	20,400	18,700	24,000	26,200	15,900	24,600	24,700
16	13,000	13,900	8,340	6,880	9,300	20,300	14,600	24,100	23,300	15,800	24,400	24,700
17	13,100	13,800	14,400	6,880	9,300	20,000	12,200	24,100	21,600	15,800	24,300	24,700
18	13,500	13,500	14,100	6,880	8,720	19,000	10,400	24,100	20,200	15,300	24,300	24,800
19	13,500	13,900	14,100	6,800	8,080	13,200	9,220	24,600	20,100	14,900	24,200	25,100
20	13,500	14,000	14,100	6,910	9,120	11,700	9,160	25,700	20,200	14,900	24,100	25,100
21	13,500	14,000	14,300	6,910	10,200	11,100	9,160	27,700	20,100	14,700	24,100	25,100
22	13,500	14,000	14,800	8,460	14,300	10,500	8,950	28,600	20,000	14,200	24,600	25,000
23	13,500	14,000	15,000	10,000	14,500	9,740	8,760	27,100	20,300	12,200	25,300	25,000
24	13,400	13,900	15,000	9,640	13,400	9,140	8,720	28,600	21,000	12,100	25,300	25,000
25	13,400	14,000	15,400	9,900	14,100	9,100	8,620	29,900	22,000	12,400	25,000	25,000
26	13,400	14,100	16,300	13,400	15,900	9,080	8,380	31,100	23,400	14,500	24,100	24,100
27	13,400	14,000	17,000	11,400	12,300	9,080	6,200	33,200	21,600	14,900	24,600	25,000
28	13,300	14,000	16,900	10,000	10,700	9,080	6,380	36,000	24,800	14,300	26,100	25,000
29	13,200	13,900	17,000	10,200	-	9,080	8,990	35,000	24,600	15,100	26,300	25,300
30	13,100	13,800	16,600	10,200	-	9,080	9,000	35,400	24,400	14,800	27,100	25,700
31	12,900	-	14,400	10,200	-	9,200	-	35,300	-	14,800	27,100	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	402,500	13,500	12,200	12,980	798,300
November	371,170	14,100	8,120	12,370	736,200
December	427,540	17,000	8,340	13,790	848,000
Calendar year 1940	3,859,940	17,000	4,860	10,550	7,656,000
January	315,980	14,000	6,800	10,190	626,700
February	282,690	15,900	6,920	10,100	560,700
March	377,960	20,400	8,620	12,190	749,700
April	306,680	21,000	6,200	10,220	608,300
May	685,120	35,400	8,990	22,100	1,359,000
June	820,800	36,000	20,000	27,360	1,628,000
July	503,000	23,800	12,100	16,230	997,700
August	671,300	27,100	15,000	21,650	1,332,000
September	770,300	27,800	24,100	25,680	1,528,000
Water year 1940-41	5,935,040	36,000	6,200	16,260	11,770,000

Colorado River near Picacho, Calif.

Location.- Water-stage recorder, lat. 33°02'00", long. 114°33'00", in NW¼ sec. 22, T. 13 S., R. 23 E., San Bernardino meridian, 4 miles downstream from Picacho, 14½ miles upstream from Imperial Dam, 133 miles downstream from Parker Dam, and 289 miles downstream from Boulder Dam. Datum of gage is 167.38 feet above mean sea level, datum of 1929.

Drainage area.- 184,100 square miles.

Records available.- July 1934 to September 1941.

Extremes.- Maximum daily discharge during year, 34,500 second-feet June 3; minimum daily, 5,500 second-feet Apr. 29.

1935-41 (regulated): Maximum discharge, 40,800 second-feet Sept. 5, 1939 (elevation, 186.13 feet); minimum, 990 second-feet July 4, 1938; minimum daily, 1,450 second-feet Feb. 17, 1935.

For a period extending back to 1902 or longer: unregulated minimum discharge of 538 second-feet and unregulated minimum daily discharge of 568 second-feet, occurring Aug. 3, 1934.

Remarks.- Records excellent Oct. 1 to Dec. 31, good thereafter. Diversions above station for irrigation. Flow regulated at Boulder Dam since Feb. 1, 1935, and at Parker Dam since July 1, 1938. Records computed on basis of mountain standard time. Mean sea level elevation of spillway crest of Imperial Dam, 181.0 feet (datum of 1929). Normal operating level of Imperial Reservoir, 179.5 feet.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	10,800	12,400	13,300	16,000	9,960	11,700	8,420	7,700	34,000	23,500	13,900	24,200
2	10,700	12,000	13,200	14,600	9,860	10,300	8,320	8,000	34,200	23,200	13,900	24,500
3	10,600	11,300	12,800	14,000	9,630	9,720	8,290	8,000	34,500	22,600	14,000	24,500
4	10,600	10,600	12,300	13,900	8,830	15,500	8,290	8,100	34,200	22,000	14,000	23,900
5	10,800	10,800	12,000	13,300	8,490	18,300	8,360	8,200	33,700	21,000	14,100	23,900
6	10,900	10,800	12,000	12,400	8,060	16,900	8,390	8,200	33,300	19,500	14,200	24,100
7	11,100	11,100	11,800	12,600	8,030	13,400	8,490	8,000	33,100	18,000	14,200	24,600
8	11,100	10,300	11,900	13,100	8,030	11,100	8,420	8,000	33,000	16,500	14,200	24,600
9	11,000	8,490	12,000	13,300	7,960	10,900	8,290	8,000	32,500	15,500	15,000	24,800
10	11,100	7,930	11,900	12,800	8,490	9,490	8,130	8,200	32,000	14,800	16,700	24,500
11	11,500	7,960	11,900	11,500	9,240	8,530	8,320	11,000	31,800	14,800	18,500	24,100
12	11,700	7,960	11,800	10,900	10,700	8,240	8,690	15,000	31,700	14,700	19,000	24,700
13	11,800	7,930	11,800	10,200	6,800	8,380	8,720	18,500	31,600	14,800	19,000	25,000
14	11,800	9,630	11,800	8,950	7,890	8,790	10,900	21,600	31,300	14,900	19,400	25,200
15	11,900	11,200	12,000	8,140	8,710	10,400	17,200	22,000	30,000	14,900	20,200	24,900
16	11,800	12,600	12,000	7,790	8,790	17,000	19,800	22,000	28,000	14,800	21,900	24,600
17	11,500	13,100	11,400	7,300	8,830	19,800	17,600	22,200	25,000	14,800	22,400	24,100
18	11,700	13,300	11,000	7,010	8,790	20,500	13,700	22,200	22,000	14,800	22,600	23,700
19	12,000	13,300	13,000	6,920	8,710	20,100	10,500	22,600	20,000	14,500	22,500	23,700
20	12,400	13,200	13,400	6,980	8,140	17,500	9,000	22,800	19,400	14,100	22,500	23,700
21	12,300	13,300	13,400	6,920	7,760	13,400	8,500	23,200	19,200	13,800	22,300	23,800
22	12,300	13,400	13,400	6,890	8,640	11,900	8,500	23,700	19,200	13,800	22,000	23,700
23	12,200	13,100	13,700	6,890	10,300	11,100	8,500	24,400	19,200	13,400	21,900	23,700
24	12,200	13,200	14,600	8,880	14,000	10,300	8,200	26,000	19,200	12,500	22,100	23,600
25	12,200	13,300	15,100	9,630	13,800	9,430	8,000	25,700	19,500	11,300	22,700	23,600
26	12,300	13,300	14,700	9,190	12,600	8,920	7,800	26,600	20,000	11,200	22,800	23,600
27	12,400	13,400	14,900	10,200	14,400	8,790	7,600	27,600	21,000	12,000	22,700	23,700
28	12,400	13,400	15,600	12,700	14,500	8,660	7,000	28,200	21,500	13,500	22,400	25,300
29	12,500	13,400	16,200	10,900	-	8,460	5,500	29,500	21,500	13,800	22,700	25,100
30	12,500	13,300	16,500	9,910	-	8,460	6,000	31,500	23,500	13,500	23,300	24,500
31	12,500	-	16,700	10,200	-	8,490	-	33,000	-	14,000	23,700	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	362,600	12,500	10,600	11,700	719,200
November	349,200	13,400	7,930	11,640	692,600
December	408,000	16,700	11,000	13,160	809,300
Calendar year 1940	3,518,450	16,700	3,930	9,613	6,979,000
January	323,800	16,000	6,890	10,450	642,200
February	269,940	14,500	6,800	9,641	535,400
March	374,460	20,500	8,240	12,080	742,700
April	283,430	19,800	5,500	9,448	562,200
May	579,600	33,000	7,700	18,700	1,150,000
June	809,100	34,500	19,200	26,970	1,605,000
July	486,500	23,500	11,200	15,690	965,000
August	600,800	23,700	13,900	19,380	1,192,000
September	727,900	25,300	23,600	24,260	1,444,000
Water year 1940-41	5,575,330	34,500	5,500	15,270	11,060,000

Note.- No gage-height record Apr. 19 to July 9 and July 13 to Aug. 9; discharge computed on basis of records at stations on Colorado River below Parker Dam and at Yuma, Gila River near Dome, and records of diversions to Colorado River Indian Reservation, Palo Verde canal, All American canal, Yuma Main canal, and North Gila Valley canal at Laguna Dam, and changes in contents of Imperial Reservoir.

Colorado River at Yuma, Ariz.

Location.- Water-stage recorder, lat. 32°43'45", long. 114°37'15", in NW¼NE¼ sec. 35, T. 16 S., R. 22 E., San Bernardino meridian, 1,800 feet downstream from highway bridge at Yuma, 5 miles downstream from Gila River, 19 miles downstream from Imperial Dam, and 7 and 29 miles upstream from international boundaries of California and Arizona respectively, with Mexico. Datum of gage is 102.79 feet, datum of 1912 and 1929, and 102.25 feet (Yuma project datum) above mean sea level (subject to correction due to undetermined changes caused by earthquake of May 18, 1940).

Drainage area.- 242,900 square miles, including all closed basins entirely within the drainage boundary.

Records available.- January 1878 (revised) to December 1901 (gage heights only), January 1902 to September 1941.

Extremes.- Maximum discharge during year, 30,400 second-feet June 5, maximum gage height, 22.82 feet June 7; minimum discharge, 3,510 second-feet Feb. 21 (gage height, 14.71 feet) caused by regulation at Laguna Dam; minimum daily, 4,120 second-feet Feb. 13.
1902-41: Maximum discharge, 250,000 second-feet Jan. 22, 1916 (gage height, 34.0 feet); minimum daily, 18 second-feet Aug. 25-27, 1934, caused by diversion of river flow at Laguna Dam.

Remarks.- Records excellent. Many diversions for irrigation from Colorado River and tributaries. Principal diversions below Parker Dam are Colorado River Indian Reservation canal (p. 235), Palo Verde canal (p. 236), All-American canal (p. 31), North Gila canal (diversion in water year 1941, about 27,000 acre-feet), and Yuma main canal (p. 34). Water was by-passed around Yuma river station and returned to river half a mile downstream through Yuma main canal wasteway (p. 36). No water was returned to river this year through Pilot Knob wasteway. Flow of Colorado River regulated at Boulder, Parker, and Imperial Dams. No regulation on Gila River below Gillespie Dam. Records computed on basis of mountain standard time. During the year 195 discharge measurements were made.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	8,360	11,700	10,100	14,200	6,820	10,000	6,540	4,830	27,900	18,700	9,380	19,900
2	8,530	10,100	10,100	12,600	6,710	8,640	6,430	5,950	28,900	18,600	8,940	20,300
3	8,450	8,840	10,100	11,600	6,420	7,000	5,870	6,790	29,800	18,400	8,920	20,100
4	8,300	8,030	9,850	11,300	6,280	9,010	5,790	6,690	30,000	18,000	9,850	19,500
5	8,830	7,780	9,010	11,100	5,640	14,900	5,420	7,270	30,000	17,600	9,880	19,600
6	8,380	7,900	8,900	10,100	4,900	15,900	5,230	7,230	29,500	16,300	9,220	19,400
7	8,670	7,910	8,880	9,170	4,690	13,600	5,050	7,260	29,700	14,900	9,450	20,400
8	8,700	6,200	8,900	9,510	4,660	11,200	4,940	8,370	29,800	13,000	9,770	20,400
9	8,590	4,860	9,050	10,200	4,530	9,580	4,240	9,950	29,400	11,500	9,820	20,800
10	8,550	5,110	9,080	10,600	4,540	9,290	4,300	10,800	28,900	10,400	13,000	20,900
11	8,690	5,250	9,130	10,000	4,910	8,360	4,980	10,700	27,800	9,810	16,100	20,000
12	9,500	5,430	9,160	9,080	5,000	7,790	5,720	16,000	27,500	9,860	15,200	20,100
13	9,160	6,140	9,160	8,650	4,120	8,330	6,160	19,900	27,700	9,930	15,000	21,800
14	9,060	6,590	9,130	7,830	4,790	8,970	6,220	22,900	28,300	10,200	15,900	22,200
15	9,170	7,570	8,910	6,390	4,930	9,370	9,900	24,100	27,400	9,980	15,400	21,200
16	8,980	8,560	9,320	5,580	4,890	11,700	14,000	23,400	26,300	9,820	18,000	20,800
17	9,000	9,780	10,000	5,240	4,750	16,600	15,600	22,500	24,100	9,710	18,900	20,300
18	9,070	10,100	9,600	4,620	4,720	17,700	11,600	22,700	21,200	9,840	18,500	19,600
19	9,280	9,970	9,480	4,380	4,740	18,000	10,300	21,200	18,200	10,500	18,500	19,100
20	9,520	9,920	11,000	4,380	4,640	16,100	13,100	21,800	15,800	9,850	18,400	19,300
21	9,610	10,000	12,100	4,350	5,050	16,800	14,700	21,600	15,800	9,100	18,500	19,100
22	9,660	10,200	10,500	4,140	4,280	19,200	17,400	21,700	15,400	8,930	18,800	19,200
23	9,780	10,200	10,500	4,310	5,640	17,400	17,300	21,400	14,700	8,970	18,600	19,300
24	9,790	9,980	11,600	4,500	7,630	13,700	13,000	21,900	14,800	8,620	18,500	19,500
25	9,780	10,000	12,300	6,700	9,940	10,700	10,300	22,100	14,600	7,730	18,700	19,300
26	10,100	9,980	12,100	6,920	9,650	8,190	9,330	22,200	14,600	6,870	19,000	19,400
27	11,300	9,840	11,400	6,610	9,170	6,740	7,800	22,900	15,200	6,820	18,800	19,400
28	11,500	10,200	12,200	8,510	11,000	6,360	6,850	24,200	16,600	8,050	18,300	20,000
29	11,400	10,500	13,100	10,600	-	6,200	5,580	24,400	16,500	9,240	18,000	22,400
30	11,500	10,200	14,200	8,610	-	5,730	4,230	25,300	17,500	9,130	18,900	20,800
31	11,800	-	14,200	6,870	-	5,530	-	27,200	-	8,800	19,100	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	293,010	11,800	8,300	9,452	581,200
November	258,840	11,700	4,860	8,628	513,400
December	323,060	14,200	8,880	10,420	640,800
Calendar year 1940	2,741,350	14,200	3,220	7,490	5,437,000
January	248,650	14,200	4,140	8,021	493,200
February	165,040	11,000	4,120	5,894	327,400
March	350,490	19,200	5,530	11,310	695,200
April	257,880	17,400	4,230	8,596	511,500
May	535,240	27,200	4,830	17,270	1,062,000
June	693,900	30,000	14,600	23,130	1,376,000
July	349,160	18,700	6,820	11,260	692,500
August	473,330	19,100	8,920	15,270	938,800
September	604,100	22,400	19,100	20,140	1,198,000
Water year 1940-41	4,552,700	30,000	4,120	12,470	9,030,000

All-American canal near Imperial Dam, Calif.

Location.- Water-stage recorder, lat. 32°52'10", long. 114°28'48", in SE¼NW¼ sec. 17, T. 15 S., R. 24 E., San Bernardino meridian, on left bank, 6,000 feet downstream from canal intake at Imperial Dam. Datum of gage is 150.00 feet above mean sea level, datum of 1929 (subject to correction due to undetermined changes caused by earthquake of May 18, 1940).

Records available.- October 1939 to September 1941.

Extremes.- Maximum discharge during year, 4,410 second-feet Sept. 28 (gage height, 13.58 feet); no flow Dec. 17-21.
1939-41: Maximum discharge, that of Sept. 28, 1941; no flow part of each year.

Remarks.- Records excellent. Flow passing this station is quantity available for irrigation on projects below, except for canal losses and waste in Yuma main canal wasteway. Water first diverted from All-American canal into Yuma main canal Oct. 8, 1940.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	687	970	1,110	656	1,470	1,660	897	1,860	1,860	2,490	2,350	3,870
2	678	965	1,110	693	1,530	1,570	1,050	1,820	1,860	2,510	2,370	3,870
3	678	1,100	1,050	735	1,640	1,580	1,310	1,750	1,870	2,390	2,370	3,900
4	678	1,100	1,000	742	1,570	1,640	1,220	1,800	1,880	2,370	2,780	3,870
5	682	1,110	1,030	746	1,650	1,480	1,490	1,760	1,870	2,370	3,560	3,880
6	682	1,120	1,060	929	1,730	1,490	1,640	1,760	1,920	2,410	4,010	3,880
7	691	1,120	1,050	961	1,480	1,580	1,760	1,810	1,960	2,450	3,870	3,860
8	696	975	1,050	961	1,680	1,640	2,090	1,850	2,030	2,510	3,640	3,880
9	691	1,050	1,060	925	1,720	1,890	2,390	1,860	1,920	2,530	3,580	3,830
10	700	1,060	1,070	672	1,890	1,880	2,410	1,950	1,920	2,500	2,570	3,800
11	740	1,050	1,070	476	2,000	1,990	2,180	1,960	1,920	2,480	2,480	3,800
12	808	1,110	1,040	489	2,040	2,030	2,020	1,800	1,960	2,430	2,890	3,860
13	817	1,190	1,000	630	2,060	1,300	1,940	1,840	2,060	2,420	3,110	3,870
14	812	1,230	1,010	765	2,070	683	1,810	1,850	2,060	2,430	3,120	3,900
15	790	1,240	1,050	921	2,120	721	1,790	1,820	2,060	2,480	3,080	3,920
16	790	1,250	198	929	2,190	1,170	2,210	1,760	2,150	2,530	3,080	3,890
17	790	1,280	0	925	2,250	1,190	1,960	1,760	2,240	2,550	3,140	3,940
18	786	1,280	0	941	2,340	1,300	2,170	1,770	2,180	2,570	3,240	4,070
19	786	1,280	0	945	2,340	1,160	1,910	1,800	2,200	2,540	3,310	4,100
20	786	1,280	0	953	2,220	1,500	1,620	1,800	2,290	2,550	3,540	4,020
21	790	1,200	402	985	1,860	1,950	1,800	1,810	2,200	2,570	3,650	4,050
22	790	1,180	1,270	1,040	1,920	2,170	1,930	1,760	2,210	2,550	3,630	4,100
23	790	1,160	1,110	1,040	1,900	2,130	1,910	1,790	2,290	2,500	3,650	4,070
24	781	1,170	228	1,020	1,910	2,230	1,810	1,780	2,380	2,400	3,650	4,070
25	781	1,180	575	1,000	1,910	2,180	1,770	1,790	2,430	2,240	3,660	4,070
26	845	1,170	1,100	985	1,870	2,170	1,680	1,790	2,540	2,450	3,720	4,180
27	945	1,170	1,200	997	1,850	2,160	1,780	1,800	2,600	2,360	3,710	4,340
28	955	1,170	1,140	658	1,850	2,140	1,810	1,820	2,470	2,370	3,770	4,360
29	945	1,120	796	449	-	2,150	1,910	1,800	2,470	2,390	3,950	4,330
30	935	1,110	652	953	-	2,030	1,960	1,790	2,480	2,370	3,890	4,320
31	940	-	649	1,290	-	1,790	-	1,810	-	2,380	3,910	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	24,265	955	678	783	48,130
November	34,420	1,280	965	1,147	68,270
December	25,080	1,270	0	809	49,750
Calendar year	-	-	-	-	-
January	26,411	1,290	449	852	52,390
February	53,060	2,340	1,470	1,895	105,200
March	52,554	2,230	683	1,695	104,200
April	54,227	2,410	897	1,808	107,600
May	56,120	1,960	1,750	1,810	111,300
June	64,280	2,600	1,860	2,143	127,500
July	76,090	2,570	2,240	2,455	150,900
August	103,280	4,010	2,350	3,332	204,900
September	119,900	4,360	3,800	3,997	237,800
Water year 1940-41	689,687	4,360	0	1,890	1,368,000

All-American canal above Pilot Knob wasteway, Calif.

Location.- Water-stage recorder, lat. 32°45', long. 114°42', in SE¼ sec. 24, T. 16 S., R. 21 E., San Bernardino meridian, at bridge on U. S. Highway 80, 1 mile upstream from Pilot Knob wasteway, 5½ miles northwest of Yuma, and 19½ miles downstream from head at Imperial Dam. Datum of gage is 148.49 feet above mean sea level, datum of 1929, (subject to correction due to undetermined changes caused by earthquake of May 18, 1940).

Records available.- October 1938 to September 1941.

Extremes.- Maximum discharge during year, 2,620 second-feet Apr. 16 (gage height, 7.15 feet); maximum gage height, 9.61 feet Aug. 10; no flow on several days.
1938-41: Maximum discharge, that of Apr. 16, 1941; maximum gage height, that of Aug. 10, 1941; no flow on several days since continuous operation began Sept. 15, 1940.

Remarks.- Records good. Flow past this station less flow past station below Pilot Knob wasteway is flow wasted through Pilot Knob wasteway, except for canal losses. No flow through Pilot Knob wasteway during year except negligible leakage. First diversion from canal into Yuma main canal at siphon-drop turnout occurred on Oct. 8. Entire flow through siphon-drop power plant on Yuma main canal diverted from this canal beginning Aug. 4.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	503	694	877	409	1,140	1,410	773	1,600	1,540	2,160	2,040	1,900
2	507	712	877	409	1,220	1,210	739	1,560	1,560	2,180	2,050	1,880
3	511	751	846	459	1,320	1,260	1,090	1,530	1,540	2,100	2,020	1,950
4	515	818	814	471	1,320	1,350	967	1,580	1,560	2,100	2,000	1,900
5	515	818	800	475	1,310	1,220	1,280	1,530	1,550	2,090	1,960	1,900
6	515	828	832	565	1,460	1,190	1,380	1,510	1,560	2,110	2,050	1,900
7	524	846	832	668	1,240	1,270	1,550	1,520	1,700	2,110	1,950	1,900
8	479	769	832	694	1,340	1,280	1,720	1,590	1,800	2,150	1,790	1,890
9	420	787	841	676	1,420	1,480	2,160	1,560	1,620	2,180	1,760	1,880
10	405	818	846	590	1,520	1,530	2,210	1,650	1,630	2,160	646	1,850
11	413	818	864	313	1,670	1,600	2,000	1,680	1,610	2,160	752	1,830
12	479	823	841	257	1,750	1,710	1,830	1,530	1,630	2,140	944	1,890
13	499	890	814	310	1,740	1,180	1,760	1,590	1,770	2,100	1,180	1,930
14	511	940	805	390	1,760	673	1,570	1,620	1,780	2,120	1,120	1,930
15	507	949	836	616	1,800	360	1,550	1,570	1,760	2,140	1,080	1,920
16	503	980	470	650	1,880	687	1,960	1,490	1,770	2,190	1,110	1,910
17	507	990	0	646	1,920	920	1,740	1,610	1,880	2,200	1,210	1,920
18	511	990	0	663	2,010	909	1,940	1,510	1,810	2,210	1,260	2,020
19	515	990	0	668	2,030	910	1,750	1,500	1,820	2,210	1,350	2,100
20	519	990	0	676	2,010	1,120	1,470	1,480	1,920	2,220	1,600	2,070
21	519	972	127	703	1,660	1,530	1,470	1,510	1,880	2,220	1,720	2,100
22	524	922	980	778	1,600	1,880	1,620	1,440	1,910	2,200	1,710	2,080
23	528	918	1,060	805	1,580	1,820	1,700	1,470	1,970	2,170	1,760	2,050
24	532	913	249	787	1,610	1,920	1,570	1,460	2,040	2,100	1,760	2,080
25	524	926	357	760	1,600	1,890	1,590	1,460	2,080	1,950	1,760	2,080
26	552	922	676	747	1,560	1,840	1,460	1,470	2,190	2,110	1,770	2,140
27	659	908	931	751	1,500	1,900	1,560	1,490	2,300	2,030	1,770	2,340
28	672	922	1,000	729	1,500	1,850	1,620	1,500	2,150	2,030	1,790	2,360
29	659	913	747	208	-	1,880	1,650	1,470	2,110	2,060	1,930	2,370
30	663	890	479	515	-	1,780	1,720	1,470	2,150	2,050	1,890	2,370
31	668	-	428	914	-	1,710	-	1,500	-	2,050	1,890	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	16,358	672	405	528	32,450
November	26,407	990	694	880	52,380
December	20,051	1,060	0	647	39,770
Calendar year 1940	67,050	1,060	0	183	133,000
January	18,302	914	208	690	36,300
February	44,470	2,030	1,140	1,588	88,200
March	43,169	1,920	360	1,393	85,620
April	47,399	2,210	739	1,580	94,010
May	47,350	1,680	1,440	1,527	93,920
June	54,590	2,300	1,640	1,820	108,300
July	66,000	2,220	1,950	2,129	130,900
August	49,612	2,050	646	1,600	98,400
September	60,440	2,370	1,830	2,015	119,900
Water year 1940-41	494,148	2,370	0	1,354	980,200

All-American canal below Pilot Knob wasteway, Calif.

Location.- Water-stage recorder, lat. 32°43', long. 114°44', in SW¼ sec. 35, T. 16 S., R. 21 E., San Bernandino meridian, 1.6 miles downstream from Pilot Knob wasteway, 6½ miles west of Yuma, and 22 miles downstream from head at Imperial Dam. Datum of gage is 147.70 feet above mean sea level, datum of 1929 (subject to correction due to undetermined changes caused by earthquake of May 18, 1940).

Records available.- April 1939 to September 1941 (discharge measurements only after February 1941).

Extremes.- Maximum discharge during period October 1940 to February 1941, 1,990 second-feet Feb. 20 (gage height, 6.84 feet); minimum, 1 second-foot Dec. 21 (gage height, 1.23 feet).
1939 to February 1941: Maximum discharge, that of Feb. 20, 1941; no flow during most of 1939 and 1940.

Remarks.- Records excellent. Water passing this station is available for irrigation in Imperial Valley except for canal losses.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	474	680	884	400	1,090	-	-	†1,570	-	†2,100	†2,030	-
2	481	700	896	397	1,180	-	-	-	-	-	-	-
3	488	732	868	460	1,290	-	-	-	†1,560	-	-	†1,940
4	498	808	832	473	1,300	-	-	-	-	-	-	-
5	498	812	816	476	1,280	-	-	-	-	-	-	-
6	506	824	844	554	1,430	†1,240	-	-	-	-	-	-
7	509	840	848	672	1,210	-	-	-	-	-	-	-
8	474	768	844	696	1,300	-	†1,610	-	-	-	-	-
9	416	788	844	688	1,380	-	-	-	-	-	-	-
10	401	816	856	604	1,480	-	-	-	-	-	-	-
11	401	816	856	311	1,620	-	-	-	-	-	†396	-
12	461	828	844	250	1,710	-	-	-	-	-	-	-
13	481	896	828	297	1,710	-	-	-	-	-	-	-
14	495	948	812	379	1,720	†707	-	-	-	-	-	-
15	488	960	840	604	1,770	†370	-	†1,610	-	-	-	-
16	478	978	537	649	1,830	-	-	-	-	-	-	-
17	478	996	14	645	1,880	-	†1,640	-	-	†2,200	-	†1,920
18	478	996	10	653	1,950	-	-	-	†1,840	-	-	-
19	478	996	8	653	1,960	-	-	-	-	-	-	-
20	481	992	4	657	1,970	-	-	-	-	-	-	-
21	485	974	136	676	1,660	-	-	-	-	-	†1,650	-
22	488	936	764	756	1,590	-	-	-	-	-	-	-
23	492	932	1,060	732	1,580	-	-	-	-	-	-	-
24	492	916	270	766	1,600	-	-	-	-	-	-	-
25	485	924	333	732	1,600	-	-	-	-	-	-	-
26	512	936	607	724	1,580	†1,820	-	-	-	-	-	-
27	614	928	868	736	1,530	-	-	-	-	-	-	-
28	633	936	960	696	1,500	-	-	-	-	-	-	-
29	641	920	736	202	-	-	-	-	-	-	-	-
30	648	896	469	469	-	-	-	-	-	-	-	-
31	648	-	412	884	-	-		-	-	-	-	-

Month	Second-feet-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	15,602	648	401	503	30,950
November	26,472	996	680	882	52,510
December	19,890	1,060	4	642	39,450
Calendar year 1940	65,648	1,060	0	179	130,000
January	17,891	884	202	577	35,490
February	43,700	1,970	1,090	1,561	86,680
March	-	-	-	-	-
April	-	-	-	-	-
May	-	-	-	-	-
June	-	-	-	-	-
July	-	-	-	-	-
August	-	-	-	-	-
September	-	-	-	-	-
The period	-	-	-	-	245,100

† Result of discharge measurement.

Yuma main canal at siphon-drop power plant, near Yuma, Ariz.

Location.- Two gages consisting of staff gage on forebay and water-stage recorder on tailrace at power plant, lat. 32°46'30", long. 114°38'00", in SE¼SE¼ sec. 10, T. 16 S., R. 22 E., San Bernardino meridian, 500 feet downstream from turnout in All-American canal to Yuma main canal, 3⅞ miles north of Yuma, 10⅞ miles downstream from head of Yuma main canal at Laguna Dam, and 14⅞ miles downstream from head of All-American canal at Imperial Dam. Datum of each gage is at mean sea level, Yuma project datum, or 0.70 foot above mean sea level, datum of 1929, (subject to correction due to undetermined changes caused by earthquake of May 18, 1940).

Records available.- October 1938 to September 1941.

Extremes.- Maximum discharge during year, 1,900 second-feet Aug. 31, Sept. 13, 14; minimum, 490 second-feet Aug. 4.
1938-41: Maximum discharge, that of Aug. 31, Sept. 13, 14, 1941; no flow Sept. 5-11, 1939.

Remarks.- Records excellent Oct. 1 to Aug. 17 and good thereafter. Daily discharge determined from flow through turbines, computed from relation between discharge, head, and gate openings, to which is added small discharge bypassed around power plant through waste gates. Bypassed discharge computed on basis of gage readings at forebay, and record of gate openings, by orifice formula. Rating of turbines checked by current-meter measurements. Records show quantity of water available for irrigation on Valley division of Yuma project and that available for spill through Yuma main canal wasteway 3 miles downstream. The All-American canal first diverted water to the Yuma main canal above the power plant on Oct. 8 and furnished all the water at this point after Aug. 4.

Cooperation.- Record of gage heights at forebay and of turbine gate openings furnished by Bureau of Reclamation.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,530	1,710	1,750	1,750	1,790	1,740	1,720	1,730	1,770	1,730	1,790	1,850
2	1,570	1,730	1,720	1,750	1,800	1,760	1,700	1,770	1,710	1,760	1,790	1,840
3	1,590	1,730	1,720	1,760	1,780	1,730	1,730	1,580	1,700	1,760	1,780	1,840
4	1,600	1,700	1,710	1,760	1,740	1,750	1,740	1,790	1,730	1,770	879	1,850
5	1,370	1,710	1,720	1,760	1,740	1,740	1,770	1,730	1,710	1,780	1,330	1,860
6	1,600	1,720	1,740	1,730	1,740	1,750	1,780	1,720	1,730	1,770	1,720	1,890
7	1,580	1,730	1,750	1,760	1,740	1,760	1,740	1,740	1,770	1,700	1,790	1,890
8	1,630	1,720	1,760	1,800	1,760	1,760	1,730	1,760	1,780	1,680	1,800	1,860
9	1,710	1,730	1,740	1,770	1,770	1,770	1,730	1,750	1,700	1,710	1,820	1,840
10	1,710	1,740	1,740	1,660	1,730	1,710	1,750	1,760	1,700	1,750	1,840	1,880
11	1,720	1,730	1,730	1,710	1,760	1,720	1,790	1,790	1,730	1,770	1,760	1,880
12	1,730	1,720	1,740	1,780	1,750	1,740	1,800	1,710	1,740	1,770	1,760	1,890
13	1,730	1,730	1,750	1,770	1,770	1,760	1,800	1,710	1,770	1,780	1,770	1,900
14	1,690	1,740	1,750	1,720	1,780	1,640	1,730	1,750	1,770	1,710	1,870	1,900
15	1,680	1,750	1,760	1,810	1,790	1,750	1,710	1,760	1,780	1,690	1,860	1,870
16	1,680	1,750	1,600	1,820	1,800	1,760	1,760	1,770	1,710	1,710	1,850	1,850
17	1,680	1,750	1,590	1,800	1,740	1,750	1,780	1,760	1,700	1,730	1,860	1,850
18	1,700	1,740	1,590	1,810	1,730	1,750	1,780	1,770	1,720	1,740	1,830	1,860
19	1,730	1,730	1,600	1,820	1,780	1,750	1,780	1,710	1,720	1,790	1,840	1,860
20	1,730	1,740	1,600	1,780	1,790	1,750	1,780	1,710	1,760	1,780	1,840	1,870
21	1,690	1,760	1,390	1,770	1,460	1,760	1,730	1,750	1,590	1,710	1,850	1,890
22	1,690	1,750	1,600	1,770	1,760	1,780	1,730	1,760	1,780	1,710	1,840	1,860
23	1,690	1,750	1,690	1,770	1,780	1,770	1,740	1,760	1,710	1,730	1,860	1,850
24	1,690	1,750	1,730	1,770	1,740	1,740	1,750	1,770	1,580	1,760	1,860	1,850
25	1,700	1,720	1,730	1,780	1,730	1,730	1,760	1,770	1,710	1,780	1,800	1,860
26	1,720	1,740	1,740	1,780	1,750	1,750	1,770	1,700	1,750	1,790	1,840	1,860
27	1,730	1,730	1,750	1,740	1,770	1,780	1,780	1,680	1,770	1,790	1,830	1,870
28	1,700	1,750	1,750	1,750	1,740	1,770	1,710	1,730	1,780	1,720	1,830	1,860
29	1,720	1,730	1,750	1,710	-	1,760	1,690	1,750	1,780	1,730	1,880	1,820
30	1,710	1,740	1,740	1,750	-	1,780	1,640	1,750	1,720	1,740	1,880	1,820
31	1,710	-	1,720	1,780	-	1,730	-	1,750	-	1,750	1,900	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	51,710	1,730	1,370	1,668	102,600
November	52,020	1,760	1,700	1,734	103,200
December	52,650	1,760	1,390	1,698	104,400
Calendar year 1940	601,710	1,760	1,340	1,644	1,193,000
January	54,690	1,820	1,660	1,764	108,500
February	49,010	1,800	1,460	1,750	97,210
March	54,190	1,780	1,640	1,748	107,500
April	52,400	1,800	1,640	1,747	103,900
May	53,940	1,790	1,580	1,740	107,000
June	51,970	1,780	1,590	1,732	103,100
July	54,090	1,790	1,680	1,745	107,300
August	55,149	1,900	879	1,779	109,400
September	55,870	1,900	1,820	1,862	110,800
Water year 1940-41	637,689	1,900	879	1,747	1,265,000

Yuma main canal below Colorado River siphon, at Yuma, Ariz.

Location.- Two gages determine head on Colorado River siphon. At intake, water-stage recorder, lat. 32°43'45", long. 114°37'15", in SW¼SE¼ sec. 26, T. 16 S., R. 22 E., San Bernardino meridian, on California side of river, 500 feet downstream from Yuma main canal wasteway and 3 miles downstream from siphon drop power plant. At outlet, water-stage recorder in NW¼NE¼ sec. 35, T. 16 S., R. 22 E., San Bernardino meridian, on Arizona side of river. Both gages are a quarter of a mile downstream from highway bridge over Colorado River at Yuma. Datum of each gage is 100.00 feet (Yuma project datum) or 100.54 feet (datum of 1929) above mean sea level (subject to correction due to undetermined changes caused by earthquake of May 18, 1940.

Records available.- October 1938 to September 1941.

Extremes.- Maximum discharge during year, 718 second-feet June 10 (head, 1.55 feet); no flow May 3.
1938-41 (regulated): Maximum discharge, 784 second-feet Apr. 11, 1939 (head, 1.65 feet); no flow during short periods in each year.

Remarks.- Records excellent. Daily discharge computed from relation between discharge and head on siphon, which is the difference between readings of stages at intake and outlet gages. Records show quantity of water delivered immediately below Yuma main canal wasteway to Valley division of Yuma project for irrigation.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	697	665	423	342	358	338	479	450	301	621	456	460
2	701	601	586	338	346	334	454	393	635	591	365	511
3	691	579	588	342	495	482	323	255	651	572	315	517
4	633	658	570	342	537	462	260	216	632	461	488	541
5	523	680	557	334	579	403	242	408	579	435	535	507
6	454	666	531	391	585	403	216	442	493	395	531	414
7	627	640	470	407	557	391	485	424	352	591	476	346
8	627	624	415	403	467	367	550	367	306	626	465	647
9	603	570	557	397	407	363	541	325	660	632	356	651
10	620	504	567	342	591	534	511	264	698	626	319	612
11	614	579	534	311	626	567	363	170	639	632	537	579
12	544	654	451	315	600	555	271	501	557	547	579	486
13	486	648	411	346	553	483	209	567	474	412	588	435
14	654	612	391	346	500	340	460	554	315	646	521	375
15	691	546	383	342	462	159	476	479	259	671	442	585
16	675	497	536	346	399	107	423	399	595	640	358	637
17	654	493	524	338	578	207	387	286	667	603	286	637
18	606	620	445	319	614	260	306	195	644	549	456	637
19	557	603	375	315	582	276	254	528	612	411	465	667
20	490	536	371	390	582	229	202	588	556	346	435	606
21	656	472	360	407	547	271	506	489	448	579	436	504
22	701	497	367	431	427	301	534	431	383	600	454	633
23	693	476	521	419	383	286	500	351	611	540	393	678
24	693	454	464	389	538	495	466	246	637	440	342	669
25	667	600	395	359	551	567	337	195	616	402	538	646
26	592	617	395	334	535	579	210	601	588	331	603	609
27	517	594	391	482	382	613	170	632	503	320	594	565
28	649	547	368	469	363	585	511	574	407	528	570	476
29	667	524	338	419	-	484	551	486	391	564	564	649
30	647	464	466	403	-	391	517	465	602	531	442	653
31	665	-	404	399	-	531	-	362	-	527	371	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	19,294	701	454	622	38,270
November	17,220	630	454	574	34,160
December	14,154	588	338	457	28,070
Calendar year 1940	204,169	728	2	559	405,000
January	11,517	482	311	372	22,840
February	14,144	626	346	505	28,050
March	12,363	613	107	399	24,520
April	11,714	551	170	390	23,230
May	12,643	632	170	408	25,080
June	15,611	698	259	527	31,360
July	16,369	671	320	528	32,470
August	14,282	603	286	461	28,330
September	16,932	678	346	564	33,580
Water year 1940-41	176,443	701	107	483	350,000

Yuma main canal wasteway at Yuma, Ariz.

Location.- Water-stage recorders on Yuma main canal determining flow to wasteway at gates, lat. 32°44'00", long. 114°37'15", in SW¼SE¼ sec. 26, T. 16 S., R. 22 E., San Bernardino meridian, 500 feet upstream from intake of Colorado River siphon on Yuma main canal, half a mile north of Yuma, and 3 miles downstream from siphon drop power plant.

Records available.- April 1913 to September 1941 (prior to October 1930, yearly discharge only, in Water-Supply Paper 879; 1930-38, published as separate table with records for Colorado River at Yuma, Ariz.).

Extremes.- Maximum daily discharge during year, 1,650 second-feet Mar. 16; minimum daily, 391 second-feet Aug. 4.
1930-41: Maximum daily discharge, 1,900 second-feet Feb. 21, 1932; no flow several days in 1937, 1938, and 1939.

Remarks.- Records good. Discharge computed as difference between discharge of Yuma main canal at siphon drop power plant and that of same canal below Colorado River siphon, with deduction for small irrigation diversion from canal between those stations. All flow in Yuma main canal wasteway is returned to Colorado River half a mile downstream from station on Colorado River at Yuma, and all flow bypasses that station.

Cooperation.- Record of diversions for irrigation from Yuma Main canal furnished by Bureau of Reclamation.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	823	1,040	1,330	1,410	1,430	1,400	1,240	1,280	1,470	1,100	1,330	1,380
2	866	1,130	1,130	1,410	1,450	1,430	1,240	1,380	1,070	1,160	1,420	1,320
3	899	1,150	1,120	1,420	1,280	1,250	1,400	1,320	1,040	1,180	1,460	1,310
4	967	1,040	1,130	1,420	1,200	1,290	1,480	1,570	1,090	1,310	391	1,300
5	847	1,020	1,160	1,430	1,160	1,340	1,530	1,320	1,130	1,340	795	1,340
6	1,150	1,040	1,210	1,340	1,150	1,350	1,560	1,280	1,240	1,380	1,190	1,480
7	947	1,080	1,280	1,350	1,180	1,370	1,250	1,320	1,420	1,100	1,310	1,540
8	995	1,100	1,340	1,400	1,290	1,390	1,170	1,390	1,470	1,040	1,340	1,210
9	1,110	1,160	1,180	1,370	1,360	1,410	1,180	1,420	1,030	1,070	1,460	1,180
10	1,090	1,240	1,170	1,310	1,140	1,170	1,240	1,500	1,000	1,120	1,520	1,270
11	1,110	1,150	1,200	1,400	1,130	1,140	1,430	1,620	1,090	1,140	1,220	1,300
12	1,190	1,060	1,290	1,460	1,150	1,180	1,530	1,200	1,180	1,220	1,170	1,400
13	1,240	1,080	1,340	1,420	1,220	1,280	1,590	1,130	1,300	1,370	1,170	1,460
14	1,030	1,130	1,360	1,370	1,280	1,300	1,260	1,200	1,460	1,050	1,340	1,520
15	988	1,200	1,380	1,470	1,330	1,590	1,230	1,280	1,520	1,010	1,420	1,280
16	1,000	1,250	1,060	1,470	1,400	1,650	1,340	1,370	1,110	1,060	1,490	1,200
17	1,030	1,260	1,070	1,460	1,150	1,540	1,390	1,470	1,020	1,120	1,570	1,210
18	1,090	1,120	1,140	1,490	1,110	1,490	1,470	1,580	1,080	1,190	1,370	1,220
19	1,170	1,130	1,220	1,500	1,200	1,470	1,530	1,180	1,110	1,380	1,380	1,190
20	1,240	1,200	1,230	1,390	1,210	1,520	1,580	1,110	1,200	1,430	1,400	1,260
21	1,030	1,290	1,030	1,360	913	1,490	1,220	1,260	1,140	1,120	1,410	1,390
22	984	1,250	1,230	1,340	1,330	1,480	1,190	1,330	1,400	1,100	1,390	1,220
23	997	1,270	1,170	1,350	1,400	1,480	1,240	1,410	1,090	1,190	1,470	1,160
24	997	1,300	1,270	1,380	1,200	1,240	1,280	1,520	1,030	1,320	1,520	1,170
25	1,030	1,120	1,340	1,420	1,180	1,150	1,440	1,580	1,080	1,380	1,250	1,200
26	1,130	1,120	1,340	1,450	1,220	1,170	1,550	1,100	1,160	1,460	1,230	1,250
27	1,210	1,140	1,360	1,250	1,390	1,170	1,610	1,040	1,270	1,470	1,240	1,300
28	1,050	1,200	1,380	1,280	1,380	1,180	1,190	1,150	1,370	1,190	1,260	1,380
29	1,050	1,210	1,410	1,290	-	1,280	1,130	1,260	1,390	1,170	1,320	1,160
30	1,060	1,280	1,270	1,350	-	1,390	1,120	1,280	1,110	1,210	1,440	1,160
31	1,040	-	1,320	1,380	-	1,190	-	1,390	-	1,220	1,530	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	32,360	1,240	823	1,044	64,190
November	34,760	1,300	1,020	1,159	68,950
December	38,460	1,410	1,030	1,241	76,280
Calendar year 1940	396,595	1,700	823	1,084	786,600
January	43,140	1,500	1,250	1,392	85,570
February	34,833	1,450	913	1,244	69,090
March	41,780	1,650	1,140	1,348	82,870
April	40,610	1,610	1,120	1,354	80,550
May	41,240	1,620	1,040	1,330	81,800
June	36,070	1,520	1,000	1,202	71,540
July	37,600	1,470	1,010	1,213	74,580
August	40,806	1,570	391	1,316	80,940
September	38,760	1,540	1,160	1,292	76,880
Water year 1940-41	460,419	1,650	391	1,261	913,200

Arapaho Creek below Monarch Lake, Colo.

Location.- Water-stage recorder, lat. 40°08' (revised), long. 105°46', in SE¼ sec. 15, T. 2 N., R. 75 W., 700 feet downstream from Roaring Fork, 2½ miles downstream from outlet of Monarch Lake, and 10 miles east of Granby. Datum of gage is 8,244.30 feet above mean sea level, datum of 1929.

Drainage area.- 59 square miles.

Records available.- June 1935 to September 1941.

Extremes.- Maximum discharge during year, 726 second-feet June 19 (gage height, 2.89 feet); minimum, 3.5 second-feet Jan. 14, probably less during winter.
1934-41: Maximum discharge, 1,380 second-feet June 22, 1938 (gage height, 4.31 feet), from rating curve extended above 900 second-feet; minimum 2.5 second-feet Jan. 13, 1940.

Remarks.- Records good except those for period of ice effect, which are fair. Flow partly regulated by Monarch Lake. Small diversions for irrigation above station. Several second-feet diverted around station by power canal during summer months.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	61	19					8.0	50	420	235	52	28
2	59	19					8.0	68	400	208	51	27
3	61	19					7.8	108	400	188	48	26
4	59	18					7.6	134	420	198	45	24
5	54	19					7.8	130	420	201	46	22
6	52	18					8.0	108	392	194	46	19
7	51	18					8.0	87	361	188	44	19
8	51	18					8.0	68	373	188	51	19
9	51	18					8.2	81	357	191	61	19
10	50	18					8.4	154	346	184	61	21
11	48	16			(*)		8.8	269	342	177	54	23
12	44	14					9.2	357	357	164	52	25
13	38	11					9.4	536	342	108	50	28
14	35	10		(*)			9.2	642	332	71	52	32
15	32	10	8.5	6.0	5.5	6.5	9.4	594	328	87	51	37
16	30	11					10	424	392	96	52	40
17	28	13					11	369	510	102	56	40
18	26	13					10	458	629	102	56	38
19	25	12					11	380	712	96	56	36
20	24	12					11	321	677	96	54	34
21	23	11					11	310	616	99	51	31
22	22	11					10	396	585	99	48	27
23	22	10					11	376	536	90	44	26
24	21	10					12	432	479	84	44	27
25	20	10					15	510	420	78	40	29
26	19	10					17	550	416	84	38	30
27	19	10				(*)	18	528	361	84	37	30
28	19	10					*25	441	324	73	36	31
29	19	10			-		37	404	279	68	34	30
30	19	11			-		44	392	256	56	31	30
31	19	-			-		-	408	-	56	30	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	1,101	61	19	35.5	2,180
November	409	19	10	13.6	811
December	263.5	-	-	8.5	523
Calendar year 1940	29,668.5	638	-	81.1	58,830
January	186	-	-	6.0	369
February	154	-	-	5.5	305
March	201.5	-	-	6.5	400
April	378.8	44	7.6	12.6	751
May	10,085	642	60	325	20,000
June	12,782	712	256	426	25,350
July	3,945	235	56	127	7,820
August	1,471	61	30	47.5	2,920
September	848	40	19	28.3	1,680
Water year 1940-41	31,824.8	712	-	87.2	63,110

* Winter discharge measurement made on this day.
Note.- Stage-discharge relation affected by ice Nov. 11 to Apr. 26.

Willow Creek near Granby, Colo.

Location.- Water-stage recorder, lat. 40°11', long. 106°00', in NW¼ sec. 34, T. 3 N., R. 77 W., 100 feet downstream from Gold Run Creek and 7 miles northwest of Granby. Datum of gage is 8,240.99 feet above mean sea level, datum of 1929.

Drainage area.- 105 square miles.

Records available.- April 1935 to September 1941.

Extremes.- Maximum discharge during year, 680 second-feet May 13 (gage height, 4.08 feet), from rating curve extended above 530 second-feet; minimum daily, 6.0 second-feet Dec. 15, 16, 27.

1935-41: Maximum discharge, 811 second-feet May 16, 1938 (gage height, 4.49 feet), from rating curve extended above 530 second-feet; minimum not determined, occurred during period of ice effect.

Remarks.- Records good except those for periods of ice effect and those for June, which are fair. Water diverted above station for irrigation of hay meadows.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	18	12	8.0	7.6	6.6	7.8	16	96	216	72	18	13
2	17	11	8.2	7.4	6.6	7.8	16	120	200	71	17	13
3	17	12	8.0	7.0	6.8	7.8	15	149	191	64	16	13
4	15	13	8.0	6.6	6.8	7.6	16	174	184	60	15	13
5	14	12	7.8	6.2	6.8	7.6	15	142	180	59	15	13
6	18	*13	7.6	6.2	6.8	7.8	16	124	168	56	18	13
7	15	13	7.6	6.4	7.0	8.0	16	109	168	55	19	13
8	14	12	7.6	6.6	7.2	8.2	15	144	160	52	18	20
9	15	13	7.6	7.0	7.4	8.0	15	226	156	48	17	18
10	15	12	7.8	7.2	7.4	7.5	16	327	153	46	18	19
11	14	11	7.6	7.4	7.2	7.5	17	412	142	43	24	19
12	15	10	7.0	7.2	7.0	7.7	22	492	137	43	30	17
13	13	9.5	6.7	7.0	7.0	8.0	24	599	136	43	24	16
14	*13	8.0	6.4	*6.9	7.2	8.2	22	638	128	50	18	20
15	12	9.0	6.0	6.9	7.4	8.5	22	560	128	43	17	17
16	14	10	6.0	7.0	7.2	8.8	31	464	139	39	18	15
17	15	11	6.2	6.8	7.5	8.8	26	442	151	35	20	14
18	15	11	7.0	6.6	7.8	9.0	22	447	151	34	26	14
19	15	10	7.2	6.6	*8.0	10	23	422	153	33	19	13
20	15	9.6	7.0	6.8	8.0	11	20	380	151	35	17	13
21	14	9.8	6.4	7.0	8.2	12	20	353	144	32	16	13
22	14	9.6	6.6	7.0	8.2	12	21	351	142	29	17	13
23	14	9.2	7.2	7.1	8.4	12	*26	344	132	26	17	14
24	12	9.0	7.2	7.4	8.4	12	29	336	129	25	16	14
25	12	8.5	7.0	7.0	8.5	13	27	322	121	24	16	14
26	12	8.2	6.8	7.0	8.4	14	33	312	112	31	17	14
27	12	8.0	6.0	6.4	8.0	*14	40	298	100	25	15	13
28	13	8.0	6.4	6.4	7.5	13	46	272	90	22	14	13
29	12	8.2	7.0	6.2	-	13	54	255	82	20	13	13
30	12	8.2	7.4	6.2	-	13	76	231	75	20	14	13
31	12	-	7.6	6.5	-	14	-	221	-	19	13	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	438	18	12	14.1	869
November	308.8	13	8.0	10.3	612
December	220.9	8.2	6.0	7.13	438
Calendar year 1940	15,188.3	298	6.0	41.5	30,130
January	211.6	7.6	6.2	6.83	420
February	209.3	8.5	6.6	7.48	415
March	307.6	14	7.5	9.92	610
April	756	76	15	25.2	1,500
May	9,762	638	96	315	19,360
June	4,339	216	75	145	8,610
July	1,254	72	19	40.5	2,490
August	552	30	13	17.8	1,090
September	440	20	13	14.7	873
Water year 1940-41	18,799.2	638	6.0	51.5	37,290

* Winter discharge measurement made on this day.
Note.- Stage-discharge relation affected by ice Nov. 5 to Mar. 30, Apr. 1-3.

Fraser River near Winter Park, Colo.

Location.- Water-stage recorder, lat. 39°54'00", long. 105°46'35", in NE¼ sec. 4, T. 2 S., R. 75 W., 1½ miles northwest of Winter Park and 2½ miles downstream from point of diversion for Moffat tunnel.

Drainage area.- 27.6 square miles.

Records available.- September 1910 to September 1930 and September 1933 to September 1941 in reports of Geological Survey. September 1910 to September 1941 in reports of State engineer. Records since June 9, 1936, equivalent to earlier records if flow through Pioneer bore of Moffat tunnel is added to flow past station.

Average discharge.- 31 years, 43.1 second-feet (including diversion through Moffat tunnel).

Extremes.- Maximum discharge during year, 64 second-feet Oct. 16 (gage height, 0.85 foot); minimum daily, 3.4 second-feet Sept. 1-7. Fraser River and diversion to Moffat tunnel combined: maximum 274 second-feet June 18, minimum daily, 6.2 second-feet Jan. 28.

1910-41: Maximum discharge, 820 second-feet June 13, 1918 (gage height, 2.9 feet); minimum, 2 second-feet Mar. 30, 1912.

Remarks.- Records good except those for periods of ice effect, which are fair. Small diversion through Berthoud Pass. Considerable portion of flow above station diverted to Moffat tunnel.

Cooperation.- Records of diverted flow through Pioneer bore of Moffat tunnel furnished by State engineer.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	6.2	13	10	9.1	7.2	8.0	12	24	21	11	4.9	3.4
2	5.6	15	9.9	8.5	6.6	8.2	11	28	20	10	4.6	3.4
3	5.2	13	9.5	7.0	6.4	7.5	10	27	19	9.5	4.9	3.4
4	5.2	13	9.0	6.5	6.4	8.0	9.9	22	19	9.1	4.9	3.4
5	5.9	10	9.0	7.0	6.4	8.6	11	22	20	9.1	4.9	3.4
6	6.5	8.5	9.2	7.5	6.4	8.2	11	19	19	8.2	4.9	3.4
7	5.9	14	9.5	7.0	6.5	8.6	10	19	20	8.2	7.5	3.4
8	5.6	*14	9.5	8.0	6.6	7.0	10	22	19	7.8	6.2	4.6
9	5.6	13	9.5	7.5	7.0	7.8	11	26	19	7.5	4.6	5.2
10	5.6	12	9.1	7.5	*7.2	7.0	12	30	23	7.5	4.6	5.6
11	5.2	10	8.6	7.5	7.2	7.5	13	30	20	7.2	5.2	4.9
12	5.2	8.5	8.0	7.2	7.2	6.6	17	33	19	7.2	6.8	4.4
13	5.2	7.5	9.1	*6.8	7.2	7.0	16	35	18	7.2	5.6	4.4
14	5.2	8.0	7.5	6.5	7.2	7.8	13	32	16	6.8	4.4	4.9
15	6.8	9.0	8.0	6.5	7.2	8.6	12	29	15	6.8	4.4	4.6
16	32	11	7.0	6.5	7.2	8.0	13	29	14	6.8	4.6	4.4
17	22	12	8.0	6.5	7.2	8.4	14	29	14	6.5	4.9	4.4
18	19	12	8.6	6.5	7.2	9.0	12	26	13	6.5	4.4	4.4
19	18	12	7.5	6.5	7.2	9.5	12	25	13	6.5	4.1	4.1
20	17	11	8.2	6.5	7.2	9.9	12	22	13	6.8	4.1	4.1
21	16	11	7.2	6.5	7.2	9.9	12	22	13	7.2	4.1	4.1
22	16	10	8.0	6.5	7.2	10	13	22	13	7.5	3.9	4.1
23	16	8.5	9.0	6.5	7.2	11	14	22	12	6.2	3.9	4.6
24	16	11	9.1	6.8	7.2	*11	15	22	13	5.9	3.7	4.6
25	16	10	9.1	6.8	7.2	10	17	22	13	6.2	3.7	4.9
26	15	9.9	9.1	7.5	7.0	10	21	23	12	6.5	3.9	4.6
27	16	9.0	8.5	6.8	6.4	10	23	22	12	6.5	3.9	4.6
28	15	9.9	8.8	6.2	7.0	12	24	22	11	5.9	3.7	4.4
29	14	9.9	9.5	6.8	-	11	23	22	11	5.6	3.7	4.9
30	14	10	9.1	7.2	-	9.9	22	22	11	5.2	3.7	4.9
31	14	-	9.1	7.2	-	11	-	22	-	4.9	3.7	-

Month	Observed					Diversion by Moffat tunnel (acre-feet)	Adjusted for diversion	
	Second-foot-days	Maximum	Minimum	Mean	Run-off (acre-feet)		Run-off (acre-feet)	Mean (second-feet)
October	360.9	32	8.2	11.6	716	473	1,190	19.3
November	325.7	15	7.5	10.9	646	0	646	10.9
December	271.2	10	7.0	8.75	538	0	538	8.75
Calendar year 1940	3,554.6	32	3.7	9.71	7,050	14,960	22,010	30.3
January	217.4	9.1	6.2	7.01	431	0	431	7.01
February	195.1	7.2	6.4	6.97	387	0	387	6.97
March	277.0	12	6.6	8.94	549	0	549	8.94
April	425.9	24	9.9	14.2	845	0	845	14.2
May	772	35	19	24.9	1,530	4,250	5,780	94.1
June	475	23	11	15.8	942	8,910	9,850	166
July	223.8	11	4.9	7.22	444	3,670	4,110	66.9
August	142.4	7.5	3.7	4.59	282	1,840	2,120	34.6
September	129.5	5.6	3.4	4.32	257	1,010	1,270	21.2
Water year 1940-41	3,815.9	35	3.4	10.5	7,570	20,150	27,720	38.3

* Winter discharge measurement made on this day.

Note.- Stage discharge relation affected by ice Nov. 5, 6, 10-17, 23, 27, Dec. 3-8, 11-17, 19, 21-23, 27, 28, Jan. 2-9, 28, 29; Feb. 2-9, 26-28, Mar. 1, 4, 8-13, 16-19.

Fraser River at Granby, Colo.

Location.- Water-stage recorder, lat. 40°05', long. 105°57', in sec. 1, T. 1 N., R. 76½ W., just downstream from Tenmile Creek, half a mile southwest of Granby and 2½ miles upstream from mouth.

Drainage area.- 285 square miles.

Records available.- August 1904 to September 1909, September 1937 to September 1941. Records for August 1904 to September 1909 at site just below Tenmile Creek (published erroneously in Water-Supply Paper 617 as 2 miles downstream from Tenmile Creek). Records since September 1937 equivalent to earlier records if flow through Pioneer bore of Moffat tunnel is added to flow past station.

Extremes.- Maximum discharge during year, 867 second-feet May 14 (gage height, 2.45 feet); minimum daily, 28 second-feet Nov. 13.
1904-9, 1938-41: Maximum daily discharge, 1,860 second-feet June 14, 15, 1906; probable minimum daily, 25 second-feet Sept. 22, 1939.

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

Cooperation.- Records of flow diverted through Pioneer bore of Moffat tunnel furnished by State engineer.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	77	55	59	43	33	48	170	292	458	203	49	40
2	66	64	57	39	33	44	164	308	436	183	46	41
3	59	64	56	37	33	44	154	361	415	154	43	39
4	52	68	52	36	34	44	148	376	415	134	41	37
5	54	44	52	35	34	45	148	292	420	126	57	37
6	79	*77	51	35	34	46	145	276	415	113	83	36
7	64	75	49	36	34	46	140	228	405	102	62	37
8	61	75	*49	37	35	47	137	224	412	96	71	57
9	62	70	47	38	36	46	137	300	420	93	59	61
10	68	57	44	39	36	45	137	370	405	89	65	64
11	61	40	44	39	*35	47	137	463	370	81	62	61
12	57	30	43	38	35	48	170	523	338	87	83	55
13	55	28	41	38	35	50	190	681	352	87	83	62
14	62	29	38	38	36	52	154	770	316	95	62	57
15	51	36	35	38	36	54	148	694	312	111	61	54
16	59	45	35	37	37	54	140	562	347	102	61	49
17	85	57	35	36	38	54	140	596	352	91	83	47
18	71	58	35	35	39	56	129	632	395	83	70	46
19	70	57	36	35	41	60	129	556	528	89	62	46
20	70	53	36	34	42	64	129	501	534	81	71	44
21	68	50	36	*34	42	66	129	486	501	73	71	44
22	66	51	37	34	41	68	132	517	452	57	62	41
23	68	54	39	34	41	70	142	506	431	46	61	44
24	64	58	39	35	41	80	126	623	436	47	57	47
25	66	60	38	36	42	85	132	534	474	44	54	49
26	66	58	38	36	43	88	145	550	390	64	54	49
27	70	54	36	35	44	91	183	550	342	64	51	44
28	68	51	39	35	45	98	265	490	300	62	47	41
29	62	52	41	35	-	*111	300	523	257	57	46	43
30	70	56	42	34	-	161	292	479	200	55	47	46
31	68	-	44	34	-	139	-	463	-	51	43	-

Month	Observed					Diversion by Moffat tunnel (acre-feet)	Adjusted for diversion	
	Second-foot-days	Maximum	Minimum	Mean	Run-off (acre-feet)		Run-off (acre-feet)	Mean (second-feet)
October	2,009	79	51	64.8	3,980	966	4,950	80.5
November	1,624	77	28	54.1	3,220	0	3,220	54.1
December	1,324	69	35	42.7	2,630	0	2,630	42.7
Calendar year 1940	35,040	436	27	95.7	69,490	28,870	98,360	135
January	1,126	43	34	36.3	2,230	0	2,230	36.3
February	1,054	45	33	37.6	2,090	0	2,090	37.6
March	2,038	151	44	65.7	4,040	0	4,040	65.7
April	4,792	300	126	160	9,500	0	9,500	160
May	14,624	770	224	472	29,010	8,310	37,320	607
June	11,828	534	200	394	23,460	14,530	37,990	638
July	2,819	203	44	90.9	5,590	7,200	12,790	208
August	1,877	83	41	60.5	3,720	3,370	7,090	116
September	1,408	64	36	46.9	2,790	1,910	4,700	79.0
Water year 1940-41	46,522	770	28	127	92,260	36,290	128,550	178

* Winter discharge measurement made on this day.
Note.- Stage-discharge relation affected by ice Nov. 12-30, Dec. 14 to Mar. 31.

Vasquez Creek near Winter Park, Colo.

Location.- Water-stage recorder, lat. 39°55'15", long. 105°47'05", in NW¼ sec. 33, T. 1 S., R. 75 W., a quarter of a mile upstream from mouth, 1½ miles downstream from Moffat tunnel diversion, and 2½ miles northwest of Winter Park. Datum of gage is 8,768.48 feet above mean sea level, unadjusted.

Drainage area.- 27.8 square miles.

Records available.- June 1907 to October 1909, August 1934 to September 1941. Records since May 26, 1937, equivalent to earlier records if flow through Pioneer bore of Moffat tunnel is added to flow past station.

Extremes.- Maximum discharge during year, 187 second-feet June 18 (gage height, 2.08 feet); minimum daily, 0.2 second-foot July 2, 3. Vasquez Creek and diversion to Moffat tunnel combined: maximum not determined; minimum 4 second-feet Feb. 1-5, 26-28.

1934-41: Maximum discharge, 396 second-feet June 15, 1935 (gage height, 2.64 feet); minimum daily, 0.1 second-foot June 4, 5, 8-27, 29, 30, July 3, 7-17, 21-24, 1940.

Remarks.- Records good except those for periods of ice effect, which are fair. Considerable portion of flow above station diverted to Moffat tunnel.

Cooperation.- Records of diverted flow through Pioneer bore of Moffat tunnel furnished by State engineer.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3.5	11	8.4	7.6	4.0	4.5	7.2	13	1.6	0.3	0.7	0.6
2	3.1	12	8.4	7.2	4.0	6.0	7.4	16	1.5	.2	.6	.6
3	2.8	12	8.8	6.4	4.0	6.0	7.4	22	1.4	.2	.6	.6
4	2.6	11	8.4	7.2	4.0	5.6	7.4	23	1.4	.3	.6	.6
5	2.8	9.0	8.8	7.2	4.0	5.6	7.5	16	1.3	.4	.6	.6
6	3.1	9.0	9.2	6.8	4.5	6.0	7.5	15	1.2	.4	.7	.6
7	3.1	11	8.8	6.4	4.5	5.6	7.5	13	1.1	.3	.7	.7
8	2.8	*13	9.2	7.2	4.5	5.0	7.5	15	1.0	.3	.8	1.2
9	2.8	12	11	7.2	4.5	5.6	7.6	28	1.0	.3	.6	1.2
10	3.1	11	10	7.2	4.5	5.6	7.6	34	1.2	.3	.9	1.2
11	2.8	9.0	8.6	7.2	5.6	5.6	7.6	28	1.2	.3	1.3	1.2
12	2.8	8.0	7.8	7.6	5.6	5.6	8.4	30	2.0	.7	1.5	1.0
13	2.8	7.2	7.5	*8.0	5.6	5.6	9.6	34	1.6	.6	1.0	1.0
14	2.8	7.5	7.4	8.0	6.0	6.4	8.5	22	.8	.6	.8	1.1
15	3.1	8.0	7.4	6.8	6.6	6.0	6.0	17	.7	.6	.9	1.0
16	13	9.5	7.2	6.8	5.6	6.0	8.8	15	.7	.4	1.1	.9
17	13	12	7.2	6.8	5.2	6.0	8.8	15	.6	.4	1.3	.8
18	13	12	7.2	6.4	5.2	6.0	8.8	12	14	.4	.9	.8
19	12	12	7.4	6.0	5.6	6.0	8.5	9.6	140	1.0	.9	.8
20	12	10	7.4	6.0	6.0	6.0	8.5	8.4	135	3.1	1.0	.8
21	12	10	7.4	6.0	*6.0	5.6	9.0	8.0	98	2.8	.8	.8
22	12	10	7.5	4.8	5.2	6.4	8.8	7.2	67	1.0	.8	.8
23	12	9.6	7.5	5.2	4.5	6.4	8.8	13	64	.8	.8	1.0
24	12	9.6	8.0	5.2	4.5	6.4	6.8	6.4	69	.8	.7	1.0
25	11	9.6	8.2	5.0	4.3	6.0	8.6	5.2	90	.9	.7	1.0
26	11	9.6	8.2	5.0	4.0	6.0	*8.6	5.2	74	1.1	.8	1.0
27	12	9.6	8.2	5.2	4.0	*6.4	10	4.5	65	1.1	.8	.9
28	10	9.6	8.4	6.0	4.0	7.2	10	3.8	54	1.0	.7	.9
29	12	9.6	8.4	4.5	-	6.5	10	3.5	21	.8	.7	1.0
30	11	9.2	8.4	4.5	-	6.8	10	2.6	.3	.8	.7	1.1
31	10	-	8.4	4.5	-	7.0	-	2.2	-	.7	.6	-

Month	Observed					Diversion by Moffett tunnel (acre-feet)	Adjusted for diversion	
	Second-foot-days	Maximum	Minimum	Mean	Run-off (acre-feet)		Run-off (acre-feet)	Mean (second-feet)
October	232.0	13	2.6	7.48	460	493	953	15.5
November	302.6	13	7.2	10.1	600	0	600	10.1
December	254.6	11	7.2	8.21	505	0	506	8.21
Calendar year 1940	1,845.8	16	.1	5.04	3,660	13,900	17,560	24.2
January	194.9	8.0	4.5	6.29	387	0	387	6.29
February	135.0	6.0	4.0	4.82	268	0	268	4.82
March	185.4	7.2	4.5	5.98	368	0	368	6.98
April	253.1	10	7.2	8.44	502	0	502	8.44
May	449.3	34	2.2	14.5	891	4,050	4,940	80.4
June	911.6	140	.3	30.4	1,810	5,620	7,430	125
July	22.9	3.1	.2	.74	45	3,630	3,580	68.2
August	25.6	1.5	.6	.83	51	1,530	1,580	26.7
September	26.8	1.2	.6	.69	53	902	955	16.1
Water year 1940-41	2,993.8	140	.2	8.20	5,940	16,120	22,070	30.5

* Winter discharge measurement made on this day.

Note.-Stage-discharge relation affected by ice Nov. 1-7, 10-18, Dec. 11-28, Jan. 25, 26, 28, 29, Feb. 1-10, Feb. 26 to Mar. 1, Mar. 8, 10, 29, Mar. 31 to Apr. 8, Apr. 14, 16, 19-22.

St. Louis Creek near Fraser, Colo.

Location.- Water-stage recorder, lat. 39°54'45", long. 105°52'35", in sec. 34, T. 1 S., R. 76 W., a third of a mile downstream from confluence of East and West Branches and 4½ miles southwest of Fraser.

Drainage area.- 32.8 square miles.

Records available.- August 1934 to September 1941.

Extremes.- Maximum discharge during year, 248 second-feet June 24 (gage height, 2.28 feet), from rating curve extended above 210 second-feet; minimum daily, 7.2 second-feet Feb. 27.

1934-41: Maximum discharge, 353 second-feet June 15, 1935 (gage height, 2.58 feet), from rating curve extended above 210 second-feet; minimum, 3.2 second-feet Apr. 9, 1935 (gage height, 0.75 foot).

Remarks.- Records excellent above 25 second-feet and good below except those Nov. 1 to Mar. 31, which are fair. No regulation or diversion.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	25	12	9.0	9.0	8.4	8.4	8.0	16	118	114	35	20
2	23	14	9.0	8.8	8.8	8.0	8.0	18	120	106	34	20
3	23	14	9.0	8.4	8.4	8.0	8.0	22	122	102	33	18
4	20	12	9.0	7.5	8.0	8.4	8.0	24	127	98	32	19
5	23	10	9.0	8.5	7.5	8.0	8.0	18	134	97	34	18
6	24	9.0	9.0	9.0	7.5	8.0	8.0	16	129	91	34	17
7	22	12	9.0	8.2	7.5	8.0	8.0	14	127	89	34	18
8	21	*12	9.0	9.0	7.5	8.8	8.0	18	124	86	32	24
9	23	11	9.5	9.6	8.0	8.0	8.0	29	114	82	30	24
10	22	11	9.0	9.6	8.2	8.8	8.4	40	104	81	30	26
11	20	10	8.5	9.6	8.4	8.4	8.4	50	95	78	33	26
12	19	9.5	8.5	9.6	8.4	8.0	10	68	89	76	33	24
13	18	8.5	8.0	9.6	8.4	8.0	10	93	93	71	30	23
14	18	9.0	8.0	9.6	8.0	8.8	9.2	95	98	67	27	24
15	17	11	8.0	9.6	8.0	8.8	8.8	81	102	65	30	21
16	16	12	8.0	9.6	8.0	8.8	10	76	114	65	35	19
17	16	12	8.0	9.6	8.0	8.8	8.8	86	132	61	33	19
18	16	10	8.0	9.6	8.0	8.8	8.8	93	156	58	30	18
19	16	11	8.0	9.2	8.4	8.8	8.8	89	172	57	30	18
20	16	10	8.0	9.2	8.8	8.4	9.2	81	172	55	36	18
21	16	10	8.0	9.2	8.0	8.4	10	86	172	52	32	17
22	16	9.5	8.5	9.2	8.0	9.2	9.6	89	172	50	30	17
23	16	9.0	8.5	8.8	8.4	9.2	9.2	93	172	48	28	19
24	16	9.0	9.0	8.8	8.0	8.8	9.6	102	188	46	26	19
25	16	9.0	9.0	8.0	8.0	8.8	10	106	193	46	26	19
26	16	9.0	9.0	8.0	7.5	8.8	10	114	162	49	24	18
27	17	9.0	9.0	8.0	7.2	8.8	11	116	149	47	23	17
28	16	9.5	9.0	8.0	7.8	7.7	12	114	139	43	22	16
29	16	10	9.0	8.0	-	7.4	13	116	127	41	22	18
30	16	9.5	9.5	8.0	-	7.4	14	115	118	39	23	20
31	15	-	9.5	8.0	-	8.0	-	122	-	38	21	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	574	25	15	18.5	1,140
November	313.5	14	8.5	10.4	622
December	269.5	9.5	8.0	8.69	535
Calendar year 1940	9,599.6	141	6.0	26.2	19,040
January	274.8	9.6	7.5	8.86	545
February	225.1	8.8	7.2	8.04	446
March	260.5	9.2	7.4	8.40	517
April	280.8	14	8.0	9.36	557
May	2,201	122	14	71.0	4,370
June	4,034	193	89	134	8,000
July	2,098	114	38	67.7	4,160
August	922	36	21	29.7	1,830
September	594	26	16	19.8	1,180
Water year 1940-41	12,047.2	193	7.2	33.0	23,900

* Winter discharge measurement made on this day.

Note.- Stage-discharge relation affected by ice Nov. 1 to Jan. 8, Feb. 3-10, 26-28.

Ranch Creek above forks, near Fraser, Colo.

Location.- Water-stage recorder, lat. 39°56'30", long. 105°44'00", in SW¼ sec. 24, T. 1 S., R. 75 W., 0.8 mile upstream from North Fork and 4 miles east of Fraser.

Drainage area.- 3.8 square miles.

Records available.- April 1937 to September 1941 (no winter records 1940 and 1941).

Extremes.- Maximum discharge during year, 62 second-feet June 17 (gage height, 2.19 feet); minimum daily, 1.0 second-foot Apr. 24, probably less during period of no record.
1937-41: Maximum discharge, 67 second-feet June 21, 1938 (gage height, 3.45 feet); minimum daily, 0.4 second-foot Apr. 1-3, 10, 11, 16, 17, 19, 20, 1939.

Remarks.- Records good June 1 to July 31, fair for the remainder of year. No diversion or regulation.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3.1						-	2.5	31	15	4.1	1.8
2	3.1						-	3.5	31	14	4.1	1.8
3	3.0						-	4.8	32	12	3.9	1.7
4	3.0						-	4.4	35	11	3.7	1.7
5	3.0						-	4.0	35	11	3.9	1.7
6	3.3						-	3.4	31	9.4	3.7	1.7
7	3.3						-	3.0	31	9.4	4.1	1.9
8	3.3						-	3.4	30	9.1	3.5	2.1
9	3.4						-	3.8	26	8.5	3.3	2.2
10	-						-	4.5	22	8.2	3.1	2.3
11	-						-	11	20	7.9	3.5	2.3
12	-						-	18	18	7.9	3.7	2.2
13	-						-	29	18	7.3	3.1	2.3
14	-						-	37	20	7.3	2.7	2.3
15	-						-	28	28	7.0	2.7	2.1
16	-						-	22	35	7.0	2.9	2.1
17	-						-	28	42	6.5	2.7	2.1
18	-						-	36	41	6.5	2.7	2.1
19	-						-	30	40	6.2	2.7	2.1
20	-						-	21	37	6.2	2.7	2.0
21	-						-	19	35	5.8	2.4	2.0
22	-						-	19	36	5.5	2.3	2.2
23	-						-	17	35	5.2	2.3	2.4
24	-						*1.0	20	30	5.0	2.1	2.4
25	-						1.2	30	28	5.0	2.1	2.5
26	-						1.3	37	24	5.0	2.0	2.4
27	-						1.5	35	22	5.0	1.9	2.4
28	-						1.7	33	19	4.8	1.8	2.4
29	-						1.7	32	17	4.5	1.8	2.5
30	-						1.8	31	16	4.3	1.8	2.4
31	-						-	33	-	4.3	1.8	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October 1-9	28.5	3.4	3.0	3.17	57
November	-	-	-	-	-
December	-	-	-	-	-
Calendar year	-	-	-	-	-
January	-	-	-	-	-
February	-	-	-	-	-
March	-	-	-	-	-
April 24-30	10.2	1.8	1.0	1.46	20
May	603.3	37	2.5	19.5	1,200
June	865	42	16	28.8	1,720
July	231.8	15	4.3	7.48	460
August	89.1	4.1	1.8	2.87	177
September	64.1	2.5	1.7	2.14	127
Water year	-	-	-	-	-

* Winter discharge measurement made on this day.
Note.- Stage-discharge relation affected by ice Apr. 24 to May 9.

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Ranch Creek near Fraser, Colo.

Location.- Water-stage recorder, lat. 39°55'15", long. 105°47'05", in NW¼ sec. 22, T. 1 S., R. 75 W., 150 yards downstream from South Fork and 3 miles east of Fraser.

Drainage area.- 19.9 square miles.

Records available.- August 1934 to September 1941.

Extremes.- Maximum discharge during year, 169 second-feet June 17 (gage height, 2.63 feet); minimum daily, 3.1 second-feet Feb. 15, 17-28.

1934-41: Maximum discharge, 299 second-feet June 15, 1935 (gage height, 3.37 feet); minimum daily, 1.5 second-feet (estimated), Feb. 3-7, Mar. 18-21, 1935.

Remarks.- Records excellent above 10 second-feet and good below except those for periods of ice effect, which are fair. No diversions above station.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	10	7.4	4.6	4.0	3.5	3.3	4.0	11	114	49	8.9	6.4
2	8.9	7.2	4.5	3.8	3.4	3.3	3.8	13	114	45	8.1	6.4
3	8.4	6.7	4.5	3.6	3.3	3.3	3.8	18	116	41	8.1	6.2
4	7.9	5.8	4.3	3.6	3.3	3.3	4.0	16	118	38	7.9	6.2
5	9.2	5.5	4.0	3.8	3.3	3.3	4.4	13	120	37	7.9	6.0
6	9.7	5.4	4.1	3.7	3.3	3.3	4.4	12	114	33	8.9	6.0
7	9.2	10	4.2	3.7	3.3	3.3	4.1	11	114	31	9.2	6.2
8	9.4	10	4.3	3.7	3.4	3.3	4.0	13	110	30	9.7	8.6
9	10	9.2	4.2	3.7	3.5	3.3	4.0	19	100	27	8.9	9.2
10	10	8.3	4.2	3.7	*3.5	3.3	4.3	28	93	26	8.9	9.4
11	9.4	7.2	3.9	3.6	3.5	3.3	4.1	38	85	24	10	9.7
12	9.2	5.9	3.9	3.4	3.4	3.3	5.1	53	80	23	14	8.9
13	8.9	4.1	4.1	*3.3	3.4	3.3	5.7	74	77	20	11	8.6
14	8.6	4.4	3.7	3.2	3.3	3.4	4.6	89	79	19	9.4	9.7
15	8.6	4.7	3.9	3.2	3.1	3.3	4.4	81	95	18	9.7	7.9
16	8.6	5.1	3.6	3.2	3.3	3.3	4.4	77	110	18	12	7.4
17	8.4	5.3	3.7	3.2	3.1	3.4	4.4	87	124	16	11	6.9
18	8.1	5.4	4.0	3.2	3.1	3.4	4.3	99	122	15	9.7	6.7
19	8.1	5.4	3.9	3.3	3.1	3.4	4.3	87	121	14	9.7	7.2
20	7.9	5.0	3.8	3.3	3.1	3.4	4.1	75	115	14	10	5.8
21	7.6	5.0	3.8	3.3	3.1	3.3	4.3	79	107	14	9.7	5.5
22	7.6	4.6	3.8	3.3	3.1	3.4	4.4	86	107	13	9.4	5.8
23	7.6	4.2	4.0	3.4	3.1	3.4	4.6	81	101	12	8.9	7.2
24	7.4	4.7	4.3	3.4	3.1	3.3	4.9	87	94	11	8.4	7.4
25	7.2	4.5	4.3	3.5	3.1	3.3	5.7	103	87	12	8.4	8.4
26	7.2	4.5	4.3	3.4	3.1	3.3	6.9	116	79	13	8.4	8.4
27	7.4	4.5	4.1	3.3	3.1	3.4	7.9	119	72	13	7.9	8.1
28	6.7	4.6	4.1	3.4	3.1	3.6	8.9	116	66	11	7.4	7.2
29	6.9	4.6	4.1	3.5	-	3.6	8.9	116	57	11	7.4	6.7
30	6.9	4.6	4.1	3.5	-	3.4	8.9	116	52	11	7.2	6.7
31	6.7	-	4.1	3.5	-	3.6	-	121	-	9.4	6.4	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	257.7	10	6.7	8.31	511
November	173.8	10	4.2	5.79	345
December	126.4	4.6	3.6	4.08	251
Calendar year 1940	5,569.9	108	2.8	15.3	11,090
January	107.7	4.0	3.2	3.47	214
February	91.0	3.5	3.1	3.25	180
March	104.1	3.6	3.3	3.36	206
April	151.6	8.9	3.8	5.05	301
May	2,054	121	11	66.3	4,070
June	2,943	124	52	98.1	5,840
July	668.4	49	9.4	21.6	1,330
August	282.5	14	6.4	9.11	560
September	220.8	9.7	5.5	7.36	438
Water year 1940-41	7,181.0	124	3.1	19.7	14,250

* Winter discharge measurement made on this day.

Note.- Stage-discharge relation affected by ice Nov. 1-6, Nov. 10 to Feb. 12.

Ranch Creek near Tabernash, Colo.

Location.- Water-stage recorder, lat. 39°59'55", long. 105°49'10", in sec. 6, T. 1 S., R. 75 W., a quarter of a mile upstream from Meadow Creek and 1½ miles east of Tabernash.

Drainage area.- 50.7 square miles.

Records available.- September 1934 to September 1941.

Extremes.- Maximum discharge during year, 278 second-feet May 26 (gage height, 3.42 feet); minimum daily, 6.0 second-feet Nov. 13.

1934-41: Maximum discharge, 506 second-feet June 15, 1935 (gage height, 4.40 feet), from rating curve extended above 250 second-feet; no flow Feb. 15 to Mar. 13, 1937.

Remarks.- Records good except those Oct. 1 to Apr. 25, which are fair. Several small diversions above station for irrigation.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	22	12	12	7.8	6.2	8.2	22	42	208	72	14	11
2	20	12	12	7.4	6.2	8.2	21	46	196	67	14	11
3	19	12	11	6.8	6.2	8.2	20	56	192	68	13	10
4	18	12	11	6.6	6.2	8.2	20	56	196	52	12	10
5	18	13	11	6.4	6.2	8.4	19	44	202	50	14	10
6	22	18	11	6.6	6.2	8.4	19	42	188	45	17	9.5
7	20	16	10	6.6	6.2	8.4	19	32	188	41	17	10
8	20	16	10	6.8	6.4	8.6	20	30	188	40	19	18
9	20	14	10	7.0	6.4	8.4	23	44	172	38	16	17
10	22	12	9.2	7.0	6.4	8.4	25	73	168	35	15	18
11	19	8.8	9.0	7.2	6.4	8.6	32	108	144	34	16	19
12	18	6.2	9.0	7.0	6.4	8.4	40	142	138	32	26	16
13	17	6.0	8.6	7.0	6.4	8.2	48	202	126	28	25	14
14	18	6.5	8.0	7.0	6.6	8.2	44	232	121	30	18	16
15	18	7.8	7.4	7.0	6.8	8.2	38	210	142	31	18	14
16	18	9.8	7.2	6.8	7.0	8.2	36	186	162	28	25	12
17	18	12	7.2	6.8	7.2	8.4	36	204	180	25	24	12
18	16	12	7.2	6.8	7.2	8.4	32	230	192	26	20	12
19	16	12	7.2	6.8	7.4	8.6	32	206	192	25	20	12
20	16	11	7.2	6.6	*7.6	8.8	32	178	182	25	22	11
21	15	11	7.2	6.6	7.7	9.0	32	182	170	22	19	10
22	14	11	7.4	6.6	7.8	9.2	33	206	168	21	17	9.5
23	14	12	7.6	*6.6	7.8	9.2	35	188	156	20	16	12
24	14	12	7.6	6.6	7.8	9.6	32	196	144	18	16	12
25	14	13	7.6	6.4	8.0	11	33	219	134	18	15	14
26	13	12	7.6	6.4	8.0	12	*37	239	117	24	15	15
27	14	11	7.8	6.4	8.2	*12	36	243	107	22	14	14
28	12	11	7.8	6.4	8.2	14	45	223	94	19	12	12
29	12	11	8.0	6.2	-	16	46	221	81	18	12	12
30	12	12	8.0	6.2	-	18	44	208	73	18	12	13
31	12	-	8.2	6.2	-	17	-	217	-	16	11	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	521	22	12	16.8	1,030
November	347.1	18	6.0	11.6	688
December	270.0	12	7.2	8.71	536
Calendar year 1940	11,627.2	210	3.8	31.8	23,060
January	208.6	7.8	6.2	6.73	414
February	195.1	8.2	6.2	6.97	387
March	304.4	18	8.2	9.82	604
April	951	48	19	31.7	1,890
May	4,707	243	30	152	9,340
June	4,723	208	73	157	9,370
July	998	72	16	32.2	1,980
August	524	26	11	16.9	1,040
September	386.0	19	9.5	12.9	766
Water year 1940-41	14,135.2	243	6.0	38.7	28,040

* Winter discharge measurement made on this day.

Note.- Stage-discharge relation affected by ice Nov. 11 to Apr. 25.

North Fork of Ranch Creek near Fraser, Colo.

Location.- Water-stage recorder, lat. 39°57'00", long. 105°44'20", in northeast corner of sec. 23, T. 1 S., R. 75 W., 0.6 mile upstream from mouth and 4 miles east of Fraser.

Drainage area.- 3.6 square miles.

Records available.- April 1937 to September 1941 (no winter records during years 1940 and 1941).

Extremes.- Maximum discharge during year, 33 second-feet June 17 (gage height, 1.72 feet); minimum daily, 0.8 second-foot Aug. 28, 29, 31, probably less during period of no record.

1937-41: Maximum discharge, 62 second-feet June 21, 1938 (gage height, 2.00 feet), from rating curve extended above 40 second-feet; minimum daily, 0.4 second-foot Oct. 28, 30, 1940.

Remarks.- Records fair. No diversion or regulation.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.4						-	1.7	22	13	2.2	0.9
2	2.5						-	1.9	22	12	2.1	.9
3	2.4						-	2.7	23	10	2.0	.9
4	2.3						-	2.6	24	10	1.9	.9
5	2.4						-	2.1	25	9.0	2.0	.9
6	2.6						-	2.0	22	8.5	2.1	.9
7	2.6						-	1.9	22	8.0	2.0	1.0
8	2.7						-	1.9	22	7.5	1.9	1.4
9	2.9						-	2.7	20	7.0	1.8	1.6
10	-						-	4.2	18	6.6	1.9	1.9
11	-						-	6.0	17	6.2	1.9	2.2
12	-						-	8.5	16	5.8	2.6	2.0
13	-						-	12	16	5.4	1.9	1.9
14	-						-	15	17	5.2	1.6	2.3
15	-						-	13	20	4.8	1.7	1.9
16	-						-	13	22	4.7	2.2	1.7
17	-						-	14	25	4.4	1.8	1.7
18	-						-	18	25	4.1	1.4	1.6
19	-						-	16	25	4.0	1.4	1.6
20	-						-	14	24	4.0	1.4	1.6
21	-						-	16	24	3.6	1.2	1.6
22	-						-	18	24	3.4	1.1	1.6
23	-						-	16	22	3.2	1.1	1.9
24	-						-	18	21	2.9	1.0	1.9
25	-						1.5	20	20	3.1	1.0	1.9
26	-						1.6	23	19	3.1	1.0	1.9
27	-						1.6	23	18	2.9	.9	1.9
28	-						1.6	22	16	2.6	.8	1.8
29	-						1.6	22	15	2.5	.8	1.9
30	-						1.6	22	13	2.3	.9	1.9
31	-						-	22	-	2.3	.8	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October 1-9	22.8	2.9	2.3	2.53	45
November	-	-	-	-	-
December	-	-	-	-	-
Calendar year	-	-	-	-	-
January	-	-	-	-	-
February	-	-	-	-	-
March	-	-	-	-	-
April 25-30	9.5	1.6	1.5	1.58	19
May	375.2	23	1.7	12.1	744
June	619	25	13	20.6	1,230
July	172.1	13	2.3	5.55	341
August	48.4	2.6	.8	1.56	96
September	48.1	2.3	.9	1.60	95
Water year	-	-	-	-	-

Middle Fork of Ranch Creek near Fraser, Colo.

Location.- Water-stage recorder, lat. 39°56'00", long. 105°44'40", on line between secs. 25 and 26, T. 1 S., R. 75 W., 1.6 miles upstream from South Fork and 4.2 miles east of Fraser.

Drainage area.- 4.4 square miles.

Records available.- April 1937 to September 1941 (no winter records during years 1940 and 1941).

Extremes.- Maximum discharge during year, 77 second-feet June 17 (gage height, 1.53 feet); minimum recorded, 0.6 second-foot Apr. 24 (gage height, 0.49 foot), less during period of no record.

1937-41: Maximum discharge, 124 second-feet June 21, 1938 (gage height, 1.88 feet), from rating curve extended above 85 second-feet; minimum not determined, occurred during period of ice effect.

Remarks.- Records good except those for period of missing gage heights, which are fair. No diversion or regulation.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.0						-	0.9	26	17	2.4	1.4
2	2.0						-	1.2	27	15	2.2	1.4
3	1.9						-	2.0	28	14	2.2	1.4
4	1.8						-	1.8	30	12	2.1	1.4
5	1.8						-	1.4	31	11	2.2	1.2
6	1.9						-	1.2	31	11	2.2	1.1
7	1.8						-	1.0	32	10	3.0	1.2
8	2.0						-	1.4	32	8.9	2.4	1.7
9	-						-	2.4	31	8.5	2.1	2.0
10	-						-	4.2	30	7.6	2.1	2.1
11	-						-	6.0	23	7.2	2.2	2.1
12	-						-	9.7	20	6.9	3.4	1.8
13	-						-	11	20	6.3	2.8	2.1
14	-						-	13	23	6.0	2.2	2.1
15	-						-	14	30	5.7	2.2	1.7
16	-						-	13	42	5.4	2.6	1.6
17	-						-	16	48	5.1	2.2	1.6
18	-						-	21	51	4.5	2.1	1.6
19	-						-	14	48	4.5	2.0	1.5
20	-						-	12	42	4.5	2.2	1.5
21	-						-	11	41	4.0	2.0	1.4
22	-						-	20	39	3.8	2.0	1.7
23	-						-	17	38	3.6	1.8	1.8
24	-						0.6	20	35	3.4	1.7	1.8
25	-						.6	23	30	3.6	1.7	2.0
26	-						.7	25	27	3.4	1.6	2.0
27	-						.8	25	23	3.4	1.5	1.8
28	-						.7	25	20	3.0	1.5	1.7
29	-						.7	25	18	3.0	1.5	2.0
30	-						.7	26	17	2.8	1.5	2.0
31	-						-	26	-	2.6	1.4	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October 1-8	15.2	2.0	1.8	1.90	30
November	-	-	-	-	-
December	-	-	-	-	-
Calendar year	-	-	-	-	-
January	-	-	-	-	-
February	-	-	-	-	-
March	-	-	-	-	-
April 24-30	4.8	.8	.6	.69	9.5
May	390.2	26	.9	12.6	774
June	933	51	17	31.1	1,850
July	207.7	17	2.6	6.70	412
August	65.0	3.4	1.4	2.10	129
September	50.7	2.1	1.1	1.69	101
Water year	-	-	-	-	-

Note.- No gage-height record May 20, May 25 to June 9; discharge computed on basis of record for Ranch Creek near Fraser.

South Fork of Ranch Creek near Winter Park, Colo.

Location.- Water-stage recorder, lat. 39°54'45", long. 105°44'40", in SE¼ sec. 35, T. 1 S., R. 75 W., 2.8 miles upstream from mouth and 5 miles northeast of Winter Park.

Drainage area.- 2.55 square miles.

Records available.- November 1936 to September 1941 (no winter records during years 1940 and 1941).

Extremes.- Maximum discharge during year, 43 second-feet May 30 (gage height, 1.31 feet); minimum recorded, 0.8 second-foot Apr. 24 (gage height, 0.14 foot), and less during period of no record.

1936-41: Maximum discharge, 59 second-feet June 1, 1938 (gage height, 1.43 feet); from rating curve extended above 42 second-feet; minimum, probably between 0.2 and 0.4 second-foot at times during period of ice effect.

Remarks.- Records fair. No diversion or regulation.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.3						-	1.6	25	9.9	2.2	1.0
2	1.1						-	2.2	25	9.0	2.1	1.0
3	1.0						-	3.6	24	8.2	2.1	1.0
4	.9						-	2.9	24	7.8	1.9	1.0
5	.9						-	2.1	24	7.1	1.9	1.0
6	1.0						-	1.9	22	6.7	1.9	.9
7	.9						-	1.6	22	6.7	3.1	1.0
8	1.1						-	2.2	21	6.2	2.2	1.4
9	1.1						-	3.8	20	5.8	1.9	1.6
10	-						-	6.0	19	5.6	2.1	1.8
11	-						-	7.3	17	5.6	2.1	1.9
12	-						-	10	16	5.4	3.1	1.6
13	-						-	13	16	5.0	2.1	1.8
14	-						-	15	14	5.0	1.8	1.8
15	-						-	15	15	4.8	1.8	1.4
16	-						-	16	16	4.6	1.9	1.4
17	-						-	16	17	4.2	1.6	1.3
18	-						-	18	19	4.2	1.5	1.3
19	-						-	17	20	4.2	1.8	1.2
20	-						-	17	20	4.0	1.6	1.2
21	-						-	20	20	3.6	1.5	1.2
22	-						-	19	20	3.3	1.4	1.8
23	-						-	18	18	2.9	1.3	1.6
24	-						0.8	20	17	2.7	1.2	1.5
25	-						1.1	22	16	3.1	1.3	1.6
26	-						1.4	26	15	2.9	1.2	1.4
27	-						1.4	25	14	3.1	1.1	1.3
28	-						1.3	26	12	2.9	1.1	1.3
29	-						1.2	25	11	2.7	1.2	1.4
30	-						1.3	28	10	2.4	1.1	1.4
31	-						-	28	-	2.4	1.0	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October 1-9	9.3	1.3	0.9	1.03	18
November	-	-	-	-	-
December	-	-	-	-	-
Calendar year	-	-	-	-	-
January	-	-	-	-	-
February	-	-	-	-	-
March	-	-	-	-	-
April 24-31	8.5	1.4	.8	1.21	17
May	431.2	28	1.6	13.9	855
June	549	25	10	18.3	1,090
July	152.0	9.9	2.4	4.90	301
August	54.1	3.1	1.0	1.75	107
September	41.1	1.9	.9	1.37	82
Water year	-	-	-	-	-

Meadow Creek near Tabernash, Colo.

Location.- Water-stage recorder, lat. 40°02'55", long. 105°46'30", in sec. 15, T. 1 N., R. 75 W., 5 miles northeast of Tabernash.

Drainage area.- 7.0 square miles.

Records available.- May 1936 to September 1941 (no winter records for 1941).

Extremes.- Maximum discharge during year, 150 second-feet May 25 (gage height, 3.22 feet), from rating curve extended above 85 second-feet; minimum daily, 0.9 second-foot Apr. 27, probably less during period of no record.

1936-41: Maximum discharge, 197 second-feet June 3, 1938 (gage height, 3.67 feet, site and datum then in use); probably no flow at times during ice periods.

Remarks.- Records good except those for period of ice effect, which are fair. No diversions above station.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4.2	1.2					-	b1.3	64	17	1.6	1.4
2	3.6	1.2					-	1.8	58	17	1.5	1.4
3	3.3	1.2					-	3.9	53	15	1.4	1.4
4	2.0	1.3					-	8.8	56	14	1.4	1.4
5	2.0	1.2					-	13	57	12	1.8	1.4
6	3.9	1.2					-	14	51	12	1.9	1.3
7	3.9	1.3					-	11	53	10	1.8	1.4
8	3.3	1.3					-	8.2	57	9.8	2.2	2.4
9	4.2	1.3					-	9.5	49	10	1.7	2.8
10	4.2	1.3					-	22	50	8.5	1.6	5.7
11	2.8	1.3					-	40	38	6.9	2.1	6.0
12	2.1	1.3					-	44	38	6.9	12	3.6
13	1.8	1.3					-	68	35	6.3	10	2.6
14	1.8	-					-	90	35	6.6	4.8	4.8
15	1.6	-					-	76	39	6.6	3.0	2.8
16	1.5	-					-	62	46	5.4	6.3	2.1
17	1.4	-					-	83	46	4.5	8.8	1.7
18	1.4	-					-	78	49	4.2	6.0	1.6
19	1.4	-					-	72	49	3.6	6.3	1.6
20	1.3	-					-	67	45	3.9	8.2	1.5
21	1.3	-					-	76	44	3.9	5.7	1.4
22	1.3	-					-	78	42	3.9	4.8	1.4
23	1.3	-					-	84	36	2.6	3.3	1.5
24	1.3	-					-	89	33	2.1	2.4	1.6
25	1.3	-					-	100	30	5.1	2.2	2.1
26	1.3	-					-	97	27	6.3	2.1	2.4
27	1.3	-					*b0.9	81	24	3.3	1.8	1.8
28	1.3	-					b1.0	71	22	2.6	1.6	1.6
29	1.3	-					b1.0	69	19	2.0	1.6	1.6
30	1.3	-					b1.1	64	17	1.9	1.6	1.9
31	1.3	-					-	66	-	1.7	1.5	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	66.0	4.2	1.3	2.13	131
November 1-13	16.4	1.3	1.2	1.26	33
December	-	-	-	-	-
Calendar year	-	-	-	-	-
January	-	-	-	-	-
February	-	-	-	-	-
March	-	-	-	-	-
April	-	-	-	-	-
May	1,648.5	100	1.3	53.2	3,270
June	1,262	64	17	42.1	2,500
July	215.6	17	1.7	6.95	428
August	113.0	12	1.4	3.65	224
September	66.2	6.0	1.3	2.21	131
Water year	-	-	-	-	-

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

Strawberry Creek near Granby, Colo.

Location.- Water-stage recorder, lat. 40°05'10", long. 105°49'30", in SW¼SW¼ sec. 32, T. 2 N., R. 75 W., 0.6 mile downstream from Little Strawberry Creek and 6 miles east of Granby.

Drainage area.- 12.6 square miles.

Records available.- May 1936 to September 1941 (no winter records).

Extremes.- Maximum discharge during year, 93 second-feet May 13 (gage height, 2.09 feet); minimum daily, 0.1 second-foot Oct. 14, 16, 22-25, 28-31, Nov. 3-6, Sept. 7, probably no flow at times during winter.

1936-41: Maximum discharge, 132 second-feet May 29, 1938 (gage height, 2.91 feet), from rating curve extended above 110 second-feet; no flow at times in August, September, and November 1939, Sept. 7, 1940, and probably at times during extremely cold weather in each year.

Remarks.- Records good except those for period of ice effect, which are fair. No records Nov. 11 to Mar. 27. Two diversions above station for irrigation.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.4	0.2				-	3.3	21	6.9	8.8	0.6	0.4
2	1.4	.2				-	3.2	24	6.2	11	.6	.4
3	1.0	.1				-	3.3	31	4.6	7.5	.4	.4
4	.9	.1				-	3.5	30	4.0	6.2	.4	.3
5	1.4	.1				-	3.8	23	3.6	6.2	.4	.3
6	2.8	.1				-	3.8	18	3.3	6.2	2.0	.4
7	1.6	.3				-	3.8	16	3.0	5.2	1.0	.1
8	.8	.3				-	3.7	21	4.0	5.2	1.7	2.2
9	.3	.2				-	3.7	27	3.0	5.4	1.0	3.1
10	.3	.2				-	3.8	39	3.6	4.4	.6	4.2
11	.2	-				-	4.2	48	2.8	4.0	1.3	5.2
12	.3	-				-	4.8	61	2.6	4.0	8.8	3.4
13	.6	-				-	5.5	64	1.9	3.6	7.5	2.5
14	.1	-				-	4.8	70	1.2	3.8	4.2	2.6
15	.2	-				-	4.6	63	1.0	4.2	3.0	2.2
16	.1	-				-	4.6	56	1.9	3.3	3.4	1.7
17	.3	-				-	4.6	56	1.4	2.6	6.6	1.0
18	.5	-				-	4.6	55	1.4	2.5	3.6	.6
19	.5	-				-	4.7	48	6.9	2.0	2.5	.5
20	.5	-				-	4.7	41	8.2	2.6	3.1	.4
21	.4	-				-	5.2	38	7.5	3.0	2.3	.5
22	.1	-				-	5.6	36	7.8	3.0	2.2	.6
23	.1	-				-	6.8	35	8.8	2.3	1.4	1.7
24	.1	-				-	9.0	32	9.8	1.9	1.2	2.0
25	.1	-				-	9.8	31	9.3	3.0	.6	2.6
26	.2	-				-	9.8	28	8.5	6.2	.6	3.3
27	.6	-				-	10	26	11	3.3	.9	2.5
28	.1	-				*2.9	12	24	9.8	2.6	.6	2.0
29	.1	-				3.0	14	25	7.2	1.7	.6	1.9
30	.1	-				2.9	18	25	6.9	1.3	.7	2.5
31	.1	-				3.2	-	13	-	1.0	.6	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	17.2	2.8	0.1	0.55	34
November 1-10	1.8	.3	.1	.18	3.6
December	-	-	-	-	-
Calendar year	-	-	-	-	-
January	-	-	-	-	-
February	-	-	-	-	-
March	-	-	-	-	-
April	183.2	18	3.2	6.11	363
May	1,125	70	13	36.3	2,230
June	158.1	11	1.0	5.27	314
July	128.0	11	1.0	4.13	254
August	64.4	8.8	.4	2.08	128
September	51.5	5.2	.1	1.72	102
Water year	-	-	-	-	-

* Winter discharge measurement made on this day.
Note.- Stage-discharge relation affected by ice Nov. 5, 6, Mar. 28 to Apr. 24.

Williams River below Steelman Creek, Colo.

Location.- Water-stage recorder, lat. 39°46'45", long. 105°55'30", in sec. 20, T. 3 S., R. 76 W., just downstream from Steelman Creek and 7 miles southeast of Leal.

Drainage area.- 16.3 square miles.

Records available.- October 1933 to September 1941 in reports of Geological Survey. July 1933 to September 1941 in reports of State engineer. Records since May 10, 1940, equivalent to earlier records if flow diverted through Jones Pass tunnel is added to flow past station.

Extremes.- Maximum discharge during year, 321 second-feet June 24 (gage height, 2.22 feet); minimum daily, 1.2 second-foot Sept. 2-6, may have been less during period of ice effect.

1933-41: Maximum discharge, 441 second-feet June 21, 1938 (gage height, 2.48 feet), from rating curve extended above 260 second-feet; minimum observed prior to beginning of diversion through Jones Pass tunnel, 1.1 second-feet (discharge measurement) Mar. 29, 1940; minimum recorded, 0.9 second-foot Aug. 14, 1940 but may have been less during period of ice effect.

Remarks.- Records fair. Transmountain diversion through Jones Pass tunnel to Clear Creek started May 10, 1940.

Cooperation.- Records of flow diverted through Jones Pass tunnel furnished by State engineer.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	18	13					1.9	4.4	14	110	1.8	1.3
2	17	11					1.9	5.4	14	103	1.7	1.2
3	15	8.8					1.9	7.3	14	100	1.7	1.2
4	13	8.2					1.9	8.0	14	96	1.5	1.2
5	15	7.8					1.9	7.1	14	88	1.5	1.2
6	16	8.5					2.0	5.8	12	82	1.7	1.2
7	15	9.3					2.0	5.2	12	40	1.5	1.3
8	15	8.2					2.0	6.0	11	a4.5	1.5	5.0
9	15	7.9					1.8	10	9.7	a4.4	1.5	12
10	14	7.9					2.0	20	8.6	a4.4	1.7	14
11	13	7.0					2.1	36	7.8	a4.2	1.8	12
12	12	6.0					2.2	71	7.5	a4.4	1.8	10
13	12	6.0					2.1	100	8.0	a4.2	1.5	11
14	11	6.2					2.1	84	7.5	a4.0	1.7	12
15	11	6.2	4.0	3.0	2.5	2.0	2.1	65	7.3	a3.8	1.9	10
16	11	6.2					2.1	60	7.1	a3.7	2.1	9.3
17	10	6.2					2.1	78	7.3	a3.6	1.8	8.6
18	10	6.4					2.1	82	11	a3.3	1.7	9.0
19	9.8	6.4					2.1	65	96	a3.2	1.7	8.6
20	9.6	6.4					2.1	55	220	a3.0	1.7	8.2
21	9.3	6.2					2.1	28	220	a2.7	1.8	8.2
22	9.1	6.0					2.1	16	228	2.3	1.5	9.3
23	9.1	5.8					2.1	18	220	2.1	1.7	10
24	8.8	5.6					2.1	16	228	2.0	1.5	10
25	8.6	5.6					2.1	16	220	2.4	1.4	10
26	8.6	5.4					2.3	16	192	2.5	1.4	9.0
27	8.8	5.4					2.5	16	186	2.3	1.3	8.2
28	8.4	5.2					2.6	16	158	2.0	1.3	8.0
29	9.6	5.0			-		2.6	16	134	1.9	1.3	10
30	9.1	4.8			-		3.2	16	119	1.8	1.3	10
31	8.6	-			-		-	16	-	1.7	1.3	-

Month	Observed					Diversion by Jones tunnel (acre-feet)	Adjusted for diversion	
	Second-foot-days	Maximum	Minimum	Mean	Run-off (acre-feet)		Run-off (acre-feet)	Mean (second-feet)
October	360.4	18	8.4	11.6	715	0	715	11.6
November	208.8	13	4.8	6.95	414	0	414	6.95
December	124.0	-	-	4.0	246	0	246	4.0
Calendar year 1940	2,815.9	43	-	7.69	5,580	9,560	15,140	20.9
January	93.0	-	-	3.0	184	0	184	3.0
February	70.0	-	-	2.5	139	0	139	2.5
March	62.0	-	-	2.0	123	0	123	2.0
April	64.1	3.2	1.8	2.14	127	0	127	2.14
May	965.2	100	4.4	31.1	1,910	1,540	3,450	56.2
June	2,407.8	228	7.1	80.3	4,780	3,470	8,250	139
July	693.4	110	1.7	22.4	1,380	2,110	3,490	56.7
August	49.6	2.1	1.3	1.60	98	946	1,040	17.0
September	231.0	14	1.2	7.70	458	124	582	9.78
Water year 1940-41	5,329.1	228	-	14.6	10,570	8,190	18,760	25.9

a No gage-height record; discharge computed on basis of record for station near Leal, Colo.
Note.- Stage-discharge relation affected by ice Nov. 5, 6, Nov. 8 to Apr. 21.

Williams River near Leal, Colo.

Location.- Water-stage recorder, lat. 39°50', long. 106°03', in sec. 31, T. 2 S., R. 77 W., just downstream from Kinney Creek and 2 miles north of Leal.

Drainage area.- 84 square miles.

Records available.- October 1933 to September 1941 in reports of U. S. Geological Survey. July 1933 to September 1941 in reports of State engineer. Records since May 10, 1940, equivalent to earlier records if flow through Jones Pass tunnel is added to flow past station.

Extremes.- Maximum discharge during year, 972 second-feet June 24 (gage height, 3.11 feet); minimum daily, 15 second-feet Mar. 8.

1933-41: Maximum discharge observed, 1,530 second-feet June 21, 1938 (gage height, 3.81 feet), from rating curve extended above 1,000 second-feet; minimum daily, 13 second-feet Dec. 28, 29, 1939.

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

Cooperation.- Records of flow diverted through Jones Pass tunnel furnished by State engineer.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	61	28	25	25	20	18	21	56	298	338	55	36
2	53	30	24	22	20	17	20	61	264	319	50	36
3	50	32	24	b20	b18	17	20	79	294	301	48	35
4	44	32	23	22	19	18	20	92	305	284	49	35
5	50	26	23	22	20	16	20	78	316	268	48	34
6	55	*32	23	21	20	16	20	69	308	252	52	33
7	50	33	23	21	20	16	20	57	312	219	53	34
8	51	32	23	20	19	15	19	66	308	160	53	45
9	53	33	23	20	19	16	18	102	281	146	48	55
10	50	30	23	21	19	16	20	138	258	140	46	58
11	48	26	23	24	18	16	20	185	232	130	50	60
12	45	b23	23	21	18	16	24	237	224	138	62	53
13	44	b24	b21	22	18	16	26	342	226	130	50	49
14	42	b24	b20	22	18	16	23	350	234	126	44	56
15	40	b25	22	22	18	16	23	301	229	123	51	48
16	40	b25	22	22	18	16	23	242	255	121	61	46
17	39	b26	22	23	17	16	23	288	308	109	53	44
18	38	b26	22	22	18	17	23	331	364	104	50	43
19	37	b26	23	23	*18	17	23	301	485	107	50	42
20	36	27	22	23	18	18	22	248	660	104	55	41
21	36	27	22	23	18	19	22	255	672	92	56	40
22	36	26	22	*23	18	19	24	252	654	87	50	40
23	36	26	22	23	16	19	26	245	672	84	50	44
24	35	26	22	23	a17	18	28	281	684	79	45	44
25	34	26	22	23	a18	17	29	277	696	76	43	42
25	33	26	22	22	a17	17	31	294	588	84	42	42
27	35	26	22	22	a16	17	38	301	507	84	38	40
28	33	25	22	22	a16	18	41	277	465	72	37	39
29	30	25	23	22	-	19	46	281	408	66	36	41
30	33	-	22	21	-	20	48	288	368	58	39	49
31	34	-	22	21	-	18	-	305	-	56	37	-

Month	Observed					Diversion through Jones Pass tunnel (acre-feet)	Adjusted for diversion	
	Second-foot-days	Maximum	Minimum	Mean	Run-off acre-feet)		Run-off (acre-feet)	Mean (second-feet)
October	1,301	61	30	42.0	2,580	0	2,580	42.0
November	818	33	23	27.3	1,620	0	1,620	27.3
December	697	25	20	22.5	1,380	0	1,380	22.5
Calendar year 1940	23,666	430	14	64.7	46,930	9,560	56,490	77.8
January	683	25	20	22.0	1,350	0	1,350	22.0
February	509	20	15	18.2	1,010	0	1,010	18.2
March	528	20	15	17.0	1,050	0	1,050	17.0
April	761	48	18	25.4	1,510	0	1,510	25.4
May	6,679	350	56	215	13,250	1,540	14,790	241
June	11,895	696	224	396	23,590	3,470	27,060	455
July	4,457	338	56	144	8,840	2,110	10,950	178
August	1,501	62	36	48.4	2,980	946	3,930	63.8
September	1,304	60	33	43.5	2,590	124	2,710	45.5
Water year 1940-41	31,133	696	15	85.3	61,750	8,190	69,940	96.6

* Winter discharge measurement made on this day.
a No gage-height record; discharge computed on basis of recorded range of stage and weather records.
b Stage-discharge relation affected by ice.

Williams River near Parshall, Colo.

Location.- Water-stage recorder, lat. 40°00', long. 106°11', in sec. 1, T. 1 S., R. 79 W., 2½ miles upstream from Battle Creek and 4 miles south of Parshall. Datum of gage is 7,805.00 feet above mean sea level.
Drainage area.- 184 square miles.
Records available.- July 1904 to September 1924, October 1933 to September 1941 in reports of U. S. Geological Survey. July 1904 to September 1924, June 1933 to September 1941 in reports of State engineer. Records since May 10, 1940, equivalent to earlier records if flow through Jones Pass tunnel is added to flow past station.
Average discharge.- 28 years (1904-24, 1933-41), 161 second-feet.
Extremes.- Maximum discharge during year, 740 second-feet June 25 (gage height, 3.13 feet); minimum daily, 25 second-feet Feb. 27.
1904-24, 1933-41: Maximum discharge observed, 2,570 second-feet June 14, 1918 (gage height, 6.0 feet, site and datum then in use), from rating curve extended above 1,400 second-feet; a higher discharge probably occurred June 15, when gage was destroyed; minimum daily, 10 second-feet Sept. 15-17, 1934.
Remarks.- Records excellent except those for period of ice effect, which are fair. Diversions above station for irrigation.
Cooperation.- Records of flow diverted through Jones Pass tunnel furnished by State engineer.

Rating table, water year 1940-41, except period of ice effect (gage height, in feet, and discharge, in second-feet)

1.1	32	1.4	63	1.7	122	2.2	295
1.2	40	1.5	78	1.8	150	2.6	475
1.3	51	1.6	98	2.0	218	3.4	875

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	88	49	54	36	30	28	50	136	344	340	43	41
2	78	50	53	34	29	26	49	150	322	326	40	40
3	75	52	50	32	27	27	48	170	318	300	37	39
4	70	55	45	30	26	27	48	197	331	287	37	38
5	69	44	42	32	27	28	50	157	340	263	44	37
6	84	*59	43	32	28	30	52	159	340	240	53	38
7	78	53	43	33	27	28	48	108	331	222	57	39
8	76	52	43	34	26	28	46	108	358	147	62	59
9	78	53	45	35	26	29	46	183	283	117	55	72
10	80	49	44	35	26	28	49	240	291	110	51	84
11	75	42	43	36	26	28	51	318	271	90	56	86
12	72	35	41	36	27	26	59	376	240	82	63	78
13	70	27	37	36	26	27	68	545	263	60	59	72
14	69	27	30	34	27	30	55	530	255	72	42	75
15	66	29	29	34	26	29	57	470	248	72	39	70
16	64	32	30	34	26	28	55	394	263	72	53	64
17	63	36	31	32	26	28	55	416	295	58	58	61
18	62	46	32	32	27	28	51	462	340	53	58	58
19	62	46	32	31	*28	28	47	452	412	100	56	58
20	61	45	32	32	27	30	44	403	586	147	63	64
21	61	43	32	33	27	30	43	376	575	130	61	64
22	58	43	33	*34	26	31	49	386	545	115	56	63
23	59	45	34	33	26	31	51	367	575	103	55	64
24	58	47	35	33	27	31	56	390	580	88	52	64
25	58	49	33	32	28	32	59	380	645	72	50	63
26	56	49	32	34	27	*33	64	376	570	76	53	62
27	57	47	33	33	25	37	76	394	490	75	51	58
28	57	45	34	31	27	43	94	354	470	69	48	56
29	53	49	36	30	-	44	115	354	416	64	46	55
30	55	52	38	31	-	44	130	344	372	58	43	63
31	55	-	39	32	-	47	-	354	-	50	41	-

Month	Observed					Diversion through Jones Pass tunnel (acre-feet)	Adjusted for diversion	
	Second-foot-days	Maximum	Minimum	Mean	Run-off (acre-feet)		Run-off (acre-feet)	Mean (second-feet)
October	2,067	88	53	66.7	4,100	0	4,100	66.7
November	1,352	59	27	45.1	2,680	0	2,680	45.1
December	1,178	54	29	38.0	2,340	0	2,340	38.0
Calendar year 1940.	31,209	500	22	85.3	61,900	9,560	71,460	98.4
January	1,026	36	30	33.1	2,040	0	2,040	33.1
February	755	30	25	27.0	1,500	0	1,500	27.0
March	966	47	26	31.2	1,920	0	1,920	31.2
April	1,755	130	43	58.8	3,500	0	3,500	58.8
May	10,028	545	108	323	19,890	1,540	21,430	349
June	11,668	645	240	389	23,140	3,470	26,610	447
July	4,078	340	50	132	8,090	2,110	10,200	166
August	1,582	63	37	51.0	3,140	946	4,090	66.4
September	1,785	86	37	59.5	3,540	124	3,660	61.6
Water year 1940-41.	38,250	645	25	105	75,880	8,190	84,070	116

* Winter discharge measurement made on this day.
Note.- Stage-discharge relation affected by ice Nov. 12 to Mar. 27.

Troublesome Creek at Atmore Ranch, near Troublesome, Colo.

Location.- Staff gage, lat. 40°12', long. 106°19', in SE¼ sec. 23, T. 3 N., R. 80 W., 3¼ miles upstream from East Fork of Troublesome Creek and 10 miles north of old Troublesome post office.

Drainage area.- 50.3 square miles.

Records available.- April to September 1941.

Extremes.- Maximum discharge observed during period, 209 second-feet May 13 (gage height, 2.78 feet), from rating curve extended above 150 second-feet; minimum daily, 2.3 second-feet Sept. 15, 16.

Remarks.- Records fair. Diversions above station for irrigation. Staff gage read twice daily.

Cooperation.- Gage heights and discharge measurements furnished Apr. 15 to June 30 by Bureau of Reclamation.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1							-	45	56	31	16	12
2							-	56	56	29	15	12
3							-	63	50	27	14	12
4							-	72	43	26	14	12
5							-	53	42	26	12	12
6							-	49	38	23	12	12
7							-	43	33	23	15	4.2
8							-	48	31	18	14	3.8
9							-	65	29	21	13	3.5
10							-	108	29	28	14	3.3
11							-	116	26	27	14	2.8
12							-	152	27	27	16	2.8
13							-	182	25	26	16	2.8
14							-	182	22	26	16	2.6
15							14	171	23	26	16	2.3
16							14	147	23	25	26	2.3
17							14	155	22	24	20	2.6
18							14	152	23	24	17	2.6
19							15	148	22	24	16	3.2
20							15	131	21	26	16	3.2
21							16	112	21	23	16	6.3
22							16	96	20	18	16	6.0
23							16	98	19	16	16	8.1
24							20	100	19	14	16	9.0
25							20	95	19	16	15	8.7
26							24	95	17	21	16	9.0
27							28	94	17	17	14	6.9
28							34	84	15	17	14	6.6
29							35	79	20	16	14	7.5
30							42	69	29	16	13	7.5
31							-	66	-	16	14	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October					
November					
December					
Calendar year					
January	-	-	-	-	-
February	-	-	-	-	-
March	-	-	-	-	-
April 15-30	337	42	14	21.1	668
May	3,126	182	43	101	6,200
June	839	58	15	28.0	1,660
July	697	31	14	22.5	1,380
August	476	26	12	16.4	944
September	189.6	12	2.3	6.32	376
The period	-	-	-	-	11,230

East Fork of Troublesome Creek near Troublesome, Colo.

Location.- Chain gage, lat. 40°10', long. 106°17', in NE¼ sec. 6, T. 2 N., R. 79 W., a quarter of a mile upstream from mouth and 7½ miles north of old Troublesome post office. Prior to Aug. 28, staff gage at same site and datum.

Drainage area.- 81.4 square miles.

Records available.- April to September 1941.

Extremes.- Maximum discharge not determined; minimum daily discharge, 0.6 second-foot Aug. 8.

Remarks.- Records fair. Diversions above station for irrigation. Staff gage read twice daily Apr. 15 to May 12, May 22 to Aug. 27. Chain gage read twice daily Aug. 28 to Sept. 30.

Cooperation.- Gage heights and discharge measurements furnished Apr. 15 to June 30 by Bureau of Reclamation.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1							-	79	94	15	1.4	2.5
2							-	90	96	15	1.4	2.2
3							-	101	94	14	1.4	1.8
4							-	106	96	14	1.3	1.6
5							-	100	93	13	1.1	1.3
6							-	94	91	13	1.0	.9
7							-	96	101	13	.8	1.5
8							-	107	89	13	.6	4.5
9							-	89	83	13	.9	9.0
10							-	118	75	12	3.8	9.8
11							-	180	72	10	3.2	9.4
12							-	230	66	9.8	2.8	8.1
13							-	a300	60	9.4	2.0	8.1
14							-	a300	58	9.4	3.0	8.1
15							17	a290	55	9.4	4.5	9.0
16							17	a250	54	9.8	7.3	9.4
17							17	a250	53	9.8	7.7	7.7
18							14	a260	50	9.0	8.5	6.9
19							16	a250	46	8.1	6.9	6.5
20							19	a225	44	6.9	6.1	4.9
21							9.4	a200	38	6.1	4.9	4.2
22							12	166	36	6.5	6.1	3.8
23							18	160	33	5.7	6.5	3.2
24							20	160	29	5.7	6.5	2.5
25							27	157	25	4.9	6.1	1.8
26							35	151	24	5.3	5.3	1.6
27							31	121	22	5.3	5.7	1.4
28							42	118	18	4.2	5.7	1.2
29							44	113	17	4.0	5.3	.9
30							63	106	17	3.5	4.2	.8
31							-	100	-	2.2	3.5	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October					
November					
December					
Calendar year					
January	-	-	-	-	-
February	-	-	-	-	-
March	-	-	-	-	-
April 15-30	401.4	63	9.4	25.1	796
May	5,067	300	79	163	10,050
June	1,729	101	17	57.6	3,430
July	280.0	15	2.2	9.03	555
August	125.5	8.5	.6	4.05	249
September	134.6	9.8	.8	4.49	267
The period	-	-	-	-	15,350

a No gage-height record; discharge computed on basis of records for Troublesome Creek at Atmore Ranch, near Troublesome, Colo.

Muddy Creek near Kremmling, Colo.

Location.- Staff gage, lat. 40°18', long. 106°31', in SW¼ sec. 18, T. 4 N., R. 81 W., just upstream from Albert Creek and 18 miles northwest of Kremmling.

Drainage area.- 71.7 square miles.

Records available.- April to September 1941.

Extremes.- Maximum discharge observed during period, 658 second-feet May 14 (gage height, 3.86 feet), from rating curve extended above 350 second-feet; minimum daily, 0.7 second-foot Aug. 6.

Remarks.- Records fair. Several small diversions above station for irrigation. Some regulation by Barber Reservoir (capacity, 4,290 acre-feet).

Cooperation.- Gage-height records and discharge measurements from Apr. 24 to June 30 furnished by Bureau of Reclamation.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1							-	121	160	12	2.0	2.0
2							-	151	151	10	1.3	1.7
3							-	206	143	19	1.3	1.6
4							-	283	130	11	1.2	1.3
5							-	228	126	13	1.0	1.2
6							-	143	121	18	.7	1.4
7							-	181	116	18	1.0	1.2
8							-	234	134	16	1.0	1.7
9							-	315	114	16	1.9	7.0
10							-	360	132	13	1.9	8.0
11							-	448	120	12	6.0	9.0
12							-	462	106	9.5	5.0	8.0
13							-	530	114	8.5	5.0	8.0
14							-	565	88	9.0	5.5	8.0
15							-	510	93	9.5	4.1	9.5
16							-	380	94	7.5	3.8	7.0
17							-	388	84	6.5	6.5	7.0
18							-	408	80	4.7	6.5	7.0
19							-	385	65	4.1	7.0	6.0
20							-	269	60	9.5	6.0	4.1
21							-	265	58	9.5	4.4	2.6
22							-	283	53	5.0	3.8	2.3
23							-	298	55	5.0	3.8	2.6
24							65	322	56	2.9	4.1	3.5
25							53	318	69	2.3	5.0	4.4
26							62	290	35	3.5	3.8	4.1
27							74	295	26	3.8	3.2	4.4
28							91	258	19	2.9	2.3	3.5
29							134	216	23	2.3	2.0	3.8
30							116	190	19	2.3	1.9	3.8
31							-	167	-	2.9	1.7	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October					
November					
December					
Calendar year					
January	-	-	-	-	-
February	-	-	-	-	-
March	-	-	-	-	-
April 24-30	595	134	53	85.0	1,180
May	9,469	565	121	305	18,780
June	2,644	160	19	88.1	5,240
July	269.2	19	2.3	8.68	534
August	104.7	7.0	.7	3.38	208
September	135.7	9.5	1.2	4.52	269
The period	-	-	-	-	26,210

Blue River at Dillon, Colo.

Location.- Water-stage recorder, lat. 39°36'50", long. 106°03'05", in sec. 18, T. 5 S., R. 77 W., at edge of Dillon, a short distance upstream from Snake River and Tenmile Creek. Datum of gage is 8,821.42 feet above mean sea level (unadjusted).

Drainage area.- 129 square miles.

Records available.- October 1910 to September 1941.

Average discharge.- 31 years, 120 second-feet.

Extremes.- Maximum discharge during year, 654 second-feet June 19 (gage height, 3.39 feet), from rating curve extended above 500 second-feet; minimum daily, 15 second-feet Jan. 17.

1910-41: Maximum discharge observed, 1,180 second-feet June 2, 1914, June 14, 1924; maximum gage height observed, 4.35 feet June 2, 1914; minimum discharge observed, 7.4 second-feet Mar. 22, 1933 (discharge measurement).

Remarks.- Records good except those for periods of ice effect, which are fair. Practically all water diverted above station is returned to river above.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	76	34	26	20	19	17	20	43	379	313	106	62
2	76	34	24	19	18	16	19	53	334	294	98	60
3	74	33	25	18	16	17	19	87	338	280	96	59
4	69	35	27	17	16	18	19	113	362	277	96	55
5	65	34	24	18	17	17	19	116	370	270	96	54
6	65	*34	25	18	17	16	19	107	374	252	96	54
7	65	34	30	17	17	16	19	107	366	243	96	54
8	62	34	32	18	18	16	*20	146	366	237	96	55
9	61	34	30	18	19	17	20	138	342	234	96	56
10	59	34	27	19	19	*17	19	169	312	228	92	58
11	55	32	24	19	19	17	20	202	245	225	94	62
12	54	28	20	18	*19	17	22	251	218	231	113	62
13	52	25	22	*18	18	18	23	334	208	231	130	62
14	51	26	21	*17	17	18	22	406	210	213	125	58
15	50	28	20	16	18	19	22	354	233	195	116	56
16	50	28	20	16	18	19	23	302	306	186	118	55
17	49	28	22	15	18	20	23	281	370	175	113	55
18	48	29	21	16	18	20	24	323	480	172	111	54
19	46	30	20	16	18	21	23	309	600	180	111	53
20	45	28	20	17	18	21	21	260	608	183	104	52
21	44	26	21	17	18	21	21	230	586	175	100	50
22	43	24	22	18	18	20	22	266	570	162	96	49
23	42	23	22	17	18	20	22	225	550	152	96	54
24	42	23	22	16	18	19	24	230	525	145	90	57
25	41	25	21	17	18	18	27	251	550	138	83	58
26	40	26	20	18	19	17	31	278	540	142	80	57
27	40	24	19	18	20	18	34	292	470	148	73	56
28	38	25	20	17	20	18	35	302	430	145	70	56
29	37	26	20	16	-	19	38	323	381	138	66	55
30	36	28	21	18	-	19	42	342	337	125	64	55
31	36	-	21	19	-	19	-	366	-	118	66	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	1,611	76	36	52.0	3,200
November	872	35	23	29.1	1,730
December	709	32	19	22.9	1,410
Calendar year 1940	25,377	379	10	69.3	50,340
January	541	20	15	17.5	1,070
February	506	20	16	18.1	1,000
March	565	21	16	18.2	1,120
April	712	42	19	23.7	1,410
May	7,206	406	43	232	14,290
June	11,960	608	208	399	23,720
July	6,207	313	118	200	12,310
August	2,987	130	64	96.4	5,920
September	1,683	62	49	56.1	3,340
Water year 1940-41	35,559	608	15	97.4	70,520

* Winter discharge measurement made on this day.

Note.- Stage-discharge relation affected by ice Nov. 11-30, Dec. 11 to Apr. 6.

Blue River below Green Mountain Reservoir, near Kremmling, Colo.

Location.- Water-stage recorder, lat. 39°56', long. 106°21', in NE¼ sec. 33, T. 1 S., R. 80 W., just downstream from Spring Creek, about 4 miles downstream from Green Mountain Dam, and 10 miles southeast of Kremmling.

Drainage area.- 623 square miles.

Records available.- October 1937 to September 1941.

Extremes.- Maximum discharge during year, 3,010 second-feet June 19 (gage height, 5.17 feet); minimum daily, 84 second-feet Mar. 12.
1937-41: Maximum discharge, 4,000 second-feet June 4, 1938 (gage height, 5.93 feet), from rating curve extended above 3,000 second-feet; minimum daily, 80 second-feet Feb. 18-24, 1938, Feb. 18, 19, 1940.

Remarks.- Records excellent except those for period of ice effect, which are fair. Many diversions above station for irrigation. Green Mountain Dam is under construction.

Rating table, water year 1940-41, except period of ice effect (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Oct. 1-5)

1.3	132	2.2	350	4.2	1,640
1.5	155	2.7	590	5.2	3,050
1.7	190	3.2	900		
1.9	245	3.7	1,290		

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	322	172	125	105	100	90	125	372	1,910	1,160	413	259
2	315	168	120	95	88	95	120	413	1,720	1,110	390	256
3	301	174	120	92	86	98	140	520	1,840	1,060	377	242
4	287	182	125	92	86	95	152	612	1,950	1,030	386	221
5	280	*161	130	86	86	90	151	540	1,960	1,020	377	227
6	287	172	135	88	86	92	152	515	1,940	1,010	382	221
7	276	172	135	92	88	95	140	440	1,910	939	404	224
8	273	170	135	98	90	94	137	422	1,940	926	408	280
9	280	176	130	105	95	92	141	590	1,590	880	390	290
10	276	172	125	115	100	86	147	783	1,360	854	386	287
11	270	148	120	110	100	88	151	1,070	1,220	809	386	290
12	256	134	115	110	100	84	172	1,350	1,090	828	422	290
13	245	110	115	105	98	90	198	1,890	1,080	828	445	276
14	242	110	100	100	95	98	167	2,250	1,160	750	408	298
15	230	120	95	95	88	94	167	2,080	1,380	669	408	294
16	221	130	95	100	94	90	164	1,640	1,540	693	450	273
17	215	140	100	110	90	95	170	1,690	1,850	663	455	252
18	208	140	110	105	92	100	164	2,080	2,390	634	436	242
19	208	135	115	105	95	115	155	1,940	2,620	634	426	233
20	208	125	115	95	*94	110	148	1,350	2,550	663	408	227
21	200	120	120	105	94	110	148	1,210	2,450	634	395	221
22	195	120	130	*102	94	110	160	1,520	2,260	580	390	215
23	192	125	125	100	90	110	166	1,410	2,280	550	382	236
24	190	135	120	100	92	110	178	1,730	2,210	530	354	245
25	190	130	120	96	92	*111	188	1,890	2,420	500	332	239
26	188	125	115	95	90	115	212	1,940	2,180	530	318	230
27	188	125	115	92	85	115	259	2,030	1,890	530	304	221
28	188	125	115	90	86	120	308	1,760	1,710	525	290	215
29	180	130	115	92	-	120	322	1,630	1,460	490	280	212
30	180	130	110	98	-	125	343	1,580	1,300	460	280	227
31	180	-	110	105	-	130	-	1,840	-	431	266	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	7,271	322	180	235	14,420
November	4,276	182	110	143	8,480
December	3,655	135	95	118	7,250
Calendar year 1940	140,050	2,440	80	384	277,800
January	3,078	115	86	99.3	6,110
February	2,574	100	85	91.9	5,110
March	3,167	130	84	102	6,280
April	5,345	343	120	178	10,600
May	41,087	2,250	372	1,325	81,490
June	55,160	2,620	1,080	1,839	109,400
July	22,940	1,180	431	740	45,500
August	11,748	455	266	379	23,300
September	7,443	298	212	248	14,760
Water year 1940-41	167,744	2,620	84	460	332,700

* Winter discharge measurement made on this day.
Note.- Stage-discharge relation affected by ice Nov. 13 to Apr. 3.

Snake River at Dillon, Colo.

Location.- Water-stage recorder, lat. 39°36'50", long. 106°03'05", in sec. 18, T. 5 S., R. 77 W., at private bridge at Dillon, 100 yards upstream from mouth. Datum of gage is 8,820.54 feet above mean sea level (unadjusted).

Drainage area.- 92 square miles.

Records available.- October 1910 to September 1919, December 1929 to September 1941.

Average discharge.- 21 years, 68.6 second-feet.

Extremes.- Maximum discharge during year, 618 second-feet June 24 (gage height, 3.57 feet), from rating curve extended above 500 second-feet; minimum daily, 5.7 second-feet Mar. 26.

1910-19, 1929-41: Maximum discharge, 1,200 second-feet June 13, 1935 (gage height, 4.25 feet), from rating curve extended above 500 second-feet; minimum daily, 3 second-feet Nov. 9, 1912.

Remarks.- Records good except those for periods of ice effect, which are fair. One diversion above station for power.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	12	7.9	8.2	6.7	8.2	7.2	7.2	29	266	172	36	18
2	12	7.2	7.8	6.6	8.0	7.5	6.6	30	236	153	34	17
3	13	7.2	8.6	6.4	7.7	7.5	6.6	39	262	139	35	16
4	14	7.2	8.2	6.6	7.6	9.2	6.3	36	266	134	36	16
5	14	7.6	9.2	7.0	7.6	8.6	6.9	35	270	134	31	15
6	14	*7.9	7.5	6.9	8.0	7.5	6.9	29	270	130	32	14
7	12	7.5	7.8	6.8	8.4	7.5	6.0	24	262	121	29	15
8	12	8.3	8.6	6.6	8.8	8.0	*6.3	35	243	114	29	16
9	12	8.3	8.9	6.5	9.0	8.6	6.3	55	215	103	28	16
10	11	8.3	7.5	6.6	9.0	*10	7.2	74	180	100	28	16
11	11	8.0	7.2	6.7	8.9	10	7.5	95	163	103	26	17
12	9.9	7.4	7.0	6.8	*8.9	10	9.6	127	158	114	39	13
13	9.5	7.3	7.3	6.9	8.9	10	9.6	197	151	96	36	10
14	9.5	7.8	7.6	*7.0	8.9	10	7.8	236	148	87	29	11
15	9.5	8.2	6.8	6.9	8.9	9.6	8.2	188	166	87	30	11
16	8.7	8.6	7.2	6.8	8.9	9.4	8.2	156	188	98	32	11
17	8.7	8.8	7.6	6.6	9.6	7.6	8.2	191	243	84	26	11
18	8.7	8.8	8.0	6.6	9.2	7.8	8.2	218	302	79	27	10
19	8.7	9.0	8.0	6.6	9.2	8.0	7.5	172	322	74	28	10
20	8.7	8.6	8.2	7.0	9.2	8.0	7.5	129	302	76	25	10
21	8.7	8.4	8.6	7.2	9.2	7.8	8.2	127	279	65	25	10
22	8.3	8.0	9.0	7.4	8.9	7.8	7.2	136	258	67	26	10
23	8.3	7.8	8.9	7.6	8.9	7.5	7.8	136	266	57	25	9.6
24	8.3	7.6	8.6	7.4	8.6	6.6	8.6	163	310	53	22	8.9
25	8.3	7.8	8.6	7.2	8.6	6.0	11	197	348	52	21	8.9
26	7.9	7.8	8.6	7.8	8.6	5.7	13	229	274	55	20	8.9
27	7.9	7.6	7.4	7.6	8.4	6.3	18	250	250	60	20	8.9
28	7.5	7.8	6.6	7.4	8.0	6.3	20	215	232	54	21	9.2
29	7.2	8.2	7.5	7.2	-	6.6	25	236	209	52	20	9.6
30	6.9	8.2	7.2	7.6	-	7.2	28	243	180	42	20	9.2
31	6.9	-	6.9	8.0	-	7.5	-	286	-	37	18	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	305.1	14	6.9	9.84	605
November	239.1	9.0	7.2	7.97	474
December	245.1	9.2	6.6	7.91	486
Calendar year 1940	13,732.0	352	3.8	37.5	27,230
January	217.0	8.0	6.4	7.00	430
February	242.1	9.6	7.6	8.65	480
March	247.3	10	5.7	7.98	491
April	295.4	28	6.0	9.85	586
May	4,313	286	24	139	8,550
June	7,218	348	148	241	14,320
July	2,792	172	37	90.1	5,540
August	854	39	18	27.5	1,690
September	366.2	18	8.9	12.2	726
Water year 1940-41	17,334.3	348	5.7	47.5	34,380

* Winter discharge measurement made on this day.

Note.- Stage-discharge relation affected by ice Nov. 5, Nov. 10 to 25, Nov. 27, Dec. 12-22, Jan. 1 to Feb. 10, Feb. 27, 28, Mar. 8-20.

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Tenmile Creek at Dillon, Colo.

Location.- Water-stage recorder, lat. 39°36'45", long. 106°03'15", in sec. 18, T. 5 S., R. 77 W., at Dillon, 250 feet downstream from highway bridge and 200 yards upstream from mouth. Datum of gage is 8,817.97 feet above mean sea level (unadjusted).

Drainage area.- 113 square miles.

Records available.- October 1910 to September 1919, April 1930 to September 1941.

Average discharge.- 21 years (1910-19, 1929-41), 124 second-feet.

Extremes.- Maximum discharge during year, 654 second-feet May 17 (gage height, 3.93 feet); minimum daily, 13 second-feet Jan. 29, Feb. 3, 4.
1910-19, 1930-41: Maximum discharge, 2,010 second-feet June 1, 1933 (gage height, 5.82 feet, site and datum then in use), from rating curve extended above 1,000 second-feet; minimum, 2 second-feet Feb. 15-17, 20, 1918.

Remarks.- Records excellent except those for period of ice effect, which are fair. Diversions above station for irrigation and mining. Flow partly regulated by Robinson Reservoir (capacity, 2,520 acre-feet).

Rating table, water year 1940-41, except period of ice effect (gage height, in feet, and discharge, in second-feet)

1.8	22	2.1	52	2.7	160
1.9	30	2.2	66	3.0	270
2.0	40	2.4	100	3.7	550

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	47	23	22	17	16	16	25	77	450	218	58	36
2	50	25	21	16	14	17	24	86	434	207	58	36
3	48	27	22	15	13	18	24	120	438	192	56	34
4	42	28	23	15	13	20	24	134	462	178	59	33
5	44	24	20	16	14	19	25	107	458	167	56	32
6	46	*22	18	16	14	18	24	98	466	156	56	31
7	44	25	20	15	15	18	21	86	458	158	59	32
8	*45	27	24	16	16	20	*22	93	438	156	65	44
9	46	27	23	16	16	21	24	138	370	149	59	46
10	47	28	20	17	16	*23	26	214	326	136	52	52
11	45	24	19	17	*15	23	27	338	290	130	60	53
12	46	20	17	17	*14	22	31	418	262	142	68	48
13	44	18	18	*16	14	21	31	482	286	134	63	46
14	41	20	17	*15	14	25	28	506	342	124	56	50
15	40	22	16	15	15	24	28	458	386	114	62	44
16	39	23	17	15	15	23	28	414	414	113	63	40
17	37	23	18	14	16	25	29	466	442	107	60	39
18	35	23	17	14	16	27	28	518	432	96	63	37
19	35	24	17	14	16	28	27	446	436	100	63	35
20	32	22	17	15	16	28	25	334	454	96	59	33
21	30	20	18	15	17	28	26	358	434	89	58	33
22	29	19	19	16	17	27	27	414	426	82	60	36
23	29	18	19	16	17	26	28	414	406	80	58	40
24	28	18	19	15	17	25	32	470	390	77	55	41
25	28	19	18	15	18	24	35	486	414	79	51	38
26	28	21	18	16	18	23	41	494	358	84	50	37
27	29	19	16	15	18	22	53	510	322	93	42	36
28	28	20	17	14	19	24	55	470	290	80	40	35
29	26	21	18	13	-	24	56	436	255	72	39	35
30	27	23	18	15	-	24	65	446	228	66	40	39
31	28	-	19	16	-	24	-	470	-	63	39	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	1,163	50	26	37.5	2,310
November	673	28	18	22.4	1,330
December	585	24	16	18.9	1,160
Calendar year 1940	27,349	505	8	74.7	54,250
January	477	17	13	15.4	946
February	439	19	13	15.7	871
March	707	28	16	22.8	1,400
April	939	65	21	31.3	1,860
May	10,503	518	77	339	20,830
June	11,667	436	228	389	23,140
July	3,738	218	63	121	7,410
August	1,727	68	39	55.7	3,430
September	1,171	53	31	39.0	2,320
Water year 1940-41	33,789	518	13	92.6	67,010

* Winter discharge measurement made on this day.
Note.- Stage-discharge relation affected by ice Nov. 6 to Mar. 27.

Roaring Fork at Aspen, Colo.

Location.- Water-stage recorder, lat. 39°11'20", long. 106°48'55", in sec. 7, T. 10 S., R. 84 W., at Aspen, three-quarters of a mile upstream from Hunter Creek.
Drainage area.- 109 square miles.
Records available.- January 1911 to September 1921 and January 1934 to September 1941 in reports of Geological Survey. January 1911 to September 1921 and April 1932 to September 1941 in reports of State engineer. Records since May 24, 1935, equivalent to earlier records if flow through Twin Lakes tunnel is added to flow past station.
Average discharge.- 19 years, 160 second-feet (including flow diverted through Twin Lakes tunnel).
Extremes.- Maximum discharge during year, 775 second-feet June 24 (gage height, 4.14 feet), from rating curve extended above 650 second-feet; minimum daily, 7.7 second-feet Sept. 6.
1911-21, 1933-41: Maximum discharge, 3,170 second-feet June 18, 1917 (gage height, 7.2 feet, site and datum then in use, from high-water marks), from rating curve extended above 1,200 second-feet; minimum daily, 15 second-feet July 15, 16, 1934; minimum daily since diversion through Twin Lakes tunnel began, 3.2 second-feet Aug. 15, 1940.
Remarks.- Records good except those for periods of ice effect, which are fair. Transmountain diversion at point 15 miles upstream through Twin Lakes tunnel to Arkansas River Basin since May 24, 1935.
Cooperation.- Records of diverted flow furnished by State engineer.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	46	23	19	16	18	18	20	52	320	157	23	9.6
2	45	25	19	15	18	18	19	56	306	144	21	9.3
3	41	26	19	14	18	18	19	86	330	140	19	8.7
4	37	27	20	15	18	16	18	99	338	132	18	8.4
5	39	25	20	16	18	18	20	80	344	130	18	8.4
6	51	26	20	21	18	18	20	85	327	126	18	7.7
7	47	27	19	21	18	17	16	80	316	122	20	11
8	46	*26	19	21	18	16	18	100	282	115	21	22
9	47	26	19	22	19	17	19	151	224	104	20	25
10	47	26	*18	21	19	18	21	218	196	104	20	31
11	44	26	19	20	18	18	21	264	174	93	21	33
12	42	23	19	22	18	19	23	320	157	88	24	32
13	40	20	19	22	18	17	24	455	164	82	18	33
14	39	20	18	22	*18	18	22	459	172	73	18	40
15	37	22	18	*22	18	17	23	363	187	69	23	34
16	35	24	17	22	16	16	23	306	237	67	22	31
17	33	25	19	21	18	17	24	341	299	60	21	38
18	32	24	22	20	18	17	22	387	375	57	23	40
19	31	23	19	19	18	18	21	344	431	57	20	41
20	31	22	18	20	17	18	21	237	423	66	20	41
21	30	21	19	21	18	18	20	218	407	59	20	40
22	29	22	20	20	17	19	23	244	515	54	21	26
23	29	21	21	19	17	18	25	244	667	47	18	27
24	28	21	22	20	17	18	27	302	703	45	16	27
25	28	20	22	20	17	18	31	338	675	44	15	29
26	28	20	21	20	17	17	35	359	651	40	13	31
27	32	20	20	19	14	17	39	375	555	39	12	28
28	28	20	22	19	16	18	41	296	391	38	11	26
29	26	20	21	19	-	19	40	288	201	33	11	27
30	28	20	19	19	-	19	41	292	174	28	11	31
31	27	-	18	19	-	18	-	316	-	25	10	-

Month	Observed					Diversion by Twin Lake tunnel (acre-feet)	Adjusted for diversion	
	Second-foot-days	Maximum	Minimum	Mean	Run-off (acre-feet)		Run-off (acre-feet)	Mean (second-feet)
October	1,123	51	26	36.2	2,230	1,020	3,250	52.8
November	691	27	20	23.0	1,370	382	1,750	29.5
December	605	22	17	19.5	1,200	230	1,430	23.3
Calendar year 1940	18,790.9	391	3.2	51.3	37,270	28,230	65,490	90.2
January	607	22	14	19.6	1,200	187	1,390	22.6
February	494	19	14	17.6	980	116	1,100	19.7
March	548	19	16	17.7	1,090	122	1,210	19.7
April	738	41	18	24.6	1,460	123	1,580	26.7
May	7,757	459	52	250	15,390	10,100	25,490	415
June	10,541	703	157	351	20,910	14,880	35,790	601
July	2,438	157	25	78.6	4,840	7,060	11,900	193
August	566	24	10	18.3	1,120	1,620	2,740	44.6
September	796.1	41	7.7	26.5	1,580	253	1,830	30.8
Water year 1940-41	26,904.1	703	7.7	73.7	53,370	36,090	89,460	124

* Winter discharge measurement made on this day.
Note.- Stage-discharge relation affected by ice Nov. 11-19, 27-29, Dec. 12 to Feb. 12.

Roaring Fork at Glenwood Springs, Colo.

Location.- Water-stage recorder, lat. 39°33', long. 107°20', in sec. 9, T. 6 S., R. 89 W., at Glenwood Springs, 1,500 feet upstream from mouth. Datum of gage is 5,720.73 feet above mean sea level, adjustment of 1912.

Drainage area.- 1,460 square miles.

Records available.- October 1905 to September 1909, September 1910 to September 1931 and October 1933 to September 1941 in reports of U. S. Geological Survey. April 1906 to September 1909 and September 1910 to September 1941 in reports of State engineer.

Average discharge.- 35 years (1905-9, 1910-41), 1,496 second-feet (revised).

Extremes.- Maximum discharge during year, 8,300 second-feet May 14 (gage height, 5.64 feet); minimum daily, 250 second-feet Jan. 4.

1905-9, 1910-41: Maximum discharge, 17,600 second-feet June 14, 1918, and June 14, 1921; minimum, 145 second-feet Jan. 21, 1935 (gage height, 0.65 foot); minimum daily, 179 second-feet Jan. 21, 1935.

Remarks.- Records excellent. Diversions above station for irrigation. Transmountain diversion through Twin Lakes tunnel to Arkansas River Basin. Total flow diverted during water year 1940-41 was 36,090 acre-feet (see p. 61) for record by months).

Cooperation.- Records of diverted flow furnished by State engineer.

Rating table, water year 1940-41 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Oct. 1-27, Mar. 19 to May 1)

0.7	235	1.4	690	3.0	2,660
1.0	390	2.0	1,330	4.0	4,520
1.2	520	2.5	1,940	6.0	9,200

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,060	464	414	352	325	330	414	1,300	3,700	3,150	790	506
2	956	478	408	290	285	340	402	1,410	3,630	2,790	770	513
3	890	492	396	270	275	335	390	1,390	3,920	2,800	720	485
4	840	528	390	250	275	315	384	2,500	4,120	2,880	700	478
5	820	478	390	275	300	320	408	2,290	4,400	2,820	720	457
6	890	478	390	352	305	320	408	2,080	4,200	2,550	710	444
7	830	506	396	346	315	305	384	1,980	4,240	2,600	710	438
8	770	499	379	368	295	295	368	2,100	4,060	2,610	710	552
9	760	499	379	408	315	310	374	2,840	3,380	2,560	820	654
10	760	499	396	362	325	270	402	3,430	2,880	2,420	870	672
11	720	471	396	352	310	310	402	4,120	2,580	2,310	780	681
12	690	450	396	384	315	280	420	4,760	2,310	2,210	820	672
13	663	374	390	384	310	305	495	6,710	2,270	2,180	780	690
14	645	368	310	325	305	330	457	7,340	2,320	1,970	700	1,150
15	618	438	305	357	300	310	450	6,180	2,470	1,840	730	956
16	618	464	280	330	320	290	444	4,600	2,910	1,760	780	830
17	584	478	362	330	305	305	450	4,660	3,450	1,690	830	770
18	568	478	420	305	305	320	438	5,360	4,500	1,670	840	770
19	552	478	362	305	320	330	426	5,250	5,350	1,680	790	830
20	528	464	315	325	305	346	402	3,830	5,490	2,070	750	810
21	513	450	320	352	310	352	402	3,110	5,450	1,750	740	780
22	492	444	357	325	315	374	408	3,610	5,450	1,590	720	750
23	485	444	390	330	315	402	432	3,540	5,900	1,510	690	870
24	478	426	408	305	320	384	499	4,120	6,280	1,410	663	860
25	471	432	390	340	325	368	576	4,620	5,620	1,380	645	860
26	457	426	357	300	310	340	663	4,800	6,360	1,240	592	850
27	485	384	340	325	280	330	820	5,010	4,780	1,160	560	820
28	485	420	396	295	285	346	1,070	4,060	4,280	1,100	528	780
29	478	420	368	325	-	368	1,130	3,670	3,740	1,010	528	760
30	464	414	368	340	-	384	1,140	3,470	3,330	934	544	800
31	471	-	362	330	-	384	-	3,690	-	866	520	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	20,041	1,060	457	646	39,750
November	13,644	528	368	455	27,060
December	11,530	420	280	372	22,870
Calendar year 1940	303,031	4,540	220	828	601,000
January	10,237	408	250	330	20,300
February	8,570	325	275	306	17,000
March	10,298	402	270	332	20,430
April	15,448	1,140	368	515	30,640
May	118,230	7,340	1,300	3,814	234,500
June	122,380	6,280	2,270	4,079	242,700
July	60,504	3,150	860	1,952	120,000
August	22,050	870	520	711	43,740
September	21,488	1,150	438	715	42,620
Water year 1940-41	434,420	7,340	250	1,190	861,600

Crystal River near Redstone, Colo.

Location.- Water-stage recorder, lat. 39°18', long. 107°13', in NE¼ sec. 9, T. 9 S., R. 88 W., 75 feet downstream from Nettle Creek and 7 miles downstream from Redstone. Datum of gage is 6,485.07 feet above mean sea level (unadjusted).

Drainage area.- 197 square miles.

Records available.- May 1935 to September 1941. 1908-9 at site 3 miles downstream; records not equivalent.

Extremes.- Maximum discharge during year, 2,940 second-feet May 13 (gage height, 4.85 feet), from rating curve extended above 2,200 second-feet; minimum daily, 51 second-feet Jan. 4.

1935-41: Maximum discharge, 4,400 second-feet June 21, 1938 (gage height, 5.96 feet), from rating curve extended above 2,200 second-feet; minimum daily discharge, 46 second-feet Jan. 15, 1940.

Remarks.- Records good except those for periods of ice effort, which are fair. Diversions above station for irrigation.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	304	108	87	73	70	76	116	504	1,630	1,350	265	105
2	268	110	88	56	63	76	113	546	1,700	1,160	256	107
3	247	113	86	52	60	76	108	720	1,860	1,210	242	99
4	222	118	87	b51	67	73	107	917	1,920	1,260	228	120
5	236	104	84	b55	70	78	113	728	1,960	1,210	242	86
6	244	108	84	b69	70	76	113	692	1,810	1,050	271	81
7	219	108	81	b70	75	72	104	685	1,900	1,140	259	86
8	202	108	80	b78	70	68	100	744	1,700	1,080	274	131
9	200	108	83	75	76	74	104	1,090	1,320	1,090	334	108
10	194	110	*80	73	76	66	113	1,390	1,090	1,000	328	104
11	180	99	80	74	75	74	115	1,540	908	953	265	107
12	174	94	81	75	76	67	126	1,880	784	854	233	108
13	164	78	81	74	75	73	142	2,330	768	784	205	177
14	169	79	72	69	74	78	133	2,410	863	692	188	508
15	153	105	b72	*72	75	72	133	2,150	1,000	657	222	319
16	146	108	b66	68	75	73	131	1,850	1,270	608	239	253
17	142	112	b85	68	74	75	128	1,980	1,690	602	230	211
18	137	113	94	66	74	79	126	2,120	2,030	596	214	225
19	135	115	79	68	76	80	123	1,980	2,230	657	186	259
20	131	110	73	72	74	88	115	1,410	2,240	827	180	250
21	128	108	78	73	74	90	118	1,410	2,160	602	188	233
22	124	108	80	72	75	96	126	1,740	2,280	535	169	216
23	123	108	80	70	74	100	153	1,810	2,450	508	148	253
24	120	105	81	70	74	102	202	2,000	2,250	478	151	247
25	118	107	80	70	74	97	247	2,080	2,130	458	166	266
26	118	105	75	66	74	93	295	2,140	1,980	422	157	266
27	133	94	72	70	67	88	368	2,090	1,840	389	151	250
28	124	97	83	63	69	90	414	1,650	1,730	361	144	233
29	118	95	78	73	-	96	422	1,430	1,530	334	146	230
30	121	91	75	76	-	99	438	1,410	1,420	286	148	253
31	116	-	75	75	-	102	-	1,610	-	277	139	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	5,200	304	116	168	10,310
November	3,126	118	78	104	6,200
December	2,479	94	72	80.0	4,920
Calendar year 1940	101,260	1,760	46	277	200,800
January	2,136	78	51	68.9	4,240
February	2,026	76	60	72.4	4,020
March	2,547	102	66	82.2	5,050
April	5,146	438	100	172	10,210
May	47,036	2,410	504	1,517	93,290
June	50,333	2,450	768	1,678	99,830
July	23,430	1,350	277	756	46,470
August	6,568	334	139	212	13,030
September	5,889	508	81	196	11,680
Water year 1940-41	155,916	2,450	51	427	309,200

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

West Divide Creek below Willow Creek, near Raven, Colo.

Location.- Water-stage recorder, lat. 39°17', long. 107°31', in NE¼ sec. 14, T. 9 S., R. 91 W., a quarter of a mile downstream from Willow Creek and 15 miles south of Raven.
Drainage area.- 32.7 square miles.
Records available.- October 1938 to September 1941.
Extremes.- Maximum discharge during year, 876 second-feet May 13 (gage height, 3.27 feet), from rating curve extended above 320 second-feet; probably no flow at times during winter.
1938-41: Maximum discharge, that of May 13, 1941; no flow some periods in each year.
Remarks.- Records good except those for periods of ice effect, which are fair. No records Nov. 10 to Mar. 12. No diversions above station.
Flow increased above station by diversion from Clear Fork of East Muddy Creek (Gunnison River Basin) through Clear Fork ditch and by diversion from Thompson Creek (Roaring Fork Basin) through Thompson Creek feeder ditch in the amounts given in the following table:

Ditch	Month	Diversion (acre-feet)
Clear Fork ditch	June	1,040
	July	479
Thompson Creek feeder ditch ..	May	52
	June	494
	July	120
	Aug.	10
Total.....	-	2,195

Cooperation.- Records of transmountain diversions to West Divide Creek furnished by State engineer.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3.1	1.6				-	6.0	101	122	47	2.1	0.6
2	2.7	1.8				-	5.8	118	113	46	1.7	.6
3	2.1	1.8				-	5.6	176	111	55	1.5	.6
4	1.8	1.7				-	5.4	199	107	53	1.2	.5
5	2.9	1.6				-	5.6	176	107	39	1.0	.5
6	4.0	1.6				-	5.4	183	100	34	1.9	.6
7	2.6	1.4				-	5.4	199	120	32	2.8	.6
8	2.1	1.5				-	5.8	283	118	36	2.8	2.1
9	1.9	*1.4				-	6.0	350	105	37	4.3	1.9
10	2.2	-				-	*6.5	362	107	26	5.3	1.5
11	1.9	-				-	6.0	362	100	22	3.2	1.2
12	1.8	-				-	8.5	465	94	21	2.8	.9
13	1.6	-				*1.3	11	585	88	16	2.3	3.2
14	1.6	-				1.3	12	394	88	13	1.7	8.0
15	1.5	-				1.4	11	296	94	12	1.7	3.0
16	1.5	-				1.5	11	273	98	11	2.3	1.9
17	1.5	-				1.8	7.5	300	100	9.2	3.7	1.5
18	1.5	-				2.2	6.5	289	105	7.7	5.3	1.7
19	1.4	-				2.5	6.0	222	102	8.0	3.9	1.9
20	1.4	-				3.0	7.5	170	94	10	2.4	1.4
21	1.4	-				3.8	7.5	180	92	7.4	1.9	1.4
22	1.1	-				4.5	6.0	188	90	6.2	2.3	1.4
23	1.2	-				5.0	9.8	186	92	5.6	2.1	2.4
24	1.4	-				4.8	18	191	94	4.8	1.5	3.0
25	1.4	-				4.5	29	180	84	6.2	1.2	3.5
26	1.8	-				4.5	42	178	76	5.9	.9	3.2
27	2.2	-				4.5	52	170	74	5.3	.8	2.6
28	1.8	-				4.8	55	152	69	4.6	.8	2.3
29	1.4	-				5.0	58	142	62	4.1	.7	2.3
30	1.6	-				5.2	76	137	55	3.7	.9	4.6
31	1.6	-				5.5	-	134	-	2.6	.7	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	58.0	4.0	1.1	1.87	115
November 1-9	14.4	1.8	1.4	1.60	29
December.....	-	-	-	-	-
Calendar year	-	-	-	-	-
January.....	-	-	-	-	-
February.....	-	-	-	-	-
March 13-31	67.1	5.5	1.3	3.53	133
April.....	497.8	76	5.4	16.6	987
May.....	7,341	585	101	237	14,560
June.....	2,861	122	55	95.4	5,670
July.....	591.3	55	2.6	19.1	1,170
August.....	67.7	5.3	.7	2.18	134
September.....	60.9	8.0	.5	2.03	121
Water year	-	-	-	-	-

* Winter discharge measurement made on this day.
Note.- Stage-discharge relation affected by ice Nov. 4, Mar. 13 to Apr. 12.

Rifle Creek near Rifle, Colo.

Location.- Staff gage, lat. 39°37', long. 107°45', in NE¼ sec. 18, T. 5 S., R. 92 W., 1 mile downstream from West Rifle Creek and 6.2 miles northeast of Rifle.

Drainage area.- 140 square miles.

Records available.- October 1940 to September 1941.

Extremes.- Maximum discharge observed during year, 180 second-feet May 15 (gage height, 2.10 feet); minimum daily, 2.7 second-feet Feb. 6.

Remarks.- Records fair. Diversions above station for irrigation. Some regulation at low flow by power plant on East Rifle Creek. Staff gage read twice daily.

Cooperation.- Gage-height record and discharge measurements from Oct. 1 to June 30 furnished by Bureau of Reclamation.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	40	6.6	4.8	5.2	4.8	12	11	21	33	37	36	29
2	11	6.2	10	6.6	4.8	14	9.5	27	30	42	36	28
3	10	6.2	11	8.0	4.6	37	12	29	30	42	37	28
4	9.5	6.2	11	3.2	4.4	36	9.5	57	42	38	37	30
5	16	6.2	10	3.5	4.2	27	14	83	44	43	35	27
6	9.5	6.2	10	5.0	2.7	22	18	57	46	40	36	26
7	8.0	6.6	10	4.8	3.2	21	8.0	44	49	40	38	27
8	8.0	6.2	12	4.5	3.4	18	6.9	24	47	40	36	27
9	9.0	6.2	9.0	4.2	3.8	16	6.9	44	43	40	37	35
10	8.3	6.2	6.9	3.2	4.8	18	6.6	50	38	40	36	34
11	9.0	6.2	8.0	3.5	4.8	16	9.0	71	37	42	36	28
12	8.3	6.2	7.2	4.8	4.8	18	10	95	46	44	34	27
13	8.3	5.8	4.2	3.8	4.2	18	11	132	37	62	34	33
14	6.9	5.0	4.0	3.8	4.2	19	8.0	164	39	44	34	26
15	6.2	5.4	3.8	4.5	4.0	18	11	159	35	44	33	26
16	6.9	5.6	4.0	3.5	6.6	19	9.0	140	40	38	41	21
17	6.9	6.0	4.2	5.0	7.6	22	9.0	132	37	40	40	21
18	6.6	6.2	4.6	4.2	14	34	32	156	38	41	37	27
19	5.5	6.2	*5.0	3.8	11	32	32	143	37	52	37	22
20	6.6	5.8	5.0	4.8	9.5	20	32	110	37	41	30	22
21	6.9	5.5	4.8	4.0	8.6	28	34	100	37	37	29	23
22	6.9	6.6	4.8	4.2	9.5	19	34	88	44	37	29	27
23	6.9	6.0	5.5	4.2	12	30	35	87	43	37	25	25
24	6.2	6.6	5.0	*4.2	13	22	34	143	42	36	22	23
25	7.2	6.2	5.0	4.5	10	21	36	135	43	35	22	18
26	6.2	5.8	4.5	4.2	7.6	17	34	127	40	34	22	17
27	9.5	5.4	4.0	4.0	12	16	32	67	41	34	26	14
28	7.6	5.0	3.5	4.2	12	16	18	58	41	35	30	11
29	6.9	4.8	3.5	4.4	-	18	20	47	40	35	30	12
30	18	5.0	5.5	4.8	-	12	23	46	39	37	29	12
31	22	-	3.8	4.5	-	9.0	-	40	-	35	29	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	304.8	40	5.5	9.83	605
November	178.1	6.6	4.8	5.94	353
December	194.6	12	3.5	6.28	386
Calendar year	-	-	-	-	-
January	137.1	8.0	3.2	4.42	272
February	196.1	14	2.7	7.00	389
March	645.0	37	9.0	20.8	1,280
April	565.4	36	6.6	18.8	1,120
May	2,676	164	21	86.3	5,310
June	1,195	49	30	39.8	2,370
July	1,242	62	34	40.1	2,460
August	1,013	41	22	32.7	2,010
September	726	35	11	24.2	1,440
Water year 1940-41	9,073.1	164	2.7	24.9	18,000

* Winter discharge measurement made on this day.

Note.- Stage-discharge relation affected by ice Nov. 13-17, 23-30, Dec. 14-18, Jan. 26-29, Feb. 3, 4, 8.

East Fork of Rifle Creek near Rifle, Colo.

Location.- Water-stage recorder, lat. 39°04', long. 107°41', in sec. 22, T. 4 S., R. 92 W., just downstream from Rifle Falls, 7.2 miles upstream from mouth, and 12 miles northeast of Rifle.

Drainage area.- 32 square miles.

Records available.- October 1940 to September 1941.

Extremes.- Maximum discharge during year, 131 second-feet May 13 (gage height, 2.12 feet); minimum daily, 24 second-feet Feb. 26-28.

Remarks.- Records good. Flow regulated by power plant just above station. Several small diversions above station for irrigation.

Cooperation.- Gage-height record and discharge measurements from Oct. 1 to June 30 furnished by Bureau of Reclamation.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	32	32	29	31	29	28	31	35	68	53	44	38
2	31	32	30	31	28	31	31	35	65	51	44	37
3	30	32	31	31	28	31	31	38	65	51	42	37
4	32	32	32	31	29	31	31	41	64	48	42	38
5	35	31	31	30	29	31	31	42	65	47	41	38
6	33	31	31	30	29	30	31	43	64	46	41	38
7	33	31	31	30	28	30	31	44	67	45	41	38
8	34	31	31	30	28	31	31	43	65	44	41	38
9	34	32	31	30	28	32	31	45	64	44	41	38
10	32	32	31	30	28	31	32	50	64	44	41	38
11	32	31	31	31	29	32	31	65	62	46	41	38
12	32	31	31	31	28	31	32	84	60	46	42	40
13	32	29	30	31	28	32	32	105	60	46	41	43
14	31	29	29	31	26	32	29	123	60	46	41	43
15	32	30	28	31	26	31	29	115	62	46	42	42
16	32	31	29	31	26	32	26	102	63	46	43	41
17	33	32	30	31	26	31	25	103	60	44	43	41
18	32	33	31	31	26	31	28	112	58	43	42	42
19	31	33	31	31	26	31	29	110	57	43	41	42
20	31	32	31	31	26	31	29	100	56	44	40	41
21	31	32	31	30	26	29	29	98	55	43	40	41
22	31	32	31	30	26	30	29	100	56	43	38	41
23	31	31	32	29	26	31	29	96	59	43	38	40
24	32	32	32	29	25	30	30	96	58	44	37	38
25	32	31	32	29	26	31	31	94	58	45	37	36
26	33	31	32	29	24	31	31	85	57	44	38	34
27	34	30	32	29	24	30	33	78	56	44	38	35
28	33	31	32	29	24	30	34	77	56	45	38	36
29	31	30	33	30	-	30	34	76	54	45	38	37
30	32	30	32	29	-	30	34	73	54	44	38	37
31	31	-	32	29	-	30	-	71	-	44	37	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	995	35	30	32.1	1,970
November	937	33	29	31.2	1,860
December	960	33	28	31.0	1,900
Calendar year	-	-	-	-	-
January	936	31	29	30.2	1,860
February	752	29	24	26.9	1,490
March	952	32	28	30.7	1,890
April	915	34	25	30.5	1,810
May	2,379	123	35	76.7	4,720
June	1,812	68	54	60.4	3,590
July	1,407	53	43	45.4	2,790
August	1,251	44	37	40.4	2,480
September	1,166	43	34	38.9	2,310
Water year 1940-41	14,462	123	24	39.6	28,670

Plateau Creek near Collbran, Colo.

Location.- Water-stage recorder, lat. 39°15', long. 107°50', in NW¼ sec. 24, T. 9 S., R. 94 W., 7 miles east of Collbran.

Drainage area.- 88 square miles.

Records available.- August 1921 to September 1927 (monthly discharge) and October 1933 to September 1941 in reports of U. S. Geological Survey. August 1921 to September 1941 in reports of State engineer.

Average discharge.- 20 years, 100 second-feet.

Extremes.- Maximum discharge during year, 1,520 second-feet May 26 (gage height, 4.67 feet), from rating curve extended above 1,100 second-feet; minimum daily, 8.2 second-feet Sept. 6.

1921-41: Maximum discharge, 2,800 second-feet May 28, 1922 (gage height, 6.72 feet, site and datum then in use), from rating curve extended above 1,300 second-feet; minimum daily, 3 second-feet Sept. 21, 1926.

Remarks.- Records good except those for November to March, which are fair. Five small diversions above station.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	61				15	15	24	130	710	118	18	16
2	66				14	15	22	172	690	104	17	14
3	59				13	14	21	186	616	93	17	12
4	41				12	16	21	263	592	86	18	11
5	93				14	14	22	215	600	86	20	9.2
6	88				15	14	22	205	520	79	20	8.2
7	55				15	14	21	218	852	72	20	8.9
8	48				14	16	20	282	632	78	21	17
9	50				15	13	21	396	464	71	23	15
10	50				15	12	23	552	414	65	20	16
11	44				14	13	23	750	379	55	16	11
12	40				15	14	26	864	335	49	17	10
13	37				16	13	27	1,030	368	49	16	43
14	33				15	12	24	1,070	426	54	17	137
15	29				14	12	23	1,030	402	45	21	46
16	26	15.5	14.5	14.0	[illegible]	13	24	914	438	43	61	25
17	24				13	13	25	1,030	432	35	42	18
18	22				14	14	23	1,140	478	33	31	26
19	21				14	15	22	970	450	31	21	35
20	20				15	16	21	616	402	29	17	28
21	19				16	18	21	680	379	24	16	22
22	18				16	18	23	828	357	23	16	28
23	18	(*)			14	19	26	942	335	20	20	43
24	17				15	18	33	1,060	374	20	18	42
25	17				*15	16	38	1,060	308	32	17	56
26	17				15	16	50	1,090	263	27	16	66
27	22				19	16	71	956	242	25	16	52
28	21				17	17	89	770	208	22	15	38
29	19			(*)	-	17	103	760	172	19	18	34
30	18				-	18	117	804	140	19	18	49
31	19	-			-	20	-	740	-	18	16	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	1,112	93	17	35.9	2,210
November	465	-	-	15.5	922
December	449.5	-	-	14.5	892
Calendar year 1940	21,002.5	780	4.8	57.4	41,670
January	434	-	-	14.0	861
February	413	19	12	14.8	819
March	471	20	12	15.2	934
April	1,026	117	20	34.2	2,040
May	21,723	1,140	130	701	43,090
June	12,978	852	140	433	25,740
July	1,524	118	18	49.2	3,020
August	639	61	15	20.6	1,270
September	936.3	137	8.2	31.2	1,860
Water year 1940-41	42,170.8	1,140	-	116	83,660

* Winter discharge measurement made on this day.

Note.- Stage-discharge relation affected by ice Nov. 1 to Feb. 24, Mar. 10.

Plateau Creek near Cameo, Colo.

Location.- Water-stage recorder, lat. 39°11', long. 108°16'. in SW¼ sec. 18, T. 10 S., R. 97 W., 1.1 miles upstream from mouth and 4 miles northeast of Cameo.

Drainage area.- 604 square miles.

Records available.- April 1936 to September 1941.

Extremes.- Maximum discharge during year, 3,620 second-feet May 14 (gage height, 7.60 feet); minimum daily, 54 second-feet Aug. 2, 3.
1936-41: Maximum discharge, that of May 14, 1941; minimum daily, 16 second-feet July 14, 15, Aug. 17, 18, 1940.

Remarks.- Records excellent. Many diversions above station for irrigation.

Rating tables, water year 1940-41 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Feb. 25 to May 14)

Oct. 1 to May 9						May 10 to Sept. 30					
1.6	50	2.0	120	2.8	390	1.4	50	2.2	225	4.1	1,035
1.7	65	2.2	170	4.5	1,390	1.6	80	2.5	330	6.0	2,260
1.8	82	2.5	265	5.2	1,880	1.9	140	3.1	570	8.0	3,780

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	152	79	84	79	72	96	162	534	1,220	168	56	66
2	122	75	80	79	65	104	155	539	1,140	155	54	68
3	120	98	77	77	84	102	162	1,050	1,060	136	54	60
4	106	112	77	75	80	84	165	1,870	985	124	58	60
5	182	80	75	106	77	89	170	1,290	955	124	56	60
6	230	86	75	106	80	89	162	1,140	925	122	62	60
7	155	91	75	96	84	77	136	1,040	945	114	64	64
8	128	91	74	104	84	77	125	1,280	1,090	110	66	77
9	118	91	74	102	79	87	132	1,690	1,020	106	70	76
10	118	93	79	89	72	67	165	1,990	945	104	104	74
11	110	84	77	93	75	87	162	2,270	872	94	84	76
12	104	84	77	91	120	74	173	2,630	840	86	76	74
13	100	62	72	93	110	84	221	3,170	836	84	70	112
14	93	77	59	108	91	102	158	3,020	808	82	68	292
15	89	84	59	96	87	96	170	2,480	777	78	68	171
16	86	86	64	100	100	82	182	1,880	750	84	106	134
17	80	89	110	106	89	82	182	1,970	723	77	100	118
18	77	89	116	93	93	93	155	2,160	750	74	112	124
19	72	91	108	89	116	104	150	2,170	732	71	86	136
20	70	87	100	89	91	112	145	1,630	664	77	77	126
21	68	84	116	102	104	110	152	1,460	584	70	77	120
22	67	86	106	100	104	122	150	1,420	518	68	78	236
23	67	87	108	93	95	158	152	1,410	442	65	76	207
24	65	79	114	77	104	212	191	1,560	514	62	71	222
25	65	84	104	79	160	155	237	1,580	442	62	76	195
26	70	82	128	72	96	132	262	1,610	374	64	65	207
27	125	75	132	75	75	118	368	1,730	316	70	62	201
28	89	84	126	72	82	118	484	1,550	288	62	62	171
29	84	82	98	70	-	120	534	1,460	250	60	62	160
30	86	82	80	70	-	125	468	1,380	207	62	70	180
31	84	-	80	70	-	125	-	1,290	-	58	66	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	3,182	230	65	103	6,310
November	2,554	112	62	85.1	5,070
December	2,803	132	59	90.4	5,560
Calendar year 1940	48,607	1,340	16	133	96,410
January	2,751	108	70	88.7	5,460
February	2,569	160	65	91.8	5,100
March	3,283	212	67	106	6,510
April	6,232	534	125	208	12,360
May	52,253	3,170	534	1,686	103,600
June	21,972	1,220	207	732	43,580
July	2,775	168	58	89.5	5,500
August	2,258	112	54	72.8	4,480
September	3,927	292	60	131	7,790
Water year 1940-41	106,559	3,170	54	292	211,300

Buzzard Creek near Heiberger, Colo.

Location.- Water-stage recorder, lat. 39°17', long. 107°43', in NE¼ sec. 13, T. 9 S., R. 93 W., 1.1 miles downstream from Hightower ranger station and 3 miles east of Heiberger.

Drainage area.- 76.5 square miles.

Records available.- April 1936 to September 1941 (no winter records).

Extremes.- Maximum discharge during year, 968 second-feet May 13 (gage height, 5.05 feet), from rating curve extended above 500 second-feet; minimum daily, 0.1 second-foot Aug. 1-7, 9, 10, Sept. 11, 12.
1936-41: Maximum discharge, that of May 13, 1941; no flow at times in most years.

Remarks.- Records good except those below 10 second-feet, which are fair. One diversion above station to West Divide Creek for irrigation.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	11	2.6					e	107	128	17	0.1	0.2
2	6.5	2.4					7	127	125	15	.1	.2
3	6.8	2.6					6	195	122	12	.1	.2
4	6.0	3.5					7	372	114	11	.1	.2
5	6.8	3.4					8	264	115	11	.1	.2
6	19	3.2					7	233	112	11	.1	.2
7	12	3.5					6	257	131	9.2	.1	.2
8	6.8	3.4					6	348	130	7.0	.2	.2
9	5.8	3.5					7	416	98	6.1	.1	.2
10	5.5	3.5					8	468	90	5.8	.1	.2
11	5.0	2.7					*9	488	79	4.8	1.4	.1
12	3.6	2.8					15	604	67	4.4	1.1	.1
13	3.1	2.8					14	624	73	3.4	.5	.2
14	2.8	2.5					17	504	69	2.6	.4	14
15	2.9	2.4					27	334	67	3.8	.3	9.2
16	2.2	2.4					29	288	77	3.2	.6	3.0
17	2.2	2.6					25	357	86	3.0	1.7	1.8
18	2.0	3.0					21	354	90	3.0	2.0	1.4
19	1.7	3.4					18	302	91	1.6	2.1	1.7
20	1.5	3.4					20	225	93	1.0	1.2	1.8
21	1.4	2.8					21	248	81	.8	.8	1.5
22	1.3	2.8					20	257	60	.6	.8	1.8
23	1.2	*2.8					25	242	54	.5	.6	4.4
24	1.3	2.8					43	230	78	.4	.4	7.4
25	1.1	2.9					54	211	54	.3	.2	7.7
26	1.6	2.8					74	216	40	.3	.2	9.6
27	2.2	2.6					87	206	34	.2	.2	5.8
28	2.8	2.4					105	172	31	.2	.2	6.7
29	2.8	2.2					101	146	26	.2	.2	4.4
30	2.8	2.1					104	150	21	.2	.2	2.8
31	2.8	-					-	140	-	.2	.2	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	134.5	19	1.1	4.34	267
November	85.8	3.5	2.1	2.86	170
December	-	-	-	-	-
Calendar year	-	-	-	-	-
January	-	-	-	-	-
February	-	-	-	-	-
March	-	-	-	-	-
April	899	105	6	30.0	1,780
May	9,065	624	107	292	17,980
June	2,436	131	21	81.2	4,830
July	139.8	17	.2	4.51	277
August	16.4	2.1	.1	.53	33
September	87.4	14	.1	2.91	173
Water year	-	-	-	-	-

* Winter discharge measurement made on this day.
Note.- No gage-height record July 22 to Aug. 8; discharge computed on basis of recorded range in stage and records for station near Collbran. Stage-discharge relation affected by ice Nov. 11-19, 23-30, Apr. 1-14.

Buzzard Creek near Collbran, Colo.

Location.- Water-stage recorder, lat. 39°16', long. 107°52', in sec. 14, T. 9 S., R. 94 W., half a mile upstream from Brush Creek and 7 miles east of Collbran.

Drainage area.- 139 square miles.

Records available.- August 1921 to September 1927 (monthly discharge only) and October 1933 to September 1941 in reports of U. S. Geological Survey. August 1921 to September 1941 in reports of State engineer.

Average discharge.- 20 years, 53.5 second-feet.

Extremes.- Maximum discharge during year, 1,630 second-feet May 14 (gage height, 7.80 feet), from rating curve extended above 650 second-feet; minimum daily, 0.7 second-foot Aug. 14.

1921-41: Maximum discharge, that of May 14, 1941; minimum, 0.1 second-foot Aug. 27, 1934 (gage height, 0.76 foot).

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

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	22	4.8	3.4	3.0	2.8	5.1	42	256	200	20	1.8	1.7
2	10	4.4	3.2	2.7	2.5	5.0	25	310	185	18	1.9	1.5
3	7.8	4.1	3.9	2.4	2.3	4.5	24	530	180	15	1.7	1.4
4	7.5	5.3	2.8	2.1	2.3	4.8	24	910	178	13	1.6	1.2
5	12	5.0	2.8	2.0	2.3	4.5	42	572	180	13	1.0	1.2
6	27	4.8	2.5	2.2	2.3	4.3	28	450	185	13	.8	1.5
7	21	6.5	2.8	2.1	2.3	4.4	21	420	187	13	1.1	1.7
8	13	7.5	2.5	2.4	2.5	4.5	18	533	210	13	2.8	1.9
9	10	6.8	2.5	2.5	2.6	4.4	29	668	162	11	1.6	1.6
10	10	7.2	2.6	2.5	2.8	4.2	50	770	151	10	.9	1.6
11	8.3	5.3	2.5	2.5	3.0	4.3	*46	794	142	9.8	1.2	1.2
12	7.8	4.8	2.3	2.4	2.9	4.0	82	896	115	8.6	.9	1.1
13	5.5	4.2	2.1	2.5	2.9	4.2	74	1,080	109	7.8	.9	2.5
14	4.8	3.9	2.0	2.6	3.0	*4.6	83	1,030	107	7.8	.7	14
15	4.1	3.9	1.9	2.7	3.0	4.1	107	746	103	8.3	1.0	17
16	3.9	4.1	2.0	2.6	3.1	4.0	113	551	109	8.6	3.7	8.3
17	2.9	4.6	2.3	2.5	3.0	4.5	92	578	110	8.3	7.0	5.3
18	2.4	4.8	2.6	2.4	3.1	5.4	72	611	110	8.3	13	4.6
19	2.4	5.3	2.7	2.4	3.2	6.2	57	542	109	8.0	11	3.9
20	2.4	5.3	2.5	2.5	3.0	7.0	56	325	109	8.3	9.8	3.2
21	2.2	4.8	2.3	2.6	3.1	8.0	50	315	104	8.6	8.3	3.1
22	2.4	4.4	2.3	2.7	3.2	8.2	48	365	93	7.5	6.5	4.1
23	2.4	*4.1	2.4	2.6	3.2	7.7	72	340	77	6.2	4.1	6.2
24	2.6	4.2	2.6	2.4	3.3	7.4	112	342	85	5.0	3.1	11
25	2.5	4.4	2.9	2.5	*3.4	7.2	113	325	89	3.9	2.4	11
26	3.7	4.0	2.8	2.4	3.5	8.0	144	315	58	3.1	1.9	11
27	5.5	3.7	2.7	2.4	4.0	8.6	189	340	44	2.6	2.2	10
28	6.0	3.4	2.8	2.5	4.8	14	271	276	37	1.9	1.9	7.8
29	5.5	3.2	3.0	*2.6	-	24	285	232	31	2.5	2.1	9.5
30	5.0	3.2	3.1	2.8	-	24	251	216	25	2.1	2.2	7.8
31	5.0	-	3.1	2.9	-	25	-	212	-	1.9	2.1	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	227.6	27	2.2	7.34	451
November	142.0	7.5	3.2	4.73	282
December	81.9	3.9	1.9	2.64	162
Calendar year 1940	9,148.8	280	.4	25.0	18,150
January	77.4	3.0	2.0	2.50	154
February	83.4	4.8	2.3	2.98	165
March	236.1	25	4.0	7.62	468
April	2,620	285	18	87.3	5,200
May	15,850	1,080	212	511	31,440
June	3,584	210	25	119	7,110
July	268.1	20	1.9	8.65	532
August	101.2	13	.7	3.26	201
September	157.9	17	1.1	5.26	313
Water year 1940-41	23,429.6	1,080	7	64.2	46,480

* Winter discharge measurement made on this day.

Note.- Stage-discharge relation affected by ice Nov. 12, 13, 23, 24, 26, 27, Dec. 12 to Mar. 13, Mar. 16-20, and Apr. 5.

Big Creek below Bonham Reservoir, near Collbran, Colo.

Location.- Water-stage recorder and Cippoletti weir, lat. 39°06', long. 107°54', in SE¼ sec. 9, T. 11 S., R. 94 W., at outlet of Bonham Reservoir, just upstream from Atkinson Creek and 10 miles southeast of Collbran.

Drainage area.- 6.1 square miles.

Records available.- May to September 1941.

Extremes.- Maximum discharge during period, 46 second-feet May 19 (gage height, 1.00 foot); no flow July 10-12.

Remarks.- Records excellent. Complete regulation by Bonham Reservoir (capacity, 1,450 acre-feet).

Cooperation.- Gage heights and results of discharge measurements May 17 to June 30 furnished by Bureau of Reclamation.

Rating table, period May 17 to Sept. 30, 1941 (gage height, in feet, and discharge, in second-feet)

0	0	0.3	8.8	0.8	34.5
.1	1.5	.4	13	1.0	45.5
.2	5.0	.5	18		

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1								-	40	25	28	16
2								-	40	24	28	15
3								-	40	24	31	12
4								-	40	24	31	8.0
5								-	39	24	31	4.3
6								-	39	24	31	3.6
7								-	40	27	31	2.2
8								-	40	22	31	1.5
9								-	40	7.9	31	4.6
10								-	39	0	30	12
11								-	39	0	30	12
12								-	33	0	30	13
13								-	31	13	30	14
14								-	31	22	29	14
15								-	31	18	28	13
16								-	31	18	28	11
17								45	30	18	28	10
18								45	29	26	27	10
19								46	29	30	27	12
20								46	29	26	26	13
21								46	29	27	26	14
22								46	29	30	26	14
23								42	29	30	25	16
24								39	29	30	25	17
25								39	29	30	24	17
26								39	29	30	23	17
27								40	29	31	22	13
28								39	28	31	21	8.4
29								39	27	31	21	7.7
30								39	26	31	20	6.1
31								39	-	29	18	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October					
November					
December					
Calendar year					
January	-	-	-	-	-
February	-	-	-	-	-
March	-	-	-	-	-
April	-	-	-	-	-
May 17-31	629	46	39	41.9	1,250
June	994	40	26	33.1	1,970
July	702.9	31	0	22.7	1,390
August	837	31	18	27.0	1,660
September	331.4	17	1.5	11.0	657
The period	-	-	-	-	6,930

Bull Creek near Molina, Colo.

Location.- Staff gage, lat. 39°08', long. 108°09', in NE¼ sec. 6, T. 11 S., R. 95 W., 4 miles upstream from mouth and 4 miles south of Molina. Altitude of gage is 7,100 feet above mean sea level (by barometer).

Drainage area.- 9.7 square miles.

Records available.- April to September 1941.

Extremes.- Maximum discharge observed during period, 100 second-feet May 18 (gage height, 3.90 feet), from rating curve extended above 71 second-feet; minimum daily, 1.5 second-feet Apr. 4, 9.

Remarks.- Records poor. Gage read twice daily. Regulation by a few small reservoirs. Many small diversions above and below station for irrigation.

Cooperation.- Gage-height record and results of discharge measurements Apr. 1 to Aug. 31 furnished by Bureau of Reclamation.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1							1.9	4.7	58	18	15	8.2
2							1.9	6.0	54	18	14	8.2
3							1.9	6.7	54	18	13	8.2
4							1.5	13	50	17	13	8.2
5							1.7	10	48	17	13	10
6							1.9	13	50	17	13	11
7							1.9	16	52	16	14	11
8							1.9	18	56	16	14	11
9							1.5	25	46	16	16	11
10							1.7	31	36	17	15	9.6
11							1.9	50	30	16	13	9.9
12							2.2	70	24	16	12	11
13							1.9	72	24	16	11	11
14							1.9	78	24	16	11	9.3
15							1.9	76	24	16	11	9.6
16							1.9	78	24	16	11	9.3
17							2.6	84	26	16	11	9.6
18							1.9	95	31	16	11	10
19							1.9	92	31	16	9.6	11
20							2.8	84	32	15	8.8	9.6
21							1.9	82	32	13	8.8	9.3
22							1.7	79	33	13	8.8	13
23							1.7	79	32	13	8.5	12
24							1.9	90	29	13	8.5	10
25							1.9	86	29	13	8.5	10
26							1.9	84	28	13	8.5	8.5
27							2.2	86	25	15	8.5	7.3
28							3.1	86	20	15	8.2	6.7
29							3.7	81	20	16	8.2	6.9
30							4.0	74	18	15	8.2	6.9
31							-	68	-	13	8.2	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October					
November					
December					
Calendar year					
January	-	-	-	-	-
February	-	-	-	-	-
March	-	-	-	-	-
April	62.7	4.0	1.5	2.09	124
May	1,817.4	95	4.7	58.6	3,600
June	1,040	58	18	34.7	2,060
July	481	18	13	15.5	954
August	342.3	16	8.2	11.0	679
September	287.3	13	6.7	9.58	570
The period	-	-	-	-	7,990

Coon Creek near Mesa, Colo.

Location.- Staff gage, lat. 39°07', long. 108°08', in NE¼ sec. 8, T. 11 S., R. 96 W., 3 miles south of Mesa. Altitude of gage, 6,910 feet (by barometer).

Drainage area.- 10.0 square miles.

Records available.- April to September 1941.

Extremes.- Maximum discharge observed during period, 37 second-feet May 13 (gage height, 1.86 feet), from rating curve extended above 17 second-feet; minimum daily, 0.8 second-foot Apr. 8, 19.

Remarks.- Records fair. Gage read twice daily. Flow regulated by a few small reservoirs on headwaters. One small diversion above station.

Cooperation.- Gage heights and results of discharge measurements Apr. 1 to Aug. 31 furnished by Bureau of Reclamation.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1							1.3	3.6	17	6.5	7.4	3.1
2							1.2	4.1	16	6.1	7.4	2.8
3							1.2	5.2	15	6.1	7.0	3.0
4							1.2	10	14	5.7	7.0	2.7
5							1.2	7.6	14	5.4	6.7	2.8
6							1.2	8.6	14	5.2	6.5	2.8
7							1.1	9.6	21	4.8	6.5	3.3
8							.8	13	16	4.6	6.5	3.8
9							1.2	16	14	4.6	6.3	3.3
10							1.3	20	14	4.6	6.5	3.4
11							1.4	23	13	5.9	5.9	4.1
12							1.6	26	12	5.9	4.2	4.4
13							1.5	31	12	5.4	3.6	7.4
14							1.3	29	11	5.2	3.3	5.4
15							1.3	25	11	5.4	4.6	4.1
16							1.3	23	10	6.1	4.6	2.0
17							1.3	26	9.8	6.1	4.6	1.3
18							1.1	28	9.1	6.3	4.2	3.6
19							.8	22	8.3	6.7	3.3	2.8
20							.9	17	8.6	7.0	2.6	2.0
21							1.3	20	9.3	8.1	2.2	1.8
22							1.1	21	10	5.9	2.2	5.9
23							1.1	26	9.8	9.6	1.9	2.8
24							1.3	23	9.8	9.1	1.9	1.9
25							1.4	24	9.3	9.1	1.5	2.0
26							1.7	26	8.8	9.1	1.4	3.3
27							1.8	25	8.3	8.3	1.6	2.6
28							3.6	22	7.6	8.1	2.4	2.5
29							3.6	20	6.7	8.1	3.0	2.5
30							3.1	19	6.5	7.9	3.1	2.5
31							-	18	-	7.9	4.6	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October					
November					
December					
Calendar year					
January	-	-	-	-	-
February	-	-	-	-	-
March	-	-	-	-	-
April	44.2	3.6	.8	1.47	88
May	591.7	31	3.6	19.1	1,170
June	345.9	21	6.5	11.5	686
July	204.8	9.6	4.6	6.61	406
August	134.5	7.4	1.4	4.34	267
September	95.9	7.4	1.3	3.20	190
The period	-	-	-	-	2,810

Taylor Park Reservoir at Taylor Park, Colo.

Location.- Staff gage, lat. 38°49', long. 106°36', at dam in sec. 16, T 14 S., R. 83 W., on Taylor River, just downstream from Taylor Park and 17 miles northeast of Almont, Colo. Datum of gage is 9,187 feet above mean sea level (Bureau of Reclamation bench mark), gage readings have been reduced to elevations above mean sea level.

Records available.- October 1938 to September 1941 in reports of Geological Survey. September 1937 to September 1938 in files of Bureau of Reclamation.

Extremes.- Maximum contents observed during year, 107,500 acre-feet July 13 (elevation, 9,330.60 feet); minimum, 10,980 acre-feet Oct. 1 (elevation, 9,246.05 feet).
1938-41: Maximum contents observed, 108,820 acre-feet May 31, 1939 (elevation, 9,331.25 feet); minimum, 9,980 acre-feet Sept. 20-22, 1940 (elevation, 9,243.55 feet).

Remarks.- Dam completed by Bureau of Reclamation in September 1937. Capacity of reservoir, 106,230 acre-feet between elevations 9,187 feet (bottom of outlet gates) and 9,330 feet (crest of spillway). No dead storage. Water used for irrigation in Uncompahgre Valley. No other reservoirs of any consequence in Gunnison River Basin. Figures given herein are of usable contents.

Cooperation.- Records furnished by Uncompahgre Valley Water Users' Association.

Elevation and contents, water year October 1940 to September 1941

Date	Elevation (feet)	Contents (acre-feet)	Change in contents during month (acre-feet)
Sept.30	9,245.7	10,840	-
Oct. 31	9,253.2	14,410	+3,570
Nov. 30	9,258.8	17,590	+3,180
Dec. 31	9,263.3	20,290	+2,700
Calendar year 1940	-	-	-11,750
Jan. 31	9,267.45	23,120	+2,830
Feb. 28	9,271.1	25,740	+2,620
Mar. 31	9,275.0	28,700	+2,960
Apr. 30	9,279.45	32,400	+3,700
May 31	9,305.55	62,920	+30,520
June 30	9,327.4	101,000	+38,080
July 31	9,330.36	107,000	+6,000
Aug. 31	9,323.7	93,860	-13,140
Sept.30	9,309.7	69,420	-24,440
Water year 1940-41	-	-	+58,580

Taylor River below Taylor Park Reservoir, Colo.

Location.- Water-stage recorder, lat. 38°49', long. 106°36', in sec. 24, T. 14 S., R. 83 W., a quarter of a mile downstream from Taylor Park Reservoir Dam and 16 miles northeast of Almont.

Drainage area.- 155 square miles.

Records available.- October 1938 to September 1941. June 1929 to August 1934, summation of records for Taylor River, Texas and Willow Creeks at site at Taylor Park would be practically equivalent.

Extremes.- Maximum discharge during year, 754 second-feet Sept. 11-14 (gage height, 3.37 feet, regulated flow); minimum daily, 8.6 second-feet Oct. 17-23.
1938-41: Maximum discharge, 825 second-feet Oct. 3, 1939; no flow May 1 to July 3, 1940.

Remarks.- Records excellent except those for period of no gage-height record, which are good. Flow regulated by Taylor Park Reservoir (capacity, 106,000 acre-feet). One small diversion from Willow Creek above reservoir.

Cooperation.- Gage-height record and results of five discharge measurements furnished by Uncompahgre Valley Water Users' Association.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	63	10	10	11	11	12	13	14	44	23	124	615
2	63	10	10	11	11	12	13	14	38	49	159	600
3	63	10	10	11	11	12	13	14	26	70	241	575
4	55	10	10	11	11	12	13	14	26	70	294	650
5	52	10	10	11	11	12	13	14	26	69	329	704
6	52	10	10	11	11	12	13	14	26	67	385	698
7	52	10	10	11	11	12	13	14	26	54	405	635
8	40	10	10	11	11	12	13	14	22	67	368	650
9	37	10	10	11	11	12	13	14	32	172	343	748
10	31	10	10	11	11	12	13	14	30	229	340	748
11	22	10	10	11	11	12	13	16	20	250	340	754
12	20	10	10	11	11	12	13	16	21	262	322	754
13	20	10	10	11	11	12	13	18	23	265	280	754
14	20	10	10	11	11	12	13	18	27	262	287	754
15	20	10	10	11	11	12	13	20	30	247	287	698
16	51	10	10	11	11	12	13	20	32	232	280	580
17	8.6	10	10	11	11	12	13	22	32	226	280	565
18	8.6	10	10	11	11	12	13	24	27	213	280	457
19	8.6	10	10	11	11	12	13	26	24	210	277	409
20	8.6	10	10	11	11	12	13	28	22	232	277	371
21	8.6	10	10	11	11	12	14	30	20	229	277	354
22	8.6	10	10	11	11	12	14	35	16	208	277	287
23	8.6	10	10	11	11	12	14	35	21	194	274	250
24	9.3	10	10	11	11	12	14	35	22	186	274	189
25	9.3	10	10	11	11	12	14	35	22	198	277	163
26	9.3	10	10	11	11	12	14	35	25	182	336	157
27	9.3	10	10	11	11	12	14	35	24	172	445	154
28	9.3	10	10	11	11	12	14	35	24	161	501	152
29	9.3	10	10	11	-	12	14	35	23	146	560	150
30	9.3	-	10	11	-	12	14	44	23	139	595	152
31	9.3	-	10	11	-	12	-	44	-	130	610	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	795.6	63	8.6	25.7	1,580
November	300	10	10	10.0	595
December	310	10	10	10.0	615
Calendar year 1940	47,820.6	682	0	131	94,850
January	341	11	11	11.0	676
February	308	11	11	11.0	611
March	372	12	12	12.0	738
April	400	14	13	13.3	793
May	746	44	14	24.1	1,480
June	774	44	16	25.8	1,540
July	5,214	265	23	168	10,340
August	10,324	610	124	333	20,480
September	14,727	754	150	491	29,210
Water year 1940-41	34,611.6	754	8.6	94.8	68,660

Note.- No gage-height record Nov. 1 to May 29; discharge computed on basis of one discharge measurement and records of release from Taylor Park Reservoir.

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Taylor River at Almont, Colo.

Location.- Water-stage recorder, lat. 38°40', long. 106°51', in sec. 22, T. 51 N., R. 1 E., in Almont, 800 feet upstream from confluence with East River. Datum of gage is 8,011.98 feet above mean sea level, adjustment of 1912.

Drainage area.- 440 square miles.

Records available.- July 1910 to September 1931 and October 1933 to September 1941 in reports of U. S. Geological Survey. July 1910 to September 1941 in reports of State engineer.

Average discharge.- 31 years, 355 second-feet.

Extremes.- Maximum discharge during year, 752 second-feet Sept. 5 (gage height, 2.90 feet); minimum daily, 26 second-feet Feb. 22, 24, 25.
1910-41: Maximum discharge, 3,760 second-feet June 9, 1920 (gage height, 5.0 feet), from rating curve extended above 2,300 second-feet; minimum before storage began in Taylor Park Reservoir, 50 second-feet several days in August 1913 (gage height, 1.2 feet); minimum daily, 24 second-feet Mar. 12, 1938.

Remarks.- Records good except those for period Nov. 12 to Mar. 31, which are fair. Flow partly regulated by Taylor Park Reservoir (capacity, 106,000 acre-feet), 24 miles above station. Diversions from tributaries above station for irrigation.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	137	50	50	44	40	65	50	115	451	216	204	640
2	130	52	47	42	39	38	45	115	440	216	212	619
3	124	54	45	40	36	27	43	151	428	240	295	590
4	118	54	46	40	34	28	45	172	445	240	340	672
5	118	41	45	41	33	33	47	144	457	236	379	720
6	137	54	44	42	33	28	47	162	451	232	440	696
7	124	58	45	41	35	28	45	179	457	228	531	640
8	118	58	43	40	36	47	45	244	457	220	518	619
9	100	61	43	40	37	58	47	310	401	320	475	736
10	98	58	45	38	39	34	50	335	357	384	557	728
11	86	47	45	40	40	45	49	357	315	401	481	728
12	81	47	44	42	40	40	52	390	305	418	457	736
13	76	46	43	43	40	54	58	445	310	428	384	736
14	76	48	42	44	40	33	56	434	310	418	374	736
15	74	52	41	43	40	32	58	396	330	401	384	704
16	78	58	42	41	32	32	56	357	357	384	379	612
17	72	64	43	42	38	32	58	384	384	379	362	564
18	47	*67	45	41	28	30	56	428	406	357	357	499
19	47	63	46	40	27	32	54	412	440	357	352	418
20	47	54	47	40	30	32	47	340	418	384	352	396
21	47	58	46	42	27	32	52	330	390	379	346	362
22	47	56	44	*44	26	36	56	330	346	357	340	330
23	47	56	43	43	28	40	54	330	346	335	335	262
24	47	55	44	41	26	41	54	384	357	305	335	236
25	47	52	45	40	26	41	58	401	340	310	330	168
26	49	50	44	39	28	40	58	440	315	295	368	168
27	52	49	43	37	43	45	67	475	295	280	457	165
28	50	50	42	36	*65	45	78	445	285	267	531	162
29	49	51	44	38	-	47	88	423	258	244	570	162
30	50	50	45	40	-	45	100	434	236	232	619	165
31	47	-	45	40	-	47	-	451	-	220	640	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	2,420	137	47	78.1	4,800
November	1,613	67	41	53.8	3,200
December	1,376	50	41	44.4	2,730
Calendar year 1940	68,122	776	35	186	135,100
January	1,264	44	36	40.8	2,510
February	986	65	26	35.2	1,960
March	1,207	65	27	38.9	2,390
April	1,673	100	43	55.8	3,320
May	10,313	475	115	333	20,460
June	11,087	457	236	370	21,990
July	9,683	428	216	312	19,210
August	12,704	640	204	410	25,200
September	14,977	736	162	499	29,710
Water year 1940-41	69,303	736	26	190	137,500

* Winter discharge measurement made on this day.
Note.- Stage-discharge relation affected by ice Nov. 12-17, Nov. 22-30, Dec. 2-9, Dec. 12 to Jan. 30, Feb. 2-11, 14.

Gunnison River at Iola, Colo.

Location.- Water-stage recorder, lat. 38°29', long. 107°06', in NW¼ sec. 28, T. 49 N., R. 2 W., 1,000 feet upstream from highway bridge and 3,000 feet northeast of Iola.

Drainage area.- 2,490 square miles.

Records available.- October 1899 to November 1903, April 1938 to September 1941.

Extremes.- Maximum discharge during year, 5,080 second-feet May 14 (gage height, 3.86 feet); minimum daily, 170 second-feet Dec. 15, 16.

1899-1903, 1938-41: Maximum discharge observed, 6,130 second-feet June 18, 1903 (gage height, 6.0 feet, site and datum then in use); minimum daily (prior to construction of Taylor Park Reservoir), 221 second-feet at times in period July to October 1902; minimum daily, 130 second-feet Feb. 19, 1939.

Remarks.- Records excellent except those for period of ice effect, which are fair. Flow partly regulated by Taylor Park Reservoir (capacity, 106,000 acre-feet). Diversions above station for irrigation.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	235	*245	220	210	240	230	543	1,290	2,580	1,680	692	900
2	245	250	215	200	220	250	507	1,270	2,540	1,500	660	888
3	250	250	210	190	210	260	472	1,480	2,640	1,420	692	828
4	245	260	210	190	205	250	464	1,710	2,670	1,400	725	652
5	245	245	210	200	210	260	498	1,620	2,790	1,400	758	900
6	265	250	*206	220	220	255	543	1,600	2,770	1,420	876	888
7	265	260	205	230	220	250	480	1,440	2,850	1,380	1,050	840
8	260	270	210	220	225	245	472	1,670	2,990	1,420	1,080	788
9	260	270	210	205	225	240	472	2,070	2,770	1,420	1,080	876
10	260	276	205	200	220	240	525	2,470	2,400	1,440	1,230	876
11	250	260	195	210	220	240	525	2,850	2,130	1,380	1,150	828
12	235	265	190	230	220	245	534	3,270	1,940	1,370	1,070	816
13	230	230	195	235	*227	*251	620	4,000	1,830	1,370	960	804
14	225	200	180	250	230	265	590	4,620	1,760	1,380	888	852
15	225	215	170	240	235	275	534	4,300	1,830	1,270	912	864
16	225	225	170	230	240	270	516	3,570	1,970	1,180	936	780
17	235	230	185	235	240	270	507	3,530	2,200	1,120	912	670
18	225	235	200	240	240	275	489	3,790	2.640	1,050	900	650
19	225	235	195	230	240	290	456	3,640	3,030	1,050	840	552
20	225	230	210	225	250	295	432	2,970	3,110	1,240	852	534
21	225	230	190	*234	250	300	*408	2,520	3,110	1,200	828	480
22	225	230	185	240	250	310	440	2,430	3,030	1,100	792	480
23	225	230	200	250	250	320	440	2,360	3,050	1,100	736	507
24	220	225	205	255	250	320	472	2,540	3,190	1,060	703	464
25	220	225	225	250	260	318	561	2,810	3,070	1,020	692	393
26	225	225	215	240	240	318	630	3,110	2,830	936	681	386
27	230	220	205	245	225	351	725	3,290	2,600	912	747	372
28	240	220	210	255	225	379	888	2,990	2.250	864	816	379
29	240	220	220	265	-	408	888	2,690	2,000	816	852	432
30	245	220	230	270	-	448	1,060	2,560	1,840	758	900	472
31	250	-	235	260	-	472	-	2,580	-	714	924	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	7,375	265	220	238	14,630
November	7,146	276	200	238	14,170
December	6,311	235	170	204	12,520
Calendar year 1940	173,551	1,560	160	474	344,200
January	7,154	270	190	231	14,190
February	6,487	260	205	232	12,870
March	9,100	472	230	294	18,050
April	16,691	1,060	408	556	33,110
May	83,040	4,620	1,270	2,679	164,700
June	76,410	3,190	1,760	2,547	151,600
July	37,370	1,680	714	1,205	74,120
August	26,934	1,230	660	869	53,420
September	20,321	900	372	677	40,310
Water year 1940-41	304,339	4,620	170	834	603,700

* Winter discharge measurement made on this day.
Note.- Stage-discharge relation affected by ice Nov. 13 to Mar. 24.

Gunnison River near Grand Junction, Colo.

Location.- Water-stage recorder, lat. 39°02', long. 108°34', in NW¼ sec. 35, T. 1 S., R. 1 W., Ute meridian, half a mile downstream from point of diversion of Redlands power canal and 2 miles upstream from mouth and Grand Junction.

Drainage area.- 8,020 square miles.

Records available.- October 1894 to December 1895, May 1897 to September 1899 (at site near mouth), April 1917 to September 1928 and January 1934 to September 1941 (at present site) in reports of U. S. Geological Survey. April 1917 to September 1930 and January 1934 to September 1941 in reports of State engineer.

Average discharge (river and power canal).- 21 years (1917-30, 1933-41), 2,977 second-feet.

Extremes.- Combined flow (river and power canal): Maximum discharge, 27,500 second-feet May 14; minimum daily, 577 second-feet Sept. 6.
1917-30, 1933-41: Maximum discharge observed, 35,700 second-feet May 23, 1920 (gage height, 14.95 feet), from rating curve extended above 21,400 second-feet; minimum daily, 106 second-feet July 20, 1934.

Remarks.- Records excellent except those for period Aug. 10 to Sept. 30, which are good. Diversions above station for irrigation. Combined flow of river and Redlands power canal minus about 40 second-feet diverted during irrigation season represents entire flow that enters Colorado River from Gunnison River Basin. Discharge tables include flow of power canal.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3,590	1,100	1,020	980	868	810	1,580	7,440	9,280	5,650	1,100	a574
2	1,910	1,080	996	928	854	840	1,850	7,330	9,210	5,150	976	a874
3	1,580	1,030	975	782	790	934	1,670	8,370	9,210	4,610	896	a546
4	1,460	1,080	946	648	725	954	1,530	11,400	9,500	4,420	822	a768
5	1,830	1,080	896	589	707	886	1,470	14,200	9,590	4,400	776	a652
6	2,730	947	869	644	720	891	1,600	12,400	9,880	4,210	778	a577
7	1,930	1,010	888	839	752	872	1,560	12,000	10,600	3,990	1,130	a606
8	1,680	1,040	895	884	806	845	1,370	12,300	12,000	3,890	1,990	a670
9	1,620	1,050	885	922	811	815	1,180	14,800	11,600	3,810	2,210	a798
10	1,560	1,080	861	929	819	819	1,240	17,600	10,400	3,860	3,090	a843
11	1,530	1,140	938	897	827	790	1,570	19,400	9,530	3,740	3,070	838
12	1,460	1,040	1,060	840	917	798	1,610	20,800	8,240	3,710	2,840	887
13	1,380	924	983	849	1,050	819	1,790	23,200	7,340	3,560	2,500	931
14	1,300	831	895	836	988	891	2,050	26,200	7,070	3,510	2,170	1,140
15	1,250	748	782	849	936	970	1,690	24,400	7,190	3,210	1,830	1,360
16	1,210	870	699	868	921	993	1,640	19,700	7,640	2,920	2,150	1,340
17	1,170	991	622	832	931	892	1,580	16,500	8,210	2,740	2,390	1,290
18	1,160	1,120	716	790	939	876	1,530	16,900	9,070	2,450	2,360	1,240
19	1,160	1,260	886	819	988	892	1,440	17,200	10,600	2,640	2,110	1,420
20	1,110	1,260	954	865	1,090	980	1,430	14,000	11,300	2,610	1,890	1,410
21	1,090	1,210	916	840	1,020	991	1,250	11,100	11,100	2,890	1,710	1,320
22	1,030	1,180	782	845	1,010	1,220	1,150	10,400	10,800	2,530	1,550	2,730
23	996	1,110	791	848	1,030	1,190	1,150	10,500	10,800	2,210	1,330	2,960
24	942	1,100	808	819	1,010	1,520	1,370	10,700	11,300	2,040	1,140	2,500
25	1,000	1,090	943	810	1,060	1,530	1,850	11,100	11,000	2,010	941	2,300
26	986	1,050	1,100	814	1,070	1,320	2,460	12,200	10,100	2,000	846	2,150
27	1,040	1,030	1,010	775	972	1,220	3,530	13,100	9,360	1,870	a734	1,970
28	1,170	957	913	760	863	1,180	5,200	13,000	8,360	1,840	a620	1,810
29	1,100	909	888	764	-	1,310	6,410	11,100	7,410	1,640	a586	1,750
30	1,100	1,010	928	819	-	1,420	6,350	10,200	6,270	1,400	a620	1,980
31	1,090	-	970	858	-	1,470	-	9,580	-	1,250	a846	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	44,174	3,590	942	1,425	87,620
November	31,327	1,260	748	1,044	62,140
December	27,815	1,100	622	897	55,170
Calendar year 1940	552,853	8,560	306	1,511	1,096,000
January	25,542	980	589	824	50,660
February	25,474	1,090	707	910	50,530
March	31,938	1,530	790	1,030	63,350
April	62,100	6,410	1,150	2,070	123,200
May	439,120	26,200	7,330	14,170	871,000
June	283,960	12,000	6,270	9,465	563,200
July	96,760	5,650	1,250	3,121	191,900
August	48,001	3,090	586	1,548	95,210
September	40,834	2,960	577	1,361	80,990
Water year 1940-41	1,157,045	26,200	577	3,170	2,295,000

a No gage-height record for river station; discharge computed on basis of records for canal.

East River near Crested Butte, Colo.

Location.- Staff gage, lat. 38°52', long. 106°54', in NE¼ sec. 5, T. 14 S., R. 85 W., at highway bridge, 1.2 miles downstream from Brush Creek and 4½ miles east of Crested Butte.

Drainage area.- 89.2 square miles.

Records available.- April to September 1941.

Extremes.- Maximum discharge observed during period, 1,020 second-feet June 18 (gage height, 2.80 feet), from rating curve extended above 700 second-feet; minimum daily, 45 second-feet Sept. 6.

Remarks.- Records good except those for periods of no gage-height record, which are fair. Gage read twice daily. Several small diversions above station for irrigation.

Cooperation.- Gage-height record and results of discharge measurements Apr. 20 to Aug. 31 furnished by Bureau of Reclamation.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1							-	a205	518	385	75	54
2							-	a250	523	354	76	52
3							-	a245	575	358	75	46
4							-	a250	691	367	75	46
5							-	a300	587	385	75	47
6							-	a335	534	385	75	45
7							-	a360	575	320	75	51
8							-	a380	523	280	75	56
9							-	a425	410	296	75	53
10							-	a480	344	276	75	50
11							-	a560	316	276	75	47
12							-	a700	288	276	75	47
13							-	789	300	219	75	52
14							-	817	316	207	75	76
15							-	712	349	312	75	67
16							-	677	490	204	75	55
17							-	789	644	225	75	55
18							-	705	652	192	75	53
19							-	599	789	204	66	56
20							204	440	768	228	65	56
21							195	540	684	201	68	56
22							246	479	691	180	68	56
23							201	557	705	162	66	56
24							195	605	712	135	64	56
25							192	824	684	125	60	56
26							201	670	644	125	57	55
27							232	664	569	117	55	56
28							198	587	501	113	54	a62
29							219	468	452	99	55	a70
30							201	484	410	98	56	a80
31							-	518	-	92	54	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October					
November					
December					
Calendar year					
January	-	-	-	-	-
February	-	-	-	-	-
March	-	-	-	-	-
April 20-30	2,284	246	192	208	4,530
May	16,414	824	205	529	32,560
June	16,444	852	288	548	32,620
July	7,196	385	92	232	14,270
August	2,139	76	54	69.0	4,240
September	1,667	80	45	55.6	3,310
The period	-	-	-	-	91,530

a No gage-height record; discharge computed on basis of records for station at Almont, Colo.

East River at Almont, Colo.

Location.- Water-stage recorder, lat. 38°40', long. 106°51', in sec. 22, T. 51 N., R. 1 E., at Almont, 400 feet upstream from mouth. Datum of gage is 8,009.51 feet above mean sea level, adjustment of 1912.

Drainage area.- 295 square miles.

Records available.- April to October 1905, July 1910 to April 1922, October 1934 to September 1941.

Average discharge.- 14 years (1910-13, 1916-20, 1934-41), 363 second-feet.

Extremes.- Maximum discharge during year, 3,240 second-feet May 14 (gage height, 4.70 feet), from rating curve extended above 1,600 second-feet; minimum daily, 42 second-feet Feb. 27.

1905, 1910-22, 1934-41: Maximum discharge, 6,500 second-feet June 15, 1921 (gage height, 6.6 feet, site and datum then in use), from rating curve extended above 3,000 second-feet; minimum, 19 second-feet Aug. 13, 1913.

Remarks.- Records excellent 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 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	108	84	76	61	61	47	69	555	1,270	808	197	132
2	136	84	70	56	57	52	67	555	1,250	711	194	130
3	131	87	69	54	53	50	67	732	1,410	704	191	117
4	122	90	75	52	51	48	67	816	1,440	718	194	108
5	119	76	73	53	50	52	70	697	1,490	732	206	100
6	131	87	75	55	51	48	67	718	1,410	669	226	96
7	119	87	70	55	53	48	66	683	1,490	655	257	79
8	117	89	68	54	56	46	66	921	1,440	662	254	81
9	117	89	70	53	58	52	76	1,180	1,130	655	268	98
10	126	87	72	53	59	48	88	1,610	903	608	271	108
11	117	73	70	56	60	49	86	1,800	784	566	257	104
12	108	72	69	60	62	46	104	2,130	704	560	264	98
13	96	72	68	62	62	50	119	2,610	690	520	246	106
14	92	70	60	63	61	49	106	2,730	725	485	222	137
15	87	70	54	60	56	46	119	2,300	792	451	226	128
16	86	75	54	60	52	43	128	1,700	970	433	229	119
17	84	82	56	62	53	45	123	1,800	1,220	410	209	a112
18	81	*89	58	60	52	48	117	2,050	1,560	402	200	a102
19	76	94	60	59	52	52	108	1,760	1,700	397	203	a100
20	75	89	62	58	50	52	96	1,180	1,700	442	218	a100
21	75	90	58	62	50	55	102	1,050	1,700	388	209	a102
22	73	87	56	*66	52	58	119	1,170	1,650	356	200	a102
23	73	86	57	65	46	62	128	1,140	1,620	343	177	a102
24	72	81	59	63	50	61	165	1,360	1,680	338	163	a102
25	72	81	64	63	52	56	222	1,570	1,500	313	154	a102
26	73	76	60	61	48	52	260	1,790	1,410	285	150	102
27	81	72	56	58	42	55	334	1,800	1,260	268	144	102
28	81	74	60	56	*45	56	352	1,410	1,050	254	140	121
29	81	76	62	58	-	58	343	1,260	940	236	142	134
30	96	76	63	62	-	61	475	1,200	849	218	144	150
31	92	-	64	63	-	62	-	1,290	-	206	137	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	2,997	136	72	96.7	5,940
November	2,445	94	70	81.5	4,850
December	1,988	76	54	64.1	3,940
Calendar year 1940	68,558	1,130	20	187	136,000
January	1,823	66	52	58.8	3,620
February	1,494	62	42	53.4	2,960
March	1,607	62	43	51.8	3,190
April	4,309	475	66	144	8,550
May	43,567	2,730	555	1,405	86,410
June	37,737	1,700	690	1,258	74,850
July	14,793	808	206	477	29,340
August	6,292	271	137	203	12,480
September	3,274	150	79	109	6,490
Water year 1940-41	122,326	2,730	42	335	242,600

* Winter discharge measurement made on this day.

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

Note.- Stage-discharge relation affected by ice Nov. 13-17, 27, 28, Dec. 14 to Feb. 13.

Slate River near Crested Butte, Colo.

Location.- Staff gage, lat. 38°52', long. 106°58', in sec. 2, T. 14 S., R. 86 W., half a mile downstream from Coal Creek and 1 mile east of Crested Butte.

Drainage area.- 69.0 square miles.

Records available.- April to September 1941.

Extremes.- Maximum discharge observed during period, 1,240 second-feet May 13 (gage height, 3.98 feet); minimum daily, 21 second-feet Sept. 5-7.

Remarks.- Records good. Gage read twice daily. Diversions above etation for irrigation.

Cooperation.- Gage-height record and results of discharge measurements Apr. 18 to Aug. 31 furnished by Bureau of Reclamation.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1							-	342	659	396	67	27
2							-	352	604	345	64	26
3							-	342	631	314	59	25
4							-	370	680	292	59	23
5							-	428	680	292	56	21
6							-	452	659	282	61	21
7							-	476	696	272	59	21
8							-	604	720	272	56	26
9							-	736	652	269	56	28
10							-	814	520	257	54	26
11							-	950	432	248	52	24
12							-	1,110	328	233	48	23
13							-	1,220	328	215	46	30
14							-	1,200	328	191	46	36
15							-	1,100	420	169	43	35
16							-	1,010	440	161	42	34
17							-	1,050	480	153	41	36
18							41	1,000	540	147	41	36
19							39	920	645	158	39	35
20							36	712	736	191	38	34
21							39	598	823	163	36	33
22							39	624	805	150	35	35
23							54	778	744	142	32	43
24							121	880	668	126	30	47
25							139	910	624	118	29	45
26							180	950	604	114	28	41
27							206	930	520	99	27	37
28							227	920	492	95	27	36
29							257	850	460	86	29	40
30							303	778	436	79	29	53
31							-	712	-	70	28	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October					
November					
December					
Calendar year					
January	-	-	-	-	-
February	-	-	-	-	-
March	-	-	-	-	-
April 18-30	1,681	303	36	129	3,330
May	24,118	1,220	342	778	47,840
June	17,374	823	328	579	34,460
July	6,099	396	70	197	12,100
August	1,357	67	27	43.8	2,690
September	977	53	21	32.6	1,940
The period	-	-	-	-	102,400

Cement Creek near Crested Butte, Colo.

Location.- Staff gage, lat. 38°50', long. 106°50', in SE¼ sec. 13, T. 14 S., R. 85 W., near Pioneer Resort, three-quarters of a mile upstream from Ward Gulch and 8½ miles southeast of Crested Butte. Former staff gage at site 2 miles downstream at different datum.

Drainage area.- 27.7 square miles.

Records available.- November 1910 to November 1913, April to September 1941.

Extremes.- Maximum discharge observed during period, 160 second-feet May 17 (gage height, 8.60 feet); minimum daily, 7.6 second-feet Apr. 21.
1910-13, 1941: Maximum discharge observed, 330 second-feet June 7, 1912 (gage height, 1.9 feet, site and datum then in use), from rating curve extended above 270 second-feet; minimum observed, 6 second-feet at times in January and February 1913.

Remarks.- Records good except those for period of no gage-height record, which are fair. Gage read twice daily. Diversions above station for irrigation.

Cooperation.- Gage-height record and results of discharge measurements Apr. 18 to Aug. 31 furnished by Bureau of Reclamation.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1							-	24	114	69	24	17
2							-	24	118	66	24	17
3							-	27	136	63	22	17
4							-	29	136	63	21	17
5							-	29	140	60	21	16
6							-	33	136	60	21	16
7							-	34	136	56	21	16
8							-	44	136	55	21	16
9							-	58	118	53	20	17
10							-	76	104	52	21	17
11							-	86	96	50	22	17
12							-	89	91	50	22	16
13							-	116	89	50	21	16
14							-	136	91	44	19	16
15							-	140	102	42	19	17
16							-	128	128	40	19	17
17							-	148	148	36	21	17
18							10	136	144	36	21	17
19							10	122	140	38	19	17
20							10	112	136	35	19	17
21							7.6	96	130	35	18	17
22							9.7	93	126	35	18	18
23							11	96	116	35	18	19
24							12	112	108	35	18	21
25							15	108	108	34	18	20
26							17	112	95	33	18	19
27							18	110	89	31	17	18
28							18	112	84	29	17	17
29							19	114	79	26	17	18
30							24	116	72	25	17	22
31							-	114	-	24	17	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October					
November					
December					
Calendar year					
January	-	-	-	-	-
February	-	-	-	-	-
March	-	-	-	-	-
April 18-30	181.3	24	7.6	13.9	360
May	2,774	148	24	89.5	5,500
June	3,446	148	72	115	6,840
July	1,360	69	24	43.9	2,700
August	611	24	17	19.7	1,210
September	522	22	16	17.4	1,040
The period	-	-	-	-	17,650

Note.- No gage-height record Sept. 7-30; discharge computed on basis of one discharge measurement and records for Slate River near Crested Butte.

Ohio Creek near Baldwin, Colo.

Location.- Staff gage, lat. 38°42', long. 107°00', in SW¼ sec. 34, T. 15 S., R. 86 W., 800 feet downstream from Mill Creek and 5½ miles southeast of Baldwin.

Drainage area.- 124 square miles.

Records available.- April to September 1941.

Extremes.- Maximum discharge observed during period, 940 second-feet May 13 (gage height, 4.20 feet), from rating curve extended above 700 second-feet; minimum daily, 15 second-feet Sept. 4, 5, 7.

Remarks.- Records good. Gage read twice daily. Many small diversions above station for irrigation.

Cooperation.- Gage-height records and results of discharge measurements Apr. 15 to Aug. 30 furnished by Bureau of Reclamation.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1							-	220	382	212	56	22
2							-	244	382	188	52	23
3							-	292	394	201	52	16
4							-	346	376	188	52	15
5							-	304	346	201	52	15
6							-	262	346	182	52	22
7							-	292	382	167	51	15
8							-	364	430	160	52	18
9							-	460	319	198	64	21
10							-	561	256	172	63	22
11							-	641	235	162	57	21
12							-	734	226	139	57	18
13							-	872	218	124	52	19
14							-	876	247	122	40	35
15							51	700	277	104	37	27
16							55	603	307	104	41	24
17							52	622	367	116	41	22
18							41	667	337	116	38	23
19							37	552	418	158	36	23
20							37	430	412	122	32	22
21							46	379	406	104	35	21
22							57	412	421	97	35	25
23							60	409	412	101	33	33
24							99	436	424	95	30	29
25							114	481	370	88	29	25
26							130	514	346	88	30	29
27							137	508	310	78	29	26
28							162	448	271	72	28	21
29							195	400	256	64	28	22
30							209	385	218	63	29	29
31							-	391	-	63	28	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October					
November					
December					
Calendar year					
January	-	-	-	-	-
February	-	-	-	-	-
March	-	-	-	-	-
April 15-30	1,482	209	37	92.6	2,940
May	14,805	876	220	478	29,370
June	10,091	430	218	336	20,020
July	4,049	212	63	131	8,030
August	1,311	64	28	42.3	2,600
September	683	35	15	22.8	1,350
The period	-	-	-	-	64,310

Tomichi Creek at Sargents, Colo.

Location.- Water-stage recorder, lat. 38°24', long. 106°25', in SW¼ sec. 21, T. 48 N., R. 5 E., half a mile downstream from Marshall Creek and three-quarters of a mile south of Sargents.

Drainage area.- 155 square miles.

Records available.- May 1917 to September 1922, April 1938 to September 1941.

Extremes.- Maximum discharge during year, 445 second-feet May 14 (gage height, 2.50 feet); minimum daily, 15 second-feet Jan. 3, 4.
1917-22, 1938-41: Maximum discharge, 792 second-feet June 9, 1921 (gage height, 4.05 feet, site and datum then in use), from rating curve extended above 600 second-feet; minimum recorded, 6 second-feet Nov. 16, 1920.

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 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	28	19	23	20	18	18	37	73	310	140	41	29
2	27	20	23	17	17	19	34	75	285	129	39	29
3	27	20	22	15	17	19	33	92	288	118	37	27
4	24	20	22	15	16	18	36	105	298	114	33	26
5	22	21	22	16	16	18	42	88	285	116	29	26
6	22	22	21	17	17	18	39	94	278	114	33	26
7	23	22	21	19	18	17	39	107	292	105	38	25
8	23	22	22	19	18	17	39	131	288	111	42	30
9	22	22	21	18	18	16	44	162	255	107	42	32
10	22	22	20	17	18	16	48	202	262	98	43	30
11	22	23	20	17	17	16	44	225	240	90	39	28
12	22	21	20	17	18	17	63	268	205	83	42	28
13	22	16	19	18	18	*17	60	355	192	79	39	29
14	22	18	17	18	19	18	44	424	195	81	38	32
15	21	20	16	17	19	18	43	412	205	75	43	30
16	20	22	17	16	19	18	42	355	210	77	41	29
17	19	24	18	16	19	18	43	376	210	73	43	28
18	19	*25	19	17	19	19	42	394	230	77	39	29
19	18	25	19	16	20	19	38	338	245	72	36	29
20	18	25	20	17	*20	20	*37	295	245	90	36	28
21	18	25	19	17	*21	21	37	268	232	77	36	27
22	18	24	18	17	*20	21	43	282	228	72	38	30
23	17	24	19	*17	20	22	46	265	235	65	35	46
24	17	23	20	18	20	22	52	270	228	61	32	33
25	16	24	20	18	21	22	54	310	222	66	31	30
26	16	23	19	17	19	22	58	330	202	58	30	29
27	20	22	18	18	18	23	65	349	188	55	29	28
28	22	23	19	18	17	26	75	346	172	52	30	27
29	21	23	19	19	-	28	68	325	152	48	32	33
30	20	24	20	20	-	32	68	308	145	44	36	42
31	21	-	21	20	-	35	-	302	-	42	31	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	649	28	16	20.9	1,290
November	664	25	16	22.1	1,320
December	614	23	16	19.8	1,220
Calendar year 1940	11,580	140	11	31.6	22,980
January	541	20	15	17.5	1,070
February	517	21	16	18.5	1,030
March	630	35	16	20.3	1,250
April	1,413	75	33	47.1	2,800
May	7,926	424	73	256	15,720
June	7,022	310	145	234	13,930
July	2,589	140	42	83.5	5,140
August	1,133	43	29	36.5	2,250
September	895	46	25	29.8	1,780
Water year 1940-41	24,593	424	15	67.4	48,800

* Winter discharge measurement made on this day.
Note.- Stage-discharge relation affected by ice Nov. 12 to Apr. 3.

Tomichi Creek at Gunnison, Colo.

Location.- Water-stage recorder, lat. 38°32', long. 106°56', in sec. 11, T. 49 N., R. 1 W., half a mile upstream from mouth and 1 mile south of Gunnison.

Drainage area.- 1,020 square miles.

Records available.- April 1938 to September 1941. November, December 1910 (gage heights only, datum then in use).

Extremes.- Maximum discharge during year, 855 second-feet May 16 (gage height, 3.00 feet); minimum daily, 47 second-feet Oct. 26.

1938-41: Maximum discharge, 1,530 second-feet Mar. 24, 1939 (gage height, 3.93 feet, present datum, from rating curve extended above 1,000 second-feet; minimum daily, 26 second-feet Sept. 16, 17, 19, 1940.

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

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	56	*61	66	58	73	92	200	248	612	460	215	122
2	56	59	68	61	70	82	190	244	618	400	199	114
3	56	64	71	58	67	87	186	251	579	360	188	106
4	55	68	72	53	67	85	179	266	568	315	181	91
5	55	65	72	51	68	80	224	288	628	305	178	89
6	55	68	*69	53	71	89	241	255	623	310	184	83
7	52	72	68	55	73	87	210	237	634	305	223	76
8	54	75	69	58	75	89	213	241	627	300	235	78
9	55	76	70	63	76	a85	213	276	735	285	235	83
10	52	76	66	62	78	a82	237	307	735	300	262	85
11	52	65	66	61	78	a78	227	352	699	280	262	78
12	52	62	65	61	77	76	227	388	657	276	244	74
13	52	62	65	63	77	80	288	486	579	290	219	70
14	52	64	62	64	78	73	248	634	530	310	211	71
15	54	67	59	67	78	73	220	759	a495	271	227	73
16	55	70	60	67	78	78	210	831	513	235	235	73
17	55	71	62	67	79	76	210	825	513	223	240	68
18	56	72	64	67	80	76	200	807	568	181	258	63
19	58	71	66	66	80	83	190	a790	651	192	231	62
20	56	71	67	66	80	85	164	a740	711	262	211	60
21	55	70	65	66	*81	82	143	a680	747	276	199	59
22	51	68	62	66	82	89	143	a600	747	258	192	56
23	51	68	58	*65	*84	96	146	a580	753	295	188	60
24	52	68	57	67	82	96	155	a560	807	315	178	65
25	48	68	57	68	81	100	167	a580	789	271	174	63
26	47	67	58	68	80	114	173	a620	783	248	164	63
27	49	65	59	66	80	126	193	a720	771	253	153	63
28	56	65	58	67	*78	138	230	a700	675	248	139	63
29	61	67	56	69	-	140	241	699	590	240	125	68
30	62	67	55	71	-	155	244	675	535	219	128	83
31	62	-	56	73	-	167	-	623	-	219	128	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	1,682	62	47	54.3	3,340
November	2,032	76	59	67.7	4,030
December	1,968	72	55	63.5	3,900
Calendar year 1940	27,452	276	26	75.0	54,450
January	1,967	73	51	63.5	3,900
February	2,151	84	67	76.8	4,270
March	2,939	167	73	94.8	5,830
April	6,112	288	143	204	12,120
May	16,262	831	237	525	32,260
June	19,532	807	495	651	38,740
July	8,702	460	181	281	17,260
August	6,206	262	125	200	12,310
September	2,262	122	56	75.4	4,490
Water year 1940-41	71,815	831	47	197	142,400

* Winter discharge measurement made on this day.

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

Note.- Stage-discharge relation affected by ice Nov. 12 to Feb. 27.

Quartz Creek near Ohio, Colo.

Location.- Water-stage recorder, lat. 38°34', long. 106°38', in SW¼ sec. 27, T. 50 N., R. 3 E., half a mile downstream from Willow Creek and 1 mile southwest of Ohio.

Drainage area.- 101 square miles.

Records available.- April 1938 to September 1941.

Extremes.- Maximum discharge during year, 370 second-feet June 19 (gage height, 2.31 feet); minimum daily, 11 second-feet Feb. 4, 5, Mar. 11-13.
1938-41: Maximum discharge, 572 second-feet May 30, 1938 (gage height, 2.71 feet); minimum daily, 10 second-feet Feb. 6, Sept. 16, 17, 1940.

Remarks.- Records good except those for periods of ice effect or no gage-height record, which are fair. Small diversions above station for irrigation. Slight regulation by small power plant 3 miles above station.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	42	20	19	14	14	16	25	48	228	150	45	32
2	39	23	18	13	13	16	24	50	186	140	44	29
3	34	25	18	12	12	15	23	60	194	125	41	28
4	33	24	17	12	11	14	25	62	208	120	45	27
5	34	22	16	13	11	14	29	55	225	125	45	21
6	39	27	*16	14	12	14	28	66	233	115	52	16
7	35	25	16	15	12	13	27	72	258	105	72	14
8	33	24	17	15	13	13	28	94	239	100	65	17
9	33	25	17	14	13	12	31	121	205	92	68	18
10	36	24	16	14	12	12	32	142	186	86	82	20
11	33	21	16	14	12	11	31	186	164	82	66	20
12	31	18	15	14	13	11	40	228	152	78	58	21
13	30	15	14	15	13	*11	36	273	149	74	51	21
14	29	16	13	14	14	12	32	297	164	76	57	24
15	28	18	13	14	15	13	29	291	194	72	61	23
16	28	19	13	13	15	14	30	256	216	74	55	22
17	27	20	14	13	15	15	30	282	236	70	51	23
18	27	*20	14	14	16	16	29	297	288	72	48	22
19	27	20	14	13	16	17	27	250	312	84	45	21
20	26	20	15	14	17	18	*26	194	303	96	46	21
21	24	20	14	14	*18	18	27	180	285	84	43	22
22	22	19	13	15	*19	15	24	183	276	76	42	26
23	22	19	14	*15	*18	18	22	175	273	76	39	32
24	22	19	14	15	19	19	29	197	261	52	37	30
25	22	20	15	15	19	19	28	236	247	45	37	29
26	20	19	14	15	19	19	28	261	219	43	34	29
27	22	18	14	15	18	18	31	288	194	45	33	27
28	24	19	14	16	*23	18	39	261	183	46	31	25
29	20	19	14	16	-	19	39	228	172	43	33	33
30	22	19	15	16	-	20	45	208	155	42	34	36
31	20	-	15	15	-	23	-	219	-	44	29	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	884	42	20	28.5	1,750
November	617	27	15	20.6	1,220
December	467	19	13	15.1	928
Calendar year 1940	10,630	132	10	29.0	21,080
January	441	16	12	14.2	875
February	422	23	11	15.1	837
March	486	23	11	15.7	964
April	896	45	22	29.9	1,780
May	5,760	297	48	186	11,420
June	6,605	312	149	220	13,100
July	2,532	150	42	81.7	5,020
August	1,489	82	29	48.0	2,950
September	728	35	14	24.3	1,440
Water year 1940-41	21,327	312	11	58.4	42,280

* Winter discharge measurement made on this day.
Note.- No gage-height record June 30 to July 21; discharge computed on basis of records for Tomichi Creek at Sargents. Stage-discharge relation affected by ice Nov. 11 to Apr. 19.

Cochetopa Creek near Parlin, Colo.

Location.- Staff gage, lat. 38°24', long. 106°46', in NW¼ sec. 28, T. 48 N., R. 2 E., at Timney Ranch, 1 mile downstream from Bead Creek and 8 miles southwest of Parlin.

Drainage area.- 346 square miles.

Records available.- April to September 1941.

Extremes.- Maximum discharge observed during period, 380 second-feet June 26, from rating curve extended above 260 second-feet; maximum gage height observed, 4.24 feet June 25; minimum daily discharge, 15 second-feet Sept. 18.

Remarks.- Records good. Gage read twice daily. Diversions above station for irrigation.

Cooperation.- Gage-height record and results of discharge measurements Apr. 1 to Aug. 31 furnished by Bureau of Reclamation.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1							34	94	148	193	68	42
2							30	86	161	180	67	41
3							30	118	156	153	66	38
4							30	107	178	140	64	37
5							42	90	172	151	61	33
6							43	84	185	150	65	30
7							48	85	196	148	75	28
8							42	86	237	140	82	30
9							48	91	228	161	79	33
10							59	85	203	153	88	30
11							72	97	198	126	81	30
12							135	119	161	126	76	29
13							88	201	148	146	71	28
14							66	250	128	126	67	28
15							64	287	135	115	77	28
16							63	245	158	115	83	27
17							72	237	185	102	87	18
18							48	250	237	91	91	15
19							44	259	304	96	76	18
20							41	245	329	114	69	18
21							33	207	336	96	69	15
22							42	180	324	88	75	16
23							46	223	311	87	67	24
24							64	186	317	87	63	24
25							76	180	354	83	60	24
26							79	172	380	96	57	23
27							85	161	336	94	54	23
28							96	156	319	90	50	23
29							90	158	260	79	52	29
30							98	148	206	73	57	28
31							-	135	-	79	54	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October					
November					
December					
Calendar year					
January	-	-	-	-	-
February	-	-	-	-	-
March	-	-	-	-	-
April	1,808	135	30	60.3	3,590
May	4,992	259	84	161	9,900
June	6,990	380	128	233	13,880
July	3,678	193	73	119	7,300
August	2,151	91	50	69.4	4,270
September	810	42	15	27.0	1,610
The period	-	-	-	-	40,530

Cebolla Creek at Powderhorn, Colo.

Location.- Water-stage recorder, lat. 38°17'30", long. 107°07'00", in SE¼ sec. 29, T. 47 N., R. 2 W., 250 feet downstream from Powderhorn Creek and half a mile north of Powderhorn.

Drainage area.- 334 square miles.

Records available.- April 1938 to September 1941.

Extremes.- Maximum discharge during year, 1,070 second-feet May 13 (gage height, 2.47 feet), from rating curve extended above 700 second-feet; minimum daily, 28 second-fest Jan. 3.

1938-41: Maximum discharge, that of May 13, 1941; minimum daily, 22 second-feet July 14, 1940.

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 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	49	*40	37	32	34	41	70	256	360	256	104	85
2	45	44	38	29	33	42	66	a270	332	248	104	83
3	43	45	38	28	32	43	68	a295	373	220	101	76
4	43	45	36	29	32	44	73	a340	453	216	101	76
5	44	36	36	30	32	45	76	a310	399	224	98	74
6	49	43	36	32	33	44	79	325	412	232	104	72
7	44	40	37	33	34	44	72	355	425	220	112	67
8	43	39	36	32	35	42	70	453	399	208	131	78
9	43	39	35	32	37	42	72	607	338	200	138	81
10	39	40	33	31	37	43	76	663	300	192	148	72
11	36	40	33	30	37	45	74	671	274	188	158	65
12	37	41	31	31	37	*47	82	744	244	204	138	60
13	38	39	31	32	*38	48	90	861	236	200	115	63
14	38	33	31	33	39	48	78	852	240	180	115	67
15	39	36	31	33	41	48	76	671	274	173	155	63
16	39	38	31	32	40	48	76	551	316	158	155	60
17	39	38	32	32	40	48	76	543	380	155	169	60
18	39	39	32	33	40	48	74	599	488	144	158	63
19	38	39	33	33	40	51	71	607	596	148	138	65
20	37	38	33	33	41	52	69	399	540	158	134	63
21	35	38	32	*32	41	51	*64	338	555	151	128	61
22	35	37	32	32	41	53	64	332	502	141	128	65
23	37	37	32	32	41	54	63	332	532	134	115	101
24	37	37	33	32	42	55	61	316	570	134	112	81
25	37	37	33	32	41	55	73	360	548	155	101	74
26	42	37	32	32	39	55	77	392	481	180	96	74
27	42	36	31	33	39	56	93	446	412	158	96	72
28	37	36	32	34	38	56	130	412	373	144	90	74
29	37	36	32	35	-	58	166	386	300	131	98	83
30	37	37	33	35	-	62	220	344	278	138	107	90
31	36	-	33	35	-	68	-	327	-	122	90	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	1,234	49	35	39.8	2,450
November	1,160	45	33	38.7	2,300
December	1,035	38	31	33.4	2,050
Calendar year 1940	17,145	177	22	46.8	34,010
January	994	35	28	32.1	1,970
February	1,054	42	32	37.6	2,090
March	1,536	68	41	49.5	3,050
April	2,499	220	61	83.3	4,960
May	14,357	861	256	463	28,480
June	11,930	596	236	398	23,660
July	5,512	256	122	178	10,930
August	3,737	169	90	121	7,410
September	2,168	101	60	72.3	4,300
Water year 1940-41	47,216	861	28	129	93,650

* Winter discharge measurement made on this day.
a No gage-height record; discharge computed on basis of records for Tomichi Creek at Sargents.
Note.- Stage-discharge relation affected by ice Nov. 10 to Apr. 20.

Lake Fork at Gateview, Colo.

Location.- Water-stage recorder, lat. 38°07'50", long. 107°13'25", in sec. 29, T. 47 N., R. 3 W., at old village of Gateview, a quarter of a mile upstream from Indian Creek and about 15 miles upstream from mouth. Datum of gage is 7,833.02 feet above mean sea level, unadjusted.

Drainage area.- 324 square miles.

Records available.- April 1938 to September 1941.

Extremes.- Maximum discharge during year, 2,500 second-feet June 24, from rating curve extended above 1,800 second-feet; maximum gage height, 3.91 feet June 19; minimum daily discharge not determined, occurred during period of ice effect.

1938-41: Maximum discharge, 2,620 second-feet June 21, 1938 (gage height, 5.00 feet), from rating curve extended above 1,800 second-feet; minimum daily discharge, 31 second-feet Jan. 15, 16, 1940.

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 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	118	*62					54	138	734	1,250	330	150
2	115	66					62	128	891	1,240	310	145
3	115	67					60	152	1,140	1,210	290	139
4	108	67					56	197	1,140	1,230	268	136
5	110	58					54	203	1,140	1,140	268	133
6	120	64					54	236	1,130	982	261	133
7	118	62					62	266	1,140	974	310	126
8	115	62					58	328	972	950	306	130
9	112	62					60	457	746	1,030	310	130
10	108	64					64	620	610	950	322	124
11	103	52					62	809	519	990	318	124
12	99	56				(*)	71	1,020	457	918	306	120
13	95	49			(*)		67	1,330	470	902	279	124
14	93	45					54	1,590	605	821	261	139
15	89	48	45	48	42	43	55	1,250	728	751	268	a156
16	87	50					64	950	877	676	268	a145
17	85	51					66	996	1,250	670	268	a140
18	85	52					62	1,160	1,810	694	258	a150
19	83	52					56	1,170	2,090	712	239	a195
20	81	50					54	790	2,090	688	227	a175
21	80	50		(*)			*58	610	2,000	610	216	a170
22	78	50					56	542	1,970	562	214	279
23	76	49					55	501	2,100	550	198	382
24	74	49					55	510	2,190	568	186	302
25	72	49					60	666	2,020	604	176	251
26	71	50					66	822	2,010	540	170	227
27	76	50					81	1,050	1,850	510	163	214
28	72	49					95	950	1,660	470	154	198
29	69	48			-		103	764	1,370	422	154	198
30	69	48			-		122	688	1,270	386	161	198
31	66	-			-		-	660	-	358	156	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	2,842	120	66	91.7	5,640
November	1,631	67	45	54.4	3,240
December	1,395	-	-	45.0	2,770
Calendar year 1940	59,436	1,130	31	162	117,900
January	1,488	-	-	48.0	2,950
February	1,176	-	-	42.0	2,330
March	1,333	-	-	43.0	2,640
April	1,946	122	54	64.9	3,860
May	21,553	1,590	128	695	42,750
June	38,979	2,190	457	1,299	77,310
July	24,358	1,250	358	786	48,310
August	7,615	330	154	246	15,100
September	5,233	382	120	174	10,380
Water year 1940-41	109,549	2,190	-	300	217,300

* Winter discharge measurement made on this day.
a No gage-height record; discharge computed on basis of records for Uncompahgre River at Colona.
Note.- Stage-discharge relation affected by ice Nov. 14 to Apr. 5.

Smith Fork near Crawford, Colo.

Location.- Water-stage recorder, lat. 38°44', long. 107°31', in sec. 24, T. 15 S., R. 91 W., just upstream from Second Creek, 6 miles northeast of Crawford. Altitude of gage, 7,200 feet (by barometer).

Drainage area.- 42.3 square miles.

Records available.- February to September 1941.

Extremes.- Maximum discharge during period, 513 second-feet May 13 (gage height, 3.80 feet), from rating curve extended above 430 second-feet; minimum daily, 2.0 second-feet Feb. 11.

Remarks.- Records fair. A few small diversions above station.

Cooperation.- Gage-height record and results of discharge measurements Feb. 7 to Aug. 31 furnished by Bureau of Reclamation.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1					-	11	28	185	134	67	20	11
2					-	11	26	192	137	58	18	10
3					-	11	25	219	142	53	18	9.7
4					-	12	22	231	140	51	18	9.7
5					-	11	29	239	138	47	17	9.7
6					-	9.7	29	269	134	43	18	9.4
7					2.9	9.7	26	266	145	36	17	10
8					2.6	12	25	306	151	48	17	16
9					2.3	10	27	338	132	60	20	14
10					2.1	9.4	34	322	138	57	22	13
11					2.0	9.4	37	354	111	52	20	12
12					2.2	10	59	362	110	47	18	11
13					2.4	9.7	73	422	108	44	16	16
14					2.5	9.4	54	344	108	42	16	32
15					2.6	9.4	52	228	105	41	17	23
16					2.7	9.4	53	179	105	40	21	20
17					2.8	10	51	215	108	35	19	18
18					2.9	12	44	242	125	33	18	20
19					3.0	16	39	237	128	34	16	20
20					3.1	22	36	183	112	35	15	c19
21					3.2	21	35	162	100	31	14	c18
22					3.4	24	40	159	93	28	14	c25
23					3.8	25	53	174	93	27	13	c32
24					4.4	25	84	194	89	25	12	c32
25					5.2	20	105	222	87	24	12	c31
26					6.0	18	137	242	84	22	12	c30
27					6.4	16	166	253	79	22	11	c28
28					10	17	148	185	73	21	11	c26
29					-	19	167	132	67	23	12	c29
30					-	20	183	140	65	22	12	c33
31					-	22	-	138	-	20	11	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October					
November					
December					
Calendar year					
January	-	-	-	-	-
February 7-28	78.2	10	2.0	3.55	155
March	451.1	25	9.4	14.6	895
April	1,887	183	22	62.9	3,740
May	7,334	422	132	237	14,550
June	3.341	151	65	111	6,630
July	1,188	67	20	38.3	2,360
August	495	22	11	16.0	982
September	587.5	33	9.4	19.6	1,170
The period	-	-	-	-	30,480

c Backwater from beaver dam; discharge computed on basis of records for Anthracite Creek near Floresta.

East Muddy Creek near Bardine, Colo.

Location.- Water-stage recorder, lat. 39°01', long. 107°22', in sec. 17, T. 12 S., R. 89 W., a quarter of a mile downstream from Spring Creek and 6½ miles above Bardine.

Drainage area.- 136 square miles.

Records available.- May 1935 to September 1941 (no winter records).

Extremes.- Maximum discharge during year, 2,190 second-feet May 13 (gage height, 3.41 feet), from rating curve extended above 800 second-feet; minimum daily discharge not determined, occurred during period of ice effect.
1935-41: Maximum discharge, that of May 13, 1941; minimum daily, 6 second-feet Aug. 28, 1936.

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 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	32	16				17	50	330	392	122	36	30
2	29	16				19	42	345	374	113	36	30
3	25	18				18	41	522	374	105	36	30
4	22	19				16	40	760	345	100	36	30
5	31	18				15	43	550	356	95	36	29
6	38	*16				*14	41	558	330	90	38	29
7	29	19				14	37	566	380	90	37	29
8	25	19				14	35	750	398	80	36	29
9	25	18				14	41	880	340	76	46	28
10	23	18				12	54	1,020	305	71	62	28
11	22	-				14	52	1,200	264	69	37	28
12	20	-				13	70	1,340	228	67	34	28
13	20	-				14	82	1,700	214	60	32	34
14	19	-				15	76	1,560	203	57	31	55
15	18	-				14	*72	1,250	206	53	31	36
16	18	-				14	69	1,010	214	51	37	32
17	18	-				15	64	1,020	228	49	37	31
18	18	-				17	60	1,020	255	44	42	32
19	18	-				21	58	850	278	44	37	33
20	18	-				27	54	606	273	49	36	32
21	16	-				30	56	614	264	43	34	30
22	16	-				33	67	657	250	40	34	32
23	16	-				36	79	630	260	38	33	35
24	15	-				34	111	622	305	41	32	37
25	15	-				32	144	614	242	41	32	36
26	16	-				28	170	666	210	40	31	35
27	20	-				25	257	630	186	40	31	33
28	18	-				27	289	522	168	38	31	32
29	16	-				30	270	473	147	36	31	32
30	18	-				32	298	431	131	36	32	35
31	16	-				36	-	424	-	36	31	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	651	38	15	21.0	1,290
November 1-10	177	19	16	17.7	351
December	-	-	-	-	-
Calendar year	-	-	-	-	-
January	-	-	-	-	-
February	-	-	-	-	-
March	660	36	12	21.3	1,310
April	2,822	298	35	94.1	5,600
May	24,120	1,700	330	778	47,840
June	8,120	398	121	271	16,110
July	1,914	122	36	61.7	3,800
August	1,104	62	31	35.6	2,190
September	970	55	28	32.3	1,920
Water year	-	-	-	-	-

* Winter discharge measurement made on this day.
Note.- Stage-discharge relation affected by ice Mar. 1 to Apr. 14.

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North Fork of Gunnison River near Somerset, Colo.

Location.- Water-stage recorder, lat. 38°56', long. 107°26', in sec. 10, T. 13 S., R. 90 W., 2 miles east of Somerset.

Drainage area.- 521 square miles.

Records available.- March 1934 to September 1941.

Extremes.- Maximum discharge during year, 5,850 second-feet May 13 (gage height, 6.30 feet), from rating curve extended above 3,200 second-feet; minimum daily, 42 second-feet Dec. 14, 15.
1934-41: Maximum discharge, that of May 13, 1941; minimum daily, 28 second-feet Sept. 19, 1934.

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 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	214	76	54	50	62	88	286	1,780	1,970	952	170	103
2	172	76	54	47	56	95	225	2,520	1,950	856	157	97
3	159	81	52	45	63	83	214	2,430	1,950	848	151	86
4	140	100	52	45	66	72	214	3,040	1,930	824	148	78
5	146	72	54	48	69	81	247	2,480	1,960	776	145	74
6	214	*86	54	52	70	73	221	2,380	1,870	706	151	73
7	178	86	54	54	70	70	197	2,360	2,060	685	167	71
8	159	83	52	54	68	66	191	2,690	2,140	671	206	124
9	149	86	52	52	66	73	225	3,420	1,780	644	227	112
10	143	93	54	63	66	58	306	3,660	1,690	585	252	97
11	130	68	55	56	66	75	298	3,960	1,380	531	186	90
12	118	75	50	58	66	62	411	4,300	1,220	486	164	88
13	112	44	45	60	66	69	470	4,800	1,150	455	164	109
14	103	50	42	62	65	61	380	4,490	1,200	430	142	294
15	98	57	42	60	65	72	394	3,810	1,280	411	145	203
16	112	61	48	62	66	72	385	3,240	1,470	389	154	151
17	124	63	52	60	65	76	359	3,350	1,590	368	164	127
18	121	66	54	66	66	98	318	3,450	1,810	351	173	133
19	118	68	54	61	68	130	290	3,090	1,970	385	157	139
20	115	66	54	65	66	152	256	2,360	1,910	455	154	127
21	109	66	50	58	69	156	271	2,300	1,840	359	136	115
22	93	63	47	58	72	175	318	2,440	1,870	314	127	127
23	81	59	48	58	70	201	416	2,440	1,880	294	118	183
24	81	56	50	58	78	184	618	2,560	1,920	286	109	180
25	78	52	54	58	76	165	808	2,710	1,700	279	112	173
26	78	49	52	56	72	146	979	2,810	1,570	260	112	170
27	100	47	*52	*61	66	140	1,340	2,820	1,390	249	115	164
28	93	51	52	58	62	165	1,560	2,420	1,260	224	109	148
29	83	53	54	63	-	175	1,540	2,170	1,130	206	112	151
30	86	54	54	65	-	181	1,690	2,060	1,030	196	121	213
31	86	-	54	65	-	201	-	2,090	-	183	109	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	3,793	214	78	122	7,520
November	2,009	100	44	67.0	3,980
December	1,595	55	42	51.5	3,160
Calendar year 1940	121,988	2,500	35	333	242,000
January	1,768	66	45	57.0	3,510
February	1,880	78	56	67.1	3,730
March	3,535	201	58	114	7,010
April	15,427	1,690	191	514	30,600
May	90,430	4,800	1,780	2,917	179,400
June	49,770	2,140	1,030	1,659	98,720
July	14,658	952	183	473	29,070
August	4,657	252	109	150	9,240
September	4,000	294	71	133	7,930
Water year 1940-41	193,522	4,800	42	530	383,900

* Winter discharge measurement made on this day.
Note.- Stage-discharge relation affected by ice Nov. 14 to Jan. 11.

Anthracite Creek near Floresta, Colo.

Location.- Water-stage recorder, lat. 38°52', long. 107°09', in sec. 6, T. 14 S., R. 87 W., at Horse Ranch, 1 mile below Bracken Creek, 2 miles northwest of old Floresta, and 9 miles west of Crested Butte.

Drainage area.- 17.5 square miles.

Records available.- May to September 1941.

Extremes.- Maximum discharge during period, 488 second-feet June 18 (gage height, 4.46 feet), from rating curve extended above 290 second-feet; minimum daily, 2.5 second-feet Sept. 6.

Remarks.- Records good. One small transmountain diversion above station to Coal Creek.

Cooperation.- Gage-height record and results of discharge measurements May 17 to Aug. 31 furnished by Bureau of Reclamation.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1								-	221	146	14	3.5
2								-	230	132	13	3.2
3								-	225	137	12	3.0
4								-	239	139	12	2.9
5								-	253	128	12	2.8
6								-	253	112	12	2.5
7								-	251	114	13	2.6
8								-	234	111	13	5.2
9								-	180	103	13	4.2
10								-	150	87	15	4.1
11								-	132	77	12	3.9
12								-	118	71	11	3.6
13								-	119	60	9.5	5.9
14								-	146	57	9.4	12
15								-	178	54	8.4	9.2
16								-	216	49	9.2	6.5
17								301	256	45	7.9	5.9
18								311	329	44	7.7	6.3
19								251	371	52	7.4	5.9
20								184	342	50	6.7	5.6
21								201	329	39	6.3	4.9
22								225	340	32	5.9	8.2
23								234	342	30	5.4	12
24								258	311	28	5.2	12
25								322	275	27	4.6	12
26								316	258	24	3.9	12
27								292	225	22	3.5	11
28								214	205	20	3.4	10
29								205	188	18	3.6	14
30								216	158	16	3.9	19
31								232	-	15	3.5	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October					
November					
December					
Calendar year					
January	-	-	-	-	-
February	-	-	-	-	-
March	-	-	-	-	-
April	-	-	-	-	-
May 17-31	3,752	322	184	250	7,440
June	7,074	371	118	236	14,030
July	2,037	146	15	65.7	4,040
August	265.3	15	3.4	8.56	526
September	212.9	19	2.5	7.10	422
The period	-	-	-	-	26,460

Leroux Creek near Cedaredge, Colo.

Location.- Water-stage recorder, lat. 38°55', long. 107°48', in ssc. 16, T. 13 S., R. 93 W., 200 fset upstream from head gate of Overland ditch and 7.2 miiss northeast of Cedaredge.

Drainage area.- 43.0 square miles.

Records available.- October 1936 to September 1941 (no winter records).

Extremes.- Maximum discharge during year, 1,240 second-feet May 13 (gage height, 5.02 feet), from rating curve extended above 550 second-feet; minimum daily not determined, occurred during period of ice effect.
1936-41: Maximum discharge, that of May 13, 1941; minimum daily not determined, occurred during period of ice effect.

Remarks.- Records excellent except those for periods of ice effect or no gage-height record, which are fair. One small diversion and several small reservoirs above station for irrigation.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	44	12					-	110	337	68	30	23
2	45	13					-	115	349	62	29	22
3	50	13					-	148	349	58	28	20
4	38	12					-	219	310	57	29	19
5	67	10					-	168	298	57	30	20
6	65	*14					-	164	280	56	a33	19
7	50	12					15	172	563	60	a32	20
8	44	12					16	267	369	67	a28	29
9	44	11					16	402	260	68	29	22
10	41	9.5					21	352	235	62	30	18
11	38	b9.0					19	409	208	58	26	15
12	35	b8.5					20	604	182	54	23	14
13	32	b8.0					21	884	182	54	22	42
14	27	b8.5					19	785	180	52	24	84
15	24	b9.0					20	517	178	51	30	43
16	22	b9.5					20	484	182	52	34	30
17	21	b10					18	555	182	50	34	24
18	20	10					17	572	205	48	33	30
19	19	9.7					17	362	225	45	26	26
20	17	9.2					17	298	235	38	24	21
21	17	9.2					19	344	186	37	26	18
22	15	9.2					22	423	172	34	28	21
23	15	9.0					27	476	172	33	27	26
24	13	9.2					41	445	184	37	26	26
25	12	9.2					53	464	147	42	26	38
26	13	9.2					67	577	124	33	26	47
27	14	9.5					75	509	110	32	27	38
28	14	8.8					79	394	94	31	27	30
29	13	8.5					73	325	85	31	26	30
30	13	8.3					107	404	74	30	26	33
31	13	-					-	362	-	31	24	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	895	67	12	28.9	1,780
November	300.0	14	8.0	10.0	595
December	-	-	-	-	-
Calendar year	-	-	-	-	-
January	-	-	-	-	-
February	-	-	-	-	-
March	-	-	-	-	-
April 7-30	819	107	15	34.1	1,620
May	12,310	884	110	397	24,420
June	6,657	563	74	222	13,200
July	1,486	68	30	47.9	2,950
August	863	34	22	27.8	1,710
September	848	84	14	28.3	1,680
Water year	-	-	-	-	-

* Winter discharge measurement made on this day.
a No gage-height record; discharge computed on basis of recorded range in stage and records for Surface Creek near Cedaredge, Colo.
b Stage-discharge relation affected by ice.

Surface Creek below Park Reservoir, near Grand Mesa, Colo.

Location.- Water-stage recorder, lat. 39°03', long. 107°52', in NW¼ sec. 2, T. 12 S., R. 94 W., a quarter of a mile downstream from outlet of Park Reservoir and 4½ miles east of Grand Mesa.

Drainage area.- 7.8 square miles.

Records available.- June to September 1941.

Extremes.- Maximum discharge during period, 99 second-feet June 7 (gage height, 2.92 feet), from rating curve extended above 70 second-feet); minimum daily, 0.5 second-foot Sept. 2-30.

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

Cooperation.- Gage-height record and results of discharge measurements May 31 to Aug. 31 furnished by Bureau of Reclamation.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1									64	27	36	1.6
2									66	26	44	.5
3									68	25	41	.5
4									65	24	41	.5
5									69	25	40	.5
6									70	58	39	.5
7									95	58	36	.5
8									85	61	36	.5
9									66	61	34	.5
10									54	60	33	.5
11									41	64	32	.5
12									29	65	30	.5
13									34	65	28	.5
14									47	26	25	.5
15									53	25	23	.5
16									57	52	17	.5
17									57	45	16	.5
18									56	36	14	.5
19									52	38	12	.5
20									48	58	11	.5
21									45	50	9.2	.5
22									47	50	8.2	.5
23									48	50	7.5	.5
24									47	52	8.5	.5
25									43	51	8.5	.5
26									37	50	7.2	.5
27									33	50	6.5	.5
28									32	50	6.5	.5
29									30	48	8.0	.5
30									28	47	8.0	.5
31								68	-	45	8.5	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October					
November					
December					
Calendar year					
January	-	-	-	-	-
February	-	-	-	-	-
March	-	-	-	-	-
April	-	-	-	-	-
May	-	-	-	-	-
June	1,566	95	28	52.2	3,110
July	1,437	65	24	46.4	2,850
August	674.6	44	6.5	21.8	1,340
September	16.1	1.6	.5	.54	32
The period	-	-	-	-	7,330

Note.- No gage-height record Sept. 3-30; discharge computed on basis of one discharge measurement and report of water commissioner.

Surface Creek near Cedaredge, Colo.

Location.- Water-stage recorder, lat. 38°59', long. 107°51', in NW¼NW¼ sec. 12, T. 12 S., R. 94 W., 1 mile downstream from Caesar Creek and 8½ miles northeast of Cedaredge.

Drainage area.- 28.5 square miles.

Records available.- June 1939 to September 1941 (no winter records).

Extremes.- Maximum discharge during year, 578 second-feet May 12 (gage height, 3.62 feet), from rating curve extended above 300 second-feet; minimum not determined, occurred during period of ice effect.

1939-41: Maximum discharge that of May 12, 1941; minimum daily, 5.8 second-feet Sept. 23, 1939, but probably less during period of no record.

Remarks.- Records good except those for periods of no gage-height record, which are fair. Discharge regulated by many small reservoirs.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	a56	a16						a60	301	90	51	44
2	a52	16						a70	298	91	56	41
3	44	12						a94	268	87	56	42
4	37	11						a140	226	85	59	46
5	61	16						a120	235	80	63	45
6	52	14						a110	232	105	68	46
7	42	12						a125	325	101	67	48
8	34	10						a170	313	105	57	46
9	34	-						a230	280	105	62	45
10	33	-						244	253	98	61	43
11	31	-						277	214	98	55	39
12	29	-						295	190	100	47	29
13	24	-						386	193	97	43	48
14	21	-						325	208	68	42	55
15	19	-						220	211	63	49	38
16	18	-						229	214	77	55	29
17	17	-						235	208	72	53	26
18	21	-						268	211	67	45	26
19	20	-						214	205	65	38	23
20	20	-						175	190	71	43	22
21	19	-						184	181	67	45	19
22	18	-						190	172	66	49	29
23	15	-						196	168	66	48	26
24	15	-						199	170	71	48	23
25	14	-						211	152	71	47	a30
26	15	-						223	137	68	49	a38
27	a22	-						337	125	68	48	a33
28	a18	-						331	122	61	45	a30
29	a13	-						286	111	59	47	29
30	a19	-						295	101	59	46	29
31	a16	-						280	-	59	47	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	849	61	13	27.4	1,680
November 1-8	107	16	10	13.4	212
December	-	-	-	-	-
Calendar year	-	-	-	-	-
January	-	-	-	-	-
February	-	-	-	-	-
March	-	-	-	-	-
April	-	-	-	-	-
May	6,719	386	60	217	13,330
June	6,214	325	101	207	12,330
July	2,440	105	59	78.7	4,840
August	1,589	68	38	51.3	3,150
September	1,067	55	19	35.6	2,120
Water year	-	-	-	-	-

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

Surface Creek at Cedaredge, Colo.

Location.- Water-stage recorder and concrete control, lat. 38°52', long. 107°55', in sec. 20, T. 13 S., R. 94 W., at Cedaredge.

Drainage area.- 43 square miles.

Records available.- May 1917 to September 1927 and October 1933 to September 1941 in reports of U. S. Geological Survey. May 1917 to September 1941 in reports of State engineer.

Average discharge.- 24 years, 31.1 second-feet.

Extremes.- Maximum discharge during year, 1,190 second-feet May 13 (gage height, 2.50 feet), from rating curve extended above 640 second-feet; minimum discharge observed, 1.3 second-feet Jan. 27 (discharge measurement), probably less during period of ice effect.

1917-41: Maximum discharge, that of May 13, 1941; no flow Sept. 25, 1939, and practically no flow at times during some winters.

Remarks.- Records good except those for period of ice effect, which are fair. Flow regulated by many reservoirs. Water is diverted into Surface Creek Basin from adjacent streams. Diversions above station for irrigation.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	29	11			1.6	2.0	11	92	155	46	14	16
2	30	10			1.6	1.5	8.4	104	137	44	16	13
3	29	9.6			1.5	2.0	6.5	149	131	39	15	14
4	23	10			1.4	2.0	7.2	246	118	37	18	14
5	47	11			1.3	1.4	9.1	176	109	34	23	12
6	41	10			1.3	1.4	7.2	169	100	42	22	16
7	27	*9.6			1.4	*2.0	6.0	190	235	37	18	20
8	21	8.4			1.4	2.0	6.0	284	251	44	16	16
9	21	7.8			1.5	2.5	7.2	355	208	45	26	14
10	20	7.8			1.5	1.5	11	369	165	49	37	14
11	18	7.0			1.5	4.5	8.4	376	118	48	28	14
12	16	4.0			*1.5	3.0	9.8	465	98	51	26	13
13	14	3.5			1.4	2.0	9.1	553	94	51	24	30
14	12	3.7			1.4	2.5	8.4	404	100	37	22	51
15	11	4.0	2.2	1.4	1.4	2.5	9.1	290	102	37	23	24
16	9.6	4.3			1.4	3.0	9.8	240	100	44	35	21
17	9.0	4.5			1.5	2.0	8.4	273	94	37	25	22
18	7.2	4.7			1.5	2.5	8.4	251	86	32	23	16
19	6.0	4.7			1.5	3.5	8.4	194	76	30	19	7.2
20	5.1	4.3			1.5	4.5	9.1	143	62	26	15	4.0
21	5.1	3.7			1.5	4.0	8.4	146	55	19	14	7.8
22	6.0	3.4			1.5	5.0	9.1	146	54	19	15	16
23	5.1	3.2			1.5	6.5	10	149	60	19	14	16
24	6.6	3.1			1.5	6.0	16	143	70	23	16	15
25	7.8	3.2			1.5	5.0	23	137	63	28	18	26
26	8.4	3.1			2.0	4.5	37	143	58	28	14	32
27	11	3.0		(*)	3.0	4.5	54	190	62	27	9.8	23
28	9.6	2.9			5.0	5.0	62	199	63	22	9.8	14
29	9.0	3.0			-	5.5	65	165	60	20	13	13
30	9.6	3.3			-	5.5	86	162	52	17	16	14
31	10	-			-	7.2	-	158	-	16	16	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	484.1	47	5.1	15.6	960
November	171.8	11	2.9	5.73	341
December	68.2	-	-	2.2	135
Calendar year 1940	6,902.8	128	-	18.9	13,680
January	43.4	-	-	1.4	86
February	46.6	5.0	1.3	1.66	92
March	107.0	7.2	1.4	3.45	212
April	539.0	86	6.0	18.0	1,070
May	7,061	553	92	228	14,010
June	3,136	251	52	105	6,220
July	1,048	51	16	33.8	2,080
August	600.6	37	9.8	19.4	1,190
September	528.0	51	4.0	17.6	1,050
Water year 1940-41	13,833.7	553	-	37.9	27,450

* Winter discharge measurement made on this day.

Note.- Stage-discharge relation affected by ice Nov. 11 to Feb. 23.

Uncompahgre River at Colona, Colo.

Location.- Water-stage recorder, lat. 38°19'50", long. 107°46'40", in NW¼ sec. 17, T. 47 N., R. 8 W., a quarter of a mile east of Colona.

Drainage area.- 437 square miles.

Records available.- March 1935 to September 1941. April 1903 to June 1906, April 1917 to November 1934, at site 3 miles upstream.

Extremes.- Maximum discharge during year, 2,540 second-feet June 23 (gage height, 3.50 feet), from rating curve extended above 1,800 second-feet; minimum daily, 62 second-feet Jan. 4, Feb. 2.

1903-6, 1917-41: Maximum daily discharge, 4,080 second-feet June 13, 14, 1921; minimum daily, 16 second-feet Sept. 3, 1918.

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

Cooperation.- Gage heights and results of most of discharge measurements furnished by Uncompahgre Valley Water Users' Association.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	280	125	96	68	68	96	192	514	669	1,270	373	184
2	223	128	98	64	62	94	150	508	770	1,190	344	176
3	203	122	96	64	*66	88	142	766	900	1,200	306	168
4	188	118	96	62	78	80	128	1,910	890	1,220	280	156
5	255	100	94	66	88	92	150	960	960	1,110	260	146
6	334	102	96	70	90	90	136	815	993	1,000	300	139
7	250	96	94	74	88	92	120	815	1,020	1,050	338	128
8	227	100	90	78	64	88	118	1,020	1,040	1,000	350	150
9	231	98	88	76	80	a86	128	1,220	824	1,020	494	142
10	223	102	84	76	80	a84	160	1,530	797	1,030	599	136
11	195	84	84	76	80	a84	150	1,520	730	1,080	501	136
12	184	86	76	76	82	a84	156	1,530	648	1,030	467	132
13	178	78	72	77	84	a90	150	1,650	655	940	379	136
14	170	94	*76	78	84	a96	132	1,630	714	824	397	196
15	164	112	74	82	88	98	142	1,430	788	770	428	168
16	160	115	72	82	86	92	146	1,250	900	754	441	164
17	153	120	90	84	86	100	160	1,480	1,120	762	529	160
18	146	122	86	*74	86	120	146	1,580	1,530	806	422	192
19	142	122	84	72	88	146	128	1,420	1,670	842	361	230
20	139	122	85	73	86	164	115	851	1,660	797	338	205
21	139	115	84	73	86	164	122	1,020	1,740	714	306	192
22	136	115	86	74	88	170	118	746	1,780	683	290	385
23	136	112	*93	74	92	188	118	730	2,050	676	270	397
24	136	102	93	*76	96	188	125	851	1,670	714	260	316
25	128	96	76	76	96	139	164	1,030	1,780	690	240	295
26	125	96	74	76	88	125	192	1,070	1,700	620	225	275
27	160	80	72	74	78	136	280	1,150	1,520	599	215	260
28	150	96	76	74	84	160	346	842	1,430	550	196	240
29	139	98	72	76	-	160	400	730	1,210	487	200	275
30	153	98	72	74	-	160	496	690	1,250	441	210	300
31	139	-	74	70	-	164	-	634	-	415	192	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	5,586	334	125	180	11,080
November	3,158	128	78	105	6,260
December	2,603	98	72	84.0	5,160
Calendar year 1940	85,297	1,350	40	233	169,200
January	2,289	84	62	73.8	4,540
February	2,342	96	62	83.6	4,650
March	3,718	188	80	120	7,370
April	5,207	496	115	174	10,330
May	33,892	1,910	508	1,098	67,220
June	35,408	2,050	648	1,180	70,230
July	26,284	1,270	415	848	52,130
August	10,531	599	192	340	20,890
September	6,179	397	128	206	12,260
Water year 1940-41	137,197	2,050	62	376	272,100

* Winter discharge measurement made on this day.
a No gage-height record; discharge computed on basis of records for station at Delta.
Note.- Stage-discharge relation affected by ice Dec. 15-24, Jan. 3-13, 19-21, 27, 28.

Uncompahgre River at Delta, Colo.

Location.- Chain gage, lat. 38°45', long. 108°05', in SW¼ sec. 13, T. 15 S., R. 96 W., at west edge of Delta, 1¼ miles upstream from mouth. Prior to May 5, 1941, water-stage recorder at site 80 feet downstream at same datum.

Drainage area.- 1,110 square miles.

Records available.- April 1924 to September 1931, September 1938 to September 1941. April 1903 to October 1923 at site 3½ miles upstream.

Extremes.- Maximum discharge during year, 3,730 second-feet May 5 (gage height, 5.90 feet), from rating curve extended above 1,900 second-feet; minimum daily, 56 second-feet Feb. 5.

1903-31, 1938-41: Maximum discharge, that of May 5, 1941; minimum daily, 7 second-feet July 10-15, 17, 21, 24-28, 1910.

Remarks.- Records good Oct. 1 to May 5, fair remainder of year. Gage read twice daily May 9 to Sept. 30. Diversions above station for irrigation.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,160	175	138	115	89	72	184	796	637	330	366	170
2	595	181	142	102	85	77	229	650	818	372	265	126
3	530	178	140	95	74	81	214	957	797	585	345	134
4	512	181	145	83	59	75	172	1,830	884	561	315	90
5	698	178	138	100	56	70	166	2,810	720	604	305	138
6	780	172	151	115	58	75	163	a2,300	1,090	513	366	90
7	605	160	157	102	66	70	142	a2,050	949	525	598	122
8	556	166	135	93	72	66	89	a2,150	1,160	637	1,280	224
9	538	140	122	89	72	63	175	2,310	1,090	720	1,180	320
10	552	140	125	83	74	64	350	1,920	1,160	657	1,410	232
11	512	151	135	85	75	74	394	1,890	1,130	924	1,080	355
12	498	140	130	83	93	68	350	2,160	839	797	976	346
13	480	145	120	91	95	70	370	2,440	713	825	790	477
14	448	135	98	85	87	81	302	2,110	650	692	678	579
15	430	154	98	81	85	93	232	1,450	618	567	618	531
16	426	163	95	79	79	95	190	783	699	727	1,120	531
17	408	172	120	79	83	93	217	604	692	644	1,260	592
18	394	175	110	66	102	87	229	769	762	664	1,160	811
19	394	190	100	63	108	102	232	713	994	755	967	797
20	382	169	100	70	108	118	266	543	734	916	734	860
21	358	151	93	72	93	118	229	501	1,240	916	637	734
22	342	157	110	75	100	130	163	477	1,190	573	465	908
23	334	157	110	70	105	151	172	388	1,220	604	477	2,100
24	246	154	115	68	102	190	175	382	1,330	598	305	1,320
25	178	151	112	70	110	178	187	644	1,260	501	285	1,100
26	163	142	102	64	102	130	238	832	1,080	513	224	1,100
27	196	140	95	62	85	125	394	846	1,040	519	166	804
28	184	145	105	62	72	128	302	762	762	507	118	783
29	181	154	102	68	-	138	791	543	598	483	110	876
30	181	157	108	74	-	128	840	618	460	305	150	976
31	175	-	115	87	-	132	-	624	-	355	170	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	13,436	1,160	163	433	26,650
November	4,773	190	135	159	9,470
December	3,666	157	93	118	7,270
Calendar year 1940	84,683	1,160	65	231	168,000
January	2,531	115	62	81.6	5,020
February	2,389	110	56	85.3	4,740
March	3,142	190	63	101	6,230
April	8,657	840	89	289	17,170
May	37,852	2,810	382	1,221	75,080
June	27,316	1,330	460	911	54,180
July	18,889	924	305	609	37,470
August	18,920	1,410	110	610	37,530
September	18,225	2,100	90	608	36,150
Water year 1940-41	159,796	2,810	56	438	317,000

a No gage-height record; discharge computed on basis of unpublished record for Uncompahgre River near Olathe.

Roubideau Creek near Delta, Colo.

Location.- Water-stage recorder, lat. 38°42', long. 108°09', in sec. 7, T. 51 N., R. 11 W., 600 feet upstream from Buttermilk Creek and 5½ miles southwest of Delta.

Drainage area.- 165 square miles.

Records available.- March 1939 to September 1941 (discontinued).

Extremes.- Maximum discharge during year, 1,760 second-feet May 12 (gage height, 5.25 feet), from rating curve extended above 1,200 second-feet; minimum daily, 3.8 second-feet Aug. 4, 5.

1939-41: Maximum discharge, that of May 12, 1941; minimum daily, 0.3 second-foot Jan. 18, 19, 1940.

Remarks.- Records good except those for periods of ice effect, which are fair. A few small diversions above station for irrigation.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	41	9.4	11	11	*7.8	14	41	538	406	32	5.0	4.1
2	20	7.4	11	7.0	6.1	17	38	514	381	29	4.4	4.4
3	17	7.8	9.4	b6.6	b6.0	18	37	636	350	26	4.1	4.4
4	16	11	6.7	b6.4	b5.8	14	37	950	313	23	3.8	4.4
5	107	11	7.4	b6.8	b6.8	15	40	970	316	23	3.8	4.1
6	50	12	6.7	b7.2	b7.6	14	45	960	298	20	5.5	4.1
7	24	13	6.1	b7.6	*b8.4	11	38	975	502	20	31	4.1
8	18	15	6.7	b8.0	10	10	34	980	402	19	10	4.1
9	15	12	7.8	b8.8	9.4	11	37	1,040	346	15	23	4.1
10	14	16	*7.8	b9.5	10	11	52	1,100	307	13	28	4.1
11	14	17	7.8	b10	11	12	57	1,320	268	13	17	4.4
12	12	12	8.2	10	17	12	66	1,450	230	12	16	4.4
13	9.0	9.4	7.0	9.8	17	14	77	1,500	215	14	20	4.7
14	8.2	9.4	b6.4	12	*14	20	64	1,430	198	12	19	4.7
15	7.4	11	*b5.9	9.4	20	23	57	1,300	200	11	18	7.0
16	8.6	9.4	b6.4	11	24	19	71	1,130	202	9.5	23	5.5
17	8.6	10	b6.8	*11	24	17	70	1,060	188	9.0	34	5.0
18	7.8	11	6.7	10	21	18	64	1,020	174	7.5	22	6.0
19	4.9	9.8	7.4	9.4	25	20	68	880	159	8.0	20	6.5
20	6.1	12	7.8	9.0	26	21	58	631	145	9.0	16	8.0
21	5.2	14	b7.4	9.0	24	24	54	662	125	9.0	15	7.5
22	4.6	14	b7.0	9.4	23	26	50	658	109	6.5	12	72
23	4.6	13	b8.6	8.6	19	29	51	708	96	6.5	9.5	47
24	4.6	13	*9.4	*9.0	20	38	80	739	88	7.5	9.0	25
25	5.5	12	10	9.0	21	27	98	685	90	6.0	7.5	22
26	8.2	12	9.0	8.2	20	24	139	676	72	5.5	4.1	20
27	12	13	9.0	8.6	11	17	242	703	62	5.5	4.1	13
28	16	12	11	8.6	11	20	520	631	52	6.0	4.4	13
29	13	9.0	11	8.2	-	24	470	550	44	5.5	4.4	15
30	11	8.6	11	8.2	-	26	510	506	36	5.0	4.1	16
31	10	-	11	8.2	-	28	-	423	-	5.0	4.1	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	503.3	107	4.6	16.2	998
November	346.2	17	7.4	11.5	687
December	255.4	11	5.9	8.24	507
Calendar year 1940	14,747.2	508	.3	40.3	29,250
January	275.5	12	6.4	8.89	546
February	425.9	26	5.8	15.2	845
March	594	38	10	19.2	1,180
April	3,265	520	34	109	6,480
May	27,325	1,500	423	881	54,200
June	6,374	502	36	212	12,640
July	393.0	32	5.0	12.7	780
August	401.8	34	3.8	13.0	797
September	348.6	72	4.1	11.6	691
Water year 1940-41	40,507.7	1,500	3.8	111	80,350

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

Roubideau Creek at mouth, near Delta, Colo.

Location.- Water-stage recorder, lat. 38°44', long. 108°09', in sec. 19, T. 15 S., R. 96 W., half a mile upstream from mouth and 5 miles west of Delta.

Drainage area.- 245 square miles.

Records available.- March 1939 to September 1941.

Extremes.- Maximum discharge during year, 2,180 second-feet May 13 (gage height, 6.40 feet), from rating curve extended above 1,200 second-feet; minimum daily, 38 second-feet Dec. 16.

1939-41: Maximum discharge, that of May 13, 1941; minimum daily, 17 second-feet Mar. 20, 1940.

Remarks.- Records good except those for May 5-15 or period of no gage-height record, which are fair. A few small diversions above station for irrigation. Increase in discharge between station near Delta and mouth is mostly return flow from irrigated lands under lower end of Ironstone canal.

Discharge, in second-fset, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	149	64	55	75	67	67	98	754	a520	65	66	56
2	117	57	55	58	62	67	98	734	a460	60	66	50
3	102	54	52	53	57	68	100	911	a400	61	73	46
4	96	62	43	46	67	54	90	1,310	354	58	75	46
5	307	61	44	49	68	62	90	1,290	387	61	68	46
6	144	67	44	49	72	64	96	1,240	369	60	65	45
7	104	67	41	46	73	60	83	1,350	629	62	106	45
8	98	68	41	48	76	55	68	1,440	598	63	98	48
9	90	66	45	49	72	55	83	1,630	528	59	227	64
10	87	70	46	50	72	55	128	1,680	531	54	246	71
11	83	70	49	53	68	54	139	1,720	492	55	228	94
12	78	67	49	66	82	54	146	1,780	462	59	186	115
13	70	58	44	64	85	58	170	1,820	438	64	160	137
14	80	57	42	60	82	66	154	1,630	417	67	176	119
15	76	58	43	67	87	73	128	1,330	378	63	162	110
16	70	55	38	66	88	68	146	1,060	372	63	152	140
17	72	57	42	70	92	64	146	1,080	360	60	162	150
18	72	60	46	66	87	64	130	1,180	321	59	158	176
19	67	58	54	70	94	66	142	1,170	275	63	144	172
20	67	60	61	67	92	68	149	748	224	67	133	162
21	62	62	55	76	87	67	144	710	154	65	105	156
22	58	61	55	80	88	68	128	688	150	63	75	318
23	57	60	54	70	85	70	125	776	133	60	64	237
24	62	60	53	68	85	85	159	884	126	57	60	252
25	60	58	64	72	88	76	173	860	137	59	57	237
26	57	58	64	67	85	68	218	796	115	62	47	237
27	60	56	61	68	66	61	354	856	98	64	47	188
28	60	57	64	72	67	62	859	784	89	63	50	164
29	62	52	68	73	-	72	662	671	75	55	54	188
30	64	52	70	78	-	70	730	629	71	62	55	188
31	64	-	75	67	-	75	-	576	-	67	59	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	2,695	307	57	86.9	5,350
November	1,814	70	52	60.5	3,600
December	1,617	75	38	52.2	3,210
Calendar year 1940	36,156	706	17	98.8	71,730
January	1,963	80	46	63.3	3,890
February	2,194	94	57	78.4	4,350
March	2,016	85	54	65.0	4,000
April	5,936	859	68	198	11,770
May	34,087	1,820	576	1,100	67,610
June	9,663	629	71	322	19,170
July	1,900	67	54	61.3	3,770
August	3,440	246	47	111	6,820
September	4,057	318	45	135	8,050
Water year 1940-41	71,382	1,820	38	196	141,600

a No gage-height record; discharge computed on basis of unpublished records for Dry Creek near Delta.

Kahnah Creek near Whitewater, Colo.

Location.- Water-stage recorder and concrete control, lat. 38°59', long. 108°14', in sec. 34, T. 12 S., R. 97 W., a quarter of a mile downstream from intake of pipe line for Grand Junction water supply and 17 miles east of Whitewater.

Drainage area.- 55.0 square miles.

Records available.- October 1917 to September 1921 and October 1933 to September 1941 in reports of Geological Survey. October 1917 to September 1921 and August 1922 to September 1941 in reports of State engineer.

Average discharge (including flow diverted by pipe line above station).- 23 years, 41.7 second-feet.

Extremes (combined flow).- Maximum discharge during year, 517 second-feet June 7, minimum daily, 7.6 second-feet Mar. 6-8.

1917-21, 1922-41: Maximum discharge, 1,630 second-feet June 6, 1921 (gage height, 4.5 feet, site and datum then in use), from rating curve extended above 700 second-feet; minimum daily, 4.3 second-feet Dec. 19, 1939.

Remarks.- Records excellent above 15 second-feet and good below except those for periods of ice effect or no gage-height record, which are fair. Figures of flow diverted for Grand Junction water supply (obtained from several readings made each day on Cippoletti weir) and Raber ditch furnished by State engineer and added to monthly discharge to give total flow of stream. Records of combined flow excellent. Regulation by a few small reservoirs above station.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	10	7.4	6.3	6.1	3.6	3.6	14	44	352	55	34	27
2	9.4	8.0	5.8	5.1	3.6	3.6	9.4	52	385	55	35	46
3	10	9.4	5.8	4.5	4.1	3.0	6.3	68	368	48	37	46
4	8.5	10	5.8	4.3	3.6	2.8	5.8	139	352	46	32	46
5	15	7.4	5.2	4.1	3.6	3.0	6.3	136	355	43	20	41
6	16	8.5	4.1	4.5	3.6	3.0	5.2	144	365	39	27	35
7	14	8.5	3.6	4.9	3.6	3.0	3.6	142	453	35	27	32
8	14	8.5	4.1	5.1	3.6	3.0	3.6	162	342	43	25	32
9	13	8.5	5.2	5.1	3.6	4.1	3.6	180	278	37	30	30
10	13	8.0	4.1	4.9	3.6	3.6	a7.0	189	253	35	30	29
11	14	6.1	4.1	4.7	3.6	4.6	a6.5	210	225	34	29	27
12	12	5.1	4.1	4.7	4.1	4.1	a6.0	237	213	34	16	21
13	11	5.3	3.6	4.7	3.1	4.1	a6.3	294	228	35	12	29
14	11	5.5	3.2	4.9	4.1	4.1	6.3	298	228	39	10	29
15	10	5.5	3.2	4.7	4.1	3.6	6.8	265	240	30	12	24
16	9.4	5.9	3.6	4.5	3.6	4.6	7.4	288	237	27	16	24
17	8.5	6.6	4.0	4.3	3.6	5.2	7.4	326	243	27	21	22
18	8.5	8.0	4.2	4.3	5.2	6.3	6.3	349	253	30	20	25
19	8.5	7.4	4.0	4.5	4.1	8.0	5.2	317	246	37	17	24
20	8.5	6.8	3.6	4.9	3.6	8.5	6.8	266	231	35	20	22
21	8.0	6.8	3.4	4.5	4.1	8.5	9.4	298	216	27	17	21
22	8.0	6.8	3.2	4.1	3.6	11	9.4	336	198	24	10	48
23	8.0	6.3	3.6	3.9	3.6	9.4	8.5	352	177	25	8.0	44
24	7.4	6.0	4.4	3.9	3.6	8.0	9.4	362	168	25	8.0	43
25	7.4	6.0	4.6	3.2	4.1	5.8	11	371	147	30	8.6	44
26	8.0	6.0	4.4	3.2	7.4	5.2	14	443	130	32	27	46
27	10	6.0	4.2	3.4	5.2	6.3	18	433	109	30	29	39
28	8.0	6.0	4.0	3.4	5.2	6.8	32	412	91	30	29	27
29	8.0	6.0	4.2	3.6	-	7.4	30	382	68	25	27	24
30	8.0	5.8	4.4	3.6	-	8.0	39	382	66	26	26	25
31	7.4	-	5.4	3.6	-	13	-	375	-	27	26	-

Month	Observed					Diversions (acre-feet)†	Adjusted for diversion	
	Second-foot-days	Maximum	Minimum	Mean	Run-off (acre-feet)		Run-off (acre-feet)	Mean (second-feet)
October	312.5	16	7.4	10.1	620	326	946	15.4
November	208.1	10	5.1	6.94	413	234	647	10.9
December	133.4	6.3	3.2	4.30	265	307	572	9.30
Calendar year 1940.	12,193.5	503	1.2	33.3	24,190	5,070	29,260	40.3
January	135.2	6.1	3.2	4.36	268	249	517	8.42
February	113.4	7.4	3.6	4.05	225	248	473	8.52
March	175.2	13	2.8	5.65	348	279	627	10.2
April	310.5	39	3.6	10.4	616	335	951	16.0
May	8,272	443	44	267	16,410	808	17,220	280
June	7,247	453	66	242	14,370	678	15,050	253
July	1,065	55	24	34.4	2,110	613	2,720	44.3
August	685.5	37	8.0	22.1	1,360	502	1,860	30.3
September	972	48	21	32.4	1,930	467	2,400	40.3
Water year 1940-41.	19,629.8	453	2.8	53.8	38,940	5,050	43,980	60.8

† Diversions by Grand Junction pipe line and Raber Ditch.

a No gage-height record. Discharge computed on basis of record for Surface Creek at Cedaredge.

Note.- Stage-discharge relation affected by ice Nov. 11-17, 24-30, Dec. 13 to Jan. 28.

Dolores River at Dolores, Colo.

Location.- Water-stage recorder, lat. 37°28', long. 108°30', in sec. 9, T. 37 N., R. 15 W., at Dolores, a quarter of a mile upstream from Lost Canyon Creek.

Drainage area.- 556 square miles (revised).

Records available.- June 1895 to October 1903 and August 1910 to December 1912 (at site just downstream from Lost Canyon Creek), May 1922 to September 1927 (monthly discharge) and October 1933 to September 1941 in reports of U. S. Geological Survey. June 1895 to October 1903, August 1910 to December 1912 and April 1922 to September 1941 in reports of State engineer.

Average discharge.- 20 years (1921-41), 477 second-feet.

Extremes.- Maximum discharge during year, 8,070 second-feet May 14 (gage height, 7.72 feet), from rating curve extended above 5,300 second-feet; minimum daily, 40 second-feet Feb. 1-6.

1895-1903, 1910-12, 1922-41: Maximum discharge, 10,000 second-feet Oct. 5, 1911 (gage height, 10.2 feet, site and datum then in use), from rating curve extended above 2,800 second-feet; minimum daily, 8 second-feet Aug. 16, 1896.

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 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	383	a92	56	56	40	94	502	1,580	2,330	1,800	321	161
2	322	91	56	56	40	92	398	1,510	2,390	1,770	301	148
3	269	*92	47	56	*40	92	360	1,860	2,400	1,680	282	138
4	226	a90	45	56	40	90	322	2,690	2,270	1,620	265	152
5	260	a86	46	*56	40	88	371	2,380	2,420	1,560	260	150
6	646	a85	50	56	40	91	341	2,600	2,390	1,370	284	145
7	410	a85	46	56	42	84	329	2,870	2,720	1,360	312	140
8	333	84	52	55	45	78	406	3,210	2,790	1,350	307	140
9	287	79	*48	53	47	80	552	3,660	2,330	1,330	357	145
10	260	86	51	51	50	73	666	4,080	2,050	1,190	404	136
11	229	a88	48	50	52	73	531	4,360	1,940	1,240	361	130
12	209	a90	50	49	55	82	456	5,210	1,860	1,120	321	125
13	193	a90	55	48	60	96	394	6,360	1,840	1,060	279	163
14	180	a90	55	46	62	98	356	6,550	1,960	1,000	257	386
15	167	a110	52	45	64	97	341	5,040	2,170	897	296	270
16	156	a135	50	44	66	92	337	4,080	2,370	855	287	226
17	145	a130	50	*43	68	102	322	4,300	2,570	814	350	187
18	136	94	50	43	70	125	311	4,600	2,930	784	296	273
19	129	91	50	43	72	154	291	4,260	3,290	760	250	469
20	122	85	50	43	75	187	260	2,930	3,290	736	224	318
21	118	78	52	42	80	191	291	2,460	3,220	684	209	268
22	111	72	52	42	*84	189	291	2,280	3,240	625	197	1,240
23	107	70	52	42	80	202	304	2,560	3,180	625	187	1,460
24	100	68	52	42	84	209	326	3,140	3,080	589	176	808
25	97	67	52	42	79	171	422	3,320	2,890	594	166	700
26	96	61	54	42	86	176	692	3,260	2,840	517	155	589
27	131	65	54	42	79	189	926	3,390	2,520	530	150	508
28	129	61	54	41	85	219	1,020	2,940	2,400	495	142	445
29	113	76	54	41	-	246	1,220	2,800	2,030	430	148	517
30	105	63	54	41	-	281	1,530	2,700	1,860	379	189	678
31	96	-	54	41	-	367	-	2,380	-	344	195	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	6,265	646	96	202	12,430
November	2,554	135	61	85.1	5,070
December	1,591	56	45	51.3	3,160
Calendar year 1940	115,495	1,870	17	316	229,100
January	1,463	56	41	47.2	2,900
February	1,725	86	40	61.6	3,420
March	4,408	367	73	142	8,740
April	14,868	1,530	260	496	29,490
May	105,360	6,550	1,510	3,399	209,000
June	75,570	3,290	1,840	2,519	149,900
July	30,108	1,800	344	971	59,720
August	7,928	404	142	256	15,720
September	11,215	1,460	125	374	22,240
Water year 1940-41	263,055	6,550	40	721	521,800

* Winter discharge measurement made on this day.

a No gage-height record; discharge computed on basis of records for station at McPhee and records of diversions.

Note.- Stage-discharge relation affected by ice Nov. 29 to Feb. 21.

Dolores River near McPhee, Colo.

Location.- Water-stage recorder, lat. 37°34', long. 108°34', in NE¼ sec. 12, T. 38 N., R. 16 W., 0.8 mile downstream from Beaver Creek and 4½ miles northwest of McPhee. Datum of gage is 6,666.45 feet above mean sea level, unadjusted.

Drainage area.- 793 square miles (revised).

Records available.- October 1938 to September 1941.

Extremes.- Maximum discharge during year, 8,430 second-feet May 14 (gage height, 7.48 feet), from rating curve extended above 5,900 second-feet; minimum daily, 5.7 second-feet Sept. 12.
1938-41: Maximum discharge, that of May 14, 1941; minimum daily, 2.1 second-feet July 20, 22, 1939, Aug. 5, 1940.

Remarks.- Records excellent except those for period Oct. 1 to Apr. 30, which are fair. Diversions above station for irrigation. In 1941, 104,000 acre-feet was diverted from river between Dolores and McPhee for irrigation in San Juan River Basin.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	366	17	33	50	57	83	1,290	3,220	2,320	1,360	15	8.8
2	250	13	18	50	58	109	926	2,810	2,330	1,340	14	7.7
3	180	14	16	50	59	98	786	3,540	2,290	1,230	15	7.2
4	137	18	13	50	67	79	666	5,200	2,150	1,190	15	6.3
5	270	17	15	50	67	94	664	4,420	2,110	1,120	14	6.3
6	646	10	12	*50	67	77	795	4,450	2,140	944	24	6.3
7	388	13	15	50	67	79	795	4,740	2,580	925	20	6.8
8	237	10	12	50	70	79	1,110	5,010	3,000	889	18	6.3
9	147	11	*14	50	70	77	1,500	5,470	2,590	898	29	6.3
10	126	11	15	50	73	77	1,580	5,730	2,350	740	74	6.3
11	90	13	25	49	73	75	1,110	5,790	2,090	800	28	6.0
12	72	40	18	49	76	79	882	6,120	1,820	708	16	5.7
13	55	94	66	49	60	98	703	7,220	1,730	592	13	9.6
14	45	68	61	49	52	112	638	7,180	1,790	544	15	170
15	48	116	58	48	54	132	695	5,980	1,970	462	28	111
16	64	142	57	48	56	109	686	4,650	2,120	417	17	44
17	55	75	55	*47	56	121	646	4,760	2,290	375	33	16
18	50	27	55	47	58	174	551	4,920	2,650	322	34	31
19	45	23	55	47	60	243	453	4,670	3,050	296	14	355
20	39	19	55	48	61	331	373	3,140	2,990	266	12	188
21	35	14	55	48	66	366	490	2,620	2,900	216	11	128
22	32	18	55	49	*70	402	528	2,410	2,870	156	9.6	1,410
23	28	70	55	50	66	482	662	2,630	2,790	128	9.1	1,810
24	23	70	55	51	79	497	873	3,320	2,690	125	9.1	916
25	21	61	55	52	98	366	1,300	3,370	2,480	131	8.2	740
26	22	16	55	61	77	359	2,320	3,260	2,410	48	7.7	499
27	75	18	55	62	68	373	2,920	3,430	2,070	31	7.7	360
28	98	35	55	62	70	497	2,840	3,110	1,970	32	6.8	296
29	61	59	55	63	-	630	3,320	2,920	1,640	14	6.8	355
30	26	47	55	64	-	769	3,530	2,800	1,490	15	8.2	592
31	32	-	55	65	-	1,050	-	2,490	-	15	9.1	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	3,763	646	21	121	7,460
November	1,159	142	10	38.6	2,300
December	1,273	66	12	41.1	2,520
Calendar year 1940	84,452.2	1,660	2.1	231	167,500
January	1,608	65	47	51.9	3,190
February	1,855	98	52	66.2	3,680
March	8,117	1,050	75	262	16,100
April	35,852	3,530	373	1,195	71,110
May	131,600	7,220	2,410	4,245	261,000
June	69,670	3,050	1,490	2,322	138,200
July	16,349	1,380	14	527	32,430
August	541.3	74	6.8	17.5	1,070
September	8,110.6	1,610	5.7	270	16,090
Water year 1940-41	279,897.9	7,220	5.7	767	555,200

* Winter discharge measurement made on this day.
Note.- Stage-discharge relation affected by ice Dec. 15 to Feb. 21.

Dolores River at Gateway, Colo.

Location.- Water-stage recorder, lat. 38°41', long. 108°58', in SW¼ sec. 15, T. 51 N., R. 19 W., 0.3 mile northwest (revised) of Gateway, 0.3 mile downstream from West Creek, and 8 miles upstream from Colorado-Utah State line. Datum of gage is 4,547.44 feet above mean sea level, unadjusted.

Drainage area.- 4,350 square miles.

Records available.- March 1937 to September 1941.

Extremes.- Maximum discharge during year, 15,400 second-feet May 14 (gage height, 12.85 feet); minimum daily, 132 second-feet Jan. 4, 5.
1937-41: Maximum discharge, that of May 14, 1941; minimum daily, 45 second-feet Aug. 18, 1940.

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

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3,130	268	195	294	271	336	2,080	10,800	4,740	3,470	590	256
2	965	244	192	268	259	403	3,070	9,510	4,390	3,050	545	232
3	675	220	192	215	235	453	2,170	9,150	4,200	2,780	502	232
4	555	220	205	132	220	494	1,860	11,100	4,140	2,540	462	190
5	635	212	200	132	220	440	1,420	13,800	3,980	2,340	435	186
6	2,180	205	200	220	220	403	1,750	12,600	3,760	2,160	419	182
7	915	200	198	235	250	363	1,620	12,200	3,780	1,980	427	170
8	770	195	198	210	267	351	1,440	12,200	4,280	1,860	466	152
9	625	188	195	178	290	315	1,770	12,500	4,720	1,780	625	150
10	585	182	195	161	277	301	2,960	12,800	4,720	1,710	635	182
11	484	168	195	195	262	287	3,850	13,300	4,440	1,650	785	188
12	407	161	215	238	301	287	3,020	13,800	3,850	1,620	785	182
13	351	146	205	290	525	301	2,560	14,500	3,300	1,650	700	190
14	335	138	198	256	466	395	2,010	14,600	2,890	1,690	615	205
15	315	148	195	241	379	575	1,620	13,300	2,630	1,680	540	403
16	298	176	192	241	355	565	1,630	11,900	2,560	1,630	502	298
17	284	159	190	229	363	525	1,810	10,900	2,680	1,540	580	268
18	268	182	185	205	367	489	1,650	10,300	2,870	1,450	745	229
19	253	232	205	163	431	540	1,460	10,000	3,240	1,390	760	435
20	250	280	215	185	466	745	1,210	9,370	3,860	1,340	675	440
21	244	262	200	244	462	925	1,080	8,020	4,280	1,270	565	315
22	241	244	212	253	550	1,030	1,150	7,060	4,450	1,210	484	411
23	232	229	210	250	476	1,150	1,420	6,430	4,660	1,110	435	1,780
24	226	212	220	241	258	1,350	1,660	6,220	5,290	1,050	391	2,520
25	220	200	271	190	466	1,380	2,350	6,600	6,060	1,060	343	1,660
26	218	192	244	244	489	1,070	3,560	6,810	6,090	935	301	1,240
27	415	200	205	212	399	865	6,640	6,600	5,710	830	290	1,060
28	383	208	235	210	367	820	9,410	6,510	5,050	755	284	935
29	308	208	274	226	-	930	9,690	6,140	4,520	715	271	825
30	268	200	277	241	-	1,160	9,930	5,580	3,960	680	268	735
31	268	-	287	253	-	1,470	-	5,140	-	640	262	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	17,303	3,130	218	558	34,320
November	6,081	280	138	203	12,060
December	6,600	287	185	213	13,090
Calendar year 1940	248,442	4,020	45	679	492,700
January	6,852	294	132	221	13,590
February	10,111	560	220	361	20,050
March	20,717	1,470	287	668	41,090
April	87,870	9,930	1,080	2,929	174,300
May	309,940	14,600	5,140	9,998	614,800
June	125,100	6,090	2,560	4,170	248,100
July	49,565	3,470	640	1,599	98,310
August	15,687	785	262	506	31,110
September	16,231	2,520	150	541	32,190
Water year 1940-41	672,057	14,600	132	1,841	1,333,000

West Fork of Dolores River near Stoner, Colo.

Location.- Water-stage recorder, lat. 37°39', long. 108°19', in NE¼ sec. 18, T. 39 N., R. 13 W., three-quarters of a mile downstream from Cottonwood Creek, 4 miles north of Stoner, and 4½ miles upstream from mouth.

Drainage area.- 160 square miles.

Records available.- March to September 1941.

Extremes.- Maximum discharge during period, 2,790 second-feet May 13 (gage height, 4.25 feet), from rating curve extended above 1,220 second-feet; minimum daily, 38 second-feet, Mar. 18.

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

Cooperation.- Gage-height record and results of discharge measurements Mar. 18 to Aug. 31 furnished by Bureau of Reclamation.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1						-	111	597	638	426	120	56
2						-	89	570	638	422	122	54
3						-	78	633	650	390	110	55
4						-	71	1,010	620	386	92	86
5						-	78	820	632	361	96	82
6						-	73	882	620	349	116	82
7						-	69	820	710	349	140	80
8						-	82	1,100	731	343	116	84
9						-	107	1,400	662	343	142	86
10						-	135	1,600	620	310	146	80
11						-	116	1,710	580	334	124	72
12						-	107	1,910	545	322	120	72
13						-	93	2,430	560	289	110	100
14						-	80	1,650	520	268	102	132
15						-	78	1,400	590	248	110	82
16						-	78	1,190	626	253	110	62
17						-	75	1,210	638	238	134	54
18						38	75	1,290	698	238	108	98
19						47	71	1,150	752	240	94	132
20						46	61	844	724	225	90	116
21						46	64	766	717	205	82	76
22						44	67	731	692	195	76	182
23						46	66	780	680	202	72	215
24						47	64	887	668	198	68	142
25						46	89	887	656	180	58	130
26						42	125	852	602	172	56	108
27						40	162	914	560	172	56	98
28						48	192	844	535	162	54	86
29						56	240	759	466	142	67	108
30						61	579	704	438	136	92	146
31						78	-	662	-	128	80	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October					
November					
December					
Calendar year					
January	-	-	-	-	-
February	-	-	-	-	-
March 18-31	685	78	38	48.9	1,360
April	3,375	579	61	112	6,690
May	33,002	2,430	570	1,065	65,460
June	18,768	752	438	626	37,230
July	8,226	426	128	265	16,320
August	3,063	146	54	98.8	6,080
September	2,956	215	54	98.5	5,860
The period	-	-	-	-	139,000

Disappointment Creek at upper station, near Cedar, Colo.

Location.- Staff gage, lat. 37°51', long. 108°25', in sec. 33, T. 42 N., R. 14 W., 2 miles downstream from Morrison Creek and 14½ miles southeast of Cedar.

Drainage area.- 69 square miles.

Records available.- October 1940 to September 1941 (no winter records).

Extremes.-Maximum discharge observed during year, 404 second-feet May 6 (gage height, 3.40 feet), from rating table extended above 200 second-feet; minimum daily, 2 second-feet Sept. 14, may have been less during period of ice effect.

Remarks.- Records poor. Gage read twice daily. A few diversions above station for irrigation.

Cooperation.- Gage-height record and results of discharge measurements Oct. 1 to Aug. 31 furnished by Bureau of Reclamation.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	127	33	7				-	45	142	88	11	3
2	120	33	7				-	45	129	88	11	3
3	110	35	7				-	78	106	86	11	5
4	80	35	8				-	186	88	90	10	3
5	62	34	8				-	279	92	88	10	3
6	42	32	8				-	372	88	88	9	3
7	38	34	8				-	229	102	82	9	3
8	42	36	9				-	186	100	81	8	3
9	113	36	8				-	229	86	82	6	3
10	148	33	9				-	183	90	75	5	4
11	72	31	9				-	214	92	68	5	5
12	36	30	10				-	244	94	67	4	4
13	34	27	9				-	244	96	63	4	3
14	37	24	10				-	232	106	61	5	2
15	40	22	9				-	241	120	54	6	3
16	77	20	9				41	238	106	49	8	3
17	118	19	9				43	244	96	48	8	3
18	85	15	10				41	226	88	46	8	3
19	34	12	10				42	206	88	42	48	3
20	23	10	11				41	200	92	37	15	3
21	25	9	11				36	200	92	31	4	3
22	26	9	12				34	194	88	28	3	181
23	27	9	12				34	186	90	25	3	150
24	29	9	12				35	175	92	23	3	62
25	30	8	11				37	178	90	20	3	10
26	34	8	12				38	184	90	18	3	5
27	62	8	12				40	169	88	16	3	5
28	68	8	12				42	163	82	15	4	5
29	28	8	12				43	152	75	13	3	5
30	29	7	13				45	147	71	12	3	4
31	33	-	12				-	144	-	12	3	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	1,829	148	23	59.0	3,630
November	634	36	7	21.1	1,260
December	306	13	7	9.9	607
Calendar year	-	-	-	-	-
January	-	-	-	-	-
February	-	-	-	-	-
March	-	-	-	-	-
April 16-30	592	45	34	39.5	1,170
May	5,993	372	45	193	11,890
June	2,859	142	71	95.3	5,670
July	1,596	90	12	51.5	3,170
August	236	48	3	7.6	468
September	495	181	2	16.5	982
Water year	-	-	-	-	-

Disappointment Creek near Cedar, Colo.

Location.- Staff gage, lat. 37°56', long. 108°38', in sec. 16, T. 42 N., R. 16 W., at highway bridge, 2½ miles southeast of Cedar and 3 miles upstream from Dawson Draw.

Drainage area.- 180 square miles.

Records available.- November 1940 to September 1941.

Extremes.- Maximum discharge during period, 1,270 second-feet Sept. 26 (gage height, 7.26 feet), by computation of flow over dam; minimum daily, 0.2 second-foot Jan. 15, 16.

Remarks.- Records poor. Gage read twice daily. Diversions above station for irrigation.

Cooperation.- Gage-height record and results of discharge measurements Nov. 1 to Aug. 31 furnished by Bureau of Reclamation.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	-	5.1	10	2.8	14	11	68	195	152	100	25	8.4
2	-	4.8	7.6	2.8	14	11	66	242	148	100	24	5.1
3	-	4.5	8.4	2.8	15	8.4	59	218	148	100	19	5.1
4	-	4.2	6.8	2.6	16	9.2	49	305	152	98	18	5.1
5	-	4.2	5.7	2.4	16	6.0	56	307	155	96	17	3.3
6	-	4.2	5.1	2.4	18	6.0	56	383	160	94	17	1.2
7	-	3.9	4.5	2.4	16	6.8	57	340	162	94	17	1.6
8	-	3.6	4.5	1.8	15	6.8	54	340	165	88	16	1.2
9	-	3.6	4.2	.9	14	10	53	346	160	84	14	1.2
10	-	3.6	3.9	.9	14	11	59	347	160	80	19	1.2
11	-	5.4	3.3	.8	12	13	57	339	152	75	18	1.2
12	-	4.8	2.8	.6	11	13	59	336	142	74	17	1.2
13	-	4.2	2.6	.6	7.6	15	56	343	142	72	14	1.2
14	-	3.9	2.4	.6	6.0	16	53	358	138	68	14	5.7
15	-	3.6	2.4	.2	5.4	19	60	353	132	64	14	4.5
16	-	3.3	2.4	.2	4.8	23	57	302	132	60	13	4.5
17	-	3.3	2.4	.4	4.2	25	56	357	128	56	13	4.2
18	-	3.0	2.2	.6	4.2	24	44	333	124	53	108	16.0
19	-	3.0	2.2	.6	4.2	20	50	337	120	53	52	16
20	-	2.6	2.4	.6	5.4	17	50	328	120	49	302	10
21	-	2.6	2.4	.6	5.4	15	46	148	120	30	6.8	4.8
22	-	2.4	3.0	.8	11	14	59	124	118	27	5.7	630
23	-	4.5	4.5	.9	28	13	62	114	152	20	5.7	29
24	-	4.8	5.1	1.0	41	12	52	110	152	5.1	5.7	16
25	-	5.1	5.7	1.2	52	13	80	114	118	4.8	5.1	15
26	-	4.8	5.7	1.6	53	17	368	110	116	3.0	5.7	a700
27	-	3.9	6.8	1.6	53	36	359	108	114	2.2	4.8	a100
28	-	3.3	6.8	1.8	69	75	278	108	114	1.2	4.8	a50
29	-	2.2	5.4	2.0	-	110	195	104	104	.6	5.7	a120
30	5.1	2.0	5.4	2.4	-	112	218	94	100	.3	20	a550
31	5.1	-	4.8	2.8	-	142	-	108	-	.3	31	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	-	-	-	-	-
November	114.4	5.4	2.0	3.81	227
December	141.4	10	2.2	4.56	280
Calendar year	-	-	-	-	-
January	43.7	2.8	.2	1.41	87
February	529.2	69	4.2	18.9	1,050
March	830.2	142	6.0	26.8	1,650
April	2,836	368	44	94.5	5,630
May	7,651	383	94	247	15,180
June	4,100	165	100	137	8,130
July	1,652.5	100	.3	53.3	3,280
August	852.0	302	4.8	27.5	1,690
September	2,312.7	700	1.2	77.1	4,590
The period	-	-	-	-	41,790

a No gage-height record; discharge computed on basis of one determination of flow over dam and records for station at upper station, near Cedar, Colo.

San Miguel River at Naturita, Colo.

Location.- Staff gage, lat. 38°13', long. 108°34', in SE¼SW¼ sec. 19 T.46 N.,R.15 W., at highway bridge in Naturita, 1.2 miles downstream from Naturita Creek. Datum of gage is 5,392.85 feet above mean sea level, datum of 1929. Staff gage October 1917 to April 1927 and water-stage recorder April 1927 to September 1929 at same site (different datums).

Drainage area.- 1,080 square miles.

Records available.- October 1917 to September 1927 and October 1940 to September 1941 in reports of U.S. Geological Survey. April 1918 to September 1929, October 1940 to September 1941 in reports of State engineer.

Average discharge.- 13 years, 418 second-feet.

Extremes.- Maximum discharge observed during year, 6,520 second-feet May 4 (gage height, 8.40 feet), from rating curve extended above 3,700 second-feet; minimum daily, 79 second-feet Mar. 5-12.

1917-29, 1940-41: Maximum discharge observed, that of May 4, 1941; minimum daily, 38 second-feet Aug. 31, 1918.

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

Cooperation.- Gage-height record and results of discharge measurements Oct. 1 to Aug. 31 furnished by Bureau of Reclamation.

Rating tables, water year 1940-41, except period of ice effect (gage height, in feet, and discharge, in second-feet)

Oct. 1 to May 3				May 4 to Sept. 30			
1.0	79	3.0	705	1.1	114	3.1	830
1.2	106	3.6	1,050	1.3	148	3.6	1,130
1.4	140	4.2	1,500	1.6	216	4.5	1,900
2.0	290	4.8	2,070	1.9	300	6.0	3,520
2.4	430	5.6	2,940	2.3	447	8.5	6,650

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	211	122	99		96	103	1,020	2,780	1,410	1,450	468	169
2	182	122	99		98	119	1,150	2,780	1,410	1,450	439	169
3	182	122	92		96	119	1,120	2,880	1,450	1,370	388	169
4	194	102	92		90	103	895	6,420	1,580	1,370	369	139
5	596	92	92		86	79	560	3,280	1,580	1,370	369	139
6	390	95	92		90	79	450	2,680	1,630	1,250	399	139
7	306	106	92		100	79	355	2,780	1,720	1,330	447	139
8	232	106	92		106	79	560	2,950	1,900	1,210	359	139
9	219	114	92		92	79	730	3,000	1,720	1,170	447	139
10	211	140	92		86	79	1,020	3,340	1,630	1,060	655	139
11	182	131	92		95	79	925	3,880	1,500	1,000	535	130
12	182	122	92		95	79	730	3,520	1,290	1,330	535	122
13	171	106	92		99	109	560	4,300	1,130	1,290	468	285
14	140	106	84		99	114	605	3,980	858	1,000	447	490
15	140	106	80		109	119	695	3,170	805	830	427	270
16	136	106	82	93	109	126	705	2,780	1,330	830	1,000	169
17	122	106	84		122	126	755	2,680	1,540	1,100	680	165
18	122	119	86		122	126	538	2,460	1,900	940	512	242
19	122	106	88		119	131	372	1,860	2,100	1,060	388	256
20	122	106	88		99	136	430	1,760	2,300	1,330	369	256
21	122	106	86		114	160	538	1,680	2,250	885	369	256
22	122	106	86		114	171	680	1,680	2,300	885	369	970
23	122	106	88		114	171	730	1,720	2,300	940	369	885
24	122	106	88		109	290	1,150	1,810	2,300	858	351	468
25	122	106	88		106	290	985	2,150	2,250	830	300	427
26	122	106	86		103	211	2,020	1,900	2,100	705	256	407
27	182	106	86		99	227	2,120	1,810	2,000	705	242	388
28	232	106	86		99	238	2,780	1,720	1,630	655	229	369
29	160	106	88		-	290	2,780	1,720	1,540	605	216	316
30	131	106	88		-	538	2,780	1,450	1,450	490	204	427
31	122	-	92		-	538	-	1,410	-	427	169	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	5,721	596	122	185	11,350
November	3,299	140	92	110	6,540
December	2,764	99	80	89.2	5,480
Calendar year	-	-	-	-	-
January	2,883	-	-	93	5,720
February	2,866	122	86	102	5,680
March	5,187	538	79	167	10,290
April	30,738	2,780	355	1,025	60,970
May	82,330	6,420	1,410	2,656	163,300
June	50,903	2,300	805	1,697	101,000
July	31,725	1,450	427	1,023	62,930
August	12,785	1,000	169	412	25,360
September	8,778	970	122	293	17,410
Water year 1940-41	239,979	6,420	79	657	476,000

Note.- Stage-discharge relation affected by ice Dec. 14 to Feb. 7.

Green River at Warren Bridge, near Daniel, Wyo.

Location.- Water-stage recorder, lat. 43°00', long. 110°07', in sec. 8, T. 35 N., R. 111 W., at Warren Bridge, 12 miles north of Daniel. Datum of gage is 7,468.09 feet above mean sea level, datum of 1929.

Drainage area.- 468 square miles.

Records available.- October 1931 to September 1941.

Extremes.- Maximum discharge during year, 2,490 second-feet June 25 (gage height, 4.43 feet); minimum daily, 88 second-feet Mar. 14.
1931-41: Maximum discharge, 3,260 second-feet June 26, 1932 (gage height, 5.08 feet); from rating curve extended above 2,500 second-feet; minimum not determined, occurred during winter.

Remarks.- Records excellent except those for period of ice effect, which are fair. Natural regulation by lakes in Green River Basin.

Cooperation.- Discharge measurements Oct. 1 to June 30 furnished by Bureau of Reclamation.

Rating table, water year 1940-41, except period of ice effect
(gage height, in feet, and discharge, in second-feet)

1.4	112	2.7	650
1.7	185	3.2	1,050
2.0	285	3.8	1,720
2.3	420	4.5	2,580

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	475	191	120	100	102	104	140	497	1,060	1,170	572	385
2	442	188	120	94	102	106	140	542	996	1,020	542	356
3	410	188	122	94	102	106	145	590	1,000	1,020	514	334
4	405	188	124	96	100	98	150	596	1,050	1,090	486	334
5	361	*140	*125	98	98	100	150	596	1,320	1,150	464	334
6	334	165	125	98	96	100	154	572	1,500	1,230	453	330
7	309	185	124	100	96	98	160	486	1,370	1,270	458	352
8	289	182	122	105	96	100	155	458	1,380	1,360	458	385
9	278	170	120	104	98	102	158	480	1,400	1,460	453	366
10	260	119	116	*102	100	100	160	502	1,420	1,550	470	366
11	250	110	110	100	*100	90	165	584	1,190	1,550	536	348
12	243	110	108	96	104	94	160	792	1,060	1,370	699	338
13	232	115	105	96	100	90	160	1,120	1,070	1,090	800	325
14	222	130	100	100	98	88	170	1,420	1,250	928	713	317
15	218	140	100	96	96	95	*174	1,340	1,550	864	626	305
16	212	140	104	94	94	100	176	1,130	1,770	856	578	305
17	206	135	105	98	96	102	174	1,010	1,920	864	572	293
18	203	132	107	100	96	104	165	1,240	2,130	832	590	282
19	197	130	110	100	94	106	160	1,230	2,260	784	584	285
20	191	130	116	102	98	108	164	1,050	2,310	800	560	289
21	188	125	116	100	100	*111	170	944	2,200	928	536	305
22	185	120	114	98	100	115	180	1,050	2,150	1,000	519	334
23	182	115	115	100	102	118	190	1,330	2,220	944	486	338
24	178	115	115	100	104	116	191	1,670	2,350	936	470	343
25	175	118	112	102	100	110	215	1,800	2,460	944	464	334
26	172	115	110	102	96	112	232	1,960	2,400	1,030	442	325
27	188	113	110	100	94	115	254	2,240	2,180	1,060	438	348
28	203	120	110	100	100	120	356	2,150	1,890	1,000	431	366
29	200	128	110	100	-	125	458	1,710	1,680	864	431	348
30	194	122	110	100	-	130	502	1,320	1,460	728	420	334
31	191	-	108	100	-	135	-	1,160	-	632	405	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	7,793	475	172	251	15,460
November	4,179	191	110	139	8,290
December	3,513	125	100	113	6,970
Calendar year 1940	122,715	1,680	62	335	243,400
January	3,075	105	94	99.2	6,100
February	2,762	104	94	98.6	5,480
March	3,298	135	88	106	6,540
April	5,928	502	140	198	11,760
May	33,569	2,240	458	1,083	66,580
June	49,996	2,460	996	1,667	99,170
July	32,344	1,550	632	1,043	64,150
August	16,170	800	405	522	32,070
September	10,004	385	282	333	19,840
Water year 1940-41	172,631	2,460	88	473	342,400

* Winter discharge measurement made on this day.
Note.- Stage-discharge relation affected by ice Nov. 11 to Apr. 23.

Green River near Linwood, Utah

Location.- Water-stage recorder, lat. 40°58', long. 109°35', in SW¼ sec. 29, T. 3 N., R. 21 E., a quarter of a mile upstream from Henrys Fork, 2 miles south of Wyoming-Utah State line, and 5 miles southeast of Linwood. Datum of gage is 5,844.64 feet above mean sea level, unadjusted.

Drainage area.- 14,300 square miles.

Records available.- October 1928 to September 1941.

Average discharge.- 13 years, 1,607 second-feet.

Extremes.- Maximum discharge during year, 10,000 second-feet May 30 (gage height, 7.62 feet); minimum daily, 340 second-feet Jan. 2, Feb. 7, 8.
1928-41: Maximum discharge, 15,200 second-feet June 4, 1936 (gage height, 10.11 feet, from recorded range of stage and floodmarks), from rating curve extended above 11,000 second-feet; minimum, 196 second-feet Nov. 27, 1934 (gage height, -0.10 foot).

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 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,100	586	510	350	360	560	2,690	1,410	7,000	4,480	1,720	1,310
2	880	586	530	340	360	570	3,220	1,480	a5,900	4,230	1,540	1,190
3	712	593	550	350	365	560	3,940	1,510	a5,050	4,020	1,390	1,110
4	664	600	560	350	365	550	4,050	1,520	a4,800	3,730	1,290	a1,080
5	688	593	540	370	360	560	4,100	1,520	a4,750	3,420	1,190	a1,050
6	704	600	560	375	350	579	3,390	1,520	a5,100	3,140	1,120	a1,020
7	720	608	580	380	340	586	3,360	1,570	a6,050	2,850	1,070	a990
8	696	586	610	385	340	586	3,040	1,680	a6,250	2,610	1,040	a960
9	688	579	600	385	350	558	2,490	1,660	a6,300	2,480	1,080	a930
10	680	579	570	385	360	608	2,130	1,540	a7,800	2,390	1,320	888
11	656	593	510	390	380	537	1,960	1,430	9,800	2,280	1,880	864
12	624	*586	450	400	400	551	1,890	1,400	9,010	2,220	2,220	856
13	600	432	420	400	385	551	1,840	1,400	7,560	2,200	2,360	864
14	586	405	390	390	375	608	1,750	1,560	6,480	2,310	2,010	848
15	579	432	390	380	360	*586	1,690	2,310	6,020	2,350	1,880	824
16	579	494	400	390	380	579	1,880	3,440	5,910	2,220	1,760	784
17	579	459	405	390	*357	579	1,940	4,270	6,480	2,100	1,690	768
18	572	437	420	400	370	632	1,810	4,560	6,900	2,000	2,140	744
19	565	415	430	400	390	984	1,740	4,360	7,290	1,900	2,270	736
20	551	425	430	375	390	1,930	1,580	4,320	7,290	1,820	1,680	768
21	544	440	420	380	380	2,280	1,400	5,620	7,530	1,770	1,520	824
22	544	430	410	380	400	2,130	1,290	5,040	7,420	1,740	1,440	864
23	537	415	425	*366	420	2,240	1,240	4,390	7,020	1,840	1,380	1,090
24	530	400	430	355	420	2,220	1,170	4,180	6,740	1,830	1,340	1,120
25	506	400	430	370	420	2,030	1,130	4,660	6,480	1,770	1,340	1,060
26	494	430	415	370	430	1,480	1,210	5,890	6,200	1,940	1,450	1,080
27	500	450	405	350	460	1,510	1,300	7,080	6,000	1,930	1,960	1,000
28	524	470	415	365	510	1,490	1,360	7,970	5,620	1,920	1,720	968
29	530	500	410	370	-	1,510	1,340	9,140	5,240	2,070	1,410	920
30	544	520	400	360	-	1,670	1,400	9,820	4,720	2,130	1,390	904
31	565	-	380	350	-	1,880	-	8,660	-	1,890	1,390	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	19,241	1,100	494	621	38,160
November	15,043	608	400	501	29,840
December	14,395	610	380	464	28,580
Calendar year 1940	274,710	4,290	270	751	544,800
January	11,601	400	340	374	23,010
February	10,777	510	340	385	21,380
March	33,694	2,280	537	1,087	66,850
April	63,330	4,100	1,130	2,111	125,600
May	116,910	9,820	1,400	3,771	231,900
June	194,710	9,800	4,720	6,490	386,200
July	75,580	4,480	1,740	2,438	149,900
August	48,930	2,360	1,040	1,578	97,050
September	28,414	1,310	736	947	56,360
Water year 1940-41	632,625	9,820	340	1,733	1,255,000

* Winter discharge measurement made on this day.
a No gage-height record; discharge computed on basis of records for Green River at Warren Bridge and near Daniel, and New Fork near Boulder.
Note.- Stage-discharge relation affected by ice Nov. 19 to Mar. 5.

Green River at Green River, Utah

Location.- Water-stage recorder, lat. 39°00', long. 110°09', in NW¼SW¼ sec. 15, T. 21 S., R. 16 E., 1 mile southeast of town of Green River and 22 miles upstream from San Rafael River.

Drainage area.- 40,600 square miles.

Records available.- October 1894 to October 1899, February 1905 to December 1911, June 1924 to September 1941. December 1910 to June 1924, at site 7 miles downstream, published as Green River at Little Valley, near Green River, Utah.

Average discharge.- 41 years (1894-99, 1905-41), 7,006 second-feet.

Extremes.- Maximum discharge during year, 28,100 second-feet May 27 (gage height, 11.45 feet); minimum, 472 second-feet Dec. 21 (gage height, 5.56 feet).
1894-99, 1905-41: Maximum discharge, 58,100 second-feet June 27, 1917 (gage height, 14.53 feet, site and datum then in use); minimum, 255 second-feet Nov. 26, 1931 (gage height, 4.17 feet); minimum gage height, 4.08 feet Aug. 1, Dec. 5, 1934.

Remarks.- Records excellent except those for August and September, which are good. Diversions above station for irrigation.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2,280	1,810	1,560	1,790	1,500	4,510	3,790	6,550	25,000	11,300	3,400	4,690
2	4,210	1,770	1,620	1,970	1,540	4,580	3,790	7,740	23,400	10,700	3,210	4,180
3	3,960	1,810	1,840	1,860	1,520	4,400	4,210	8,450	21,600	9,970	3,240	3,630
4	3,030	1,860	2,020	2,160	1,770	4,470	4,730	9,470	20,000	9,030	3,240	3,310
5	3,400	1,860	2,140	1,860	1,660	4,430	5,560	10,100	18,900	8,450	3,360	3,090
6	3,760	1,950	2,140	1,700	1,660	3,760	6,600	11,200	18,200	7,970	2,880	2,970
7	3,560	2,040	2,160	1,380	1,640	3,660	6,960	14,000	19,300	7,690	2,740	2,740
8	3,430	2,090	2,180	1,360	1,600	3,660	7,180	18,600	21,100	7,180	2,520	2,550
9	2,970	2,060	2,210	1,310	1,460	3,400	6,640	17,300	21,300	6,600	2,630	2,440
10	2,850	2,060	2,210	1,250	1,420	3,090	6,330	14,300	21,100	6,160	3,400	2,310
11	2,630	2,060	2,140	1,360	1,480	2,850	6,160	13,700	20,400	5,650	4,850	2,180
12	2,500	2,060	2,000	1,520	1,580	2,600	5,860	14,700	20,400	5,400	5,900	2,110
13	2,410	2,090	2,040	1,520	1,600	2,520	5,480	17,700	20,500	5,280	4,100	2,500
14	2,340	2,040	1,540	1,580	1,620	2,410	5,400	20,200	21,500	5,040	3,560	2,830
15	2,240	1,950	1,180	1,580	1,640	2,240	5,360	20,000	20,500	5,200	3,630	2,580
16	2,140	1,810	664	1,680	1,700	2,140	5,280	25,100	19,000	5,400	6,110	2,550
17	2,110	1,730	734	1,580	1,840	2,040	5,160	25,700	18,500	5,080	5,770	2,800
18	2,060	1,730	776	1,640	2,000	2,000	5,730	25,400	18,700	4,850	7,320	2,970
19	2,000	1,810	790	1,790	2,280	2,110	5,650	23,900	19,200	4,850	6,460	2,880
20	1,930	1,700	546	1,810	2,470	2,310	5,480	23,300	20,300	5,520	5,400	2,690
21	1,860	1,860	508	1,730	2,580	2,440	5,480	22,900	20,000	4,660	7,140	2,550
22	1,810	2,020	720	1,420	2,830	2,500	5,120	22,100	20,200	4,580	6,460	2,580
23	1,810	2,110	1,130	1,460	3,000	2,740	4,770	20,600	19,900	4,470	5,650	2,580
24	1,770	2,060	1,360	1,420	3,430	3,660	4,360	20,700	19,000	3,960	4,770	3,730
25	1,730	1,930	1,620	1,640	4,360	5,480	4,000	23,000	18,000	3,630	4,280	5,440
26	1,730	1,950	1,790	1,580	4,320	5,440	3,830	23,600	16,900	3,660	3,860	4,320
27	2,110	1,880	1,840	1,770	4,580	5,320	3,930	25,500	15,600	3,930	3,630	3,360
28	1,950	1,680	1,840	1,860	4,470	5,240	4,400	25,400	14,100	3,790	3,430	3,120
29	1,840	1,640	1,620	1,640	-	4,960	5,160	26,700	13,200	3,660	3,470	3,120
30	2,040	1,660	1,640	1,640	-	4,140	5,650	26,800	12,100	3,530	3,760	2,910
31	1,930	-	1,680	1,660	-	3,830	-	26,200	-	3,530	4,690	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	76,390	4,210	1,730	2,464	151,500
November	57,080	2,110	1,640	1,903	113,200
December	48,238	2,210	508	1,556	95,680
Calendar year 1940	1,221,823	15,700	508	3,338	2,423,000
January	50,520	2,160	1,250	1,630	100,200
February	63,550	4,580	1,420	2,270	126,000
March	108,930	5,480	2,000	3,514	216,100
April	158,050	7,180	3,790	5,268	313,500
May	590,910	26,800	6,550	19,060	1,172,000
June	577,900	25,000	12,100	19,260	1,146,000
July	180,720	11,300	3,530	5,830	358,500
August	134,860	7,320	2,520	4,350	267,500
September	91,710	4,690	2,110	3,057	181,900
Water year 1940-41	2,138,858	26,800	508	5,860	4,242,000

Beaver Creek near Daniel, Wyo.

Location.- Water-stage recorder, lat. 43°00', long. 110°09', in sec. 18, T. 35 N., R. 111 W., at Hanson Ranch, half a mile downstream from forks, 1 mile upstream from mouth, 2 miles southwest of Warren Bridge, and 11 miles northwest of Daniel.

Drainage area.- 141 square miles.

Records available.- November 1938 to September 1941.

Extremes.- Maximum discharge during year, 289 second-feet May 3 (gage height, 5.45 feet), from rating curve extended above 160 second-feet; minimum daily not determined, occurred during period of ice effect.

1938-41: Maximum discharge, that of May 3, 1941; no flow July 8-15, 21-24, Aug. 2-25, Sept. 5-11, 1940.

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

Cooperation.- Gage-height record and discharge measurements Oct. 1 to June 30 furnished by Bureau of Reclamation.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.5	1.7						160	24	4.4	2.0	1.4
2	.5	1.6						*163	14	3.8	3.2	1.2
3	.6	1.2						192	6.6	4.1	2.9	1.2
4	.5	.6						163	.3	4.7	2.0	4.7
5	.3	*.4	(*)					143	39	3.8	1.6	9.0
6	.1	1.0						86	56	1.6	1.8	10
7	.1	1.5						54	75	1.4	2.3	14
8	.1	3.4			(*)			65	178	1.4	1.8	9.6
9	.1	3.0						78	202	1.7	1.6	8.6
10	.1	2.6		(*)		(*)		76	122	2.0	1.7	9.0
11	.1	2.5						67	52	1.8	2.9	7.8
12	.1	2.4						61	33	1.8	7.8	6.2
13	.1	4.5						45	25	2.0	8.2	2.9
14	.1	5.8						31	48	2.3	5.8	2.6
15	.1	6.7						23	67	3.2	4.4	2.0
16	.3	7.2	7.0	6.5	4.0	5.0	20	17	52	3.2	5.8	3.5
17	.3	7.2						11	42	2.3	4.4	5.0
18	.3	7.2						7.4	24	1.7	4.7	3.8
19	.2	7.0						10	16	1.8	4.1	4.4
20	.2	6.4						14	12	2.0	1.1	4.1
21	.2	6.0						11	6.6	1.8	2.3	6.6
22	.2	5.6						8.2	5.4	1.7	1.8	7.0
23	.2	5.2						6.6	5.4	1.7	2.0	5.8
24	.2	5.2						6.2	8.2	1.7	2.3	4.7
25	.2	5.6						7.4	5.4	2.9	1.7	3.8
26	.2	6.2						18	2.9	13	1.8	3.2
27	.4	6.8						42	1.7	13	2.3	10
28	.5	7.0						57	1.7	9.0	2.3	10
29	.5	7.2			-			35	2.0	5.0	1.8	7.0
30	1.4	7.0			-			25	2.3	2.6	.3	4.4
31	1.4	-			-		-	4.1	-	2.6	1.6	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	10.1	1.4	0.1	0.33	20
November	135.7	7.2	.4	4.52	269
December	217.0	-	-	7.0	430
Calendar year 1940	4,542.9	109	0	12.4	9,010
January	201.5	-	-	6.5	400
February	112.0	-	-	4.0	222
March	155.0	-	-	5.0	307
April	600	-	-	20	1,190
May	1,686.9	192	4.1	54.4	3,350
June	1,129.5	202	.3	37.6	2,240
July	106.0	13	1.4	3.42	210
August	90.3	8.2	.3	2.91	179
September	173.7	14	1.2	5.79	345
Water year 1940-41	4,617.7	202	-	12.7	9,160

* Winter discharge measurement made on this day.

Note.- Stage-discharge relation affected by ice Nov. 6 to May 1.

Horse Creek near Daniel, Wyo.

Location.- Water-stage recorder, lat. 43°56', long. 110°12', in sec. 10, T. 34 N., R. 112 W., 12 miles northwest of Daniel. Datum of gage is 7,349.88 feet above mean sea level, datum of 1929.

Drainage area.- 124 square miles.

Records available.- October 1931 to September 1941.

Extremes.- Maximum discharge during year, 470 second-feet May 27 (gage height, 1.90 feet); minimum daily not determined (occurred during period of ice effect).
1931-41: Maximum discharge, 1,670 second-feet May 31, 1936 (gage height, 3.53 feet), from rating curve extended above 800 second-feet; minimum daily, 1 second-foot July 22, 23, 1940.

Remarks.- Records excellent except those for period of ice effect or of no gage-height record, which are fair. Diversions above station for irrigation.

Cooperation.- Discharge measurements Oct. 1 to June 30 furnished by Bureau of Reclamation.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	12	14					23	62	190	37	22	21
2	11	14					24	56	168	56	21	20
3	13	14					22	73	172	64	19	20
4	13	13					24	86	190	53	16	20
5	11	*13	(*)				22	73	288	55	16	20
6	11	13					16	41	247	37	17	21
7	12	11					16	24	266	28	18	21
8	11	12			(*)		16	24	387	26	17	22
9	11	12					17	20	380	21	18	22
10	11	10		(*)			18	14	257	18	24	21
11	10	9.5				(*)	18	15	182	17	74	20
12	10	9.0					21	44	188	17	100	19
13	10	9.5					21	110	203	17	84	19
14	10	11					20	108	311	19	60	19
15	10	12					28	62	311	21	47	19
16	11	12	9.0	7.5	9.0	10	34	44	276	19	47	20
17	11	13					25	60	215	17	51	20
18	10	13					21	122	172	15	69	21
19	9.8	12					18	98	144	11	55	25
20	10	11					20	73	133	9.2	41	24
21	10	10					22	73	122	8.0	36	25
22	10	9.0					28	122	98	7.5	35	28
23	10	8.0					37	186	90	7.0	36	31
24	10	7.5					46	282	84	14	35	30
25	10	8.0					51	238	74	32	32	29
26	11	8.5					51	311	51	86	32	28
27	14	8.5					40	428	35	74	32	29
28	14	9.0					64	328	25	49	26	30
29	13	9.5					60	247	24	34	23	29
30	13	9.0			-		69	220	30	28	21	28
31	13	-			-		-	215	-	24	21	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	345.8	14	9.8	11.2	686
November	325.0	14	7.5	10.8	645
December	279.0	-	-	9.0	553
Calendar year 1940	7,961.9	255	-	21.8	15,780
January	232.5	-	-	7.5	461
February	252.0	-	-	9.0	500
March	310	-	-	10	615
April	892	69	16	29.7	1,770
May	3,859	428	14	124	7,650
June	5,293	387	24	176	10,500
July	920.7	86	7.0	29.7	1,830
August	1,145	100	16	36.9	2,270
September	701	31	19	23.4	1,390
Water year 1940-41	14,555.0	428	-	39.9	28,870

* Winter discharge measurement made on this day.
Note.- No gage-height record Sept. 6-17, 19-30; discharge computed on basis of one discharge measurement, recorded range in stage, and records for South Piney Creek near Big Piney, Wyo. Stage-discharge relation affected by ice Nov. 10 to Apr. 3.

Cottonwood Creek near Daniel, Wyo.

Location.- Water-stage recorder, lat. 42°47', long. 110°09', in sec. 11, T. 32 N., R. 112 W., 1½ miles downstream from forks and 7 miles southwest of Daniel.

Drainage area.- 204 square miles.

Records available.- October 1938 to September 1941. April 1916 to September 1919, October 1931 to November 1932 at site 4 miles downstream; records not equivalent.

Extremes.- Maximum discharge during year, 450 second-feet June 9 (gage height, 6.45 feet), from rating curve extended above 200 second-feet); minimum daily not determined, occurred during period of ice effect.
1938-41: Maximum discharge, that of June 9, 1941; no flow Aug. 19-22, 1940.

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

Cooperation.- Gage-height record and discharge measurements Oct. 1 to June 30 furnished by Bureau of Reclamation.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	11	18						*65	94	56	37	24
2	8.5	19						65	67	89	37	23
3	9.7	20						65	59	100	35	24
4	13	18						65	70	72	32	24
5	12	13						67	111	57	29	23
6	9.7	14	(*)					70	119	41	27	23
7	9.1	17						59	148	30	24	24
8	9.1	*18						50	248	25	23	27
9	9.1	15						41	368	23	23	27
10	9.1	12			(*)			40	280	17	26	26
11	9.1	10						a45	164	17	38	23
12	9.1	9.0				(*)		a52	114	20	70	21
13	8.5	9.5						a55	102	25	94	20
14	8.5	11						a65	132	26	65	20
15	8.5	12						a67	157	26	50	20
			9.5	9.0	8.0	12	25					
16	8.5	12						a65	178	22	56	20
17	9.1	13						a62	181	18	60	20
18	8.5	13						a60	161	18	59	21
19	9.1	13						a60	148	20	44	28
20	9.1	12						a62	138	29	38	26
21	9.7	11						a55	135	30	a34	28
22	9.7	9.0						a47	119	25	a35	32
23	9.7	8.2						a45	97	20	a35	38
24	10	7.6						84	84	20	a33	39
25	11	8.0						92	82	33	a33	36
26	11	8.5						125	67	77	a35	34
27	14	8.8						154	56	135	35	39
28	16	9.0						171	46	89	32	45
29	16	10						122	46	56	29	40
30	15	9.6			-			105	49	44	26	35
31	16	-			-		-	122	-	38	25	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	326.4	16	8.5	10.5	647
November	368.5	20	7.6	12.3	731
December	294.5	-	-	9.5	584
Calendar year 1940	6,623.0	119	0	18.1	13,140
January	279	-	-	9.0	553
February	224	-	-	8.0	444
March	372	-	-	12	738
April	750	-	-	25	1,490
May	2,302	171	40	74.3	4,570
June	3,820	368	46	127	7,580
July	1,298	135	17	41.9	2,570
August	1,219	94	23	39.3	2,420
September	830	45	20	27.7	1,650
Water year 1940-41	120,083.4	368	-	33.1	23,980

* Winter discharge measurement made on this day.
a No gage-height record; discharge computed on basis of one discharge measurement, recorded range in stage, and records for South Piney Creek near North Piney, Wyo.
Note.- Stage-discharge relation affected by ice Nov. 5, Nov. 9 to Apr. 30.

East Fork near Big Sandy, Wyo.

Location.- Water-stage recorder, lat. 42°40', long. 109°25', in sec. 7, T. 31 N., R. 105 W., 1 mile downstream from Jim Creek and 4 miles northeast of Big Sandy.

Drainage area.- 79.2 square miles.

Records available.- October 1938 to September 1941. May 1916 to September 1917 and May 1921 to November 1923, at site 2 miles downstream, published as East Fork at East Fork Canal.

Extremes.- Maximum discharge during year, 1,040 second-feet May 27 (gage height, 6.07 feet), from rating curve extended above 420 second-feet; minimum daily not determined, occurred during period of ice effect.

1916-17, 1921-23, 1938-41: Maximum discharge, 1,400 second-feet June 23, 1917 (gage height, 4.6 feet, site and datum then in use), from rating curve extended above 850 second-feet); minimum discharge observed, 1.2 second-feet Jan. 4, 1940 (discharge measurement), but probably less during period of ice effect.

Remarks.- Records good except those for periods of ice effect, which are fair. No diversions above station.

Cooperation.- Gage-height record and discharge measurements Oct. 1 to June 30 furnished by Bureau of Reclamation.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	49	20						22	386	112	23	19
2	44	19						24	368	117	21	17
3	49	21			(*)			26	450	165	19	16
4	50	*19	(*)					30	454	145	16	16
5	45	20						35	518	128	16	16
6	40	18						44	389	119	16	14
7	38	18						45	386	117	17	15
8	35	16		(*)				47	386	115	21	17
9	33	15						100	410	155	38	19
10	33	15						*219	426	145	33	20
11	29	16						280	375	130	70	19
12	29	13						426	378	115	64	18
13	28	12						680	504	98	52	16
14	26	13						760	531	86	44	15
15	25	14						675	508	77	37	14
			12	10	8.5	11	14					
16	24	15						562	495	66	36	14
17	22	16						612	594	59	37	14
18	21	16						824	621	52	35	15
19	19	15						544	446	49	34	27
20	18	15						414	375	47	32	27
21	18	15						536	378	45	29	26
22	17	15						725	347	40	29	29
23	16	13						857	340	37	28	29
24	16	14						735	294	35	26	29
25	15	14						705	270	38	26	28
26	15	14						755	222	45	29	27
27	19	13						857	183	42	29	29
28	19	13						549	161	36	27	32
29	23	13						459	147	32	24	31
30	23	13			-			386	126	28	21	29
31	21	-			-		-	336	-	25	20	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	859	50	15	27.7	1,700
November	463	21	12	15.4	918
December	372	-	-	12	738
Calendar year 1940	17,710.2	-	-	48.4	35,120
January	310	-	-	10	615
February	238	-	-	8.5	472
March	341	-	-	11	676
April	420	-	-	14	833
May	13,289	857	22	429	26,360
June	11,468	621	126	382	22,750
July	2,500	165	25	80.6	4,960
August	949	70	16	30.6	1,880
September	637	32	14	21.2	1,260
Water year 1940-41	31,846	857	-	87.2	63,160

* Winter discharge measurement made on this day.

Note.- Stage-discharge relation affected by ice Nov. 13-16, Nov. 30 to May 9.

Silver Creek near Big Sandy, Wyo.

Location.- Water-stage recorder, lat. 42°45', long. 109°31', in sec. 17, T. 32 N., R. 106 W., at Miller Ranch, 1 mile downstream from South Fork, 8 miles northwest of Big Sandy, and 11 miles east of Boulder.

Drainage area.- 45.4 square miles.

Records available.- October 1938 to September 1941.

Extremes.- Maximum discharge during year, 611 second-feet May 22 (gage height, 6.63 feet), from rating curve extended above 300 second-feet; no flow Oct. 1-8.
1938-41: Maximum discharge, that of May 22, 1941; no flow at times in each year.

Remarks.- Records excellent except those below 10 second-feet, which are fair. One small diversion above station.

Cooperation.- Gage-height record and discharge measurements Oct. 1 to June 30 furnished by Bureau of Reclamation.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	2.4						11	258	21	1.6	0.6
2	0	4.2	(*)					11	242	18	1.4	.6
3	0	4.2						12	246	18	1.2	.5
4	0	*4.4			(*)			14	236	18	.9	.6
5	0	3.5				(*)		19	272	16	.9	.5
6	0	4.7						22	429	14	.9	.5
7	0	4.4						22	226	24	.9	.5
8	0	4.4						22	250	32	.9	.6
9	.1	4.2		(*)				23	290	29	.8	.6
10	.1	3.5						31	268	26	.8	.6
11	.2	3.2						111	234	23	1.0	.5
12	.4	3.1						236	190	21	1.0	.4
13	.5	3.1						344	144	18	1.2	.3
14	.6	3.3						390	136	16	1.0	.3
15	.6	3.6						377	137	14	1.0	.3
16	.6	3.7	3.0	2.5	2.5	3.0	8.0	357	133	12	1.0	.3
17	.6	3.7						405	126	9.8	1.3	.3
18	.6	3.6						460	110	8.8	1.2	.3
19	.6	3.4						350	92	7.9	1.0	.9
20	.6	3.3						284	72	7.0	.9	.9
21	.5	3.2						348	59	7.6	.9	.9
22	.5	3.1						474	48	8.5	1.2	1.0
23	.4	3.0					(*)	518	40	7.6	1.0	1.2
24	.4	3.1						486	34	7.0	1.2	1.0
25	.4	3.1						467	32	7.3	1.2	1.0
26	.4	3.0						501	29	7.3	1.3	.9
27	.8	3.0						482	26	6.7	1.2	1.8
28	1.0	3.0						372	24	4.4	1.0	2.7
29	1.2	3.0			-			320	24	2.2	.9	3.2
30	1.0	3.1			-			278	22	1.9	.7	3.5
31	1.0	-			-		-	254	-	1.8	.7	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	13.1	1.2	0	0.42	26
November	104.5	4.7	2.4	3.48	207
December	93.0	-	-	3.0	184
Calendar year 1940	5,555.1	243	0	15.2	11,020
January	77.5	-	-	2.5	154
February	70.0	-	-	2.5	139
March	93.0	-	-	3.0	184
April	240.0	-	-	8.0	476
May	8,001	518	11	258	15,870
June	4,429	429	22	148	8,780
July	415.8	32	1.8	13.4	825
August	32.2	1.6	.7	1.04	64
September	27.3	3.5	.3	.91	54
Water year 1940-41	13,596.4	518	0	37.3	26,960

* Winter discharge measurement made on this day.
Note.- Stage-discharge relation affected by ice Nov. 10 to Apr. 30.

New Fork below New Fork Lake, near Cora, Wyo.

Location.- Water-stage recorder, lat. 43°05', long. 110°01', in sec. 20, T. 36 N., R. 110 W., 2 miles downstream from New Fork Lake and 9 miles north of Cora.

Drainage area.- 36.2 square miles.

Records available.- October 1938 to September 1941.

Extremes.- Maximum discharge during year, 430 second-feet May 24 (gage height, 5.39 feet), from rating curve extended above 280 second-feet; minimum daily, 0.1 second-foot May 13 when gates in dam at New Fork Lake were closed.
1938-41: Maximum discharge, that of May 24, 1941; minimum daily, that of May 13, 1941.

Remarks.- Records good. Flow regulated for irrigation by New Fork Lake (capacity, 45,900 acre-feet). No diversions above station.

Cooperation.- Gage-height record and discharge measurements Oct. 1 to June 30 furnished by Bureau of Reclamation.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.8	6.6						b0.5	98	245	11	8.1
2	2.8	6.6						b.5	200	240	10	8.1
3	3.0	6.9						*.5	287	238	10	5.8
4	2.8	6.9						.5	284	236	10	2.3
5	2.7	6.9						.4	287	228	9.5	2.3
6	2.7	6.9						.4	284	228	8.1	2.5
7	2.5	6.9						.3	279	226	7.8	2.5
8	2.3	6.6						.4	277	224	7.8	2.5
9	2.1	6.9						.3	169	221	7.8	2.3
10	1.9	6.9						.2	66	216	8.7	2.5
11	2.1	6.9						.2	66	212	8.7	2.3
12	2.1	b6.4						.2	66	209	9.0	2.3
13	2.1	b6.0						.1	67	189	8.7	2.3
14	2.1	b6.2						.2	147	160	8.7	2.3
15	1.9	b6.4						.2	260	156	8.7	2.5
16	1.9	6.6						.2	262	154	8.7	2.5
17	1.9	6.9						.6	262	149	8.4	2.5
18	1.9	6.6						193	267	145	8.7	2.7
19	1.9	6.6						216	269	140	8.7	2.5
20	1.9	6.3						72	272	138	8.7	2.5
21	2.7	b6.0						72	269	134	8.7	2.5
22	6.0	b5.9						74	269	130	8.7	2.3
23	6.0	b5.8						226	269	128	8.4	2.3
24	6.0	b5.6						404	282	122	8.4	1.9
25	6.3	b5.8						394	300	118	8.4	1.9
26	6.3	b5.8						386	295	109	8.4	1.8
27	6.9	b5.6						321	290	103	8.1	1.9
28	6.6	b5.6						102	272	100	8.1	1.8
29	6.6	*b5.9						100	255	55	8.1	1.8
30	6.6	b5.8						100	252	19	8.1	1.8
31	6.6	-						100	-	12	8.1	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	112.0	6.9	1.9	3.61	222
November	190.8	6.9	5.6	6.36	378
December	-	-	-	-	-
Calendar year	-	-	-	-	-
January	-	-	-	-	-
February	-	-	-	-	-
March	-	-	-	-	-
April	-	-	-	-	-
May	2,765.7	404	.1	89.2	5,490
June	6,922	300	66	231	13,730
July	4,984	245	12	161	9,890
August	269.2	11	7.8	8.68	534
September	83.3	8.1	1.8	2.78	165
Water year	-	-	-	-	-

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

New Fork near Pinedale, Wyo.

Location.- Water-stage recorder, lat. 42°50', long. 109°51', in sec. 15, T. 33 N., R. 109 W., a quarter of a mile upstream from Pine Creek and 2 miles south of Pinedale.

Drainage area.- 241 square miles.

Records available.- October 1938 to September 1941.

Extremes.- Maximum discharge during year, 1,060 second-feet June 9 (gage height, 8.63 feet), from rating curve extended above 320 second-feet; minimum daily not determined, occurred during period of ice effect.

1938-41: Maximum discharge, that of June 9, 1941; minimum daily, 13 second-feet May 18-21, 23, 1940.

Remarks.- Records good except those for periods of ice effect, which are fair. Diversions above station for irrigation. Flow regulated for irrigation by New Fork Lake (capacity, 45,900 acre-feet).

Cooperation.- Gage-height record and discharge measurements Oct. 1 to June 30 furnished by Bureau of Reclamation.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	27	*42	28			28	80	57	111	234	94	29
2	25	42	29	(*)		29	82	41	90	244	82	28
3	30	42	30			29	84	38	77	265	70	30
4	33	40	31		(*)	29	84	38	83	252	58	30
5	35	30	29			28	84	38	155	252	53	29
6	32	35	26			*27	86	40	252	231	62	28
7	31	48	28			27	86	40	335	208	64	29
8	30	40	27			27	94	36	522	201	55	28
9	30	39	26			26	100	38	854	189	50	28
10	30	33	*20			28	108	37	860	180	55	27
11	28	32	20			27	97	36	418	177	71	26
12	27	30	20			26	103	36	310	204	84	25
13	27	28	20			26	146	31	265	223	64	25
14	26	30	21			28	123	29	213	226	55	26
15	26	30	23	(*)		29	134	32	211	218	52	27
16	26	32	23	21	22	30	138	33	231	211	51	27
17	26	32	24			31	*108	35	231	194	49	27
18	26	32	25			32	94	33	228	184	46	27
19	25	30	25			33	86	50	257	187	45	30
20	25	28	25			*33	88	50	288	321	43	29
21	27	28	25			32	92	39	346	265	41	32
22	27	27	24			37	92	36	356	201	41	33
23	27	26	24			40	92	38	346	175	39	33
24	26	25	26			39	89	44	324	177	39	33
25	26	27	22			37	76	61	294	199	35	33
26	26	26	22			38	74	101	267	208	35	32
27	30	26	23			40	90	218	247	159	35	35
28	33	29	22			45	80	338	226	134	31	37
29	32	30	23		-	48	71	223	252	125	30	34
30	34	*28	24		-	60	64	155	254	138	30	74
31	39	-	24		-	70	-	144	-	120	30	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	892	39	25	28.8	1,770
November	967	48	25	32.2	1,920
December	759	31	20	24.5	1,510
Calendar year 1940	13,259	180	13	36.2	26,310
January	651	-	-	21.0	1,290
February	616	-	-	22.0	1,220
March	1,059	70	26	34.2	2,100
April	2,825	146	64	94.2	5,600
May	2,165	338	29	69.8	4,290
June	8,903	860	77	297	17,660
July	6,302	321	120	203	12,500
August	1,589	94	30	51.3	3,150
September	931	74	25	31.0	1,850
Water year 1940-41	27,659	860	-	75.8	54,860

* Winter discharge measurement made on this day.

Note.- Stage-discharge relation affected by ice Nov. 12, 13, 19, 20, 22-24, 26, 27, 30, Dec. 1, Dec. 4 to Mar. 20, Mar. 26 to Apr. 6.

New Fork near Boulder, Wyo.

Location.- Water-stage recorder, lat. 42°45', long. 109°44', in sec. 9, T. 32 N., R. 108 W., an eighth of a mile upstream from Boulder Creek and half a mile southwest of Boulder.

Drainage area.- 552 square miles.

Records available.- May 1915 to September 1941.

Average discharge.- 26 years, 388 second-feet.

Extremes.- Maximum discharge during year, 2,090 second-feet May 28 (gage height, 5.44 feet); minimum daily, 103 second-feet Oct. 2.
1915-41: Maximum discharge observed, 12,300 second-feet June 17, 1918 (gage height, 8.7 feet), from rating curve extended above 6,000 second-feet; minimum, 42 second-feet Dec. 15-17, 1915.

Remarks.- Records excellent except those for period of ice effect, which are fair. Diversions above station for irrigation.

Cooperation.- Discharge measurements Oct. 1 to June 30 furnished by Bureau of Reclamation.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	108	180	140	115	114	115	172	183	1,060	996	370	212
2	103	*180	140	110	114	120	180	175	966	906	338	209
3	121	180	145	110	114	124	185	165	906	852	326	209
4	132	175	*145	114	114	122	185	167	900	690	320	206
5	125	163	145	115	115	120	185	172	1,020	629	288	200
6	121	165	145	115	113	118	190	172	1,200	575	268	194
7	119	175	140	114	112	118	195	186	1,320	565	270	197
8	110	175	140	118	110	116	200	200	1,460	555	260	194
9	116	170	138	116	110	116	205	183	1,680	550	254	194
10	119	163	135	115	112	118	210	165	1,880	550	254	186
11	123	154	130	118	114	115	215	158	1,540	565	260	178
12	123	150	125	120	115	113	215	170	1,310	590	267	167
13	125	152	125	118	116	112	220	197	1,200	530	278	162
14	123	162	122	*116	*114	112	225	316	1,180	517	257	160
15	123	168	125	114	113	120	230	651	1,250	517	251	158
16	123	165	125	110	110	125	230	768	1,380	490	260	153
17	123	162	125	110	108	130	230	786	1,500	508	264	148
18	123	158	130	110	106	132	228	798	1,590	508	254	150
19	123	154	132	114	106	135	*227	924	1,710	504	245	155
20	121	150	136	115	110	*137	215	936	1,740	607	242	148
21	123	145	135	115	113	140	206	864	1,700	575	242	155
22	127	135	130	114	114	143	210	828	1,670	499	242	160
23	127	132	130	115	116	145	212	906	1,640	470	242	162
24	125	135	130	113	118	150	215	1,080	1,640	486	245	153
25	127	140	125	113	118	145	215	1,350	1,590	517	239	153
26	127	135	125	115	114	150	214	1,540	1,500	540	242	150
27	146	135	124	114	110	155	212	1,830	1,380	512	254	162
28	160	140	122	113	115	160	203	2,070	1,240	434	236	167
29	168	145	122	112	-	160	194	1,820	1,170	422	221	165
30	172	140	122	110	-	164	189	1,480	1,130	410	215	178
31	177	-	120	112	-	166	-	1,270	-	398	215	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	3,983	177	103	128	7,900
November	4,683	180	132	156	9,290
December	4,073	145	120	131	8,080
Calendar year 1940	70,935	1,310	60	194	140,700
January	3,533	120	110	114	7,010
February	3,158	118	106	113	6,260
March	4,096	166	112	132	8,120
April	6,212	230	172	207	12,320
May	22,510	2,070	158	726	44,650
June	41,472	1,880	900	1,382	82,260
July	17,467	996	398	563	34,650
August	8,139	370	215	263	16,140
September	5,165	212	148	173	10,280
Water year 1940-41	124,511	2,070	103	341	247,000

* Winter discharge measurement made on this day.
Note.- Stage-discharge relation affected by ice Nov. 11 to Apr. 26.

Willow Creek near Cora, Wyo.

Location.- Water-stage recorder, lat. 43°00', long. 109°56', in sec. 14, T. 35 N., R. 110 W., a quarter of a mile downstream from forks and 4½ miles northeast of Cora.

Drainage area.- 41.8 square miles.

Records available.- October 1938 to December 1941 (discontinued).

Extremes.- Maximum discharge during period October 1940 to December 1941, 95 second-feet May 27 (gage-height, 7.03 feet), from rating curve extended above 30 second-feet; minimum determined, occurred during period of ice effect.
1938-41: Maximum discharge, that of May 27, 1941; minimum daily, 0.8 second-feet Aug. 4, 5, 10-19, Sept. 1-3, 16, 17, 26, 1940.

Remarks.- Records good except those for periods of ice effect, which are fair. Several small diversions above station for irrigation.

Cooperation.- Gage-height record and results of discharge measurements Oct. 1 to June 30 furnished by Bureau of Reclamation.

Discharge, in second-feet, 1940-41

1940-41

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.4	*5.9						6.2	18	5.0	2.6	1.5
2	1.3	6.2						5.4	17	5.6	2.5	1.5
3	1.7	6.2						5.3	23	5.6	2.5	1.5
4	1.8	5.6						4.8	28	3.5	2.3	1.5
5	1.4	5.3						4.4	52	3.5	2.5	1.3
6	1.4	5.6						3.9	34	2.5	5.0	1.3
7	1.3	5.9		(*)	(*)			4.4	33	2.0	4.7	1.3
8	1.3	6.2				(*)		6.9	47	1.8	3.8	1.2
9	1.4	5.9						5.3	65	1.5	4.7	1.2
10	1.4	6.2						3.8	38	1.2	4.4	1.2
11	1.3	5.2						3.8	23	1.1	6.9	1.2
12	1.3	5.3						4.4	24	1.6	6.9	2.0
13	1.3	5.1						8.7	26	1.5	1.8	2.9
14	1.3	5.2						14	40	2.2	1.8	2.9
15	1.3	5.5						10	46	4.4	1.9	2.9
16	1.3	5.6	4.0	4.0	4.0	4.5	7.0	8.7	46	3.5	2.3	3.2
17	1.3	5.3						7.8	38	2.6	2.0	3.2
18	1.3	5.3						17	40	2.5	2.0	3.6
19	1.3	5.3						16	28	2.9	2.0	4.7
20	1.4	5.4						10	25	10	1.9	4.7
21	1.4	5.0					(*)	8.7	36	6.0	1.5	4.7
22	1.4	4.6						16	23	4.1	1.8	5.6
23	1.5	4.1						21	20	3.5	1.6	5.3
24	1.7	3.5						30	16	3.2	1.8	5.3
25	1.7	3.7						38	13	4.4	1.3	5.3
26	1.8	3.7						57	5.9	4.7	1.5	5.3
27	2.4	3.3						72	2.6	5.0	1.5	6.0
28	2.6	3.4						55	2.5	3.8	1.6	5.0
29	2.8	3.8			-			28	3.2	2.9	1.5	4.7
30	5.1	3.4			-			23	4.4	3.2	1.5	4.7
31	5.6	-			-		-	22	-	2.5	1.3	-

* Winter discharge measurement made on this day.
b Stage-discharge relation affected by ice Nov. 13-15, Nov. 20, 1940 to May 6, and Nov. 16 to Dec. 31, 1941.

Discharge, in second-feet, of Willow Creek near Cora, Wyo., 1940-41--Continued

1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5.3	3.5										
2	5.6	3.2										
3	5.0	3.2										
4	5.0	3.5										
5	6.9	2.6										
6	6.0	3.2										
7	6.5	2.6										
8	6.9	2.9										
9	6.0	6.5										
10	5.6	6.0										
11	5.6	5.6										
12	5.3	*6.5										
13	3.5	5.6										
14	3.5	3.5										
15	8.2	4.7	b5.0									
16	8.7											
17	6.9											
18	6.5											
19	6.0											
20	6.0											
21	8.7											
22	10											
23	7.8	b5.0										
24	6.5											
25	8.7											
26	9.1											
27	9.6											
28	8.7											
29	8.2											
30	6.9											
31	6.5	-										

Monthly discharge, in second-feet, 1940-41

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October 1940	55.5	5.6	1.8	1.79	110
November	151.7	6.2	3.3	5.06	301
December	124.0	-	-	4.0	246
Calendar year 1940	1,519.6	27	-	4.15	3,010
January 1941	124.0	-	-	4.0	246
February	112.0	-	-	4.0	222
March	139.5	-	-	4.5	277
April	210.0	-	-	7.0	417
May	520.5	72	3.8	16.8	1,030
June	818.6	65	2.5	27.3	1,620
July	107.9	10	1.1	3.48	214
August	81.8	6.9	1.3	2.64	162
September	96.9	6.0	1.2	3.23	192
Water year 1940-41	2,542.4	72	1.1	6.97	5,040
October 1941	209.7	10	3.5	6.76	416
November	138.1	6.5	-	4.60	274
December	155.0	-	-	5.0	307
Calendar year 1941	2,714.0	72	1.1	7.44	5,380

Lake Creek near Cora, Wyo.

Location.- Water-stage recorder, lat. 43°00', long. 109°54', in sec. 19, T. 35 N., R. 109 W., just downstream from Willow Lake and 5 miles northeast of Cora.

Drainage area.- 31.6 square miles.

Records available.- October 1938 to December 1941 (discontinued).

Extremes.- Maximum discharge during period October 1940 to December 1941, 168 second-feet June 13 (gage height, 7.88 feet); no flow Nov. 1 to Dec. 31, 1941.
1938-41: Maximum discharge, that of June 13, 1941; no flow Nov. 1 to Dec. 31, 1941.

Remarks.- Records good except those for periods of no gage-height record or those below 10 second-feet, which are fair. Flow partly regulated for irrigation by Willow Lake (capacity, 15,000 acre-feet). No diversion above station.

Cooperation.- Gage-height record and results of discharge measurements Oct. 1 to June 30 furnished by Bureau of Reclamation.

Discharge, in second-feet, 1940-41

Day	Oct.	Nov.					May	June	July	Aug.	Sept.	Oct.
1	0.6	0.4					-	92	100	1.1	0.5	77
2	.5	.4					-	92	98	1.0	.5	72
3	.6	.4					-	92	98	.9	.4	65
4	.5	.4					-	95	97	.9	.4	59
5	.4	.4					-	97	98	.8	.4	59
6	.4	.4					-	100	100	.8	.4	50
7	.4	.4					-	102	98	.8	.4	44
8	.4	.4					-	107	96	.8	.4	40
9	.4	.4					48	130	95	.7	.4	38
10	.4	.3					77	152	92	.7	.4	33
11	.4	.3					75	150	91	.7	.4	31
12	.4	.3					76	150	96	.8	.3	30
13	.4	.4					78	136	98	.8	.3	27
14	.4	.4					81	103	97	.8	.3	27
15	.4	.4					82	104	95	.8	.3	27
16	.4	.4					83	106	96	.8	.3	25
17	.4	.4					84	107	97	.8	.3	19
18	.4	.4					86	122	a97	.8	.3	23
19	.3	.4					86	140	a98	.8	.2	38
20	.3	.4					88	149	a99	.8	.2	37
21	.3	.4					89	157	a110	.8	.2	34
22	.3	.4					90	159	a95	.8	.2	30
23	.3	.4					96	156	a90	.8	.2	24
24	.3	.4					104	157	88	.8	.2	17
25	.3	.4					106	137	27	.7	.2	15
26	.3	.4					107	116	3.2	.7	.2	12
27	.4	.4					109	108	2.2	.6	.2	11
28	.4	.4					113	104	2.0	.6	.2	11
29	.4	.4					114	84	1.9	.6	40	8.6
30	.4	.4					102	91	1.4	.6	83	16
31	.4	-					90	-	1.3	.6	-	15

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October 1940	12.2	0.6	0.3	0.39	24
November	11.7	.4	.3	.39	23
December					
May 9-31, 1941	2,064	114	48	89.7	4,090
June	3,599	159	84	120	7,140
July	2,358.0	110	1.3	76.1	4,680
August	24.0	1.1	.6	.77	48
September	131.7	83	.2	4.39	261
October	1,014.6	77	8.6	32.7	2,010

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

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Duck Creek at Cora, Wyo.

Location.- Water-stage recorder, lat. 42°56', long. 110°00', in sec. 4, T. 34 N., R. 110 W., three-quarters of a mile west of Cora.

Drainage area.- 27.0 square miles.

Records available.- November 1938 to September 1941 (discontinued).

Extremes.- Maximum discharge during year, 25 second-feet Nov. 6 (gage height, 2.76 feet); minimum daily, 3.7 second-feet May 29.
1938-41: Maximum discharge, 65 second-feet Mar. 31, 1939 (gage height, 3.07 feet), from rating curve extended above 20 second-feet; minimum daily, that of May 29, 1941.

Remarks.- Records fair. Flow is mainly return water from irrigated lands.

Cooperation.- Gage-height records and discharge measurements Oct. 1 to June 30 furnished by Bureau of Reclamation.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	7.9	4.6	7.9	6.7	6.4	6.0	6.8	5.4	4.2	9.0	6.2	6.0
2	7.8	4.4	7.9	6.7	6.4	6.0	6.5	5.3	4.3	6.5	6.2	6.0
3	8.5	4.4	7.8	6.7	6.4	6.0	6.4	5.3	4.3	5.2	6.3	6.1
4	8.1	4.4	7.8	6.6	6.4	6.1	6.4	5.2	4.4	5.2	6.4	6.3
5	7.9	7.1	7.8	6.6	6.4	6.1	6.3	5.1	a4.6	5.2	6.5	6.3
6	7.7	17	7.7	6.6	6.4	6.1	6.1	5.1	a4.7	5.1	6.6	6.4
7	7.6	13	7.7	6.6	6.3	6.2	6.1	5.1	a4.8	5.2	6.6	6.6
8	7.7	9.9	7.7	6.6	6.3	6.1	6.3	5.1	5.0	5.6	7.0	6.6
9	7.6	9.2	7.7	6.6	6.3	6.0	6.4	5.0	6.2	6.0	7.7	6.6
10	7.5	9.1	7.6	6.6	6.3	5.9	6.3	5.0	5.1	6.6	8.1	6.6
11	7.4	9.2	7.4	6.6	6.3	5.9	6.3	4.9	5.0	7.9	9.8	6.6
12	7.4	7.1	7.5	6.6	6.2	5.8	6.7	4.9	5.0	9.6	8.9	6.6
13	7.3	6.3	7.5	6.6	6.2	5.8	6.7	4.8	5.0	12	6.9	7.2
14	7.4	6.4	7.1	6.6	6.2	5.8	6.1	4.8	5.1	12	5.9	7.6
15	7.1	6.6	7.1	6.6	6.2	5.7	6.2	4.8	5.3	11	5.3	7.8
16	7.3	6.7	7.0	6.6	6.2	5.8	5.6	4.7	5.2	11	5.4	7.6
17	6.8	6.7	7.0	6.6	6.2	5.8	5.3	4.7	5.2	10	5.3	7.5
18	5.7	6.7	7.1	6.6	6.2	5.9	5.2	4.6	5.1	10	5.2	7.5
19	6.1	7.6	7.1	6.6	6.1	5.9	5.2	4.6	5.2	10	5.4	7.5
20	6.7	9.1	7.1	6.5	6.1	6.1	5.3	4.6	5.2	9.0	5.6	7.5
21	6.1	8.8	7.0	6.5	6.1	6.1	5.6	4.3	5.3	8.0	5.9	7.3
22	5.8	8.9	7.0	6.5	6.1	6.1	5.8	4.0	5.2	7.7	5.3	7.3
23	5.8	8.8	7.0	6.5	6.1	6.0	5.6	4.0	5.2	7.7	4.5	7.3
24	5.9	8.8	7.0	6.5	6.0	5.9	5.6	4.0	5.3	7.9	4.6	7.3
25	5.9	8.5	6.9	6.5	6.0	5.9	5.3	4.3	5.3	8.5	5.0	7.2
26	5.9	7.8	6.9	6.5	6.0	6.0	5.8	5.8	5.3	7.2	5.3	8.9
27	6.2	7.9	6.8	6.5	6.0	6.0	6.0	5.2	5.3	6.2	5.4	10
28	6.2	8.0	6.8	6.5	6.0	6.0	5.5	3.9	5.4	6.1	5.4	11
29	5.4	7.9	6.7	6.5	-	6.2	5.4	3.7	6.2	6.1	5.6	12
30	4.6	7.9	6.7	6.5	-	6.4	5.4	4.0	11	7.5	5.7	11
31	4.6	-	6.7	6.4	-	6.5	-	4.2	-	7.4	5.8	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	210.1	8.5	4.6	6.78	417
November	238.8	17	4.4	7.96	474
December	225.0	7.9	6.7	7.26	446
Calendar year 1940	2,355.4	17	4.4	6.44	4,670
January	203.6	6.7	6.4	6.57	404
February	173.8	6.4	6.0	6.21	345
March	186.1	6.5	5.7	6.00	369
April	178.2	6.8	5.2	5.94	353
May	146.4	5.8	3.7	4.72	290
June	158.4	11	4.2	5.28	314
July	242.4	12	5.1	7.82	481
August	189.8	9.8	4.5	6.12	376
September	226.2	12	6.0	7.54	449
Water year 1940-41	2,378.8	17	3.7	6.52	4,720

a No gage-height record; discharge interpolated.

Pine Creek at Pinedale, Wyo.

Location.- Water-stage recorder, lat. 42°52', long. 109°52', in sec. 33, T. 34 N., R. 109 W., at Pinedale, 3 miles upstream from mouth. Datum of gage is 7,164.3 feet above mean sea level, adjustment of 1912.

Drainage area.- 118 square miles.

Records available.- April to October 1904, May 1915 to September 1941.

Average discharge.- 26 years, 132 second-feet.

Extremes.- Maximum discharge during year, 952 second-feet June 23 (gage height, 3.87 feet), from rating curve extended above 640 second-feet; minimum daily, 5.4 second-feet Nov. 10. 1904, 1915-41: Maximum discharge, 2,310 second-feet June 17, 1918 (gage height, 5.0 feet); minimum, 2 second-feet Apr. 1-26, May 6-8, 1931.

Remarks.- Records excellent except those for period of ice effect, which are fair. Diversions above station for irrigation. Flow regulated by Fremont Lake (regulated capacity, 15,000 acre-feet).

Cooperation.- Discharge measurements Oct. 1 to June 30 furnished by Bureau of Reclamation.

Rating table, water year 1940-41, except period of ice effect (gage height, in feet, and discharge, in second-feet)

0.6	3	1.3	54	3.0	510
.7	7	1.5	80	3.5	740
.8	12	1.7	114	3.9	970
.9	18	2.1	206		
1.1	34	2.5	324		

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	13	10						40	506	451	101	74
2	17	10						41	462	365	101	70
3	23	10						44	440	314	116	70
4	25	9.5	(*)		(*)			48	428	172	107	66
5	20	9.0						46	447	160	85	64
6	20	8.5		(*)				39	466	154	77	64
7	18	6.2				(*)		53	478	165	67	66
8	19	6.2						54	498	184	69	65
9	20	5.8						47	538	201	70	64
10	17	5.4						39	526	209	72	61
11	16	10						39	478	214	69	59
12	16	32						50	459	182	82	55
13	16	37						70	466	105	85	52
14	15	33						274	494	100	85	49
15	15	28	30	32	30	28	44	289	554	105	86	48
16	13	22						283	655	114	90	46
17	12	22						277	730	168	93	45
18	13	23						271	822	170	82	43
19	13	24						289	904	158	85	41
20	13	28						295	904	158	90	38
21	14	24						298	886	149	91	42
22	14	24						298	886	151	93	45
23	14	37						311	904	160	93	39
24	14	38						398	910	172	94	38
25	14	38						550	874	172	93	37
26	14	38						665	822	182	96	38
27	16	38						817	740	172	96	41
28	19	37						822	655	138	91	41
29	17	23			-			735	604	143	85	42
30	17	24			-			640	550	129	82	42
31	14	-			-		-	572	-	121	77	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	501	25	12	16.2	994
November	660.6	38	5.4	22.0	1,310
December	930	-	-	30	1,840
Calendar year 1940	21,820.8	760	4.4	59.6	43,270
January	992	-	-	32	1,970
February	840	-	-	30	1,670
March	868	-	-	28	1,720
April	1,320	-	-	44	2,620
May	8,694	822	39	280	17,240
June	19,086	910	428	636	37,860
July	5,538	451	100	179	10,980
August	2,703	116	67	87.2	5,360
September	1,545	74	37	51.5	3,060
Water year 1940-41	43,677.6	910	5.4	120	86,620

* Winter discharge measurement made on this day.
Note.- Stage-discharge relation affected by ice Dec. 1 to Apr. 30.

Pole Creek below Little Half Moon Lake, near Pinedale, Wyo.

Location.- Water-stage recorder, lat. 42°53', long. 109°43', in sec. 26, T. 34 N., R. 108 W., 1½ miles downstream from Little Half Moon Lake and 7 miles east of Pinedale.

Drainage area.- 87.5 square miles.

Records available.- October 1938 to September 1941.

Extremes.- Maximum discharge during year, 761 second-feet May 28 (gage height, 6.07 feet), from rating curve extended above 500 second-feet; minimum daily, 8.6 second-feet Oct. 1. 1938-41: Maximum discharge, that of May 28, 1941; minimum daily, 3.7 second-feet Aug. 30 to Sept. 1, 1940, probably less during period of ice effect.

Remarks.- Records excellent except those for period of ice effect, which are fair. Several small diversions above station for irrigation.

Cooperation.- Gage-height record and discharge measurements Oct. 1 to June 30 furnished by Bureau of Reclamation.

Rating table, water year 1940-41, except periods of ice effect (gage height, in feet, and discharge, in second-feet)

2.7	3	2.9	19	3.2	52	3.6	114	4.8	398
2.8	10	3.0	29	3.4	80	4.0	200	6.1	770

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	8.6	53	31				32	42	409	255	80	46
2	10	52	*31				33	45	372	231	76	44
3	17	52	31				34	48	359	207	71	42
4	22	52	31				34	56	367	189	66	41
5	29	50	30		(*)		34	66	420	178	64	39
6	36	48	29				34	77	476	171	61	38
7	42	48	29			(*)	34	86	499	167	57	38
8	50	48	28				34	94	496	169	55	37
9	55	48	27	(*)			34	101	524	176	52	36
10	58	47	27				34	105	527	182	52	33
11	61	46	26				35	110	504	187	50	31
12	62	45	25				35	143	454	187	48	29
13	64	42	25				35	217	415	180	47	29
14	62	41	24				36	330	420	169	46	28
15	62	41	24				37	423	465	154	48	27
				19	17	24						
16	62	41	24				37	434	507	138	50	26
17	65	41	23				37	420	535	126	51	26
18	68	41	24				37	423	549	120	51	26
19	65	41	25				36	462	569	114	52	26
20	62	40	25				35	454	558	110	52	25
21	61	39	25				35	423	521	105	53	26
22	58	38	24				36	412	482	101	53	25
23	57	38	24				37	457	468	101	55	25
24	57	37	24				38	549	468	101	56	25
25	56	36	24				38	619	462	103	57	24
26	55	34	23				*38	668	432	101	57	24
27	57	34	23				37	737	390	98	56	26
28	57	33	23				38	740	351	94	53	26
29	55	32	24		-		40	650	315	93	51	26
30	55	32	24		-		41	552	284	88	48	26
31	53	-	23		-		-	468	-	85	47	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	1,581.6	68	8.6	51.0	3,140
November	1,270	53	32	42.3	2,520
December	800	31	23	25.8	1,590
Calendar year 1940	23,299.6	546	-	63.7	46,230
January	589	-	-	19	1,170
February	476	-	-	17	944
March	744	-	-	24	1,480
April	1,075	41	32	35.8	2,130
May	10,411	740	42	336	20,650
June	13,598	569	284	453	26,970
July	4,480	255	85	145	8,890
August	1,715	80	46	55.3	3,400
September	920	46	24	30.7	1,820
Water year 1940-41	37,659.6	740	-	103	74,700

* Winter discharge measurement made on this day.
Note.- Stage-discharge relation affected by ice Dec. 15-29, Jan. 1 to Apr. 25.

Fall Creek near Pinedale, Wyo.

Location.- Water-stage recorder, lat. 42°51', long. 109°43', in sec. 2, T. 33 N., R. 108 W., at McIntosh Ranch, half a mile downstream from Meadow Creek, 3 miles downstream from Burnt Lake, and 8 miles east of Pinedale.

Drainage area.- 37.2 square miles.

Records available.- October 1938 to September 1941. May 1904 to October 1905 at site 1½ miles downstream, published as Fall Creek at Fayette.

Extremes.- Maximum discharge during year, 273 second-feet May 27 (gage height, 5.40 feet), from rating curve extended above 175 second-feet; minimum daily, 1.9 second-foot Sept. 14.

1904-5, 1938-41: Maximum discharge, 480 second-feet June 19-21, 1904 (gage height, 3.00 feet, site and datum then in use), from rating curve extended above 200 second-feet; minimum, 0.3 second-foot Dec. 4, 1939 (discharge measurement).

Remarks.- Records excellent except those for period of no gage-height record, which are fair. Practically no diversions above station.

Cooperation.- Gage-height record and discharge measurements Oct. 1 to June 30 furnished by Bureau of Reclamation.

Rating table, water year 1940-41, except period of ice effect (gage height, in feet, and discharge, in second-feet)

2.7	1.3	3.0	7.3	3.6	34	4.5	139
2.8	2.5	3.2	14	3.7	42	5.5	289
2.9	4.5	3.4	22.5	3.9	62		

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	9.2	14	5.9	6.2	4.8	4.3	4.3	12	143	80	17	4.3
2	9.2	14	5.6	6.2	5.1	4.3	4.3	14	139	70	16	4.1
3	10	14	5.6	6.2	5.1	4.5	4.5	14	140	66	15	4.1
4	10	13	5.9	6.5	5.1	4.5	4.5	12	149	61	14	3.7
5	10	13	5.9	6.5	5.1	4.5	4.8	14	175	59	13	3.5
6	11	3.3	5.9	6.5	5.1	4.5	4.5	17	186	57	13	3.3
7	12	2.7	6.2	6.5	4.8	4.5	4.5	19	175	53	12	2.9
8	12	2.7	6.2	6.5	4.3	4.5	5.3	20	170	50	12	2.5
9	12	2.7	6.2	6.5	4.3	4.5	4.5	22	184	50	12	2.4
10	12	2.7	5.9	6.5	4.3	4.3	5.1	23	192	47	11	2.1
11	12	2.7	5.9	6.5	4.3	4.3	5.6	25	180	45	10	2.1
12	12	3.1	a5.0	6.2	4.5	4.1	5.9	33	166	41	9.9	2.1
13	12	4.1	a4.4	6.2	4.5	4.1	6.5	51	161	39	8.6	2.0
14	12	4.5	a4.2	6.2	4.5	4.3	7.0	87	174	36	7.3	1.9
15	12	4.5	a4.8	6.2	4.5	4.3	7.0	135	186	33	7.3	2.0
16	12	4.1	a5.2	6.2	4.5	4.3	7.3	159	188	31	7.6	2.0
17	12	3.9	a6.0	6.2	4.5	4.1	7.3	157	199	30	7.3	2.3
18	13	3.7	a7.0	6.2	4.3	4.1	7.9	174	214	30	7.3	2.3
19	13	3.9	8.6	5.9	4.3	4.1	7.3	188	211	29	7.0	2.3
20	13	4.5	7.3	5.9	4.3	4.1	7.3	171	192	27	6.5	2.3
21	12	4.3	7.0	5.9	4.5	4.1	7.6	161	181	27	6.2	2.3
22	12	4.5	7.3	5.9	4.5	4.1	7.9	174	175	26	5.9	2.3
23	12	4.5	7.6	5.9	4.5	3.9	8.3	208	175	25	5.6	2.3
24	12	5.6	7.0	5.9	4.5	3.7	7.9	232	170	24	5.6	2.3
25	12	5.6	6.7	5.9	4.5	3.7	8.3	236	160	24	5.6	2.3
26	12	5.9	6.2	5.9	4.5	3.9	9.2	243	147	23	5.9	2.3
27	12	7.3	5.9	5.3	4.3	3.5	10	263	133	22	6.2	2.3
28	13	7.0	6.2	5.1	4.3	3.7	10	240	118	22	6.2	2.3
29	13	6.5	6.2	5.1	-	3.9	11	200	104	21	5.6	2.3
30	13	6.2	6.2	5.1	-	4.3	12	175	90	19	5.3	2.3
31	14	-	6.2	4.8	-	4.3	-	160	-	18	5.1	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	367.4	14	9.2	11.9	729
November	178.5	14	2.7	5.95	354
December	190.2	8.6	4.2	6.14	377
Calendar year 1940	6,697.1	177	-	18.3	13,280
January	186.6	6.5	4.8	6.02	370
February	127.8	5.1	4.3	4.56	253
March	129.3	4.5	3.5	4.17	256
April	207.6	12	4.3	6.92	412
May	3,639	263	12	117	7,220
June	4,977	214	90	166	9,870
July	1,185	80	18	38.2	2,350
August	277.0	17	5.1	8.94	549
September	77.2	4.3	1.9	2.57	153
Water year 1940-41	11,542.6	263	1.9	31.6	22,890

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

Boulder Creek below Boulder Lake, near Boulder, Wyo.

Location.- Water-stage recorder, lat. 42°50', long. 109°43', in sec. 14, T. 33 N., R. 108 W., 1 mile downstream from outlet of Boulder Lake and 5 miles north of Boulder.

Drainage area.- 130 square miles.

Records available.- October 1938 to September 1941. April 1904 to October 1906, May 1915 to October 1924, May 1931 to November 1932, chain gage at site 4 miles downstream; records not equivalent.

Extremes.- Maximum discharge during year, 1,530 second-feet May 27 (gage height, 5.08 feet), from rating curve extended above 1,100 second-feet; minimum daily, 0.5 second-foot Nov. 15-18.

1938-41: Maximum discharge, that of May 27, 1941; no flow Nov. 28, 1939, to Apr. 15, 1940.

Remarks.- Records good except those for period of ice effect, which are fair. Flow slightly regulated by Boulder Lake (capacity, 11,000 acre-feet). No diversions above station.

Cooperation.- Gage-height record and discharge measurements Oct. 1 to June 30 furnished by Bureau of Reclamation.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	55	17	5.5					146	695	352	157	74
2	56	13	*5.2					146	675	310	124	72
3	61	52	5.5					155	705	294	100	72
4	66	26	5.2					162	803	286	100	72
5	67	26	5.2					164	940	283	98	70
6	68	24	5.2		(*)			164	979	272	98	70
7	68	24	5.2					164	918	265	96	70
8	70	23	5.5					164	886	265	96	88
9	70	22	5.2	(*)				164	902	258	94	122
10	68	22	5.5					198	913	246	94	110
11	68	20	5.4				20	272	852	239	94	102
12	67	15	5.3					283	792	236	92	98
13	67	16	5.3					298	830	224	92	94
14	67	8.0	5.2					330	946	211	92	92
15	67	.5	5.2					397	1,030	214	92	90
16	66	.5	5.4	5.2	4.2	6.0		530	1,040	224	94	88
17	66	.5	5.4					600	1,070	224	90	88
18	66	.5	5.4					745	1,150	227	84	86
19	64	2.8	5.5					869	1,170	224	83	104
20	64	34	5.6					792	1,060	221	83	124
21	61	30	5.5					745	979	219	81	120
22	60	30	5.5					836	946	216	81	118
23	60	26	5.5				*46	1,080	836	211	83	110
24	56	12	5.4				48	1,260	786	206	83	108
25	55	130	5.4				51	1,330	770	203	83	102
26	54	47	5.5				55	1,380	725	203	83	102
27	55	5.2	5.5				58	1,490	635	191	81	100
28	11	5.2	5.4				61	1,330	550	174	79	98
29	1.6	5.2	5.4		-		61	1,090	475	174	79	94
30	1.1	4.9	5.4		-		83	913	411	172	77	92
31	1.4	-	5.4		-		-	765	-	169	75	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	1,727.1	70	1.1	55.7	3,430
November	627.0	130	.5	20.9	1,240
December	166.8	5.6	5.2	5.38	331
Calendar year 1940	36,086.0	1,060	0	98.6	71,580
January	161.2	-	-	5.2	320
February	117.6	-	-	4.2	233
March	186.0	-	-	6.0	369
April	903	-	-	30.1	1,790
May	18,962	1,490	146	612	37,610
June	25,469	1,170	411	849	50,520
July	7,215	352	169	233	14,310
August	2,838	157	75	91.5	5,630
September	2,832	124	70	94.4	5,620
Water year 1940-41	61,204.7	1,490	-	168	121,400

* Winter discharge measurement made on this day.
Note.- Stage-discharge relation affected by ice Dec. 11 to Apr. 22.

North Piney Creek near Mason, Wyo.

Location.- Water-stage recorder, lat. 32°40', long. 110°21', in sec. 19, T 31 N., R. 113 W., 4 miles west of Mason.

Drainage area.- 58 square miles.

Records available.- May 1915 to October 1916, October 1931 to September 1941 (no winter records prior to 1940).

Extremes.- Maximum discharge during year, 245 second-feet June 18 (gage height, 2.87 feet); minimum daily, 6 second-feet Nov. 24, may have been less during winter.
1915-16; 1931-41: Maximum discharge, 613 second-feet June 19, 1916 (gage height, 3.93 feet), from rating curve extended above 450 second-feet; minimum not determined, probably occurred during winter.

Remarks.- Records excellent except those for periods of ice effect, which are poor. Several small diversions above station.

Cooperation.- Results of discharge measurements Oct. 1 to June 30 furnished by Bureau of Reclamation.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	17	16						28	98	101	46	28
2	16	16						31	99	96	43	28
3	18	16						34	111	88	41	27
4	18	14						38	127	84	39	28
5	17	11						41	159	79	38	27
6	16	*12						35	143	75	38	26
7	16	14	(*)					28	148	81	39	28
8	*16	14						*29	151	84	42	28
9	16	12						38	158	79	51	27
10	16	10						47	130	78	60	27
11	16	8		(*)	(*)			58	123	76	71	25
12	15	7						72	136	78	64	24
13	15	8				(*)		91	154	71	54	24
14	15	9						96	177	71	43	23
15	15	11	8.0	8.0	8.5	12	15	81	210	66	41	23
16	15	11						76	218	62	48	23
17	15	12						80	224	59	47	22
18	14	12						88	234	58	51	24
19	14	12						82	226	59	43	25
20	14	10						73	218	61	39	22
21	14	8						78	212	53	38	23
22	14	7						92	206	50	38	24
23	15	7						119	198	48	35	27
24	14	6						140	190	54	35	25
25	14	7						136	181	72	35	24
26	14	8						150	159	71	37	22
27	17	8						167	143	63	35	28
28	15	8						148	133	57	32	26
29	14	9			-			127	126	52	31	24
30	16	8			-			115	112	50	30	23
31	15	-			-		-	108	-	48	30	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	476	18	14	15.4	944
November	311	16	6	10.4	617
December	248.0	-	-	8.0	492
Calendar year 1940	9,888.9	206	-	27.0	19,610
January	248.0	-	-	8.0	492
February	238.0	-	-	8.5	472
March	372	-	-	12.0	738
April	450	-	-	15.0	893
May	2,526	167	28	81.5	5,010
June	4,904	234	98	163	9,730
July	2,124	101	48	68.5	4,210
August	1,314	71	30	42.4	2,610
September	755	28	22	25.2	1,500
Water year 1940-41	13,966.0	234	-	38.3	27,710

* Winter discharge measurement made on this day.
Note.- Stage-discharge relation affected by ice Nov. 5, 6, Nov. 9 to May 7.

Middle Piney Creek below South Fork, near Big Piney, Wyo.

Location.- Water-stage recorder, lat. 42°36', long. 110°28', in sec. 7, T. 30 N., R. 114 W., 1 mile downstream from South Fork and 18 miles northwest of Big Piney.

Drainage area.- 34.3 square miles.

Records available.- July 1939 to September 1941.

Extremes.- Maximum discharge during year, 91 second-feet June 23 (gage height, 5.83 feet); minimum observed, 1.0 second-foot Mar. 19 (discharge measurement), probably less during period of ice effect.
1939-41: Maximum discharge, that of June 23, 1941; minimum, that of March 19, 1941.

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

Cooperation.- Gage-height record and discharge measurements Oct. 1 to June 30 furnished by Bureau of Reclamation.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	7.1	6.5						10	38	68	30	15
2	7.1	6.2						12	36	68	29	13
3	7.7	5.9						15	37	67	27	13
4	7.4	5.8						18	41	66	27	13
5	7.1	5.6						22	47	64	25	12
6	7.1	*6.0						20	44	63	25	12
7	7.4	6.8	(*)					17	48	61	25	12
8	6.8	6.5						*15	49	60	24	12
9	6.8	6.0						15	50	57	24	12
10	7.1	5.5						19	46	56	29	12
11	6.8	5.0		(*)				21	43	55	35	11
12	6.8	4.8			(*)			23	43	54	33	11
13	6.8	5.0						24	48	52	31	11
14	6.8	5.5						23	52	50	27	11
15	6.8	6.0						20	56	49	27	12
			4.0	2.5	1.5	2.0	6.0					
16	6.8	6.6						20	64	48	26	12
17	6.8	6.6						23	69	47	26	12
18	6.8	6.6						28	79	46	26	14
19	6.5	6.2				(*)		27	86	46	24	13
20	6.5	5.5						a24	86	44	23	13
21	6.5	5.0						a26	87	43	23	13
22	6.5	4.5						a30	88	42	22	13
23	6.5	4.0						a40	90	42	a21	13
24	6.5	3.6						a45	87	41	a21	13
25	6.5	4.0						a44	84	42	a21	12
26	6.5	4.2						a49	80	40	a22	12
27	7.1	4.3						a47	78	36	a20	14
28	6.8	4.2						46	75	34	18	12
29	6.8	4.2			-			44	73	33	18	12
30	6.5	4.1			-			41	70	32	17	11
31	6.5	-			-		-	39	-	31	16	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	211.7	7.7	6.5	6.83	420
November	160.7	6.8	3.6	5.36	319
December	124.0	-	-	4.0	246
Calendar year 1940	4,016.5	46	-	11.0	7,970
January	77.5	-	-	2.5	154
February	42.0	-	-	1.5	83
March	62.0	-	-	2.0	123
April	180.0	-	-	6.0	357
May	847	49	10	27.3	1,680
June	1,876	90	36	62.5	3,720
July	1,537	68	31	49.6	3,050
August	762	35	16	24.6	1,510
September	371	15	11	12.4	736
Water year 1940-41	6,250.9	90	-	17.1	12,400

* Winter discharge measurement made on this day.
a No gage-height record; discharge computed on basis of recorded range in stage and records for North Piney Creek near Mason, Wyo.
Note.- Stage-discharge relation affected by ice Nov. 4-6, Nov. 9 to May 7.

South Piney Creek near Big Piney, Wyo.

Location.- Water-stage recorder, lat. 42°31', long. 110°19', in sec. 9, T. 29 N., R. 113 W., 200 feet downstream from Beaver Creek and 10 miles southwest of Big Piney.

Drainage area.- 117 square miles.

Records available.- October 1938* to September 1941.

Extremes.- Maximum discharge during year, 280 second-feet June 9 (gage height, 7.20 feet), from rating curve extended above 200 second-feet; minimum daily not determined, occurred during period of ice effect.

1938-41: Maximum discharge, 321 second-feet May 31, 1939 (gage height, 7.56 feet), from rating curve extended above 200 second-feet; minimum daily not determined, occurred during period of ice effect.

Remarks.- Records good except those for period of ice effect, which are fair. No diversions above station.

Cooperation.- Gage-height record and discharge measurements Oct. 1 to June 30 furnished by Bureau of Reclamation.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	22	20						44	76	91	30	28
2	20	18						49	71	84	30	26
3	19	20						54	70	84	28	26
4	22	19						60	72	79	25	25
5	20	14						65	86	74	25	24
6	16	*15	(*)					60	88	65	29	23
7	16	19						46	105	65	35	23
8	16	20						47	116	68	33	25
9	16	16						63	217	59	34	25
10	17	13						85	147	52	37	25
11	16	12						92	113	54	53	23
12	16	10			(*)			91	106	64	73	22
13	16	12		(*)				89	106	59	53	23
14	15	13				(*)		88	110	63	45	23
15	13	16						74	113	56	41	23
16	13	16	15	15	11	10	20	70	121	54	40	23
17	13	17						66	120	48	44	24
18	12	17						71	126	44	46	26
19	13	17						73	126	41	42	32
20	13	15						66	127	44	37	28
21	13	13						63	127	37	34	29
22	13	12						62	123	33	a34	31
23	13	12						66	123	32	a34	43
24	13	11						73	126	31	a33	37
25	14	13						77	116	37	a33	32
26	14	14						91	109	43	a35	29
27	19	14						106	102	41	a34	34
28	19	15						114	96	36	32	35
29	17	16			-			95	96	32	30	30
30	19	14			-		(*)	93	96	31	28	29
31	19	-			-		-	86	-	29	29	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	497	22	12	16.0	986
November	454	20	11	15.1	900
December	465	-	-	15.0	922
Calendar year 1940	7,739.6	63	-	21.1	15,350
January	465	-	-	15.0	922
February	308	-	-	11.0	611
March	310	-	-	10.0	615
April	600	-	-	20.0	1,190
May	2,279	114	44	73.5	4,520
June	3,330	217	70	111	6,600
July	1,630	91	29	52.6	3,230
August	1,136	73	25	36.6	2,250
September	826	43	22	27.5	1,640
Water year 1940-41	12,300	217	-	33.7	24,390

* Winter discharge measurement made on this day.
a No gage-height record; discharge computed on basis of recorded range in stage and records for North Piney Creek near Mason.
Note.- Stage-discharge relation affected by ice Nov. 20 to Apr. 30.

Labarge Creek near Labarge Meadows ranger station, Wyo.

Location.- Water-stage recorder, lat. 42°30', long. 110°40', in sec. 8, T. 29 N., R. 116 W., a quarter of a mile upstream from Crystal Creek, 2 miles southeast of Labarge Meadows ranger station, and 29 miles northwest of Labarge.

Drainage area.- 6.3 square miles.

Records available.- October 1940 to September 1941 (no winter records).

Extremes.- Maximum discharge during year, 103 second-feet May 23 (gage height, 6.75 feet), from rating curve extended above 45 second-feet; minimum daily, 2.8 second-feet Dec. 8, 9, probably less during period of no record.

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

Cooperation.- Gage-height record and results of discharge measurements Oct. 1 to June 30 furnished by Bureau of Reclamation.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4.5	5.0	3.4					-	a57	15	6.8	5.5
2	4.5	5.0	3.4					-	a52	14	6.5	5.5
3	4.8	5.0	3.4					-	47	14	6.2	5.5
4	4.5	4.5	3.2					-	49	13	6.2	5.5
5	4.5	4.0	3.2					-	57	12	6.2	5.2
6	4.5	4.5	3.0					-	48	12	6.2	5.2
7	4.5	4.5	3.0					-	48	12	6.5	5.5
8	4.2	4.5	2.8					-	45	12	6.5	5.8
9	4.5	b4.5	2.8					-	49	11	6.5	5.8
10	4.2	b4.4	-					-	41	11	6.8	5.2
11	4.2	b4.1	-					20	38	11	7.2	5.0
12	4.2	b4.0	-					30	37	10	7.6	5.0
13	4.2	b4.0	-					44	37	10	7.2	5.0
14	4.2	b4.2	-					45	37	10	7.2	5.0
15	4.2	b4.3	-					34	36	9.6	7.2	5.2
16	4.2	b4.5	-					35	35	9.6	7.2	5.0
17	4.2	4.8	-					50	32	9.0	7.2	5.0
18	4.2	4.5	-					54	30	9.0	7.2	5.8
19	4.2	4.5	-					39	28	9.6	6.8	5.2
20	4.2	4.5	-					41	27	9.0	6.5	5.2
21	4.2	4.5	-					51	25	8.6	6.2	5.2
22	4.2	4.2	-					64	22	8.2	6.2	5.8
23	4.2	4.2	-					74	22	8.2	6.2	5.8
24	4.2	4.2	-					72	20	7.6	6.2	5.5
25	4.0	4.0	-					69	20	7.6	6.2	5.0
26	4.5	3.8	-					74	18	7.6	6.5	5.8
27	4.5	3.8	-					78	18	7.2	6.0	7.2
28	3.8	4.0	-					a76	17	7.2	5.8	5.8
29	4.0	4.0	-					a65	17	7.2	5.5	5.2
30	4.8	3.6	-					a62	16	6.8	5.8	5.0
31	5.0	-	-					a60	-	6.8	5.8	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	134.1	5.0	3.8	4.33	266
November	129.6	5.0	3.6	4.32	257
December 1-9	28.2	3.4	2.8	3.13	56
Calendar year	-	-	-	-	-
January	-	-	-	-	-
February	-	-	-	-	-
March	-	-	-	-	-
April	-	-	-	-	-
May 11-31	1,137	78	20	54.1	2,260
June	1,025	57	16	34.2	2,030
July	305.8	15	6.8	9.86	607
August	202.1	7.6	5.5	6.52	401
September	162.4	7.2	5.0	5.41	322
Water year	-	-	-	-	-

a No gage-height record; discharge computed on basis of recorded range of stage and records for station near Viola.
b Stage-discharge relation affected by ice.

Labarge Creek near Viola, Wyo.

Location.- Water-stage recorder, lat. 42°13', long. 110°19', in sec. 19, T. 26 N., R. 113 W., a quarter of a mile upstream from the narrows, 2½ miles downstream from Spring Creek, 4½ miles southeast of Viola, and 7 miles southwest of Labarge.

Drainage area.- 172 square milee.

Records available.- October 1940 to September 1941. April to September 1913 and April 1915 to September 1916 at site three-quarters of a mile downstream, published as Labarge Creek near Labarge, Wyo. April 1932 to August 1939 at site 7 miles downstream, published as Labarge Creek near Labarge, Wyo.; records not equivalent.

Extremes.- Maximum discharge during year, 302 second-feet June 9 (gage height, 5.00 feet), from rating curve extended above 220 second-feet; minimum daily, 23 second-feet Oct. 17.

1913, 1915-16, 1940-41: Maximum daily discharge, 478 second-feet May 27, 1913; minimum daily, 4 second-feet July 5-14, 1915.

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

Cooperations.- Gage-height record and results of discharge measurements Oct. 1 to June 30 furnished by Bureau of Reclamation.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	26	34	40	*44	40	42	54	76	142	72	47	29
2	25	34	40	41	41	42	54	96	132	70	42	28
3	25	a35	40	42	42	41	51	111	132	70	37	31
4	25	a36	40	43	44	32	48	117	132	67	33	36
5	25	a29	40	43	45	31	55	118	152	62	32	36
6	24	a30	35	42	45	32	44	101	138	60	32	35
7	24	a31	43	41	44	32	40	88	140	57	36	36
8	25	a33	45	43	41	32	42	98	154	60	37	40
9	25	a35	*45	43	40	32	48	115	240	54	32	41
10	25	a39	40	43	42	31	52	128	182	43	33	38
11	24	a36	38	43	45	30	43	154	138	43	50	36
12	24	a35	36	44	45	31	48	182	122	47	48	34
13	24	a32	36	45	*44	32	54	208	122	48	45	35
14	24	a33	37	43	43	32	54	244	126	54	36	35
15	24	*36	38	42	42	35	58	208	118	48	32	36
16	24	35	40	41	39	40	54	177	120	45	33	36
17	23	35	42	40	38	46	45	186	106	44	35	36
18	24	36	44	42	39	*51	35	218	99	43	36	38
19	24	36	46	44	40	50	33	195	94	44	32	43
20	24	35	47	45	43	51	34	156	90	48	31	41
21	24	34	46	47	45	51	32	144	88	42	31	42
22	30	33	45	42	42	48	34	154	84	40	35	48
23	30	32	44	43	40	50	34	169	79	40	36	57
24	28	31	44	43	40	42	37	199	79	36	32	54
25	30	34	43	44	36	38	41	206	76	42	33	52
26	31	36	42	45	32	37	43	220	84	48	34	50
27	33	33	43	40	31	41	43	237	82	43	33	55
28	35	35	45	42	37	41	51	228	78	40	31	58
29	32	38	43	42	-	43	64	188	76	32	29	54
30	33	41	41	41	-	44	73	175	74	35	30	51
31	34	-	43	40	-	47	-	164	-	36	30	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	828	35	23	26.7	1,640
November	1,032	41	29	34.4	2,050
December	1,291	47	35	41.6	2,560
Calendar year	-	-	-	-	-
January	1,323	47	40	42.7	2,620
February	1,145	45	*31	40.9	2,270
March	1,227	51	30	39.6	2,430
April	1,398	73	32	46.6	2,770
May	5,060	244	76	163	10,040
June	3,479	240	74	116	6,900
July	1,513	72	32	48.8	3,000
August	1,093	50	29	35.3	2,170
September	1,241	58	28	41.4	2,460
Water year 1940-41	20,630	244	23	56.5	40,910

* Winter discharge measurement made on this day.
a No gage-height record; discharge computed on basis of weather records.
Note.- Stage-discharge relation affected by ice Nov. 20 to Dec. 2, Dec. 10 to Feb. 20, Mar. 9-17.

Fontenelle Creek near Fontenelle, Wyo.

Location.- Water-stage recorder, lat. 42°06', long. 110°13', in sec. 3, T. 24 N., R. 113 W., 6 miles west of Fontenelle.

Drainage area.- 224 square miles.

Records available.- May 1915 to September 1919, October 1931 to September 1941.

Average discharge.- 13 years (1916-19, 1931-41), 55.5 second-feet.

Extremes.- Maximum discharge during year, 228 second-feet June 9 (gage height, 2.24 feet), from rating curve extended above 150 second-feet; minimum daily, 1.3 second-feet Oct. 2-4.

1915-19, 1931-41: Maximum discharge observed, 922 second-feet Apr. 19, 1938 (gage height, 4.00 feet, site and datum then in use), from rating curve extended above 380 second-feet; no flow Aug. 1-5, Aug. 23 to Sept. 15, 1934, June 27-30, Sept. 18-27, 1940.

Remarks.- Records good except those for period of ice effect, which are fair. Diversions above station for irrigation.

Cooperation.- Gage-height record and results of discharge measurements for Oct. 1 to June 30 furnished by Bureau of Reclamation.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.6	19					30	110	70	13	14	18
2	1.3	19					35	106	55	20	14	18
3	1.3	20					33	116	45	42	13	17
4	1.3	20					34	114	45	48	13	14
5	4.0	18					36	120	55	40	13	13
6	5.5	15					31	112	60	36	14	14
7	6.5	18					32	91	64	28	15	17
8	8.0	20					*32	82	80	24	19	19
9	*6.5	20	(*)				35	82	140	21	21	20
10	9.0	16					42	85	173	18	22	20
11	8.5	14					41	78	116	13	68	19
12	9.0	12					38	83	108	8.5	64	18
13	9.0	15			(*)		46	85	112	7.0	85	17
14	9.6	17					46	98	98	7.5	52	18
15	11	*19	17	14 (*)	12	15	48	98	96	7.0	44	19
16	12	20					63	80	94	7.0	38	20
17	14	20					58	54	78	7.5	34	19
18	14	20				(*)	44	41	63	7.5	39	25
19	14	19					38	44	52	7.5	38	25
20	12	17					35	45	38	11	31	23
21	11	14					35	41	32	18	28	23
22	12	13					41	32	32	21	25	25
23	9.6	13					54	29	28	20	24	32
24	7.0	12					71	48	25	19	23	35
25	8.0	14					80	71	22	20	24	32
26	8.5	15					80	91	13	26	27	29
27	13	15					73	108	7.5	27	27	28
28	18	16					92	126	8.0	20	24	29
29	20	17			-		106	118	8.0	15	21	29
30	19	16			-		110	104	9.6	14	20	26
31	17	-			-		-	87	-	14	19	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	303.2	20	1.3	9.78	601
November	503	20	12	16.8	998
December	527	-	-	17	1,050
Calendar year 1940	5,171.8	49	0	14.1	10,260
January	434	-	-	14	861
February	336	-	-	12	666
March	465	-	-	15	922
April	1,539	110	30	51.3	3,050
May	2,579	126	29	83.2	5,120
June	1,827.1	173	7.5	60.9	3,620
July	587.5	48	7.0	19.0	1,170
August	913	85	13	29.5	1,810
September	661	35	13	22.0	1,310
Water year 1940-41	10,674.8	173	1.3	29.2	21,180

* Winter discharge measurement made on this day.
Note.- Stage-discharge relation affected by ice Nov. 7 to Apr. 7.

Big Sandy Creek at Leckie Ranch, near Big Sandy, Wyo.

Location.- Water-stage recorder, lat. 42°35', long. 109°17', in sec. 18, T. 30 N., R. 104 W., at Leckie Ranch, half a mile downstream from Squaw Creek and 19 miles southeast of Big Sandy.

Drainage area.- 94 square miles.

Records available.- July 1910 to August 1911, July 1939 to September 1941.

Extremes.- Maximum discharge during year, 658 second-feet May 27 (gage height, 5.63 feet), from rating curve extended above 560 second-feet; minimum not determined, probably occurred during period of ice effect.

1910-11, 1939-41: Maximum discharge, that of May 27, 1941; minimum observed, 4.8 second-feet Jan. 4, 1940 (discharge measurement), but probably less during period of ice effect.

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

Cooperation.- Gage-height record and results of discharge measurements Oct. 1 to June 30 furnished by Bureau of Reclamation.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	68	24						80	283	146	47	41
2	60	24						80	260	152	42	38
3	66	24	(*)		(*)			85	303	152	37	36
4	60	*24						95	317	142	33	37
5	48	25						114	375	132	29	36
6	41	30						a150	300	127	39	32
7	37	26						a200	324	125	53	33
8	35	24		(*)				a200	359	119	58	36
9	31	22						a205	344	112	56	41
10	29	18						a230	341	108	56	40
11	28	17						a270	310	101	84	37
12	26	17						*338	293	98	85	35
13	24	19						475	391	91	77	32
14	25	*21						499	411	88	64	32
15	28	22	14	11	11	15	40	411	403	81	56	32
16	22	21						352	431	76	55	30
17	21	21						379	507	73	53	29
18	21	20						519	543	70	48	33
19	20	20						375	451	68	46	56
20	20	19						286	415	66	41	45
21	20	18						371	415	62	40	46
22	20	18						471	395	58	40	51
23	19	17						547	379	56	36	50
24	19	16						503	344	70	36	50
25	19	16						511	317	159	36	45
26	19	16						523	260	188	46	43
27	22	16						596	221	134	48	45
28	22	15						439	193	98	44	46
29	30	15			-			367	176	77	39	45
30	27	15			-			293	154	63	37	42
31	25	-			-		-	264	-	55	42	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	952	68	19	30.7	1,890
November	600	30	15	20.0	1,190
December	434	-	-	14.0	861
Calendar year 1940	15,566.9	292	-	42.5	30,870
January	341	-	-	11.0	676
February	308	-	-	11.0	611
March	465	-	-	15.0	922
April	1,200	-	-	40.0	2,380
May	10,228	596	80	330	20,290
June	10,215	543	154	340	20,260
July	3,147	188	55	102	6,240
August	1,503	85	29	48.5	2,980
September	1,194	56	29	39.8	2,370
Water year 1940-41	30,587	596	-	83.8	60,670

* Winter discharge measurement made on this day.

a No gage-height record; discharge computed on basis of recorded range of stage and records for Green River at Warren Bridge, near Daniel.

Note.- Stage-discharge relation affected by ice Nov. 9 to May 4.

Little Sandy Creek near Elkhorn, Wyo.

Location.- Water-stage recorder, lat. 42°32', long. 109°13', in sec. 35, T. 30 N., R. 104 W., 7 miles northeast of Elkhorn.

Drainage area.- 20.9 square miles.

Records available.- July 1939 to September 1941.

Extremes.- Maximum discharge during year, 196 second-feet June 18 (gage height, 3.90 feet); minimum not determined, probably occurred during period of ice effect.
1939-41: Maximum discharge recorded, that of June 18, 1941; minimum recorded, 0.9 second-foot Jan. 4, 1940, but less during period of ice effect.

Remarks.- Records good except those for periods of ice effect or no gage-height record, which are poor. Two small diversions above station.

Cooperation.- Gage-height record and results of discharge measurements Oct. 1 to June 30 furnished by Bureau of Reclamation.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5.0	5.4						7.0	43	43	9.0	15
2	*4.4	5.4						7.2	39	39	8.0	15
3	5.5	5.4	(*)					7.6	45	39	7.5	15
4	5.5	*5.4						8.4	56	39	7.0	15
5	5.0	4.5						9.5	70	38	7.0	14
6	4.9	5.4						11	62	38	11	15
7	5.0	6.8						15	66	35	13	16
8	5.0	5.5						18	63	35	14	16
9	5.2	5.4						19	70	35	13	16
10	5.0	5.3						20	64	35	13	16
11	5.0	5.0						30	55	31	17	15
12	4.9	4.8						*40	53	31	17	15
13	4.9	4.6						46	78	27	15	15
14	5.0	4.6		(*)				37	112	24	13	14
15	5.2	4.9	5.0	2.0	2.0	3.0	4.5	25	116	21	13	14
16	5.5	5.2						29	124	20	12	13
17	5.0	5.4						42	145	18	12	13
18	5.2	5.5						70	173	18	12	15
19	5.2	5.6						71	152	18	11	16
20	5.0	5.4						53	136	18	11	13
21	4.9	5.2						55	144	16	11	14
22	5.0	5.2				(*)		75	140	15	10	13
23	5.0	5.0						101	135	14	9.3	13
24	5.2	5.0						104	122	14	8.4	14
25	5.2	5.2						104	111	16	9.1	15
26	5.2	5.3						116	98	16	10	15
27	5.2	5.3						123	82	16	9.1	16
28	9.6	5.2						93	70	14	8.4	14
29	8.4	5.0			-			74	61	11	8.1	14
30	8.4	4.9			-			59	50	10	8.1	14
31	6.0	-			-		-	48	-	10	8.1	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	169.5	9.6	4.4	5.47	336
November	156.8	6.8	4.5	5.23	311
December	155	-	-	5.0	307
Calendar year 1940	4,015.1	92	-	11.0	7,970
January	62	-	-	2.0	123
February	56	-	-	2.0	111
March	93	-	-	3.0	184
April	135	-	-	4.5	268
May	1,517.7	123	7.0	49.0	3,010
June	2,735	173	39	91.2	5,420
July	754	43	10	24.3	1,500
August	335.1	17	7.0	10.8	665
September	438	16	13	14.6	869
Water year 1940-41	6,607.1	173	-	18.1	13,100

* Winter discharge measurement made on this day.
Note.- Stage-discharge relation affected by ice Nov. 4-6, Nov. 9 to May 11. No gage-height record July 30 to Aug. 21; discharge computed on basis of recorded range in stage and records for Big Sandy Creek at Leckie ranch, near Big Sandy.

Blacks Fork near Millburne, Wyo.

Location.- Water-stage recorder, lat. 41°03', long. 110°34', in sec. 35, T. 13 N., R. 117 W., 3 miles downstream from Little West Fork, 4½ miles north of Utah-Wyoming State line, and 15 miles southwest of Millburne.
Drainage area.- 156 square miles.
Records available.- July 1939 to September 1941.
Extremes.- Maximum discharge during year, 1,570 second-feet May 13 (gage height, 3.07 feet), from rating curve extended above 1,000 second-feet; minimum not determined, probably occurred during period of ice effect.

1939-41: Maximum discharge, that of May 13, 1941; minimum, 17 second-feet Jan. 24, 1940 (discharge measurement), but probably less during period of ice effect.

Revisions.- The maximum discharge for the water year 1940 has been revised to 1,360 second-feet May 15, 1940 (gage height, 2.82 feet), superseding figure published in Water-Supply Paper 899.

Remarks.- Records good except those for periods of ice effect or no gage-height record, which are poor.
Revisions.- Revised figures of daily discharge, in second-feet, for the high-water period in water year 1940, superseding those published in Water-Supply Paper 899, are given herein:

May 8	440	May 17	916	May 26	755
9	544	18	797	27	755
10	692	19	734	28	636
11	853	20	678	29	544
12	932	21	678	30	520
13	940	22	615	31	550
14	860	23	657	June 1	532
15	948	24	664	2	500
16	1,000	25	622	3	450

Month	Second-foot days	Maximum	Minimum	Mean	Acre-feet
May	19,206	1,000	107	620	38,090
June	8,146	532	117	272	16,160
Water year 1939-40	39,724	1,000	-	109	78,790

Cooperation.- Gage-height record and results of discharge measurements Oct. 1 to June 30 furnished by Bureau of Reclamation.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	131	52						130	657	490	141	93
2	124	57						*138	713	416	131	86
3	120	58						141	762	425	121	88
4	110	52		(*)				176	825	435	110	100
5	105	50						176	748	435	110	86
6	95	52						180	568	435	131	77
7	85	56						169	594	412	148	77
8	80	54						273	532	388	155	75
9	110	46						384	538	376	183	72
10	105	47						505	495	380	212	68
11	105	42						706	608	380	187	63
12	110	40						996	699	348	144	60
13	100	30						1,280	699	332	124	62
14	90	32						1,150	720	325	110	65
15	85	36	34	30	22	28.5	55	846	734	317	121	62
16	76	38						727	900	288	131	58
17	74	40						892	1,120	277	127	57
18	*70	40						964	1,200	270	121	55
19	68	36						650	1,060	325	100	62
20	66	34						608	1,040	310	97	52
21	65	38						622	1,100	266	93	51
22	63	36						804	1,060	252	114	58
23	63	34						1,040	1,020	252	93	66
24	62	34						1,020	1,080	255	97	65
25	60	32			(*)			1,020	1,050	244	205	72
26	70	34						1,080	776	244	151	75
27	70	*32						964	664	230	114	70
28	70	30						769	526	187	97	63
29	57	30		(*)	-			643	475	172	90	62
30	68	32			-			615	460	162	138	55
31	55	-			-		-	636	-	155	110	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	2,612	131	55	84.3	5,180
November	1,224	58	30	40.8	2,430
December	1,054	-	-	34	2,090
Calendar year 1940	41,707	1,000	-	114	82,720
January	930	-	-	30	1,840
February	616	-	-	22	1,220
March	883.5	-	-	28.5	1,750
April	1,650	-	-	55	3,270
May	20,304	1,280	130	655	40,270
June	23,423	1,200	460	781	46,460
July	9,783	490	155	316	19,400
August	4,008	212	90	129	7,950
September	2,055	100	51	68.5	4,080
Water year 1940-41	68,540.5	1,280	-	188	135,900

* Winter discharge measurement made on this day.

Note.- Stage-discharge relation affected by ice Nov. 5-7, Nov. 12 to Mar. 14; no gage-height record Oct. 3-17, Mar. 15 to May 1; discharge computed on basis of records for Bear River near Evanston.

Blacks Fork near Urie, Wyo.

Location.- Water-stage recorder, lat. 41°21', long. 110°20', in sec. 24, T. 16 N., R. 115 W., 2 miles downstream from Quartz Creek and 2½ miles north of Urie.

Drainage area.- 261 square miles.

Records available.- August 1913 to September 1924, October 1937 to September 1941.

Extremes.- Maximum discharge during year, 1,170 second-feet May 14 (gage height, 5.67 feet), from rating curve extended above 650 second-feet; minimum daily, 4.0 second-foot Oct. 3.

1913-24, 1937-41: Maximum discharge, 2,680 second-feet June 20, 1917 (gage height, 4.72 feet, site and datum then in use); minimum daily, 0.2 second-feet Sept. 2, 3, 1939.

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

Cooperation.- Results of discharge measurements Oct. 1 to June 30 furnished by Bureau of Reclamation.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	6.6	7.5	40	25	25	35	29	48	119	48	14	12
2	5.9	7.5	31	23	24	32	26	36	119	56	14	12
3	4.0	11	32	*20	24	29	28	28	76	50	14	12
4	6.6	12	32	20	25	28	29	30	98	49	12	16
5	6.2	11	36	21	26	28	33	32	134	47	14	19
6	6.2	19	35	22	24	30	29	30	105	40	15	20
7	7.0	34	34	24	24	28	27	30	99	40	16	17
8	7.5	34	34	26	25	29	28	28	161	40	18	18
9	9.7	35	31	27	26	30	*26	57	225	36	20	17
10	12	27	34	27	29	28	33	101	165	33	24	16
11	13	34	22	27	29	27	35	192	98	32	27	15
12	12	25	21	26	27	28	33	440	130	41	25	14
13	8.8	27	19	26	26	35	33	822	165	45	19	14
14	8.4	29	19	25	26	31	29	917	132	56	17	14
15	9.7	33	19	25	27	28	27	588	130	39	17	14
16	9.7	33	20	25	26	37	31	279	170	33	17	14
17	9.7	32	21	26	27	43	28	228	346	28	16	12
18	9.7	33	23	26	28	65	26	352	612	26	16	12
19	*8.8	42	23	27	29	67	28	261	612	25	16	12
20	8.4	45	24	27	26	51	25	205	472	32	15	11
21	9.2	41	25	27	25	55	20	222	452	29	14	12
22	7.5	40	24	27	28	45	18	190	440	25	14	16
23	7.9	34	24	26	36	46	18	318	422	22	15	22
24	8.4	29	26	26	41	41	19	402	402	25	14	16
25	8.4	28	27	26	31	37	18	405	512	30	16	14
26	8.4	31	27	27	*27	35	20	426	342	35	18	14
27	12	30	27	27	28	40	32	492	192	27	17	14
28	9.7	*33	26	27	30	47	36	279	124	26	13	14
29	8.4	36	26	28		41	38	182	56	20	12	14
30	8.4	38	27	*28	-	34	40	138	41	18	11	14
31	7.5	-	26	26	-	31	-	116	-	16	13	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	265.7	13	4.0	8.57	527
November	871.0	45	7.5	29.0	1,730
December	835	40	19	26.9	1,660
Calendar year 1940	6,745.4	310	.4	18.4	13,390
January	790	28	20	25.5	1,570
February	769	41	24	27.5	1,530
March	1,161	67	27	37.5	2,300
April	842	40	18	28.1	1,670
May	7,874	917	28	254	15,620
June	7,151	612	41	238	14,180
July	1,069	56	16	34.5	2,120
August	503	27	11	16.2	998
September	441	22	11	14.7	875
Water year 1940-41	22,571.7	917	4.0	61.8	44,780

* Winter discharge measurement made on this day.

Note.- Stage-discharge relation affected by ice Nov. 12, 13, 24-30, Dec. 6, Dec. 12 to Feb. 20, Feb. 25-28, Mar. 3-15.

East Fork of Smith Fork near Robertson, Wyo.

Location.- Water-stage recorder, lat. 41°03', long. 110°24', on west line of sec. 4, T. 12 N., R. 115 W., 1 mile upstream from Gilbert Creek and 11 miles southeast of Robertson.

Drainage area.- 59.0 square miles.

Records available.- July 1939 to September 1941.

Extremes.- Maximum discharge during year, 472 second-feet June 18 (gage height, 2.76 feet), from rating curve extended above 370 second-feet; minimum recorded, 3.9 second-feet Jan. 3 (discharge measurement), but may have been less at some other time during period of ice effect.

1939-41: Maximum discharge, that of June 18, 1941; minimum, 3.0 second-feet Jan. 23, 1940 (discharge measurement), but may have been less during period of ice effect.

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

Cooperation.- Gage-height record and results of discharge measurements Oct. 1 to June 30 furnished by Bureau of Reclamation.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	39	19						*20	226	131	43	41
2	36	19						a25	232	124	40	34
3	36	18		(*)				a28	260	100	40	32
4	32	16						a30	302	100	39	34
5	31	18						a34	241	108	39	32
6	27	17						37	184	106	42	27
7	25	19						42	182	106	51	26
8	24	17						56	173	98	60	25
9	30	16						79	176	94	50	24
10	28	15						112	157	94	58	22
11	29	14	(*)				(*)	162	179	100	60	21
12	30	13						254	217	98	45	19
13	27	12						360	214	85	39	19
14	24	13						384	217	79	35	20
15	25	13						288	211	79	36	19
16	21	14	9.5	6.0	6.0	7.2	12.0	205	288	74	39	18
17	20	14						223	316	68	38	17
18	*20	14						299	400	66	37	17
19	19	13						190	332	90	32	23
20	19	13						170	320	136	31	19
21	19	14						190	340	96	32	20
22	18	14						229	320	78	45	22
23	18	13						332	316	71	36	25
24	17	13						360	316	72	36	27
25	17	12			(*)			380	336	71	64	33
26	17	13						400	254	72	60	38
27	19	12						336	202	68	42	32
28	19	12						254	152	48	37	28
29	18	12		(*)	-			202	124	50	32	27
30	22	13			-			199	110	48	57	24
31	18	-			-		-	217	-	46	47	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	746	39	17	24.1	1,480
November	435	19	12	14.5	863
December	294.5	-	-	9.5	584
Calendar year 1940	10,584.5	301	-	28.9	20,990
January	186	-	-	6.0	369
February	168	-	-	6.0	333
March	223.2	-	-	7.2	443
April	360	-	-	12.0	714
May	6,097	400	20	197	12,090
June	7,297	400	110	243	14,470
July	2,656	136	46	85.7	5,270
August	1,342	64	31	43.3	2,660
September	765	41	17	25.5	1,520
Water year 1940-41	20,569.7	400	-	56.4	40,800

* Winter discharge measurement made on this day.
a No gage-height record; discharge computed on basis of weather records.
Note.- Stage-discharge relation affected by ice Nov. 10 to Apr. 30.

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West Fork of Smith Fork near Robertson, Wyo.

Location.- Water-stage recorder, lat. 41°01', long. 110°29', in sec. 15, T. 12 N., R. 116 W., three-quarters of a mile downstream from Archie Creek and 13 miles southwest of Robertson.

Drainage area.- 37.2 square miles.

Records available.- July 1939 to September 1941.

Extremes.- Maximum discharge during year, 465 second-feet May 13 (gage height, 2.60 feet), from rating curve extended above 190 second-feet; minimum, 0.2 second-foot Feb. 25 (discharge measurement), probably less at some other time during winter.

1939-41: Maximum discharge, that of May 13, 1941; minimum, 0.2 second-foot Aug. 13, 1940, and Feb. 25, 1941 (discharge measurement), probably less during winter.

Revisions: The maximum discharge for the water year 1940 has been revised to 363 second-feet May 11, 1940 (gage height, 2.37 feet), from rating curve extended above 190 second-feet.

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

Cooperation.- Gage-height records and results of discharge measurements Oct. 1, 1939, to June 30, 1940, furnished by Bureau of Reclamation.

Revisions.- Revised figures of discharge for the water year 1940, superseding those published in Water-Supply Paper 899, are given herein.

Discharge, in second-feet, 1939-41

1939-40

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.2	2.1					2.5	24	34	6.0	0.6	0.4
2	2.4	2.1					2.8	36	31	4.8	.5	.5
3	2.4	1.7					2.8	70	28	3.9	.4	1.0
4	2.7	2.1					2.6	103	25	3.2	.4	2.0
5	2.3	2.1					2.5	78	25	2.6	.4	1.8
6	2.7	2.1					2.5	63	22	2.2	.4	1.1
7	2.2	2.1					2.8	83	19	2.1	.5	.9
8	2.3	2.1					2.5	139	22	1.8	.4	.8
9	3.2	1.8					2.5	206	19	1.5	.4	.8
10	2.4	*1.5					2.6	222	16	1.5	.4	1.0
11	2.4	1.2					2.8	242	14	1.7	.3	1.0
12	2.4	1.3					3.0	246	14	1.8	.3	1.3
13	2.2	1.2					*3.0	238	12	1.5	.2	1.3
14	2.0	1.2					3.4	198	12	1.3	.3	1.0
15	1.8	1.2					4.0	202	11	1.5	.3	1.0
16	1.8	1.3					5.6	176	9.4	2.8	.3	.9
17	1.5	1.0					7.0	132	8.6	3.5	.3	.8
18	1.5	.9					8.0	97	8.2	3.3	.4	.9
19	1.4	.8					15	75	7.0	3.0	.4	1.2
20	1.5	.9					*28	63	6.5	1.8	.5	3.0
21	1.5	.9					27	61	6.3	1.2	.6	2.4
22	1.5	1.0					*26	58	6.0	1.0	.7	1.7
23	1.5	1.5					35	56	5.8	1.0	1.0	1.3
24	1.5	1.3					35	54	5.1	1.0	1.3	1.2
25	1.5	1.1					37	44	4.4	.6	2.2	1.5
26	2.1	1.0					41	59	4.2	.5	2.3	2.2
27	1.6	1.0					35	72	3.9	.5	1.1	1.5
28	1.5	1.1					32	54	3.7	.5	.7	4.2
29	2.1	1.1					24	44	3.3	.5	.5	4.8
30	1.8	.9					20	39	4.6	.7	.5	4.4
31	2.1	-					-	*37	-	.8	.4	-

* Winter discharge measurement made on this day.

Note.- Stage-discharge relation affected by ice Nov. 11-15, 22-25, Apr. 1-22.

Discharge, in second-feet, of West Fork of Smith Fork near Robertson, Wyo., 1939-41--Continued

1940-41

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3.5	3.2						(*)15	103	29	4.8	3.7
2	2.6	3.0						20	94	25	4.1	3.2
3	3.0	2.7		(*)				22	94	20	3.3	3.7
4	3.0	3.3						24	100	18	3.3	4.6
5	3.0	3.2						30	103	16	3.9	4.1
6	2.3	3.2						33	97	16	4.8	3.3
7	2.1	3.0						40	110	16	8.6	3.5
8	2.3	3.0						72	119	14	12	3.5
9	5.8	3.9						97	122	12	11	3.3
10	4.8	3.0						129	129	12	16	3.0
11	4.8	3.2						191	179	12	16	2.3
12	5.1	3.0						288	218	14	9.8	2.2
13	4.2	2.7						332	191	12	6.3	2.4
14	3.5	2.4						254	154	14	5.6	2.8
15	3.0	2.4	2.8	2.0	0.7	1.2	4.2	191	132	15	6.0	2.8
16	2.7	2.6						202	129	11	6.0	2.4
17	2.6	2.6						263	129	9.4	6.8	2.3
18	2.4	2.6						198	126	9.0	6.8	2.3
19	2.3	3.0						176	110	12	5.1	2.4
20	2.3	2.7						168	97	14	4.8	2.1
21	2.3	2.7						222	92	8.6	4.8	2.2
22	2.2	2.7						246	80	6.8	5.6	3.7
23	2.2	2.6						242	72	8.2	4.8	4.4
24	2.2	2.7						238	75	16	5.3	3.9
25	2.3	a2.8			(*)			198	78	13	11	4.8
26	3.3	a2.9						187	59	13	7.8	4.6
27	4.4	*3.0						168	70	12	5.1	4.6
28	3.3	2.9						136	36	7.0	4.1	3.9
29	2.7	2.8		(*)	-			119	25	5.8	3.3	3.9
30	3.3	2.8			-			113	26	5.3	5.3	3.2
31	3.0	-			-		-	106	-	5.6	4.4	-

* Winter discharge measurement made on this day.
a No gage-height record; discharge computed on basis of weather records.
Note.- Stage-discharge relation affected by ice Nov. 28 to May 5.

Monthly discharge, in second-feet, 1939-41

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October 1939	62.0	3.2	1.4	2.00	123
November	41.6	2.1	.8	1.39	83
December	-	-	-	-	-
Calendar year	-	-	-	-	-
January 1940	-	-	-	-	-
February	-	-	-	-	-
March	-	-	-	-	-
April	417.9	41	2.5	13.9	829
May	3,271	246	24	106	6,490
June	391.0	34	3.3	13.0	776
July	60.1	6.0	.5	1.94	119
August	19.0	2.3	.2	.61	38
September	47.9	4.8	.4	1.60	95
Water year	-	-	-	-	-
October 1940	96.5	5.8	2.1	3.11	191
November	86.6	3.9	2.4	2.89	172
December	86.8	-	-	2.8	172
Calendar year	-	-	-	-	-
January 1941	62	-	-	2.0	123
February	19.6	-	-	.7	39
March	37.2	-	-	1.2	74
April	126	-	-	4.2	250
May	4,720	332	15	152	9,360
June	3,149	218	25	105	6,250
July	401.7	29	5.5	13.0	797
August	206.5	16	3.3	6.66	410
September	99.1	4.8	2.1	3.30	197
Water year 1940-41	9,091.0	332	-	24.9	18,040

Henrys Fork at Linwood, Utah

Location.- Water-stage recorder, lat. 41°00', long. 109°39', in sec. 23, T. 12 N., R. 109 W., 200 feet north of Wyoming-Utah State line and Linwood. Datum of gage is 5,992.57 feet above mean sea level, adjustment of 1912.

Drainage area.- 531 square miles.

Records available.- October 1928 to September 1941.

Average discharge.- 13 years, 73.3 second-feet.

Extremes.- Maximum discharge during year, 677 second-feet May 26 (gage height, 3.90 feet); minimum daily, 5.0 second-feet Oct. 8.

1928-41: Maximum discharge, 6,750 second-feet Aug. 3, 1936 (gage height, 7.19 feet, from floodmarks), by slope-area method; no flow several days in 1934, 1935, 1939, and 1940.

Remarks.- Records good except those for period of ice effect, which are fair. Diversions above station for irrigation.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	20	48	36	28	36	55	55	42	301	255	82	94
2	11	50	35	29	32	61	57	40	280	269	71	88
3	7.6	50	35	26	30	55	59	32	269	216	38	86
4	7.2	50	34	26	30	58	61	28	310	199	31	90
5	6.9	43	34	27	31	59	76	28	399	180	26	88
6	6.1	40	34	27	32	58	59	19	328	162	26	88
7	5.7	46	34	28	30	57	45	24	301	160	31	82
8	5.0	53	33	29	31	56	57	18	331	202	52	78
9	6.1	53	33	30	33	54	48	16	546	144	63	86
10	14	48	31	31	36	48	46	13	472	118	198	82
11	14	34	30	32	39	48	53	12	319	111	186	74
12	9.5	*34	28	32	41	53	53	18	310	128	128	63
13	9.5	26	25	32	40	46	62	78	328	123	106	58
14	9.5	25	24	32	41	48	52	262	340	165	90	63
15	9.5	30	23	31	40	49	43	393	376	154	78	66
16	9.5	34	25	29	40	51	45	361	444	139	94	63
17	10	34	28	29	*39	*55	38	298	495	113	199	58
18	14	34	31	30	40	68	24	373	520	106	221	53
19	17	34	28	31	42	80	25	319	524	101	134	53
20	19	33	26	30	44	89	28	440	408	134	104	55
21	19	32	26	32	45	84	*28	476	421	136	90	53
22	19	34	27	31	45	81	26	364	424	101	88	69
23	20	31	30	*31	47	83	27	402	424	86	94	116
24	22	32	34	32	48	85	28	466	440	78	104	141
25	22	30	30	33	49	82	34	527	492	106	108	136
26	25	28	28	33	47	57	37	588	421	216	121	116
27	30	27	29	32	47	42	45	584	328	213	131	111
28	35	28	31	31	50	52	45	472	272	157	123	118
29	32	31	32	31	-	53	55	392	244	113	106	106
30	32	36	34	33	-	48	45	349	230	92	94	99
31	40	-	32	35	-	46	-	304	-	72	104	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	507.1	40	5.0	16.4	1,010
November	1,108	53	25	36.9	2,200
December	940	36	23	30.3	1,860
Calendar year 1940	11,818.2	299	0	32.3	23,450
January	943	35	26	30.4	1,870
February	1,105	50	30	39.5	2,190
March	1,861	89	42	60.0	3,690
April	1,356	76	24	45.2	2,690
May	7,738	588	12	250	15,350
June	11,297	546	230	377	22,410
July	4,549	269	72	147	9,020
August	3,121	221	26	101	6,190
September	2,533	141	53	84.4	5,020
Water year 1940-41	37,058.1	588	5.0	102	73,500

Peak discharge.- May 26 (8:30 p.m.) 677 sec.-ft.; Aug. 10 (10 p.m.) 568 sec.-ft.; Aug. 17 (1 p.m.) 520 sec.-ft.

* Winter discharge measurement made on this day.

Note.- Stage-discharge relation affected by ice Nov. 13 to Mar. 26.

Burnt Fork at Burntfork, Wyo.

Location.- Chain gage, lat. 41°02', long. 110°01', in sec. 11, T. 12 N., R. 112 W., a quarter of a mile west of Burntfork and 1 mile upstream from mouth. Datum of gage is 7,098.70 feet above mean sea level, adjustment of 1912.

Drainage area.- 73 square miles.

Records available.- July 1929 to September 1941.

Average discharge.- 12 years, 8.98 second-feet.

Extremes.- Maximum discharge observed during year, 128 second-feet June 18 (gage height, 3.50 feet); minimum daily, 0.6 second-foot Oct. 5, 6.
1929-41: Maximum discharge, 4,360 second-feet Aug. 2, 1936 (gage height, 9.60 feet, from floodmarks), by slope-area method; no flow June 27, 30, July 2, 5-7, 17, 18, 25, 1934.

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

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.8	4.5	4.7	4.0	5.2	5.4	1.2	0.9	21	9.8	8.1	12
2	.8	4.3	4.8	3.6	5.0	5.0	1.2	.9	15	8.5	7.3	10
3	1.0	4.2	5.2	3.6	4.8	5.0	1.2	.8	15	11	5.2	11
4	1.1	3.8	5.4	3.7	4.8	5.2	1.1	.9	30	10	5.7	12
5	.6	3.2	5.6	4.0	4.9	5.2	1.2	1.0	37	9.8	5.2	13
6	.6	4.2	5.5	3.9	4.8	4.8	1.2	1.0	21	10	5.2	10
7	.7	4.5	5.8	4.2	4.7	5.2	1.1	.9	30	9.1	7.7	10
8	.9	4.3	6.0	4.2	4.7	4.8	1.2	.9	22	15	11	13
9	1.2	4.5	5.6	4.4	5.2	4.6	1.0	1.8	29	8.3	14	14
10	1.4	4.0	5.0	4.5	5.7	4.5	1.8	1.3	29	7.7	21	12
11	1.6	4.2	4.6	4.2	5.5	4.6	1.5	1.5	23	7.7	24	11
12	*1.7	3.8	4.3	4.4	5.5	4.8	1.8	1.9	30	6.6	20	10
13	1.8	*3.4	4.3	4.3	5.4	4.9	1.5	50	33	6.6	18	10
14	2.0	3.8	4.2	4.4	5.2	5.0	1.5	49	45	6.2	17	10
15	2.0	4.3	4.3	4.6	4.8	*6.6	1.9	31	55	6.4	15	10
16	2.2	4.7	4.4	5.0	4.8	5.0	1.9	17	65	5.7	15	9.3
17	2.3	5.2	4.6	5.4	*5.2	4.8	1.7	13	81	4.3	19	8.5
18	2.2	4.6	4.7	5.8	5.4	5.7	1.4	32	116	4.2	18	8.1
19	2.4	4.2	4.8	5.4	5.4	5.2	1.8	22	98	4.3	14	9.3
20	2.4	4.4	5.0	5.4	5.2	4.5	2.3	21	88	4.7	13	8.3
21	2.3	4.5	5.1	5.5	5.4	3.2	2.2	24	92	4.2	12	8.1
22	2.3	3.5	4.8	5.5	5.2	2.6	2.4	31	93	3.5	16	12
23	2.1	3.1	4.7	*5.4	5.4	2.9	2.2	38	77	3.7	15	14
24	2.3	3.1	4.9	5.2	5.2	2.9	2.2	56	84	3.7	14	17
25	2.7	3.2	5.2	5.0	4.8	2.4	1.8	74	105	4.2	20	20
26	3.5	3.4	5.0	4.8	4.6	2.9	1.4	70	60	7.1	28	24
27	4.3	3.6	4.9	5.2	4.5	2.4	1.3	67	37	10	19	25
28	3.8	3.8	5.1	5.0	5.0	3.4	1.2	40	22	11	16	22
29	4.0	4.2	5.0	5.3	-	3.0	.9	34	14	9.3	14	22
30	4.7	4.5	5.2	5.0	-	2.4	.9	21	12	8.7	14	21
31	4.7	-	4.8	5.2	-	2.3	-	22	-	8.3	14	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	66.4	4.7	0.6	2.14	132
November	121.0	5.2	3.1	4.03	240
December	153.5	6.0	4.2	4.95	304
Calendar year 1940	955.8	16	.2	2.61	1,900
January	146.1	5.8	3.6	4.71	290
February	142.3	5.7	4.5	5.08	282
March	131.2	6.6	2.3	4.23	260
April	46.0	2.4	.9	1.53	91
May	725.8	74	.8	23.4	1,440
June	1,479	116	12	49.3	2,930
July	229.6	15	3.5	7.41	455
August	445.4	28	5.2	14.4	883
September	396.6	25	8.1	13.2	787
Water year 1940-41	4,082.9	116	.6	11.2	8,090

* Winter discharge measurement made on this day.
Note.- Stage-discharge relation affected by ice Nov. 12 to Jan. 23, Jan. 28-30, Feb. 2-9, 26-28, Mar. 8-13.

Yampa River at Steamboat Springs, Colo.

Location.- Water-stage recorder, lat. 40°29', long. 106°50', in sec. 17, T. 6 N., R. 84 W., at Steamboat Springs, a quarter of a mile upstream from Soda Creek. Datum of gage is 6,696.23 feet above mean sea level, adjustment of 1912.

Drainage area.- 604 square miles.

Records available.- May 1904 to October 1906 and October 1909 to September 1926 (monthly discharge only), and October 1933 to September 1941 in reports of U. S. Geological Survey. May 1904 to October 1906 and March 1910 to September 1941 in reports of State engineer.

Average discharge.- 34 years, 490 second-feet.

Extremes.- Maximum discharge during year, 3,770 second-feet May 14 (gage height, 5.32 feet); minimum daily, 48 second-feet Dec. 16.
1904-6, 1909-41: Maximum discharge, 6,820 second-feet June 14, 1921 (gage height, 7.08 feet); minimum daily, 4 second-feet Sept. 8, 1934.

Remarks.- Records excellent except those below 350 second-feet, which are good. Diversions above station for irrigation.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	182	88	74	b100	93	72	406	927	2,030	301	157	100
2	174	81	74	b93	b89	86	334	1,030	1,980	330	151	95
3	157	90	70	b87	b88	107	297	1,410	1,840	281	138	93
4	135	95	63	b83	b86	114	293	2,140	1,750	249	127	90
5	157	77	63	b79	b80	110	356	2,330	1,700	228	120	84
6	198	84	66	72	b75	102	392	1,680	1,600	208	122	72
7	176	122	68	81	b70	114	289	1,270	1,570	188	127	70
8	157	114	58	74	b67	112	253	1,150	1,540	182	146	81
9	176	112	63	84	63	100	285	1,490	1,350	171	132	93
10	224	112	65	84	63	107	356	1,930	1,520	176	130	90
11	188	66	65	88	70	95	415	2,390	1,490	168	162	81
12	162	79	58	74	77	114	586	2,650	1,240	176	179	68
13	138	81	b58	77	79	81	697	3,160	1,300	201	218	58
14	122	*110	b56	84	81	79	471	3,640	1,260	218	157	143
15	117	110	54	79	84	97	428	3,440	1,260	a215	130	130
16	107	93	48	81	81	100	451	2,740	1,350	a200	146	110
17	102	97	68	84	81	90	471	2,720	1,300	a195	214	95
18	88	104	81	84	79	107	370	2,910	1,200	a191	249	88
19	84	100	93	93	72	140	309	2,660	1,070	188	211	a84
20	81	93	84	84	74	195	278	2,120	934	548	179	a80
21	79	86	77	77	81	256	317	2,120	842	366	171	a75
22	77	79	72	74	88	246	410	2,430	764	260	162	a71
23	74	72	72	79	93	289	488	2,590	679	211	162	65
24	74	65	79	95	100	253	515	2,660	643	188	176	81
25	72	54	77	81	*102	214	548	2,760	771	179	162	102
26	72	65	97	90	107	179	603	2,710	570	185	151	110
27	84	70	97	*86	112	192	649	2,670	460	211	143	100
28	88	63	*88	b86	81	228	703	2,430	424	211	124	93
29	86	74	93	b83	-	281	823	2,260	361	185	122	86
30	88	74	95	81	-	a320	856	2,160	325	182	117	95
31	90	-	100	84	-	361	-	2,110	-	165	112	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	3,809	224	72	123	7,560
November	2,630	122	54	87.7	5,220
December	2,278	100	48	73.5	4,520
Calendar year 1940	131,680	2,620	14	360	261,200
January	2,581	100	72	83.3	5,120
February	2,316	112	63	82.7	4,590
March	4,941	361	72	159	9,800
April	13,649	856	253	455	27,070
May	70,887	3,640	927	2,287	140,600
June	35,123	2,030	325	1,171	69,670
July	6,957	648	165	224	13,800
August	4,797	249	112	155	9,510
September	2,683	143	58	89.4	5,320
Water year 1940-41	152,651	3,640	48	418	302,600

* Winter discharge measurement made on this day.
a No gage-height record; discharge computed on basis of records for Elk River at Clark, Colo.
b Stage-discharge relation affected by ice.

Yampa River near Maybell, Colo.

Location.- Water-stage recorder, lat. 40°30', long. 108°02', in sec. 2, T. 6 N., R. 95 W., 3 miles east of Maybell. Datum of gage is 5,899.25 feet above mean sea level, unadjusted.

Drainage area.- 3,410 square miles.

Records available.- April 1904 to October 1905, June 1910 to November 1912, April 1916 to September 1917, and October 1917 to September 1926 (monthly discharge), and October 1933 to September 1941 in reports of U. S. Geological Survey. April 1916 to September 1941 in reports of State engineer.

Average discharge.- 25 years (1916-41), 1,652 second-feet.

Extremes.- Maximum discharge during year, 11,700 second-feet May 15 (gage height, 8.50 feet); minimum daily, 122 second-feet Dec. 13.

1904-5, 1910-12, 1916-41: Maximum discharge observed, 17,900 second-feet May 19, 1917 (gage height, 10.4 feet, site and datum then in use, from floodmarks), from rating curve extended above 12,000 second-feet; minimum daily, 2 second-feet July 17-19, 1934.

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 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	250	302	296	260	245	448	1,190	3,300	5,760	1,650	382	210
2	318	302	318	228	218	538	1,490	3,540	5,560	1,510	352	197
3	358	290	334	194	235	594	1,290	4,060	5,360	1,410	329	192
4	334	312	318	172	235	657	1,210	5,240	5,060	1,360	302	189
5	460	334	285	170	186	580	1,270	8,480	4,940	1,240	280	186
6	388	334	312	168	180	*466	1,430	9,130	5,140	1,140	260	178
7	412	296	312	175	180	442	1,410	6,740	4,880	1,060	245	168
8	484	296	280	186	183	436	1,210	5,300	4,580	982	255	165
9	460	352	307	194	214	424	1,170	4,940	4,980	897	255	165
10	442	388	296	207	*200	340	1,140	6,420	4,360	808	280	161
11	526	376	235	210	200	352	1,260	7,710	4,450	720	394	168
12	587	352	214	*207	224	250	1,290	8,900	4,490	678	296	168
13	508	200	122	218	352	376	1,480	9,330	3,770	657	312	168
14	436	255	135	221	290	358	2,260	10,700	3,590	650	316	197
15	382	275	140	224	290	275	1,810	11,500	3,520	685	329	180
16	346	228	150	235	346	307	1,570	10,900	3,700	657	329	192
17	324	280	170	240	364	307	1,520	8,780	3,890	594	334	302
18	302	340	220	245	346	382	1,530	8,100	4,130	556	664	250
19	285	*352	275	255	364	948	1,370	8,660	4,310	538	502	210
20	265	382	265	260	340	1,210	1,160	8,460	4,250	526	532	189
21	250	334	250	260	340	622	1,020	6,720	4,060	824	466	186
22	240	255	245	250	394	608	999	6,180	3,820	1,140	400	178
23	235	388	250	245	382	940	1,160	6,760	3,540	832	364	175
24	228	265	265	235	418	1,150	1,470	7,160	3,320	664	346	165
25	221	296	260	228	412	1,050	1,810	7,440	3,050	556	334	161
26	224	250	*235	228	358	888	1,020	7,560	3,080	502	329	172
27	265	307	240	224	388	776	2,340	7,710	2,860	484	307	197
28	280	275	232	228	394	699	2,640	8,130	2,450	478	280	218
29	285	370	240	*224	-	880	2,760	7,400	2,240	472	270	228
30	290	376	250	235	-	1,130	3,100	6,380	1,950	460	250	228
31	296	-	250	240	-	1,180	-	5,860	-	418	224	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	10,681	587	221	345	21,190
November	9,362	388	200	312	18,570
December	7,701	334	122	248	15,270
Calendar year 1940	433,036	8,850	41	1,183	858,800
January	6,866	260	168	221	13,620
February	6,278	418	180	296	16,420
March	19,813	1,210	250	639	39,300
April	46,379	3,100	999	1,646	91,990
May	227,490	11,500	3,300	7,338	451,200
June	121,090	5,760	1,950	4,036	240,200
July	25,148	1,650	418	811	49,880
August	10,520	664	224	339	20,870
September	5,743	302	161	191	11,390
Water year 1940-41	499,071	11,500	122	1,367	989,900

* Winter discharge measurement made on this day.
Note.- Stage-discharge relation affected by ice Nov. 11 to Feb. 28.

Elk River at Clark, Colo.

Location.- Water-stage recorder, lat. 40°43', long. 106°55', in sec. 28, T. 9 N., R. 85 W., at Clark, 1 mile upstream from Cottonwood Gulch. Datum of gage is 7,267.75 feet above mean sea level (State Highway bench mark).

Drainage area.- 206 square miles.

Records available.- May 1910 to November 1913 and December 1913 to September 1922 (monthly discharge only), published as Elk River near Clark and October 1933 to September 1941 in reports of Geological Survey. May 1910 to September 1922 and April 1930 to September 1941 in reports of State engineer.

Average discharge.- 23 years, 368 second-feet.

Extremes.- Maximum discharge during year, 2,720 second-feet May 13 (gage height, 4.73 feet), from rating curve extended above 1,900 second-feet; minimum daily, 39 second-feet Feb. 8.

1910-22, 1930-41: Maximum daily discharge, 4,470 second-feet June 6, 9, 1912; minimum observed, 22 second-feet Apr. 7, 1935 (gage height, 0.62 foot).

Remarks.- Records good except those Nov. 11 to Apr. 20 and those for period of no gage-height record, which are fair. Practically no diversion or regulation.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	139	86	S5	50	51	44	126	673	1,050	490	141	85
2	117	83	84	48	53	48	112	835	1,000	455	132	90
3	110	90	82	46	52	54	106	1,010	1,020	430	126	80
4	92	94	81	45	51	58	102	1,240	1,020	416	119	75
5	117	71	S2	44	51	56	106	918	1,050	398	115	69
6	139	90	83	44	46	52	100	73S	820	384	112	64
7	110	86	S0	45	42	58	*108	600	972	364	117	69
8	100	65	82	45	39	58	94	76S	948	348	123	86
9	152	85	82	46	43	54	104	1,020	805	32S	112	82
10	141	78	S2	48	46	56	117	1,290	842	312	a120	78
11	119	73	81	48	*52	54	117	1,410	666	292	a128	72
12	106	70	76	48	54	60	141	1,700	606	280	a140	65
13	104	68	72	47	51	54	166	2,070	606	268	a150	64
14	100	69	65	46	50	52	143	1,930	673	250	a138	108
15	98	81	64	46	47	54	128	1,460	775	240	a129	134
16	94	S8	68	46	52	58	121	1,160	925	236	a123	100
17	90	88	73	47	57	56	115	1,370	1,050	226	a134	86
18	*86	*88	77	47	57	58	100	1,580	1,150	216	a154	85
19	85	85	80	48	58	60	90	1,400	1,160	236	a155	83
20	80	83	80	51	51	64	86	1,050	1,140	352	a139	77
21	77	83	69	52	47	69	98	1,140	1,090	284	a131	74
22	77	80	71	52	48	69	123	1,360	1,060	243	a128	a72
23	75	78	68	51	50	S0	161	1,450	1,000	221	a126	a68
24	77	75	62	51	52	82	203	1,440	964	208	a120	a70
25	77	67	78	56	54	86	253	1,610	972	198	112	a84
26	75	65	60	53	56	86	316	1,570	828	192	123	a94
27	86	70	*56	51	58	88	340	1,840	738	182	115	94
28	86	74	59	*49	50	98	384	1,240	680	173	100	88
29	88	S0	71	48	-	106	445	1,070	574	164	96	88
30	94	83	65	47	-	106	547	1,060	525	154	92	102
31	88	-	53	49	-	108	-	1,070	-	150	92	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	3,079	152	75	99.3	6,110
November	2,396	94	65	79.9	4,750
December	2,271	85	53	73.3	4,500
Calendar year 1940	103,686	2,180	27	283	205,600
January	1,494	56	44	48.2	2,960
February	1,418	58	39	50.6	2,810
March	2,086	10S	44	67.3	4,140
April	5,152	547	86	172	10,220
May	39,072	2,070	600	1,260	77,500
June	26,709	1,160	525	890	52,980
July	8,690	490	150	280	17,240
August	3,842	155	92	124	7,620
September	2,486	134	64	82.9	4,930
Water year 1940-41	98,695	2,070	39	270	195,800

* Winter discharge measurement made on this day.

a No gage-height record; discharge computed on basis of record for Yampa River at Steamboat Springs, Colo.

Note.- Stage-discharge relation affected by ice Nov. 11 to Mar. 20.

Little Snake River near Dixon, Wyo.

Location.- Water-stage recorder, lat. 41°02', long. 107°32', in sec. 6, T. 12 N., R. 90 W., 600 feet upstream from Willow Creek and 1 mile west of Dixon. Datum of gage is 6,332.81 feet above mean sea level, unadjusted.

Drainage area.- 988 square miles.

Records available.- May 1910 to September 1923, March 1938 to September 1941.

Extremes.- Maximum discharge during year, 4,920 second-feet May 14 (gage height, 6.58 feet); minimum daily, 5.6 second-feet Aug. 7.
1910-23, 1938-41: Maximum discharge observed, 8,960 second-feet May 23, 1920 (gage height, 8.3 feet, datum then in use), from rating curve extended above 6,000 second-feet; minimum daily discharge, 0.6 second-foot Aug. 24-27, 1939.

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

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	26	65	72	60	76	122	581	1,660	1,940	162	9.8	50
2	52	61	75	60	68	130	424	1,830	1,810	155	12	40
3	52	61	69	56	64	125	345	2,330	1,670	131	12	32
4	49	69	68	56	64	122	316	3,400	1,570	106	9.8	30
5	46	65	68	58	67	125	392	3,710	1,740	88	8.6	31
6	61	61	70	62	68	126	365	2,750	1,750	73	7.8	31
7	16	75	66	64	64	121	268	2,170	1,460	63	5.6	28
8	57	73	63	66	66	121	272	1,990	1,740	56	6.4	31
9	52	78	68	66	68	119	312	2,690	1,520	48	12	39
10	70	83	66	66	74	107	350	3,280	1,620	43	28	45
11	73	*66	66	68	82	103	320	3,640	1,500	38	76	32
12	56	55	60	68	86	119	448	3,530	1,210	34	67	25
13	48	51	52	68	84	98	640	4,240	1,190	32	73	26
14	43	52	50	68	86	*105	490	4,470	1,140	32	48	60
15	40	68	48	66	86	107	496	3,760	1,210	31	28	142
16	38	72	51	62	*85	109	466	2,960	1,230	28	28	88
17	35	72	58	*62	88	126	442	2,820	1,210	25	80	67
18	33	73	65	62	90	230	345	3,210	1,230	23	168	57
19	34	73	60	66	92	436	276	3,240	1,150	20	102	55
20	32	72	57	64	94	484	233	2,500	1,030	22	69	56
21	32	69	56	70	94	442	248	2,420	899	30	50	48
22	32	72	58	66	96	386	307	2,430	809	22	40	45
23	31	66	64	64	100	484	448	2,690	688	18	34	45
24	33	70	74	66	104	320	614	2,760	584	16	31	54
25	35	63	66	70	104	236	685	2,870	584	14	40	72
26	37	58	60	70	100	198	840	2,880	455	14	66	76
27	49	56	62	68	100	205	916	3,020	350	13	84	78
28	65	59	66	66	110	272	1,020	2,740	295	13	63	73
29	68	76	70	66	-	397	1,280	2,350	232	13	55	72
30	63	75	74	70	-	430	1,440	2,150	195	12	46	72
31	68	-	68	74	-	345	-	1,970	-	11	48	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	1,426	73	16	46.0	2,830
November	2,009	83	51	67.0	3,980
December	1,970	75	48	63.5	3,910
Calendar year 1940	127,694.5	3,320	1.8	349	253,200
January	2,018	74	56	65.1	4,000
February	2,360	110	64	84.3	4,680
March	6,850	484	98	221	13,590
April	15,579	1,440	233	519	30,900
May	88,660	4,470	1,660	2,860	175,900
June	34,011	1,940	195	1,134	67,460
July	1,386	162	11	44.7	2,750
August	1,430.0	168	5.6	46.1	2,840
September	1,600	142	25	53.3	3,170
Water year 1940-41	159,299.0	4,470	5.6	436	316,000

* Winter discharge measurement made on this day.
Note.- Stage-discharge relation affected by ice Nov. 26-28, Dec. 15 to Mar. 5.

Little Snake River near Lily, Colo.

Location.- Water-stage recorder, lat. 40°32', long. 108°25', in sec. 20, T. 7 N., R. 98 W., 8 miles north of Lily and 10 miles upstream from mouth.

Drainage area.- 3,730 square miles.

Records available.- June to August 1904, May 1922 to September 1927, and October 1933 to September 1941 in reports of U. S. Geological Survey. June to August 1904, May 1922 to September 1941 in reports of State engineer.

Extremes.- Maximum discharge during year, 8,740 second-feet Aug. 17 (gage height, 6.83 feet), from rating curve extended above 4,300 second-feet; minimum daily, 4.6 second-feet Aug. 5, 6.
1904, 1922-41: Maximum discharge, 14,200 second-feet May 27, 1926 (gage height, 10.5 feet); no flow at times in 1924, 1930, 1931, 1934-36, 1939-40.

Remarks.- Records fair except those for period May 5 to June 30, which are good. Diversions above station for irrigation.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,190	88				77	601	1,650	1,990	335	10	356
2	1,240	82				83	580	1,800	1,900	295	8.0	335
3	720	95				87	804	2,100	1,820	263	6.0	174
4	462	88				85	713	2,350	1,880	216	5.5	163
5	320	125				85	615	3,050	1,600	197	4.6	122
6	229	170				86	594	4,440	1,580	182	4.6	85
7	155	118				86	574	3,120	1,900	159	5.5	68
8	114	201				86	587	2,510	1,650	129	25	58
9	104	122				85	451	2,070	1,670	107	25	50
10	111	90				85	580	2,800	1,760	104	29	42
11	95	60				87	713	3,360	1,560	78	556	36
12	95	78				89	800	3,520	1,680	65	2,660	32
13	118	75				90	720	3,780	1,470	60	2,060	44
14	114	70				78	1,000	3,940	1,240	48	1,060	75
15	92	50	35	40	56	79	1,050	3,850	1,200	60	491	378
16	82	48				82	900	4,260	1,180	50	250	320
17	*63	46				100	910	3,480	1,200	28	1,480	497
18	62	41				140	840	3,040	1,200	22	2,230	335
19	58	*39				*350	800	3,260	1,200	20	787	212
20	55	39				1,030	650	3,340	1,180	18	485	136
21	55	39				1,120	520	2,970	1,110	16	377	140
22	50	39				990	430	2,670	1,010	16	282	104
23	70	41				838	460	2,600	916	46	208	100
24	68	42				780	540	2,620	829	62	159	95
25	68	37				854	800	2,680	735	30	201	80
26	46	38				629	1,000	2,760	643	21	361	62
27	58	35				479	1,100	2,980	608	18	970	52
28	80	32				411	1,200	2,840	544	16	685	58
29	88	39			-	439	1,350	2,890	456	13	508	72
30	90	42			-	451	1,500	2,460	400	11	356	78
31	100	-			-	526	-	2,180	-	10	272	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	6,257	1,240	46	202	12,410
November	2,109	201	32	70.3	4,180
December	1,085	-	-	35.0	2,150
Calendar year 1940	136,820.1	3,100	0	374	271,300
January	1,240	-	-	40.0	2,460
February	1,568	-	-	56.0	3,110
March	10,477	1,120	77	338	20,780
April	23,362	1,500	430	779	46,380
May	91,350	4,440	1,650	2,947	181,200
June	37,941	1,990	400	1,265	75,250
July	2,695	335	10	88.9	5,350
August	16,561.2	2,660	4.6	534	32,850
September	4,359	497	32	145	8,650
Water year 1940-41	199,024.2	4,440	4.6	545	394,800

* Winter discharge measurement made on this day.
Note.- No gage-height record Apr. 12 to May 4; discharge computed on the basis of two discharge measurements and record for station at Dixon, Wyo. Stage-discharge relation affected by ice Nov. 16 to Mar. 19.

Savery Creek at upper station, near Savery, Wyo.

Location.- Water-stage recorder, lat. 41°13', long. 107°22', in SW¼ sec. 35, T. 15 N., R. 89 W., half a mile downstream from Coal Gulch and 14.5 miles northeast of Savery.

Drainage area.- 189 square miles.

Records available.- October 1940 to September 1941.

Extremes.- Maximum discharge during year, 495 second-feet May 5 (gage height, 4.80 feet), from rating curve extended above 360 second-feet; minimum daily, 3.8 second-feet Aug. 6.

Remarks.- Records good except those for period of ice effect, which are poor. Diversions above station for irrigation.

Cooperation.- Gage-height record and results of discharge measurements Oct. 1 to July 8 furnished by Bureau of Reclamation.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	24	16	19				170	308	100	23	6.1	12
2	20	16	20				130	275	93	24	5.0	9.0
3	16	17	22				100	325	85	22	5.3	7.2
4	16	19	21				110	390	79	19	4.6	7.2
5	14	16	20				*117	411	88	17	4.0	8.0
6	14	17	21				85	325	129	15	3.8	7.6
7	13	19	20				64	264	105	14	4.6	7.2
8	12	18	19				61	227	116	12	12	7.6
9	11	19	19				60	257	108	12	7.2	9.0
10	12	19	17				68	275	118	12	6.5	8.5
11	12	15	14				67	292	117	11	34	8.0
12	11	14	12				104	266	68	10	16	6.9
13	10	14	11				188	318	82	12	11	8.0
14	10	11	10				120	325	71	16	12	18
15	10	12	9	15	19	60	116	264	67	16	6.9	18
16	10	14	*9				118	210	68	23	10	14
17	10	14	11				121	186	65	16	20	10
18	10	14	14				96	186	56	12	14	9.0
19	10	16	14				79	185	51	9.5	10	12
20	10	*14	13				66	170	45	11	8.5	10
21	10	14	13		(*)		67	159	42	14	10	8.5
22	10	16	13				78	142	41	12	10	9.0
23	10	15	14				120	136	38	9.5	12	9.5
24	10	15	16				156	132	36	8.0	10	12
25	11	15	15				172	135	36	7.2	19	14
26	11	19	14				196	140	32	7.6	29	12
27	16	19	15				205	141	29	7.2	21	12
28	20	20	16				198	147	26	6.5	14	12
29	17	20	16		-		273	138	25	6.5	10	12
30	18	20	17		-		305	120	25	6.1	10	12
31	17	-	15		-		-	106	-	5.7	14	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	405	24	10	13.1	803
November	487	20	11	16.2	966
December	479	22	9	15.5	950
Calendar year	-	-	-	-	-
January	465	-	-	15	922
February	532	-	-	19	1,060
March	1,860	-	-	60	3,690
April	3,810	305	60	127	7,560
May	6,955	411	106	224	13,600
June	2,061	129	25	68.7	4,090
July	396.6	24	5.7	12.6	767
August	360.5	34	3.8	11.6	715
September	310.2	18	6.9	10.3	615
Water year 1940-41	18,121.5	411	3.6	49.6	35,960

* Winter discharge measurement made on this day.
Note.- Stage-discharge relation affected by ice Dec. 12 to Apr. 4.

Slater Fork near Slater, Colo.

Location.- Water-stage recorder, lat. 40°59', long. 107°23', in SW¼ sec. 21, T. 12 N., R. 89 W., about 1 mile upstream from mouth and 1½ miles south of Slater.

Drainage area.- 161 square miles.

Records available.- May 1910 to May 1912 and October 1933 to September 1941 in reports of U. S. Geological Survey. May 1910 to May 1912 and June 1931 to September 1941 in reports of State engineer.

Average discharge.- 10 years, 65.6 second-feet.

Extremes.- Maximum discharge during year, 804 second-feet May 14 (gage height, 7.86 feet), from rating curve extended above 600 second-feet; minimum daily, 1.0 second-foot Aug. 5. 1910-12, 1931-41: Maximum daily discharge, 1,700 second-feet May 19, 1912; no flow Aug. 2-10, 1934, Aug. 18, 25-27, 1936.

Remarks.- Records good except those below 100 second-feet, which are fair. Diversions above station for irrigation.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	37	18	15	12	13	24	36	250	292	50	9.2	11
2	26	18	17	13	12	26	32	274	265	44	8.4	10
3	22	18	16	12	12	22	32	330	247	38	6.8	9.6
4	18	21	16	12	13	19	31	582	248	35	5.0	9.6
5	17	16	15	12	14	21	40	464	277	27	1.0	10
6	22	21	15	13	15	18	33	367	261	21	1.8	9.2
7	21	20	16	13	15	19	38	323	261	22	3.4	9.0
8	19	18	15	13	16	19	35	362	336	21	5.7	9.4
9	21	20	15	13	17	23	38	477	255	20	5.4	10
10	29	19	14	13	18	19	43	518	274	19	5.7	10
11	21	15	*9.6	12	18	19	40	536	264	15	16	9.4
12	16	18	13	12	19	13	60	532	202	16	32	8.7
13	14	12	11	12	19	21	73	644	202	14	27	9.6
14	13	12	11	13	18	*18	55	618	203	15	18	34
15	13	13	12	13	18	16	54	484	235	14	15	26
16	12	15	12	14	*17	19	57	389	242	13	15	16
17	12	16	13	*14	17	21	54	397	222	12	33	13
18	12	*17	14	13	17	41	42	443	219	10	44	12
19	12	18	13	13	17	57	38	401	202	10	26	14
20	12	17	13	13	16	47	32	313	179	14	19	12
21	13	17	13	14	16	36	34	328	159	16	16	11
22	13	17	12	13	18	38	47	356	143	14	15	10
23	14	16	13	13	17	42	68	367	128	12	14	10
24	14	15	13	12	17	35	84	371	126	11	14	13
25	14	16	13	12	16	29	88	399	131	9.8	15	15
26	15	17	13	11	14	26	116	414	101	9.4	16	17
27	20	15	13	11	13	27	121	427	81	12	15	15
28	21	16	13	11	19	26	159	369	72	12	13	15
29	20	17	13	12	-	27	197	327	57	12	11	15
30	20	17	13	14	-	28	214	315	51	10	11	16
31	19	-	13	14	-	25	-	302	-	8.8	12	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	552	37	12	17.8	1,090
November	505	21	12	16.8	1,000
December	417.6	17	9.6	13.5	828
Calendar year 1940	19,137.7	379	.5	52.3	37,960
January	392	14	11	12.6	778
February	451	19	12	16.1	895
March	821	57	13	26.5	1,630
April	1,991	214	31	66.4	3,950
May	12,679	644	250	409	25,150
June	5,935	336	51	198	11,770
July	557.0	50	8.8	18.0	1,100
August	449.4	44	1.0	14.5	891
September	389.5	34	8.7	13.0	773
Water year 1940-41	25,139.5	644	1.0	68.9	49,860

* Winter discharge measurement made on this day.

Note.- Stage-discharge relation affected by ice Nov. 13-17, Feb. 1-11, 21-25, Mar. 1-3.

Ashley Creek near Vernal, Utah

Location.- Water-stage recorder, lat. 40°35', long. 109°37', in sec. 1, T. 3 S., R. 20 E., three-quarters of a mile upstream from head of Utah Power & Light Co.'s canal and 12 miles northwest of Vernal.

Drainage area.- 101 square miles.

Records available.- June 1914 to September 1941. March 1900 to December 1904 (fragmentary) at site just downstream from Dry Fork. October 1911 to June 1914 at power plant 1½ miles downstream.

Average discharge.- 25 years (1914-16, 1918-40), 104 second-feet.

Extremes.- Maximum discharge during year, 1,340 second-feet May 13 (gage height, 8.55 feet); minimum daily, 25 second-feet Mar. 26.
1911-41: Maximum discharge, 2,050 second-feet May 29, 1921; minimum recorded, 16 second-feet Mar. 21, 1937.

Remarks.- Records good. Flow is increased by waters released from the Oaks Park Reservoir (capacity, 6,250 acre-feet) on Brush Creek and diverted to the Ashley Creek Basin for irrigation. No diversions above station.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	87	70	45	34	29	28	27	42	540	184	121	a124
2	83	72	42	33	28	29	27	49	500	176	121	a128
3	89	70	42	33	28	28	26	59	515	174	121	a130
4	85	68	41	33	29	28	26	72	515	161	117	a132
5	81	67	41	33	30	28	26	108	453	158	117	a126
6	81	67	41	33	29	28	26	161	387	158	91	a122
7	79	65	40	32	29	28	26	178	632	153	91	a118
8	79	65	40	31	29	28	26	204	491	153	91	a114
9	81	63	39	32	29	28	26	313	430	145	97	a116
10	81	63	39	32	28	27	25	437	395	138	103	a112
11	81	57	38	32	29	28	25	569	387	123	91	108
12	81	56	38	31	29	27	25	806	366	161	85	a108
13	79	52	35	31	28	28	25	1,000	370	168	106	a116
14	79	50	35	31	28	27	25	850	346	148	112	a124
15	79	50	35	30	28	26	25	605	404	145	112	a124
16	79	52	36	30	29	26	25	510	458	150	108	a118
17	77	52	36	30	29	26	25	672	440	150	103	a114
18	77	53	35	30	30	25	26	798	435	148	121	a118
19	75	56	35	30	29	25	26	505	366	153	123	117
20	75	54	35	30	29	29	26	426	339	153	123	103
21	75	52	34	30	29	29	26	505	316	174	114	95
22	75	50	34	30	30	29	26	638	291	171	101	99
23	75	50	35	30	30	28	28	726	274	171	106	101
24	74	49	35	30	29	28	29	740	274	168	99	89
25	74	49	35	30	29	27	30	654	268	179	103	101
26	74	49	35	30	28	25	30	690	233	168	106	123
27	75	47	35	29	27	26	33	654	215	158	95	123
28	72	46	35	29	28	27	34	572	195	99	87	110
29	72	45	35	29	-	27	35	550	193	95	a84	110
30	75	45	35	29	-	27	38	561	190	95	a130	110
31	68	-	35	29	-	27	-	566	-	110	a120	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	2,417	89	68	78.0	4,790
November	1,684	72	45	56.1	3,340
December	1,151	45	34	37.1	2,280
Calendar year 1940	26,770	495	22	73.1	53,100
January	956	34	29	30.8	1,900
February	806	30	27	28.8	1,600
March	853	29	25	27.5	1,690
April	823	38	25	27.4	1,630
May	15,220	1,000	42	491	30,190
June	11,208	632	190	374	22,310
July	4,687	184	95	151	9,300
August	3,299	130	84	106	6,540
September	3,431	132	95	114	6,810
Water year 1940-41	46,535	1,000	25	127	92,380

a No gage-height record; discharge computed on the basis of Bureau of Reclamation record at "Sign of the Man" about six miles downstream.

Duchesne River at Provo River Trail, near Hanna, Utah

Location.- Water-stage recorder, lat. 40°37', long. 110°54', in SE¼ sec. 27, T. 3 N., R. 9 W., Uinta meridian, 400 feet downstream from Provo River trail bridge, 7 miles upstream from Hades Creek, and 12 miles northwest of Hanna. Altitude of gage, 8,120 feet (from topographic map).

Drainage area.- 39 square miles.

Records available.- July 1929 to September 1933 and October 1935 to September 1941.

Extremes.- Maximum daily discharge during year, 540 second-feet May 26; minimum discharge recorded, 9 second-feet Sept. 17, 18 but may have been less during period of no gage-height record.
1929-33, 1935-41: Maximum discharge recorded, 888 second-feet June 24, 1932; minimum recorded, 1 second-foot Aug. 30, 1931.

Remarks.- Records good except those for periods of no gage-height record, which are fair. Records show flow of river at proposed diversion tunnel to Provo River. No diversions above station.

Cooperation.- Water-stage recorder graph and five discharge measurements furnished by Bureau of Reclamation.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	40	18						55	350	116	23	13
2	36	18						55	350	99	21	12
3	38	18						60	370	86	20	14
4	34	18						65	350	81	20	14
5	32	16						70	330	79	19	13
6	29	18						65	400	74	28	12
7	28	17						65	380	76	31	12
8	30	16						80	370	74	32	12
9	38	16						120	330	65	26	11
10	38							200	330	59	31	11
11	37							300	350	59	33	10
12	36						12	329	370	57	29	10
13	34							464	390	55	23	10
14	31							500	380	53	24	11
15	29							425	420	46	23	10
16	27		10	8	8	10		400	440	44	28	10
17	26							425	430	43	26	9
18	24	16						475	380	40	23	9
19	24							350	360	52	21	11
20	23							250	336	49	19	11
21	22							300	319	40	18	12
22	21							450	292	36	20	12
23	21							480	263	34	18	14
24	20							460	245	33	18	13
25	19							520	225	34	30	12
26	23						20	540	182	34	23	12
27	24							450	158	32	18	11
28	23							420	137	26	16	11
29	21	15						400	122	26	14	10
30	21				-			370	116	24	16	10
31	20	-			-		-	350	-	23	14	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	869	40	19	28.0	1,720
November	487	-	-	16.2	986
December	310	-	-	10	615
Calendar year 1940	14,876	530	-	40.6	29,490
January	248	-	-	8	492
February	224	-	-	8	444
March	310	-	-	10	615
April	416	-	-	13.9	825
May	9,493	540	55	306	18,830
June	9,475	440	116	316	18,790
July	1,653	116	23	53.3	3,280
August	705	33	14	22.7	1,400
September	342	14	9	11.4	678
Water year 1940-41	24,532	540	-	67.2	48,660

Note.- No gage-height record Nov. 10 to May 11, May 14 to June 19 and Sept. 19-30; discharge computed on basis of one discharge measurement and records for station near Tabiona, Rock Creek near Mountain Home, and other Duchesne River stations.

Duchesne River near Tabiona, Utah

Location.- Water-stage recorder, lat. 40°18', long. 110°36', in SW¼ sec. 17, T. 2 S., R. 6 W., Uinta meridian, at bridge on State highway 35, 5½ miles upstream from Rock Creek and 8 miles southeast of Tabiona.

Drainage area.- 352 square miles.

Records available.- January 1919 to September 1941.

Average discharge.- 22 years, 205 second-feet.

Extremes.- Maximum discharge during year, 1,330 second-feet May 27 (gage height, 6.61 feet); minimum, 65 second-feet Mar. 15.
1919-41: Maximum discharge observed, 2,500 second-feet June 13, 1921, from rating curve extended above 1,100 second-feet; minimum recorded, 27 second-feet Oct. 17, 1934.

Remarks.- Records good except those for period of no gage-height record or ice effect, which are fair. Several diversions above station for irrigation.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	181	115	109			92	119	214	678	325	125	93
2	173	115	107			95	109	223	676	302	111	87
3	176	119	107			90	105	242	676	275	104	87
4	178	119	105			86	102	268	739	255	88	87
5	166	109	100			92	119	271	693	242	92	87
6	183	119	102		b80	88	107	278	644	235	92	84
7	156	121	100			82	100	264	535	226	97	76
8	151	119	97			86	102	295	739	220	104	80
9	166	117	100			92	104	375	721	197	102	81
10	173	113	88			80	113	524	654	168	115	80
11	163	113	86		86	87	113	622	649	166	107	76
12	159	109	92	(*)	87	78	119	793	715	166	100	75
13	156	102			86	82	119	1,080	757	189	88	82
14	151	111			86	87	107	1,150	799	209	80	87
15	145	111	b75		86	78	107	996	775	166	82	78
16	142	113		b85	86	84	109	874	817	151	88	76
17	142	115			82	93	100	932	874	145	93	81
18	140	115			86	102	97	1,140	861	140	88	97
19	134	117			*86	104	102	913	775	159	84	119
20	134	111			86	104	102	710	710	173	82	105
21	134	109			87	102	98	431	676	151	86	104
22	131	100			90	111	102	528	632	142	88	127
23	125	a100			90	109	107	1,040	595	138	93	142
24	121	a102	b90		93	104	115	1,120	548	136	93	136
25	119	a110			90	98	119	1,080	528	145	90	131
26	123	a105			80	92	131	1,150	453	154	92	129
27	136	a107			80	97	151	1,220	405	168	88	127
28	127	a105			88	102	159	1,020	379	156	87	127
29	121	*109			-	104	184	845	352	145	87	127
30	119	111			-	98	206	769	340	147	87	123
31	119	-			-	107	-	721	-	136	90	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	4,524	181	119	146	8,970
November	3,341	121	100	111	6,630
December	2,843	109	86	91.7	5,640
Calendar year 1940	49,864	991	53	136	98,910
January	2,635	85	85	85.0	5,230
February	2,355	93	80	84.1	4,670
March	2,904	111	76	93.7	5,760
April	3,527	206	97	118	7,000
May	22,153	1,220	214	715	43,940
June	19,693	874	340	656	39,060
July	5,727	325	136	185	11,360
August	2,903	125	80	93.6	5,760
September	2,991	142	75	99.7	5,930
Water year 1940-41	75,596	1,220	75	207	150,000

* Winter discharge measurement made on this day.
a No gage-height record; discharge computed on basis of records for station at Duchesne.
b Stage-discharge relation affected by ice.

Duchesne River at Duchesne, Utah

Location.- Water-stage recorder, lat. 40°09'55", long. 110°23'50", in SW¼NE¼ sec. 1, T. 4 S., R. 5 W., Uinta meridian at Duchesne, half a mile upstream from Strawberry River.

Drainage area.- 660 square miles.

Records available.- December 1917 to September 1941.

Average discharge.- 24 years, 372 second-feet.

Extremes.- Maximum discharge during year, 3,160 second-feet May 24 (gage height, 5.05 feet); minimum, 95 second-feet Mar. 12.
1917-41: Maximum discharge observed, 4,420 second-feet June 10, 1922 (gage height, 8.65 feet, site and datum then in use); minimum observed, 15 second-feet July 11, 1931.

Remarks.- Records good except those for period of ice effect, which are fair. Diversions above station for irrigation.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	334	217	193			147	179	290	1,350	714	232	176
2	312	213	182			166	176	299	1,380	668	213	166
3	299	217	182			153	160	321	1,450	609	196	153
4	303	228	182			144	153	348	1,570	580	179	157
5	294	210	179			141	173	368	1,480	552	169	157
6	282	210	182			141	169	363	1,330	533	176	176
7	270	228	179			135	157	344	1,650	514	199	169
8	270	220	176			132	153	358	1,500	507	228	166
9	290	213	176			141	153	464	1,460	459	213	169
10	294	213	173			123	169	616	1,240	403	308	153
11	282	206	147		b160	126	182	782	1,110	368	262	147
12	274	206	160	(*)		120	193	1,020	1,220	372	235	141
13	270	186	132			114	193	1,460	1,370	372	217	176
14	258	199	129			129	173	1,690	1,490	470	189	179
15	254	210	106			117	166	1,480	1,460	363	186	166
16	250	210		b155		117	169	1,260	1,550	330	203	150
17	246	210			(*)	126	176	1,320	1,740	308	239	147
18	239	213				138	160	1,650	1,960	286	217	153
19	235	217				147	166	1,500	1,800	312	196	206
20	232	213				147	166	1,140	1,640	424	186	186
21	232	196			163	141	163	1,050	1,660	325	182	176
22	224	176			160	157	166	1,260	1,520	290	189	220
23	220	179	b170		157	160	166	1,860	1,450	274	193	303
24	217	182			147	160	179	2,180	1,330	262	189	246
25	213	206			150	160	179	2,130	1,310	266	189	228
26	220	196			135	147	182	2,160	1,090	299	220	228
27	270	199			132	147	203	2,370	930	330	189	220
28	250	196			147	153	217	1,940	817	303	176	220
29	235	206			-	157	243	1,590	739	270	173	224
30	228	196			-	153	274	1,420	698	262	189	220
31	228	-			-	157	-	1,380	-	246	186	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	8,025	334	213	259	15,920
November	6,171	228	176	206	12,240
December	5,198	193	106	168	10,310
Calendar year 1940	86,976	2,050	51	238	172,500
January	4,805	155	155	156	9,530
February	4,391	163	132	157	8,710
March	4,396	166	114	142	8,720
April	5,358	274	153	179	10,630
May	36,413	2,370	290	1,175	72,220
June	41,294	1,960	698	1,376	81,910
July	12,271	714	246	396	24,340
August	6,318	308	169	204	12,530
September	5,578	303	141	186	11,060
Water year 1940-41	140,218	2,370	106	384	278,100

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

Duchesne River at Myton, Utah

Location.- Water-stage recorder, lat. 40°12', long. 110°03', in NW¼ sec. 25, T. 3 S., R. 2 W., Uinta meridian, at Myton, 3 miles downstream from Lake Fork.

Drainage area.- 2,750 square miles.

Records available.- October 1899 to November 1910, July 1911 to September 1941.

Average discharge.- 33 years (1899-1902, 1911-41), 630 second-feet.

Extremes.- Maximum discharge during year, 4,610 second-feet June 18 (gage height, 5.70 feet); minimum, 49 second-feet Aug. 6.

1899-1941: Maximum discharge observed, 12,800 second-feet June 10, 1922 (gage height, 7.94 feet), from rating curve extended above 8,000 second-feet; minimum, less than 1 second-foot July 16, 1931, and on several days in August and September 1934.

Remarks.- Records good except those for period of doubtful gage-height record or ice effect, which are fair. Large diversions above station for irrigation. Flow affected by reservoirs above station.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	634	270	406			356	196	695	2,000	858	126	167
2	536	270	394			423	230	716	2,110	904	119	148
3	d460	275	389			406	227	768	2,130	812	105	122
4	d440	294	378			330	192	872	2,430	745	92	89
5	d440	284	367			299	196	1,020	2,350	760	66	86
6	d420	255	351	b250		304	275	1,070	2,090	647	56	92
7	d410	335	356		b275	299	201	1,150	2,700	594	61	102
8	d410	314	351			265	188	1,080	3,110	556	286	95
9	d450	289	346			241	196	1,220	2,990	594	192	76
10	d450	284	340			214	209	1,450	2,580	440	434	72
11	d410	255	289			192	294	1,700	2,400	378	518	66
12	d370	289	304			180	400	2,020	2,230	346	394	61
13	d350	255	280			159	406	2,520	2,370	372	330	75
14	d335	255	260			167	362	2,930	2,690	524	284	144
15	d325	294	205			167	325	2,820	2,920	475	237	156
16	d310	320	201			156	320	2,310	3,060	423	284	126
17	d300	330				167	335	2,080	3,450	314	394	109
18	d295	335				205	309	2,270	3,930	270	335	115
19	d285	362				252	299	2,410	3,640	255	250	137
20	d280	356			b310	223	299	1,910	3,340	524	167	148
21	d270	389		b275		201	280	1,580	3,400	417	192	148
22	d265	346				196	284	1,700	3,180	275	196	246
23	260	309				214	280	2,480	2,940	232	205	500
24	255	325	b325			218	289	3,080	2,880	209	237	423
25	255	346				237	299	3,290	2,740	196	218	330
26	260	372			314	218	351	3,200	2,050	227	241	325
27	340	356			294	201	367	3,550	1,610	304	218	320
28	325	356			314	184	411	3,220	1,240	294	167	304
29	294	384			-	188	475	2,680	1,080	223	152	304
30	280	417			-	188	594	2,230	992	192	175	304
31	284	-			-	180	-	2,080	-	156	192	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	11,008	634	255	355	21,830
November	9,521	417	255	317	18,880
December	10,092	406	201	326	20,020
Calendar year 1940	96,499	1,700	4	264	191,400
January	8,225	-	-	265	16,310
February	8,182	-	-	292	16,230
March	7,210	423	156	233	14,300
April	9,139	594	188	305	18,130
May	62,101	3,550	695	2,003	123,200
June	76,682	3,930	992	2,556	152,100
July	13,516	904	156	436	26,810
August	6,923	518	56	223	13,730
September	5,392	500	61	180	10,690
Water year 1940-41	227,991	3,930	56	625	452,200

b Stage-discharge relation affected by ice.
d Doubtful gage-height record; discharge computed on basis of records for stations at Duchesne and near Tabiona.

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Rock Creek near Mountain Home, Utah

Location.- Water-stage recorder, lat. 40°30', long. 110°35', in SW¼ sec. 9, T. 1 N., R. 6 W., Uinta meridian, at Lower Stillwater dam site "B", a third of a mile upstream from Corral Creek, 7 miles downstream from South Fork, and 12 miles northwest of Mountain Home.

Drainage area.- 149 square miles.

Records available.- November 1937 to September 1941.

Extremes.- Maximum discharge during year, 1,690 second-feet June 18 (gage height, 5.06 feet); minimum, 20 second-feet Apr. 18.
1937-41: Maximum discharge observed, 1,790 second-feet June 4, 1938 (gage height, 11.19 feet; site and datum then in use); minimum discharge, 7 second-feet Mar. 13, 1940, probably caused by ice jams above station.

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

Cooperation.- Water-stage recorder graph and seven discharge msaeurements furnished by Bureau of Reclamation.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	205	98	67				62	108	714	506	153	118
2	191	98	65				57	113	785	445	145	111
3	184	102	63				57	129	871	415	139	108
4	176	99	63				54	147	906	398	134	111
5	171	74	62			a50	62	149	792	384	134	106
6	157	96	62				56	151	714	370	134	102
7	151	98	60				56	143	755	367	141	98
8	153	90	59		a45		55	180	676	357	163	96
9	169	89	59				56	244	640	332	163	94
10	167	82	47				61	320	568	308	205	90
11	161	80	44				59	423	550	297	174	87
12	159	77	48			a45	66	582	635	294	171	83
13	151	75	45				65	804	725	283	149	86
14	141	80					60	892	792	314	138	90
15	134	82					60	749	779	267	143	89
16	130	80		a45		46	60	686	892	246	163	83
17	127	80				45	50	785	1,100	241	178	80
18	122	80				48	49	969	1,300	231	149	92
19	118	80				52	52	731	1,090	264	136	96
20	113	75				52	52	596	1,050	291	132	83
21	111	73				52	52	630	1,070	234	129	79
22	108	64	a50		a50	55	54	830	990	217	139	99
23	105	67				53	55	1,140	941	207	134	111
24	102	67				52	59	1,150	899	207	125	99
25	100	72				51	60	1,130	871	202	157	100
26	113	63				46	65	1,300	698	224	157	104
27	125	65				50	75	1,150	620	214	130	96
28	118	69				54	79	892	540	191	120	90
29	104	69			-	52	93	731	481	174	113	87
30	110	69			-	53	105	692	457	163	132	82
31	99	-			-	57	-	692	-	157	132	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	4,276	205	99	138	8,480
November	2,393	102	53	79.8	4,750
December	1,644	67	-	53.0	3,260
Calendar year 1940	43,445	1,070	28	119	86,170
January	1,395	-	-	45	2,770
February	1,325	-	-	47.3	2,630
March	1,538	57	-	49.6	3,050
April	1,847	105	62	61.6	3,560
May	19,238	1,300	108	621	38,160
June	23,901	1,300	457	797	47,410
July	8,800	505	157	284	17,450
August	4,512	205	113	146	8,950
September	2,849	118	79	95.0	5,550
Water year 1940-41	73,717	1,300	-	202	146,200

a No daily gage-height record; discharge computed on basis of mean gage height for period, records for stations on Duchesne River near Tabiona and at Duchesne, and temperature records.

Strawberry River at Duchesne, Utah

Location.- Staff gage, lat. 40°10', long. 110°25', in SW¼NE¼ sec. 2, T. 4 S., R. 5 W., Uinta meridian, at bridge three-quarters of a mile west of Duchesne and 1½ miles upstream from mouth.

Drainage area.- 1,040 square miles.

Records available.- June 1908 to November 1910, March 1914 to September 1941.

Average discharge.- 27 years (1914-41), 165 second-feet.

Extremes.- Maximum discharge observed during year, 1,520 second-feet May 13 (gage height, 7.30 feet) from rating curve extended above 800 second-feet; minimum observed, 42 second-feet Oct. 23, but may have been less during period of ice effect.
1908-10, 1914-41: Maximum discharge observed, 3,230 second-feet May 27, 1922 from rating curve extended above 1,500 second-feet; minimum observed, 1 second-foot on several days in July 1931.

Remarks.- Records fair. Gage read twice daily. Diversions above station for irrigation. Water diverted from Strawberry Valley Reservoir (capacity, 250,000 acre-feet) to Great Salt Lake Basin.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	75	49	64			100	94	363	346	180	94	65
2	64	49	70			121	98	407	316	172	91	56
3	61	47	73			94	91	446	296	164	80	56
4	48	47	64			87	89	479	277	156	76	56
5	43	49	72			73	94	560	274	146	78	59
6	46	49	75			64	104	651	247	142	76	55
7	48	51	72			62	92	695	750	137	377	54
8	49	51	64			61	92	744	570	396	238	52
9	73	48	59			58	92	902	514	159	112	52
10	52	47	59			61	104	1,090	541	144	414	51
11	49	51	52			61	106	1,200	528	134	137	52
12	48	59				55	114	1,270	496	137	108	51
13	48	51				61	137	1,460	462	125	100	51
14	47	58			b55	59	116	1,400	446	142	89	75
15	46	56				59	116	1,130	410	167	85	64
16	44	55		b45		61	118	658	392	125	87	59
17	44	51				70	118	717	360	114	104	55
18	46	51				80	114	700	329	104	89	52
19	46	59				85	110	695	299	110	80	58
20	47	64				91	110	604	274	152	75	55
21	47	67				80	104	488	247	112	73	54
22	44	56	b50			83	96	434	235	104	85	85
23	44	54				87	98	488	227	96	75	108
24	46	49				89	110	695	201	94	73	87
25	46	52				87	118	565	193	96	68	75
26	47	51				76	130	505	187	154	67	65
27	72	48				76	156	518	177	159	61	64
28	58	54				78	198	514	167	123	64	62
29	51	55			-	78	244	467	164	112	61	64
30	48	59			-	83	329	422	172	100	70	64
31	47	-			-	83	-	374	-	96	68	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	1,574	75	43	50.8	3,120
November	1,587	67	47	52.9	3,150
December	1,724	75	-	55.6	3,420
Calendar year 1940	23,807	364	14	65.0	47,220
January	1,395	-	-	45	2,770
February	1,540	-	-	55	3,050
March	2,363	121	55	76.2	4,690
April	3,692	329	89	123	7,320
May	21,841	1,460	363	705	43,320
June	10,097	750	164	337	20,030
July	4,352	396	94	140	8,630
August	3,356	414	61	108	6,650
September	1,856	108	51	61.9	3,680
Water year 1940-41	55,376	1,460	-	152	109,800

b Stage-discharge relation affected by ice.

Currant Creek near Fruitland, Utah

Location.- Water-stage recorder, lat. 40°12', long. 110°54', in SE¼ sec. 21, T. 3 S., R. 9 W., Uinta meridian, 200 feet downstream from Deep Creek, 250 feet downstream from bridge on U. S. Highway 40, and 3½ miles southwest of Fruitland.

Drainage area.- 142 square miles.

Records available.- January 1935 to September 1941.

Extremes.- Maximum discharge during year, 1,040 second-feet July 26 (gage height, 5.85 feet) from rating curve extended above 150 second-feet; minimum recorded, 4 second-feet Mar. 12, may have been less during period of ice effect.

1935-41: Maximum discharge, that of July 26, 1941; minimum recorded, that of Mar. 12, 1941.

Remarks.- Records excellent except those for period of ice effect, which are fair. Currant Creek feeder canal, constructed by the Bureau of Reclamation in 1936, diverts water from headwaters of Currant Creek to Strawberry Reservoir, from which it is further diverted through Strawberry tunnel to the Great Basin for irrigation in the Strawberry Valley Project.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	20	17	18	13	16	20	36	92	90	45	21	18
2	19	17	18	12	15	20	31	104	82	45	20	18
3	17	18	18	10	15	20	29	123	76	42	19	14
4	17	19	17	10	15	18	28	138	75	39	18	14
5	18	17	16	13	16	20	34	130	72	37	18	14
6	17	17	16	16	16	19	30	138	70	34	18	14
7	17	18	16	16	18	17	28	115	123	45	20	14
8	17	18	15	17	17	18	28	150	120	45	21	14
9	18	18	16	*16	17	21	29	207	119	35	21	14
10	18	17	14	16	17	17	33	242	114	32	31	14
11	17	16	13	18	18	18	33	242	111	33	24	14
12	17	14	14	20	20	16	38	278	104	33	22	14
13	16	15	13	18	19	19	37	308	96	31	20	14
14	16	16	12	18	18	20	34	265	89	31	19	19
15	16	16	10	17	18	16	36	210	83	30	20	19
16	16	18	12	16	20	19	36	189	79	29	22	18
17	16	19	14	15	*19	23	34	181	76	28	21	18
18	16	19	15	17	21	27	28	183	70	27	20	23
19	16	19	16	17	21	28	28	153	67	30	18	18
20	16	18	15	18	21	28	28	136	64	33	18	17
21	16	16	14	19	21	29	28	125	59	28	18	17
22	17	14	16	20	21	31	30	114	56	25	18	21
23	17	14	16	18	20	30	34	117	53	24	18	28
24	17	16	16	19	21	27	39	120	53	24	18	26
25	17	18	16	18	21	25	43	112	50	28	18	22
26	18	16	15	17	16	23	47	127	48	27	22	21
27	20	17	16	16	16	25	54	125	46	31	17	21
28	20	19	16	17	19	27	67	112	45	26	16	19
29	18	*19	16	20	-	28	83	104	46	24	16	19
30	18	19	17	18	-	28	98	100	46	22	16	19
31	18	-	16	18	-	31	-	100	-	21	18	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	536	20	16	17.3	1,060
November	514	19	14	17.1	1,020
December	472	18	10	15.2	936
Calendar year 1940	8,274	77	5	22.6	16,410
January	513	20	10	16.5	1,020
February	512	21	15	18.3	1,020
March	708	31	16	22.8	1,400
April	1,161	98	28	38.7	2,300
May	4,840	308	92	156	9,600
June	2,283	123	46	76.1	4,530
July	1,054	97	21	34.0	2,090
August	606	51	16	19.5	1,200
September	535	28	14	17.8	1,060
Water year 1940-41	13,734	308	10	37.7	27,240

* Winter discharge measurement made on this day.

Note.- Stage-discharge relation affected by ice Dec. 11 to Feb. 16.

Uinta River near Neola, Utah

Location.- Water-stage recorder, lat. 40°32', long. 110°04', in SW¼ sec. 25, T. 2 N., R. 2 W., Uinta meridian, 600 feet downstream from bridge, 1 mile upstream from Pole Creek, and 7 miles north of Neola.

Drainage area.- 181 square miles.

Records available.- July 1921 to September 1927 (fragmentary), September 1929 to September 1941.

Average discharge.- 13 years (1925-26, 1929-41), 163 second-feet.

Extremes.- Maximum discharge during year, 1,760 second-feet June 18 (gage height, 3.85 feet); minimum discharge recorded, 32 second-feet Mar. 10, but may have been less during period of ice effect.

1929-41: Maximum discharge, 2,240 second-feet June 5, 1938 (gage height, 3.33 feet, site and datum then in use), from rating curve extended above 1,300 second-feet; minimum recorded, that of Mar. 10, 1941.

Maximum discharge known, more than 3,000 second-feet June 9, 1922 (not determined more exactly because of unstable channel conditions).

Remarks.- Records good except those for periods of no gage-height record or ice effect, which are fair. Water diverted from Pole Creek and used at Uinta Power & Light Co.'s plant enters river 500 feet above station. Summer flow slightly regulated by several small mountain lakes and reservoirs.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	393	154	109			63	77	106	846	560	272	235
2	365	156	106			68	73	115	870	554	259	226
3	353	159	102			65	70	137	1,010	586	252	232
4	315	156	104			62	69	154	1,100	580	242	232
5	290	139	104			64	76	172	910	591	245	213
6	259	146	100			62	70	189	809	560	283	207
7	245	146	98			61	67	189	781	565	319	207
8	245	142	100			60	66	204	689	544	389	195
9	259	142	100			64	68	265	659	519	373	189
10	245	130	93		b64	56	73	338	570	524	345	183
11	242	130	88	(*)		62	72	419	565	524	353	178
12	235	122				58	79	560	618	500	330	170
13	229	122				61	76	846	714	468	304	178
14	219	128				62	73	958	823	436	286	189
15	213	126				58	73	774	862	463	293	178
				b70								
16	210	124				62	74	608	1,090	427	308	170
17	204	122				64	65	641	1,320	402	293	161
18	198	122			*65	68	65	823	1,520	389	276	170
19	195	119			65	70	69	647	1,330	454	259	198
20	189	119			65	70	68	529	1,300	505	255	167
21	186	a118	b80		65	70	68	565	1,330	423	269	159
22	183	a117			65	74	69	809	1,280	397	293	180
23	178	117			64	73	72	1,090	1,250	377	272	207
24	172	111			65	70	74	1,160	1,340	361	272	192
25	170	115			65	69	73	1,090	1,280	377	336	192
26	180	106			60	63	85	1,170	982	397	323	204
27	186	106			60	67	87	1,180	838	365	276	204
28	180	*107			64	70	83	902	702	334	252	183
29	175	111			-	70	91	788	618	311	242	186
30	175	111			-	69	104	767	565	301	272	175
31	161	-			-	72	-	809	-	286	259	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	7,049	393	161	227	13,980
November	3,823	159	106	127	7,580
December	2,704	109	-	87.2	5,360
Calendar year 1940	48,507	575	54	133	96,200
January	2,170	-	-	70.0	4,300
February	1,791	-	-	64.0	3,550
March	2,027	74	56	65.4	4,020
April	2,231	104	65	74.4	4,430
May	19,004	1,180	106	613	37,690
June	28,571	1,520	565	952	56,670
July	14,080	591	286	454	27,930
August	9,004	389	242	290	17,860
September	5,760	235	159	192	11,420
Water year 1940-41	98,214	1,520	56	269	194,800

* Winter discharge measurement made this day.
a No gage-height record; discharge interpolated.
b Stage-discharge relation affected by ice.

Whiterocks River near Whiterocks, Utah

Location.- Water-stage recorder, lat. 40°34', long. 109°56', in SW¼ sec. 18, T. 2 N., R. 1 E., Uinta meridian, 25 feet downstream from bridge, three-quarters of a mile upstream from heading of United States Whiterocks and Farm Creek canals, and 6½ miles north of Whiterocks.

Drainage area.- 115 square miles.

Records available.- August 1921 to September 1928, February 1930 to September 1941. September 1899 to August 1904, April 1907 to November 1910 near present site. November 1917 to June 1921 at site downstream from diversion of United States Whiterocks canal and above that of Farm Creek canal; records equivalent if flow of Whiterocks canal is included.

Average discharge.- 17 years (1899-1903, 1908-10, 1930-41), 120 second-feet.

Extremes.- Maximum discharge during year, 1,270 second-feet May 23 (gage height, 3.98 feet); minimum recorded, 20 second-feet Mar. 10, but may have been less during periods of ice effect.

1921-28; 1930-41: Maximum discharge, 2,750 second-feet June 21, 1922, from rating curve extended above 1,700 second-feet; minimum recorded, 10 second-feet Dec. 5, 1933, but may have been less during periods of ice effect.

Remarks.- Records good except those for periods of ice effect, which are fair. Flow slightly regulated by storage in small mountain lakes.

Rating tables, water year 1940-41, except periods of ice effect (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used May 11-22)

Oct. 1 to May 22				May 23 to Sept. 30			
1.10	33	2.20	218	1.60	99	2.70	453
1.20	41	2.40	281	1.80	144	3.00	605
1.40	60	2.60	355	2.00	198	3.20	720
1.60	86	2.80	440	2.20	260	3.50	910
1.80	121	3.00	535	2.50	368	3.70	1,050
2.00	165	3.30	700				

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	245	92	60		32	32	43	66	774	280	120	110
2	230	92	59		31	34	39	73	780	291	114	101
3	227	97	59		29	34	38	91	822	380	110	105
4	196	97	59		28	34	35	102	810	308	105	112
5	180	91	58		28	33	42	121	649	280	112	101
6	178	91	57		30	33	37	132	594	267	130	95
7	172	92	56		51	32	35	132	622	270	139	90
8	165	89	56		32	32	35	154	556	270	154	86
9	176	88	56		33	30	37	190	620	247	160	86
10	165	82	61	(*)	33	33	41	256	486	228	160	82
11	158	83			33	32	39	359	491	219	139	78
12	158	76		b35	33	29	44	525	505	222	112	78
13	158	b76			32	35	43	772	625	213	105	105
14	151	b82			32	31	39	814	550	201	99	118
15	147	b81			32	34	39	634	583	187	99	95
16	142	80			32	31	41	500	720	178	107	80
17	136	78			32	32	36	550	780	176	112	75
18	132	75			*32	35	40	694	840	170	105	90
19	125	73			32	36	39	530	708	204	99	101
20	121	72			32	36	36	426	678	210	107	88
21	117	72	b42		32	35	35	472	678	176	125	80
22	115	71			32	37	37	700	632	160	134	95
23	112	b68			32	57	40	1,070	588	152	142	112
24	108	b64			32	35	42	1,100	594	154	137	107
25	106	b66		35	32	34	43	959	566	167	162	116
26	112	b62		35	30	34	50	1,050	458	204	142	132
27	117	b62		36	b30	35	52	931	401	181	120	125
28	113	*b63		33	b32	37	50	684	349	154	112	107
29	106	b66		b34	-	37	54	664	319	139	105	107
30	106	b67		b34	-	37	62	696	305	130	125	105
31	97	-		b34	-	39	-	762	-	125	118	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	4,570	245	97	147	9,060
November	2,348	97	62	78.3	4,660
December	1,452	60	-	46.8	2,880
Calendar year 1940	27,927	344	23	76.3	55,410
January	1,080	-	-	34.8	2,140
February	881	33	28	31.5	1,750
March	1,055	39	29	34.0	2,090
April	1,243	62	35	41.4	2,470
May	16,198	1,100	66	523	32,130
June	17,883	840	305	596	35,470
July	6,543	380	125	211	12,980
August	3,810	160	99	123	7,560
September	2,962	132	75	98.7	5,880
Water year 1940-41	60,025	1,100	28	164	119,100

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

White River near Meeker, Colo.

Location.- Water-stage recorder, lat. 40°02', long. 107°52', in sec. 30, T. 1 N., R. 93 W., 1 mile upstream from Curtis Creek and 3½ miles east of Meeker.

Drainage area.- 762 square miles.

Records available.- May 1901 to October 1906 and May 1910 to November 1913, at site 2½ miles downstream, and October 1933 to September 1941 in reports of U. S. Geological Survey. May 1901 to October 1906, and May 1910 to September 1941 in reports of State engineer.

Average discharge.- 36 years, 642 second-feet.

Extremes.- Maximum discharge during year, 4,100 second-feet May 14 (gage height, 4.07 feet); minimum daily, 222 second-feet Jan. 2, Feb. 2.
1901-6, 1910-41: Maximum daily discharge, 6,070 second-feet June 16, 1921; minimum daily, 112 second-feet July 17, 1934.

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

Rating table, water year 1940-41 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Oct. 1-8 and Oct. 28 to Nov. 30)

1.1	210	2.0	700	3.0	1,760
1.3	290	2.3	940	3.4	2,480
1.6	445	2.7	1,370	3.9	3,660

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	385	335	330	258	262	290	401	842	2,260	904	345	345
2	355	330	325	222	222	282	365	940	2,150	868	325	345
3	545	340	315	230	238	282	370	1,170	2,140	786	320	325
4	330	355	310	242	258	266	365	1,560	2,060	735	315	325
5	390	305	300	258	266	274	380	1,430	2,050	714	305	320
6	428	340	310	290	278	274	401	1,320	2,080	686	310	310
7	390	340	310	266	274	262	370	1,050	1,960	672	330	310
8	380	335	300	300	258	258	350	1,090	2,030	651	335	335
9	418	340	295	290	290	278	345	1,530	1,720	630	360	330
10	423	335	300	274	286	250	385	1,960	1,590	617	401	330
11	401	300	282	274	282	274	385	2,010	1,420	578	406	325
12	385	282	295	295	295	238	375	2,060	1,260	591	380	330
13	375	254	278	300	286	278	406	2,650	1,390	584	360	350
14	370	258	230	278	274	286	396	3,460	1,470	559	350	481
15	365	310	238	295	274	270	385	3,150	1,450	529	350	428
16	360	330	262	266	282	266	375	2,610	1,520	517	406	406
17	360	345	305	278	266	278	380	2,610	1,660	523	423	375
18	360	345	325	262	278	300	355	2,880	1,860	529	423	375
19	355	355	286	266	282	320	345	2,930	2,050	499	396	380
20	355	340	270	274	274	340	320	2,320	2,150	598	390	355
21	350	335	278	290	274	350	330	2,050	2,140	553	380	355
22	345	335	285	278	278	385	355	2,280	2,050	493	375	365
23	345	310	295	282	278	423	370	2,440	1,870	451	375	385
24	340	295	305	274	278	406	401	2,540	1,730	440	360	390
25	340	300	305	286	286	370	434	2,580	1,630	434	355	385
26	345	315	282	262	266	330	481	2,560	1,620	423	355	375
27	380	274	270	278	238	340	565	2,930	1,490	418	345	365
28	355	320	300	258	262	350	604	2,690	1,320	423	335	365
29	340	335	295	266	-	360	672	2,500	1,130	406	340	370
30	350	335	295	290	-	360	735	2,280	1,010	390	350	370
31	350	-	290	282	-	370	-	2,300	-	355	340	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	11,370	428	330	367	22,550
November	9,628	355	254	321	19,100
December	9,067	330	230	292	17,980
Calendar year 1940	182,766	2,540	202	499	362,500
January	8,464	300	222	273	16,790
February	7,585	295	222	271	15,040
March	9,610	423	238	310	19,060
April	12,401	735	320	413	24,600
May	66,722	3,460	842	2,152	132,300
June	52,260	2,260	1,010	1,742	103,700
July	17,556	904	355	566	34,820
August	11,140	423	305	359	22,100
September	10,805	481	310	360	21,430
Water year 1940-41	226,808	3,460	222	621	449,500

White River near Watson, Utah.

Location.- Water-stage recorder, lat. 39°58', long. 109°10', in sec. 2, T. 10 S., R. 24 E., Salt Lake meridian, just downstream from Evacuation Creek and 7 miles north of Watson.

Drainage area.- 4,020 square miles.

Records available.- April to October 1906, published as White River near Dragon, Utah and October 1933 to September 1941 in reports of U. S. Geological Survey. April 1923 to September 1941 in reports of State engineer of Colorado.

Average discharge.- 18 years, 754 second-feet.

Extremes.- Maximum discharge during year, 4,210 second-feet May 15 (gage height, 4.63 feet); minimum daily, 112 second-feet Dec. 14.
1906, 1923-41: Maximum daily discharge, 8,160 second-feet July 15, 1929; minimum discharge, 52 second-feet July 19, 20, 1934.

Remarks.- Records good except those for period of ice effect, which are fair. Diversions above station for irrigation.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,600	383	410	280	280	644	508	990	2,430	1.200	354	426
2	981	378	394	260	270	950	571	1,100	2,390	1,080	342	414
3	564	372	372	220	270	1,140	557	1,170	2,270	980	318	414
4	515	388	350	230	290	810	522	1,460	2,240	900	312	408
5	564	416	330	260	310	599	536	1,850	2,200	820	312	402
6	726	394	325	300	340	494	522	2,250	2,300	790	300	396
7	600	366	325	310	370	462	564	2,170	2,380	745	324	390
8	520	383	320	300	350	420	557	1,990	2,500	754	462	384
9	476	394	310	310	320	396	501	1,840	2,570	700	692	390
10	498	*405	305	300	350	396	468	2,120	2,230	676	1,300	408
11	510	394	310	300	390	366	501	2,550	2,020	668	644	396
12	466	378	330	320	440	342	543	2,680	1,820	628	536	390
13	427	340	230	320	410	348	564	3,090	1,630	628	487	390
14	405	340	112	310	410	*330	620	3,430	1,640	840	420	692
15	394	290	150	310	*425	348	599	3,930	1,700	652	402	644
16	388	275	210	320	415	342	550	3,820	1,690	599	480	543
17	383	345	300	300	400	342	557	3,130	1,720	571	1,350	480
18	383	394	350	*293	410	378	564	2,840	1,790	550	810	462
19	378	405	300	295	450	501	536	2,950	1,890	571	620	426
20	372	405	250	305	460	578	508	3,220	2,030	578	587	390
21	361	394	260	310	450	578	474	2,840	2,110	599	529	384
22	356	383	270	315	450	515	456	2,560	2,120	613	550	1,100
23	356	366	290	320	460	494	456	2,590	2,070	564	543	1,120
24	356	378	310	300	470	585	494	2,660	1,950	522	550	613
25	350	366	320	305	480	599	536	2,740	1,830	515	529	444
26	350	345	300	300	450	508	578	2,810	1,750	529	515	408
27	510	350	250	290	520	468	628	2,850	1,700	474	501	390
28	416	325	270	300	564	468	709	2,920	1,580	432	468	384
29	388	356	310	280	-	468	830	2,930	1,450	402	438	384
30	378	383	300	310	-	474	920	2,710	1,320	384	426	390
31	372	-	300	300	-	487	-	2,510	-	372	456	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	15,343	1,600	350	495	30,430
November	11,091	416	275	370	22,000
December	9,163	410	112	296	18,170
Calendar year 1940	196,136	2,210	112	536	379,000
January	9,173	320	220	296	18,190
February	11,204	564	270	400	22,220
March	15,830	1,140	330	511	31,400
April	16,929	920	456	564	33,580
May	78,700	3,930	990	2,539	156,100
June	59,320	2,570	1,320	1,977	117,700
July	20,336	1,200	372	656	40,340
August	16,527	1,350	300	533	32,780
September	14,462	1,120	384	482	28,680
Water year 1940-41	278,078	3,930	112	762	551,600

* Winter discharge measurement made on this day.
Note.- Stage-discharge relation affected by ice Dec. 15 to Feb. 27.

Piceance Creek near Rio Blanco, Colo.

Location.- Staff gage, lat. 39°48', long. 108°06', in N½ sec. 18, T. 3 S., R. 95 W., just downstream from Story Gulch and 9 miles northwest of Rio Blanco. Altitude of gage, 6,950 feet (by barometer).

Drainage area.- 153 square miles.

Records available.- March to September 1941.

Extremes.- Maximum discharge observed during period, 158 second-feet Apr. 12 (gage height, 4.16 feet), from rating curve extended above 45 second-feet; minimum daily, 2.5 second-feet Mar. 1-17.

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

Cooperation.- Gage-height record and results of discharge measurements Mar. 1 to June 30 furnished by Bureau of Reclamation.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1						2.5	40	80	22	8.5	6.3	4.4
2						2.5	38	75	22	8.8	6.1	4.4
3						2.5	33	85	22	8.8	6.1	4.4
4						2.5	34	113	23	9.1	6.3	4.4
5						2.5	30	93	22	9.1	6.5	4.0
6						2.5	42	82	20	8.8	6.5	4.0
7						2.5	27	66	22	10	6.3	4.5
8						2.5	28	68	36	10	6.7	4.2
9						2.5	38	73	24	9.1	16	4.4
10						2.5	49	78	24	8.8	28	4.4
11						2.5	51	93	21	8.5	24	4.0
12						2.5	115	102	20	8.8	20	3.8
13						2.5	73	110	19	8.8	17	3.4
14						2.5	62	90	20	8.8	13	4.0
15						2.5	61	80	21	8.5	9.7	4.0
16						2.5	63	72	19	8.1	8.3	4.2
17						2.5	59	65	19	7.9	7.9	3.9
18						11	50	60	17	7.9	6.5	3.6
19						33	44	57	14	7.9	6.3	3.9
20						36	40	56	15	7.7	6.1	3.8
21						29	38	51	16	7.7	5.7	3.9
22						28	47	50	16	7.5	8.1	3.6
23						14	58	46	16	7.3	6.7	3.8
24						7.7	59	42	16	7.7	5.9	3.4
25						7.9	55	41	16	7.5	5.5	3.6
26						7.7	63	38	16	7.3	5.1	3.4
27						10	76	40	12	6.9	4.5	3.4
28						19	70	38	11	6.7	4.4	3.6
29						22	83	30	11	6.5	4.7	3.4
30						26	83	26	10	6.1	4.4	3.4
31						44	-	21	-	6.3	4.4	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October					
November					
December					
Calendar year					
January	-	-	-	-	-
February	-	-	-	-	-
March	337.8	44	2.5	10.9	670
April	1,611	115	27	53.7	3,200
May	2,021	113	21	65.2	4,010
June	562	36	10	18.7	1,110
July	251.4	10	6.1	8.11	499
August	273.0	28	4.4	8.81	541
September	117.2	4.5	3.4	3.91	232
The period	-	-	-	-	10,260

Price River above Scofield Reservoir, near Scofield, Utah

Location.- Water-stage recorder, lat. 39°46', long. 111°11', in SE¼ sec. 18, T. 12 S., R. 7 E., at mouth of canyon, 800 feet upstream from bridge, half a mile upstream from Pontown Creek, and 4 miles north of Scofield.

Drainage area.- 62 square miles.

Records available.- June 1931 to September 1932 (fragmentary), October 1938 to September 1941.

Extremes.- Maximum discharge during year, 645 second-feet May 13 (gage height, 3.11 feet); minimum recorded, 6 second-feet Nov. 6, but was undoubtedly less during period of ice effect.

1931-32, 1938-41: Maximum discharge, 673 second-feet May 19, 1932; minimum recorded, 3 second-feet Sept. 10-30, 1932, but may have been less during periods of ice effect.

Remarks.- Records good except those for period of no gage-height record or period of ice effect, which are fair. Small transmountain diversions at headwaters for irrigation in the Sevier River Basin.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	9	8						94	242	55	22	11
2	9	8						111	223	52	19	10
3	8	8						135	206	48	18	12
4	8	9						157	192	45	18	15
5	8	8						169	177	42	19	14
6	8	8						188	169	40	20	14
7	S	10						204	234	39	21	14
8	7	9				8	12	268	221	39	21	14
9	7	9						345	209	39	22	15
10	9	8						412	195	37	23	16
11	9	8						480	179	36	27	17
12	8	b7						535	165	36	22	16
13	8	b7						598	163	36	20	18
14	S							563	171	34	19	21
15	7		7	6	7			512	155	32	20	19
16	7							471	136	31	23	17
17	7							484	126	30	22	15
18	7							521	118	30	19	14
19	7							476	107	34	16	12
20	7						15	391	98	34	14	10
21	7							379	90	30	14	10
22	7	7						399	84	29	14	16
23	7					10		462	79	27	13	19
24	7						20	450	76	27	12	17
25	7						25	437	68	28	12	15
26	7						30	471	65	36	11	14
27	8						38	424	62	37	10	12
28	8						48	379	59	34	10	12
29	9				-		63	327	56	27	10	12
30	8				-		82	290	54	24	11	12
31	9	-			-		-	256	-	23	12	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	240	9	7	7.7	476
November	226	10	-	7.5	448
December	217	-	-	7.0	430
Calendar year 1940	14,566	480	-	39.8	28,890
January	186	-	-	6.0	369
February	196	-	-	7.0	389
March	280	-	-	9.0	555
April	606	82	-	20.2	1,200
May	11,388	598	94	367	22,590
June	4,179	242	54	139	8,290
July	1,091	55	23	35.2	2,180
August	534	27	10	17.2	1,060
September	433	21	10	14.4	859
Water year 1940-41	19,576	598	-	53.6	38,830

b Stage-discharge relation affected by ice.

Note.- No gage-height record Nov. 14 to Apr. 25; discharge computed on basis of records for Huntington Creek near Huntington and Cottonwood Creek near Orangeville.

Price River near Scofield, Utah

Location.- Water-stage recorder and concrete control, lat. 39°47', long. 111°07', in SE¼ sec. 10, T. 12 S., R. 7 E., 1,000 feet downstream from Scofield Reservoir, 5 miles northeast of Scofield, and 9 miles upstream from White River.

Drainage area.- 163 square miles.

Records available.- November 1917 to September 1921, June to September 1925, April 1926 to September 1931, October 1938 to September 1941.

Extremes.- Maximum discharge during year, 585 second-feet (regulated), May 25 (gage height, 4.24 feet); practically no flow at times when reservoir gates were closed.
1917-20, 1926-31, 1938-41: Maximum discharge, 1,000 second-feet on or about May 24, 1920 (gage height, 10.4 feet from high water mark, site and datum then in use) from rating curve extended above 500 second-feet; practically no flow at times when reservoir gates were closed.

Remarks.- Records excellent except those for period of no gage-height record, which are fair. Flow completely regulated by Scofield Reservoir (capacity, 42,000 acre-feet). Small diversions above station for irrigation.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1							3	3	250	166	152	84
2							3	3	99	163	128	85
3							3	3	118	157	125	89
4							3	3	105	157	126	105
5						2	3	3	105	155	126	113
6							3	3	224	155	157	138
7							3	3	204	154	175	137
8						*2	3	2	324	155	150	135
9							3	2	333	108	75	134
10							3	2	333	78	56	133
11							3	3	333	75	22	133
12							3	3	249	141	33	133
13							3	4	7	170	108	132
14							3	191	50	170	135	131
15	2	2	2	2	2		3	466	158	168	134	117
16							3	424	224	154	134	72
17							3	398	226	115	134	71
18							3	376	198	115	133	71
19							3	413	114	115	110	71
20						2	3	334	92	114	100	60
21							*3	244	95	113	100	43
22							3	273	95	113	99	43
23							3	397	95	111	99	43
24							3	553	95	111	100	43
25							3	488	87	110	100	31
26							3	575	94	110	119	16
27							3	558	109	110	155	16
28							3	532	150	109	154	16
29					-		3	368	168	137	154	16
30					-		3	300	167	153	132	16
31		-			-		-	300	-	153	85	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	62	-	-	2	123
November	60	-	-	2	119
December	62	-	-	2	
Calendar year 1940	18,324	232	-	50.1	36,350
January	62	-	-	2	123
February	56	-	-	2	111
March	62	-	-	2	123
April	90	3	3	3	179
May	7,227	575	2	233	14,330
June	4,901	333	7	163	9,720
July	4,115	170	75	133	8,160
August	3,610	175	22	116	7,160
September	2,427	138	16	80.9	4,810
Water year 1940-41	22,734	575	-	62.3	45,080

* Discharge measurement made on this day.
Note.- No gage-height record Oct. 1 to Apr. 26; discharge computed on basis of three discharge measurements (outlet gates at reservoir closed).

Price River near Heiner, Utah

Location.- Water-stage recorder, lat. 39°43'05", long. 110°51'55", in SW¼ sec. 1, T. 13 S., R. 9 E., two-thirds of a mile north of Heiner and three-quarters of a mile downstream from Willow Creek.

Records available.- June 1934 to September 1941.

Extremes (regulated).- Maximum discharge during year, 2,280 second-feet Sept. 13 (gage height, 4.75 feet, from rating curve extended above 800 second-feet on basis of slope-area determinations at gage heights 6.16 and 7.98 feet; minimum daily, 4 second-feet Dec. 14, 15, Jan. 2-5, during ice affected periods.

1934-41: Maximum discharge, 9,340 second-feet Sept. 13, 1940 (gage height, 7.98 feet), by slope-area method; minimum, less than 1 second-foot at times during period Sept. 1-10, 1934.

Remarks.- Records good except those for periods of ice effect or no gage-height record, which are fair. Station is above diversions from main stream for irrigation. Several small diversions from tributaries upstream for irrigation and municipal supply. Flow regulated by Scofield Reservoir (capacity, 42,000 acre-feet).

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	a15	11	9	b7	b9	48	a110	324	a450	289	186	a110
2	a12	12	9	b4	b8	38	a100	361	a300	282	176	a110
3	a12	13	b10	b4	b7	32	a90	405	a250	266	151	a120
4	a11	13	b10	b4	b7	96	a80	434	a250	260	153	141
5	a10	11	b11	b4	b7	24	71	475	a250	253	151	a150
6	a10	11	b10	b5	b8	23	66	502	a400	250	171	a150
7	a10	13	b10	b6	b9	24	64	535	a400	263	220	153
8	44	12	b11	b7	b10	29	74	565	502	260	200	151
9	26	12	b11	*b7	b11	30	77	632	575	247	121	149
10	16	12	b10	b7	12	22	87	692	575	a175	107	149
11	14	b12	b9	7	13	23	87	710	580	a150	74	149
12	12	b11	b8	8	*14	20	124	728	595	a200	53	146
13	12	b10	b6	8	b14	22	109	710	327	a250	78	391
14	11	b9	b4	7	17	23	107	680	296	a210	149	186
15	10	*b9	b4	b7	18	18	105	1,050	361	a200	156	168
16	10	b10	b5	b7	20	36	113	947	457	a190	184	151
17	9	b11	b6	b7	22	80	101	891	452	171	186	126
18	9	13	b7	b6	26	119	87	835	434	158	166	109
19	9	13	7	b6	26	125	94	877	331	171	156	97
20	9	b13	7	b7	29	125	90	794	289	168	126	94
21	9	13	7	8	40	a125	92	632	279	158	151	74
22	8	b12	b7	8	53	a140	87	615	266	156	137	77
23	8	b11	b7	b8	58	a110	99	674	257	151	126	90
24	9	b9	b7	b9	53	a85	128	891	253	153	121	78
25	9	b8	b6	b9	51	a80	144	814	238	171	119	74
26	73	b9	b6	b8	38	a80	163	933	232	179	124	51
27	28	b10	b7	b8	38	a85	197	877	235	176	171	45
28	20	11	b8	b9	48	a90	220	828	263	161	173	42
29	16	*b11	8	10	-	a92	263	710	293	179	291	42
30	14	b11	8	10	-	a92	293	570	289	192	a200	40
31	12	-	b8	10	-	a96	-	535	-	189	a150	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	477	73	8	15.4	946
November	336	13	8	11.2	666
December	243	11	4	7.8	482
Calendar year 1940	26,909	520	4	73.5	53,360
January	222	10	4	7.2	440
February	666	58	7	23.8	1,320
March	1,962	140	18	63.3	3,890
April	3,522	293	64	117	6,990
May	21,226	1,050	324	685	42,100
June	10,679	595	232	356	21,180
July	6,278	289	150	203	12,450
August	4,727	220	53	152	9,380
September	3,613	391	40	120	7,170
Water year 1940-41	53,951	1,050	4	148	107,000

* Winter discharge measurement made on this day.
a No gage-height record; discharge computed on basis of records for station near Scofield and for Huntington Creek near Huntington, and Cottonwood Creek near Orangeville.
b Stage-discharge relation affected by ice.

Huntington Creek near Huntington, Utah

Location.- Water-stage recorder, lat. 39°22'15", long. 111°03'45", in SE¼ sec. 6, T. 17 S., R. 8 E., 1 mile upstream from Fish Creek and 7 miles northwest of Huntington.

Drainage area.- 188 square miles.

Records available.- May 1909 to September 1917, October 1918 to November 1920 (fragmentary), April 1921 to September 1941.

Average discharge.- 26 years (1910-17, 1921-29, 1930-41), 98.9 second-feet.

Extremes.- Maximum discharge during year, 1,050 second-feet May 12 (gage height, 4.30 feet); minimum recorded, 11 second-feet Nov. 5, but may have been less during periods of ice effect.

1909-41: Maximum discharge, 2,500 second-feet Aug. 2 or 3, 1930 (gage height, 7.5 feet, from floodmark), from rating curve extended above 600 second-feet; minimum recorded, 2 second-feet Nov. 5, 1926, during period of ice effect, but may have been lower during other periods of ice effect.

Remarks.- Records good except those for periods of ice effect, which are fair. Small diversions above station for irrigation. Flow slightly regulated by small reservoirs above station.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	32	28			b24	31	37	104	481	177	86	80
2	31	29			b24	31	34	119	485	167	84	77
3	31	30			b23	30	33	165	473	160	82	80
4	31	28			b20	29	32	209	462	149	82	82
5	34	22			b20	31	37	209	458	143	82	76
6	34	30	b28		b20	30	30	260	458	139	96	73
7	31	31			b21	28	32	315	576	160	106	71
8	31	28		b24	b22	27	33	432	485	194	99	73
9	37	28			b24	31	34	560	447	199	104	73
10	34	25			b26	23	36	636	396	196	128	76
11	32	26			*28	29	35	702	340	201	112	74
12	31	28			28	23	43	828	331	217	60	73
13	30	b28			27	29	35	870	351	209	55	80
14	30	b26		(*)	29	30	34	784	378	191	52	82
15	29	*b26		25	29	26	35	672	396	191	60	74
16	29	b26			30	28	40	620	402	165	61	71
17	28	b27			28	30	35	656	417	139	55	71
18	28	28			30	32	35	652	402	133	54	73
19	28	28			29	33	34	568	378	154	50	68
20	29	28			28	33	34	477	361	154	48	64
21	28	25	b26		29	31	35	454	340	143	47	60
22	28	20			30	32	37	504	318	141	52	77
23	28	b19		b24	29	33	42	624	302	145	84	78
24	28	b18			30	30	45	656	299	143	84	67
25	28	b17			29	29	43	660	265	154	84	66
26	46	b19			28	29	48	716	239	165	83	60
27	36	b22			26	30	54	689	234	149	82	53
28	32	b25			29	32	63	604	231	139	80	49
29	29	b27			-	34	82	544	223	135	82	48
30	32	*b30			-	33	94	508	194	127	88	48
31	28	-			-	34	-	489	-	91	83	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	963	46	28	31.1	1,910
November	772	31	17	25.7	1,530
December	826	-	-	26.6	1,640
Calendar year 1940	28,480	552	17	77.8	56,490
January	745	-	-	24.0	1,480
February	740	30	20	26.4	1,470
March	931	34	25	30.0	1,850
April	1,241	94	30	41.4	2,460
May	16,286	870	104	525	32,300
June	11,122	576	194	371	22,060
July	4,970	217	91	160	9,860
August	2,405	128	47	77.6	4,770
September	2,097	82	48	69.9	4,160
Water year 1940-41	43,098	870	17	118	85,490

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

Cottonwood Creek near Orangeville, Utah

Location.- Water-stage recorder, lat. 39°15'55", long. 111°07'40", in SW¼ sec. 10, T. 18 S., R. 7 E., 2 miles upstream from Grimes Wash and 5 miles northwest of Orangeville.

Drainage area.- 200 square miles.

Records available.- May 1909 to September 1927 (fragmentary), May 1932 to September 1941.

Average discharge.- 25 years (1910-20, 1921-27, 1932-41), 106 second-feet.

Extremes.- Maximum discharge during year, 2,870 second-feet Aug. 9 (gage height, 6.38 feet) from rating curve extended above 1,000 second-feet; minimum recorded, 11 second-feet Mar. 10, 12, but may have been less during period of ice effect.
1909-27, 1932-41: Maximum discharge, that of Aug. 9, 1941; minimum observed, 4 second-feet Jan. 24, 1933 (discharge measurement) but may have been less during periods of ice effect.

Remarks.- Records good except those for periods of ice effect or no gage-height record, which are fair. Small diversions above station for irrigation. Ephraim and Spring City tunnels constructed by Bureau of Reclamation in 1936 and 1938, respectively, and several small canals divert from headwaters of Cottonwood Creek to Great Basin for irrigation in San Pitch River Basin.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	23	20	23		b17	20	38	77	662	242	64	a33
2	24	20	22		b16	20	31	92	656	224	61	a34
3	23	22			b15	*20	29	121	656	211	59	a34
4	23	20			b14	19	28	140	610	198	57	a34
5	26	18			b14	20	33	137	580	186	54	a34
6	24	20	b22		b14	19	24	153	580	178	59	34
7	23	21			b15	16	26	183	694	169	80	33
8	23	20			b16	18	26	238	574	158	61	34
9	26	20			b17	20	28	318	514	150	148	34
10	25	18			b18	18	30	385	440	130	162	34
11	23	20			*18	20	29	468	395	126	a100	33
12	23	20			18	18	49	592	390	119	a60	32
13	23	b20			18	20	34	708	415	119	a50	34
14	23	b19	(*)		18	20	33	701	462	112	a42	34
15	23	*b19			18	18	35	610	520	110	a45	33
16	23	b19		b17	18	20	38	568	580	108	63	31
17	23	b20			18	24	28	642	623	98	a50	30
18	23	21			18	28	27	754	642	92	a45	34
19	23	21			18	32	27	662	616	100	a42	32
20	23	20			18	33	26	484	616	91	a40	29
21	23	18	b19		18	32	27	430	604	82	a38	29
22	23	b17			19	37	31	468	586	76	a37	68
23	23	b16			20	31	35	623	556	74	a37	66
24	23	b15			20	24	40	708	538	74	a36	44
25	23	b15			20	23	40	789	452	76	a35	44
26	37	b16			18	23	47	852	385	82	a35	39
27	25	b78			18	27	50	838	331	77	a34	35
28	22	b19			20	30	62	734	293	70	a34	33
29	21	b20			-	29	74	688	270	68	a33	33
30	22	*b21			-	29	77	694	259	66	a33	32
31	21	-			-	34	-	675	-	66	a33	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	733	37	21	23.6	1,450
November	633	78	15	21.1	1,260
December	620	-	-	20.0	1,230
Calendar year 1940	31,165	1,000	-	85.1	61,800
January	527	-	-	17	1,050
February	489	20	14	17.5	970
March	744	37	18	24.0	1,480
April	1,102	77	24	36.7	2,190
May	15,532	852	77	501	30,810
June	15,499	694	259	517	30,740
July	3,732	242	66	120	7,400
August	1,727	162	33	55.7	3,430
September	1,063	68	29	36.1	2,150
Water year 1940-41	42,421	852	-	116	84,160

* Winter discharge measurement made on this day.
a No gage-height record; discharge computed on basis of records for Huntington Creek near Huntington and Price River above reservoir near Scofield.
b Stage-discharge relation affected by ice.

Fremont River below Fish Lake, near Fremont, Utah

Location.- Water-stage recorder, lat. 38°35'30", long. 111°40'30", in NE¼ sec. 34, T. 25 S., R. 2 E., half a mile downstream from outlet gates of Fish Lake, 3¾ miles northeast of Twin Creeks ranger station, and 10 miles northwest of Fremont.

Drainage area.- 27 square miles.

Records available.- June 1939 to September 1941.

Extremes (regulated).- Maximum daily discharge during year, 90 second-feet June 29; practically no flow at times when gates are closed at outlet of Fish Lake.
1939-41: Maximum daily discharge, that of June 29, 1941; practically no flow at times when gates are closed at outlet of Fish Lake.

Remarks.- Records good except those for periods of no gage-height record, which are fair. Flow regulated by gates at outlet of Fish Lake, half a mile upstream. No diversions above station.

Rating table, water year 1940-41 (gage height, in feet, and discharge, in second-feet)

7.40	0	8.00	8	9.00	57
7.60	1	8.20	14	9.20	71
7.70	2	8.40	22	9.50	95
7.80	4	8.60	32	9.80	121
4.90	6	8.80	44		

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.2									84	36	16
2	.2									81	34	16
3	.2									77	33	15
4	.2									75	32	14
5	.2									71	32	14
6	.2								a0.2	68	32	14
7	.2									67	31	13
8										65	34	12
9										62	36	12
10										60	36	* 12
11										60	36	9
12	(*)									59	36	2
13									*.2	58	35	2
14									.2	56	33	2
15		a0.2	a0.2	a0.2	a0.2	a0.2	a0.2	a0.2	.2	53	32	1
16									.4	51	32	1
17									.4	51	31	1
18									.4	49	30	1
19	a.2								.4	49	27	.8
20									.4	48	24	a.8
21									.2	46	23	a.8
22									.2	45	22	a.8
23									.2	44	22	a.8
24									.2	43	22	a.8
25									.2	43	21	a.5
26									.2	41	20	a.5
27									.2	40	20	a.5
28									46	40	20	a.5
29					-				90	39	20	a.5
30					-				86	37	18	a.5
31		-			-		-		-	37	17	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	6.2	-	-	0.2	12
November	6.0	-	-	.2	12
December	6.2	-	-	.2	12
Calendar year 1940	1,751.4	58	-	4.8	3,480
January	6.2	-	-	.2	12
February	5.6	-	-	.2	11
March	6.2	-	-	.2	12
April	6.0	-	-	.2	12
May	6.2	-	-	.2	12
June	228.4	90	-	7.61	453
July	1,699	84	37	54.8	3,370
August	877	36	17	28.3	1,740
September	164.8	16	-	5.49	327
Water year 1940-41	3,017.8	90	-	8.3	5,980

* Discharge measurement made on this day.
a No gage-height record; gates closed at lake outlet; discharge computed on basis of three discharge measurements.

Fremont River near Bicknell, Utah

Location.- Staff gage, lat. 38°18', long. 111°31', in NE¼ sec. 7, T. 29 S., R. 4 E., 1,000 feet upstream from highway bridge, 1,000 feet downstream from Torrey canal and Mill ditch, 1 mile downstream from Government Creek, and 3 miles southeast of Bicknell.

Drainage area.- 776 square miles.

Records available.- May 1909 to December 1912 (published as Fremont River near Thurber), October 1937 to September 1941.

Extremes.- Maximum daily discharge observed during year, 607 second-feet May 7; minimum daily observed, 32 second-feet July 24.
1909-12, 1937-41: Maximum daily discharge observed, that of May 7, 1941; minimum daily observed, 18 second-feet June 2, 4, 13-15, 17, 18, 1912.

Remarks.- Records poor. Records include flow of Torrey canal and Mill ditch and represent flow of Fremont River above these diversions. Discharge computed by combining flow in canals with that in river below canals. Gages read once daily. Several diversions above station for irrigation. Flow affsected by Fish Lake and Johnson and Forsythe Reservoirs.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	68	62	86	84	82	a86	78	130	69	53	47	66
2	66	63	87	76	78	70	78	194	71	52	44	66
3	67	a70	85	74	77	100	80	309	70	51	47	67
4	65	78	87	73	77	97	78	305	74	42	47	71
5	66	77	85	72	77	92	80	288	80	47	52	75
6	66	54	87	70	73	88	74	447	83	39	54	74
7	69	77	85	74	85	88	74	607	75	44	45	75
8	66	67	87	74	86	a89	77	561	82	61	62	74
9	72	78	86	70	86	90	75	538	79	41	63	72
10	68	77	86	65	89	87	77	493	73	42	65	73
11	66	114	82	79	92	88	81	350	69	61	62	76
12	67	105	92	73	99	87	108	340	64	45	60	75
13	66	100	88	73	90	87	81	304	65	47	48	80
14	70	72	74	70	93	87	75	201	64	50	48	64
15	66	73	83	79	91	90	75	157	49	50	66	65
16	66	76	69	75	106	98	74	137	48	55	64	66
17	66	73	72	74	103	87	74	142	62	52	66	74
18	66	81	72	72	107	85	75	128	58	62	67	74
19	67	82	72	75	103	87	75	128	59	82	63	76
20	69	84	73	76	108	82	75	98	59	48	64	74
21	71	80	75	70	121	88	74	80	61	45	62	75
22	74	108	73	74	116	88	74	81	73	50	62	77
23	74	80	73	73	109	85	63	84	79	42	63	74
24	a74	80	74	73	109	85	74	83	76	32	64	83
25	74	83	77	79	103	82	87	106	63	40	65	84
26	79	82	70	83	98	84	75	82	63	93	63	a84
27	82	83	76	85	98	78	76	85	64	36	64	a84
28	77	80	82	79	a92	82	78	72	58	48	63	84
29	68	80	77	81	-	74	61	69	60	42	67	87
30	65	86	78	82	-	80	84	68	57	43	65	85
31	64	-	78	84	-	78	-	72	-	49	67	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	2,144	82	64	69.2	4,250
November	2,405	114	54	80.2	4,770
December	2,471	92	69	79.7	4,900
Calendar year 1940	25,831	121	39	70.6	51,240
January	2,341	85	65	75.5	4,640
February	2,648	121	73	94.6	5,250
March	2,669	100	70	86.1	5,290
April	2,330	108	63	77.7	4,620
May	6,739	607	68	217	13,370
June	2,007	83	48	66.9	3,980
July	1,544	93	32	49.8	3,060
August	1,839	67	44	59.3	3,650
September	2,254	87	64	75.1	4,470
Water year 1940-41	31,391	607	32	86.0	62,250

a No gage-height record; discharge interpolated.

San Juan River near Pagosa Springs, Colo.

Location.- Water-stage recorder, lat. 37°22'05", long. 106°53'40", in SE¼ sec. 12, T. 36 N., R. 1 W., a quarter of a mile upstream from private highway bridge, half a mile upstream from West Fork of San Juan River, and 9.5 miles northeast of Pagosa Springs.

Drainage area.- 86.9 square miles.

Records available.- May 1935 to September 1941.

Extremes.- Maximum discharge during year, 2,070 second-feet May 12 (gage height, 4.84 feet), from rating curve extended above 1,220 second-feet; minimum daily, 13 second-feet Jan. 3.

1935-41: Maximum discharge, that of May 12, 1941; minimum daily, 5.5 second-feet Dec. 20, 1939.

Greatest flood known occurred Oct. 5, 1911.

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

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	67	29	24	20	23	22	87	382	796	646	140	54
2	53	31	24	19	21	24	69	445	808	598	130	52
3	48	32	24	13	20	23	62	475	784	646	122	49
4	43	30	23	14	21	22	69	460	820	652	115	46
5	140	23	23	17	22	24	69	556	826	748	112	44
6	135	26	24	20	22	23	60	736	808	592	125	42
7	89	26	24	19	23	22	59	862	868	574	125	41
8	72	27	23	18	25	22	69	984	1,140	545	140	43
9	64	27	24	20	*24	23	94	1,260	958	556	135	45
10	57	25	25	20	*24	24	125	1,390	778	525	130	40
11	51	17	25	19	*24	23	98	1,580	688	510	110	38
12	45	16	24	21	24	22	89	1,710	682	445	103	37
13	42	16	21	22	24	23	84	1,680	628	364	108	59
14	39	*14	20	21	*25	24	77	1,610	622	368	127	185
15	37	18	18	*20	24	24	77	1,250	712	337	233	108
16	37	21	16	17	22	24	80	1,120	754	328	176	84
17	33	23	21	19	22	28	78	1,120	844	324	159	91
18	31	25	23	19	22	*36	72	1,310	1,010	360	140	105
19	28	27	21	19	*23	45	63	1,240	1,240	355	120	117
20	27	26	19	20	21	51	59	940	1,260	342	110	185
21	25	25	20	21	21	46	62	862	1,260	286	103	162
22	24	24	21	21	20	43	60	862	1,190	260	93	145
23	24	24	22	21	21	42	60	916	1,230	224	84	148
24	23	23	24	20	23	40	78	1,050	1,220	230	77	125
25	23	23	23	21	23	37	117	1,020	1,190	224	72	112
26	24	23	20	19	21	37	130	1,150	1,120	212	67	100
27	41	24	23	20	20	39	194	1,080	998	203	62	94
28	38	21	24	21	21	43	246	984	856	191	59	100
29	37	22	24	23	-	45	324	940	760	179	63	200
30	36	23	23	24	-	46	382	838	724	162	74	215
31	30	-	22	23	-	62	-	808	-	148	60	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	1,463	140	23	47.2	2,900
November	711	32	14	23.7	1,410
December	692	25	16	22.3	1,370
Calendar year 1940	28,667.2	508	60	78.3	56,870
January	611	24	13	19.7	1,210
February	626	25	20	22.4	1,240
March	1,009	62	22	32.5	2,000
April	3,183	382	59	106	6,310
May	31,620	1,710	382	1,020	62,720
June	27,574	1,260	622	919	54,690
July	12,134	748	148	391	24,070
August	3,474	233	59	112	6,890
September	2,866	215	37	95.5	5,680
Water year 1940-41	85,963	1,710	13	236	170,500

* Winter discharge measurement made on this day.

Note.- Stage-discharge relation affected by ice Nov. 12-24, Nov. 29 to Jan. 22, Jan. 27 to Feb. 17, Mar. 1-13.

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San Juan River at Pagosa Springs, Colo.

Location.- Water-stage recorder, lat. 37°15'55", long. 107°00'40", in S½ sec. 13, T. 35 N., R. 2 W., under lower highway bridge at town of Pagosa Springs. Datum of gage is 7,052.03 feet above mean sea level, unadjusted.

Drainage area.- 298 square miles.

Records available.- January 1911 to November 1914, May 1935 to September 1941.

Extremes.- Maximum discharge during year, 5,790 second-feet May 13 (gage height, 7.92 feet), from rating curve extended above 4,500 second-feet; minimum daily, 44 second-feet Jan. 3.

1911-14, 1935-41: Maximum discharge, that of May 13, 1941; minimum daily, 22 second-feet Dec. 19, 1938.

Greatest flood known occurred Oct. 5, 1911 (discharge, about 25,000 second-feet; gage height, 17.8 feet, revised).

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

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	294	100	85	72	64	95	434	1,170	2,340	2,370	434	147
2	240	102	85	71	61	100	309	1,350	2,510	2,260	399	140
3	212	104	84	44	63	95	291	1,420	2,630	2,270	369	129
4	185	100	82	48	67	88	303	1,390	2,620	2,350	345	122
5	459	82	82	60	68	96	319	1,460	2,540	2,830	338	114
6	667	92	84	75	74	84	273	1,740	2,440	2,230	372	110
7	410	88	82	67	87	84	279	1,920	2,660	2,040	395	104
8	325	92	82	64	81	82	348	2,210	3,450	2,090	430	104
9	279	90	85	68	81	88	446	2,690	2,910	1,960	434	116
10	246	92	88	68	76	79	490	3,020	2,410	1,860	402	106
11	215	67	90	a65	75	79	399	3,370	2,120	1,880	352	100
12	193	66	84	a70	78	84	399	3,920	1,960	1,870	316	98
13	177	54	72	a75	78	92	391	4,640	1,910	1,700	291	129
14	162	54	72	a70	81	88	338	4,560	1,970	1,530	300	442
15	150	66	54	69	85	88	348	3,810	2,120	1,380	515	270
16	138	76	50	52	85	93	352	3,300	2,230	1,300	418	210
17	129	82	79	57	87	114	338	3,340	2,540	1,300	348	210
18	120	84	84	58	86	145	306	3,540	3,070	1,540	325	246
19	112	95	71	66	92	169	270	3,120	3,540	1,470	288	306
20	108	92	66	67	88	187	252	2,780	3,610	1,470	270	490
21	100	88	71	71	90	182	279	2,420	3,810	1,270	264	477
22	98	87	76	67	87	185	273	2,370	3,810	1,160	243	414
23	95	84	78	68	90	207	288	2,280	4,040	1,040	215	477
24	92	81	88	64	98	196	406	2,540	3,940	1,040	201	383
25	88	79	82	68	95	169	606	2,640	3,640	988	190	338
26	88	81	69	58	84	169	779	2,720	3,570	835	180	300
27	140	82	74	62	79	172	996	2,740	3,210	737	169	276
28	120	74	88	63	82	204	1,110	2,580	3,170	642	159	276
29	116	76	84	79	-	210	1,180	2,410	2,750	578	159	589
30	125	82	84	78	-	235	1,220	2,520	2,510	515	185	572
31	104	-	81	74	-	325	-	2,620	-	464	162	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	5,987	667	88	193	11,880
November	2,492	104	54	83.1	4,940
December	2,436	90	50	78.6	4,830
Calendar year 1940	85,161	1,370	30	233	168,900
January	2,038	79	44	65.7	4,040
February	2,264	98	61	80.9	4,490
March	4,284	325	79	138	8,500
April	14,022	1,220	252	467	27,810
May	82,610	4,640	1,170	2,665	163,900
June	86,030	4,040	1,910	2,868	170,600
July	46,969	2,830	464	1,515	93,160
August	9,468	434	159	305	18,780
September	7,795	589	98	260	15,460
Water year 1940-41	266,395	4,640	44	730	528,400

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

San Juan River at Rosa, N. Mex.

Location.- Water-stage recorder, lat. 37°00'20", long. 107°24'10", in sec. 21, T. 32 N., R. 5 W., about 75 feet upstream from highway bridge, a quarter of a mile downstream from Piedra River, and about a mile north of Rosa.

Drainage area.- 1,990 square miles.

Records available.- October 1930 to September 1941 in reports of Geological Survey. September 1920 to December 1931 in reports of State engineer.

Average discharge.- 21 years (1920-41), 1,227 second-feet.

Extremes.- Maximum discharge during year, 16,800 second-feet May 13 (gage height, 8.26 feet), from rating curve extended above 10,200 second-feet by logarithmic plotting; minimum daily, 140 second-feet (estimated) Dec. 16.

1930-41: Maximum discharge and gage height, those of May 13, 1941; minimum daily discharge, 70 second-feet (estimated) Dec. 1, 2, 1934.

Greatest flood known occurred Oct. 5, 1911.

Remarks.- Records good except those for periods of ice effect, which are poor. Diversions above station for irrigation.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,280	*344	280	290	270	644	3,850	8,670	6,390	5,510	a1,200	478
2	866	332	270	*240	250	942	2,790	9,620	6,390	5,150	a1,120	454
3	722	344	260	250	220	764	2,420	9,300	6,650	5,150	a1,070	424
4	655	358	260	160	220	636	2,210	10,600	6,920	5,390	1,040	375
5	760	325	260	170	240	780	2,640	8,670	6,650	6,520	1,010	360
6	2,400	351	*270	190	*260	684	2,420	9,620	6,390	5,760	1,050	345
7	1,260	301	260	180	280	620	2,350	9,950	7,060	4,920	1,240	316
8	980	295	250	170	320	557	2,720	10,300	11,300	4,920	1,220	302
9	860	307	260	160	320	578	3,040	11,000	9,950	4,690	1,330	325
10	737	332	290	*170	325	532	3,850	10,600	8,670	4,160	1,530	330
11	638	289	300	200	320	490	3,290	11,700	6,390	4,260	1,250	302
12	564	*202	290	240	355	520	3,380	13,200	5,630	4,260	1,030	284
13	516	190	270	300	*375	606	3,660	13,600	a5,300	4,160	924	340
14	484	170	220	250	414	628	2,870	13,600	a5,400	3,560	888	1,610
15	453	190	170	200	460	1,070	2,790	12,000	5,630	3,290	1,430	1,220
16	425	220	140	190	544	1,490	2,790	10,300	6,000	3,120	1,490	861
17	404	255	*170	*180	564	1,600	2,870	10,300	6,520	3,040	1,350	692
18	377	283	270	190	613	1,620	2,870	11,000	7,480	3,470	1,380	852
19	358	370	220	180	724	1,690	2,560	9,950	8,670	3,470	1,070	1,230
20	336	377	190	210	748	1,650	2,070	7,480	8,670	4,160	933	1,690
21	325	351	230	220	897	2,000	2,280	6,780	8,670	3,120	879	2,000
22	307	*313	210	210	a950	1,760	3,120	6,920	8,670	3,040	825	1,350
23	289	307	190	200	a850	2,000	2,720	6,780	8,670	2,560	724	2,000
24	283	295	220	200	a900	2,420	2,640	7,620	9,300	2,280	644	1,370
25	277	301	270	*230	a900	1,880	3,760	8,360	8,980	2,560	592	1,160
26	283	301	220	210	a700	1,680	5,510	8,670	8,360	2,210	550	996
27	626	290	200	220	a650	1,530	8,360	8,670	7,620	a2,000	514	897
28	500	270	190	250	585	1,740	9,950	8,060	7,480	a1,850	472	816
29	411	*250	250	290	-	2,000	8,670	7,200	6,520	a1,700	448	2,070
30	390	270	300	320	-	2,140	8,360	6,780	5,760	a1,500	514	2,210
31	384	-	320	290	-	2,640	-	6,390	-	a1,300	538	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	19,152	2,400	277	618	37,990
November	8,783	377	170	293	17,420
December	7,500	320	140	242	14,880
Calendar year 1940	231,314	3,420	90	632	458,800
January	6,760	320	160	218	13,410
February	14,254	950	220	509	28,270
March	39,891	2,640	490	1,287	79,120
April	112,810	9,950	2,070	3,760	223,800
May	293,690	13,600	6,390	9,474	582,500
June	222,090	11,300	5,300	7,403	440,500
July	113,080	6,520	1,300	3,648	224,300
August	30,255	1,530	448	976	60,010
September	27,659	2,210	284	922	54,860
Water year 1940-41	895,924	13,600	140	2,455	1,777,000

Peak discharge.- Oct. 6 (2 a.m.) 3,760 sec.-ft.; May 13 (4 a.m.) 16,800 sec.-ft.; July 20 (5:30 a.m.) 5,270 sec.-ft.; July 22 (8:30 p.m.) 5,630 sec.-ft.; Sept. 29 (11 p.m.) 3,380 sec.-ft.

* Winter discharge measurement made on this day.

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

Note.- Stage-discharge relation affected by ice Nov. 13-16, 27-30, Dec. 1 to Feb. 7.

San Juan River near Blanco, N. Mex.

Location.- Water-stage recorder, lat. 36°44', long. 107°49', in sec. 18, T. 29 N., R. 9 W., half a mile upstream from highway bridge, 1 mile upstream from Canyon Largo, and 1½ miles east of Blanco.

Drainage area.- 3,320 square miles.

Records available.- December 1908 to October 1910 (gage heights only January to October 1910) and October 1930 to September 1941 in reports of Geological Survey. December 1908 to December 1909 and June 1927 to December 1931 in reports of State engineer.

Average discharge.- 13 years (1928-41), 1,558 second-feet.

Extremes.- Maximum discharge during year, 23,300 second-feet May 14 (gage height, 8.46 feet), from rating curve extended above 12,000 second-feet by logarithmic plotting; minimum daily, 221 second-feet Nov. 15.

1930-41: Maximum discharge and gage height, those of May 14, 1941; minimum daily discharge, 17 second-feet Aug. 18, 24, 25, 1939.

Remarks.- Records good except those estimated, which are fair. Diversions above station for irrigation.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2,130	455	361	a490	490	1,050	4,640	10,100	7,740	7,510	1,560	668
2	1,490	443	378	a420	431	1,770	4,480	13,800	7,970	7,070	1,400	616
3	1,240	437	361	*b370	367	1,560	3,230	12,700	7,970	7,070	1,300	710
4	1,120	443	356	a300	334	1,120	2,830	a13,000	8,450	7,070	1,230	550
5	1,030	443	350	a270	339	1,140	3,230	a14,000	8,210	7,740	1,160	484
6	2,760	419	350	a290	350	1,390	2,990	a12,000	8,450	7,970	1,130	484
7	2,210	401	361	a290	389	1,140	2,810	a13,000	8,210	6,860	1,330	460
8	1,640	401	350	*303	384	960	3,010	a14,000	13,200	6,650	1,360	449
9	1,390	389	345	313	384	900	3,380	a15,000	13,900	6,650	1,440	438
10	1,230	407	356	297	407	860	4,330	15,300	12,500	6,250	1,860	416
11	1,070	431	425	318	389	707	3,890	15,900	9,480	6,060	1,540	394
12	950	350	462	373	395	716	4,030	17,900	7,510	6,060	1,260	366
13	861	273	449	419	462	860	4,330	19,300	7,290	6,060	1,110	416
14	770	263	*395	419	525	910	3,750	20,100	7,070	5,510	1,040	1,510
15	716	221	268	413	600	1,770	3,110	17,800	7,070	5,170	1,230	1,740
16	656	244	a230	345	672	2,200	3,210	15,400	7,510	4,700	1,680	1,110
17	608	297	a240	334	920	2,560	3,280	14,500	7,970	3,980	1,550	884
18	570	339	a310	268	930	2,580	3,230	14,500	8,950	4,260	1,480	884
19	525	407	*b380	263	1,270	2,630	3,010	13,500	10,000	4,400	1,260	1,300
20	490	540	a420	268	1,420	2,630	2,760	10,600	10,900	4,850	1,060	1,940
21	469	455	a350	345	1,800	2,650	2,370	9,220	10,900	4,120	980	2,440
22	449	431	a310	345	1,940	2,850	3,850	8,950	10,600	3,840	932	1,990
23	431	413	a290	334	1,660	2,780	4,180	8,950	10,600	3,710	876	2,360
24	407	413	a350	313	1,790	3,890	3,360	9,220	12,500	3,120	804	1,740
25	389	395	a500	229	1,770	3,430	3,890	10,300	12,200	3,230	773	1,430
26	389	401	a410	345	1,740	2,690	6,200	10,300	11,200	3,010	738	1,240
27	487	401	a350	339	1,220	2,000	7,570	10,600	10,000	2,700	710	1,100
28	824	395	a340	323	1,060	2,130	11,600	10,000	9,760	2,440	675	1,060
29	585	373	a370	373	-	2,500	10,800	8,950	8,950	2,130	628	2,490
30	504	345	a430	425	-	2,780	10,100	8,450	7,970	1,990	616	3,230
31	504	-	a530	511	-	3,360	-	7,970	-	1,800	675	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	28,874	2,760	389	931	57,270
November	11,625	540	221	388	23,060
December	11,377	530	230	367	22,570
Calendar year 1940	285,766	3,890	25	781	566,800
January	10,645	511	229	343	21,110
February	24,438	1,940	334	873	48,470
March	60,513	3,890	707	1,952	120,000
April	133,450	11,600	2,370	4,448	264,700
May	395,310	20,100	7,970	12,750	784,100
June	285,030	13,900	7,070	9,501	565,300
July	153,980	7,970	1,800	4,967	305,400
August	35,407	1,860	616	1,142	70,230
September	34,899	3,230	366	1,163	69,220
Water year 1940-41	1,185,548	20,100	221	3,248	2,351,000

Peak discharge.- Oct. 6 (1 p.m.) 4,480 sec.-ft.; May 14 (12 m.) 23,300 sec.-ft.; Sept. 19 (12 p.m.) 3,840 sec.-ft.; Sept. 21 (11 a.m.) 3,010 sec.-ft.; Sept. 22 (6 p.m.) 3,120 sec.-ft.; Sept. 30 (4 a.m.) 4,260 sec.-ft.

* Winter discharge measurement made on this day.

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

b Stage-discharge relation affected by ice.

San Juan River at Farmington, N. Mex.

Location.- Water-stage recorder, lat. 36°43', long. 108°13', in NE¼NE¼ sec. 20, T. 29 N., R. 13 W., 1,900 feet downstream from Animas River and 1 mile southwest of Farmington.

Drainage area.- 6,580 square miles.

Records available.- June 1904 to September 1906, September 1912 to December 1914 and October 1930 to September 1941 in reports of Geological Survey. September 1912 to July 1918 and November 1921 to December 1931 in reports of State engineer.

Average discharge.- 18 years (1922-25, 1926-41), 2,596 second-feet.

Extremes.- Maximum discharge during year, 32,200 second-feet May 13 (gage height, 7.34 feet), from rating curve extended above 24,400 second-feet by logarithmic plotting; minimum daily, 451 second-feet Dec. 16.

1930-41: Maximum discharge, 32,800 second-feet Sept. 28, 1935 (gage height, 8.0 feet, estimated), from rating curve extended above 18,000 second-feet; minimum daily, 27 second-feet Aug. 22, 1939.

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

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3,330	820	704	1,010	982	1,630	4,760	11,600	11,100	12,000	2,860	905
2	2,630	738	720	840	910	2,380	6,420	17,300	11,700	11,700	2,540	808
3	2,120	774	712	747	756	2,710	4,530	17,000	12,300	11,400	2,300	781
4	1,860	765	704	612	738	1,710	3,700	22,200	13,300	11,700	2,160	826
5	1,710	783	696	550	712	1,610	3,840	24,700	13,000	11,700	2,000	620
6	2,780	765	688	577	704	2,150	3,880	18,400	13,600	12,600	1,900	650
7	3,670	696	696	584	850	1,820	3,780	19,100	12,600	11,400	2,180	665
8	2,890	704	696	619	870	1,550	3,840	19,900	15,700	11,100	2,760	612
9	2,400	680	680	612	850	1,490	4,460	21,400	19,900	11,100	3,690	590
10	2,200	720	680	633	810	1,350	5,360	23,800	17,500	10,800	4,820	562
11	2,000	738	890	648	922	1,160	5,820	23,800	14,300	10,800	3,440	555
12	1,750	729	994	830	922	1,090	5,570	25,500	11,400	10,800	2,540	534
13	1,610	591	958	994	994	1,200	5,530	28,000	10,500	10,500	2,110	673
14	1,460	550	801	958	1,020	1,440	5,320	30,000	10,300	9,980	1,880	2,780
15	1,330	544	605	870	1,170	2,170	4,160	28,000	11,100	8,900	1,950	3,640
16	1,220	550	451	756	1,350	3,270	4,200	23,300	12,000	8,120	2,860	2,410
17	1,130	605	493	664	1,710	3,700	4,160	20,700	12,600	7,380	3,080	2,240
18	1,070	729	672	591	1,750	3,780	4,240	21,500	14,300	7,380	2,830	2,060
19	1,010	910	774	550	2,000	3,200	4,060	21,500	17,100	7,140	2,410	2,640
20	958	1,130	870	598	2,400	3,270	3,670	19,100	19,100	7,620	1,970	4,210
21	890	994	729	688	2,920	2,920	3,070	13,900	19,100	6,680	1,720	4,930
22	860	890	648	720	3,300	3,640	4,420	12,000	18,700	6,460	1,570	4,740
23	801	840	605	712	2,980	3,200	5,990	13,000	18,300	6,680	1,480	7,620
24	765	840	720	633	2,980	3,740	4,570	11,700	19,500	6,230	1,370	5,230
25	720	792	1,070	712	2,710	4,380	4,650	13,600	20,300	6,230	1,270	3,670
26	688	756	870	738	2,630	3,300	7,330	15,300	18,300	5,800	1,150	3,110
27	738	729	729	696	1,980	2,400	8,720	15,300	17,500	5,120	1,040	2,810
28	1,160	738	696	664	1,710	2,860	12,500	15,700	16,400	5,000	936	2,760
29	1,010	712	738	830	-	3,110	13,100	13,300	15,000	4,350	845	4,680
30	890	688	900	910	-	3,600	11,900	11,700	13,300	3,800	826	6,230
31	820	-	1,110	934	-	3,950	-	11,400	-	3,270	875	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	48,470	3,670	688	1,564	96,140
November	22,500	1,130	544	750	44,630
December	23,299	1,110	451	752	46,210
Calendar year 1940	492,689	6,850	83	1,346	977,200
January	22,480	1,010	550	725	44,590
February	43,630	3,300	704	1,558	86,540
March	79,780	4,380	1,090	2,574	158,200
April	167,550	13,100	3,070	5,585	332,300
May	583,700	30,000	11,400	18,830	1,158,000
June	449,800	20,300	10,300	14,990	892,200
July	263,740	12,600	3,270	8,508	523,100
August	65,361	4,820	826	2,108	129,600
September	74,541	7,620	534	2,485	147,800
Water year 1940-41	1,844,851	30,000	451	5,054	3,659,000

Peak discharge.- May 13 (6 p.m.) 32,200 sec.-ft.; Aug. 9 (11:30 p.m.) 7,870 sec.-ft.; Sept. 17 (6:30 p.m.) 5,800 sec.-ft.; Sept. 20 (11:30 p.m.) 6,680 sec.-ft.; Sept. 23 (1:30 a.m.) 8,900 sec.-ft.; Sept. 30 (3 a.m.) 7,380 sec.-ft.

San Juan River at Ship Rock, N. Mex.

Location.- Water-stage recorder, lat. 36°47'35", long. 108°43'55", in SW¼ sec. 22, T. 30 N., R. 18 W., 3 miles northwest of Ship Rock and about 6 miles downstream from Chaco River. Datum of gage 4,848.6 feet above mean sea level (river-profile survey).

Drainage area.- 12,800 square miles.

Records available.- January to October 1911, October 1930 to September 1931 and October 1932 to September 1941 in reports of Geological Survey. January to October 1911 and November 1915 to December 1931 in reports of State engineer.

Average discharge.- 21 years (1916-20, 1921-25, 1927-31, 1932-41), 2,903 second-feet.

Extremes.- Maximum discharge during year, 32,400 second-feet May 14 (gage height, 10.02 feet), from rating curve extended above 26,200 second-feet by logarithmic plotting; minimum daily, 590 second-feet Nov. 16.

1930-31, 1932-41: Maximum discharge, 44,200 second-feet Sept. 28, 1935, from rating curve extended above 20,000 second-feet by logarithmic plotting; maximum gage height, that of May 14, 1941; minimum daily discharge, 8 second-feet Aug. 25, 26, 1939.

A stage of about 6.5 feet, former site and datum, occurred Aug. 11, 1929 (discharge, about 80,000 second-feet). A greater discharge probably occurred Oct. 6, 1911, when a stage of 22.0 feet on old gage (relation to present datum unknown) was recorded.

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

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3,600	949	745	2,100	1,160	1,230	4,410	12,500	12,100	12,500	2,920	905
2	3,260	872	760	1,400	1,180	1,630	6,400	16,500	12,500	11,600	2,630	872
3	2,300	841	769	916	1,020	3,050	4,900	19,300	12,500	11,200	2,360	805
4	1,780	778	760	814	850	1,920	4,290	22,400	13,500	11,600	2,220	883
5	1,480	760	752	738	814	1,570	4,060	25,100	14,000	12,100	2,160	796
6	1,920	769	760	708	752	2,200	4,290	17,000	14,400	13,500	2,040	805
7	4,170	745	769	722	787	2,000	3,940	17,600	14,400	12,100	2,120	796
8	3,200	715	760	738	949	1,760	3,820	18,700	16,000	11,000	2,550	745
9	2,710	700	760	685	988	1,520	4,170	19,900	21,200	11,000	3,480	700
10	2,320	730	796	730	894	1,460	4,780	21,200	18,200	10,800	6,960	861
11	2,040	738	938	787	1,100	1,230	5,680	23,100	14,900	10,200	3,600	1,070
12	1,860	752	1,310	861	1,180	938	5,410	25,100	11,600	10,600	2,650	1,310
13	1,690	715	1,350	1,200	1,310	974	5,540	27,900	10,800	10,200	2,360	1,820
14	1,550	614	1,230	1,300	1,400	1,210	5,410	30,100	10,800	9,600	2,180	2,990
15	1,460	596	927	916	1,390	1,720	4,530	28,600	11,200	8,320	2,140	4,170
16	1,400	590	672	715	1,590	3,270	4,530	24,400	12,500	7,640	2,970	3,230
17	1,350	608	620	614	2,040	3,600	4,410	22,400	13,500	7,000	2,970	2,200
18	1,260	730	872	608	2,260	3,940	4,530	22,400	14,900	6,250	3,120	2,800
19	1,160	894	1,150	602	2,280	3,820	4,410	22,400	18,700	7,000	2,460	2,460
20	1,090	1,040	1,330	596	2,880	3,710	3,940	21,200	19,900	7,000	2,220	4,410
21	949	1,130	1,260	685	3,580	3,490	3,490	17,000	19,900	7,640	2,000	5,150
22	905	1,030	1,070	722	4,290	4,290	4,410	16,000	18,700	6,540	1,820	6,770
23	832	949	988	752	a3,300	3,940	6,100	19,300	18,700	6,400	1,590	13,500
24	805	949	1,100	730	a3,000	4,410	5,020	17,600	19,900	5,820	1,440	6,840
25	778	949	1,920	745	2,990	5,410	4,780	17,000	22,400	5,960	1,200	4,060
26	769	883	1,540	778	3,030	4,170	6,540	15,400	19,300	5,410	1,090	3,160
27	823	850	1,090	760	2,420	3,490	9,040	15,400	17,000	4,780	1,030	2,740
28	1,100	832	778	752	1,540	2,900	12,500	16,000	14,900	4,530	927	2,340
29	1,370	805	949	861	-	3,120	13,500	16,000	14,900	4,060	861	4,610
30	1,180	778	1,150	894	-	3,470	12,500	13,500	13,000	3,600	841	8,670
31	1,030	-	1,800	974	-	3,820	-	12,500	-	3,270	872	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	52,161	4,170	769	1,683	103,500
November	24,291	1,130	590	810	48,180
December	31,675	1,920	620	1,022	62,830
Calendar year 1940	514,460	6,600	20	1,406	1,021,000
January	26,403	2,100	596	852	52,370
February	50,974	4,290	752	1,820	101,100
March	85,262	5,410	938	2,750	169,100
April	171,330	13,500	3,490	5,711	339,800
May	613,500	30,100	12,500	19,790	1,217,000
June	466,300	22,400	10,800	15,540	924,900
July	259,220	13,500	3,270	8,362	514,200
August	69,781	6,960	841	2,251	138,400
September	92,468	13,500	700	3,082	183,400
Water year 1940-41	1,943,365	30,100	590	5,324	3,855,000

a No gage-height record; discharge computed on basis of weather records and records for station at Farmington.

San Juan River near Bluff, Utah

Location.- Water-stage recorder, lat. 37°09', long. 109°52', in SW¼ sec. 7, T. 42 S., R. 19 E., 1,600 feet downstream from Gypsum Wash, 1,800 feet upstream from bridge, and 20 miles southwest of Bluff. Altitude of gage, 4,050 feet (from river-profile map).

Drainage area.- 23,900 square miles.

Records available.- October 1914 to September 1917, March 1927 to September 1941.

Average discharge.- 16 years (1915-17, 1927-41), 2,931 second-feet.

Extremes.- Maximum discharge during year, 34,700 second-feet May 15 (gage height, 20.2 feet); minimum daily, 617 second-feet Sept. 11.

1915-17, 1927-40: Maximum discharge, 70,000 second-feet Sept. 10, 1927 (gage height, 32.0 feet) from rating curve extended above 30,000 second-feet; no flow July 3-13, 1934, Aug. 24-27, 29, 1939.

Flood of Oct. 6, 1911, which is greatest known at Shiprock, N. Mex., probably exceeded that of Sept. 10, 1927, at this station, but stage was not accurately determined.

Remarks.- Records good. Diversions above station for irrigation. No diversions between station and mouth of river.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	9,820	1,060	878	3,200	1,340	2,080	4,450	14,400	13,400	12,900	3,110	922
2	4,100	1,000	854	2,590	1,220	1,890	5,800	14,100	12,900	12,200	2,850	948
3	3,100	981	848	1,850	1,280	2,220	7,250	20,000	12,900	11,600	2,560	922
4	2,340	988	878	1,320	1,160	3,400	5,240	20,000	13,400	11,400	2,420	836
5	5,590	903	866	a1,100	955	2,440	4,480	27,100	13,900	11,600	2,280	788
6	6,240	884	872	910	903	2,090	4,260	25,700	13,900	12,000	2,090	854
7	3,310	896	848	836	1,120	2,330	4,530	20,500	15,100	12,500	1,910	638
8	3,990	884	848	818	1,710	2,320	4,080	21,600	14,100	11,100	2,480	664
9	3,000	812	884	788	1,520	1,960	4,020	21,600	18,900	10,300	3,380	659
10	2,650	788	878	788	1,330	1,760	4,380	23,500	20,200	10,300	8,370	623
11	2,290	836	1,010	830	1,200	1,660	5,270	25,200	17,900	10,500	7,010	617
12	2,140	916	1,150	981	1,460	1,520	6,330	26,000	14,100	10,000	3,870	628
13	1,900	903	1,950	1,360	1,680	1,520	6,330	28,000	11,400	10,000	2,860	759
14	1,750	903	1,760	1,420	1,660	1,670	6,330	33,800	11,100	9,840	2,440	3,370
15	1,590	794	1,370	1,920	1,580	4,700	5,800	32,600	11,400	9,210	3,800	5,100
16	1,530	747	974	1,450	1,550	4,290	4,900	28,300	12,000	8,410	5,800	5,290
17	1,440	742	878	1,150	1,710	4,460	4,930	22,900	12,500	7,630	4,850	3,570
18	1,370	794	759	974	1,920	4,560	4,690	22,100	13,400	7,060	3,740	3,110
19	1,270	2,780	1,430	836	2,930	4,200	4,750	22,600	14,400	6,690	3,400	4,060
20	1,250	3,260	1,450	776	2,990	4,400	4,610	22,600	16,600	7,258	2,700	3,150
21	1,210	1,930	1,290	747	4,290	4,820	4,380	18,100	18,100	7,440	2,290	4,780
22	1,110	1,560	1,250	842	4,670	4,500	4,120	15,100	18,400	7,060	1,960	5,630
23	1,030	1,300	1,030	1,080	4,770	5,500	6,150	15,600	18,400	6,330	1,760	12,700
24	903	1,130	948	1,090	4,080	5,640	7,630	24,200	18,600	6,690	1,600	11,800
25	818	1,050	3,110	1,240	4,140	5,640	6,150	18,900	20,000	6,150	1,470	6,330
26	878	994	2,960	1,660	4,110	5,990	7,560	18,900	20,200	6,510	1,330	4,480
27	1,900	974	2,070	1,280	3,690	4,590	13,000	18,400	17,900	5,560	1,200	3,750
28	1,410	936	1,420	1,170	2,910	3,690	14,800	18,400	16,600	4,740	1,140	3,380
29	1,080	910	1,170	1,260	-	3,220	16,800	16,600	15,600	4,510	1,060	3,360
30	1,370	903	1,760	1,600	-	3,500	14,800	14,600	14,100	4,120	1,000	8,220
31	1,150	-	2,620	1,440	-	3,960	-	14,400	-	3,580	903	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	73,529	9,820	818	2,372	145,800
November	33,558	3,260	742	1,119	66,560
December	41,013	3,110	759	1,323	81,350
Calendar year 1940	597,641	12,130	31	1,633	1,185,000
January	39,206	3,200	747	1,265	77,760
February	63,878	4,770	903	2,281	126,700
March	106,520	5,990	1,520	3,436	211,300
April	197,820	16,800	4,020	6,594	392,400
May	667,000	33,800	14,100	21,520	1,323,000
June	461,400	20,200	11,100	15,380	915,200
July	265,180	12,900	3,580	8,554	526,000
August	87,633	8,370	903	2,827	173,800
September	101,938	12,700	617	3,398	202,200
Water year 1940-41	2,138,675	33,800	617	5,859	4,242,000

a No gage-height record; discharge interpolated.

West Fork of San Juan River above Borns Lake, near Pagosa Springs, Colo.

Location.- Water-stage recorder, lat. 37°29'00", long. 106°55'45", in sec. 36, T. 38 N., R. 1 W., half a mile downstream from Beaver Creek, 1½ miles upstream from Borns Lake, and 16 miles northeast of Pagosa Springs.

Drainage area.- 41.2 square miles.

Records available.- April 1937 to September 1941.

Extremes.- Maximum discharge during year, 888 second-feet June 23 (gage height, 4.87 feet), from rating curve extended above 450 second-feet; minimum not determined, occurred during period of ice effect.

1937-41: Maximum discharge, 1,100 second-feet June 3, 1938 (gage height, 4.43 feet), from rating curve extended above 600 second-feet; minimum not determined.

Greatest flood known occurred Oct. 5, 1911.

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

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	74	31				24	28	59	389	560	125	41
2	54	32				25	22	79	431	530	115	40
3	42	32				26	20	80	474	510	105	38
4	33	30				26	20	74	470	495	95	37
5	117	28				26	22	105	470	660	89	35
6	156	29				25	20	156	461	530	105	34
7	117	29				25	19	170	474	505	110	33
8	94	29				23	20	290	474	490	125	36
9	76	29				24	24	326	386	480	120	35
10	62	26				21	29	398	320	470	105	34
11	51	24				18	26	467	299	470	96	33
12	43	22				23	23	550	296	455	86	33
13	39	21				26	21	572	314	435	79	56
14	38	*20				27	20	558	353	405	73	93
15	38	22	21	14	20	29	20	477	401	365	110	69
16	38	24				26	20	458	455	365	100	54
17	38	26				24	19	502	526	335	88	62
18	37	27				21	18	508	628	395	76	73
19	36	29				*21	18	440	670	390	70	90
20	35	29				24	18	365	630	370	66	139
21	35	29				20	18	329	680	340	65	115
22	34	28				19	18	323	710	300	60	114
23	34	27				18	18	332	790	280	55	124
24	32	26				18	18	386	790	260	54	114
25	31	25				17	20	425	760	230	51	96
26	33	25				17	23	470	730	205	47	84
27	30	24				16	32	458	710	185	45	76
28	33	24				17	35	425	690	170	43	79
29	35	24			-	16	47	383	650	160	46	115
30	35	25			-	18	59	362	600	145	47	107
31	32	-			-	26	-	365	-	135	43	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	1,582	156	30	51.0	3,140
November	796	32	20	26.5	1,580
December	651	-	-	21.0	1,290
Calendar year 1940	17,840	263	-	48.7	35,390
January	434	-	-	14.0	861
February	560	-	-	20.0	1,110
March	686	29	16	22.1	1,360
April	715	59	18	23.8	1,420
May	10,892	572	59	351	21,600
June	16,031	790	296	534	31,800
July	11,625	660	135	375	23,060
August	2,494	125	43	80.5	4,950
September	2,089	139	33	69.6	4,140
Water year 1940-41	48,555	790	-	133	96,310

* Winter discharge measurement made on this day.

Note.- No gage-height record June 19 to Aug. 17; discharge computed on basis of one discharge measurement and record for station near Pagosa Springs. Stage-discharge relation affected by ice Nov. 11 to Feb. 28.

West Fork of San Juan River near Pagosa Springs, Colo.

Location.- Water-stage recorder, lat. 37°22'30", long. 106°53'45", in NE¼ sec. 12, T. 36 N., R. 1 W., 30 feet downstream from highway bridge, 0.6 mile upstream from mouth, and 10 miles northeast of Pagosa Springs.

Drainage area.- 87.9 square miles.

Records available.- April 1935 to September 1941.

Extremes.- Maximum discharge during year, 2,300 second-feet June 23 (gage height, 5.83 feet), from rating curve extended above 1,300 second-feet; minimum daily, 24 second-feet Jan. 3.

1935-41: Maximum discharge, that of June 23, 1941; minimum daily, 10 second-feet Dec. 19, 1937.

Greatest flood known occurred Oct. 5, 1911.

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

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	177	56	46	40	32	34	80	279	855	1,170	197	68
2	152	57	46	39	30	34	66	343	942	1,120	180	68
3	135	57	45	24	30	32	61	363	1,090	1,120	159	67
4	117	57	44	25	30	31	60	327	1,110	1,200	149	67
5	261	49	44	34	31	33	66	371	1,100	1,590	144	66
6	331	52	45	41	32	32	61	494	1,060	1,140	170	66
7	237	50	44	37	34	31	61	606	1,140	1,070	175	66
8	194	52	44	35	31	30	67	665	1,370	1,090	208	66
9	175	51	46	37	*29	31	77	840	1,040	954	202	66
10	154	49	44	37	27	30	93	981	815	915	175	65
11	132	36	48	36	29	29	80	1,240	695	915	157	65
12	120	36	45	38	31	30	80	1,520	675	926	137	65
13	109	33	39	41	28	33	80	1,710	646	790	124	78
14	100	*36	39	38	32	37	72	1,580	730	685	117	180
15	91	39	29	*30	30	34	74	1,320	820	584	197	111
16	85	41	27	31	29	33	74	1,190	893	584	172	81
17	80	43	43	33	28	35	72	1,240	1,070	552	147	95
18	74	47	45	35	28	41	68	1,310	1,400	651	130	113
19	71	47	39	36	30	46	63	1,150	1,640	624	117	162
20	66	47	36	36	27	49	62	830	1,380	610	113	287
21	63	46	39	36	28	46	65	730	1,720	520	111	254
22	61	44	41	34	27	44	65	745	1,750	484	102	227
23	58	44	43	35	28	46	66	750	1,890	444	89	240
24	57	43	47	35	29	46	81	888	1,890	435	85	194
25	56	43	45	36	29	42	111	970	1,800	395	78	167
26	58	44	38	30	27	41	142	1,110	1,750	347	72	142
27	71	43	39	30	27	40	194	1,120	1,670	327	70	124
28	66	38	47	32	28	42	221	1,030	1,620	283	68	126
29	65	41	45	37	-	43	283	898	1,380	254	68	250
30	66	44	45	37	-	46	291	820	1,250	230	71	227
31	58	-	44	35	-	61	-	805	-	218	68	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	3,540	331	56	114	7,020
November	1,365	57	33	45.5	2,710
December	1,311	48	27	42.3	2,600
Calendar year 1940	36,771	538	13	100	72,930
January	1,080	41	24	34.8	2,140
February	821	34	27	29.3	1,630
March	1,182	61	29	38.1	2,340
April	2,936	291	60	97.9	5,820
May	28,225	1,710	279	910	55,980
June	37,191	1,890	646	1,240	73,770
July	22,227	1,590	218	717	44,090
August	4,052	208	68	131	8,040
September	3,853	287	65	128	7,640
Water year 1940-41	107,783	1,890	24	295	213,800

* Winter discharge measurement made on this day.

Note.- Stage-discharge relation affected by ice Nov. 11-17, Nov. 28 to Dec. 8, Dec. 12 to Feb. 9.

Turkey Creek near Pagosa Springs, Colo.

Location.- Water-stage recorder, lat. 37°22'15", long. 106°56'45", at west side of sec. 10, T. 36 N., R. 1 W., 2¼ miles upstream from mouth and 8 miles northeast of Pagosa Springs.

Drainage area.- 23.0 square miles.

Records available.- May 1937 to September 1941.

Extremes.- Maximum discharge during year, 860 second-feet May 12 (gage height, 3.73 feet), from rating curve extended above 550 second-feet; minimum daily, 4.3 second-feet Oct. 20.

1937-41: Maximum discharge, that of May 12, 1941; minimum daily, 0.4 second-foot Sept. 28, 1937, July 25, 26, 1939, July 9-17, 24, 25, 1940.

Greatest flood known occurred Oct. 5, 1911.

Remarks.- Records fair. A large part of flow diverted from drainage basin above station during irrigation season.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	48	11	11	10	10	11	27	116	225	229	50	15
2	36	12	11	9.6	9.5	12	21	143	233	213	45	12
3	31	12	11	8.4	10	11	19	149	261	221	41	8.6
4	25	12	11	9.0	10	11	21	143	249	241	40	8.2
5	106	13	11	10	10	12	21	179	241	301	41	7.8
6	96	11	11	11	11	11	19	241	241	233	40	7.2
7	55	11	11	10	11	10	19	266	293	209	47	7.0
8	37	11	11	10	11	10	20	320	357	217	54	7.8
9	29	11	11	10	10	10	29	371	297	205	51	8.2
10	30	12	11	10	10	10	36	405	249	202	47	8.6
11	26	10	11	10	10	10	27	493	202	213	46	8.2
12	23	10	10	10	10	10	28	529	177	221	37	8.0
13	16	12	9.8	11	10	10	26	534	184	177	34	14
14	8.4	*15	9.0	10	10	10	22	540	202	152	33	41
15	7.2	16	8.6	*9.7	10	10	22	424	245	146	36	29
16	6.2	15	9.8	8.7	10	10	22	390	269	138	38	20
17	6.0	14	11	9.0	10	11	21	390	309	142	34	19
18	5.2	12	12	9.5	10	*12	19	400	345	163	32	27
19	4.8	12	11	10	*10	12	18	338	396	152	29	33
20	4.3	12	10	11	10	14	18	271	378	152	28	50
21	5.5	11	10	11	10	14	16	249	396	130	26	42
22	7.5	11	10	11	10	15	16	275	392	116	22	43
23	9.1	11	11	11	10	15	16	275	414	106	20	47
24	9.4	11	12	11	11	15	21	284	406	127	19	39
25	9.9	10	11	11	11	14	31	297	378	138	18	33
26	11	11	10	10	10	13	41	306	357	101	16	27
27	14	10	11	10	9.5	12	78	297	333	86	16	24
28	13	10	12	10	9.5	13	89	285	313	77	16	24
29	13	10	11	11	-	14	96	249	265	64	16	57
30	13	10	11	11	-	15	111	237	261	57	18	46
31	11	-	11	11	-	24	-	233	-	53	16	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	718.5	106	4.3	23.2	1,430
November	349	16	10	11.6	692
December	332.2	12	8.6	10.7	659
Calendar year 1940	7,695.6	128	.4	21.0	15,260
January	514.9	11	8.4	10.2	625
February	283.5	11	9.5	10.1	562
March	381	24	10	12.3	756
April	970	111	16	32.3	1,920
May	9,629	540	116	311	19,100
June	8,868	414	177	296	17,590
July	4,982	301	53	161	9,880
August	1,006	54	16	32.5	2,000
September	721.6	57	7.0	24.1	1,430
Water year 1940-41	28,555.7	540	4.3	78.2	56,640

* Winter discharge measurement made on this day.

Note.- Stage-discharge relation affected by ice Nov. 11-14, Nov. 28 to Mar. 17.

Rio Blanco near Pagosa Springs, Colo.

Location.- Water-stage record, lat. 37°12'45", long. 106°47'40", in center of sec. 1, T. 34 N., R. 1 E., at highway bridge, 0.4 mile upstream from White Creek and 12.5 miles southeast of Pagosa Springs.

Drainage area.- 58.0 square miles.

Records available.- May 1935 to September 1941.

Extremes.- Maximum discharge during year, 1,260 second-feet May 11 (gage height, 3.77 feet), from rating curve extended above 710 second-feet; minimum daily, 15 second-feet Oct. 22-25.

1935-41: Maximum discharge, 1,340 second-feet May 17, 1937 (gage height, 4.06 feet), from rating curve extended above 600 second-fest; minimum daily, 6.6 second-feet Feb. 24, 27, 28, 1938.

Greatest flood known occurred Oct. 5, 1911.

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 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	76	33	25	22	19	25	62	162	671	565	139	36
2	53	39	25	20	19	22	48	205	727	550	128	34
3	51	40	25	17	20	22	45	238	560	550	119	31
4	45	43	25	17	20	29	48	229	602	560	111	30
5	132	36	25	18	20	24	50	247	608	570	116	30
6	83	38	26	19	20	29	48	296	584	500	108	a34
7	59	39	26	20	21	28	50	350	614	475	80	a32
8	50	43	26	20	21	29	59	390	578	460	80	a35
9	45	40	27	21	20	29	76	193	614	425	101	a37
10	38	38	27	21	21	31	86	209	542	400	151	a35
11	32	40	27	21	21	32	66	986	476	329	101	a33
12	30	46	27	20	22	32	64	1,010	428	321	86	a31
13	26	46	25	20	22	24	60	965	452	281	82	a74
14	24	50	24	20	22	25	51	846	422	262	96	a270
15	23	*33	23	19	22	24	48	762	506	265	148	126
16	21	45	20	19	22	26	50	755	548	230	78	77
17	19	39	24	*20	22	31	50	685	524	258	128	96
18	19	29	25	21	21	36	48	644	375	420	91	119
19	17	29	24	21	*21	43	43	518	360	395	68	148
20	16	25	24	21	19	42	43	536	482	420	58	272
21	16	23	25	21	19	36	43	524	578	368	53	152
22	15	22	25	21	21	32	48	524	657	297	47	122
23	15	20	26	21	20	31	46	620	690	258	41	156
24	15	20	27	21	19	31	62	614	475	240	37	104
25	15	23	26	20	19	30	81	542	545	220	35	92
26	19	26	26	20	21	26	94	506	450	208	34	81
27	38	24	27	20	22	28	116	566	510	198	32	72
28	35	25	28	20	26	29	122	476	545	182	31	79
29	39	26	28	21	-	29	138	542	570	166	36	406
30	38	25	28	19	-	31	158	530	570	154	43	320
31	29	-	27	18	-	53	-	584	-	148	37	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	1,133	132	15	36.5	2,250
November	1,005	50	20	33.5	1,990
December	793	28	20	25.6	1,570
Calendar year 1940	21,583.0	362	7.4	59.0	42,810
January	619	22	17	20.0	1,230
February	582	26	19	20.8	1,150
March	939	53	22	30.3	1,860
April	2,003	158	43	66.8	3,970
May	16,254	1,010	162	524	32,240
June	16,263	727	360	542	32,260
July	10,675	570	148	344	21,170
August	2,495	151	31	80.5	4,950
September	3,166	406	30	106	6,280
Water year 1940-41	55,927	1,010	15	153	110,900

* Winter discharge measurement made on this day.

a No gage-height record, discharge computed on basis of recorded range in stage and records for Navajo River at Edith, Colo.

Note.- Stage-discharge relation affected by ice Nov. 28 to Feb. 7, Feb. 11, 14, 15.

Rito Blanco near Pagosa Springs, Colo.

Location.- Water-stage recorder, lat. 37°11'40", long. 106°54'20", in SW¼ sec. 12, T. 34 N., R. 1 W., at road crossing 600 feet upstream from Sheep Cabin Creek and 7¾ miles southeast of Pagosa Springs. Prior to June 20, 1941, recorder 100 feet downstream at datum 2.0 feet lower.

Drainage area.- 23.3 square miles.

Records available.- May 1935 to September 1941.

Extremes.- Maximum discharge during year, 475 second-feet May 13 (gage height, 3.21 feet, site and datum then in use), from rating curve extended above 350 second-feet; minimum daily, 0.1 second-foot Sept. 7.
1935-41: Maximum discharge, that of May 13, 1941; no flow at times in 1939 and 1940. Greatest flood known occurred Oct. 5, 1911.

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 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3.0	2.1	2.2	1.7	1.1	4.0	19	77	168	82	15	1.0
2	1.5	2.4	2.2	1.6	1.5	3.0	16	e7	173	79	11	.8
3	1.1	3.0	2.2	1.4	1.4	2.7	15	98	186	77	9.4	.5
4	1.0	1.8	2.2	1.5	1.2	3.7	16	91	176	79	8.3	.4
5	6.5	1.6	2.3	1.4	1.4	3.4	19	98	181	85	9.4	.3
6	6.1	1.7	2.3	1.2	1.6	3.4	16	150	168	82	13	.2
7	1.8	1.8	2.2	1.2	1.7	3.4	18	182	178	72	8.8	.1
8	1.6	2.4	2.2	1.2	1.7	3.3	25	174	120	67	18	.2
9	1.6	2.1	2.3	1.2	1.6	3.4	33	188	125	63	18	.3
10	1.5	2.4	2.4	1.1	1.6	3.3	40	240	137	60	21	.3
11	1.3	1.6	2.5	1.2	1.7	3.1	29	244	137	60	16	.2
12	1.0	1.6	2.4	1.2	1.8	3.0	30	292	112	60	12	.2
13	1.0	1.5	2.2	1.4	2.1	3.0	29	364	125	54	9.4	.9
14	1.0	1.7	2.1	1.4	2.1	3.1	23	368	128	51	10	26
15	1.0	*2.1	1.6	1.5	2.1	2.8	24	a290	116	48	27	9.4
16	.9	2.4	1.5	1.5	2.4	2.7	25	a240	112	43	23	3.2
17	.9	2.5	2.1	*1.4	2.7	3.7	25	a260	108	43	29	4.0
18	.9	2.6	2.4	1.4	2.4	6.1	22	a280	135	49	33	6.6
19	.9	2.7	1.8	1.2	*2.4	7.0	19	a250	145	49	25	8.8
20	.9	2.3	1.6	1.2	2.4	*8.2	18	a220	147	52	21	19
21	.8	2.0	1.6	1.2	2.1	8.2	20	a185	172	45	18	16
22	.8	1.8	1.7	1.2	2.7	7.8	22	a180	144	42	16	14
23	.8	1.7	1.7	1.2	2.7	7.8	20	a180	162	38	14	19
24	.7	1.8	1.8	a1.1	2.7	7.8	26	194	176	37	12	16
25	.6	2.1	1.8	a1.1	3.4	7.8	36	160	168	35	10	12
26	.7	1.8	1.7	a1.2	3.0	7.4	55	108	141	30	8.3	10
27	3.0	1.7	1.6	a1.4	3.7	7.4	91	184	125	25	7.2	8.8
28	2.4	1.7	1.7	a1.5	4.0	9.0	100	176	112	21	5.6	10
29	1.7	1.8	1.7	a1.4	-	9.5	108	173	100	20	2.2	47
30	2.1	2.1	1.7	1.4	-	10	89	163	87	16	3.2	52
31	1.7	-	1.7	1.2	-	17	-	168	-	16	1.5	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	50.8	6.5	0.6	1.64	101
November	60.8	3.0	1.5	2.03	121
December	61.4	2.5	1.5	1.98	122
Calendar year 1940	3,648.1	118	0	9.97	7,230
January	40.8	1.7	1.1	1.32	81
February	61.2	4.0	1.1	2.19	121
March	176.0	17	2.7	5.68	349
April	1,028	108	15	34.3	2,040
May	6,064	368	77	196	12,030
June	4,264	186	87	142	8,460
July	1,580	85	16	51.0	3,130
August	435.3	33	1.5	14.0	863
September	287.2	52	.1	9.57	570
Water year 1940-41	14,109.5	368	.1	38.7	27,990

* 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.
Note.- Stage-discharge relation affected by ice Nov. 12-14, 17-21, Nov. 28 to Dec. 17, Mar. 8-12, 14, 15.

Navajo River at Banded Peak Ranch, near Chromo, Colo.

Location.- Water-stage recorder, lat. 37°05'00", long. 106°41'30", in NW¼ sec. 24, T. 33 N., R. 2 E., on Banded Peak Ranch, half a mile downstream from Aspen Creek and 9 miles northeast of Chromo.

Drainage area.- 69.8 square miles.

Records available.- April 1937 to September 1941.

Extremes.- Maximum discharge during year, 1,340 second-feet May 13 (gage height, 4.02 feet); minimum daily, 15 second-feet Nov. 14.
1937-41: Maximum discharge, that of May 13, 1941; minimum daily, 12 second-feet Dec. 28, 1939.
Greatest flood known occurred Oct. 5, 1911.

Remarks.- Records fair. No diversion or regulation above station.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	78	36	38	27	29	33	64	174	707	635	171	57
2	61	35	39	22	28	34	53	185	716	630	160	54
3	66	36	39	19	28	34	49	360	720	626	147	48
4	58	35	39	22	29	34	52	320	702	622	134	46
5	161	32	39	25	29	34	53	380	698	622	134	44
6	101	31	39	32	30	34	52	450	666	620	131	43
7	84	31	39	32	30	32	52	520	725	620	131	42
8	72	32	40	32	29	31	56	600	745	550	152	47
9	64	34	39	32	29	-	66	690	689	510	168	52
10	58	30	36	32	29	30	80	698	599	510	197	47
11	52	27	39	32	29	32	68	760	527	510	147	45
12	48	17	39	32	29	32	63	1,060	486	490	134	42
13	45	16	34	34	29	34	61	1,180	486	470	128	58
14	43	15	32	33	29	31	56	995	500	446	155	195
15	42	*17	25	30	29	27	56	1,020	522	419	228	110
16	42	20	19	*25	29	28	56	960	527	390	144	82
17	39	27	26	26	30	35	56	975	563	414	171	77
18	38	28	26	27	*30	38	55	990	630	432	194	81
19	36	31	28	28	30	42	53	910	680	428	114	90
20	34	35	30	29	30	*45	49	820	707	419	103	105
21	32	35	33	29	30	43	53	785	730	382	100	130
22	31	36	34	29	30	43	56	785	740	366	88	108
23	31	36	35	29	30	40	56	840	735	323	79	120
24	31	36	36	29	31	44	70	860	735	320	74	105
25	30	37	33	29	31	38	86	895	735	295	70	94
26	31	38	31	28	30	38	99	910	740	278	65	89
27	35	37	32	29	30	37	130	890	730	250	62	84
28	36	36	34	30	32	42	144	805	712	228	66	74
29	38	36	32	30	-	40	154	730	689	209	70	139
30	40	36	31	30	-	44	172	712	658	197	68	265
31	36	-	29	30	-	53	-	712	-	183	59	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	1,593	161	30	51.4	3,160
November	928	38	15	30.9	1,840
December	1,045	40	19	33.7	2,070
Calendar year 1940	29,371	419	15	80.2	58,240
January	893	34	19	28.8	1,770
February	828	32	28	29.6	1,640
March	1,136	53	27	36.6	2,250
April	2,170	172	49	72.3	4,300
May	22,971	1,180	174	741	45,560
June	19,799	745	486	660	39,270
July	13,394	635	183	432	26,570
August	3,844	228	59	124	7,620
September	2,573	265	42	85.8	5,100
Water year 1940-41	71,174	1,180	15	195	141,200

* Winter discharge measurement made on this day.
Note.- No gage-height record May 3-9, July 6-13, Aug. 27, 28, Sept. 5-27; discharge computed on basis of records for station at Edith. Stage-discharge relation affected by ice Dec. 15, 16, Dec. 20 to Mar. 1.

Navajo River at Edith, Colo.

Location.- Water-stage recorder, lat. 37°00'10", long. 106°54'20", in NW¼ sec. 24, T. 32 N., R. 1 W., 340 feet downstream from highway bridge at Colorado-New Mexico State line, a quarter of a mile east of Edith and 1 mile upstream from Coyote Creek. Prior to June 27, 1941, water-stage recorder at site 250 feet upstream at 2.0 feet higher datum. Datum of gage is 7,033.00 feet above mean sea level (Bureau of Reclamation bench mark).

Drainage area.- 165 square miles.

Records available.- September 1912 to December 1914 and June 1935 to September 1941 in reports of U. S. Geological Survey. September 1912 to December 1928 and June 1935 to September 1941 in reports of Colorado State engineer. September 1912 to December 1928 in reports of New Mexico State engineer.

Average discharge.- 22 years, 188 second-feet.

Extremes.- Maximum discharge during year, 2,380 second-feet May 13 (gage height, 6.36 feet, site and datum then in use), from rating curve extended above 2,200 second-feet; minimum daily, 23 second-feet Nov. 13, Dec. 16.

1935-41: Maximum discharge, that of May 13, 1941; minimum daily, 19 second-feet Dec. 28, 1939.

Greatest flood known occurred Oct. 5, 1911.

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

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	112	46	44	38	36	50	281	740	830	808	197	78
2	78	47	46	30	34	54	215	912	836	808	188	76
3	78	49	46	25	35	50	206	960	854	796	176	72
4	72	48	46	28	38	45	224	946	848	814	165	68
5	150	40	46	35	40	54	247	852	848	834	165	68
6	178	45	46	40	44	47	228	1,160	860	796	165	65
7	112	42	45	38	46	47	247	1,280	926	718	165	62
8	92	43	46	38	42	44	302	1,370	1,420	724	168	64
9	84	43	46	39	42	47	364	1,470	1,010	748	a200	70
10	74	44	48	39	42	42	381	1,530	890	664	a285	66
11	66	31	53	38	42	42	299	1,590	760	652	206	62
12	61	29	48	39	42	43	330	1,850	740	640	162	59
13	56	23	40	41	*42	49	289	2,000	710	580	148	80
14	53	25	40	40	*42	49	228	1,960	710	515	152	276
15	50	*45	34	38	42	46	250	1,670	710	490	284	158
16	48	48	23	31	44	48	269	1,490	715	450	176	122
17	47	50	44	*33	44	64	279	1,400	782	455	173	110
18	45	54	47	34	*46	82	240	1,330	956	495	191	114
19	44	56	43	36	46	104	200	1,160	1,020	470	148	140
20	43	54	39	38	46	111	174	974	1,070	520	130	212
21	40	52	41	39	46	111	242	914	1,080	440	125	230
22	36	50	43	38	46	111	271	974	1,070	420	118	165
23	35	48	45	38	47	124	281	982	1,070	372	110	197
24	35	46	46	38	50	125	384	1,030	1,080	368	100	168
25	35	45	44	38	50	106	479	1,050	1,170	348	94	145
26	36	45	40	34	43	93	576	1,030	1,110	320	86	130
27	50	44	44	35	42	90	770	1,080	1,070	292	84	120
28	50	40	47	36	44	120	846	926	932	268	78	114
29	50	41	45	41	-	139	775	854	848	248	82	300
30	56	43	44	40	-	180	786	878	827	224	96	296
31	48	-	42	40	-	259	-	818	-	209	84	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	2,014	178	35	65.0	3,990
November	1,316	56	23	43.9	2,610
December	1,351	53	23	43.6	2,680
Calendar year 1940	37,517	528	23	103	74,380
January	1,135	41	25	36.6	2,250
February	1,203	50	34	43.0	2,390
March	2,576	259	42	83.1	5,110
April	10,557	846	174	355	21,140
May	37,060	2,000	740	1,195	73,510
June	27,752	1,420	710	925	55,050
July	16,486	834	209	532	32,700
August	4,701	285	78	152	9,320
September	3,887	300	59	130	7,710
Water year 1940-41	110,138	2,000	23	302	218,500

* Winter discharge measurement made on this day.

a No gage-height record; discharge computed on basis of recorded range of stage and records for Rio Blanco near Pagosa Springs, Colo.

Note.- Stage-discharge relation affected by ice Nov. 14-25, Dec. 17 to Feb. 22.

Little Navajo River at Chromo, Colo.

Location.- Water-stage recorder, lat. 37°02'10", long. 106°50'35", in SE¼ sec. 4, T. 32 N., R. 1 E., at highway bridge at Chromo, a quarter of a mile upstream from mouth. Prior to June 20, 1941, water-stage recorder 20 feet downstream at same datum. Datum of gage is 7,288.52 feet above mean sea level, datum of 1929.

Drainage area.- 21.9 square miles.

Records available.- May 1935 to September 1941.

Extremes.- Maximum discharge during year, 399 second-feet May 14 (gage height, 4.32 feet, site then in use), from rating curve extended above 250 second-feet; minimum daily, 0.6 second-foot Oct. 2.

1935-41: Maximum discharge, that of May 14, 1941; no flow Aug. 31, 1938, July 7, 1939.

Greatest flood known occurred Oct. 5, 1941.

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

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.0	1.4	3.1	2.6	3.2	9.3	67	128	67	28	6.7	2.2
2	.6	1.6	3.0	2.6	3.6	6.4	44	190	62	30	5.8	1.8
3	1.3	1.7	3.0	2.5	3.0	6.0	39	190	64	28	5.0	1.8
4	1.5	2.6	3.0	2.6	3.0	7.4	47	196	56	27	4.6	1.8
5	4.7	2.0	3.1	2.7	3.0	6.4	51	214	56	31	4.8	1.9
6	5.3	2.2	3.0	3.2	3.0	6.2	40	242	55	22	a5.8	1.9
7	3.0	2.0	3.0	3.2	3.0	6.9	41	308	97	21	a5.2	1.9
8	2.4	2.0	3.0	3.2	3.0	9.6	60	257	252	23	6.1	1.9
9	2.0	1.8	3.1	3.0	2.6	8.4	75	298	179	25	a7.6	1.9
10	1.9	1.3	3.2	3.0	2.2	11	73	318	166	25	a8.2	1.9
11	1.7	1.0	3.0	3.2	2.6	9.3	44	290	125	24	a8.0	1.9
12	1.6	1.8	2.8	3.2	2.4	10	73	287	97	24	a7.8	2.0
13	1.6	3.4	2.7	3.4	2.4	5.5	47	308	85	22	a7.6	3.1
14	1.6	2.6	2.5	3.4	3.4	5.1	33	326	78	21	a7.2	11
15	1.5	*2.4	2.3	3.4	4.2	5.8	36	326	71	19	a6.7	7.9
16	1.3	2.6	2.4	*3.4	3.8	5.8	36	294	71	17	6.4	5.8
17	1.4	2.8	2.7	3.2	4.9	9.3	39	290	75	16	6.1	5.0
18	1.2	3.0	3.2	3.0	*3.4	13	31	262	82	14	5.8	a7.0
19	1.2	3.2	3.0	3.0	3.6	18	25	200	80	a24	5.0	a11
20	1.2	3.6	2.7	3.0	3.6	20	23	147	80	a28	4.0	16
21	1.2	2.8	2.6	3.0	3.4	16	29	147	60	a26	4.2	10
22	1.2	2.8	2.5	3.2	2.8	18	32	190	48	a24	4.2	10
23	1.1	2.6	2.8	3.0	2.8	26	39	166	39	a22	3.8	12
24	1.1	2.9	2.9	3.0	3.4	22	51	176	72	a20	3.4	9.3
25	1.1	3.1	3.1	3.0	4.2	18	94	157	49	19	3.1	7.0
26	1.1	3.0	3.1	3.0	4.3	16	190	141	29	17	3.1	5.5
27	1.9	2.7	3.0	3.2	6.2	16	193	134	39	15	2.7	5.2
28	1.9	2.6	2.9	3.0	8.4	23	163	109	51	13	2.5	5.5
29	1.7	2.8	3.0	4.2	-	26	157	97	38	10	2.4	29
30	1.5	3.0	3.0	4.7	-	36	122	94	30	7.9	2.4	19
31	1.5	-	3.2	3.6	-	69	-	78	-	7.0	2.2	-

Month	Second-feet-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	53.3	5.3	0.6	1.72	106
November	73.3	3.6	1.0	2.44	145
December	90.0	3.2	2.3	2.90	179
Calendar year 1940	2,082.6	42	.1	5.69	4,130
January	97.7	4.7	2.5	3.15	194
February	99.4	8.4	2.2	3.55	197
March	465.4	69	5.1	15.0	923
April	1,994	193	23	66.5	3,960
May	6,590	326	78	213	13,070
June	2,353	252	29	78.4	4,670
July	649.9	31	7.0	21.0	1,290
August	158.4	8.2	2.2	5.11	314
September	202.2	29	1.8	6.74	401
Water year 1940-41	12,826.6	326	.6	35.1	25,450

* Winter discharge measurement made on this day.

a No gage-height record; discharge computed on basis of one discharge measurement, recorded range of stage, and records for Rito Blanco near Pagosa Springs, Colo.

Note.- Stage-discharge relation affected by ice Nov. 23 to Dec. 9, Dec. 12-28, Jan. 3-5, Feb. 23-27.

Piedra River at Bridge ranger station, near Pagosa Springs, Colo.

Location.- Water-stage recorder, lat. 37°25'30", long. 107°11'30", in sec. 22, T. 37 N., R. 3 W., a quarter of a mile downstream from Bridge ranger station, 1 mile downstream from Middle Fork, and 15 miles northwest of Pagosa Springs.

Drainage area.- 82.3 square miles.

Records available.- April 1937 to September 1941 (discontinued).

Extremes.- Maximum discharge during year, 1,570 second-feet June 23 (gage height, 4.41 feet), from rating curve extended above 800 second-feet; minimum not determined, occurred during period of ice effect.
1937-41: Maximum discharge, that of June 23, 1941; minimum not determined.
Greatest flood known occurred Oct. 5, 1911.

Remarks.- Records good except those for periods of ice effect or no gage-height record, which are fair. A few small diversions above station for irrigation.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	180	34				20	a64	367	644	726	135	42
2	137	36				19	a62	490	765	690	120	42
3	116	37				18	a57	406	740	713	115	40
4	98	36				17	a53	478	740	760	108	40
5	340	30				18	a61	498	825	1,060	110	39
6	297	37				16	58	532	731	770	138	37
7	202	35				15	63	555	825	695	127	29
8	148	36				16	75	622	890	686	125	30
9	126	35				18	95	654	672	623	130	31
10	106	33				15	104	710	574	628	122	29
11	91	24				17	80	810	499	618	113	27
12	81	27				18	70	895	471	677	102	26
13	73	27				19	69	975	471	592	96	43
14	68	31				16	69	920	495	515	96	125
15	64	41				18	75	790	551	459	127	96
16	60	43	26	18	20	20	74	731	605	451	257	70
17	55	*39				21	72	770	686	463	169	62
18	51	32				a24	63	795	815	596	138	81
19	49	30				a28	58	755	955	596	113	120
20	45	31				a33	55	682	1,060	569	102	327
21	43	31				a32	61	650	1,050	471	102	324
22	40	30				a30	58	641	1,020	419	90	327
23	39	28				33	54	641	1,150	371	83	327
24	*39	28				a36	76	750	1,300	427	74	250
25	36	27				a32	116	785	1,150	427	70	226
26	36	27				a33	*145	810	1,050	341	62	190
27	42	27				a34	226	790	975	292	57	154
28	40	25				a36	250	718	915	235	52	143
29	40	25			-	a38	320	641	800	202	52	285
30	41	26			-	40	382	641	731	178	57	241
31	36	-			-	a47	-	677	-	157	50	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	2,819	340	36	90.9	5,590
November	947	43	24	31.6	1,880
December	806	-	-	26.0	1,600
Calendar year 1940	25,222	414	-	68.9	50,030
January	558	-	-	18.0	1,110
February	560	-	-	20.0	1,110
March	779	47	15	25.1	1,550
April	3,065	382	53	102	6,080
May	21,179	975	367	683	42,010
June	24,155	1,300	471	805	47,910
July	16,407	1,060	157	529	32,540
August	3,292	257	50	106	6,530
September	3,803	327	26	127	7,540
Water year 1940-41	78,370	1,300	-	215	155,400

* Winter discharge measurement made on this day.
a No gage-height record; discharge computed on basis of records for station near Piedra.
Note.- Stage-discharge relation affected by ice Nov. 14-17, Nov. 26 to Mar. 14.

Piedra River near Piedra, Colo.

Location.- Water-stage recorder, lat. 37°14', long. 107°20', in sec. 8, T. 34 N., R. 4 W., at crossing of U. S. Highway 450, three-quarters of a mile upstream from Yellow Jacket Creek and 1½ miles north of Piedra. This station is 1½ miles downstream from station used Mar. 19, 1940, to May 12, 1941.

Drainage area.- 371 square miles.

Records available.- November 1911 to July 1912, October 1939 to September 1941.

Extremes.- Maximum discharge during year, 5,400 second-feet May 13 (gage height, 8.0 feet, from high-water marks, present site and datum), from rating curve extended above 3,040 second-feet; minimum daily, 46 second-feet Jan. 18.

1911-12, 1939-41: Maximum discharge, that of May 13, 1941; minimum daily, 23 second-feet Dec. 20, 1939.

Greatest flood known occurred Oct. 5, 1911.

Remarks.- Records excellent except those for periods Dec. 16 to Feb. 16 and Apr. 28 to Sept. 30, which are fair. Chain gage read twice daily Dec. 16 to Feb. 16, and May 25 to Sept. 26. Diversions above etation for irrigation.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	464	102	87	72	64	94	337	1,640	2,190	2,500	400	135
2	352	104	89	63	61	98	302	2,110	2,180	2,110	365	128
3	302	108	83	b54	66	90	275	2,110	2,660	2,120	355	122
4	259	108	83	b50	76	81	256	2,440	2,380	a2,230	346	115
5	542	85	81	57	66	98	288	2,560	2,210	a2,500	342	113
6	822	100	87	63	68	76	262	2,780	2,820	2,110	390	109
7	514	94	85	64	74	79	262	3,040	2,880	1,930	420	105
8	412	98	81	76	66	72	295	3,260	3,140	1,830	385	111
9	348	96	83	75	66	85	368	3,420	2,600	1,660	430	113
10	292	100	102	69	68	68	460	a3,600	2,550	1,640	380	105
11	252	56	100	61	68	77	392	a3,900	1,840	1,540	355	101
12	224	59	87	72	69	87	341	a4,150	1,620	1,350	324	95
13	205	50	74	70	66	94	341	a4,350	1,730	1,210	274	105
14	187	58	62	68	68	89	312	a4,400	1,860	1,140	270	160
15	171	65	62	66	75	87	334	a3,750	2,950	1,090	430	292
16	159	76	59	b52	69	87	334	a3,300	2,190	1,090	638	233
17	149	87	74	b48	*81	102	341	a3,350	3,090	1,100	430	169
18	138	90	88	*b46	83	120	309	a3,500	3,390	1,090	370	274
19	129	96	81	b52	87	138	275	a3,200	3,640	1,090	346	385
20	122	92	76	b60	83	159	252	a2,950	3,380	1,110	314	676
21	118	98	b70	66	87	154	292	a2,700	3,330	986	288	595
22	112	92	b74	66	81	149	285	a2,500	3,720	872	257	545
23	106	90	76	66	83	161	278	a2,450	3,780	878	233	776
24	106	83	80	64	90	176	305	a2,600	4,020	742	222	520
25	102	87	80	64	90	147	460	3,000	4,220	788	197	465
26	100	85	b70	61	68	149	600	3,010	3,450	764	175	415
27	159	90	b64	59	65	154	945	2,640	2,830	688	160	342
28	124	62	b74	59	76	164	1,260	2,350	2,770	610	152	314
29	116	70	81	72	-	174	1,480	2,260	2,710	520	138	590
30	124	87	60	69	-	176	1,640	2,290	2,640	485	175	535
31	108	-	76	70	-	229	-	2,180	-	420	155	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	7,318	822	100	236	14,520
November	2,568	108	50	85.6	5,090
December	2,449	102	59	79.0	4,860
Calendar year 1940	71,433	1,030	27	195	141,700
January	1,954	76	46	63.0	3,880
February	2,064	90	61	73.7	4,090
March	3,714	229	68	120	7,370
April	13,881	1,640	252	463	27,530
May	91,990	4,400	1,640	2,967	182,500
June	84,770	4,220	1,620	2,826	168,100
July	40,173	2,500	420	1,296	79,680
August	9,716	638	138	313	19,270
September	8,743	776	95	291	17,340
Water year 1940-41	269,340	4,400	46	738	534,200

* Winter discharge measurement made on this day.

a No gage-height record; discharge computed on basis of one discharge measurement and records for the San Juan River at Pagosa Springs, Colo.

b Stage-discharge relation affected by ice.

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Williams Creek near Bridge ranger station, near Pagosa Springs, Colo.

Location.- Water-stage recorder, lat. 37°27'45", long. 107°11'45", in sec. 10, T. 37 N., R. 3 W., 2½ miles north of Bridge ranger station, 3½ miles upstream from mouth, and 17 miles northwest of Pagosa Springs.

Drainage area.- 43.7 square miles.

Records available.-May 1937 to September 1941 (discontinued).

Extremes.- Maximum discharge during year, 940 second-feet May 11 (gage height, 3.68 feet), from rating curve extended above 450 second-feet; minimum daily recorded, 11 second-feet Sept. 6, 12, but may have been less during period of ice effect.
1937-41: Maximum discharge, that of May 11, 1941; minimum not determined.
Greatest flood known occurred Oct. 5, 1911.

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

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	84	21						226	330	383	62	24
2	67	21						300	330	383	54	16
3	60	21						285	356	388	48	14
4	52	21						350	340	410	50	12
5	140	19						400	340	493	44	12
6	140	19						366	335	422	49	11
7	95	19						432	394	400	47	12
8	80	19						476	427	383	40	12
9	68	19						526	366	340	40	13
10	56	17						532	305	340	39	13
11	48	17						606	260	340	35	12
12	41							594	238	372	30	11
13	38						30	583	255	340	28	27
14	35							532	285	295	24	65
15	32							449	330	270	48	59
16	29		14	12	13	16		416	378	255	100	46
17	28	(*)						444	416	238	64	43
18	25							438	449	265	48	70
19	23							444	471	280	38	95
20	21							394	498	255	34	161
21	20	17						366	482	214	32	158
22	19							356	498	174	28	155
23	19							366	542	167	26	146
24	*19							416	554	186	23	122
25	19						*53	405	493	174	22	102
26	21						65	405	520	140	22	84
27	28						90	400	498	128	20	70
28	25						108	360	482	105	17	64
29	24				-		149	340	427	92	17	120
30	24				-		202	335	394	80	17	108
31	22	-			-		-	330	-	70	27	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	1,402	140	19	45.2	2,780
November	536	-	-	17.9	1,060
December	434	-	-	14.0	861
Calendar year 1940	12,711.7	180	-	34.7	25,210
January	372	-	-	12.0	738
February	364	-	-	13.0	722
March	496	-	-	16.0	984
April	1,387	202	-	46.2	2,750
May	12,877	606	226	415	25,540
June	11,993	554	238	400	23,790
July	8,382	493	70	270	16,630
August	1,171	100	17	37.8	2,320
September	1,857	161	11	61.9	3,680
Water year 1940-41	41,271	606	-	113	81,860

* Winter discharge measurement made on this day.

Note.- No gage-height record, Nov. 12 to Apr. 24; discharge computed on basis of weather records and records for Piedra River near Piedra. Stage-discharge relation probably affected by ice during most of period of no gage-height record.

Weminuche Creek near Bridge ranger station, near Pagosa Springs, Colo.

Location.- Water-stage recorder, lat. 37°28'15", long. 107°14'00", in sec. 5, T. 37 N., R. 3 W., 3½ miles northwest of Bridge ranger station, 5 miles upstream from mouth, and 19 miles northwest of Pagosa Springs.

Drainage area.- 53.4 square miles.

Records available.- April 1937 to September 1941 (discontinued).

Extremes.- Maximum discharge during year, 867 second-feet May 13 (gage height, 5.34 feet), from rating curve extended above 500 second-feet; minimum daily not determined.
1937-41: Maximum discharge, that of May 13, 1941; minimum not determined.
Greatest flood known occurred Oct. 5, 1911.

Remarks.- Records good except those for periods of ice effect or no gage-height record, which are fair. A few diversions above station for irrigation.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	102	20					34	230	408	410	94	34
2	78	20					32	260	420	385	87	33
3	71	21					31	285	438	382	81	30
4	59	21					30	335	452	398	78	27
5	140	17					33	365	420	567	71	24
6	140	19					30	458	410	445	74	23
7	108	18					24	415	485	392	81	22
8	85	19					27	470	531	405	74	22
9	77	21					33	525	420	365	90	23
10	66	22					45	558	348	340	81	21
11	58						37	627	300	340	71	19
12	52						34	711	288	380	62	17
13	46						32	765	318	340	54	32
14	43						31	717	370	382	53	63
15	38		14	12	15	16	33	591	415	345	82	47
16	36						33	505	468	332	120	35
17	33	(*)					33	515	520	330	97	34
18	30						30	500	609	322	83	70
19	29						27	452	678	315	68	74
20	27						25	430	657	280	63	123
21	24	16					28	375	660	232	59	114
22	21						27	375	663	208	57	158
23	21						26	392	669	195	50	208
24	*21						40	448	669	192	42	140
25	21						75	498	615	220	38	118
26	23						100	488	588	180	36	97
27	30						135	505	522	164	33	81
28	27						175	460	515	146	32	69
29	25						195	418	458	127	31	132
30	26						225	408	428	114	42	136
31	20	-					-	385	-	102	36	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	1,577	140	20	50.9	3,130
November	518	-	-	17.3	1,030
December	434	-	-	14.0	861
Calendar year 1940	13,348.2	185	-	36.5	26,480
January	372	-	-	12.0	738
February	420	-	-	15.0	833
March	558	-	-	18.0	1,110
April	1,660	225	24	55.3	3,290
May	14,466	765	230	467	28,690
June	14,742	678	288	491	29,240
July	9,285	567	102	300	18,420
August	2,020	120	31	65.2	4,010
September	2,026	208	17	67.5	4,020
Water year 1940-41	48,078	765	-	132	95,370

* Winter discharge measurement made on this day.
Note.- No gage-height record Oct. 26, Apr. 13 to May 5; Aug. 9-15, 26-29, Sept. 8-10; discharge computed on basis of records for Piedra River near Piedra. Stage-discharge relation affected by ice Nov. 11 to Apr. 4.

Los Pinos River below Snowslide Canyon, near Weminuche Pass, Colo.
(Locally known as Pine River)

Location.- Water-stage recorder, lat. 37°38'15", long. 107°20'00", in sec. 5, T. 39 N., R.,4 W., 100 feet downstream from Snowslide Canyon, 3½ miles south of Weminuche Pass, and 7 miles southwest of Rio Grande Reservoir Dam.

Drainage area.- 23.8 square miles.

Records available.- October 1937 to September 1941 (no winter records).

Extremes.- Maximum discharge during year, 585 second-feet June 23 (gage height, 3.98 feet), from rating curve extended above 375 second-feet; minimum not determined, occurred during period of no record.

1937-41: Maximum discharge, 650 second-feet May 29, 1938 (gage height, 3.26 feet), from rating curve extended above 300 second-feet; minimum not determined, occurred during period of no record.

Remarks.- Records good except those for period of no gage-height record, which are poor. Two small diversions above station from Los Pinos River Basin to Rio Grande Basin.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	48	14							180	292	42	15
2	40	12							210	284	38	14
3	37	9.0							230	282	36	14
4	32	7.8							255	284	35	14
5	67	-							260	336	34	13
6	58	-							250	274	35	13
7	47	-							245	264	35	12
8	42	-							230	252	34	12
9	40	-							210	226	35	12
10	35	-							190	226	32	12
11	32	-							160	230	30	12
12	29	-							140	244	28	12
13	27	-							160	208	26	20
14	26	-							200	188	27	27
15	25	-							230	172	37	19
16	23	-						175	270	162	42	16
17	22	-							320	150	32	19
18	21	-							360	144	27	46
19	20	-							410	154	24	32
20	20	-							420	142	22	43
21	19	-							430	126	21	33
22	17	-							450	120	21	170
23	16	-							470	113	19	104
24	17	-							440	115	18	82
25	17	-							420	102	18	69
26	15	-							405	87	16	62
27	13	-							395	77	15	54
28	20	-							376	64	15	54
29	23	-							326	56	17	79
30	17	-							302	51	18	64
31	18	-							-	47	15	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	883	67	13	28.5	1,750
November	-	-	-	-	-
December	-	-	-	-	-
Calendar year	-	-	-	-	-
January	-	-	-	-	-
February	-	-	-	-	-
March	-	-	-	-	-
April	-	-	-	-	-
May	5,425	-	-	175	10,760
June	8,944	470	140	298	17,740
July	5,472	336	47	177	10,850
August	844	42	15	27.2	1,670
September	1,148	170	12	38.3	2,280
Water year	-	-	-	-	-

Note.- No gage-height record May 1 to June 27; discharge computed on basis of record for Animas River at Howardsville.

Vallecito Reservoir near Bayfield, Colo.

Location.- Float gage, lat. 37°23', long. 107°34', in sec. 19, T. 36 N., R. 6 W., at Vallecito Dam on Los Pinos (Pine) River 1,000 feet upstream from Little Red Creek and 11 miles northeast of Bayfield. Datum of gage is 7,580 feet above mean sea level (Bureau of Reclamation bench mark). Gage heights have been reduced to elevations above mean sea level.

Records available.- April to September 1941.

Extremes.- Maximum contents during year, 64,670 acre-feet July 1 (elevation, 7,639.8 feet); no available storage Mar. 31.

Remarks.- Dam completed by Bureau of Reclamation in March 1941. Capacity of reservoir, 126,280 acre-feet between elevation 7,580 (sill of outlet gate) and 7,665 feet (crest of spillway). Dead storage, 3,395 acre-feet. Water is used for irrigation in Los Pinos River Basin.

Cooperation.- Records furnished by State engineer's office.

Capacity table (elevation, in feet, usable capacity, in acre-feet)
(Prepared by Bureau of Reclamation)

7,580	0	7,610	18,360	7,640	65,095
7,585	1,885	7,615	23,745	7,645	76,090
7,590	4,115	7,620	29,995	7,650	87,780
7,595	6,790	7,625	37,265	7,655	100,080
7,600	9,980	7,630	45,595	7,660	112,920
7,605	13,790	7,635	54,895	7,665	126,280

Elevation and contents, Mar. 31 to Sept. 30, 1941

Date	Elevation (feet)	Contents (acre-feet)	Change in contents during month (acre-feet)
Mar. 31	7,580.0	0	-
Apr. 30	7,586.4	1,880	1,880
May 31	7,620.4	30,540	28,660
June 30	7,639.7	64,460	33,920
July 31	7,631.7	52,230	12,230
Aug. 31	7,629.04	44,370	7,860
Sept.30	7,634.03	52,580	8,210
The period	-	-	52,580

Los Pinos River near Bayfield, Colo.
(Locally known as Pine River)

Location.- Water-stage recorder, lat. 37°21', long. 107°36', in sec. 26, T. 36 N., R. 7 W., a quarter of a mile downstream from Red Creek and 9 miles north of Bayfield. Datum of gage is 7,415.08 feet above mean sea level, adjustment of 1912.

Drainage area.- 284 square miles.

Records available.- October 1933 to September 1941 in reports of U. S. Geological Survey. October 1927 to September 1941 (at present site) and May to September 1926 (at site 2 miles upstream) in reports of State engineer.

Average discharge.- 14 years, 361 second-feet.

Extremes.- Maximum discharge during year, 2,270 second-feet July 5 (gage height, 5.00 feet); minimum daily, 3.2 second-feet Feb. 11 (result of storage in Vallecito Reservoir).
1926-41: Maximum daily discharge, 5,070 second-feet May 26, 1926; minimum daily, that of Feb. 11, 1941; minimum daily (prior to construction of Vallecito Reservoir), 38 second-feet Dec. 21, 22, 1937.
Greatest flood known occurred Oct. 5, 1911.

Remarks.- Records good except those for period Oct. 1 to Feb. 28, which are fair. Natural regulation by many lakes and storage in Vallecito Reservoir (see page 191). Diversions above station for irrigation.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	612	190	111	102	78	392	184	542	1,580	2,010	600	434
2	606	184	109	88	72	39	192	642	1,520	2,170	606	439
3	565	179	109	84	70	10	190	700	1,600	2,160	600	411
4	510	179	104	78	69	22	184	824	1,620	2,170	576	430
5	504	167	102	75	70	208	190	873	1,580	2,200	537	430
6	720	162	102	76	42	206	187	930	1,500	2,200	537	430
7	741	157	93	80	39	190	187	988	1,630	2,170	531	430
8	681	155	104	78	62	179	195	1,070	1,700	2,110	478	340
9	618	150	115	81	80	164	206	1,180	1,650	2,170	439	287
10	554	150	117	81	6.8	155	228	1,280	1,780	2,130	439	287
11	499	136	123	84	3.2	143	247	1,370	1,440	2,150	430	287
12	463	134	125	86	32	132	247	1,570	1,780	2,190	425	287
13	425	123	107	87	18	129	241	1,770	1,800	2,170	425	287
14	388	113	104	86	4.6	132	228	1,870	1,720	2,110	425	287
15	357	111	92	87	16	20	225	1,920	1,700	1,860	430	287
16	328	115	82	80	18	150	225	1,950	1,740	1,600	425	287
17	305	117	93	75	18	152	228	1,950	1,780	1,200	425	287
18	287	121	102	75	21	169	228	1,910	1,770	1,460	425	287
19	267	132	104	78	28	155	217	1,950	1,810	1,330	425	247
20	257	134	98	82	44	143	206	1,910	1,900	1,220	444	228
21	244	129	97	86	52	143	211	1,840	1,920	1,210	444	225
22	231	125	97	84	53	141	217	1,720	1,960	1,200	444	231
23	220	123	97	86	56	148	208	1,610	2,070	1,130	444	231
24	211	121	100	82	76	157	206	1,610	2,060	1,100	444	234
25	203	121	104	82	76	143	220	1,580	2,090	1,110	444	234
26	200	119	92	75	102	132	254	1,560	2,040	1,110	434	234
27	222	119	88	72	127	132	313	1,520	2,100	1,110	425	234
28	217	115	92	72	8.0	134	370	1,470	2,140	894	411	238
29	197	113	95	74	-	138	415	1,570	2,140	901	415	241
30	195	113	98	82	-	141	473	1,650	2,170	817	411	302
31	200	-	102	81	-	152	-	1,600	-	687	434	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	12,027	741	195	388	23,860
November	4,107	190	111	137	8,150
December	3,158	125	82	102	6,260
Calendar year 1940	85,827	1,090	10	234	170,200
January	2,519	102	72	81.3	5,000
February	1,341.6	127	3.2	47.9	2,660
March	4,451	392	10	144	8,830
April	7,122	473	184	237	14,130
May	44,929	1,950	542	1,449	89,120
June	54,290	2,170	1,440	1,810	107,700
July	50,049	2,200	687	1,614	99,270
August	14,372	606	411	464	28,510
September	9,093	439	225	303	18,040
Water year 1940-41	207,458.6	2,200	3.2	568	411,500

Los Pinos River at Ignacio, Colo.
(Locally known as Pine River)

Location.- Water-stage recorder, lat. 37°07'45", long. 107°37'50", in sec. 5, T. 33 N., R. 7 W., three-quarters of a mile upstream from Ignacio and about 2 miles upstream from Rock Creek.

Drainage area.- 448 square miles.

Records available.- April 1899 to October 1903, September 1910 to December 1914 and October 1930 to September 1941 in reports of Geological Survey. April 1899 to October 1903, September 1910 to November 1912 and March 1913 to December 1931 in reports of State engineer of New Mexico.

Average discharge.- 28 years (1910-11, 1913-40), 373 second-feet, prior to completion of Vallecitos Dam.

Extremes.- Maximum discharge during year, 3,860 second-feet May 4 (gage height, 5.33 feet), from rating curve extended above 3,000 second-feet by logarithmic plotting; minimum daily, 44 second-feet Feb. 11.

1910-14, 1930-41: Maximum discharge recorded, 5,570 second-feet Aug. 27, 1932 (gage height, 6.19 feet), from rating curve extended above 2,600 second-feet by logarithmic plotting; minimum daily discharge observed, 0.1 second-foot Aug. 11, 1913.

Greatest flood known occurred Oct. 5, 1911 when gage was destroyed.

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

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	475	124	121	129	111	307	634	1,240	1,640	1,910	262	106
2	480	148	121	*121	b100	351	538	1,910	1,510	2,060	237	176
3	445	148	119	b100	b90	141	485	1,550	1,490	2,060	244	212
4	390	148	117	b80	104	117	435	2,580	1,560	2,040	220	117
5	390	138	117	b90	102	230	465	1,970	1,490	2,020	159	126
6	550	129	*117	b100	*102	285	415	1,830	1,430	2,010	200	126
7	592	129	117	b90	85	262	400	1,850	1,570	1,980	175	131
8	550	124	115	b90	74	237	430	1,920	2,020	1,950	138	131
9	496	119	115	b100	104	230	470	2,020	1,840	1,970	138	72
10	445	129	117	*b100	88	208	526	2,120	2,070	1,920	204	64
11	395	121	131	b100	44	195	538	2,260	1,730	1,910	181	62
12	354	*115	136	108	54	195	557	2,290	2,040	1,910	172	54
13	317	b110	131	111	72	201	538	2,540	2,010	1,900	164	76
14	285	b100	b110	108	60	198	460	2,620	1,840	1,840	153	119
15	254	b90	b100	106	50	195	445	2,540	1,740	1,690	166	108
16	234	b100	b80	b100	64	224	460	2,450	1,710	1,410	208	96
17	208	106	*b100	*b90	70	361	455	2,370	1,740	826	198	102
18	189	111	b120	b90	81	414	465	2,370	1,700	1,030	181	124
19	175	146	b110	b100	104	420	430	2,370	1,700	985	156	136
20	164	148	b110	b100	119	358	400	2,230	1,780	810	161	113
21	148	136	b100	111	156	386	460	2,060	1,760	786	159	a200
22	146	*136	b110	106	159	390	662	2,080	1,810	762	156	a170
23	133	141	b110	111	156	470	520	1,950	1,940	746	153	181
24	124	136	b120	b100	184	634	480	1,850	2,070	613	153	148
25	117	133	133	*111	184	410	532	1,780	2,040	634	151	141
28	108	131	b120	b100	166	345	754	1,730	1,940	627	146	141
27	143	129	b100	b100	270	329	940	1,700	2,000	620	136	158
28	153	129	b110	102	138	350	1,220	1,660	2,060	538	119	146
29	178	121	119	115	-	372	1,070	1,620	2,040	485	124	261
30	151	124	131	121	-	386	1,100	1,840	2,020	410	121	204
31	119	-	133	119	-	435	-	1,690	-	368	104	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	8,908	592	108	287	17,670
November	3,799	148	90	127	7,540
December	3,590	136	80	116	7,120
Calendar year 1940	53,457.5	714	1.9	146	106,100
January	3,209	129	80	104	6,360
February	3,091	270	44	110	6,130
March	9,636	634	117	311	19,110
April	17,284	1,220	400	576	34,280
May	63,310	2,880	1,240	2,042	125,600
June	54,310	2,070	1,430	1,810	107,700
July	40,820	2,060	368	1,317	80,970
August	5,239	262	104	169	10,390
September	3,981	261	54	133	7,900
Water year 1940-41	217,177	2,880	44	595	430,800

* Winter discharge measurement made on this day.

a No gage-height record; discharge computed on basis of weather records and records for station on San Juan River at Pagosa Springs.

b Stage-discharge relation affected by ice.

Animas River at Howardsville, Colo.

Location.- Water-stage recorder, lat. 37°50', long. 107°36', in sec. 12, T. 41 N., R. 7 W., 0.4 mile southwest of Howardsville and half a mile downstream from Cunningham Creek. Datum of gage is 9,616.98 feet above mean sea level, adjustment of 1912.

Drainage area.- 55.9 square miles.

Records available.- May 1936 to September 1941.

Extremes.- Maximum discharge during year, 1,080 second-feet June 22 (gage height, 3.53 feet), from rating curve extended above 800 second-feet; minimum daily, 11 second-feet Feb. 27, 28.

1936-41: Maximum discharge, 1,700 second-feet June 21, 1938 (gage height, 4.50 feet), from rating curve extended above 800 second-feet; minimum not determined, occurred during period of no record.

Greatest flood known occurred Oct. 5, 1911.

Remarks.- Records good except those for periods of ice effect, which are fair. No diversions above station.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	92	29	23	16	15	13	19	65	350	650	202	67
2	89	31	21	15	15	13	18	65	445	620	188	63
3	83	31	19	14	15	13	18	75	490	626	177	62
4	75	29	18	14	15	12	18	88	470	608	172	58
5	94	26	19	14	14	14	19	88	490	584	163	56
6	94	28	20	15	14	14	18	114	460	530	158	53
7	86	28	20	15	15	13	18	153	445	530	161	52
8	83	29	20	15	14	13	20	244	355	530	163	57
9	80	29	20	15	14	13	22	305	284	542	161	53
10	74	26	20	15	14	14	22	385	236	590	151	50
11	68	24	20	16	14	15	21	450	206	554	148	48
12	64	24	18	15	14	16	20	590	196	524	148	47
13	60	*23	17	15	14	16	20	596	244	506	136	77
14	59	25	16	*15	14	16	20	554	305	465	134	98
15	57	27	15	14	14	16	20	470	360	450	151	94
16	54	27	16	14	14	16	20	435	440	435	153	88
17	51	27	17	15	*14	*16	20	518	542	445	148	84
18	47	27	17	15	14	15	20	542	704	460	132	144
19	44	26	17	15	14	14	20	445	752	470	121	169
20	43	25	17	14	14	14	22	325	794	455	112	177
21	42	25	18	14	14	14	19	305	818	415	112	156
22	40	25	18	14	13	14	18	284	848	410	107	236
23	40	25	17	14	13	13	19	264	842	415	98	232
24	39	24	17	14	14	14	20	325	650	410	88	199
25	37	21	18	14	14	18	22	405	680	380	83	180
26	39	19	17	14	12	18	24	475	728	340	80	166
27	33	18	16	14	11	18	27	410	728	370	75	156
28	32	23	17	15	11	17	32	345	668	315	72	144
29	40	23	17	16	-	17	39	300	626	272	74	148
30	36	23	17	16	-	18	56	288	652	240	77	139
31	32	-	17	15	-	18	-	292	-	220	70	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	1,807	94	32	58.3	3,580
November	767	31	18	25.6	1,520
December	559	23	15	18.0	1,110
Calendar year 1940	31,013	584	12	84.7	61,520
January	456	16	14	14.7	904
February	387	15	11	13.8	768
March	465	18	12	15.0	922
April	671	56	18	22.4	1,330
May	10,200	596	65	329	20,230
June	15,788	848	196	526	31,320
July	14,361	650	220	463	28,480
August	4,015	202	70	130	7,960
September	3,353	236	47	112	6,650
Water year 1940-41	52,829	848	11	145	104,800

* Winter discharge measurement made on this day.

Note.- Stage-discharge relation affected by ice Nov. 12 to Jan. 10, Jan. 14-28, Feb. 1-3, 5, 6, 8, 9, 12, 14, 17, 22, 23, Feb. 26 to Mar. 2, Mar. 4, 7-10, 12.

Animas River at Durango, Colo.

Location.- Water-stage recorder, lat. 37°17', long. 107°52', in sec. 20, T. 35 N., R. 9 W., at Western Colorado Power Co.'s plant at Durango, half a mile upstream from Lightner Creek. Datum of gage is 6,501.57 feet above mean sea level, datum of 1929.

Drainage area.- 692 square miles.

Records available.- June 1895 to December 1905, January 1910 to December 1914 and October 1933 to September 1941 in reports of U. S. Geological Survey. June 1895 to December 1905 and December 1910 to September 1941 in reports of State engineer.

Average discharge.- 40 years (1895-1900, 1901-5, 1910-41), 910 second-feet.

Extremes.- Maximum discharge during year, 10,500 second-feet May 14 (gage height, 7.40 feet); minimum daily, 110 second-feet Jan. 4.

1895-1900, 1901-5, 1910-41: Maximum discharge, 25,000 second-feet Oct. 5, 1911 (gage height, 11 feet, corrected), from rating curve extended above 7,000 second-feet; discharge of flood of June 29, 1927, 20,000 second-feet (gage height, 9.65 feet); minimum daily, 50 second-feet Dec. 22, 1917.

Remarks.- Records excellent except those for Oct. 1 to Mar. 31, which are fair. Diversions above station for irrigation. Natural regulation by many lakes and artificial regulation for power.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	986	307	222	187	211	280	540	1,540	3,250	3,980	1,150	442
2	830	290	214	164	184	296	552	1,660	3,520	3,660	1,090	442
3	728	286	218	125	177	296	518	1,760	3,980	3,790	1,040	432
4	638	290	218	110	171	272	475	2,210	3,940	3,790	959	412
5	676	286	218	145	164	272	485	2,240	4,170	3,660	968	398
6	1,200	282	225	135	161	264	480	2,570	4,070	3,350	959	378
7	876	274	214	180	211	256	445	3,010	4,250	3,300	914	369
8	743	274	204	174	236	250	455	3,340	4,440	3,260	950	360
9	663	270	204	174	228	250	507	3,930	4,000	3,280	1,040	373
10	625	278	214	171	214	242	612	5,010	3,230	3,200	1,060	369
11	571	270	228	177	236	246	630	5,780	2,850	3,480	959	369
12	521	254	228	204	232	250	576	6,590	2,680	3,170	914	364
13	482	246	222	200	228	256	540	8,610	2,720	3,130	823	388
14	452	231	197	211	225	272	502	9,500	3,040	2,790	786	757
15	442	250	142	204	232	276	485	7,290	3,320	2,550	878	714
16	427	266	119	194	246	276	480	7,090	3,640	2,460	1,060	676
17	407	274	180	174	253	264	475	5,840	4,350	2,520	1,070	613
18	383	286	204	187	260	288	475	6,590	5,370	2,410	905	750
19	364	307	194	194	268	320	445	6,320	6,480	2,310	816	1,480
20	355	290	158	187	268	358	430	4,130	6,700	2,220	736	1,160
21	346	262	151	197	276	372	445	3,060	6,750	2,200	682	1,050
22	341	262	164	197	280	367	485	2,880	6,890	2,090	650	1,720
23	341	266	161	184	268	380	480	2,910	7,180	2,100	594	3,150
24	337	254	187	184	268	395	480	3,540	7,410	2,030	554	1,900
25	328	255	174	204	284	372	529	4,290	6,220	2,000	521	1,530
26	319	235	142	184	276	367	636	4,480	6,300	1,780	494	1,290
27	360	239	151	174	276	358	800	4,920	5,770	1,820	472	1,100
28	337	227	187	187	272	367	1,010	4,290	5,400	1,800	457	968
29	337	235	187	218	-	390	1,080	3,500	4,500	1,510	447	1,070
30	324	235	190	225	-	390	1,280	3,330	4,050	1,330	427	1,240
31	319	-	197	218	-	425	-	3,100	-	1,210	427	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	16,060	1,200	319	518	31,850
November	7,961	307	227	265	15,790
December	5,914	228	119	191	11,730
Calendar year 1940	191,954	2,850	119	524	380,700
January	5,669	225	110	183	11,240
February	6,605	284	161	236	13,100
March	9,667	425	242	312	19,170
April	17,332	1,280	430	578	34,380
May	135,310	9,500	1,540	4,365	268,400
June	140,470	7,410	2,680	4,682	278,600
July	82,380	3,980	1,210	2,657	163,400
August	24,802	1,150	427	800	49,190
September	26,264	3,150	360	875	52,090
Water year 1940-41	478,434	9,500	110	1,311	948,900

Animas River near Cedar Hill, N. Mex.

Location.- Water-stage recorder, lat. 37°02'15", long. 107°52'25", in sec. 7, T. 32 N., R. 9 W., three-quarters of a mile downstream from Florida River, 2.5 miles upstream from Colorado-New Mexico State line, and 8.5 miles north of village of Cedar Hill.

Records available.- November 1933 to September 1941.

Extremes.- Maximum discharge during year, 11,900 second-feet May 14 (gage height, 9.50 feet); minimum daily, 190 second-feet (estimated) Jan. 4.
1933-41: Maximum discharge and gage height, those of May 14, 1941; minimum daily discharge, 90 second-feet (estimated) Jan. 21, 1935.
Greatest flood known occurred Oct. 5 or 6, 1911.

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

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,260	356	285	288	279	415	1,170	2,660	4,240	5,060	1,270	555
2	1,120	342	279	b260	261	615	1,020	3,370	4,440	4,740	1,230	555
3	940	339	276	b250	*258	491	904	3,010	4,840	4,850	1,150	538
4	802	339	276	b190	b250	451	850	6,190	4,950	4,980	1,080	520
5	802	339	276	b200	b240	495	877	4,040	5,160	5,090	1,080	502
6	1,800	*324	273	*b260	b240	463	850	4,140	5,060	4,920	1,080	470
7	1,310	324	279	b280	273	431	794	4,740	5,370	5,010	1,000	455
8	1,020	318	276	b260	285	398	834	5,160	5,580	5,020	1,080	440
9	877	312	270	b260	273	408	960	5,790	5,160	4,910	1,190	455
10	794	318	273	b260	261	370	1,170	6,670	4,440	4,600	1,190	440
11	714	315	306	b260	*267	352	1,190	7,110	3,750	4,800	1,150	425
12	646	294	*306	291	300	380	1,130	8,030	3,460	4,180	1,110	425
13	605	b280	297	*294	300	419	1,050	9,680	3,460	3,980	1,000	513
14	560	*b260	b270	291	297	455	913	10,400	3,840	3,380	940	767
15	540	b290	248	276	309	720	895	8,720	4,240	2,910	1,000	880
16	518	b290	230	b260	336	725	886	7,340	4,640	2,640	1,230	768
17	500	306	b230	b260	336	680	850	7,110	5,370	2,820	1,320	768
18	483	312	b280	b210	373	664	818	7,570	6,230	2,730	1,190	768
19	459	356	b290	b230	431	721	694	7,570	7,570	2,550	1,040	1,860
20	435	366	*b270	b250	423	714	652	5,580	8,030	2,550	940	1,740
21	415	330	b260	*b270	518	742	770	4,240	8,030	2,580	850	1,460
22	404	321	b270	b260	475	778	1,270	3,840	8,030	2,300	795	2,440
23	404	*321	b280	b270	500	818	970	3,840	8,260	2,300	715	4,600
24	394	315	306	b270	495	886	877	4,440	8,720	2,300	665	2,550
25	390	294	300	273	491	682	1,000	5,370	7,570	2,300	618	1,930
26	376	294	248	b250	451	600	2,000	5,370	7,570	1,930	595	1,620
27	412	297	252	b250	390	600	2,080	5,790	6,890	1,860	575	1,410
28	404	291	*b270	*b260	387	640	2,290	5,370	6,670	2,070	555	1,270
29	387	291	288	297	-	682	2,210	4,540	5,790	1,680	538	1,660
30	376	294	285	315	-	714	2,290	4,440	5,160	1,460	555	1,620
31	376	-	297	291	-	786	-	4,140	-	1,320	575	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	20,523	1,800	376	662	40,710
November	9,428	366	260	314	18,700
December	8,546	306	230	276	16,950
Calendar year 1940	226,028	3,480	125	618	448,300
January	8,136	315	190	262	16,140
February	9,699	518	240	346	19,240
March	18,295	886	352	590	36,290
April	34,264	2,290	652	1,142	67,960
May	176,260	10,400	2,660	5,686	349,600
June	172,520	8,720	3,460	5,751	342,200
July	103,790	5,090	1,320	3,348	205,900
August	29,306	1,320	538	945	58,130
September	34,404	4,600	425	1,147	68,240
Water year 1940-41	625,171	10,400	190	1,713	1,240,000

Peak discharge.- May 14 (10 a.m.) 11,900 sec.-ft.; Aug. 9 (5 p.m.) 3,480 sec.-ft.; Sept. 23 (3 a.m.) 5,440 sec.-ft.

* Winter discharge measurement made on this day.

b Stage-discharge relation affected by ice.

Animas River at Farmington, N. Mex.

Location.- Water-stage recorder, lat. 36°43'20", long. 108°12'00", in SE¼ sec. 16, T. 29 N., R. 13 W., at bridge on State Highway 17, 0.6 mile southeast of Farmington and 1.1 miles upstream from mouth. Prior to May 12, water-stage recorder 35 feet downstream, same datum.

Drainage area.- 1,360 square miles.

Records available.- June 1904 to October 1905 (published as Animas River near Farmington), September 1912 to December 1914 and October 1930 to September 1941 in reports of Geological Survey. June 1904 to October 1905 (published as Animas River near Farmington) and September 1912 to December 1931 in reports of State engineer.

Extremes.- Maximum discharge during year, 12,800 second-feet May 14 (gage height, 8.9 feet, from graph based on gage readings), from rating curve extended above 7,700 second-feet by logarithmic plotting; minimum daily, 165 second-feet Sept. 8, 10.
1930-41: Maximum discharge and gage height, those of May 14, 1941; minimum daily discharge, 8.5 second-feet Aug. 18, 1940.
Greatest flood known occurred Oct. 5, 1911.

Remarks.- Records good for October to April; others fair. Diversions above station for irrigation.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,330	332	311	345	328	446	1,080	2,230	4,050	5,100	1,080	280
2	1,180	316	307	303	307	568	1,190	3,360	4,270	4,860	1,070	280
3	1,030	307	303	276	280	623	1,020	3,000	4,500	4,620	822	240
4	882	299	299	246	272	495	882	6,030	4,500	4,740	894	200
5	808	299	299	242	276	490	906	4,990	4,860	4,860	814	200
6	1,380	307	303	284	280	512	868	4,560	5,100	4,740	814	200
7	1,390	295	299	272	307	495	830	4,880	4,860	4,500	806	200
8	1,100	287	287	276	328	446	801	5,220	5,620	4,270	888	165
9	962	284	284	268	328	435	852	5,550	5,620	4,270	1,140	200
10	868	291	287	276	316	425	994	6,280	4,860	4,050	1,330	165
11	808	291	341	287	316	381	1,120	a7,000	3,940	4,270	1,130	200
12	717	287	345	324	345	381	1,070	8,050	3,520	4,050	1,040	200
13	656	287	337	345	358	420	1,040	9,460	3,320	3,830	958	370
14	592	280	311	324	345	456	954	10,800	3,520	3,420	790	699
15	562	276	284	311	350	616	882	9,460	4,160	3,040	870	958
16	528	284	b250	291	358	854	868	7,750	4,380	2,700	1,030	769
17	500	303	b280	264	372	822	838	7,150	5,100	2,530	1,120	720
18	473	320	328	246	376	752	830	7,750	6,160	2,610	1,120	727
19	440	358	350	257	435	745	780	7,750	7,900	2,610	870	1,440
20	420	400	328	268	478	794	710	6,020	8,500	2,610	870	1,820
21	390	376	299	291	522	773	703	4,270	8,500	2,610	650	1,500
22	372	350	276	291	598	860	1,100	3,620	8,200	2,300	650	1,710
23	354	345	284	303	539	882	1,210	3,830	8,500	2,300	590	4,980
24	341	345	303	276	598	936	1,020	4,160	9,140	2,300	530	2,950
25	328	328	368	295	562	875	994	5,100	8,200	2,150	475	2,150
26	320	316	311	280	544	675	1,740	5,360	7,900	2,010	420	1,750
27	350	307	264	272	468	662	1,790	5,620	7,300	1,820	370	1,540
28	386	307	264	276	425	703	2,080	5,880	6,720	2,080	325	1,450
29	350	307	303	320	-	738	1,930	4,620	5,880	1,700	280	1,820
30	345	311	337	390	-	759	2,000	4,270	5,100	1,270	280	1,750
31	337	-	381	363	-	822	-	3,830	-	1,260	325	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	20,499	1,390	320	661	40,660
November	9,395	400	276	313	18,630
December	9,523	381	250	307	18,890
Calendar year 1940	197,533.5	3,180	8.5	540	391,800
January	9,062	390	242	292	17,970
February	11,011	598	272	393	21,840
March	19,891	986	381	642	39,450
April	33,082	2,080	703	1,103	65,620
May	177,850	10,800	2,230	5,737	352,800
June	174,180	9,140	3,320	5,806	345,500
July	99,480	5,100	1,260	3,209	197,300
August	24,351	1,330	280	786	48,300
September	31,663	4,980	165	1,055	62,800
Water year 1941	619,987	10,800	165	1,699	1,230,000

Note.- Recorder station destroyed by flood May 11; records May 12 to Sept. 13 computed on basis of gage readings obtained twice daily.
* Winter discharge measurement made on this day.
a No gage-height record; discharge computed on basis of records for station near Cedar Hill.
b Stage-discharge relation affected by ice.

Mineral Creek near Silverton, Colo.

Location.- Water-stage recorder, lat. 37°48'50", long. 107°41'45", in sec. 13, T. 41 N., R. 8 W., 300 feet upstream from Bear Creek and 2 miles west of Silverton.

Drainage area.- 43.9 square miles.

Records available.- May 1936 to September 1941.

Extremes.- Maximum discharge during year, 1,060 second-feet June 23 (gage height, 3.83 feet), from rating curve extended above 550 second-feet; minimum daily, 12 second-feet Feb. 27.

1936-41: Maximum discharge, 1,700 second-feet June 29, 1938 (gage height, 4.69 feet), from rating curve extended above 550 second-feet; minimum not determined, occurred during period of no record.

Greatest flood known occurred Oct. 5, 1911.

Remarks.- Records good. No diversions above station.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	143	31	25	20	18	17	28	61	297	612	258	68
2	127	32	24	17	18	16	26	56	356	600	246	63
3	109	32	22	16	18	16	25	70	369	606	230	59
4	93	32	21	16	19	14	25	79	356	565	230	54
5	146	30	21	17	16	18	26	83	387	530	254	50
6	136	31	22	18	16	16	25	118	387	515	246	46
7	118	32	22	18	17	16	23	153	382	540	242	46
8	104	32	22	18	16	14	23	211	310	575	250	48
9	96	33	22	18	16	14	26	278	262	575	262	44
10	83	32	23	18	16	15	29	335	234	575	238	39
11	76	31	24	19	16	18	28	380	222	565	215	38
12	70	29	21	20	16	16	26	465	226	540	196	39
13	68	29	19	19	16	18	28	600	246	525	178	116
14	65	30	18	19	16	18	26	545	274	475	178	118
15	61	31	17	18	16	17	27	432	306	446	215	99
16	58	30	19	17	16	16	27	410	374	470	242	84
17	56	30	20	18	16	16	26	460	450	505	246	82
18	51	30	21	18	16	18	24	490	575	465	185	279
19	50	30	21	18	16	19	22	387	654	450	163	258
20	48	28	21	17	16	21	21	279	738	446	146	234
21	45	28	22	17	16	20	22	258	738	432	130	181
22	44	27	21	17	15	21	23	250	780	450	113	315
23	42	27	20	17	15	21	24	238	670	455	104	274
24	41	26	21	17	16	14	25	238	846	428	94	219
25	39	26	22	17	16	19	26	324	804	400	86	185
26	42	21	20	17	16	20	27	396	726	369	84	167
27	39	20	19	18	12	22	31	378	672	418	79	150
28	41	26	20	18	14	23	34	302	672	351	72	137
29	37	25	21	20	-	23	47	274	606	306	77	150
30	38	25	21	20	-	23	61	270	600	288	84	130
31	34	-	21	19	-	25	-	270	-	270	72	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	2,200	146	34	71.0	4,360
November	866	33	20	28.9	1,720
December	653	25	17	21.1	1,300
Calendar year 1940	28,902.2	500	9.2	79.0	57,330
January	556	20	16	17.9	1,100
February	450	19	12	16.1	893
March	564	25	14	18.2	1,120
April	831	61	21	27.7	1,650
May	9,090	600	56	293	18,030
June	14,719	870	222	491	29,190
July	14,747	612	270	476	29,250
August	5,415	262	72	175	10,740
September	3,772	315	38	126	7,480
Water year 1940-41	53,863	870	12	148	106,800

Note.- No gage-height record Nov. 5-12, 14-16, Dec. 14 to Jan. 13, Jan. 23 to Feb. 3; discharge computed on basis of three discharge measurements, recorded range in stage, and weather records.

Hermosa Creek near Hermosa, Colo.

Location.- Water-stage recorder, lat. 37°25'30", long. 107°50'15", in NW¼ sec. 3, T. 36 N., R. 9 W., 1 mile northwest of Hermosa and 2 miles upstream from mouth. Datum of gage is 6,705.88 feet above mean sea level, datum of 1929. April 1920 to September 1928 water-stage recorder, and prior to September 1914 a staff gage, both at site half a mile upstream at different datum.

Drainage area.- 172 square miles.

Records available.- November 1911 to June 1912, April 1913 to September 1914 (fragmentary) and October 1940 to September 1941 in reports of Geological Survey. April 1913 to September 1914, April 1920 to September 1928 and October 1940 to September 1941 in reports of State engineer. The figures for the flood of May and June 1920 as published in reports of the State engineer are considered to be too high according to information furnished by that organization.

Extremes.- Maximum discharge during year, 2,980 second-feet May 12 (gage height, 6.02 feet), from rating curve extended above 1,800 second-feet; minimum daily, 12 second-feet Jan. 4.

1920-28, 1940-41: Maximum discharge, 3,040 second-feet Sept. 12, 1927 (gage height, 8.50 feet, site and datum then in use, from floodmarks), by slope-area method; minimum not determined, occurred during period of ice effect.

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

Cooperation.- Gage-height records and discharge measurements prior to June 30 furnished by Bureau of Reclamation.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	73	25	25	22	17	32	231	534	1,110	586	85	54
2	58	27	25	20	18	36	186	592	1,160	579	81	52
3	50	28	24	13	19	33	162	624	1,150	553	78	50
4	44	28	23	12	20	30	150	943	1,140	520	79	49
5	82	21	20	13	22	36	170	930	1,240	508	81	48
6	109	27	*19	13	25	31	154	1,290	1,200	456	88	47
7	73	24	*19	13	28	31	138	1,370	1,350	442	85	47
8	61	26	19	14	27	33	162	1,600	1,390	449	81	47
9	56	25	20	*14	25	40	237	1,310	1,290	416	85	47
10	53	26	20	17	*27	39	321	1,810	1,090	378	84	46
11	48	23	20	20	25	44	261	2,060	1,030	371	79	44
12	44	22	19	22	26	41	208	2,330	995	345	74	44
13	41	18	18	24	25	46	166	2,460	982	309	69	62
14	38	19	17	22	26	46	146	2,400	1,030	291	66	95
15	36	29	16	21	30	44	138	2,080	1,050	249	78	74
16	34	32	16	19	29	40	146	1,880	1,070	231	77	63
17	33	*32	18	17	28	48	138	1,830	1,130	202	86	57
18	32	31	19	16	29	60	127	1,860	1,200	189	73	124
19	30	31	18	18	30	80	115	1,560	1,220	171	65	108
20	29	26	19	18	27	103	100	1,050	1,130	162	62	86
21	28	24	18	19	29	94	112	852	1,050	146	61	78
22	28	25	18	20	27	88	106	839	1,000	135	60	898
23	28	24	18	17	28	84	89	943	995	128	57	683
24	28	23	19	18	29	82	106	1,290	995	146	57	352
25	27	21	18	18	30	74	130	1,420	924	137	56	220
26	29	20	17	17	26	70	198	1,410	839	118	55	165
27	44	19	19	*17	26	74	333	1,530	794	143	54	137
28	35	19	22	20	31	84	416	1,370	754	116	54	122
29	29	22	23	22	-	88	442	1,280	664	103	55	165
30	32	23	24	20	-	94	514	1,220	612	95	61	171
31	27	-	25	19	-	138	-	1,100	-	91	56	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	1,359	109	27	43.8	2,700
November	740	32	18	24.7	1,470
December	615	25	16	19.8	1,220
Calendar year	-	-	-	-	-
January	555	24	12	17.9	1,100
February	729	31	17	26.0	1,450
March	1,863	138	30	60.1	3,700
April	5,911	514	98	197	11,720
May	44,267	2,460	534	1,428	87,800
June	31,584	1,390	612	1,053	62,650
July	8,765	586	91	283	17,390
August	2,181	88	54	70.4	4,330
September	4,235	898	44	141	8,400
Water year 1940-41	102,804	2,460	12	282	203,900

* Winter discharge measurement made on this day.

Note.- Stage-discharge relation affected by ice Nov. 12, 13, Nov. 25 to Dec. 9, Dec. 12-30, Jan. 1-12, 14, 16-28, Feb. 1-6.

Lightner Creek near Durango, Colo.

Location.- Water-stage recorder, lat. 37°16', long. 107°53', in sec. 30, T. 35 N., R. 9 W., half a mile above mouth and half a mile west of Durango. Prior to June 18, 1941, water-stage recorder 50 feet upstream at different datum.

Drainage area.- 66 square miles.

Records available.- October 1939 to September 1941. October 1933 to September 1939 at site 2 miles upstream in reports of Geological Survey June 1927 to September 1939 at site 2 miles upstream in reports of State engineer. All records equivalent.

Average discharge.- 14 years, 22.1 second-feet.

Extremes.- Maximum discharge during year, 1,780 second-feet May 4 (gage height, 5.20 feet, present site and datum, from floodmarks), by slope-area method; minimum, 2.2 second-feet Dec. 9, 12, probably less during period of ice effect, Dec. 13 to Feb. 16.
1927-41: Maximum discharge, 1,830 second-feet June 26, 1937 (gage height, 5.00 feet, from floodmarks), site and datum then in use, by slope-area method; minimum daily, 1 second-foot or less at times during periods 1930-31, 1933-35, 1938-40.

Remarks.- Records good except those for period of ice effect or no gage-height record, which are poor. No diversions above station.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3.5	3.8	2.5			15	175	190	127	48	7.0	4.5
2	4.3	4.0	2.4			18	128	335	132	45	7.3	4.8
3	3.8	3.8	2.4			14	127	296	132	42	6.2	5.1
4	3.5	3.2	2.4			16	120	764	127	42	5.9	5.1
5	18	3.5	2.4		4.0	17	123	459	130	45	5.9	5.1
6	26	3.2	2.4			14	107	414	119	40	5.6	5.1
7	14	3.0	3.0			14	107	411	147	33	5.6	4.8
8	11	3.2	2.5			14	131	431	174	34	5.9	4.8
9	9.1	3.5	2.2			15	164	448	162	31	5.6	4.8
10	7.2	3.2	2.5			14	181	431	142	28	5.1	5.1
11	6.1	3.0	2.7			14	143	411	136	30	5.3	5.1
12	6.1	3.0	2.2			16	138	473	121	27	5.6	5.1
13	5.3	4.3				17	140	518	h150	23	4.8	8.0
14	5.1	5.1			4.6	17	135	424	h175	20	4.5	9.2
15	5.1	4.0				20	143	322	h160	20	4.8	9.2
16	5.1	3.3		3		26	142	265	h145	18	4.8	8.8
17	5.1	2.7			*6.1	40	122	281	h120	20	5.1	9.2
18	4.8	2.5			6.9	56	106	308	124	18	5.3	9.2
19	4.8	3.5			9.1	71	99	255	122	16	5.3	9.2
20	4.5	3.3			8.8	66	85	167	117	15	5.1	11
21	4.3	2.9			9.5	64	125	125	108	14	5.9	12
22	4.3	*3.0	2.4		12	82	164	127	108	14	6.2	295
23	4.3	3.3			12	87	183	155	106	14	5.1	97
24	4.0	3.0			14	81	179	198	106	13	4.1	45
25	3.8	2.7			14	71	225	247	87	14	3.5	28
26	4.8	3.2			13	55	523	205	82	13	3.3	22
27	5.3	3.2			12	69	374	203	78	15	3.7	20
28	4.0	2.5			12	85	267	167	74	13	3.7	19
29	4.3	2.5			-	90	234	140	60	12	4.1	47
30	4.3	2.9			-	106	190	140	48	9.9	4.8	45
31	3.8	-			-	130	-	127	-	8.0	4.8	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	199.6	26	3.5	6.44	396
November	98.3	5.1	2.5	3.28	195
December	75.2	3.0	-	2.43	149
Calendar year 1940	3,414	168	-	9.33	6,780
January	93	-	-	3	184
February	197.0	14	-	7.04	391
March	1,414	130	14	45.6	2,800
April	5,080	523	85	169	10,080
May	9,437	764	125	304	18,720
June	3,619	175	48	121	7,180
July	734.9	48	8.0	23.7	1,460
August	159.9	7.3	3.3	5.16	317
September	763.2	295	4.5	25.4	1,510
Water year 1940-41	21,871.1	764	-	59.9	43,380

* Winter discharge measurement made on this day.
h Computed from staff-gage readings.
Note.- Stage-discharge relation affected by ice Dec. 13 to Feb. 16.

Florida River near Durango, Colo.

Location.- Water-stage recorder, lat. 37°20', long. 107°45', in sec. 4, T. 35 N., R. 8 W., just downstream from Red Creek and 10½ miles northeast of Durango. Datum of gage is 7,301.88 feet (revised) above mean sea level, datum of 1929.

Drainage area.- 96 square miles.

Records available.- May to July 1899, April 1901 to October 1903, September 1910 to September 1912 and October 1933 to September 1941 in reports of Geological Survey. May to July 1899, April 1901 to October 1903, September 1910 to September 1924 and April 1927 to September 1941 in reports of State engineer. Station has been located at several different sites in this vicinity; all records equivalent.

Average discharge.- 23 years (1910-12, 1917-24, 1927-41), 125 second-feet.

Extremes.- Maximum discharge during year, 1,530 second-feet June 24 (gage height, 4.42 feet), from rating curve extended above 950 second-feet; minimum daily, 8.5 second-feet (discharge measurement) Jan. 3, probably less during period of ice effect.

1899, 1901-3, 1910-24, 1927-41: Maximum discharge observed, 4,640 second-feet June 28, 1927 (gage height, 4.50 feet, site and datum then in use); minimum daily, 0.4 second-foot Feb. 15, 1918.

Greatest flood known occurred Oct. 5, 1911.

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 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	189	29	25			19	100	262	530	768	104	35
2	161	32	27			21	86	347	525	750	96	34
3	135	31	26	(*)		*19	77	335	551	738	87	32
4	115	29	25			21	77	525	561	662	79	28
5	189	23	23			21	82	446	594	774	85	26
6	247	28	23			18	79	490	594	654	96	28
7	186	25	25			18	73	530	665	583	92	26
8	161	25	25			20	82	572	605	583	83	24
9	142	25	25			22	96	643	490	540	124	25
10	117	26	22			20	113	744	424	520	161	25
11	104	22	22			19	104	834	374	520	131	25
12	94	26	21			21	100	942	370	561	102	27
13	82	25				23	92	1,140	415	495	81	37
14	73	*29				24	86	1,160	525	419	81	87
15	70	34	18	9	16	25	88	1,000	638	365	122	69
16	65	34				23	90	876	732	352	163	68
17	59	25				26	88	930	894	356	166	60
18	53	21				31	82	1,000	1,040	a340	127	168
19	52	27				40	79	888	1,130	a320	104	202
20	46	26				46	73	605	1,050	a300	90	200
21	45	22				47	79	471	1,080	264	79	153
22	42	24				53	82	436	1,130	246	71	525
23	40	24				59	82	424	1,150	265	63	572
24	39	22				59	92	514	1,210	255	57	307
25	37	25	10			47	117	594	1,070	262	52	238
26	37	25				45	151	594	1,050	213	45	205
27	42	24		(*)		46	217	648	942	227	44	176
28	39	26				52	244	561	888	194	38	155
29	35	29			-	59	229	525	840	163	37	205
30	38	29			-	59	232	546	810	138	45	205
31	29	-			-	75	-	504	-	120	39	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	2,765	247	29	89.2	5,460
November	792	34	21	26.4	1,570
December	527	27	-	17.0	1,050
Calendar year 1940	22,683.7	416	-	62.0	44,980
January	279	-	-	9	553
February	448	-	-	16	889
March	1,078	75	18	34.8	2,140
April	3,272	244	73	109	6,490
May	20,090	1,160	262	648	39,850
June	22,877	1,210	370	763	45,380
July	12,987	774	120	419	25,760
August	2,744	166	37	88.5	5,440
September	3,967	572	24	132	7,870
Water year 1940-41	71,826	1,210	-	197	142,500

* Winter discharge measurement made on this day.
a No gage-height record; discharge computed on basis of record for Animas River at Durango.
Note.- Stage-discharge relation affected by ice Dec. 13 to Mar. 2.

La Plata River at Hesperus, Colo.

Location.- Water-stage recorder, lat. 37°17', long. 108°02', in sec. 14, T. 35 N., R. 11 W., an eighth of a mile west of Hesperus. Datum of gage is 8,106.65 feet above mean sea level, datum of 1929.

Drainage area.- 37 square miles.

Records available.- June to August 1904, April to August 1906, August to December 1910 and October 1933 to September 1941 in reports of Geological Survey. June to August 1904, April to August 1906, August to December 1910 and May 1917 to September 1941 in reports to State engineer.

Average discharge.- 24 years (1917-41), 48.3 second-feet.

Extremes.- Maximum discharge during year, 1,880 second-feet Sept. 22 (gage height, 3.30 feet), by slope-area method; minimum daily, 4.2 second-feet Feb. 4, 5.

1904, 1906, 1910, 1917-41: Maximum discharge, that of Sept. 22, 1941; no flow Apr. 4, 1906.

Greatest flood known occurred Oct. 5, 1911.

Remarks.- Records good except those for period of ice effect, which are fair. One diversion above station for irrigation.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	54	8.8	6.2	7.8	6.3	*7.9	23	152	275	244	33	16
2	50	8.8	6.2	7.3	5.4	8.8	23	210	322	230	31	15
3	47	8.8	6.2	6.3	4.6	8.4	23	239	361	218	28	14
4	47	8.8	*6.2	6.8	4.2	8.4	24	507	387	214	27	14
5	109	8.4	6.2	7.4	4.2	7.9	26	470	380	198	32	14
6	124	*7.5	6.3	7.6	4.3	7.9	27	418	329	156	35	14
7	79	7.0	6.3	7.4	4.5	7.9	29	336	387	160	28	13
8	59	7.0	6.2	7.2	4.5	8.8	33	347	322	198	31	13
9	50	7.0	6.8	6.8	4.8	8.8	39	399	257	179	32	12
10	44	7.9	7.8	7.0	5.0	8.8	45	406	221	175	33	10
11	39	7.0	8.6	7.2	*5.1	9.2	49	461	209	163	30	9.7
12	35	7.0	9.4	7.5	7.3	8.8	50	587	209	156	27	12
13	31	6.0	9.0	7.8	*7.9	8.8	49	716	237	138	26	14
14	28	6.3	8.0	*8.2	7.2	8.8	46	641	296	118	26	14
15	25	6.3	8.2	8.1	6.9	9.7	46	498	368	86	30	17
16	22	6.3	*12	6.8	7.1	9.7	45	484	418	76	28	16
17	23	6.3	13	6.0	7.5	10	44	512	522	79	27	16
18	19	6.3	11	6.3	8.0	10	43	512	641	88	25	49
19	17	6.3	11	6.6	8.4	11	40	380	587	76	23	42
20	16	7.0	10	7.0	8.7	12	38	244	507	79	21	31
21	14	6.3	9.8	7.0	9.3	12	37	188	503	76	20	26
22	14	*6.3	8.4	7.0	10	14	37	179	493	65	20	774
23	13	6.3	7.5	6.8	10	13	35	209	406	70	19	295
24	12	6.3	7.8	6.7	9.4	13	36	268	464	61	19	152
25	12	6.3	7.9	6.5	9.0	14	39	343	365	63	19	108
26	12	6.3	7.5	6.3	8.7	14	48	380	385	52	18	85
27	14	6.3	*7.3	6.3	8.1	15	61	489	330	61	17	68
28	14	6.3	7.6	6.4	7.2	17	79	380	300	49	17	60
29	12	6.3	7.8	6.8	-	18	97	365	267	41	18	99
30	11	6.3	7.8	6.8	-	19	126	293	248	39	17	103
31	10	-	7.9	6.8	-	21	-	282	-	34	16	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	1,056	124	10	34.1	2,090
November	207.8	8.8	6.3	6.93	412
December	251.9	13	6.2	8.13	500
Calendar year 1940	10,987.1	196	-	30.0	21,780
January	216.5	8.2	6.0	6.98	429
February	193.6	10	4.2	6.91	384
March	351.6	21	7.9	11.3	697
April	1,337	126	23	44.6	2,650
May	11,895	716	152	384	23,590
June	10,996	641	209	367	21,810
July	3,642	244	34	117	7,220
August	773	35	16	24.9	1,530
September	2,125.7	774	9.7	70 9	4,220
Water year 1940-41	33,046.1	774	4.2	90.5	65,530

* Winter discharge measurement made on this day.

Note.- Stage-discharge relation affected by ice Nov. 15, 16, Dec. 1 to Feb. 28.

La Plata River at Colorado-New Mexico State line

Location.- Water-stage recorder and masonry control, lat. 37°00', long. 108°11', in sec. 10, T. 32 N., R. 13 W., 300 feet south of Colorado-New Mexico State line and 3 miles north of Pendleton, N. Mex. Datum of gage is 5,975.15 feet above mean sea level, datum of 1929.

Drainage area.- 331 square miles.

Records available.- October 1933 to September 1941 in reports of Geological Survey. February 1920 to September 1941 in reports of Colorado State engineer.

Average discharge.- 21 years, 37.7 second-feet.

Extremes.- Maximum discharge during year, 1,360 second-feet May 4 (gage height, 5.54 feet); minimum daily, 0.6 second-foot Nov. 12.
1920-41: Maximum discharge, 4,750 second-feet Aug. 24, 1927 (gage height, 11.36 feet); no flow at times in 1922, 1924, 1928, 1939, 1933-40.

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 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	15	2.2	6.4	4.6	15	18	a120	434	154	115	4.9	5.7
2	8.3	1.1	6.0	4.0	12	21	a78	508	172	89	3.8	5.7
3	6.4	.9	6.0	2.2	11	22	a83	544	192	70	3.2	5.7
4	6.4	1.1	5.7	4.0	11	21	a78	1,120	196	52	3.5	5.7
5	7.9	1.8	6.0	5.4	11	22	a83	802	222	49	3.5	5.2
6	61	2.6	7.1	5.2	12	21	84	630	178	40	3.8	4.3
7	46	2.2	6.8	4.0	15	21	92	640	217	30	10	4.3
8	25	1.6	6.0	4.6	14	15	110	636	281	83	10	4.3
9	8.7	1.0	6.4	4.9	14	18	131	705	244	86	16	4.0
10	6.4	1.1	7.1	6.0	14	16	154	802	239	63	44	3.8
11	6.0	.8	9.4	11	15	15	152	712	174	75	25	3.5
12	6.0	.6	9.8	11	18	15	148	827	176	66	16	2.4
13	4.6	1.4	9.4	11	13	17	138	978	202	80	14	9.0
14	2.2	3.5	7.1	*11	12	24	122	957	233	70	14	23
15	2.0	7.5	3.5	12	13	26	106	719	279	59	32	20
16	3.2	5.7	*10	9.0	14	22	111	598	295	51	28	12
17	4.0	5.2	10	9.4	15	22	103	577	348	61	20	10
18	3.2	6.0	14	15	16	25	101	565	414	52	18	13
19	1.8	10	12	15	18	27	93	502	460	46	16	20
20	1.2	8.3	11	14	19	36	89	286	437	25	14	50
21	2.2	7.9	7.1	13	27	39	104	158	431	15	14	33
22	2.0	6.8	3.8	14	23	40	146	131	417	10	14	474
23	.8	6.4	3.8	13	25	43	154	148	389	8.7	13	585
24	1.4	5.7	5.4	12	23	63	146	192	423	19	10	204
25	1.4	5.7	5.4	15	24	54	158	239	335	42	9.8	128
26	1.0	6.8	3.0	11	21	49	255	242	324	12	9.0	92
27	1.8	7.5	3.8	13	18	49	353	266	270	16	8.7	76
28	1.8	7.5	4.9	14	17	63	379	231	248	10	8.3	75
29	2.6	7.5	3.8	18	-	a74	392	184	180	9.8	8.3	178
30	3.0	7.1	4.0	18	-	a78	448	188	140	9.4	7.5	142
31	1.2	-	4.6	18	-	a96	-	162	-	6.4	5.0	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	244.5	61	0.8	7.89	485
November	133.5	10	.6	4.45	265
December	209.3	14	3.0	6.75	415
Calendar year 1940	5,542.3	186	0	15.1	10,990
January	322.3	18	2.2	10.4	639
February	460	27	11	16.4	912
March	1,072	96	15	34.6	2,130
April	4,711	448	78	157	9,340
May	15,683	1,120	131	506	31,110
June	8,270	460	140	276	16,400
July	1,420.3	115	6.4	45.8	2,820
August	408.3	44	3.2	13.2	810
September	2,198.6	585	2.4	73.3	4,360
Water year 1940-41	35,132.8	1,120	.6	96.3	69,690

* Winter discharge measurement made on this day.
a No gage-height record; discharge computed on basis of records for La Plata River at Hesperus, and Cherry Creek near Red Mesa.
Note.- Stage-discharge relation affected by ice Dec. 20 to Jan. 10.

461676 O-42-14

La Plata River near Farmington, N. Mex.

Location.- Water-stage recorder, lat. 36°44'30", long. 108°14'45", in SW¼ sec. 7, T. 29 N., R. 13 W., 1,800 feet upstream from mouth and 2½ miles northwest of Farmington.

Records available.- March 1938 to September 1941.

Extremes.- Maximum discharge and gage height during year not determined; no flow at times.
1938-41: Maximum discharge and gage height not determined; no flow for extended periods.

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

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	84	a1	14	46	a35	35	164	473	170	212	6	2
2	18	2	15	d35	a30	81	164	646	118	180	6	2
3	14	2	17	d25	a25	63	a150	930	122	122	7	2
4	13	2	15	*b15	a25	41	a140	d2,000	134	75	6	2
5	14	2	17	b10	d25	30	127	a1,000	175	40	5	2
6	18	2	18	b11	26	34	111	d500	195	d15	6	2
7	44	3	18	b12	56	25	111	d550	195	6	56	1
8	38	2	22	*13	67	23	118	d600	248	d20	46	1
9	22	2	19	14	48	19	127	d650	a220	23	240	1
10	10	4	14	14	93	17	147	682	d200	14	a30	0
11	e	4	29	18	95	16	144	1,430	a190	4	12	0
12	7	3	28	35	d80	18	144	2,070	a180	2	6	1
13	5	2	*18	*35	a60	26	144	2,370	a180	a2	4	488
14	3	2	19	31	a40	46	124	1,970	175	a2	2	d250
15	2	5	b10	25	d25	137	108	1,e50	165	a2	65	26
16	1	7	*b4	17	33	79	92	1,410	142	a1	604	14
17	1	14	b10	b10	48	50	86	1,030	103	a1	a40	12
18	1	14	22	b10	42	43	86	756	a90	a1	22	14
19	1	48	*23	b11	82	41	92	464	d200	a1	15	13
20	1	25	26	b12	82	52	86	261	281	a1	14	121
21	0	14	28	*22	175	61	105	218	281	a1	10	394
22	0	12	b30	15	d170	72	179	190	354	a1	7	d1,000
23	0	11	b20	18	a160	70	172	212	a360	a1	5	1,150
24	0	14	d30	11	d150	89	121	200	a370	a1	4	323
25	0	15	d50	21	140	86	105	281	a320	d100	3	160
26	0	13	d40	21	89	74	235	274	a280	a40	2	a140
27	a0	15	d20	22	45	70	465	254	a270	a30	2	a120
28	a0	17	d25	25	34	77	d450	295	a250	a10	2	d100
29	a1	15	d30	53	-	92	d350	267	a230	a7	2	610
30	a0	14	*53	d59	-	100	338	236	d220	a5	2	d150
31	a0	-	75	d40	-	111	-	185	-	4	2	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	306	84	0	9.9	607
November	286	48	1	9.5	567
December	759	75	4	24.5	1,510
Calendar year 1940	4,166	590	0	11.4	8,270
January	706	59	10	22.8	1,400
February	1,980	175	25	70.7	3,930
March	1,778	137	16	57.4	3,530
April	4,985	465	86	166	9,890
May	24,274	2,370	185	783	48,150
June	6,418	370	90	214	12,730
July	924	212	1	29.8	1,830
August	1,233	604	2	39.8	2,450
September	5,101	1,150	0	170	10,120
Water year 1940-41	48,750	2,370	0	134	96,710

* Winter discharge measurement made on this day.
a No gage-height record; discharge computed on basis of weather records and records for Los Pinos River at Ignacio, and Animas River near Cedar Hill and at Farmington.
b Stage-discharge relation affected by ice.
d Incomplete or doubtful gage-height record; discharge computed on basis of gage heights, weather records, and records for Los Pinos River at Ignacio and Animas River near Cedar Hill and at Farmington.

461676

Cherry Creek near Red Mesa, Colo.

Location.- Water-stage recorder, lat. 37°07', long. 108°12', in sec. 7, T. 33 N., R. 12 W., a quarter of a mile upstream from mouth and 2 miles northwest of Red Mesa. Prior to May 14, 1941, water-stage recorder at site 700 feet downstream at different datum. Datum of gage is 6,466.46 feet above mean sea level.

Drainage area.- 66 square miles.

Records available.- October 1933 to September 1941 in reports of Geological Survey. March 1928 to September 1941 in reports of State engineer.

Average discharge.- 13 years, 9.64 second-feet.

Extremes.- Maximum discharge during year, 377 second-feet May 4 (gage height, 3.40 feet, site and datum then in use); no flow Nov. 1-5, 12-18, and probably a few days in January.

1928-41: Maximum discharge, 1,480 second-feet Aug. 25, 1940 (gage height, 5.90 feet, site and datum then in use), from rating curve extended above 800 second-feet on basis of slope-area measurement; no flow at times during 1931, 1933-36, 1938-41.

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

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.1	0	0.6			2.2	66	132	71	10	6.5	2.7
2	1.0	0	a.6			3.4	34	132	70	6.9	3.9	2.6
3	.5	0	a.5			3.2	28	149	68	5.9	3.3	2.4
4	.3	0	.5			3.0	22	326	58	6.3	3.3	2.2
5	.2	0	.5			3.6	29	262	57	6.3	3.0	2.0
6	1.6	.4	.3			2.8	24	226	55	5.9	4.9	1.8
7	1.8	.4	.3			2.2	22	244	60	5.4	6.1	1.8
8	1.6	.5	.4			2.0	28	a240	67	5.6	3.9	1.8
9	1.6	.6	.4			2.6	33	a250	a65	6.3	5.7	1.6
10	1.7	.5	.2			*2.6	44	a270	a63	8.7	25	1.4
11	1.7	.2	.2			3.2	35	a210	a60	8.7	16	1.5
12	1.4	0	.2			3.2	36	a220	58	12	11	1.6
13	1.4	0	.2			3.2	32	a220	56	12	9.4	1.6
14	1.0	0	.2			3.4	26	195	53	14	8.3	4.5
15	.7	0	.2			3.6	22	185	55	11	6.7	8.5
16	.7	0	.2	0.2	1.0	4.0	24	155	53	11	10	5.9
17	.6	0	.2			5.0	22	146	55	12	9.2	3.8
18	.4	0	.2			6.3	20	146	51	12	8.7	4.5
19	.3	.8	.2			9.0	18	137	51	12	8.3	17
20	.3	1.4	.2			14	24	102	44	12	7.7	20
21	.3	1.2	.2			16	25	78	39	11	6.9	20
22	.3	*a1.0	.2			20	37	78	35	7.5	7.5	43
23	.2	a1.0	.2			24	37	88	33	5.7	6.1	28
24	.2	a1.0	.2			29	38	107	33	6.5	5.0	11
25	.2	a1.0	.2			18	40	105	33	6.7	4.7	7.3
26	.2	a.8	.2			14	66	104	23	6.5	3.7	5.4
27	a.4	a.8	.2			14	107	96	18	6.1	3.3	5.4
28	a.6	a.6	.2		(*)	22	110	96	15	7.1	3.0	4.5
29	1.0	a.6	.2		-	27	115	89	14	7.5	2.7	12
30	.7	a.6	.2		-	28	115	82	12	8.1	2.7	18
31	.3	-	.2		-	45	-	75	-	7.1	2.7	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	25.3	2.1	0.2	0.82	50
November	13.4	1.4	0	.45	27
December	8.5	.6	.2	.27	17
Calendar year 1940	1,289.2	80	0	3.52	2,560
January	6.2	-	-	0.2	12
February	28.0	-	-	1.0	56
March	339.5	45	2.0	11.0	673
April	1,279	115	18	42.6	2,540
May	4,945	326	75	160	9,810
June	1,425	71	12	47.5	2,830
July	263.8	14	5.4	8.51	523
August	209.2	25	2.7	6.75	415
September	243.8	43	1.4	8.13	484
Water year 1940-41	8,786.7	326	0	24.1	17,440

* Winter discharge measurement made on this day.
a No gage-height record; discharge computed on basis of record for La Plata River stations.
Note.- Stage-discharge relation affected by ice Dec. 11 to Feb. 28.

West Mancos River near Mancos, Colo.

Location.- Water-stage recorder, lat. 37°22'30", long. 108°15'20", in sec. 14, T. 36 N., R. 13 W., 1½ miles upstream from confluence with Middle Mancos River and 3½ miles northeast of Mancos.

Drainage area.- 42.1 square miles.

Records available.- September 1910 to December 1911, April 1938 to September 1941.

Extremes.- Maximum discharge during year, 1,080 second-feet May 13 (gage height, 4.55 feet), from rating curve extended above 260 second-feet; minimum observed, 4.2 second-feet Dec. 9 (discharge measurement) probably less during period of no record.
1910-11, 1938-41: Maximum discharge, that of May 13, 1941; minimum daily recorded, 2.5 second-feet Aug. 20, 1939, probably less during period of ice effect.

Remarks.- Records fair. No diversions above station.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	34	9.9				9.0	50	128	253	233	39	14
2	26	9.9				8.3	32	133	253	225	39	13
3	23	10				7.8	26	163	253	214	37	12
4	20	10				7.4	24	295	258	205	36	11
5	42	8.3				8.1	29	216	272	198	35	10
6	59	9.6				7.2	26	253	244	170	38	9.9
7	42	8.8				8.1	28	228	304	160	35	9.9
8	34	8.8				8.5	36	244	281	177	40	9.9
9	28	8.8	†4.2			9.0	51	420	233	175	47	9.3
10	24	9.6				9.0	53	534	208	153	49	9.0
11	21	9.0				10	37	553	190	146	42	9.0
12	18	9.3				9.9	33	718	170	146	34	9.0
13	16	8.3				9.0	26	828	170	140	31	20
14	15	9.9				8.5	23	645	190	133	31	50
15	14	11				9.0	21	549	198	113	39	34
16	13	11				9.0	20	542	195	111	38	29
17	13	9.9				10	18	580	211	101	34	24
18	12	9.3				13	16	633	250	99	28	62
19	11	9.0				16	17	700	266	97	25	55
20	11	8.8				20	17	316	278	90	24	40
21	10	8.8				17	19	244	286	81	22	33
22	9.9	8.5				17	18	230	295	76	19	190
23	9.6	8.3				20	20	319	292	73	17	149
24	9.3	8.5				18	27	443	328	72	16	93
25	9.3	8.8				15	34	432	316	67	15	74
26	9.9	8.8				14	67	392	328	59	14	64
27	14	8.1				17	99	365	307	62	14	56
28	12	9.0				20	101	335	295	55	13	53
29	10	9.6				23	99	322	256	48	14	78
30	11	8.3				28	124	298	242	47	17	72
31	9.6	-				46	-	256	-	42	16	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	590.6	59	9.3	19.1	1,170
November	275.9	11	8.1	9.20	547
December	-	-	-	-	-
Calendar year	-	-	-	-	-
January	-	-	-	-	-
February	-	-	-	-	-
March	431.8	46	7.2	13.9	856
April	1,191	124	16	39.7	2,360
May	12,334	828	128	398	24,460
June	7,622	328	170	254	15,120
July	3,768	233	42	122	7,470
August	898	49	13	29.0	1,780
September	1,302.0	190	9.0	43.4	2,580
Water year	-	-	-	-	-

† Result of discharge measurement.

Mancos River near Towaoc, Colo.

Location.- Water-stage recorder, lat. 37°02', long. 108°45' in NW¼ sec. 18, T. 32 N., R. 17 W., at crossing of U. S. Highway 84, 12 miles south of Towaoc. Datum of gage is 5,051.17 feet above mean sea level, unadjusted.

Drainage area.- 550 square miles.

Records available.- October 1933 to September 1941 in reports of Geological Survey. February 1921 to September 1941 in reports of State engineer.

Average discharge.- 20 years, 57.6 second-feet.

Extremes.- Maximum discharge during year, 1,290 second-feet May 14 (gage height, 5.90 feet); no flow Aug. 1-7, 10.
1921-41: Maximum discharge, 4,900 second-feet Aug. 26, 1934 (gage height, 6.55 feet, site and datum then in use); no flow at times.

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

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	61	12	4.8	6	18	72	168	370	242	214	0	24
2	28	12	2.9	6	18	107	159	274	242	193	0	15
3	22	12	2.9	6	*16	136	125	333	222	214	0	11
4	17	12	2.9	6	16	110	101	620	247	214	0	7.0
5	15	9.8	3.8	10	20	109	101	788	300	172	0	4.0
6	23	9.8	4.6	*14	20	115	118	502	289	154	0	4.0
7	33	7.8	2.8	12	26	106	118	489	292	154	0	3.0
8	26	7.4	2.8	10	24	96	126	498	322	145	2.8	1.5
9	23	6.6	*6.6	10	24	95	134	484	339	145	5.6	1.0
10	22	9.4	6.6	10	24	95	152	752	327	136	0	2.0
11	18	5.2	6.6	10	24	68	143	818	316	136	28	2.5
12	17	5.2	6.6	10	28	70	134	914	319	136	36	2.0
13	17	6.2	6.6	10	37	71	134	1,000	307	128	40	a40
14	16	5.2	6.6	10	35	72	126	983	284	128	40	136
15	15	4.2	6.6	10	31	72	118	794	262	120	40	96
16	15	5.2	6.6	10	31	102	112	800	252	112	40	68
17	15	7.8	5.6	*10	42	89	104	800	292	104	40	51
18	13	12	5.6	10	46	83	104	800	282	89	39	136
19	12	18	5.6	11	46	92	104	866	259	75	35	136
20	12	13	5.6	12	75	125	136	556	235	62	28	128
21	11	13	5.6	14	89	126	120	538	255	51	25	136
22	10	11	6.0	11	98	128	154	520	235	42	22	a500
23	10	9.0	6.6	13	89	130	154	520	272	42	19	436
24	10	6.4	8.2	11	102	140	136	595	284	42	18	212
25	9.8	6.4	8	14	94	133	128	464	284	172	15	170
26	9.4	4.8	8	14	100	110	193	394	259	46	16	152
27	9.8	4.8	8	16	76	112	287	333	224	21	24	152
28	14	4.8	8	15	68	130	556	322	204	12	27	162
29	12	5.6	8	13	-	149	433	310	193	11	27	152
30	12	6.8	8	28	-	150	367	249	214	2.7	16	152
31	9.8	-	8	22	-	150	-	252	-	.5	24	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	537.8	61	9.4	17.3	1,070
November	255.6	18	4.2	8.52	507
December	185.1	8.2	2.8	5.97	367
Calendar year 1940	10,028.2	857	0	27.4	19,900
January	364	28	6	11.7	722
February	1,317	102	16	47.0	2,610
March	3,343	150	68	106	6,630
April	5,045	556	101	168	10,010
May	17,938	1,000	249	579	35,580
June	8,034	339	193	268	15,940
July	3,273.2	214	.5	106	6,490
August	609.4	40	0	19.7	1,210
September	3,082.0	500	1.0	103	6,110
Water year 1940-41	43,984.1	1,000	0	121	87,250

* Winter discharge measurement made on this day.
a No gage-height record; discharge computed on basis of record for La Plata River at Colorado-New Mexico State line.
Note.- Stage-discharge relation affected by ice Dec. 10-13, Dec. 18 to Jan. 20, Feb. 2.

East Mancos River near Mancos, Colo.

Location.- Water-stage recorder, lat. 37°22'10", long. 108°13'35", in NE¼ sec. 24, T. 36 N., R. 13 W., 800 feet upstream from mouth and 4 miles northeast of Mancos.

Drainage area.- 11.1 square miles.

Records available.- March 1938 to September 1941.

Extremes.- Maximum discharge during year, 642 second-feet May 8 (gage height, 2.67 feet), from rating curve extended above 130 second-feet; minimum daily recorded, 0.5 second-foot Oct. 25, 26, may have been less during period of no record.
1938-41: Maximum discharge, that of May 8, 1941; no flow Aug. 17-27, 1939.

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

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4.8	0.9				1.6	12	36	88	56	8.4	1.7
2	4.5	1.0				1.6	8.4	37	105	56	8.4	1.5
3	3.8	1.3				1.6	6.9	70	113	49	7.2	1.3
4	3.2	1.2				1.6	6.3	167	99	46	6.9	1.2
5	8.9	.9				1.5	6.6	72	101	40	6.9	1.1
6	17	1.1				1.8	6.0	86	95	32	8.9	1.0
7	11	.9				1.7	6.0	99	103	29	8.4	1.0
8	7.8	1.1				2.0	7.2	165	92	36	10	1.0
9	6.3	1.1				2.1	11	128	75	40	11	.9
10	5.1	1.1				2.6	14	167	59	32	9.5	.9
11	4.2	.8				2.8	12	179	53	31	7.8	.8
12	3.8	1.0				2.8	11	260	53	26	6.3	.8
13	3.2	.7				2.1	10	156	62	24	5.4	3.4
14	3.0	1.1				2.2	7.8	176	77	22	5.4	13
15	2.8	1.2				2.4	6.9	131	95	17	6.9	8.9
16	2.2	1.2				2.6	6.3	131	109	15	7.2	7.8
17	2.1	1.3				3.2	6.0	131	126	14	6.3	6.3
18	2.0	1.4				3.8	6.3	119	133	12	5.4	15
19	1.9	1.5				4.8	6.3	107	133	8.9	4.5	15
20	1.9	1.5				6.0	6.6	62	123	7.2	3.8	9.5
21	1.9	1.4				5.4	7.8	41	117	7.8	3.6	6.6
22	1.9	1.4				5.4	8.4	50	113	6.0	2.8	37
23	1.7	1.3				6.3	7.2	70	113	5.1	2.4	37
24	1.2	1.2				5.7	8.4	101	111	4.0	2.1	21
25	.5	1.1				4.5	12	113	99	14	1.9	16
26	.5	1.1				4.0	18	107	92	11	1.8	9.5
27	1.0	1.1				4.5	32	105	88	11	1.7	5.7
28	.8	1.2				5.4	35	90	80	9.5	1.5	4.0
29	1.0	1.5				6.3	34	88	65	7.2	1.6	6.3
30	1.5	1.3				6.9	47	92	58	6.6	2.4	7.2
31	.9	-				8.9	-	77	-	8.4	2.0	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	112.4	17	0.5	3.63	223
November	34.9	1.5	.7	1.16	69
December	-	-	-	-	-
Calendar year	-	-	-	-	-
January	-	-	-	-	-
February	-	-	-	-	-
March	114.2	8.9	1.6	3.68	227
April	373.4	47	6.0	12.4	741
May	3,413	260	36	110	6,770
June	2,830	133	53	94.3	5,610
July	683.7	56	4.0	22.1	1,360
August	168.4	11	1.5	5.43	334
September	242.4	37	.8	8.08	481
Water year	-	-	-	-	-

Middle Mancos River near Mancos, Colo.

Location.- Water-stage recorder, lat. 37°22'15", long. 108°13'35", in SE¼ sec. 13, T. 36 N., R. 13 W., 500 feet upstream from East Mancos River and 4 miles northeast of Mancos.

Drainage area.- 13.7 square miles.

Records available.- March 1938 to May 1941.

Extremes.- Maximum discharge during period, 233 second-feet May 14 (gage height, 4.08 feet), from rating curve extended above 170 second-feet; minimum daily recorded, 0.1 second-foot Dec. 2-10; probably no flow during period of no record.
1938-41: Maximum discharge, that of May 14, 1941; no flow Aug. 24-27, Sept. 3-5, Nov. 21, 1939, and at times during period of no record.

Remarks.- Records good except those below 10 second-feet and those for periods of no gage-height record, which are fair. Diversions above station for irrigation. No gage-height record May 28 to Sept. 30 (stream moved away from recorder) and discharges not computed June 1 to Sept. 30.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.8	0.3	0.2			0.2	10	38				
2	1.8	.2	.1			.2	6.9	40				
3	2.0	.2	.1			.2	5.8	52				
4	1.8	.2	.1			.2	6.0	116				
5	2.2	.2	.1			.2	7.5	a55				
6	3.3	.2	.1			.4	6.6	a65				
7	3.2	.2	.1			.4	7.2	a75				
8	2.6	.2	.1			.4	9.3	a110				
9	1.9	.2	.1			.5	12	a150				
10	1.8	.2	.1			.4	14	170				
11	1.5	.3	-			.4	11	173				
12	1.6	.3	-			.5	11	187				
13	1.3	.3	-			.5	9.3	201				
14	.9	.3	-			.5	8.1	223	†45			
15	.8	.3	-			.6	7.2	164				
16	.7	.3	-			.6	6.9	152				
17	.6	.2	-			.6	6.9	165				
18	.6	.2	-			1.0	6.9	165				
19	.5	.2	-			1.3	6.6	161				
20	.5	.2	-			2.5	7.8	133				
21	.5	.2	-			3.1	8.4	135				
22	.4	.2	-			3.8	8.7	140				
23	.3	.2	-			3.8	8.4	175				
24	.3	.2	-			3.5	9.3	161				
25	.3	.2	-			2.5	11	157				
26	.3	.2	-			2.1	21	158				
27	.4	.2	-		†0.2	2.5	33	156				
28	.4	.2	-			4.5	33	a140				
29	.3	.2	-			6.3	33	a140				
30	.3	.2	-			7.2	38	a135				
31	.3	-	-			10	-	a130				

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	35.2	3.3	0.3	1.14	70
November	6.7	.3	.2	.22	13
December 1-10	1.1	.2	.1	.11	2.2
Calendar year	-	-	-	-	-
January	-	-	-	-	-
February	-	-	-	-	-
March	60.9	10	.2	1.96	121
April	372.8	38	5.8	12.4	739
May	4,222	223	38	136	8,370
June	-	-	-	-	-
July	-	-	-	-	-
August	-	-	-	-	-
September	-	-	-	-	-
Water year	-	-	-	-	-

† Result of discharge measurement.
a No gage-height record; discharge computed on basis of record for East Mancos River near Mancos.
Note.- Stage-discharge relation affected by ice Mar. 1-19.

McElmo Creek near Cortez, Colo.

Location.- Water-stage recorder, lat. 37°20', long. 106°40', in NE¼ sec. 1, T. 35 N., R. 17 W., half a mile downstream from Alkali Canyon and 5 miles southwest of Cortez. Prior to September 1929, water-stage recorder at site 3 miles downstream; records equivalent.

Drainage area.- 233 square miles.

Records available.- October 1940 to September 1941 in reports of Geological Survey. May 1926 to September 1929 and October 1940 to September 1941 in reports of State engineer.

Extremes.- Maximum discharge during year, 4,540 second-feet September 22 (gage height, 6.85 feet, from floodmarks), by slope-area method; minimum daily, 10 second-feet Nov. 14.

1926-29, 1940-41: Maximum discharge, that of Sept. 22, 1941; no flow Dec. 30, 31, 1926, Jan. 6, 7, 13, 1927.

Remarks.- Records fair. Diversions above station for irrigation. Flow is mainly return water from irrigated lands of Montezuma irrigation district.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	112	42	32	31	34	59	64	103	110	103	87	76
2	72	54	23	17	30	99	78	100	106	103	84	80
3	62	41	32	20	27	81	63	93	103	104	82	73
4	46	42	29	29	28	62	64	252	93	101	100	70
5	104	42	22	38	26	64	64	111	110	110	79	90
6	71	46	31	30	25	78	59	93	128	124	77	96
7	52	47	32	39	37	57	59	72	161	135	83	98
8	50	48	33	40	60	47	59	62	178	111	82	89
9	56	52	32	32	40	54	54	55	171	111	86	68
10	64	52	42	29	53	50	52	48	140	113	103	77
11	65	46	51	31	80	50	83	51	149	120	126	65
12	56	26	41	31	105	47	86	46	135	120	100	56
13	52	16	37	37	75	63	84	48	125	113	83	142
14	54	10	32	36	71	100	88	48	120	113	93	194
15	67	17	18	35	74	146	86	48	115	110	165	218
16	59	17	72	22	80	97	84	55	110	108	126	115
17	58	21	63	15	88	78	75	61	110	106	124	110
18	51	40	56	11	89	72	74	57	105	110	113	200
19	47	94	52	17	133	75	86	58	105	106	104	153
20	48	67	50	18	115	71	83	80	100	111	104	171
21	44	65	41	23	157	71	78	90	100	110	93	135
22	40	60	28	20	110	72	89	111	90	106	89	800
23	41	45	30	18	95	78	92	153	150	103	87	650
24	44	31	34	17	100	97	88	171	120	100	84	250
25	45	27	35	24	90	81	77	151	129	108	83	210
26	44	16	17	23	70	72	108	142	124	128	76	170
27	86	16	28	23	55	64	236	164	115	101	69	165
28	52	15	26	28	58	57	256	142	110	101	76	165
29	33	23	29	52	-	50	178	122	108	100	69	170
30	38	20	36	53	-	47	150	108	115	95	58	164
31	40	-	40	34	-	46	-	108	-	87	60	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	1,743	112	33	56.2	3,460
November	1,138	94	10	37.9	2,260
December	1,124	72	17	36.3	2,230
Calendar year	-	-	-	-	-
January	873	53	11	28.2	1,730
February	1,995	157	25	71.2	3,960
March	2,155	146	46	70.5	4,330
April	2,797	256	52	93.2	5,550
May	3,003	252	46	96.9	5,960
June	3,625	178	90	121	7,190
July	3,371	135	87	109	6,690
August	2,845	165	58	91.8	5,640
September	5,120	800	56	171	10,160
Water year 1940-41	29,819	800	10	81.7	59,160

Note.- No gage-height records Feb. 22-27, June 13-23, Sept. 22-29; discharge computed on basis of two discharge measurements and weather records.

Paria River at Lees Ferry, Ariz.

Location.- Water-stage recorder, lat. 36°52'15", long. 111°36'30", in NW¼NE¼ sec. 13, T. 40 N., R. 7 E., half a mile upstream from mouth and 1 mile northwest of Lees Ferry. Datum of gage is 3,123.4 feet above mean sea level, datum of 1929.

Drainage area.- 1,570 square miles.

Records available.- November 1923 to September 1941.

Average discharge.- 18 years, 36.4 second-feet.

Extremes.- Maximum discharge during year, 7,500 second-feet July 24 (gage height, 12.3 feet), from rating curve extended above 1,100 second-feet on basis of slope-area determinations at gage heights 11.2 and 12.4 feet; minimum, 1 second-foot Dec. 15.

1923-41: Maximum discharge, 16,100 second-feet Oct. 5, 1925 (gage height, 17.5 feet), by float-area method; no flow during several periods in December and January of many years.

Remarks.- Records good. During the year 47 discharge measurements were made. Diversions above station for irrigation.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	13	19	24	73	33	49	25	80	5	3	4	3
2	12	18	22	31	30	390	46	84	4	3	2	3
3	10	18	21	13	27	241	30	64	10	2	2	4
4	9	18	20	12	26	147	24	78	4	2	2	4
5	18	19	18	13	26	105	23	98	7	3	2	4
6	153	18	16	23	27	109	37	67	7	2	3	5
7	37	18	19	25	36	65	27	57	6	2	3	4
8	17	18	17	27	57	54	23	49	19	2	20	3
9	14	19	17	22	39	46	22	57	62	15	26	4
10	14	31	19	21	39	46	23	55	36	24	50	4
11	14	26	22	22	58	37	50	42	19	14	58	4
12	14	23	38	35	179	36	337	33	9	21	89	4
13	14	13	45	54	126	37	304	28	8	14	31	9
14	14	12	12	47	59	56	336	23	8	9	16	7
15	12	12	3	44	46	86	147	23	8	6	16	11
16	12	13	9	38	72	56	128	20	6	3	21	8
17	12	15	7	24	67	37	141	18	5	2	32	6
18	11	20	6	15	70	36	72	15	4	13	19	5
19	12	30	5	19	84	40	39	15	2	99	9	10
20	11	98	19	26	72	47	30	18	2	118	7	7
21	11	38	31	29	172	50	30	20	3	43	6	4
22	10	30	33	30	151	39	34	17	3	27	5	54
23	10	18	32	37	142	44	41	15	4	22	4	105
24	11	12	32	31	96	44	44	27	4	672	4	59
25	11	16	36	51	189	37	44	23	3	30	4	37
26	188	23	26	41	82	33	105	60	3	32	4	26
27	265	22	21	43	53	31	138	49	2	40	4	20
28	44	19	32	43	42	30	114	17	2	27	4	15
29	25	21	36	61	-	27	78	12	3	14	3	14
30	22	22	51	76	-	27	66	10	3	9	4	13
31	20	-	73	47	-	24	-	7	-	7	3	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	1,040	265	9	33.5	2,060
November	679	98	12	22.6	1,350
December	762	73	3	24.6	1,510
Calendar year 1940	14,247	2,300	3	38.9	28,260
January	1,073	76	12	34.6	2,130
February	2,100	189	26	75.0	4,170
March	2,106	390	24	67.9	4,180
April	2,558	337	22	85.3	5,070
May	1,181	98	7	38.1	2,340
June	261	62	2	8.7	518
July	1,280	672	2	41.3	2,540
August	457	89	2	14.7	906
September	456	105	3	15.2	904
Water year 1940-41	13,953	672	2	38.2	27,680

Little Colorado River above Lyman Reservoir, near St. Johns, Ariz.

Location.- Water-stage recorder, lat. 34°20', long. 109°22', in NE¼SE¼ sec. 27, T. 11 N., R. 28 E., 1 mile downstream from Coyote Creek, 4½ miles upstream from Lyman Dam, and 13 miles south of St. Johns, at site 600 feet downstream and at datum 1.70 feet lower than that of gage destroyed by flood July 25, 1940. During period Oct. 1-15, 1940, staff gage 1 mile upstream, 600 feet below mouth of Coyote Creek, at different datum; Oct. 16-27, 1940, staff gage at present site and at datum 13.08 feet lower.

Drainage area.- 747 square miles.

Records available.- April 1940 to September 1941.

Extremes.- Maximum discharge during year, 2,520 second-feet July 23 (gage height, 8.56 feet) from rating curve extended above 600 second-feet to slope-area measurement at 16,000 second-feet; minimum, 3 second-feet Oct. 23, 26.

1940-41: Maximum discharge, 16,000 second-feet July 25, 1940 (gage height, 17.1 feet, present datum, from floodmarks) by slope-area method; minimum, about 0.5 second-foot July 16-24, 1940.

Remarks.- Records good except those above 600 second-feet, which are poor, and those for period of no gage-height record, which are fair. Flow regulated by many small reservoirs; total capacity, about 16,000 acre-feet. Diversions above station for irrigation. Staff gages read twice daily Oct. 1-27.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	8	*4	8	7	*21	33	135	552	47	20	12	14
2	8	4	*8	*7	20	32	137	516	46	20	13	11
3	7	4	8	7	20	31	128	482	47	22	13	12
4	7	5	8	b8	23	36	114	579	44	23	14	11
5	6	5	8	8	23	37	114	806	43	25	14	10
6	6	5	8	8	24	38	132	1,140	45	23	14	10
7	6	5	8	b8	24	38	134	1,220	45	21	14	9
8	6	4	8	b8	25	43	138	988	44	18	28	8
9	6	4	8	b8	23	44	158	781	49	15	42	7
10	5	4	9	8	22	48	175	688	51	15	35	6
11	5	b4	9	10	22	50	189	593	50	14	22	7
12	5	4	9	14	20	50	205	534	46	17	62	6
13	5	b4	9	13	20	53	205	482	39	17	59	8
14	5	b5	8	12	20	66	192	343	36	17	41	8
15	4	b5	b8	13	22	121	179	290	38	17	36	7
16	4	*b6	*b8	*b12	25	122	177	240	40	20	36	8
17	4	6	8	b11	*28	106	194	190	39	22	30	7
18	4	7	8	b11	26	89	218	150	36	33	22	5
19	4	8	8	b12	28	86	207	120	35	41	21	4
20	4	8	8	b12	30	87	202	110	30	42	21	4
21	5	8	7	13	31	93	189	103	34	29	23	4
22	5	7	7	13	34	97	187	99	36	24	20	4
23	3	8	b7	13	39	92	184	74	40	150	19	4
24	4	8	7	13	39	94	189	76	41	191	45	4
25	4	8	7	13	39	99	246	81	62	20	22	4
26	3	8	b7	13	38	99	308	76	51	16	20	4
27	4	7	b7	13	33	89	365	67	40	a16	19	4
28	4	8	7	16	32	88	421	60	31	a15	18	32
29	5	7	7	20	-	92	465	52	24	a14	17	48
30	4	8	7	21	-	110	516	50	21	a13	16	19
31	4	-	7	22	-	122	-	49	-	12	16	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	154	8	3	5.0	305
November	178	8	4	5.9	353
December	241	9	7	7.8	478
Calendar year	-	-	-	-	-
January	367	22	7	11.8	728
February	749	39	20	26.8	1,490
March	2,285	122	31	73.7	4,530
April	6,403	516	114	213	12,700
May	11,591	1,220	49	374	22,990
June	1,230	62	21	41.0	2,440
July	942	191	12	30.4	1,870
August	783	62	12	25.3	1,550
September	289	48	4	9.6	573
Water year 1940-41	25,212	1,220	3	69.1	50,010

Peak discharge.- May 7 (9:20 a.m.) 1,500 sec.-ft.; July 23 (11:40 p.m.) 2,520 sec.-ft.
* Winter discharge measurement made on this day.
a No gage-height record; discharge interpolated.
b Stage-discharge relation affected by ice.

Lyman Reservoir near St. Johns, Ariz.

Location.- Water-stage recorder, lat. 34°22', long. 109°23', in NE¼ sec. 9, T. 11 N., R. 28 E., in control tower of Lyman Dam on Little Colorado River, 9 1/3 miles (revised) south of St. Johns.

Drainage area.- 790 square miles.

Records available.- May 1940 to September 1941.

Extremes.- Maximum contents during year, 25,500 acre-feet May 25-31 (gage height, 52.80 feet); minimum, 4,030 acre-feet Nov. 18-20 (gage height, 29.38 feet).
1940-41: Maximum contents, that of May 25-31, 1941; minimum, 29 acre-feet July 25, 1940 (gage height, 20.10 feet).

Remarks.- Reservoir is formed by an earth and rock-fill dam, rubble faced; dam completed and storage began in 1920; original dam washed out Apr. 14, 1915. Capacity, 21,900 acre-feet between gage heights 20.0 (bottom of Lyman canal) and 50.0 feet (average elevation of permanent spillway crest). On May 13 crest was raised to 53.0 feet (capacity 25,700 acre-feet) by a temporary wooden dam on spillway. Spill occurred Apr. 30 to May 13. Contents between gage heights 2.0 (sill of outlet gates) and 20.0 feet (4,500 acre-feet, based on survey in 1920), not available for release to Lyman canal but can be released to the river channel. Water is used for irrigation in the vicinity of St. Johns. Figures given herein represent contents above gage height 20.0 feet.

Contents at 12 p.m., in acre-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4,120	4,180	4,190	4,670	5,450	7,000	11,300	22,900	25,300	23,400	20,900	18,100
2	4,120	4,160	4,200	4,680	5,500	7,060	11,500	23,500	25,300	23,300	20,900	18,000
3	4,130	4,180	4,220	4,700	5,530	7,120	11,800	23,900	25,300	23,200	20,800	17,800
4	4,130	4,160	4,230	4,710	5,570	7,160	11,900	24,200	25,100	23,000	20,700	17,700
5	4,140	4,180	4,240	4,720	5,620	7,230	12,100	24,800	25,000	22,800	20,600	17,500
6	4,140	4,190	4,260	4,740	5,670	7,300	12,300	25,000	24,900	22,700	20,500	17,300
7	4,140	4,190	4,270	4,740	5,730	7,390	12,500	25,300	24,800	22,500	20,300	17,100
8	4,140	4,190	4,280	4,760	5,790	7,470	12,700	25,100	24,600	22,300	20,200	17,000
9	4,140	4,190	4,310	4,770	5,820	7,500	13,000	25,000	24,600	22,200	20,200	16,900
10	4,140	4,200	4,330	4,790	5,870	7,560	13,300	24,800	24,600	22,000	20,100	16,800
11	4,140	4,200	4,360	4,860	5,910	7,620	13,600	24,600	24,500	21,900	19,900	16,700
12	4,140	4,190	4,370	4,900	5,940	7,690	14,000	25,100	24,400	21,800	19,800	16,600
13	4,140	4,150	4,400	4,920	5,990	7,760	14,400	25,200	24,400	21,700	19,800	16,500
14	4,140	4,120	4,400	4,960	6,020	7,920	14,700	25,100	24,300	21,500	19,800	16,400
15	4,150	4,100	4,420	4,980	6,060	8,210	15,000	25,100	24,200	21,400	19,700	16,300
16	4,150	4,070	4,430	5,010	6,100	8,480	15,400	25,100	24,200	21,400	19,700	16,200
17	4,160	4,040	4,440	5,030	6,160	8,670	15,700	25,100	24,100	21,200	19,600	16,200
18	4,150	4,030	4,450	5,040	6,220	8,840	16,100	25,300	24,100	21,200	19,500	16,100
19	4,160	4,030	4,460	5,060	6,290	8,990	16,500	25,300	24,100	21,100	19,400	16,100
20	4,160	4,030	4,480	5,090	6,350	9,140	16,900	25,300	24,000	21,100	19,300	16,000
21	4,160	4,040	4,500	5,100	6,420	9,340	17,200	25,300	24,000	21,000	19,300	15,900
22	4,160	4,050	4,500	5,120	6,480	9,520	17,600	25,300	23,900	20,900	19,100	15,800
23	4,160	4,080	4,520	5,140	6,570	9,680	17,900	25,300	23,800	21,100	19,100	15,700
24	4,160	4,110	4,550	5,160	6,650	9,870	18,200	25,300	23,800	21,300	19,000	15,700
25	4,160	4,120	4,560	5,190	6,740	10,000	18,600	25,400	23,800	21,200	19,000	15,600
26	4,160	4,130	4,580	5,210	6,800	10,200	19,100	25,500	23,700	21,200	18,900	15,600
27	4,160	4,140	4,580	5,240	6,860	10,400	19,700	25,500	23,600	21,200	18,800	15,500
28	4,170	4,160	4,600	5,280	6,920	10,500	20,500	25,500	23,600	21,200	18,600	15,700
29	4,170	4,170	4,610	5,320	-	10,600	21,300	25,500	23,500	21,200	18,500	15,900
30	4,170	4,180	4,640	5,370	-	10,800	22,200	25,500	23,500	21,100	18,400	15,900
31	4,170	-	4,650	5,420	-	11,000	-	25,400	-	21,000	18,300	-

Monthly gage height and contents, water year October 1940 to September 1941

Date	Gage height (feet)†	Contents (acre-feet)	Change in contents during month (acre-feet)
Sept.30	29.52	4,110	-
Oct. 31	29.64	4,170	+60
Nov. 30	29.66	4,180	+10
Dec. 31	30.44	4,650	+470
Calendar year 1940	-	-	-
Jan. 31	31.70	5,420	+770
Feb. 28	33.96	6,920	+1,500
Mar. 31	39.28	11,000	+4,080
Apr. 30	50.21	22,200	+11,200
May 31	52.74	25,400	+3,200
June 30	51.24	23,500	-1,900
July 31	49.25	21,000	-2,500
Aug. 31	46.57	18,300	-2,700
Sept.30	44.57	15,900	-2,400
Water year 1940-41	-	-	+11,790

† Gage height at midnight.

Little Colorado River below Lyman Reservoir, near St. Johns, Ariz.

Location.- Water-stage recorder and concrete control, lat. 34°23', long. 109°23', in NE¼ sec. 9, T. 11 N., R. 28 E., 65 feet downstream from outlet tunnel in Lyman Dam and 9 1/3 miles south of St. Johns, used to determine water released to the river channel. Water-stage recorder on Lyman Reservoir, 300 feet upstream in control tower on Lyman Dam, used to determine water spilled three-eights of a mile north at spillway in SW¼ sec. 4, T. 11 N., R. 28 E.

Drainage area.- 790 square miles.

Records available.- April to September 1941.

Extremes.- Maximum discharge observed during period, 603 second-feet May 8 (including 546 second-feet of spilled water); minimum discharge, 0.7 second-foot Apr. 1, 2, 10-17.

Remarks.- Records good except those for period of spill greater than 250 second-feet during May 4-12, which are fair. Discharge completely regulated by Lyman Reservoir (see preceding page) except when spill occurs. Since 1929 spill has occurred only during periods Apr. 8 to about May 6, 1932, and Apr. 30 to May 13, 1941. Record shows all water spilled and released from Lyman Reservoir to the river channel but does not include flow diverted to Lyman canal. See table of miscellaneous discharge measurements at end of report for flow in canal.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1							0.7	53	30	22	14	13
2							.7	151	30	22	14	14
3							.8	260	30	22	14	14
4							.8	331	30	22	14	14
5							.8	425	30	24	13	14
6							.8	502	30	26	13	14
7							.8	568	30	26	13	14
8							.8	603	30	26	13	14
9							.8	512	30	26	13	14
10							.7	435	30	26	13	14
11							.7	405	30	26	13	8.1
12							.7	409	28	26	13	3.2
13							.7	244	23	26	9.7	3.2
14							.7	103	23	27	7.2	3.2
15							.7	104	20	27	7.2	3.2
16							.7	63	15	27	7.0	3.2
17							.7	12	15	26	7.0	3.1
18							.8	34	15	26	7.2	3.1
19							.8	31	15	26	7.2	3.1
20							.8	30	15	26	7.2	3.0
21							.8	30	15	26	7.2	3.0
22							.8	30	15	26	7.2	2.9
23							.8	30	15	26	7.2	2.7
24							.8	30	16	26	7.2	2.7
25							.8	30	19	26	8.9	2.7
26							.8	30	25	22	11	2.7
27							.8	30	25	19	11	2.8
28							.8	30	23	16	11	2.8
29							.8	30	22	14	11	2.4
30							4.8	30	22	14	12	1.7
31							-	30	-	14	12	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October					
November					
December					
Calendar year					
January	-	-	-	-	-
February	-	-	-	-	-
March	-	-	-	-	-
April	27.0	4.8	0.7	0.90	54
May	5,605	603	12	181	11,120
June	696	30	15	23.2	1,380
July	734	27	14	23.7	1,460
August	325.4	14	7.0	10.5	645
September	201.8	14	1.7	6.73	400
The period	-	-	-	-	15,060

Note.- No gage-height record May 22 to June 10; discharge computed on basis of two discharge measurements and watermaster's statement that no change in setting of release gate in Lyman Dam was made during that period.

Little Colorado River above Zuni River, near Hunt, Ariz.

Location.- Water-stage recorder, lat. 34°38', long. 104°40', in SW¼SW¼ sec. 2, T. 14 N., R. 25 E., 500 feet upstream from Zuni River and 3 miles northwest of Hunt.

Drainage area.- 3,680 square miles, including 830 square miles in closed basin surrounding Quemado, N. Mex.

Records available.- March 1940 to September 1941.

Extremes.- Maximum discharge during year, 516 second-feet May 11 (gage height, 3.37 feet); minimum, 0.3 second-foot July 22 (gage height, 1.29 feet).
1940-41: Maximum discharge, 577 second-feet July 26, 1940 (gage height, 3.46 feet); no flow during long periods in 1940.

Remarks.- Records good. Diversions above station for irrigation. Some regulation by many reservoirs above station, the largest of which is Lyman Reservoir (see p. 213).

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	34	7	8	14	10	10	18	6	21	1	1	1
2	47	7	8	13	9	11	14	6	18	.8	.6	1
3	44	6	8	13	9	10	14	6	16	.8	.3	.6
4	36	6	8	12	8	9	16	8	16	2	.3	.3
5	31	6	8	12	8	9	17	31	16	2	.3	.3
6	25	6	8	14	8	9	14	105	13	1	.3	.3
7	20	6	8	13	12	9	14	196	11	.8	.3	.3
8	16	6	8	12	16	9	15	294	9	.6	.6	.3
9	12	6	8	11	14	8	14	394	8	.6	.8	.6
10	11	6	9	11	14	8	11	464	8	.6	4	.8
11	11	5	10	25	14	8	10	496	7	.6	3	.8
12	10	6	11	39	11	8	10	464	8	.8	1	.8
13	9	b6	10	28	10	8	10	405	8	.8	.6	1
14	8	b6	10	25	11	42	9	280	7	.8	.6	1
15	8	b6	b11	22	11	108	9	197	8	.8	.6	1
16	8	b6	b9	20	10	63	9	187	7	.8	1	1
17	8	6	12	17	11	60	8	190	7	1	7	1
18	7	6	12	16	11	51	7	149	6	2	5	1
19	7	7	12	16	11	41	7	108	5	1	2	1
20	7	7	11	16	11	32	7	95	4	.8	1	1
21	7	7	11	13	11	36	7	80	4	.6	.8	1
22	6	8	11	13	11	31	7	63	3	.3	.6	1
23	6	8	11	11	11	26	7	54	3	.3	.8	1
24	6	8	11	13	11	33	7	50	3	1	.8	1
25	6	8	13	12	11	60	7	54	3	1	.6	1
26	5	9	11	11	11	47	7	48	2	96	.6	1
27	6	9	12	11	11	38	7	42	2	15	.6	1
28	6	8	11	11	10	33	6	38	2	4	.6	5
29	7	8	11	12	-	29	6	29	1	3	.6	19
30	6	8	13	11	-	30	6	26	1	2	.8	13
31	7	-	16	11	-	21	-	25	-	2	1	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	427	47	5	13.8	847
November	204	9	5	6.8	405
December	320	16	8	10.3	635
Calendar year	-	-	-	-	-
January	476	39	11	15.4	948
February	306	16	8	10.9	607
March	897	108	8	28.9	1,780
April	300	18	6	10.0	595
May	4,590	496	6	148	9,100
June	227	21	1	7.6	450
July	144.8	96	.3	4.67	287
August	38.1	7	.3	1.23	76
September	59.1	19	.3	1.97	117
Water year 1940-41	7,991.0	496	.3	21.9	15,850

b Stage-discharge relation affected by ice.

Little Colorado River near Hunt, Ariz.

Location.- Water-stage recorder, lat. 34°39', long. 109°42', in NW¼NW¼ sec. 4, T. 14 N., R. 25 E., at bridge on U. S. Highway 260, 2 miles downstream from Zuni River and 5 miles northwest of Hunt.

Drainage area.- 6,280 square miles, including 830 square miles in closed basin surrounding Quemado, N. Mex., and excluding 964 square miles in North Plains Basin, N. Mex., a closed basin.

Records available.- May 1929 to October 1933 and March 1940 to September 1941.

Extremes.- Maximum discharge during year, 1,560 second-feet July 25 (gage height, 8.96 feet); no flow on several days.
1929-33, 1940-41: Maximum discharge, 8,000 second-feet July 28, 1929 (gage height, 19.0 feet, datum then in use); no flow at times in various years.

Remarks.- Records good except those during periods of no gage-height record and those below 5 second-feet, which are poor. Diversions above station for irrigation. Some regulation by many reservoirs above station. The Zuni River contributes practically all the inflow between this station and station on Little Colorado River above Zuni River near Hunt.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	48	7	10	41	12	53	286	276	a30	1	1	1
2	56	7	9	28	11	52	490	296	a30	1	.5	.5
3	47	7	9	22	11	47	685	239	a25	1	.5	.5
4	38	6	9	17	10	44	617	248	a40	2	.5	.5
5	34	6	8	16	10	37	536	265	a20	1	.5	.5
6	29	6	9	16	10	35	395	306	a15	1	.5	.5
7	24	6	8	16	43	34	367	408	a11	1	.5	.5
8	16	6	8	15	79	32	348	503	a9	0	12	.5
9	12	7	8	15	38	32	298	607	a8	0	101	.5
10	11	6	8	15	24	31	289	620	a8	0	50	.5
11	12	5	15	219	19	30	294	601	7	0	170	.5
12	10	6	22	191	14	30	431	556	8	0	39	.5
13	9	b6	13	77	12	32	492	490	7	0	14	.5
14	8	b6	13	35	12	297	389	345	7	.5	6	.5
15	8	b6	14	28	12	612	318	232	7	.5	2	.5
16	7	b6	14	26	12	392	260	210	6	1	10	.5
17	7	6	13	25	13	344	234	179	6	1	49	.5
18	6	7	13	24	14	300	250	154	5	2	27	1
19	6	19	13	22	14	328	281	130	4	2	10	1
20	6	14	12	20	15	340	264	107	3	2	4	1
21	6	14	12	17	14	412	a190	86	3	2	2	.5
22	6	14	12	16	14	403	a150	68	2	.5	1	.5
23	6	13	12	16	22	424	a150	60	3	.5	1	.5
24	5	13	12	15	32	348	a160	119	2	1	1	.5
25	5	12	23	15	39	387	a170	a80	2	304	1	.5
26	5	12	16	14	67	412	a180	a50	1	251	1	1
27	7	12	17	14	65	365	a200	a45	1	24	.5	1
28	10	12	16	12	53	350	226	a40	1	8	.5	125
29	7	11	16	12	-	260	247	a35	1	4	.5	391
30	7	11	17	12	-	210	272	a35	1	2	.5	311
31	7	-	72	12	-	255	-	a30	-	1	1	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	465	56	5	15.0	922
November	269	19	5	9.0	534
December	453	72	8	14.6	899
Calendar year	-	-	-	-	-
January	1,023	219	12	33.0	2,030
February	701	79	10	25.0	1,390
March	6,928	612	30	223	13,740
April	9,450	585	150	315	18,740
May	7,423	620	30	239	14,720
June	273	40	1	9.1	541
July	615.0	304	0	19.8	1,220
August	508.0	170	.5	16.4	1,010
September	543.5	391	.5	28.1	1,670
Water year 1940-41	28,951.5	685	0	79.3	57,420

Peak discharge.- Mar. 15 (2 p.m.) 816 sec.-ft; Apr. 3 (3:30 p.m.) 764 sec.-ft.; Apr. 12 (10 p.m.) 519 sec.-ft.; July 25 (11:30 p.m.) 1,560 sec.-ft.; Sept. 29 (10:45 a.m.) 698 sec.-ft.; Sept. 30 1:45 a.m.) 854 sec.-ft.

a No gage-height record; discharge computed on basis of records for stations on Little Colorado River near Woodruff and on Silver Creek near Woodruff.

b Stage-discharge relation affected by ice.

Little Colorado River near Woodruff, Ariz.

Location.- Water-stage recorder and concrete control, lat. 34°48', long. 110°03', in sec. 7, T. 16 N., R. 22 E., 1½ miles northwest of Woodruff and 4 miles downstream from Silver Creek. Datum of gage is 5,123.5 feet above mean sea level (from river profile map, based on datum of 1929).

Drainage area.- 8,100 square miles.

Records available.- March 1905 to December 1908, December 1915 to December 1919 (fragmentary), April 1929 to December 1933, September 1935 to September 1941.

Average discharge.- 10 years (1929-33, 1935-41) 76.0 second-feet.

Extremes.- Maximum discharge during year, 6,050 second-feet Mar. 15 (gage height, 9.45 feet); minimum, 0.3 second-foot June 26.

1929-41: Maximum discharge, 13,000 second-feet July 26, 1940; no flow on some days in spring or summer of most years.

Maximum discharge recorded, 25,000 second-feet Dec. 5, 1919 (gage height, 12.0 feet, datum then in use), from rating curve extended above 2,000 second-feet; maximum gage height recorded, 12.7 feet, datum then in use, Jan. 19, 1916.

Remarks.- Records good except those for periods of no or fragmentary gage-height record, which are poor. Diversions above station for irrigation. Some regulation by reservoirs above station (combined capacity, about 67,000 acre-feet).

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	100	14	17	443	50	104	326	303	32	3	a4	9
2	102	14	16	178	40	70	443	314	29	1	a2	7
3	91	14	16	104	31	201	746	303	28	.9	a2	5
4	58	14	15	70	25	146	794	253	26	.8	21	4
5	90	14	14	44	24	91	684	326	26	1	9	4
6	64	15	14	40	22	67	515	280	34	3	5	6
7	44	15	15	31	32	82	384	338	24	4	10	5
8	32	14	14	29	551	79	314	407	17	4	195	3
9	29	14	14	26	172	48	280	515	15	1	392	4
10	24	14	15	28	126	38	271	621	14	1	507	3
11	28	14	17	1,080	108	32	280	614	13	20	196	3
12	19	10	54	1,710	152	38	326	666	11	12	126	3
13	19	9	61	497	132	40	455	515	11	8	48	10
14	16	11	32	209	76	2,590	631	395	18	5	40	12
15	15	14	39	132	52	4,420	858	271	26	4	337	79
16	14	14	28	67	48	2,330	508	227	28	12	115	16
17	11	16	25	73	79	1,290	349	218	10	52	194	22
18	11	18	51	52	104	970	253	209	5	137	73	76
19	10	18	125	40	117	770	280	146	3	158	36	29
20	10	62	64	36	100	656	262	122	1	73	21	19
21	10	46	36	34	223	583	218	91	1	28	30	11
22	9	38	26	29	218	574	165	62	1	18	29	7
23	8	25	18	25	172	532	165	67	1	18	17	6
24	8	25	18	25	172	479	158	92	1	191	24	5
25	8	38	93	25	132	532	158	152	1	235	14	a5
26	9	38	252	25	122	479	172	82	.8	469	8	a5
27	63	25	95	25	139	395	184	52	.8	103	7	a5
28	178	17	67	29	108	360	209	48	.9	44	6	f1,530
29	40	17	52	40	-	338	236	44	4	25	5	f1,640
30	19	18	67	55	-	202	292	38	1	a10	5	516
31	15	-	235	58	-	292	-	34	-	a5	12	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	1,154	178	8	37.2	2,290
November	615	62	9	20.5	1,220
December	1,616	262	14	52.1	3,210
Calendar year 1940	26,108.4	5,270	0	71.3	51,790
January	5,260	1,710	25	170	10,430
February	3,327	551	22	119	6,600
March	18,918	4,420	32	610	37,520
April	10,916	858	158	364	21,650
May	7,825	668	34	252	15,520
June	383.5	34	.8	12.4	761
July	1,646.7	469	.8	53.1	3,270
August	2,490	507	2	80.3	4,940
September	4,049	1,540	3	135	8,030
Water year 1940-41	58,200.2	4,420	.8	159	118,400

Peak discharge.- Jan. 12 (1:30 a.m.) 3,090 sec.-ft.; Mar. 15 (4:30 a.m.) 6,050 sec.-ft.; Aug. 9 (1 a.m.) 1,170 sec.-ft.; Sept. 28 (11 p.m.) 4,690 sec.-ft.

a No gage-height record; discharge computed on basis of records for Little Colorado River near Hunt and Silver Creek near Woodruff.

f Fragmentary gage-height record; discharge computed on basis of available gage-height record and records for Little Colorado River near Hunt and Silver Creek near Woodruff.

Little Colorado River at Grand Falls, Ariz.

Location.- Water-stage recorder, lat. 35°26', long. 111°12', in T. 24 N., R. 11 E., unsurveyed, at Grand Falls on Navajo Indian Reservation, 38 miles northeast of Flagstaff and 96 miles upstream from mouth. Altitude of gage, 4,440 feet (river-profile map).

Drainage area.- 21,200 square miles.

Records available.- November 1925 to September 1941.

Average discharge.- 16 years, 335 second-feet.

Extremes.- Maximum discharge during year, 17,000 second-feet Mar. 15 (gage height, 18.30 feet); no flow on many days.

1925-41: Maximum discharge, 50,500 second-feet Apr. 5, 1929 (gage height, 30.0 feet); no flow during some periods in each year.

A discharge of about 120,000 second-feet occurred Sept. 19, 1923 (gage height, 47.0 feet, from floodmarks).

Remarks.- Records excellent except those for periods of no gage-height record, which are fair. Diversions above station for irrigation.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2,720	285	124	2,820	222	a1,000	1,440	2,060	a340	0	20	46
2	1,110	189	109	2,710	207	a800	1,800	1,920	a260	0	9	13
3	368	182	98	1,190	180	a700	2,200	1,920	a160	0	3	4
4	252	149	97	610	166	1,720	2,100	2,790	a130	0	1	1
5	260	141	95	500	159	1,720	2,240	3,080	a150	0	0	0
6	1,800	126	111	320	136	1,160	2,200	3,420	a300	0	0	0
7	1,220	109	122	231	130	a550	2,150	2,750	a200	0	0	0
8	793	87	116	239	136	a630	1,800	2,390	a150	0	0	0
9	320	65	113	193	1,190	a580	1,520	2,290	116	0	302	0
10	a160	48	105	178	a780	565	1,370	2,200	81	0	1,330	0
11	141	46	118	503	a430	434	1,270	2,060	51	0	3,240	0
12	97	40	113	8,700	a340	402	1,440	1,840	29	0	1,070	0
13	78	29	123	2,570	a425	429	1,410	1,680	17	0	a430	5
14	60	25	1,080	1,440	1,410	448	1,800	1,500	9	0	a260	5
15	46	20	745	1,060	1,200	10,900	1,840	a1,250	4	0	640	398
16	36	12	500	685	962	11,800	2,420	a1,050	2	0	2,730	791
17	27	9	406	555	1,480	5,800	2,640	a850	0	0	1,210	453
18	21	7	281	448	3,190	3,780	2,490	a625	0	0	1,160	871
19	17	6	232	384	2,750	2,750	2,140	475	0	0	484	530
20	11	5	584	320	2,200	2,340	1,680	402	0	0	177	508
21	9	6	1,060	300	1,970	2,200	1,340	345	0	204	116	233
22	5	362	a550	260	3,510	2,100	a1,060	289	0	154	77	149
23	2	607	a410	220	4,360	2,150	a900	201	0	92	48	89
24	1	477	a340	181	3,190	2,200	a800	154	0	75	23	50
25	0	300	a380	178	2,440	1,880	a750	2,330	0	210	7	23
26	0	271	2,320	390	1,920	2,300	a775	1,430	0	300	2	10
27	0	230	a800	413	1,410	1,840	2,050	775	0	338	1	48
28	40	190	a680	289	1,270	1,520	3,810	a600	0	321	1	57
29	566	170	602	219	-	1,200	2,590	a410	0	122	1	4,530
30	410	143	500	193	-	1,300	2,240	a260	0	72	72	6,820
31	345	-	1,590	284	-	1,410	-	a200	-	38	86	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	10,915	2,720	0	352	21,650
November	4,336	607	5	145	8,600
December	14,504	2,320	95	468	28,770
Calendar year 1940	96,325	4,540	0	263	191,100
January	28,583	8,700	178	922	56,690
February	37,763	4,360	130	1,349	74,900
March	68,908	11,800	402	2,223	136,700
April	54,265	3,810	750	1,809	107,600
May	43,546	3,420	164	1,405	86,370
June	1,999	340	0	66.6	3,960
July	1,926	338	0	62.1	3,820
August	13,500	3,240	0	435	26,780
September	15,634	6,820	0	521	31,010
Water year 1940-41	295,879	11,800	0	811	586,800

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

Silver Creek near Woodruff, Ariz.

Location.- Water-stage recorder, lat. 34°44', long. 110°02', in sec. 32, T. 16 N., R. 22 E., half a mile upstream from mouth and 3 miles south of Woodruff. Control for station is crest of diversion dam 1,700 feet downstream.

Drainage area.- 942 square miles.

Average discharge.- 10 years (1929-33, 1935-41), 31.3 second-feet.

Records available.- April 1929 to October 1933, October 1935 to September 1941.

Extremes.- Maximum discharge during year, 3,700 second-feet Mar. 15 (gage height, 7.61 feet); no flow May 14, 15.
1929-41: Maximum discharge, 12,100 second-feet July 21, 1929 (gage height, 11.67 feet), from rating curve in effect at time extended above 3,000 second-feet on basis of records for Little Colorado River near Woodruff; maximum gage height, 12.37 feet July 26, 1940; no flow during several days in spring and summer of each year.

Remarks.- Records good except those July 17 to Sept. 30, which are poor. Diversions above station for irrigation. Flow regulated by several reservoirs (combined capacity, about 27,000 acre-feet). Records show discharge over dam and do not include flow in canal that diverts at dam. See table of miscellaneous discharge measurements for flow in canal.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	30	16	3	139	33	30	38	8	1	2	1	4
2	18	8	3	77	23	16	42	6	1	1	1	3
3	13	6	3	50	16	163	123	7	2	1	1	3
4	10	6	3	38	11	78	107	10	1	1	13	2
5	45	5	3	23	10	42	77	6	1	2	1	2
6	26	6	3	18	8	26	66	4	10	3	1	2
7	18	7	3	14	8	51	56	2	6	2	4	2
8	8	5	3	8	79	42	48	1	4	2	64	3
9	7	6	3	8	68	25	40	1	4	2	96	5
10	7	6	3	8	59	13	30	4	3	2	220	6
11	13	5	4	228	70	8	26	2	2	11	25	5
12	10	4	4	779	118	8	25	1	3	4	8	5
13	8	3	5	123	90	31	10	1	3	4	4	5
14	6	4	b4	72	52	1,380	214	0	2	3	56	31
15	5	6	b21	50	32	2,440	411	0	19	2	195	39
16	5	6	16	40	28	1,220	246	1	8	8	28	13
17	5	8	7	40	56	711	155	1	3	49	16	13
18	5	10	58	30	72	511	77	1	2	81	8	23
19	5	7	92	19	80	358	30	1	1	121	6	16
20	4	8	48	14	61	250	21	2	1	30	5	13
21	4	7	25	13	184	152	18	2	1	14	22	8
22	4	4	18	10	166	118	10	5	2	10	14	6
23	3	5	10	8	118	107	6	3	1	8	8	6
24	3	5	7	8	97	82	3	4	2	19	10	6
25	3	5	64	8	77	35	3	3	1	11	5	7
26	4	4	186	7	63	28	3	2	1	13	3	10
27	50	4	72	7	54	26	5	1	1	7	3	10
28	77	4	42	11	42	23	10	1	1	4	3	440
29	23	3	40	23	-	60	10	1	2	3	2	293
30	16	3	52	33	-	78	11	1	2	2	2	58
31	16	-	91	35	-	38	-	1	-	2	6	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	451	77	3	14.5	895
November	176	16	3	5.9	349
December	896	186	3	28.9	1,780
Calendar year 1940	9,006	2,750	0	24.6	17,860
January	1,941	779	7	62.6	3,850
February	1,775	184	8	63.4	3,520
March	8,150	2,440	8	263	16,170
April	1,921	411	3	64.0	3,810
May	83	10	0	2.7	165
June	91	19	1	3.0	180
July	424	121	1	13.7	841
August	831	220	1	26.8	1,650
September	1,039	440	2	34.6	2,060
Water year 1940-41	17,778	2,440	0	48.7	35,270

Peak discharge.- Jan. 12 (3:15 a.m.) 1,480 sec.-ft.; Mar. 15 (5:30 a.m.) 3,700 sec.-ft.; Apr. 15 (5:30 a.m.) 610 sec.-ft.; Sept. 28 (8 p.m.) 1,640 sec.-ft.
b Stage-discharge relation affected by ice.

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Puerco River at Gallup, N. Mex.

Location.- Water-stage recorder, lat. 35°32', long. 108°44', in SW¼NW¼ sec. 15, T. 15 N., R. 18 W., 1,500 feet upstream from Second Street bridge in Gallup. Datum of gage is 6,490.36 feet above mean sea level, datum of 1929.

Drainage area.- 558 square miles.

Records available.- May 1940 to September 1941.

Extremes.- Maximum discharge during year, 3,700 second-feet Sept. 28 (gage height, 7.65 feet), by slope-area method; no flow on many days.
1940-41: Maximum discharge, that of Sept. 28, 1941; no flow on many days in each year.

Remarks.- Records poor except those for Mar. 1 to Apr. 23, which are good, and those for Sept. 22-30, which are fair. Small diversions above station for irrigation.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4	0	0	14	2	20	133	45	0	0	0	0
2	0	0	0	9	1	17	72	49	0	0	0	0
3	0	0	0	5	0	17	82	58	0	0	0	0
4	0	0	0	2	0	17	66	50	0	0	0	0
5	5	0	0	1	0	17	80	40	8	0	0	0
6	0	0	0	0	0	17	62	30	2	0	45	0
7	0	0	0	0	1	13	59	30	8	0	127	0
8	0	0	0	0	2	8	62	20	4	0	11	0
9	0	0	0	0	3	10	72	20	0	7	35	0
10	0	0	0	0	1	6	101	20	0	0	155	0
11	0	0	1	2	1	11	70	10	0	0	5	0
12	0	0	0	10	3	13	54	10	0	0	0	0
13	0	0	1	24	12	22	53	10	0	0	4	32
14	0	0	1	1	11	129	65	5	0	0	0	90
15	0	0	0	1	15	151	60	5	0	0	0	26
16	0	0	0	2	23	57	68	5	0	0	0	4
17	0	0	2	1	37	44	45	5	0	95	0	169
18	0	6	6	1	40	61	30	5	0	20	0	98
19	0	10	16	1	36	80	33	0	0	3	0	11
20	0	1	3	0	33	82	38	0	0	0	0	3
21	0	2	1	0	36	64	35	0	0	0	0	4
22	0	0	1	1	31	51	41	3	0	0	0	267
23	0	0	0	1	28	48	46	11	0	12	0	40
24	0	0	0	3	26	74	40	53	1	263	0	1
25	0	0	11	6	27	48	40	112	0	5	0	0
26	0	0	11	6	22	50	50	16	0	1	0	0
27	74	0	7	11	16	39	50	5	0	0	0	0
28	26	0	6	16	17	46	65	1	0	0	0	801
29	1	0	8	12	-	67	65	0	0	0	0	226
30	0	0	12	8	-	86	46	0	0	0	0	10
31	0	-	23	4	-	98	-	0	-	0	0	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	110	74	0	3.5	218
November	19	10	0	.6	38
December	110	23	0	3.5	218
Calendar year	-	-	-	-	-
January	142	24	0	4.6	282
February	424	40	0	15.1	841
March	1,463	151	6	47.2	2,900
April	1,783	133	30	59.4	3,540
May	618	112	0	19.9	1,230
June	23	8	0	.8	46
July	406	263	0	13.1	805
August	383	156	0	12.4	760
September	1,802	801	0	60.1	3,570
Water year 1940-41	7,283	801	0	20.0	14,450

Puerco River near Adamana, Ariz.

Location.- Water-stage recorder, lat. 34°59', long. 109°48', in sec. 9, T. 18 N., R. 24 E., at highway bridge in Petrified Forest National Monument, three-quarters of a mile downstream from Dead River and 1½ miles southeast of Adamana. Datum of gage is 5,312.79 feet above mean sea level, datum of 1929.

Drainage area.- 2,760 square miles.

Records available.- March 1940 to September 1941.

Extremes.- Maximum discharge during year, 22,600 second-feet Sept. 29 (gage height, 9.5 feet); no flow during part of year.
1940-41: Maximum discharge, that of Sept. 29, 1941; no flow parts of each year.

Remarks.- Records poor. Minor diversions, mostly by pumping, above station.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	520	3	1	100	10	60	192	144	200	0	0	0
2	144	2	1	50	10	110	192	470	120	0	0	0
3	30	2	1	30	10	90	310	250	90	0	20	0
4	58	2	0	20	5	50	90	340	110	0	5	0
5	200	1	0	10	5	50	44	490	294	0	0	0
6	32	0	0	5	5	50	84	400	100	0	0	0
7	20	0	0	2	60	60	106	380	70	0	290	0
8	10	0	0	2	110	50	20	200	50	0	310	0
9	5	0	0	25	40	50	36	200	40	0	720	0
10	1	0	5	40	20	40	32	160	30	0	1,850	0
11	0	0	60	1,700	20	40	114	150	20	0	534	0
12	0	0	100	100	15	30	168	100	20	0	136	0
13	0	0	140	80	40	20	168	100	10	0	154	0
14	0	0	40	50	20	2,190	96	100	10	0	267	300
15	0	0	30	30	60	3,780	52	100	10	5	443	750
16	0	0	20	30	260	1,650	96	100	5	10	437	70
17	0	0	10	20	726	815	114	50	5	40	1,060	15
18	0	0	30	20	255	690	90	50	0	430	375	647
19	0	105	5	50	488	507	114	50	0	90	60	314
20	0	40	30	20	520	160	150	50	0	280	5	20
21	0	40	20	10	720	256	114	40	0	50	44	20
22	0	20	10	10	1,130	785	96	36	0	20	2	10
23	0	10	10	10	990	536	136	460	0	8	0	153
24	0	5	80	30	1,110	277	150	4,940	5	140	0	112
25	0	5	50	50	600	375	160	1,280	0	430	0	30
26	0	4	30	30	550	427	205	1,010	0	40	0	20
27	100	4	20	30	280	176	312	690	0	10	0	10
28	190	3	10	20	180	120	401	350	0	5	0	1,580
29	130	3	10	20	-	32	255	160	0	0	0	8,060
30	40	2	160	20	-	78	160	120	0	0	5	890
31	10	-	200	10	-	102	-	310	-	0	0	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	1,490	520	0	48.1	2,960
November	251	105	0	8.4	498
December	1,073	200	0	34.6	2,130
Calendar year	-	-	-	-	-
January	2,624	1,700	2	84.6	5,200
February	8,239	1,130	5	294	16,340
March	13,676	3,780	20	441	27,130
April	4,259	401	20	142	8,450
May	13,280	4,940	36	428	26,340
June	1,189	294	0	39.6	2,360
July	1,558	430	0	50.3	3,090
August	6,737	1,850	0	217	13,320
September	13,061	8,060	0	433	25,790
Water year 1940-41	67,357	8,060	0	185	133,600

Peak discharge.- Mar. 15 (11:45 a.m.) 7,400 sec.-ft.; May 24 (3 a.m.) 11,400 sec.-ft.; Sept. 29 (7 a.m.) 22,600 sec.-ft.

Chevelon Fork near Winslow, Ariz.

Location.- Water-stage recorder, lat. 34°56', long. 110°31', in sec. 27, T. 18 N., R. 17 E., 3 miles upstream from mouth and 12 miles southeast of Winslow.

Drainage area.- 1,010 square miles.

Records available.- December 1905 to December 1908, December 1915 to December 1919, March 1929 to February 1934, September 1935 to June 1941 (discontinued).

Extremes.- Maximum discharge during period, October 1940 to June 1941, 1,630 second-feet Mar. 15 (gage height, 7.52 feet); minimum, 2 second-feet on many days.
1929-41: Maximum discharge, 16,100 second-feet Apr. 4, 1929 (gage height, 17.8 feet), from rating curve extended above 6,000 second-feet; minimum, about 1 second-foot at times in each of several years.

Remarks.- Records good except those for periods of indefinite stage-discharge relationship, which are poor. No diversions above station.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3	e30	45	128	60	218	537	472	5			
2	3	58	46	113	58	348	600	490	4			
3	3	46	68	101	55	505	366	367	4			
4	4	e40	79	92	48	356	262	1,030	5			
5	5	e25	71	85	44	265	254	943	4			
6	4	e20	61	71	49	211	426	644	4			
7	3	e15	54	79	63	183	418	531	3			
8	3	9	47	57	66	144	347	420	3			
9	3	7	44	54	108	127	324	349	3			
10	3	7	39	49	113	116	344	288	3			
11	3	5	66	181	115	139	404	230	3			
12	4	5	55	69	198	144	335	168	3			
13	4	5	288	254	341	134	332	128	3			
14	3	4	208	247	272	931	330	95	2			
15	4	4	160	195	213	1,320	232	78	2			
16	4	4	137	156	305	868	237	59	2			
17	4	4	101	122	899	511	458	45	2			
18	4	4	91	98	648	373	511	33	2			
19	4	4	e350	84	560	420	395	29	2			
20	4	4	e350	76	408	540	229	24	2			
21	4	e150	e240	75	563	503	177	20	2			
22	4	162	e170	71	1,030	398	135	17	2			
23	4	143	e130	61	684	267	130	14	2			
24	4	107	e110	57	450	287	154	11	2			
25	4	84	e100	51	344	356	273	10	2			
26	4	75	e110	49	267	265	554	8	2			
27	e40	67	e220	46	225	206	731	7	2			
28	e10	63	e190	44	195	208	584	6	2			
29	5	58	e150	48	-	292	177	6	2			
30	4	50	146	58	-	419	474	6	2			
31	4	-	137	60	-	480	-	6	-			

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	159	40	3	5.1	315
November	1,259	162	4	42.0	2,500
December	4,063	350	39	131	8,060
Calendar year 1940	13,716	375	3	37.5	27,200
January	2,931	254	44	94.5	5,810
February	8,381	1,030	44	299	16,620
March	11,534	1,320	116	372	22,880
April	10,730	731	130	358	21,280
May	6,534	1,030	6	211	12,960
June	81	5	2	2.7	161
July	-	-	-	-	-
August	-	-	-	-	-
September	-	-	-	-	-
The period	-	-	-	-	90,590

Peak discharge.- Feb. 17 (1 a.m.) 1,090 sec.-ft.; Mar. 14 (4:30 p.m.) 1,500 sec.-ft.; Mar. 15 (12:30 p.m.) 1,630 sec.-ft.; May 4 (7:30 p.m.) 1,530 sec.-ft.

e Stage-discharge relation indefinite.

Clear Creek near Winslow, Ariz.

Location.- Water-stage recorder, lat. 34°58', long. 110°38', in SE¼ sec. 9, T. 18 N., R. 16 E., 1½ miles upstream from mouth and 5 miles southeast of Winslow. Control for station is crest of diversion dam 1,000 feet downstream.

Drainage area.- 607 square miles.

Records available.- March 1929 to February 1934, October 1935 to September 1941. June 1906 to January 1909 at site 3 miles upstream.

Average discharge.- 10 years (1929-33, 1935-41), 98.7 second-feet.

Extremes.- Maximum discharge during year, 3,300 second-feet Mar. 15 (gage height, 7.73 feet); no flow on many days.
1929-41: Maximum discharge, 50,000 second-feet Apr. 4, 1929 (gage height, 18.1 feet) from rating curve extended above 13,500 second-feet on basis of velocity-area studies; no flow on many days in each year.

Remarks.- Records good except those below 10 second-feet, which are poor. Water diverted above station for municipal and industrial supply. Records show discharge over dam and do not include flow in canal that diverts at dam or leakage through dam.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	128	50	196	83	389	705	1,070	26			0
2	0	102	50	190	80	476	940	984	20			0
3	0	80	54	164	72	924	725	1,230	16			0
4	0	57	57	144	65	715	578	1,380	12			0
5	0	47	68	133	54	558	530	1,580	9			0
6	12	36	68	112	57	467	635	1,510	6			0
7	582	30	68	118	76	389	625	1,500	2			0
8	276	26	68	97	76	323	578	1,360	1			0
9	164	22	68	87	123	276	558	1,230	0			0
10	107	15	65	83	133	247	587	1,150	0			0
11	68	13	65	92	138	254	675	1,040	1			0
12	47	10	61	107	203	261	635	918	0			0
13	34	8	473	243	438	247	940	809	0			0
14	26	7	414	339	449	1,120	788	715	0			0
15	20	6	308	284	355	2,920	596	616	0			0
16	15	5	218	247	355	1,640	606	512	0			0
17	8	4	138	190	1,090	995	830	398	0			0
18	5	4	158	128	962	725	962	308	0			0
19	3	5	312	118	830	685	788	254	0			0
20	2	3	440	112	665	695	558	225	0			0
21	1	274	323	133	846	715	585	190	0			0
22	0	276	247	133	1,650	655	398	138	0			0
23	1	196	190	112	1,240	512	355	118	0			0
24	0	151	170	112	962	458	347	102	0			0
25	0	123	144	92	725	512	423	92	0			0
26	0	107	151	83	568	512	763	80	0			0
27	1	83	214	83	476	423	1,420	68	0			0
28	1	80	225	80	398	380	1,380	57	0			1
29	0	65	218	76	-	406	1,100	47	0			4
30	113	57	203	83	-	512	1,090	39	0			3
31	158	-	196	83	-	596	-	34	-			-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	1,644	582	0	53.0	3,260
November	2,020	276	3	67.3	4,010
December	5,484	473	50	177	10,880
Calendar year 1940	20,133	582	0	55.0	39,930
January	4,254	339	76	137	8,440
February	13,169	1,650	54	470	26,120
March	19,987	2,920	247	645	39,640
April	21,700	1,420	347	723	43,040
May	19,754	1,580	34	637	39,180
June	93	26	0	3.1	184
July	0	0	0	0	0
August	0	0	0	0	0
September	8	4	0	.3	16
Water year 1940-41	68,113	2,920	0	241	174,800

Peak discharge.- Feb. 17 (9 a.m.) 1,380 sec.-ft.; Feb. 22 (7 a.m.) 1,800 sec.-ft.; Mar. 15 (11:30 a.m.) 3,300 sec.-ft.; Apr. 27 (9 p.m.) 1,900 sec.-ft.

Salt Creek near Winslow, Ariz.

Location.- Staff gage, lat. 34°59', long. 110°39', in SW¼SE¼ sec. 4, T. 18 N., R. 16 E., half a mile downstream from county highway bridge, 1 mile upstream from mouth, and 4 miles southeast of Winslow.

Drainage area.- 287 square miles.

Records available.- October 1939 to June 1941 (discontinued).

Extremes.- Maximum discharge during period October 1940 to June 1941, 778 second-feet Apr. 16 (gage height, 5.3 feet, from floodmarks); no flow during long periods.
1939-41: Maximum discharge, 2,900 second-feet Aug. 14 or 15 (gage height, 7.6 feet, from floodmarks), by computation of flow over dam; no flow during long periods.

Remarks.- Records fair. Gage read twice daily or oftener. Small diversions above station for irrigation.

Cooperation.- Gage-height record collected in cooperation with the Arizona Game and Fish Commission.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3	0.6	0	32	0	11	0.1	22				
2	2	.2	0	56	0	10	.1	24				
3	.2	.1	0	36	0	49	.1	21				
4	.1	.1	0	27	0	66	28	48				
5	.2	0	0	18	0	18	74	24				
6	.3	0	0	8	0	18	116	6				
7	2	0	0	4	.1	14	71	4				
8	.2	0	0	3	0	18	33	0				
9	2	0	0	2	0	19	17	1				
10	4	0	0	1	0	13	10	0				
11	2	0	.1	1	0	4	5	0				
12	.1	0	.2	.5	0	2	4	0				
13	.1	0	.2	.3	227	1	2	0				
14	.1	0	0	.1	156	1	124	0				
15	.1	0	0	.1	91	292	406	0				
16	0	0	0	11	163	387	534	0				
17	0	0	0	10	249	180	313	0				
18	0	0	6	6	180	116	145	0				
19	0	0	76	4	156	71	82	0				
20	0	0	35	2	128	37	51	0				
21	0	0	32	1	265	22	20	0				
22	0	0	23	.6	406	13	11	0				
23	0	0	10	.3	249	5	5	0				
24	0	0	6	0	145	4	3	0				
25	0	0	3	.1	68	2	2	0				
26	.4	0	83	.1	45	2	2	0				
27	6	0	91	.1	42	.9	7	0				
28	34	0	90	.1	27	.2	33	0				
29	10	0	45	0	-	.1	32	0				
30	3	0	37	0	-	.1	24	0				
31	1	-	29	0	-	.1	-	0				

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	70.8	34	0	2.28	140
November	1	.6	0	0.03	2
December	566.5	91	0	18.3	1,120
Calendar year 1940	2,175.3	450	0	5.94	4,310
January	224.3	56	0	7.24	445
February	2,597.1	406	0	92.8	5,150
March	1,373.4	387	.1	44.3	2,720
April	2,154.3	534	.1	71.8	4,270
May	150	48	0	4.8	298
June	0	0	0	0	0
July	-	-	-	-	-
August	-	-	-	-	-
September	-	-	-	-	-
The period	-	-	-	-	14,140

Moenkopi Wash near Tuba, Ariz.

Location.- Water-stage recorder, lat. 36°02', long. 111°24', in T. 31 N., R. 9 E., unsurveyed, on Navajo Indian Reservation, at bridge on U. S. Highway 89, 9 miles upstream from mouth, 11 miles north of Cameron, and 4 miles southwest of Tuba. Datum of gage is 4,310.96 feet above mean sea level (Arizona Highway Department bench mark). Prior to June 23, water-stage recorder at site 8 miles upstream.

Drainage area.- 2,490 square miles.

Records available.- July 1926 to September 1941.

Average discharge.- 15 years, 23.7 second-feet.

Extremes.- Maximum discharge during year, 5,240 second-feet Aug. 16 (gage height, 6.77 feet), from rating curve extended above 1,000 second-feet on basis of slope-area determination at gage height, 8.0 feet; no flow on many days.
1926-41: Maximum discharge, 15,100 second-feet Aug. 4, 1929, by slope-area method; no flow on several days in each year.

Remarks.- Records good except those for periods of no gage-height record, or above 800 second-feet, which are poor. Diversions above station for irrigation; none below.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	388	4.8	4.3	20	8.7	7	2	1		0	0	13
2	0	4.3	3.8	13	6.4	8	10	1		0	0	6
3	0	4.3	3.8	b9	5.3	9	8	1		0	0	4
4	0	4.3	3.8	b7	5	10	5	1		0	0	2
5	1,340	3.8	3.8	7.1	5	10	4	1		0	0	2
6	416	4.3	3.8	b8	5	10	3	1		0	0	1
7	73	4.3	3.8	6.4	10	9	3	.5		0	0	0
8	23	4.3	4.3	b7	30	8	3	.5		0	7	0
9	11	3.8	4.3	b6	24	7	3	.5		0	60	0
10	6.4	3.8	4.3	6.4	10	6	2	.5		0	80	0
11	5.8	3.8	5.3	10	7	5	2	.5		0	50	0
12	4.8	3.4	10	13	10	5	50	.4		0	40	1
13	5.3	4.3	11	14	30	5	20	.4		0	25	623
14	4.3	3.8	11	10	18	10	15	.3		0	15	801
15	4.3	3.4	7	9.5	10	15	10	.3		0	278	455
16	4.3	7.6	5.5	7.1	9	10	8	.2		0	1,210	95
17	3.8	4.3	3.8	b6	9	8	5	.2		0	324	20
18	3.8	5.8	8.8	b5	9	5	5	.2		7	50	688
19	3.8	13	16	b5	9	4	3	.1		20	14	376
20	3.8	12	13	7.1	10	3	3	.1		15	9	38
21	3.8	5.8	10	b6	10	3	3	.1		8	3	9
22	3.8	4.8	8.7	5.8	10	3	60	0		6	1	9
23	3.8	5.3	7.9	7.1	100	3	40	0		4	1	36
24	3.8	7.1	23	8.7	40	4	30	0		5	0	16
25	3.e	4.3	68	12	30	20	20	0		5	0	8
26	4.3	4.3	22	10	20	10	50	0		9	0	6
27	174	5.3	17	8.7	10	10	30	0		25	1	4
28	45	5.3	9.5	10	8	8	20	0		9	1	2
29	13	3.8	8.7	23	-	5	10	0		3	77	218
30	7.9	3.8	9.5	18	-	3	5	0		1	140	199
31	5.3	-	19	12	-	2	-	0		0	50	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	2,569.9	1,340	0	82.9	5,100
November	153.2	13	3.4	5.11	304
December	334.7	68	3.e	10.8	664
Calendar year 1940	14,643.3	2,590	0	40.0	29,050
January	297.9	23	5	9.61	591
February	458.4	100	5	16.4	909
March	225	20	2	7.3	446
April	432	60	2	14.4	857
May	10.8	1	0	.35	21
June	0	0	0	0	0
July	117	25	0	3.8	232
August	2,436	1,210	0	78.6	4,830
September	3,632	801	0	121	7,200
Water year 1940-41	10,666.9	1,340	0	29.2	21,150

Peak discharge.- Oct. 5 (12:45 p.m.) 4,820 sec.-ft.; Aug. 16 (6:50 a.m.) 5,240 sec.-ft.; Sept. 13 (6:45 p.m.) 2,220 sec.-ft.; Sept. 18 (6:50 a.m.) 4,420 sec.-ft.
b Stage-discharge relation affected by ice.
Note.- No gage-height record Feb. 5, 6, 11, 12, and Feb. 16 to June 27; discharge computed on basis of 10 discharge measurements, 6 discharge estimates, weather records, local information, records on other streams, and engineers' observations.

Bright Angel Creek near Grand Canyon, Ariz.

Location.- Staff gage, lat. 36°06'09", long. 112°05'49", 0.5 mile upstream from mouth and 11 miles by trail from Grand Canyon Village, Coconino County. Datum of gage is 2,481.6 feet above mean sea level (preliminary datum of 1929). Prior to Aug. 30 staff gages 600 feet upstream and 2,100 feet downstream.

Drainage area.- 100 square miles.

Records available.- October 1923 to September 1941.

Average discharge.- 18 years, 41.1 second-feet.

Extremes.- Maximum discharge observed during year, 848 second-feet May 13; minimum observed, 23 second-feet several days in October.
1923-41: Maximum discharge, 4,400 second-feet Aug. 19, 1936, by slope-area method; minimum, 9 second-feet (regulated) June 29, 1934.

Remarks.- Records good except those Apr. 26 to May 13, which are fair. Gage read twice daily or oftener. Small diversions above station for irrigation. Some fluctuation in flow caused by power plant 9 miles above station; no regulation by storage.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	24	24	24	31	31	74	78	205	280	54	42	37
2	24	24	25	29	30	80	84	230	235	53	39	37
3	24	24	24	28	30	78	73	269	222	53	39	35
4	24	24	25	28	29	64	69	346	222	53	39	36
5	83	24	25	32	28	69	69	397	208	52	39	37
6	25	24	25	30	30	61	69	602	208	52	40	37
7	24	24	25	29	44	58	71	602	196	48	40	36
8	25	24	25	29	38	53	71	648	196	48	53	37
9	24	24	25	28	36	52	76	602	183	46	44	37
10	24	24	25	28	34	52	87	696	160	44	42	37
11	25	24	25	28	38	52	89	696	138	43	42	36
12	23	24	25	29	50	50	89	696	132	40	43	36
13	23	24	25	29	42	66	87	745	130	40	43	41
14	24	24	25	29	37	90	80	784	132	40	43	35
15	24	24	25	29	39	74	74	719	121	40	42	33
16	23	24	25	29	39	68	73	719	109	40	42	32
17	23	24	26	28	38	64	76	657	105	40	42	31
18	23	28	26	28	39	61	80	599	101	40	43	28
19	23	30	26	28	52	61	78	545	101	40	43	27
20	23	27	26	28	84	61	74	545	88	40	40	27
21	23	25	25	28	149	61	73	428	76	38	42	27
22	23	25	26	31	84	58	84	366	74	39	42	27
23	23	25	27	29	68	58	73	366	71	39	44	28
24	23	25	75	44	78	64	71	386	68	39	43	27
25	23	25	48	46	82	63	82	366	68	54	42	28
26	25	25	32	34	64	63	105	406	66	48	40	28
27	24	24	31	32	58	61	114	406	64	42	39	27
28	24	24	32	33	53	61	133	406	62	42	38	28
29	24	24	32	34	-	63	158	366	56	42	37	28
30	24	24	36	32	-	66	193	366	54	42	36	27
31	24	-	40	31	-	66	-	312	-	42	37	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	795	83	23	25.6	1,580
November	740	30	24	24.7	1,470
December	906	76	24	29.2	1,800
Calendar year 1940	15,942	230	18	43.6	31,630
January	951	46	28	30.7	1,890
February	1,424	149	28	50.9	2,820
March	1,972	90	50	63.6	3,910
April	2,633	193	69	87.8	5,220
May	15,516	784	205	501	30,780
June	3,926	280	54	131	7,790
July	1,373	54	38	44.3	2,720
August	1,280	53	36	41.3	2,540
September	967	41	27	32.2	1,920
Water year 1940-41	32,483	784	23	89.0	64,440

Virgin River at Virgin, Utah

Location.- Chain gage, lat. 37°13', long. 113°11', in SE¼SE¼ sec. 22, T. 41 S., R. 12 W., at east edge of Virgin, 0.5 mile downstream from North Creek.

Drainage area.- 934 square miles (revised).

Records available.- April 1909 to September 1926 (fragmentary), October 1926 to September 1941.

Average discharge.- 22 years (1910-14, 1915-16, 1917-18, 1923-24, 1926-41), 224 second-feet.

Extremes.- Maximum discharge observed during year, 2,980 second-feet May 6 (gage height, 7.80 feet), from rating curve extended above 1,500 second-feet on basis of slope-area determination at 13,500 second-feet; minimum observed, 65 second-feet Nov. 2.
1909-41: Maximum discharge, 13,500 second-feet Mar. 3, 1938 (gage height, 10.7 feet, from floodmarks) by slope-area method; minimum discharge observed, 23 second-feet Sept. 30, 1931.

Remarks.- Records poor. Gage read once daily. Diversions above station for irrigation.

Cooperation.- Results of 59 discharge measurements furnished by Bureau of Reclamation.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	104	72	a107	185	119	245	1,240	1,300	532	132	a153	90
2	98	65	110	160	110	958	560	1,150	505	132	146	87
3	104	82	122	128	101	532	460	1,460	550	132	128	85
4	98	113	110	122	101	380	444	1,530	514	132	125	87
5	104	101	136	101	156	560	1,360	1,330	505	132	122	90
6	110	107	160	125	150	420	487	2,340	487	132	119	95
7	101	113	185	116	240	352	404	1,560	694	125	146	101
8	104	95	176	119	176	338	436	1,560	630	119	176	104
9	95	101	185	104	160	286	460	1,510	487	168	298	104
10	92	125	189	101	164	235	672	1,350	487	216	366	104
11	90	95	189	122	e200	245	832	1,870	396	146	245	128
12	79	119	180	a132	532	280	590	1,680	352	139	230	125
13	a82	113	189	142	e320	610	478	1,600	359	156	146	122
14	85	122	168	150	245	1,090	496	1,440	331	116	125	180
15	79	113	153	119	226	396	496	2,060	310	107	104	125
16	85	116	146	132	197	a374	1,010	1,540	304	116	139	107
17	90	119	160	153	206	352	478	1,610	274	116	119	92
18	85	142	189	153	216	359	420	1,670	262	206	116	92
19	79	168	226	a148	240	444	380	1,650	245	280	113	95
20	85	132	197	142	211	452	380	1,260	211	142	119	92
21	85	a134	180	156	1,070	352	359	958	211	136	98	101
22	113	136	a208	153	366	345	352	1,180	197	116	101	139
23	107	122	235	168	331	373	420	1,430	180	110	98	146
24	101	125	240	197	610	359	373	1,430	180	268	a106	136
25	95	119	368	226	514	345	436	1,460	172	1,510	113	113
26	201	119	359	211	226	345	436	1,490	160	338	98	92
27	262	113	185	164	185	338	738	1,110	160	310	95	104
28	146	101	146	153	176	317	971	958	160	211	104	104
29	110	101	a174	180	-	388	1,400	820	a153	168	95	119
30	95	104	201	168	-	366	1,330	808	146	168	74	160
31	85	-	197	136	-	e500	-	772	-	160	87	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	3,249	262	79	105	6,440
November	3,387	168	65	113	6,720
December	5,790	388	107	187	11,480
Calendar year 1940	63,695	1,500	53	174	126,300
January	4,566	226	101	147	9,060
February	7,548	1,070	101	270	14,970
March	12,936	1,090	235	417	25,660
April	18,898	1,400	352	630	37,480
May	43,886	2,340	772	1,416	87,050
June	10,154	694	146	338	20,140
July	6,439	1,510	107	208	12,770
August	4,304	366	74	139	8,540
September	3,319	180	85	111	6,580
Water year 1940-41	124,476	2,340	65	341	246,900

a No gage-height record; discharge interpolated.
e Gage reading not representative of average for day; discharge computed on basis of records for stations at Littlefield, and North Fork of Virgin River near Springdale.

Virgin River at Littlefield, Ariz.

Location.- Staff gage, lat. 36°53', long. 113°56', in SW¼ sec. 4, T. 40 N., R. 15 W., half a mile downstream from Beaverdam Wash and half a mile east of Littlefield.

Drainage area.- 4,930 square miles (revised).

Records available.- October 1929 to September 1941.

Average discharge.- 12 years, 285 second-feet.

Extremes.- Maximum discharge observed during year, 6,000 second-feet Mar. 2 and July 25 (gage height, 5.00 feet) from rating curve extended above 3,000 second-feet on basis of slope-area determination at 22,000 second-feet; minimum observed, 58 second-feet July 8.

1929-41: Maximum discharge, 22,000 second-feet Mar. 3, 1938 (gage height, 10.3 feet, datum then in use, from floodmark), by slope-area method; minimum discharge observed, 23 second-feet Aug. 31, 1935.

Remarks.- Records poor. Gage read once daily. There is a diversion of few second-feet from Beaverdam Springs; no others in Arizona above station, but several canals divert in Utah. Mesquite canal diverts water a few miles below station for irrigation in Nevada.

Cooperation.- 8 discharge measurements furnished by U. S. Bureau of Reclamation.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	132	167	160	264	234	e1,000	2,300	1,860	688	85	227	75
2	93	194	157	173	250	4,740	1,120	1,720	532	77	157	79
3	109	190	154	173	242	e2,700	1,030	1,860	512	73	134	73
4	109	194	157	148	259	1,720	840	2,020	454	68	129	73
5	97	190	154	223	234	2,270	864	2,020	460	63	486	73
6	97	190	154	204	234	1,720	1,140	3,800	406	61	268	70
7	104	190	154	208	577	e1,000	832	3,760	473	60	277	73
8	91	180	186	200	e480	681	667	3,060	1,030	58	250	77
9	89	180	160	208	277	751	716	2,850	758	93	e1,000	75
10	81	164	154	215	277	751	518	3,080	492	83	730	70
11	75	167	154	219	286	681	e1,500	3,290	412	72	2,050	75
12	83	164	157	223	960	436	2,890	4,210	350	93	e1,000	75
13	69	164	254	246	564	966	e1,900	3,820	350	95	250	75
14	85	160	142	254	295	2,510	1,410	3,960	325	87	211	72
15	87	148	148	250	286	1,140	1,350	3,580	259	75	160	104
16	72	145	157	238	577	1,130	1,250	1,970	259	72	960	93
17	79	134	300	223	506	653	1,070	1,840	259	70	350	85
18	65	145	238	219	499	577	962	1,860	227	75	234	77
19	61	186	197	227	335	551	962	1,740	211	81	254	73
20	60	254	190	227	570	570	480	1,270	194	180	234	73
21	68	186	173	227	800	564	418	1,280	180	111	116	79
22	68	167	148	238	960	436	448	1,410	148	102	109	102
23	68	167	148	242	840	492	480	1,310	106	81	97	140
24	68	164	215	286	646	525	418	1,220	95	272	77	129
25	e100	164	864	544	2,470	480	389	1,230	87	4,100	75	123
26	840	160	272	282	e1,100	362	418	1,250	95	2,300	75	121
27	660	160	230	286	400	325	1,270	1,080	95	e700	75	116
28	330	154	211	250	367	340	1,110	1,000	102	e600	77	106
29	246	154	250	254	-	330	1,300	928	97	518	77	132
30	208	160	246	300	-	400	1,300	824	89	394	77	160
31	173	-	272	254	-	e500	-	688	-	315	75	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	4,587	840	60	148	9,100
November	5,142	254	134	171	10,200
December	6,556	864	142	211	13,000
Calendar year 1940	90,454	4,600	53	247	179,400
January	7,505	544	148	242	14,890
February	15,525	2,470	234	554	30,790
March	31,301	4,740	325	1,010	62,080
April	31,352	2,890	389	1,045	62,190
May	65,790	4,210	688	2,122	130,500
June	9,745	1,030	87	325	19,330
July	11,114	4,100	58	359	22,040
August	10,291	2,050	75	332	20,410
September	2,748	160	70	91.6	5,450
Water year 1940-41	201,656	4,740	58	552	400,000

e Gage reading not representative of average for day; discharge computed on basis of records for stations at Virgin, and North Fork of Virgin River near Springdale.

North Fork of Virgin River near Springdale, Utah

Location.- Staff gage, lat. 37°12'35", long. 112°58'40", in SW¼NW¼ sec. 22, T. 41 S., R. 10 W., in Zion National Park, 0.2 mile downstream from point of diversion of Springdale canal, 0.5 mile downstream from Pine Creek, and 1.9 miles northeast of Springdale.

Drainage area.- 336 square miles (revised).

Records available.- October 1932 to September 1941. June to November 1923 and April 1925 to September 1932 at site a quarter of a mile upstream from Pine Creek.

Average discharge.- 15 years (1925-31, 1932-41), 106 second-feet.

Extremes.- Maximum discharge observed during year (including temporary storage released from land-slide 2 miles above gage), 3,100 second-feet May 14 (gage height, 7.68 feet, from floodmarks) from rating curve extended above 1,200 second-feet on basis of slope-area determination at 7,000 second-feet; minimum discharge observed, 35 second-feet Dec. 14, Jan. 17, 18.

1925-41: Maximum discharge, 7,000 second-feet Mar. 3, 1938 (gage height, 11.0 feet, from floodmarks), by slope-area method; minimum discharge observed, 24 second-feet Dec. 17 and 31, 1928.

Remarks.- Records fair. Gage read once daily. Records give the combined flow of the North Fork of Virgin River and Springdale canal, which diverts in NW¼NW¼ sec. 22, T. 41 S., R. 10 W., for irrigation in vicinity of Springdale.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	51	53	48	57	55	292	340	577	511	133	80	61
2	46	51	48	55	49	361	189	619	e602	112	77	61
3	56	51	48	36	49	95	159	682	447	109	76	60
4	56	51	48	36	47	108	159	722	577	107	76	60
5	45	49	49	a45	48	186	158	729	439	109	73	60
6	46	52	50	55	50	186	150	e1,510	373	109	76	60
7	46	52	50	54	63	186	141	e1,310	590	107	81	60
8	46	52	52	54	61	103	145	1,060	533	103	80	58
9	45	52	46	52	53	a92	163	1,820	386	98	79	58
10	45	48	48	54	61	81	183	2,000	355	92	174	58
11	45	47	48	52	e83	81	442	1,090	305	91	180	56
12	45	45	45	50	223	183	145	1,200	289	93	82	56
13	45	40	41	54	73	219	347	1,840	283	87	88	184
14	a44	44	35	59	73	201	440	e1,500	282	87	e5	135
15	42	45	37	46	75	196	416	1,070	240	103	103	60
16	45	45	41	50	71	111	365	912	217	85	88	60
17	44	45	52	35	73	92	371	920	208	89	81	65
18	43	62	a51	35	133	124	216	912	199	109	79	67
19	41	57	51	45	117	141	220	912	190	96	75	67
20	41	53	51	52	117	156	234	1,050	178	91	74	67
21	41	a49	51	53	145	150	193	708	190	88	71	67
22	41	45	51	68	78	159	206	688	167	85	72	80
23	42	43	80	66	145	167	265	764	151	80	71	82
24	45	43	92	59	181	145	270	791	144	e406	69	80
25	43	a46	57	59	87	120	299	686	140	e1,210	69	78
26	e102	49	51	59	73	121	316	845	133	277	68	76
27	119	43	57	60	72	148	404	735	133	e150	68	69
28	47	45	57	60	86	163	483	660	130	93	66	69
29	45	48	57	60	-	171	531	628	128	93	63	69
30	45	54	66	57	-	163	573	582	121	85	63	71
31	55	-	68	55	-	167	-	545	-	83	61	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	1,542	119	41	49.7	3,060
November	1,459	62	40	48.6	2,890
December	1,626	92	35	52.5	3,230
Calendar year 1940	29,181	1,000	30	79.7	57,900
January	1,632	68	35	52.6	3,240
February	2,441	223	47	87.2	4,840
March	4,868	361	81	157	9,660
April	8,523	573	141	284	16,910
May	30,267	2,000	545	976	60,030
June	8,641	602	121	288	17,140
July	4,660	1,210	80	150	9,240
August	2,548	180	61	82.2	5,050
September	2,154	184	56	71.8	4,270
Water year 1940-41	70,361	2,000	35	193	139,600

a No gage-height record; discharge interpolated.
e Gage reading not representative of average for day; discharge computed on basis of records for stations on the Virgin River at Virgin, and Littlefield.

Williams River near Alamo, Ariz.

Location.- Water-stage recorder, lat. 34°14', long. 113°35', in SW¼NW¼ sec. 2, T. 10 N., R. 13 W., 1.5 miles downstream from Alamo and 6 miles downstream from confluence of Santa Maria and Big Sandy Rivers. Datum of gage is 1,002.95 feet above mean sea level, datum of 1929.

Drainage area.- 4,730 square miles.

Records available.- December 1939 to September 1941.

Extremes.- Maximum discharge during year, 38,200 second-feet Mar. 14 (gage height, 23.0 feet); minimum observed, 4 second-feet Oct. 1-4 and Sept. 8-12.

1939-41: Maximum discharge, that of Mar. 14, 1941; minimum daily, 4 second-feet on many days each year.

Flood of Sept. 6, 1939, reached a stage of 39.6 feet, from floodmarks (discharge, 77,000 second-feet, from slope-area measurement made just below confluence of Santa Maria and Big Sandy Rivers). Floodmarks indicate a previous stage of about 46 feet.

Remarks.- Records fair above 15,000 second-feet and poor below. Diversions above station for irrigation.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	e4	e7	21	5,300	600	2,570	280	120	26	5	e10	5
2	e4	e7	18	1,260	510	19,300	210	120	21	5	e10	5
3	e4	e7	18	750	360	3,420	550		20	5	e5	5
4	e4	e7	14	570	300	1,600	540	a100	16	6	e5	5
5	420	7	14	460	220	1,320	480		15	6	e5	5
6	450	7	14	360	170	3,950	440		14	5	e5	5
7	120	7	14	280	200	2,610	360		13	5	25	5
8	42	7	14	240	1,240	1,390	280	a80	13	5	20	4
9	18	7	18	200	560	760	210		13	6	110	4
10	11	7	18	180	330	690	150		12	6	1,360	4
11	7	7	21	160	270	590	160		11	6	940	4
12	6	7	21	620	260	470	6,790		10	5	780	4
13	6	7	25	580	250	4,390	16,700	a60	10	5	240	3,200
14	6	7	28	300	250	25,200	14,300		8	6	105	2,300
15	e6	7	28	170	225	15,900	5,840		8	5	116	714
16	e6	7	28	160	210	3,290	4,880		8	5	48	348
17	e6	7	32	120	210	2,510	2,900		8	5	21	224
18	e6	15	620	120	210	1,280	1,810	a50	7	343	14	125
19	e6	35	670	130	220	1,360	1,500		7	34	14	71
20	e6	30	e260	120	280	1,400	1,100		7	24	13	40
21	e6	25	e40	120	4,200	1,360	840		7	14	11	30
22	e6	18	e30	110	2,640	1,260	660		6	11	10	18
23	e6	14	e20	100	4,630	1,040	490		5	9	9	16
24	e7	14	200	110	2,420	900	670	a40	5	56	8	18
25	e7	14	16,200	2,700	9,030	610	720		5	96	7	16
26	e7	14	2,250	2,800	2,820	470	600		5	140	6	16
27	e7	14	960	1,250	1,820	410	470	32	5	125	5	22
28	e7	14	480	830	1,250	410	350	28	5	e70	5	24
29	e7	18	380	730	-	410	220	22	5	e35	5	22
30	e7	21	600	810	-	360	150	22	6	e25	5	25
31	e7	-	2,500	880	-	340	-	24	-	e15	5	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	1,212	450	4	39.1	2,400
November	365	35	7	12.2	724
December	25,556	16,200	14	824	50,690
Calendar year 1940	40,886	16,200	4	112	81,090
January	22,520	5,300	100	726	44,670
February	35,685	9,030	170	1,274	70,780
March	101,570	25,200	340	3,276	201,500
April	64,650	16,700	150	2,155	128,200
May	1,858	120	22	59.9	3,690
June	300	26	5	10.0	595
July	1,088	343	5	35.1	2,160
August	3,922	1,360	5	127	7,780
September	7,284	3,200	4	243	14,450
Water year 1940-41	266,010	25,200	4	729	527,600

Peak discharge.- Dec. 25 (5:40 a.m.) 30,400 sec.-ft.; Feb. 25 (3 a.m.) 14,100 sec.-ft.; Mar. 2 2:30 a.m.) 37,600 sec.-ft.; Mar. 14 (9:40 p.m.) 38,200 sec.-ft.; Apr. 13 (11:20 p.m.) 30,400 sec.-ft.; Sept. 13 (7 p.m.) 13,500 sec.-ft.

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

e Stage-discharge relation indefinite; discharge computed on basis of 3 discharge measurements, adjoining good record, weather records, and records for stations at Planet and Santa Maria River near Alamo.

Note.- Channel at low stages not directly connected to gage; recorded variation in ground-water level used to compute discharge.

Williams River at Planet, Ariz.

Location.- Water-stage recorder, lat. 34°16', long. 113°59', in NE¼ sec. 36, T. 11 N., R. 17 W., 1 mile west of Planet and 6 miles upstream from water line of Lake Havasu when it is at elevation 450 feet above mean sea level. Datum of gage is 556.33 feet above mean sea level, datum of 1929.

Drainage area.- 5,140 square miles.

Records available.- October 1910 to December 1912 (gage heights only), January 1913 to December 1915, and October 1928 to September 1941.

Average discharge.- 13 years (1928-41), 182 second-feet.

Extremes.- Maximum discharge during year, 42,600 second-feet Mar. 2 (gage height, 9.15 feet); minimum, 11 second-feet July 28.

1928-41: Maximum discharge, 92,500 second-feet Feb. 7, 1937 (gage height, 13.1 feet), from rating curve extended above 51,000 second-feet on basis of velocity-area study; minimum, 7 second-feet Sept. 30, Oct. 1, 1934.

Maximum floods known (discharges estimated) occurred as follows: 125,000 second-feet Feb. 16, 1927; 175,000 second-feet about Jan. 19, 1916; 200,000 second-feet about Feb. 21, 1891.

Remarks.- Records good except those between 100 and 1,000 second-feet, which are fair. Small diversions above station for irrigation. During the year 57 discharge measurements were made.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	20	22	19	3,120	246	805	390	246	20	16	14	21
2	21	22	19	1,340	227	18,200	390	246	18	16	16	21
3	22	22	19	484	185	4,300	442	300	17	16	16	22
4	24	22	19	330	182	1,980	578	310	17	17	16	22
5	26	22	19	162	185	1,360	310	300	16	17	16	22
6	225	22	19	152	182	3,100	218	213	16	16	15	22
7	81	22	19	146	190	1,580	213	135	16	16	15	22
8	33	22	19	138	992	905	208	129	16	16	14	23
9	26	22	19	140	416	654	223	116	16	16	16	24
10	26	21	20	149	252	442	239	103	17	17	463	22
11	26	21	20	149	199	380	252	88	17	17	722	23
12	26	21	20	542	172	400	4,240	79	17	16	266	24
13	26	21	19	334	159	2,560	11,300	68	16	16	72	552
14	21	21	19	165	185	20,500	13,300	62	16	16	24	2,190
15	21	21	19	123	194	16,000	6,220	57	18	16	23	515
16	21	21	18	90	194	4,380	5,310	52	18	17	24	266
17	21	21	20	94	185	1,300	3,040	47	17	16	24	92
18	21	21	47	96	190	830	1,480	43	17	15	23	34
19	21	21	212	96	190	578	1,200	39	16	88	23	20
20	21	21	33	98	227	616	780	36	17	16	23	20
21	21	21	26	94	4,170	597	755	34	16	17	22	21
22	21	20	25	96	2,950	540	654	32	17	17	22	22
23	21	20	24	88	3,890	540	526	32	17	19	22	21
24	21	20	28	103	1,850	540	400	28	17	150	22	20
25	21	20	14,200	1,560	10,400	460	360	28	17	21	22	21
26	21	20	2,460	1,910	2,890	456	320	28	17	20	22	21
27	21	20	1,110	596	1,210	428	390	26	17	22	22	22
28	21	20	540	350	654	380	360	24	16	15	22	21
29	21	20	266	428	-	414	512	24	16	13	22	21
30	21	19	175	286	-	390	300	22	16	14	22	21
31	21	-	971	340	-	380	-	21	-	15	22	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	960	225	20	31.0	1,900
November	629	22	19	21.0	1,250
December	20,443	14,200	18	659	40,550
Calendar year 1940	34,626	14,200	16	94.6	68,670
January	13,799	3,120	88	445	27,370
February	32,968	10,400	159	1,177	65,390
March	86,015	20,500	380	2,775	170,600
April	54,950	13,300	208	1,832	109,000
May	2,968	310	21	95.7	5,890
June	510	20	16	17.0	1,010
July	719	150	13	23.2	1,430
August	2,067	722	14	66.7	4,100
September	4,168	2,190	20	139	8,270
Water year 1940-41	220,196	20,500	13	603	436,800

Peak discharge.- Dec. 25 (8:30 a.m.) 37,800 sec.-ft.; Feb. 21 (6:15 p.m.) 10,100 sec.-ft.; Feb. 25 (6:10 a.m.) 21,800 sec.-ft.; Mar. 2 (5:25 a.m.) 42,600 sec.-ft.; Mar. 14 (9:10 a.m.) 35,400 sec.-ft.; Apr. 14 (2 a.m.) 26,400 sec.-ft.

Santa Maria River near Alamo, Ariz.

Location.- Water-stage recorder, lat. 34°18', long. 113°31', in NE¼SW¼ sec. 9, T. 11 N., R. 12 W., half a mile upstream from confluence with Big Sandy River and 5¼ miles upstream from Alamo. Datum of gage is 1,126.6 feet above mean sea level (river profile survey).

Drainage area.- 1,520 square miles.

Records available.- December 1939 to September 1941.

Extremes.- Maximum discharge during year, 15,000 second-feet Mar. 14 (gage height, 9.85 feet), by slope-area method; minimum, 1 second-foot Oct. 1-5 and July 2-7.
1939-41: Maximum discharge, 15,000 second-feet Sept. 6 or 7, 1939, and Mar. 14, 1941, by slope-area method; minimum, 1 second-foot on many days.
Flood marks indicate a stage of 12.0 feet occurred probably in 1937 or 1938.

Remarks.- Records fair except those above 100 second-feet, which are poor. Several diversions above station for irrigation.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1	2	4	789	149	1,360	73	99	6	2	4	3
2	1	3	4	365	111	4,630	149	83	6	1	4	2
3	1	5	5	159	83	1,090	382	73	6	1	4	2
4	1	4	4	99	73	516	296	60	5	1	4	2
5	600	4	4	73	66	535	175	57	6	1	3	2
6	175	3	4	69	50	1,290	115	60	5	1	4	2
7	14	2	2	87	92	781	83	57	5	2	4	2
8	6	2	2	73	187	442	73	53	5	2	3	2
9	5	2	2	60	175	169	69	50	4	2	9	2
10	4	2	2	57	129	154	66	47	4	2	46	2
11	4	2	2	50	103	134	147	42	4	2	63	2
12	4	2	2	156	103	119	4,100	34	3	2	22	2
13	3	2	6	154	115	2,080	6,970	32	3	2	11	2,780
14	3	2	16	129	107	8,290	5,480	30	2	2	9	3,060
15	3	2	6	103	99	6,540	2,940	27	2	2	12	825
16	2	2	5	91	91	2,620	1,920	24	2	2	6	450
17	2	2	9	87	95	805	713	27	2	2	5	248
18	2	2	399	76	79	382	382	22	2	4	4	107
19	2	3	119	76	83	269	350	20	2	5	3	60
20	3	3	34	76	138	124	319	19	2	3	3	30
21	3	2	30	63	714	103	248	16	2	2	3	24
22	3	3	19	57	459	103	222	14	2	2	3	16
23	4	3	16	57	1,160	95	210	16	2	2	3	11
24	4	3	139	63	688	99	175	12	2	3	2	8
25	3	4	4,070	719	3,670	91	169	11	2	4	2	9
26	3	4	774	228	1,120	91	149	9	2	11	2	8
27	2	4	216	181	595	87	139	9	2	5	2	6
28	2	4	154	181	575	83	107	9	2	4	2	8
29	2	4	99	175	-	83	95	8	2	4	3	8
30	2	4	146	204	-	73	95	9	2	4	3	16
31	2	-	776	193	-	69	-	e	-	4	3	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	866	600	1	27.9	1,720
November	86	5	2	2.9	170
December	7,070	4,070	2	228	14,020
Calendar year 1940	10,039	4,070	1	27.4	19,920
January	4,950	789	50	160	9,820
February	11,109	3,670	50	397	22,030
March	33,307	8,290	69	1,074	66,060
April	26,411	6,970	66	880	52,390
May	1,037	99	8	33.4	2,060
June	96	6	2	3.2	190
July	86	11	1	2.8	170
August	251	63	2	8.1	498
September	7,699	3,060	2	257	15,270
Water year 1940-41	92,968	8,290	1	255	184,400

Peak discharge.- Dec. 24 (11:50 p.m.) 7,800 sec.-ft.; Feb. 25 (11 p.m.) 3,700 sec.-ft.; Mar. 1 (11 p.m.) 9,200 sec.-ft.; Mar. 14 (9 p.m.) 15,000 sec.-ft.; Apr. 13 (6:50 p.m.) 10,700 sec.-ft.; Sept. 13 (6 p.m.) 10,000 sec.-ft.

Date Creek near Congress, Ariz.

Location.- Water-stage recorder, lat. 34°12', long. 113°08', in NW¼SE¼ sec. 13, T. 10 N., R. 9 W., 0.6 mile upstream from Sawyer dam site, 17 miles west of Congress, and 25 miles upstream from mouth.

Drainage area.- 127 square miles.

Records available.- October 1939 to September 1941.

Extremes.- Maximum discharge during year, 1,400 second-feet Mar. 14 (gage height, 5.75 feet) by slope-area studies; no flow during greater part of year.
1939-41: Maximum discharge, that of Mar. 14, 1941; no flow during greater part of each year.

Remarks.- Records poor. Small diversions above station for irrigation.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1					0	47	0			0	0	0
2					0	196	0			0	0	0
3					0	14	0			0	0	0
4					0	0	0			0	0	0
5					0	72	0			0	0	0
6					0	8	0			0	0	0
7					0	0	0			0	0	0
8					0	0	0			0	0	0
9					0	0	0			0	0	0
10					0	0	0			0	1	0
11					0	0	83			0	0	0
12					0	0	309			0	0	0
13					0	286	488			0	0	1
14					0	589	233			0	0	0
15					0	430	173			0	1	0
16					0	144	131			0	0	0
17					0	109	56			0	0	0
18					0	44	17			32	0	0
19					0	6	0			0	0	0
20					0	0	0			0	0	0
21					0	0	0			0	0	0
22					0	0	0			0	0	0
23					0	0	0			0	0	0
24					38	0	0			0	0	0
25					272	0	0			0	0	0
26					91	0	0			0	0	0
27					6	0	0			0	0	0
28					0	0	0			0	0	0
29					-	0	0			0	0	0
30					-	0	0			0	0	0
31					-	0	-			0	0	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	0	0	0	0	0
November	0	0	0	0	0
December	0	0	0	0	0
Calendar year 1940	1	1	0	0	2
January	0	0	0	0	0
February	407	272	0	14.5	807
March	1,945	589	0	62.7	3,860
April	1,490	488	0	49.7	2,960
May	0	0	0	0	0
June	0	0	0	0	0
July	32	32	0	1.0	63
August	2	1	0	.1	4
September	1	1	0	0	2
Water year 1940-41	3,877	589	0	10.6	7,700

Peak discharge.- Mar. 14 (8:30 p.m.) 1,400 sec.-ft.; Apr. 13 (4:20 p.m.) 878 sec.-ft.

Colorado River aqueduct near Parker Dam, Ariz.-Calif.

Location.- Venturi meters at intake pumping plant of Metropolitan Water District of Southern California, lat. 34°19', long. 114°09', in SW¼ sec. 28, T. 3 N., R. 27 E., San Bernardino meridian, on Lake Havasu, 1.8 miles upstream from Parker Dam which is 156 miles downstream from Boulder Dam.

Records available.- January 1939 to September 1941.

Extremes.- Maximum daily diversion during year, 588 second-feet Sept. 11; no diversion during several periods.

1939-41: Maximum daily diversion, 692 second-feet Mar. 26, 1939; no diversion for many periods.

Remarks.- Records given herein are those of flow diverted to Colorado River aqueduct by pumping, from Lake Havasu on Colorado River. Figures represent diversion to Colorado River aqueduct, and include evaporation losses and percolation losses, mostly from Gene and Copper Basin Reservoirs. Pumped water measured by venturi meters, individually rated by salt-velocity method. During April, May, and July some water was returned to Lake Havasu from Gene Reservoir; records of return flow computed from frequent gage-height readings on Gene reservoir for changes in contents, and from record of opening and closing of reservoir gates. Figures of monthly diversion have been adjusted for this return surface flow. Records computed using Pacific standard time. Pumping first began Jan. 7, 1939.

Cooperation.- Records furnished by Metropolitan Water District of Southern California.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	417	195		0	0	0	0	202	0	169	0	0
2	403	201		0	0	0	0	206	0	213	0	0
3	204	202		0	82	0	0	212	0	210	0	0
4	190	202		0	0	0	279	211	0	209	0	0
5	214	203		0	0	0	418	212	0	208	0	0
6	215	203		0	0	142	419	211	0	92	0	0
7	214	203		0	0	208	138	211	0	0	0	0
8	216	193		0	0	205	0	212	0	0	0	0
9	216	0		0	0	215	0	212	0	0	0	0
10	216	S		0	0	214	0	212	0	0	0	0
11	205	418		0	0	169	0	213	0	0	0	588
12	0	416		0	0	0	0	213	0	0	0	453
13	10	409		0	0	0	0	68	0	0	0	0
14	428	224		0	0	0	0	0	0	0	0	0
15	425	203		0	0	0	0	0	0	0	0	0
16	377	204		0	0	0	0	0	0	0	0	282
17	212	204		0	0	0	132	138	0	0	0	419
18	211	205		0	0	0	210	210	0	0	0	394
19	212	206		0	0	0	206	208	260	0	0	0
20	213	205		0	0	0	203	205	415	0	0	0
21	214	205		15	0	0	209	204	0	0	0	0
22	215	195		429	0	0	211	202	0	0	0	0
23	215	0		429	0	0	211	202	158	0	138	0
24	215	11		431	0	0	211	202	234	0	212	0
25	205	417		432	0	0	211	202	232	0	352	0
26	0	393		428	0	0	130	278	228	0	421	0
27	10	72		249	0	0	121	231	221	0	364	0
28	407	0		0	0	0	204	0	214	0	267	0
29	403	0		0	-	0	203	0	2	0	0	0
30	313	0		0	-	0	202	0	0	0	.0	307
31	196	-		0	-	0	-	0	-	0	0	-

Month	Observed: Discharge in second-feet: Maximum	Minimum	Mean	Observed: Run-off in acre-feet	Return surface flow (acre-feet)†	Adjusted for return surface flow (acre-feet)
October	428	0	232	14,260	0	14,260
November	418	0	187	11,100	0	11,100
December	0	0	0	0	0	0
Calendar year 1940	679	0	190	137,380	41,670	95,710
January	432	0	77.8	4,790	0	4,790
February	82	0	2.9	163	0	163
March	215	0	37.2	2,290	0	2,290
April	419	0	131	7,770	4,080	3,690
May	278	0	157	9,670	7,000	2,670
June	415	0	65.5	3,900	0	3,900
July	213	0	35.5	2,180	906	1,270
August	421	0	56.6	3,480	0	3,480
September	588	0	81.4	4,850	0	4,850
Water year 1940-41	688	0	89.0	64,450	11,990	52,460

† Return surface flow from Gene Basin Reservoir; no return surface flow from Copper Basin Reservoir during this year.

Note.- Contents in regulation reservoirs on September 30, 1941: Lake Mathews 88,709 acre-feet; Gene and Copper Basin Reservoirs (combined) 26,863 acre-feet.

Diversion for Colorado River Indian Reservation near Parker, Ariz.

Location.- Pump house on left bank of Colorado River, lat. 34°09', long. 114°18', in SE¼ sec. 2, T. 9 N., R. 20 W., Gila and Salt River meridian, on Colorado River Indian Reservation, 1 mile southwest of Parker and 17 miles downstream from Parker Dam.

Records available.- January 1915 to December 1938 (calendar year discharge), January 1937 to September 1941 (monthly discharge).

Remarks.- Discharge computed from records of pump operation, checked by current-meter and Parshall-flume measurements. Water is pumped to canals for irrigation of lands in Colorado River Indian Reservation, which lies on east side of Colorado River and extends from Parker on the north to a point near Ehrenberg on the south.

Cooperation.- Records furnished by Office of Indian Affairs.

Monthly summary of diversions for water year October 1940 to September 1941

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum daily	Minimum daily	Mean	
October	90	0	23.0	1,410
November	90	0	4.8	286
December	90	0	4.3	264
Calendar year 1940	155	0	51.5	37,390
January	0	0	0	0
February	136	0	8.2	456
March	0	0	0	0
April	136	0	44.0	2,620
May	142	0	82.0	5,030
June	165	0	54.2	3,220
July	167	0	103	6,310
August	167	0	99.0	6,080
September	167	0	75.5	4,490
Water year 1940-41	167	0	41.7	30,170

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Palo Verde canal near Blythe, Calif.

Location.- Water-stage recorder, lat. 33°43', long. 114°31', in SW¼ sec. 19, T. 5 S., R. 24 E., San Bernardino meridian, below settling basin, three-quarters of a mile downstream from intake on Colorado River, and 9¼ miles northeast of Blythe.

Records available.- January 1922 to December 1923, January 1925 to September 1941.

Remarks.- Figures given herein are those of flow diverted from Colorado River less that returned to river by canal wasteways. Flow diverted from river computed on basis of head on gate openings and occasional current-meter measurements; flow in canal wasteways estimated in the field by employees of the Palo Verde Irrigation District.

Canal diverts water from right bank of Colorado River in NE¼ sec. 19, T. 5 S., R. 24 E., San Bernardino msridian, 10 miles northeast of Blythe for irrigation of lands in Palo Verde irrigation district in vicinity of Blythe and Ripley, Riverside County, Calif. Records for October 1938 to September 1940 given herein supplement those published in Water-Supply Papers 879 and 899.

Cooperation.- Records furnished by Palo Vsrde Irrigation District.

Monthly summary of diversions 1938-41

Month	Diversions at intake					Estimated waste water (acre-feet)	Net diversions (acre-feet)
	Discharge in second-feet			Run-off			
	Maximum	Minimum	Mean	Second-foot-days	Acre-feet		
October 1938	460	160	279	8,640	17,140	1,230	15,910
November	240	180	207	6,210	12,320	1,190	11,130
December	240	60	141	4,380	8,690	1,350	7,340
Calendar year 1938	590	40	313	114,300	226,700	14,600	212,100
January 1939	150	50	89.7	2,780	5,510	1,210	4,300
February	430	160	271	7,580	15,030	1,110	13,920
March	550	240	437	13,550	26,880	1,230	25,650
April	590	360	482	14,460	28,680	1,190	27,490
May	650	330	524	16,250	32,230	1,230	31,000
June	660	410	553	16,580	32,890	1,190	31,700
July	630	300	537	16,660	33,040	1,210	31,830
August	570	350	467	14,480	28,720	1,230	27,490
September	320	0	94.3	2,830	5,610	1,030	†4,580
Water year 1939	660	0	341	124,400	246,700	14,400	232,300
October 1939	420	110	258	7,990	15,850	1,580	14,270
November	320	110	262	7,860	15,590	1,560	14,030
December	300	170	220	6,820	13,530	1,350	12,180
Calendar year 1939	660	0	350	127,800	253,600	15,120	238,400
January 1940	330	220	275	8,520	16,900	1,690	15,210
February	450	230	321	9,320	18,490	1,850	16,640
March	600	350	417	12,930	25,650	2,560	23,090
April	700	200	448	13,450	26,680	2,670	24,010
May	650	400	526	16,300	32,330	3,230	29,100
June	810	520	642	19,270	38,220	3,820	34,400
July	850	520	684	21,200	42,050	4,200	37,850
August	810	560	686	21,270	42,190	4,220	37,970
September	670	410	578	17,330	34,370	3,440	30,930
Water year 1940	850	110	443	162,300	321,800	32,170	289,700
October 1940	680	470	579	17,940	35,580	3,560	32,020
November	550	430	469	14,080	27,930	2,790	25,140
December	500	60	323	10,010	19,850	1,980	17,870
Calendar year 1940	850	60	496	181,600	360,200	36,010	324,200
January 1941	220	80	126	3,900	7,740	770	6,970
February	640	160	380	10,640	21,100	2,110	18,990
March	560	100	308	9,560	18,960	1,900	17,060
April	700	270	525	15,740	31,220	3,120	28,100
May	580	180	493	15,270	30,290	3,030	27,260
June	780	380	611	18,340	36,380	3,070	33,310
July	830	470	684	21,190	42,030	3,450	38,580
August	740	120	537	16,660	33,040	2,740	30,300
September	790	410	604	18,110	35,920	3,390	32,530
Water year 1941	830	60	470	171,440	340,000	31,910	308,100

† Figure supersedes that published in Water-Supply Paper 879.

Gila River near Gila, N. Mex.

Location.- Water-stage recorder, lat. 33°04'05", long. 108°32'10", in SE¼SW¼ sec. 19, T. 14 S., R. 16 W., at Hooker dam site, 1 mile upstream from Mogollon Creek and 7 miles northeast of Gila. Datum of gage is 4,655.8 feet above mean sea level (river-profile survey).

Drainage area.- 1,870 square miles.

Records available.- April to December 1914 (at site 3 miles upstream and about a quarter of a mile downstream from Turkey Creek) and October 1930 to September 1941 in reports of Geological Survey. April to December 1914 and November 1927 to December 1928 (at site 3 miles upstream) and January 1929 to December 1931 in reports of State engineer.

Average discharge.- 13 years (1928-41), 146 second-feet.

Extremes.- Maximum discharge during year, 25,400 second-feet Sept. 29 (gage height, 17.19 feet, from floodmark), from rating table extended above 1,090 second-feet on basis of velocity-area studies and logarithmic plotting; minimum daily, 44 second-feet July 13.
1930-41: Maximum discharge, that of Sept. 29, 1941; minimum daily, 21 second-feet June 22, 27, 1934, and July 14, 1939.

Remarks.- Records good except those for periods of missing gage height and those above 2,000 second-feet, all of which are poor. One small diversion above station for irrigation.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	139	55	102	1,480	480	598	594	840	226	78	65	194
2	114	55	106	870	424	705	655	900	222	71	61	146
3	100	54	104	598	374	780	655	810	220	67	55	121
4	86	55	104	444	347	680	603	680	209	63	55	102
5	78	54	101	374	335	598	549	655	202	63	57	94
6	75	55	98	332	350	554	524	680	200	67	61	86
7	70	57	98	317	549	496	504	755	194	67	59	91
8	66	60	101	274	840	448	476	780	188	67	59	a89
9	62	56	101	250	840	402	452	755	186	71	65	a86
10	61	56	101	238	750	378	448	730	180	69	67	a82
11	60	54	146	243	840	360	444	730	172	63	67	a78
12	62	54	630	758	960	354	440	705	157	48	65	a74
13	62	54	1,020	1,160	810	512	468	705	142	44	69	a74
14	62	52	608	755	680	1,060	428	655	132	53	78	a76
15	60	51	420	580	594	2,150	385	549	130	108	94	76
16	57	51	287	456	562	2,610	354	464	128	184	150	69
17	56	51	256	392	572	1,740	341	420	125	176	192	69
18	55	54	305	326	572	1,200	357	396	121	121	162	63
19	54	96	296	285	562	870	357	378	112	181	108	63
20	54	112	256	271	554	730	329	360	108	159	143	61
21	54	98	226	248	621	755	305	344	105	205	176	61
22	52	85	198	226	755	680	287	326	108	150	171	67
23	54	94	182	209	840	840	266	290	124	144	218	65
24	54	106	170	204	900	870	243	256	127	178	220	57
25	54	106	883	220	840	840	243	238	131	105	161	57
26	54	104	655	209	755	730	455	279	118	84	131	57
27	54	102	440	196	655	567	1,850	274	105	76	108	55
28	54	102	350	382	621	476	1,470	271	96	71	96	208
29	54	102	274	840	-	444	1,090	263	88	69	264	d13,000
30	55	102	280	870	-	476	870	260	84	67	182	a7,450
31	55	-	1,580	594	-	500	-	248	-	69	143	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	2,027	139	52	65.4	4,020
November	2,187	112	51	72.9	4,340
December	10,478	1,580	98	338	20,780
Calendar year 1940	52,713	1,580	34	144	104,600
January	14,601	1,460	196	471	28,960
February	18,012	960	335	643	35,730
March	24,403	2,610	354	787	48,400
April	16,442	1,850	243	548	32,610
May	15,996	900	238	516	31,730
June	4,440	226	84	148	8,810
July	3,038	205	44	98.0	6,030
August	3,602	264	55	116	7,140
September	22,871	13,000	55	762	45,360
Water year 1940-41	138,097	13,000	44	378	273,900

Peak discharge.- Dec. 13 (10 a.m.) 1,120 sec.-ft.; Dec. 25 (11 a.m.) 1,200 sec.-ft.; Dec. 31 (8 p.m.) 2,200 sec.-ft.; Aug. 22 (10 p.m.) 930 sec.-ft.; Sept. 29 (7 a.m.) 6,870 sec.-ft.; Sept. 29 (1 p.m.) 25,400 sec.-ft.

a No gage-height record; discharge computed on basis of weather records and records for stations near Fullers Ranch and at Arizona-New Mexico State-line.

d Doubtful gage-height record; discharge computed on basis of available gage heights, weather records, and records for Fullers Ranch and State-line stations.

Gila River near Red Rock, N. Mex.

Location.- Water-stage recorder, lat. 32°45', long. 108°40', in sec. 23, T. 18 S., R. 18 W., 4 miles northeast of Red Rock and 11 miles downstream from Mangas Creek.

Drainage area.- 2,860 square miles.

Records available.- May 1908 to December 1914 and October 1930 to September 1941 in reports of Geological Survey. May 1908 to December 1931 in reports of State engineer.

Average discharge.- 23 years (1909-10, 1912-14, 1918-24, 1927-41), 196 second-feet.

Extremes.- Maximum gage-height during year, about 31 feet, Sept. 29 (discharge not determined), from high-water marks; minimum daily, 36 second-feet Aug. 4.
1930-41: Maximum gage height, that of Sept. 29, 1941; minimum daily, 6.0 second-feet July 12, 1939.

Remarks.- Records fair except those estimated, which are poor. Diversions above station for irrigation.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	146	69	139	3,070	965	758	1,040	1,200	310	79	55	1,280
2	139	71	146	1,540	818	860	1,150	1,650	298	74	a45	245
3	112	72	148	1,150	722	1,070	1,150	1,310	304	72	a40	196
4	103	71	146	860	660	965	965	1,120	301	73	36	a160
5	95	70	140	716	635	848	860	1,060	290	74	57	a150
6	93	70	137	645	640	818	812	1,090	a260	66	52	a140
7	88	76	134	550	1,400	754	776	1,120	a250	63	44	a130
8	86	78	135	476	2,120	670	722	1,120	a230	62	86	a130
9	85	83	137	428	1,360	600	680	1,060	a210	60	96	a120
10	70	80	137	416	1,150	560	670	1,030	a210	56	90	115
11	69	80	146	424	1,190	521	650	1,030	215	50	82	a110
12	72	81	487	824	1,270	508	610	1,000	185	47	69	a100
13	77	82	1,110	1,770	1,190	675	660	940	160	47	68	a90
14	76	80	752	1,230	1,000	1,460	595	882	130	48	73	a100
15	78	80	530	895	854	2,240	540	775	123	69	81	99
16	72	78	420	752	806	3,780	508	678	126	93	555	a100
17	67	80	372	615	830	2,830	512	590	126	194	530	95
18	60	82	436	503	848	1,970	516	514	111	297	293	a90
19	56	115	476	432	830	1,580	535	498	102	251	220	a80
20	57	176	432	408	806	1,400	462	466	93	205	200	a70
21	58	153	388	388	860	1,230	412	441	104	324	630	a70
22	59	132	346	368	1,040	1,150	380	408	107	202	431	a70
23	69	152	318	342	1,110	1,360	368	381	110	183	375	a70
24	67	178	308	322	1,150	1,360	339	342	111	238	321	80
25	66	157	1,170	339	1,070	1,310	332	321	147	192	313	a90
26	64	162	1,040	336	1,040	1,190	806	336	119	a150	a260	a80
27	67	150	860	304	842	1,040	2,260	336	97	a120	a240	a80
28	68	144	535	1,240	782	895	2,040	316	90	103	a240	a500
29	67	139	458	1,920	-	860	1,520	307	90	83	396	a24,000
30	67	139	428	1,870	-	895	1,270	318	84	73	375	
31	69	-	3,520	1,230	-	930	-	318	-	63	a350	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	2,422	146	56	78.1	4,800
November	3,170	178	69	106	6,290
December	15,731	3,520	134	507	31,200
Calendar year 1940	76,971	3,890	27	210	152,700
January	26,363	3,070	304	850	52,290
February	27,988	2,120	635	1,000	55,510
March	37,067	3,780	508	1,196	73,520
April	24,140	2,260	332	805	47,880
May	22,957	1,650	307	741	45,530
June	5,093	310	84	170	10,100
July	3,711	324	47	120	7,360
August	6,703	630	36	216	13,300
September	52,640	-	70	1,755	104,400
Water year 1940-41	227,985	-	36	625	452,200

Peak discharge.- Jan. 1 (1 a.m.) 5,310 sec.-ft.; Jan. 28 (7 p.m.) 3,920 sec.-ft.; Feb. 8 (1 a.m.) 3,630 sec.-ft.; Mar. 16 (7 a.m.) 4,150 sec.-ft.; Sept. 1 (8 a.m.) 6,280 sec.-ft.; Sept. 29, discharge not determined.

a No gage-height record; discharge computed on basis of weather records and records for stations below Blue Creek and at New Mexico-Arizona State line.

Gila River below Blue Creek, near Virden, N. Mex.

Location.- Water-stage recorder, lat. 32°39', long. 108°51', in SE¼SW¼ sec. 18, T. 19 S., R. 19 W., at head of canyon, just downstream from ranch formerly known as Fuller Ranch, 1¼ miles downstream from Blue Creek, 10 miles east of Virden, and 16 miles east of Duncan, Ariz. Datum of gage is 3,875 feet above mean sea level (from river-profile map).

Drainage area.- 3,220 square miles, excluding that of Animas Basin.

Records available.- June 1931 to September 1941. May 1914 to September 1915 at site 6 miles downstream, above intake of Sunset canal. January 1923 to September 1926 at site 8 miles downstream, below intake of Sunset canal. October 1926 to September 1931, at Virden Bridge, 5½ miles downstream.

Average discharge.- 10 years (1931-41), 204 second-feet.

Extremes.- Maximum discharge during year, 41,700 second-feet Sept. 29 (gage height, 25.78 feet); minimum, 27 second-feet July 14.
1931-41: Maximum discharge, that of Sept. 29, 1941; minimum, 1 second-foot July 14, 1934.

Remarks.- Records good. Diversions above and below station for irrigation. Station is above all diversions for Duncan Valley. During the year 44 discharge measurements were made.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	125	68	143	3,400	822	797	859	1,050	282	67	48	874
2	134	70	143	1,740	706	822	922	1,540	273	60	42	362
3	117	72	146	1,280	614	966	986	1,150	267	58	37	253
4	108	74	146	954	549	954	922	986	269	53	35	200
5	103	72	143	754	618	859	822	922	256	51	32	167
6	94	68	140	689	508	785	766	922	239	50	34	151
7	90	66	134	598	945	736	736	954	234	46	33	138
8	80	70	134	529	2,160	671	706	986	216	44	51	132
9	74	86	137	484	1,410	604	666	954	196	41	97	130
10	72	74	137	461	1,210	565	654	922	184	40	91	117
11	70	74	140	456	1,150	529	648	922	179	38	70	104
12	72	80	415	552	1,240	513	614	890	172	34	55	91
13	74	82	955	1,470	1,240	544	648	859	160	32	53	88
14	74	80	842	1,310	1,020	1,180	614	822	136	29	58	90
15	74	80	614	986	859	1,930	555	748	120	29	77	85
16	72	80	504	822	791	3,180	523	660	117	48	442	83
17	68	80	445	695	779	2,540	508	582	111	125	509	82
18	57	72	482	582	766	1,850	499	508	104	160	362	79
19	48	105	549	513	754	1,470	499	470	98	301	276	66
20	51	165	532	470	730	1,310	479	452	83	584	247	61
21	55	152	477	439	742	1,180	447	439	80	298	750	61
22	55	137	440	409	890	1,150	413	413	88	216	750	58
23	57	137	406	381	1,080	1,180	389	377	100	186	450	58
24	59	184	387	359	1,180	1,240	366	344	104	180	307	63
25	59	181	1,340	355	1,150	1,210	351	313	150	193	307	67
26	59	155	1,380	348	1,050	1,120	479	317	126	151	213	66
27	57	149	768	334	954	986	1,700	317	107	122	181	63
28	62	149	596	522	859	890	1,920	307	91	106	167	493
29	62	146	509	1,520	-	822	1,440	294	85	82	274	21,700
30	62	146	456	1,470	-	797	1,150	291	79	67	343	13,000
31	66	-	3,490	1,120	-	822	-	294	-	56	236	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	2,310	134	48	74.5	4,580
November	3,154	184	66	105	6,260
December	17,130	3,490	134	553	33,980
Calendar year 1940	73,790	3,490	8	202	146,400
January	26,002	3,400	334	839	51,570
February	26,676	2,160	508	953	52,910
March	34,222	3,180	513	1,104	67,880
April	22,281	1,920	351	743	44,190
May	21,005	1,540	291	678	41,660
June	4,706	282	79	157	9,330
July	3,547	584	29	114	7,040
August	6,627	750	32	214	13,140
September	38,982	21,700	58	1,299	77,320
Water year 1940-41	206,642	21,700	29	566	409,900

Peak discharge.- Dec. 31 (5 p.m.) 4,410 sec.-ft.; Mar. 16 (4:15 p.m.) 3,510 sec.-ft.; July 20 (7:30 p.m.) 3,260 sec.-ft.; Sept. 29 (2 a.m.) 17,700 sec.-ft.; Sept. 29 (11 a.m.) 41,700 sec.-ft.; Sept. 30 (12:10 a.m.) 26,800 sec.-ft.

Gila River at New Mexico-Arizona state line, near Virden, N. Mex.

Location.- Water-stage recorder, lat. 32°41', long. 109°03', in NE¼NE¼ sec. 3, T. 9 S., R. 32 E., Gila and Salt River meridian (NW¼NE¼ sec. 6, T. 19 S., R. 21 W., New Mexico meridian projected west of State line), about 790 feet downstream from State line, and 3 miles west of Virden.

Drainage area.- 3,360 square miles.

Records available.- May 1939 to September 1941.

Extremes.- Maximum discharge during year, 39,500 second-feet Sept. 29 (gage height, 13.64 feet, from floodmarks), from rating curve extended above 2,900 second-feet by comparison with peak at station below Blue Creek; minimum daily, 5.8 second-feet July 16.
1939-41: Maximum discharge, that of Sept. 29, 1941; no flow July 8, 10-14, 16, 1939.

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

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	70	31	136	3,840	970	850	910	1,260	222	37	15	816
2	58	30	136	2,180	790	850	1,000	1,610	207	30	14	381
3	78	38	146	1,500	680	970	1,090	1,330	183	24	13	195
4	68	34	143	1,060	597	1,030	1,030	1,120	198	17	31	148
5	68	31	136	880	540	970	910	980	171	16	14	123
6	58	34	140	784	515	910	844	950	162	18	14	98
7	56	38	140	674	703	880	790	1,020	150	28	10	98
8	37	68	136	580	2,080	790	724	1,020	150	19	9.0	85
9	28	84	140	510	1,540	722	663	980	130	17	24	73
10	37	54	140	455	1,300	641	624	950	109	15	30	60
11	38	54	140	455	1,230	602	619	914	96	14	20	42
12	42	56	358	495	1,300	580	602	908	96	14	10	34
13	a43	56	1,120	1,360	1,300	570	619	878	77	12	8.2	33
14	a42	58	1,030	1,460	1,120	880	614	842	57	9.0	8.2	33
15	a38	58	696	1,090	940	1,500	586	758	49	6.2	210	33
16	34	60	510	850	880	2,820	520	680	49	5.8	347	32
17	31	60	435	707	839	2,880	455	615	52	18	458	32
18	32	58	420	614	822	2,080	445	540	38	79	314	28
19	21	112	465	525	839	1,580	475	495	28	184	288	27
20	18	194	435	460	828	1,420	465	448	34	439	198	30
21	21	178	365	425	850	1,260	435	422	40	502	334	30
22	19	146	312	385	910	1,200	410	374	33	243	988	23
23	24	140	271	350	1,060	1,160	415	338	30	156	502	16
24	26	230	248	320	1,160	1,200	415	286	31	116	292	15
25	25	226	980	316	1,200	1,160	400	278	57	123	258	17
26	21	182	1,380	312	1,120	1,090	490	261	81	89	201	17
27	18	166	880	298	1,060	1,000	1,410	250	68	66	165	17
28	25	154	624	312	940	910	2,060	240	57	49	125	314
29	28	150	465	1,480	-	844	1,610	222	45	36	210	16,900
30	23	143	395	1,500	-	844	1,370	225	41	25	272	15,000
31	32	-	2,380	1,260	-	880	-	228	-	17	222	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	1,189	88	18	38.4	2,360
November	2,923	230	30	97.4	5,800
December	15,302	2,380	136	494	30,350
Calendar year 1940	63,655.2	2,970	2.3	174	126,300
January	27,437	3,840	298	885	54,420
February	28,113	2,080	515	1,004	55,760
March	35,073	2,880	570	1,131	69,570
April	23,000	2,060	400	767	45,620
May	21,422	1,610	222	691	42,490
June	2,741	222	28	91.4	5,440
July	2,424.0	502	5.8	78.2	4,810
August	5,604.4	988	8.2	181	11,120
September	34,748	16,900	15	1,158	68,920
Water year 1940-41	199,976.4	16,900	5.8	548	396,700

Peak discharge.- Jan. 1 (1 p.m.) 4,240 sec.-ft.; Feb. 8 (11 a.m.) 2,580 sec.-ft.; Mar. 16 (10 p.m.) 3,540 sec.-ft.; Sept. 29 (8 a.m.) 17,000 sec.-ft.; Sept. 29 (2 p.m.) 39,500 sec.-ft.; Sept. 30 (4 a.m.) 23,300 sec.-ft.

a No gage-height record; discharge computed on basis of weather records and records for station below Blue Creek.

Diversions from Gila River in Duncan Valley, N. Mex.-Ariz.

Duncan Valley lies along Gila River in Hidalgo County, N. Mex., and Greenlee County, Ariz. The part in New Mexico is also known as Virden Valley. The valley extends from a point about 8 miles east of the State line to the vicinity of Guthrie, Ariz. Ten canals, listed in the following table according to their position from east to west, and five pumps divert water from Gila River for irrigation in the valley. The first four canals listed divert in New Mexico, the others in Arizona. The intake of Sunset canal, at eastern end of valley, is 4 miles downstream from the station on Gila River below Blue Creek, near Virden, N. Mex. The intake of York canal at the western end is about 5 miles upstream from the station on Gila River near Clifton, Ariz.

Records of daily and monthly diversions are available for Sunset and Moddle canals for 1914-15 and 1922-31; for Valley and Colmonero canals for 1914-15 and 1923-31; and for Duncan canal for 1923-28. Discharge measurements are available for York canal for 1914-15 and 1923-31.

Records of daily diversions since January 1936, except for Sunset, Moddle, and Shriver canals for 1939-41, have been collected by the Gila Water Commissioner apointed by the United States District Court for Arizona. Water-stage recorders and rectangular sharp-crested weirs were used by the Water Commissioner to obtain records on the canals and rated pumps were used to obtain records of pumped water. See pp. 255-260 for records of Sunset, Moddle, and Shriver canals for 1941.

The following tabulations of the annual diversions by each canal and the combined monthly diversions by the canals as a group have been compiled and furnished by the Gila Water Commissioner.

Annual diversions, in acre-feet, from Gila River in Duncan Valley, N. Mex.-Ariz.

Canal	Water year 1940-41	Calendar year 1940
Sunset	15,620	17,470
Moddle	12,450	13,400
Shriver	584	871
Valley	5,440	4,470
Duncan	663	518
Black & McClesky	1,090	780
Colmenero	1,950	1,280
Sexton	549	410
R. Sexton	414	180
York Canal	916	474
Miscellaneous direct pumping	46	79
Total	39,720	39,930

Combined monthly diversion, in second-feet, from Gila River in Duncan Valley, N. Mex.-Ariz., during water year October 1940 to September 1941

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October	93.4	43.2	58.1	3,570
November	62.1	.6	27.8	1,650
December	39.2	6.8	24.9	1,530
Calendar year 1940	134	0	55.0	39,930
January	10.3	.8	4.6	283
February	46.2	0	12.3	684
March	90.3	32.8	58.6	3,610
April	122	60.0	99.9	5,940
May	130	18.0	91.5	5,620
June	127	52.9	101	6,040
July	132	24.7	53.4	3,260
August	107	28.1	61.4	3,780
September	75.5	0	63.0	3,750
Water year 1940-41	132	0	54.9	39,720

Gila River near Clifton, Ariz.

Location.- Water-stage recorder, lat. 32°58', long. 109°18', in SE¼ sec. 25, T. 5 S., R. 29 E., at highway bridge 7 miles south of Clifton and 5 miles upstream from San Francisco River. Datum of gage is 3,335.3 feet above mean sea level, datum of 1929, (unadjusted).

Drainage area.- 4,040 square miles.

Records available.- March 1928 to October 1933, May 1935 to September 1941. November 1910 to July 1918 at site 4 miles upstream, published as Gila River at Guthrie, Ariz.

Average discharge.- 11 years (1928-33, 1935-41), 196 second-feet.

Extremes.- Maximum discharge during year, 28,200 second-feet Sept. 29 (gage height, 20.12 feet); minimum, 25 second-feet July 16.
1928-41: Maximum discharge, that of Sept. 29, 1941; minimum not determined, probably occurred in 1934; minimum recorded, 9 second-feet July 8, 1939.

Remarks.- Records good except those for periods of no gage-height record, which are fair. Diversions for irrigation above station, which is below all diversions from Gila River above San Francisco River. During the year 52 discharge measurements were made.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	300	51	162	3,680	1,040	705	740	1,010	234	65	50	923
2	110	54	160	2,200	820	688	780	1,300	216	56	50	736
3	122	56	156	1,420	722	780	900	1,250	208	51	40	320
4	104	61	160	1,030	635	880	900	980	206	43	40	220
5	96	63	158	777	583	800	780	870	216	41	40	170
6	95	62	160	688	533	740	705	820	193	41	40	140
7	84	64	158	600	684	688	670	860	182	41	40	130
8	73	70	151	520	1,920	635	618	680	171	40	80	120
9	64	126	147	490	1,600	583	600	880	171	46	140	110
10	54	107	160	470	1,400	517	566	820	155	42	120	100
11	54	101	141	439	1,280	470	566	820	135	36	100	90
12	56	103	228	454	1,300	439	550	820	124	33	90	180
13	57	101	834	624	1,240	439	550	800	118	32	70	100
14	61	103	1,220	1,220	1,080	635	566	760	104	30	50	80
15	65	93	700	990	945	1,280	533	705	93	32	140	70
16	64	96	500	840	820	2,170	501	635	85	31	168	60
17	57	99	400	722	780	2,800	486	583	72	31	650	60
18	54	101	341	618	780	2,020	454	517	65	49	460	120
19	52	202	394	550	760	1,560	470	470	55	58	274	90
20	47	165	426	480	740	1,290	470	454	51	146	316	80
21	44	179	384	440	722	1,140	454	409	55	763	230	70
22	44	171	309	410	760	1,060	409	409	53	437	852	60
23	42	160	279	394	922	1,060	366	380	47	190	562	60
24	44	179	270	352	1,010	1,110	338	330	66	140	338	50
25	45	200	712	347	1,040	1,120	312	310	71	120	274	50
26	49	191	1,280	344	990	1,060	389	282	69	100	230	40
27	47	179	914	338	900	945	896	265	90	90	190	40
28	44	174	655	394	780	840	1,670	256	89	80	160	60
29	51	167	550	1,050	-	740	1,430	240	80	70	130	5,350
30	51	165	535	1,400	-	705	1,140	228	72	60	200	19,500
31	48	-	1,910	1,300	-	705	-	224	-	50	270	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	2,178	300	42	70.3	4,320
November	3,643	202	51	121	7,230
December	14,554	1,910	141	469	28,870
Calendar year 1940	65,881	2,900	19	180	130,600
January	25,781	3,680	338	832	51,140
February	26,786	1,920	533	957	53,130
March	30,604	2,800	439	987	60,700
April	19,809	1,670	312	660	39,290
May	19,567	1,300	224	631	38,810
June	3,548	234	47	118	7,040
July	3,052	763	30	98.5	6,050
August	6,394	852	40	206	12,680
September	29,179	19,500	40	973	57,880
Water year 1940-41	185,095	19,500	30	507	367,100

Peak discharge.- Jan. 1 (10 p.m.) 3,950 sec.-ft.; Mar. 17 (3 a.m.) 3,000 sec.-ft.; Aug. 22 (7:30 a.m.) 1,600 sec.-ft.; Sept. 1 (12:30 a.m.) 3,200 sec.-ft.; Sept. 29 (11:30 p.m.) 28,200 sec.-ft.; Sept. 30 (12 m.) 22,000 sec.-ft.

Note.- No gage-height record Dec. 15-17, Jan. 20-22, Mar. 20-26, May 3-5, July 23 to Aug. 15, Aug. 26-31, Sept. 3-28; discharge computed on basis of 11 discharge measurements, fragmentary gage-height record, and records for Gila River near Virden and near Solomonsville and San Francisco River at Clifton.

Gila River near Solomonsville, Ariz.

Location.- Water-stage recorder, lat. 32°52', long. 109°31', in SE¼NE¼ sec. 31, T. 6 S., R. 28 E., three-quarters of a mile downstream from intake of Brown canal, 8 miles northeast of Solomonsville, and 11 miles downstream from San Francisco River. Datum of gage is 3,065.09 feet above mean sea level, datum of 1929. Prior to Oct. 1, 1932, water-stage recorder at same site but at datum 0.89 foot higher, which datum was 1.00 foot higher than datum prior to Sept. 13, 1917. February 1932 to December 1940, water-stage recorder at site 3 miles upstream at different datum.

Drainage area.- 7,950 square miles.

Records available.- April 1914 to September 1932, October 1940 to September 1941. February 1932 to October 1933, May 1935 to September 1940, at site 3 miles upstream and above intake of Brown canal, published as Gila River below Bonita Creek, near Solomonsville, Ariz. Records equivalent if Brown canal diversion is included with records for lower site; records of combined discharge given herein include that diversion and represent flow at site 3 miles upstream.

Average discharge.- 18 years (1921-33, 1935-41), 426 second-feet, including diversion to Brown canal.

Extremes.- Maximum discharge during year, 31,900 second-feet Sept. 30 (gage height, 13.43 feet); minimum daily, 93 second-feet Oct. 24, 25.

1914-41: Maximum discharge, about 100,000 second-feet Jan. 19, 1916, by slope-area method; minimum not determined, probably occurred in 1934; minimum recorded, 27 second-feet July 14, 1939, above intake of Brown canal.

Remarks.- Records good. Diversions above station for irrigation and mining. No diversions above station for irrigation in Safford Valley except Brown canal. Combined discharge table on next page computed using discharge at station below Bonita Creek prior to Jan. 1 and sum of discharge at station near Solomonsville and station on Brown canal beginning Jan. 1.

Cooperation.- Records for Brown canal furnished by Gila Water Commissioner.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	700	113	234	8,400	2,270	2,170	1,990	2,720	572	170	116	854
2	338	113	277	5,110	1,880	2,130	2,090	3,780	541	160	113	942
3	280	116	268	2,920	1,520	2,210	2,250	3,340	510	153	109	580
4	237	124	268	2,090	1,320	2,130	2,250	2,720	488	142	150	404
5	216	120	262	1,580	1,180	2,070	1,930	2,550	465	128	173	310
6	207	121	262	1,430	1,110	1,970	1,860	2,410	444	122	229	268
7	186	133	268	1,340	1,550	1,880	1,760	2,330	415	118	208	233
8	181	156	262	1,160	4,720	1,690	1,590	2,310	379	115	265	222
9	164	177	265	1,080	3,340	1,490	1,520	2,330	357	120	301	204
10	145	186	287	968	2,920	1,420	1,420	2,250	337	115	263	182
11	138	164	306	912	2,550	1,290	1,450	2,210	299	110	256	164
12	155	164	1,600	1,270	2,490	1,280	1,350	2,170	270	110	233	149
13	156	164	2,810	2,190	2,570	1,400	1,420	2,090	252	106	191	197
14	153	162	2,340	2,330	2,250	2,350	1,420	1,950	229	104	187	241
15	150	162	1,530	1,930	1,950	8,190	1,340	1,780	204	112	303	248
16	151	159	1,080	1,580	1,780	9,430	1,250	1,520	192	156	510	204
17	140	164	852	1,390	1,860	6,960	1,190	1,400	189	217	1,950	173
18	132	176	829	1,140	1,820	5,050	1,140	1,280	186	200	1,030	184
19	124	647	897	1,060	1,780	3,960	1,140	1,120	155	212	610	194
20	121	1,120	897	1,000	1,860	3,440	1,120	1,050	150	277	674	194
21	110	579	806	923	2,090	3,230	1,060	946	145	632	596	240
22	104	418	696	881	2,430	2,820	991	892	145	911	988	229
23	102	393	606	821	2,720	2,550	923	918	140	438	890	233
24	93	471	567	748	2,720	2,590	862	1,010	140	394	723	188
25	93	426	5,950	775	2,720	2,510	831	882	239	354	498	156
26	101	389	4,080	862	3,120	2,390	1,430	802	321	272	426	144
27	103	344	2,490	862	2,550	2,150	3,540	748	270	222	346	142
28	106	323	1,530	3,490	2,350	1,970	3,860	721	226	198	293	972
29	111	306	1,230	5,280	-	1,930	3,540	682	210	170	264	8,160
30	124	300	1,370	3,650	-	1,900	3,120	642	186	140	376	22,000
31	119	-	11,500	3,020	-	1,930	-	607	-	128	371	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	5,240	700	93	169	10,390
November	8,390	1,120	113	280	16,640
December	46,669	11,500	262	1,505	92,570
Calendar year 1940	151,477	11,500	39	415	300,400
January	62,192	8,400	748	2,006	123,400
February	63,420	4,720	1,110	2,265	125,800
March	66,480	9,430	1,280	2,854	175,500
April	51,657	3,860	831	1,722	102,500
May	52,160	3,780	607	1,682	103,500
June	8,656	572	140	288	17,170
July	6,806	911	104	220	13,500
August	13,642	1,950	109	440	27,060
September	36,611	22,000	142	1,287	76,580
Water year 1940-41	445,923	22,000	93	1,222	884,600

Peak discharge.- Dec. 25 (10:30 a.m.) 12,000 sec.-ft.; Dec. 31 (6:30 a.m.) 17,600 sec.-ft.; Jan. 28 (6:45 p.m.) 8,140 sec.-ft.; Mar. 15 (11 p.m.) 12,300 sec.-ft.; Sept. 29 (2:30 p.m.) 10,900 sec.-ft.; Sept. 30 (3:20 a.m.) 31,900 sec.-ft.

Note.- Discharge Oct. 1 to Dec. 31 computed by subtracting flow of Brown canal from flow at site below Bonita Creek, 3 miles upstream.

Combined discharge, in second-feet, of Gila River near Solomonsville and Brown canal near Solomonsville, Ariz., water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	700	113	284	8,400	2,270	2,170	2,010	2,720	575	177	124	865
2	338	113	277	5,110	1,880	2,130	2,100	3,790	543	166	121	955
3	280	116	268	2,920	1,520	2,210	2,260	3,350	511	159	117	597
4	237	124	268	2,090	1,320	2,130	2,270	2,720	490	147	155	404
5	216	126	262	1,580	1,180	2,070	1,950	2,560	470	133	174	310
6	213	129	262	1,430	1,110	1,970	1,880	2,420	451	127	229	268
7	190	137	268	1,340	1,550	1,880	1,800	2,340	422	122	208	233
8	181	156	262	1,160	4,720	1,690	1,620	2,310	386	118	271	222
9	164	180	265	1,080	3,340	1,490	1,560	2,330	367	122	311	207
10	148	187	287	968	2,920	1,420	1,460	2,250	350	117	272	191
11	142	164	306	912	2,550	1,290	1,490	2,210	312	112	265	174
12	156	164	1,600	1,270	2,490	1,280	1,380	2,170	284	112	241	159
13	156	164	2,810	2,190	2,570	1,400	1,430	2,090	264	108	198	209
14	153	162	2,340	2,330	2,250	2,350	1,440	1,960	242	106	194	254
15	153	162	1,530	1,930	1,950	8,190	1,360	1,790	216	113	310	261
16	153	159	1,080	1,580	1,780	9,430	1,270	1,530	202	156	518	217
17	140	164	852	1,390	1,860	6,960	1,200	1,400	197	223	1,960	187
18	132	176	829	1,140	1,820	5,050	1,150	1,280	192	209	1,030	199
19	124	647	897	1,060	1,780	3,960	1,150	1,120	160	222	614	209
20	121	1,120	897	1,000	1,860	3,440	1,130	1,050	155	288	685	207
21	111	579	806	923	2,090	3,240	1,060	946	150	643	605	246
22	106	418	696	881	2,430	2,830	996	896	150	927	998	229
23	103	393	610	821	2,720	2,560	938	924	145	456	900	236
24	98	471	568	748	2,720	2,610	867	1,010	145	412	734	192
25	98	426	5,950	775	2,720	2,530	836	883	246	368	514	160
26	101	389	4,080	862	3,120	2,410	1,440	805	328	281	448	145
27	103	344	2,490	862	2,550	2,160	3,540	750	278	231	365	142
28	106	323	1,530	3,490	2,350	1,980	3,860	721	233	207	309	973
29	111	306	1,230	5,280	-	1,940	3,540	682	218	179	277	8,160
30	124	300	1,370	3,850	-	1,920	3,120	643	193	150	387	22,000
31	119	-	11,500	3,020	-	1,950	-	610	-	137	381	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	5,277	700	98	170	10,470
November	8,412	1,120	113	280	16,680
December	46,674	11,500	262	1,506	92,580
Calendar year 1940	152,562	11,500	39	417	302,600
January	62,192	8,400	748	2,006	123,400
February	63,420	4,720	1,110	2,265	125,800
March	88,640	9,430	1,280	2,859	175,800
April	52,107	3,860	836	1,737	103,400
May	52,260	3,790	610	1,686	103,700
June	8,875	575	145	296	17,600
July	7,028	927	106	227	13,940
August	13,915	1,960	117	449	27,600
September	38,811	22,000	142	1,294	76,980
Water year 1940-41	447,611	22,000	98	1,226	888,000

Note.- Discharge for Oct. 1 to Dec. 31 computed at site below Bonita Creek, 3 miles upstream.

Diversions from Gila River in Safford Valley, Ariz.

Safford Valley lies along Gila River in Graham County, Ariz., extending from the vicinity of Bonita Creek on the east to San Carlos Indian Reservation on the west. Twelve canals, listed in the following table in downstream order, and one pump divert water from Gila River for irrigation in the valley. Intake of Brown canal, at the upper end of the valley, is about three-quarters of a mile upstream from the station on Gila River near Solomonsville. Intake of Colvin-Jones canal, at the lower end, is about 20 miles upstream from station on Gila River near Calva.

Records of monthly diversion for all the canals except Fourness, Fort Thomas, and Colvin-Jones are available for 1914-15; records of daily and monthly diversions for all the canals except Colvin-Jones are available for 1920-31; records for Brown canal are available also for water year 1931-32 (Tidwell canal published as Michelana canal in records for 1914-15 and 1920-31). Records of monthly diversions for all canals are available for 1936-41.

Records of daily diversions since January 1936 have been collected by the Gila Water Commissioner, appointed by United States District Court for Arizona. Water-stage recorders with Parshall flumes or weirs were used by the water commissioner to obtain records of diversion by the canals, and rated pump was used to obtain record of pumped water.

The following tabulation of annual diversion by each canal and combined monthly diversion by the canals as a group have been compiled and furnished by Gila Water Commissioner.

Annual diversions, in acre-feet, from Gila River in Safford Valley, Ariz.

Canal	Water year 1940-41	Calendar year 1940
Brown	3,350	2,150
Tidwell	2,120	1,320
Fourness	512	400
San Jose	17,060	10,880
Montezuma	23,330	15,570
Union	35,420	21,710
Graham	21,480	16,380
Smithville	12,870	8,260
Dodge-Nevada	11,790	7,290
Curtis	9,100	5,800
Ft. Thomas	14,220	9,340
Colvin-Jones	56	553
Miscellaneous direct pumping	32	35
Total	151,300	99,690

Combined monthly diversion, in second-feet, from Gila River in Safford Valley, Ariz., during water year October 1940 to September 1941

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	181	63.0	115	7,090
November	78.2	17.7	43.0	2,560
December	275	40.9	132	8,100
Calendar year 1940	436	.3	138	99,690
January	74.9	3.5	14.9	918
February	54.8	9.8	24.5	1,360
March	550	10.3	204	12,570
April	678	291	499	29,680
May	404	201	319	19,590
June	447	228	326	19,380
July	552	122	258	15,890
August	392	152	303	18,630
September	539	30.4	262	15,560
Water year 1940-41	678	3.5	209	151,300

Gila River at Calva, Ariz.

Location.- Water-stage recorder, lat. 33°11', long. 110°13', in sec. 5, T. 3 S., R. 21 E., unsurveyed, on San Carlos Indian Reservation, at railroad bridge at head of San Carlos Reservoir, 1½ miles northwest of Calva. Datum of gage is 2,514.77 feet above mean sea level, datum of 1929.

Drainage area.- 11,490 square miles.

Records available.- March 1929 to September 1941.

Average discharge.- 12 years, 348 second-feet.

Extremes.- Maximum discharge during year, 14,300 second-feet Jan. 2 (gage height, 9.44 feet); minimum, 16 second-feet Aug. 14.

1929-41: Maximum discharge, 21,500 second-feet Feb. 12, 1932 (gage height, 9.7 feet); no flow on several days in most years.

Maximum discharge known, probably in excess of 100,000 second-feet, occurred Jan. 20, 1916, computed on basis of peak discharge at stations near Solomonsville and at Kelvin.

Remarks.- Records good except those above 10,000 second-feet, which are fair, and those for period Oct. 17-20, which are poor. Large diversions above station for irrigation. During the year 53 discharge measurements were made.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	670	42	259	8,700	2,860	2,260	1,410	2,610	402	39	37	124
2	410	45	264	12,100	2,320	2,110	1,450	2,830	386	36	31	438
3	231	58	268	4,960	1,800	2,130	1,560	3,420	347	37	29	504
4	195	71	227	2,970	1,510	2,240	1,720	2,630	305	34	46	305
5	133	74	242	2,260	1,360	2,140	1,680	2,200	265	31	24	220
6	91	82	238	1,870	1,260	2,000	1,510	2,070	220	30	22	166
7	91	82	242	1,670	1,440	1,960	1,400	2,130	204	29	20	122
8	87	72	227	1,440	3,430	1,840	1,320	2,260	185	27	157	96
9	76	80	220	1,280	4,700	1,680	1,210	2,300	169	26	77	71
10	58	77	238	1,150	3,080	1,490	1,090	2,200	166	24	136	52
11	44	95	231	1,090	2,650	1,350	1,060	2,110	162	23	107	48
12	34	102	529	1,180	2,400	1,260	1,060	2,030	147	22	24	39
13	32	108	2,170	1,630	2,520	1,260	1,080	1,980	147	22	19	46
14	31	110	2,460	2,440	2,500	1,620	1,180	1,820	147	21	31	153
15	40	115	1,760	2,440	2,260	4,200	1,100	1,680	129	20	50	126
16	31	108	1,160	1,980	2,030	7,850	1,110	1,550	109	19	55	119
17	20	110	921	1,580	1,870	11,300	1,060	1,370	99	30	2,050	106
18	20	140	776	1,250	1,910	6,980	1,000	1,210	89	60	1,860	86
19	20	503	766	1,130	1,920	4,340	1,000	1,060	74	52	771	111
20	20	972	785	1,030	1,960	3,420	991	937	68	33	495	62
21	28	707	746	972	2,030	2,970	946	845	59	29	607	74
22	40	439	689	937	2,340	2,970	911	740	57	160	412	65
23	42	370	574	877	2,650	2,650	845	698	55	303	709	133
24	36	376	570	845	2,860	2,610	798	1,410	52	286	586	177
25	34	419	1,760	822	2,970	2,590	754	1,020	52	173	465	181
26	28	358	4,820	814	3,080	2,440	964	822	50	154	323	112
27	29	330	3,670	830	3,080	2,260	1,930	684	44	374	225	59
28	31	315	2,120	937	2,540	2,090	3,640	593	59	129	185	1,970
29	34	290	1,410	5,460	-	1,910	3,640	545	59	96	144	5,370
30	38	264	1,740	4,950	-	1,680	2,970	499	44	65	122	7,110
31	39	-	6,200	3,530	-	1,510	-	444	-	52	109	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	2,713	670	20	87.5	5,380
November	6,914	972	42	230	13,710
December	38,282	6,200	220	1,235	75,930
Calendar year 1940	111,078	6,200	0	303	220,300
January	75,124	12,100	814	2,423	149,000
February	67,330	4,700	1,260	2,405	133,500
March	89,010	11,300	1,260	2,871	176,500
April	42,389	3,640	754	1,413	84,080
May	48,697	3,420	444	1,571	96,590
June	4,351	402	44	145	8,630
July	2,456	374	19	79.2	4,870
August	9,931	2,050	19	320	19,700
September	18,245	7,110	39	608	36,190
Water year 1940-41	405,442	12,100	19	1,111	804,100

San Carlos Reservoir at Coolidge Dam, Ariz.

Location.- Water-stage recorder, lat. 33°10'30", long. 110°31'45", in NW¼ sec. 17, T. 3 S., R. 18 E., unsurveyed, at Coolidge Dam on Gila River. Datum of gage is at mean sea level (Indian Irrigation Service bench mark).

Drainage area.- 12,890 square miles.

Records available.- November 1928 to September 1941.

Extremes.- Maximum contents during year, 742,800 acre-feet May 27 (elevation, 2,497.13 feet); minimum, 1,030 acre-feet Oct. 31 (elevation, 2,383.86 feet).
1928-41: Maximum contents, those of May 27, 1941; minimum (since appreciable storage was attained in 1929), 396 acre-feet July 23, 1939 (elevation, 2,383.33 feet).

Remarks.- Reservoir is formed by concrete multiple-dome dam; dam completed Oct. 25, 1928, storage began Nov. 15, 1928. Total usable capacity, about 1,200,000 acre-feet between elevations 2,383.0 feet (sill of outlet gates) and 2,523.0 feet (top of automatic spillway gates in raised position) above mean sea level. Dead storage below elevation 2,383.0 feet, 10,350 acre-feet according to 1937 survey. Figures given herein represent usable contents. Water is used for irrigation of San Carlos project and for power development, dependent on irrigation demands.

Capacity table (elevation, in feet, and usable contents, in acre-feet)
(Below 2,460 feet, prepared on basis of 1937 survey by Soil Conservation Service; above 2,460 feet, prepared on basis of 1915 survey by the Indian Irrigation Service, adjusted by the Geological Survey for loss in capacity as shown by the 1937 survey at 2,460 feet)

2,383	0	2,405	41,050	2,450	257,100	2,500	784,300
2,385	2,450	2,410	55,600	2,460	337,700	2,510	939,800
2,390	9,620	2,420	88,400	2,470	427,400	2,520	1,110,000
2,395	18,270	2,430	132,800	2,480	529,000	2,523	1,163,000
2,400	28,520	2,440	188,800	2,490	649,100		

Usable contents at 12 p.m., in acre-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4,430	1,070	15,200	129,700	277,700	409,700	622,300	694,000	739,800	699,000	652,100	634,200
2	5,250	1,100	15,500	150,800	281,600	413,000	625,200	698,300	739,300	697,400	650,700	633,000
3	5,430	1,130	15,800	162,300	284,900	416,500	629,500	704,000	738,400	695,800	649,300	632,200
4	5,430	1,180	16,000	168,200	287,600	420,300	633,300	708,400	737,400	694,000	648,000	631,100
5	5,350	1,250	16,400	172,500	290,200	423,900	636,600	712,000	736,700	692,100	646,500	630,000
6	5,180	1,320	16,900	176,100	292,600	427,400	639,100	715,300	735,600	690,300	645,500	628,700
7	4,940	1,370	17,300	179,100	299,800	430,700	641,700	718,500	734,500	688,600	643,700	627,100
8	4,700	1,410	17,800	181,700	307,200	433,700	644,000	721,800	733,000	686,700	642,500	625,700
9	4,400	1,440	18,100	184,100	316,400	436,300	646,100	724,900	732,000	684,900	642,500	624,400
10	4,210	1,440	18,100	186,100	322,400	438,700	647,800	727,700	730,900	683,100	643,300	623,000
11	3,950	1,520	18,400	190,600	327,300	441,100	649,600	730,000	729,800	681,400	642,800	621,500
12	3,680	1,590	19,600	196,500	331,700	444,900	651,800	732,300	728,800	679,500	641,700	619,600
13	3,390	1,660	24,900	200,700	336,100	454,700	653,600	734,400	727,400	677,600	640,900	619,000
14	3,080	1,710	29,800	205,400	340,400	480,600	655,700	736,000	726,400	675,800	639,500	618,200
15	2,770	1,750	33,100	210,200	344,200	512,400	657,600	737,700	725,100	674,000	638,600	617,700
16	2,460	1,820	35,200	214,100	347,700	530,500	659,200	739,300	723,800	672,000	638,500	617,100
17	2,180	1,880	36,800	217,600	350,800	551,200	660,700	740,100	722,600	670,200	641,200	616,200
18	1,870	2,660	38,300	220,200	353,900	564,400	662,000	740,200	721,100	668,300	644,300	615,200
19	1,600	5,820	39,700	222,600	357,400	572,900	663,400	740,100	719,500	666,800	644,800	615,100
20	1,440	8,540	41,000	224,800	361,000	579,500	664,800	740,500	717,800	665,000	644,700	614,300
21	1,300	10,400	42,300	226,800	364,600	585,200	666,000	740,700	716,400	662,900	644,300	612,800
22	1,240	11,300	43,400	228,500	368,700	590,100	667,000	740,800	715,000	661,000	643,800	611,700
23	1,200	11,800	44,400	230,200	373,900	594,400	668,100	740,800	713,100	661,400	643,600	610,500
24	1,160	12,300	46,400	232,000	379,400	598,400	669,100	741,800	711,400	661,400	643,100	609,500
25	1,130	12,800	57,600	236,100	388,900	602,300	669,400	742,400	709,600	661,100	642,400	608,600
26	1,100	13,300	66,500	238,800	395,900	606,100	670,700	742,400	707,600	660,100	641,400	607,700
27	1,080	13,700	74,600	240,900	401,600	609,600	673,600	742,200	705,600	659,100	640,400	607,200
28	1,060	14,200	78,100	245,900	405,900	612,700	679,300	741,500	704,000	657,700	639,400	618,200
29	1,060	14,700	80,600	255,900	-	615,100	685,200	741,400	702,500	656,300	637,800	629,600
30	1,060	15,000	88,000	266,000	-	617,700	689,400	741,200	700,800	655,200	637,000	642,400
31	1,060	-	113,300	272,500	-	620,000	-	740,700	-	653,800	635,800	-

Note.- Contents are those at 12 p.m. of date shown.

Gila River below Coolidge Dam, Ariz.

Location.- Water-stage recorder and Parshall flume, lat. 33°10'15", long. 110°31'45", in SW¼ sec. 17, T. 3 S., R. 18 E., unsurveyed, 2,200 feet downstream from Coolidge Dam. Datum of gage is 2,309.94 feet above mean sea level (Indian Irrigation Service bench mark).

Drainage area.- 12,890 square miles.

Records available.- April 1914 to September 1941. July 1899 to November 1905, at site 8 miles upstream, below mouth of San Carlos River. August 1910 to February 1911, at site 9 miles upstream, above mouth of San Carlos River.

Average discharge.- 14 years (1914-28) 636 second-feet (unregulated); 13 years (1928-41) 276 second-feet (regulated).

Extremes.- Maximum discharge during year, 1,110 second-feet July 22 (head on flume, 4.17 feet); minimum daily, 1 second-foot Dec. 6-8.

1914-28 (unregulated): Maximum discharge, 130,000 second-feet Jan. 20, 1916, computed on basis of peak discharge at Solomonsville and at Kelvin; no flow for several periods.

1928-41 (regulated): Maximum discharge, 1,240 second-feet July 31, 1937 (head on flume, 4.35 feet); no flow on several days in most years.

Remarks.- Records excellent. Crest width of Parshall flume, 30 feet. Large diversions above San Carlos Reservoir. Flow regulated at Coolidge Dam since Nov. 15, 1928. Flow varying between about half a second-foot and 2 second-feet from warm spring between dam and gage (see list of miscellaneous discharge measurements) included in records.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	96	31	129	25	7	14	166	390	630	824	776	772
2	153	32	129	41	12	14	116	185	623	824	776	736
3	162	34	127	37	13	10	87	204	616	828	764	717
4	186	38	127	35	13	2	35	300	612	824	675	721
5	203	44	45	31	13	2	2	305	623	832	649	721
6	200	51	1	28	14	2	2	305	620	824	776	728
7	198	57	1	84	14	2	2	329	620	828	784	725
8	184	62	1	26	14	2	2	351	563	828	736	728
9	177	65	75	11	14	2	2	359	602	832	363	728
10	177	65	221	25	14	2	2	442	594	848	39	728
11	166	68	200	11	14	2	120	539	588	873	276	721
12	149	74	147	11	14	2	153	574	598	914	584	732
13	149	78	173	12	14	3	99	594	616	974	588	652
14	149	86	90	12	14	3	17	584	566	931	529	423
15	141	91	83	12	14	3	4	519	594	961	381	348
16	139	94	126	12	15	2	4	557	652	944	122	421
17	137	98	93	12	18	2	4	630	652	956	107	491
18	135	77	46	12	17	2	63	598	690	965	191	481
19	110	2	37	12	31	2	78	634	756	952	423	193
20	85	4	101	12	15	2	68	638	760	961	496	423
21	68	5	103	12	15	2	83	653	752	995	620	563
22	58	38	105	12	15	7	132	598	756	999	660	591
23	52	133	110	12	15	64	160	630	752	666	664	493
24	48	151	114	22	15	47	198	627	756	498	664	556
25	43	151	53	14	15	3	245	602	756	326	660	522
26	38	153	36	14	15	3	282	612	764	549	660	532
27	37	128	18	14	14	3	285	630	808	717	694	591
28	34	85	18	29	14	4	311	591	820	717	780	208
29	33	80	36	14	-	4	382	539	824	686	776	104
30	31	107	55	14	-	4	393	539	824	588	780	208
31	31	-	58	12	-	90	-	572	-	686	788	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	3,569	203	31	115	7,080
November	2,182	153	2	72.7	4,330
December	2,658	221	1	85.7	5,270
Calendar year 1940	72,214	616	1	197	143,200
January	630	84	11	20.3	1,250
February	412	31	7	14.7	817
March	306	90	2	9.9	607
April	3,497	393	2	117	6,940
May	15,630	653	185	504	31,000
June	20,387	824	563	680	40,440
July	25,150	999	326	811	49,880
August	17,781	788	39	574	35,270
September	16,555	772	104	552	32,840
Water year 1940-41	108,757	999	1	298	215,700

Gila River at Kelvin, Ariz.

Location.- Water-stage recorder, lat. 33°06'15", long. 110°58'45", in NW¼ sec. 12 T. 4 S., R. 13 E., at Kelvin, 1,000 feet downstream from Mineral Creek, 15 miles downstream from San Pedro River, and 19 miles upstream from Ashurst-Hayden Dam. Datum of gage is 1,743.30 feet above mean sea level, datum of 1929 (levels by Corps of Engineers, U. S. Army).

Drainage area.- 18,000 square miles.

Records available.- January 1911 to September 1941.

Average discharge.- 17 years (1911-28) 760 second-feet (unregulated); 13 years (1928-41) 409 second-feet (largely regulated).

Extremes.- Maximum discharge during year, 23,300 second-feet Dec. 31 (gage height, 10.06 feet); minimum, 39 second-feet Nov. 4; minimum daily, 40 second-feet Nov. 5.
1911-41: Maximum discharge, about 132,000 second-feet Jan. 20, 1916 (gage height, 19.5 feet), from rating curve extended above slope-area measurement at 82,000 second-feet; minimum, less than 1 second-foot in summers of several years prior to 1929.

Remarks.- Records good. Large diversions above station for irrigation. Flow regulated at Coolidge Dam (capacity about 1,200,000 acre-feet); no other regulation. During the year 40 discharge measurements were made.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	133	42	129	4,630	530	310	668	491	682	841	776	756
2	122	42	160	1,030	370	708	803	876	691	841	785	868
3	183	42	164	544	274	653	883	392	691	841	869	748
4	187	42	160	397	236	335	643	360	672	841	1,300	732
5	225	40	160	308	219	587	499	441	653	852	662	710
6	248	42	129	260	207	884	395	434	653	852	1,060	718
7	225	48	76	230	1,850	493	344	426	643	852	879	703
8	213	65	59	260	2,490	306	303	441	643	852	1,060	696
9	227	59	48	196	1,160	236	272	457	588	883	1,890	844
10	207	63	51	155	796	207	242	466	588	830	2,430	602
11	192	63	230	608	510	192	226	578	597	862	856	740
12	187	70	632	915	367	664	350	643	597	862	716	748
13	169	78	834	675	308	1,920	449	691	606	925	733	897
14	160	80	504	382	260	4,400	351	691	616	936	792	897
15	155	83	230	322	236	7,370	260	691	578	925	1,160	627
16	151	88	136	242	219	3,430	221	597	597	946	638	466
17	155	100	369	173	213	1,240	200	701	653	956	1,540	493
18	155	136	290	144	207	870	194	720	682	998	1,330	1,250
19	148	1,980	183	129	322	720	216	682	701	988	689	920
20	140	554	129	125	413	620	237	720	720	1,020	661	493
21	118	143	148	118	360	530	231	730	730	1,030	710	551
22	100	80	160	116	358	460	231	730	740	1,050	770	575
23	86	68	169	115	578	410	254	701	750	1,970	836	575
24	73	125	605	122	599	430	291	701	750	1,590	762	510
25	63	151	2,160	1,040	1,920	430	310	710	750	869	762	557
26	67	160	583	660	1,250	370	374	691	750	608	755	533
27	60	173	242	320	747	340	418	691	770	844	732	569
28	48	164	173	1,330	460	310	410	710	820	778	770	2,880
29	44	125	151	2,190	-	290	441	634	820	778	785	1,040
30	44	118	4,280	1,470	-	250	483	624	841	703	785	539
31	44	-	17,600	800	-	230	-	615	-	661	785	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	4,309	248	44	139	8,550
November	5,014	1,980	40	167	9,950
December	30,964	17,600	48	999	61,420
Calendar year 1940	135,295	17,600	26	370	268,400
January	20,008	4,630	116	645	39,690
February	17,469	2,490	207	625	34,690
March	30,097	7,370	192	971	59,700
April	11,199	863	194	373	22,210
May	19,057	578	380	615	37,800
June	20,571	841	678	686	40,800
July	28,764	1,970	608	928	57,050
August	29,272	2,430	638	944	58,060
September	23,166	2,680	466	772	45,930
Water year 1940-41	239,900	17,600	40	657	475,800

Gila River at Ashurst-Hayden Dam, near Florence, Ariz.

Location.- Water-stage recorder, lat. 33°06', long. 111°15', in NW¼ sec. 8, T. 4 S., R. 11 E., at Ashurst-Hayden Dam, 10 miles northeast of Florence. Permanent crest of dam is 1,563.0 feet, adjustment of 1912, or 1,562.5 feet, datum of 1929, above mean sea level. Crest height at times temporarily increased from 0 to 1.0 foot by use of flashboards.

Drainage area.- 18,300 square miles.

Records available.- July 1923 to September 1941 (head on crest of dam only).

Extremes.- Maximum head during year, 2.7 feet Dec. 31; no flow over dam greater part of year.
1923-41: Maximum head, 8.0 feet Sept. 28, 1926; no flow over dam greater part of each year.

Remarks.- Figures given herein are daily mean head on dam. Records do not include water sluiced through gates in dam or diverted to Florence-Casa Grande canal (see p. 272). Many other diversions above station for irrigation. Flow regulated at Coolidge Dam, except for periods of tributary inflow below that dam. San Pedro River contributes major portion of unregulated inflow.

Cooperation.- Water-stage recorder graph prior to Aug. 1 and data on flashboards furnished by Office of Indian Affairs.

Daily mean head, in feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1		0	0	0.50	0.45	0.27	0.19	0.11		0	0	0
2		0	0	.19	.13	.50	.27	.19		0	0	(*)
3		0	0	.22	0	.38	.29	0		0	0	0
4		0	0	.05	0	.32	.06	0		0	.22	0
5		0	0	0	0	.18	.22	0		0	0	0
6		0	0	0	0	.37	.06	0		0	.24	0
7		0	0	0	.57	.34	0	0		0	.09	0
8		0	0	0	.02	.37	0	0		0	.20	0
9		0	0	0	.45	.23	0	0		(*)	.37	(*)
10		0	0	0	.48	.26	0	0		0	.57	0
11		0	0	.20	.44	.20	0	0		0	(*)	0
12		0	(*)	.14	.35	.41	0	0		0	(*)	0
13		0	0	.04	.27	.56	0	0		0	0	.03
14		0	0	0	.09	1.13	0	0		0	.07	.03
15		0	0	0	0	2.00	0	0		0	.27	(*)
16		0	0	0	0	1.08	0	0		0	.06	0
17		0	(*)	0	0	.12	0	0		0	.46	(*)
18		(*)	0	0	0	.52	0	0		0	.32	.11
19		.55	0	0	(*)	.27	0	0		0	(*)	.30
20		.33	0	0	.17	0	0	0		0	0	.04
21		0	0	0	.16	0	0	0		0	0	0
22		0	0	0	.12	0	0	0		0	(*)	0
23		0	0	0	.30	0	0	0		.67	(*)	0
24		0	0	0	.28	0	0	0		.43	0	0
25		0	.65	.40	.13	0	0	0		.10	0	0
26		0	.21	.39	.52	0	0	0		0	0	0
27		0	0	.19	.52	0	.02	0		0	0	0
28		0	0	.47	.39	0	0	0		0	0	.69
29		0	0	.94	-	0	0	0		0	0	.27
30		0	.56	.90	-	0	0	0		0	0	.02
31		0	1.98	.60	-	0	-	0		0	0	-

* Flow over crest of dam for short time, but mean head for day was less than 0.01 foot.
Note.- Water below crest of dam during months left blank and on days shown by zero.

Gila River near Laveen, Ariz.

Location.- Water-stage recorder above concrete diversion dam, lat. 33°15', long. 112°10', in SW¼NW¼ sec. 16, T. 2 S., R. 2 E., on Gila River Indian Reservation, at highway bridge, 1½ miles south of Komatke, 8 miles south of Laveen, and 8 miles upstream from Santa Cruz River.

Drainage area.- 20,200 square miles.

Records available.- January 1940 to September 1941.

Extremes.- Maximum discharge during water year, 11,900 second-feet Jan. 2 (gage height, 9.33 feet); minimum, 3 second-feet Sept. 6.
1940-41: Maximum discharge, that of Jan. 2, 1941; no flow at times during summer of 1940.

Remarks.- Records good above 100 second-feet and fair below. Records include flow over dam, through sluice gate in dam, and in bypass channel a quarter of a mile south of gage, but do not include flow in Cooperative canal, which diverts at dam (see table at end of report for miscellaneous canal measurements). Large diversions above station for irrigation. Flow partly regulated by San Carlos Reservoir (see p. 247).

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	10	13	15	2,150	416	142	48	24	15	9	9	4
2	10	13	15	8,700	181	100	48	26	16	6	9	4
3	9	13	15	1,900	122	142	48	26	15	7	8	4
4	8	13	15	301	92	116	48	30	15	7	8	4
5	9	13	15	203	82	90	48	30	15	7	51	4
6	9	13	15	159	75	238	44	30	15	8	24	4
7	10	12	15	112	74	292	44	30	15	8	107	4
8	10	13	15	92	974	153	39	26	15	9	94	6
9	11	12	15	80	1,530	86	39	26	15	10	56	6
10	11	12	16	71	422	57	30	24	15	10	760	6
11	11	12	17	66	292	53	26	24	14	10	1,570	6
12	12	12	16	61	196	53	44	26	15	10	355	6
13	12	12	17	553	109	195	48	26	14	10	40	4
14	12	12	17	209	62	1,540	53	24	14	9	15	4
15	13	11	17	80	52	1,810	53	26	14	7	10	4
16	13	11	17	59	45	2,610	44	26	14	7	132	5
17	13	11	18	47	38	4,290	39	26	14	8	117	5
18	13	12	17	37	34	2,550	34	26	14	8	889	5
19	13	289	17	30	34	700	34	26	13	7	997	592
20	13	1,380	17	26	39	300	34	26	9	7	202	528
21	13	215	17	24	39	205	30	26	7	7	30	152
22	13	34	17	24	26	153	30	30	7	7	25	36
23	12	24	17	24	26	111	30	30	7	8	15	24
24	12	22	16	24	30	95	30	26	7	490	15	20
25	12	22	150	24	276	86	26	24	8	259	10	10
26	13	17	1,110	24	1,320	72	24	24	9	95	5	6
27	13	16	260	42	425	67	24	22	9	34	5	5
28	13	16	100	28	238	57	24	22	9	16	5	6
29	13	15	55	238	-	53	24	24	8	14	5	1,290
30	13	15	50	1,240	-	53	24	20	9	14	5	435
31	13	-	1,170	891	-	48	-	16	-	10	5	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	362	13	8	11.7	718
November	2,285	1,380	11	76.2	4,530
December	3,285	1,170	15	106	6,520
Calendar year 1940	16,030	4,180	0	4.4	31,800
January	17,519	8,700	24	565	34,750
February	7,249	1,530	26	259	14,380
March	16,517	4.290	48	533	32,760
April	1,111	53	24	37.0	2,200
May	792	30	16	25.5	1,570
June	366	16	7	12.2	726
July	1,118	490	6	36.1	2,220
August	5,580	1,570	6	180	11,070
September	3,189	1,290	4	106	6,330
Water year 1940-41	59,373	8,700	4	163	117,800

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Gila River below Gillespie Dam, Ariz.

Location.- Water-stage recorder above left end of Gillespie Dam, lat. 33°14', long. 112°45', in SE¼NE¼ sec. 28, T. 2 S., R. 5 W., 8 miles downstream from Hassayampa River. Datum of crest of dam is 753.46 feet above mean sea level (average elevation), datum of 1929, and 5 feet above datum of gage.

Drainage area.- 49,600 square miles.

Records available.- August 1921 to September 1941.

Extremes.- Maximum discharge during year, 45,800 second-feet Mar. 16 (height over crest of dam, 4.45 feet); no flow for several periods during year.

1921-41: Maximum discharge, 70,000 second-feet Dec. 28, 1923 (height over crest of dam, 6.0 feet), by computation of flow over dam; no flow for several periods in each year.

Maximum discharge known, 250,000 second-feet (estimated), occurred in February 1891.

Remarks.- Records good except those below 100 second-feet, which are fair, and those for period of no gage-height record or no sluicing record, which are poor. Records include flow over crest and through sluice gates of Gillespie Dam, but do not include flow in Gillespie and Enterprise canals, which divert from river just above dam. Other diversions above station for irrigation. Flow of Gila River and tributaries above this station is regulated by San Carlos Reservoir on Gila River (capacity, about 1,200,000 acre-feet), by a series of reservoirs on Salt River (capacity, 1,771,000 acre-feet), by Bartlett Reservoir on Verde River (capacity, 182,600 acre-feet), and by Lake Pleasant on Agua Fria River (capacity, 178,000 acre-feet). For records of combined flow of Gila River, Gillespie canal, and Enterprise canal, see table on following page.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1		0	0	e1,000	700	5,010	405	4,090	160	0	0	0
2		0	0	3,660	455	3,520	355	3,610	160	0	0	0
3		0	0	3,470	355	3,010	355	4,910	140	0	0	0
4		0	0	4,950	230	6,000	874	7,340	120	0	0	0
5		0	0	2,010	140	10,000	2,700	9,650	240	0	0	0
6		0	0	555	80	7,420	2,360	9,750	95	0	0	0
7		0	0	430	65	6,500	1,910	8,020	50	0	0	0
8		0	0	330	80	5,280	1,410	8,760	50	0	0	0
9		0	0	305	555	4,290	820	8,960	65	0	0	0
10		0	0	280	1,600	2,830	580	9,350	65	0	0	0
11		0	0	280	1,410	1,870	455	8,860	50	0	333	0
12		0	0	255	530	1,530	555	5,990	14	0	795	0
13		0	0	230	355	1,720	985	5,120	0	0	340	0
14		0	0	455	280	2,240	3,880	5,450	0	0	128	0
15		0	0	330	490	4,690	13,700	3,290	0	0	38	0
16		0	0	255	880	27,600	18,400	4,140	0	0	20	0
17		0	0	205	530	29,900	18,600	3,010	0	0	17	0
18		0	0	180	568	16,600	22,300	2,180	0	0	65	0
19		0	0	160	1,520	10,400	15,800	1,600	0	0	415	0
20		0	0	160	1,200	5,870	8,580	1,270	0	0	532	0
21		537	0	160	1,080	4,390	7,420	790	0	0	183	74
22		a411	0	120	1,530	3,240	5,790	555	0	0	85	0
23		a166	0	100	2,820	2,740	3,950	480	0	0	0	0
24		a66	0	80	6,490	1,950	3,370	405	0	0	0	0
25		0	e200	120	5,980	1,310	2,960	355	0	2	0	0
26		0	e300	140	4,750	1,010	2,790	330	0	220	0	0
27		0	e700	160	5,020	790	2,280	280	0	89	0	0
28		0	e200	180	6,880	610	2,150	255	0	0	0	0
29		0	e100	255	-	505	3,280	205	0	0	0	0
30		0	e100	230	-	405	4,190	205	0	0	0	377
31		-	e200	700	-	405	-	205	-	-	-	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	0	0	0	0	0
November	1,180	537	0	39.3	2,340
December	1,800	700	0	58.1	3,570
Calendar year 1940	6,202	1,540	0	16.9	12,300
January	21,745	4,950	80	701	43,130
February	46,573	6,880	65	1,663	92,380
March	173,635	29,900	405	5,601	344,400
April	153,204	22,300	355	5,107	303,900
May	119,415	9,750	205	3,852	236,900
June	1,209	240	0	40.3	2,400
July	311	220	0	10.0	617
August	2,891	795	0	93.3	5,730
September	451	377	0	15.0	895
Water year 1940-41	522,414	29,900	0	1,431	1,036,000

a No gage-height record; all discharge through sluice gates and computed by critical depth formula from seven observations of depth of water over gate sills.

e No sluicing record; discharge computed on basis of records for Gila River near Laveen, Hassayampa River near Morristown, Salt River at Stewart Mountain Dam, Verde River above Camp Creek, near McDowell, and Santa Cruz River near Laveen.

Combined discharge, in second-feet, of Gila River below Gillespie Dam and of Gillespie and Enterprise canals at Gillespie Dam, Ariz., water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	53	61	105	1,100	863	5,180	593	4,270	338	141	142	142
2	48	62	103	3,790	626	3,680	545	3,790	362	140	129	135
3	48	62	96	3,610	530	3,180	548	5,100	339	137	125	125
4	52	65	97	5,100	406	6,180	1,060	7,530	320	133	132	122
5	91	63	99	2,160	319	10,200	2,890	9,830	282	132	136	117
6	134	63	99	705	253	7,600	2,550	9,930	269	131	127	113
7	89	61	101	608	242	6,680	2,100	3,210	259	127	127	108
8	71	62	101	535	259	5,460	1,600	8,950	270	121	135	103
9	64	64	98	504	733	4,470	1,010	9,150	286	113	159	97
10	64	66	96	462	1,730	3,010	769	9,540	286	114	191	96
11	63	63	97	442	1,590	2,050	642	9,040	269	115	535	98
12	63	67	99	417	700	1,710	741	6,180	231	116	996	100
13	63	77	106	399	529	1,890	1,170	5,310	211	111	539	101
14	62	71	104	633	454	2,410	4,060	5,640	207	106	330	104
15	63	65	98	519	660	4,850	13,900	3,470	203	107	241	105
16	62	64	100	444	1,040	27,800	18,600	4,330	199	104	223	107
17	62	64	106	393	697	30,000	18,800	3,200	197	103	219	103
18	59	68	109	368	737	16,700	22,500	2,360	194	118	270	100
19	69	69	112	348	1,690	10,500	16,000	1,600	192	123	617	97
20	60	74	115	346	1,360	6,020	8,760	1,340	186	122	729	128
21	60	742	116	346	1,250	4,570	7,590	975	179	121	382	267
22	61	549	121	305	1,700	3,420	5,970	739	175	115	226	189
23	59	166	124	284	2,990	2,860	4,140	668	168	114	202	171
24	59	105	137	263	6,650	2,080	3,560	591	161	118	194	140
25	56	111	311	299	6,120	1,510	3,150	542	155	161	179	119
26	55	116	300	315	4,920	1,210	2,980	524	153	406	158	111
27	57	108	743	342	5,190	990	2,470	479	152	285	140	109
28	62	101	287	367	7,050	808	2,340	457	150	201	133	109
29	62	107	214	411	-	637	3,480	408	146	195	128	126
30	64	111	161	402	-	497	4,380	406	144	187	129	560
31	64	-	267	874	-	596	-	407	-	162	131	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	1,989	134	48	64.2	3,950
November	3,527	742	61	118	7,000
December	4,822	743	96	156	9,560
Calendar year 1940	37,750	1,750	27	103	74,880
January	27,091	5,100	263	874	53,730
February	51,348	7,050	242	1,834	101,800
March	178,748	30,000	497	5,766	354,500
April	158,903	22,500	545	5,297	315,200
May	124,966	9,930	406	4,031	247,900
June	6,703	362	144	223	13,300
July	4,484	406	104	145	8,890
August	8,104	996	125	261	16,070
September	4,102	560	96	137	8,140
Water year 1940-41	574,787	30,000	48	1,575	1,140,000

Gila River near Dome, Ariz.

Location.- Water-stage recorder, lat. 32°45'30", long. 114°25'15", in SW¼ sec. 4, T. 8 S., R. 21 W., 3 miles west of Dome and 12 miles upstream from mouth. Datum of gage is 148.18 feet above mean sea level, datum of 1929.

Drainage area.- 58,100 square miles.

Records available.- May 1929 to September 1941. October 1903 to December 1906, at site 4 miles upstream.

Extremes.- Maximum discharge during year, 14,000 second-feet Apr. 22; maximum gage height, 14.54 feet Mar. 22; no flow much of year.

1929-41: Maximum discharge, 20,700 second-feet Feb. 15, 1932 (gage height, 16.75 feet); no flow during part of each year.

Maximum daily discharge, 200,000 second-feet (estimated), Jan. 22, 1916.

Remarks.- Records excellent. Diversions above station for irrigation. Flow regulated by reservoirs above station (see p. 252). No regulation below Gillespie Dam. During the year 47 discharge measurements were made.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1				0		0	940	2,260	290	3	0	
2				0		418	810	2,040	260	3	0	
3				0		1,160	730	2,360	228	3	0	
4				0		1,400	655	2,970	198	3	0	
5				0		1,960	515	3,210	174	3	0	
6				0		2,170	465	2,910	157	3	0	
7				0		1,840	403	3,280	132	2	0	
8				0		1,800	348	4,790	112	2	0	
9				0		2,170	309	6,520	95	2	0	
10				0		2,970	647	7,100	84	2	0	
11				80		3,280	1,230	6,520	78	2	0	
12				171		3,230	1,340	7,100	73	2	0	
13				68		3,030	1,160	7,500	66	1	0	
14				20		2,680	960	7,500	55	1	21	
15				2		2,040	716	6,900	46	1	12	
16				0		1,560	525	5,310	35	1	2	
17				0		1,520	445	4,720	29	1	1	
18				0		1,490	408	4,300	23	1	1	
19				0		1,660	3,520	3,420	17	1	1	
20				0		3,480	7,670	3,420	14	1	0	
21				0		9,880	10,600	2,750	12	1	0	
22				0		12,500	13,500	2,200	10	1	0	
23				0		10,600	11,800	1,760	8	1	0	
24				0		7,040	8,100	1,390	7	1	0	
25				0		4,470	6,240	1,060	6	1	0	
26				0		3,280	4,960	805	6	1	0	
27				0		2,790	3,740	640	5	0	0	
28				0		2,220	3,150	542	5	0	0	
29				0		1,700	2,790	472	4	0	0	
30				0		1,340	2,570	395	4	0	0	
31				0		1,110	-	340	-	0	0	

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	0	0	0	0	0
November	0	0	0	0	0
December	0	0	0	0	0
Calendar year 1940	0	0	0	0	0
January	341	171	0	11	676
February	0	0	0	0	0
March	96,838	12,500	0	3,124	192,100
April	91,300	13,500	309	3,043	181,100
May	106,484	7,500	340	3,435	211,200
June	2,233	290	4	74.4	4,430
July	44	3	0	1.4	87
August	38	21	0	1.2	75
September	0	0	0	0	0
Water year 1940-41	297,278	13,500	0	814	589,700

Sunset canal, near Virden, N. Mex.

Location.- Water-stage recorder and concrete control, lat. 32°39', long. 108°56', in SW¼SW¼ sec. 17, T. 19 S., R. 20 W., about 1¼ miles downstream from intake, 4 miles southeast of Virden, and about 12 miles east of Duncan, Ariz.

Records available.- October 1914 to September 1915, July 1922 to September 1931, and January 1939 to September 1941 in reports of Geological Survey. January 1936 to December 1938 in files of Gila water commissioner, appointed by the United States District Court for Arizona.

Extremes.- Maximum discharge during year, 56 second-feet Apr. 4 and June 5; maximum gage height, 2.53 feet June 12; no flow at times.
1939-41: Maximum discharge, 66 second-feet July 17, 1939 (gage height, 2.77 feet); no flow at times.

Remarks.- Records good. Canal diverts from right bank of Gila River in SW¼NW¼ sec. 21, T. 19 S., R. 20 W. for irrigation in Virden Valley. No diversions between intake and station.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	36	16	3.0	0.8	0	23	44	18	51	26	27	26
2	37	16	2.1	.8	0	21	37	10	52	27	25	22
3	43	16	1.2	.8	4.1	24	16	8.9	55	26	25	23
4	31	21	.4	.8	0	25	35	9.9	51	26	26	22
5	31	24	.8	1.7	0	22	46	19	51	24	25	24
6	28	21	2.1	1.7	0	24	48	13	51	22	26	25
7	23	19	1.8	2.9	0	27	46	7.0	49	20	26	22
8	29	12	.6	2.5	0	26	46	14	48	19	22	20
9	32	14	.3	2.4	0	24	48	12	45	19	29	26
10	21	13	.3	2.0	0	31	51	12	46	19	29	30
11	13	11	0	4.3	0	32	54	22	49	19	30	27
12	16	4.1	0	3.5	.2	24	52	33	51	19	31	22
13	15	2.4	0	2.2	0	23	52	42	51	20	30	22
14	17	1.8	.9	2.5	2.1	15	49	49	48	20	31	16
15	25	2.9	1.3	1.5	4.1	1.5	45	49	44	22	29	17
16	30	2.7	3.7	.4	3.5	7.9	45	38	43	24	34	21
17	28	1.8	2.0	2.8	0	14	45	29	48	25	3.8	24
18	24	.6	0	1.4	0	17	49	22	51	29	23	31
19	21	.2	2.2	2.4	0	17	47	9.7	51	32	24	28
20	23	.6	4.1	1.8	0	21	46	35	48	24	29	23
21	25	1.5	4.1	1.4	12	31	45	54	43	15	24	23
22	23	1.9	3.9	.9	11	36	46	51	45	20	23	22
23	24	1.8	2.4	4.4	5.2	31	49	48	44	22	27	21
24	18	2.9	1.7	5.0	13	35	46	51	49	32	23	22
25	17	2.7	3.9	1.5	13	37	45	46	51	32	22	22
26	19	1.4	3.2	1.8	12	34	31	51	51	30	21	22
27	18	.5	1.4	2.5	22	34	31	52	33	29	26	22
28	21	.7	1.2	.8	26	39	35	45	27	28	29	7.2
29	20	.8	1.4	.3	-	40	33	40	26	28	30	0
30	20	2.9	1.8	.2	-	36	26	48	26	31	32	.6
31	15	-	1.6	0	-	40	-	51	-	31	32	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	743	43	13	24.0	1,470
November	217.2	24	.2	7.24	431
December	53.4	4.1	0	1.72	106
Calendar year 1940	8,811.6	58	0	24.1	17,470
January	58.0	5.0	0	1.87	115
February	128.2	26	0	4.58	254
March	812.4	40	1.5	26.2	1,610
April	1,288	54	16	42.9	2,550
May	989.5	54	7.0	31.9	1,960
June	1,378	55	26	45.9	2,730
July	760	32	15	24.5	1,510
August	813.8	34	3.8	26.3	1,610
September	632.8	31	0	21.1	1,260
Water year 1940-41	7,874.3	55	0	21.6	15,610

Sunset canal above New Mexico-Arizona State line, near Virden, N. Mex.

Location.- Water-stage recorder and 3-foot concrete Parshall flume, lat. 32°41', long. 109°02', in NE¼SE¼ sec. 31, T. 18 S., R. 21 W., about a quarter of a mile east of New Mexico-Arizona State line and 2.5 miles west of Virden.

Records available.- February 1939 to September 1941.

Extremes.- Maximum discharge during year, 19 second-feet Sept. 7; maximum gage height, 1.25 feet Aug. 23; no flow at times.
1939-41: Maximum discharge, 34 second-foot Oct. 7 (gage height, 1.85 feet); no flow at times.

Remarks.- Records good. Canal diverts from right bank of Gila River in SW¼NW¼ sec. 21, T. 19 S., R. 20 W., for irrigation in Virden Valley. Many diversions above and below station for irrigation.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4.8	1.9	1.3	0.1	0	8.7	1.0	12	0.1	7.6	10	6.7
2	6.8	3.5	1.5	.5	0	7.8	1.3	1.9	.3	8.4	6.0	.4
3	7.0	5.9	.7	.5	0	11	.1	.5	7.9	10	.4	0
4	5.0	6.5	.4	.4	.6	9.7	3.1	.2	8.9	2.5	.3	0
5	5.4	4.1	0	.9	0	8.3	10	5.7	8.6	.5	0	0
6	4.6	6.2	.4	1.1	0	4.2	13	7.0	11	1.1	0	4.6
7	1.4	6.2	.8	1.7	0	5.9	8.0	1.5	4.7	.2	5.7	15
8	4.9	4.4	.4	2.0	0	5.0	8.0	5.5	2.5	0	12	10
9	6.5	7.5	0	1.7	0	4.1	14	3.0	1.7	4.8	8.4	6.2
10	5.4	9.3	0	1.2	0	8.2	14	.5	7.1	8.2	1.1	3.3
11	4.1	9.8	.1	1.8	0	8.7	11	2.8	8.6	9.1	0	0
12	6.2	3.2	0	2.3	0	9.6	2.9	8.8	10	.6	.2	0
13	5.6	1.7	0	1.5	0	7.2	1.2	8.7	10	0	9.8	0
14	8.0	.5	0	1.4	0	9.6	8.0	3.4	8.4	0	10	0
15	7.8	1.3	.4	.9	0	.2	9.4	1.1	4.4	0	11	.2
16	7.8	2.6	1.6	.2	2.8	1.4	7.4	0	2.3	6.7	5.4	8.2
17	4.0	2.3	2.7	.4	.3	4.9	9.1	.1	10	11	0	7.8
18	3.8	.4	.4	.4	0	2.5	13	5.5	7.9	8.8	1.0	4.2
19	4.1	0	.1	.6	0	4.2	8.9	8.3	10	1.8	1.1	0
20	8.5	0	2.5	.9	0	6.6	5.4	3.8	9.2	.7	2.2	0
21	11	.4	2.6	.5	.6	6.4	2.6	9.8	7.5	0	10	0
22	8.0	1.0	2.6	.3	1.6	6.0	9.1	6.1	1.7	0	7.7	0
23	7.7	1.1	2.3	.3	.8	7.9	8.4	3.4	3.7	0	9.9	0
24	5.7	1.5	1.0	.8	2.8	6.0	9.3	1.1	6.6	0	8.0	0
25	4.8	1.6	1.5	0	2.0	2.8	9.4	6.1	11	8.0	1.3	2.7
26	4.1	1.7	2.4	0	3.3	2.2	10	9.3	10	8.6	.9	10
27	6.2	.3	1.6	.2	8.2	4.7	9.7	11	12	6.7	.8	6.9
28	7.0	.1	.5	.4	8.7	7.7	7.6	11	4.8	1.4	.9	.6
29	6.8	.2	1.0	0	-	7.9	8.2	7.4	.6	.8	8.0	0
30	5.0	.5	1.1	0	-	4.8	7.8	9.1	3.5	6.3	14	0
31	4.7	-	2.0	0	-	3.3	-	4.8	-	10	10	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	182.7	11	1.4	5.89	362
November	85.7	9.8	0	2.86	170
December	31.9	2.7	0	1.03	63
Calendar year 1940	1,481.9	16	0	4.05	2,940
January	23.0	2.3	0	.74	46
February	31.7	8.7	0	1.13	63
March	187.5	11	.2	6.05	372
April	230.9	14	.1	7.70	458
May	159.4	12	0	5.14	316
June	195.0	12	.1	6.50	387
July	123.8	11	0	3.99	246
August	156.1	14	0	5.04	310
September	86.8	15	0	2.89	172
Water year 1940-41	1,494.5	15	0	4.09	2,960

Sunset canal wasteway near Virden, N. Mex.

Location.- Water-stage recorder and 3-foot concrete Parshall flume, lat. 32°41', long. 109°02', in NW¼SE¼ sec. 31, T. 18 S., R. 21 W., just below intake, at New Mexico-Arizona State line, and 2¾ miles west of Virden.

Records available.- February 1939 to September 1941.

Extremes.- Maximum discharge during year, 27 second-feet May 1 (gage height, 1.62 feet), from rating curve extended above 15 second-feet by logarithmic plotting; no flow at times.

1939-41: Maximum discharge, that of May 1, 1941; no flow at times.

Remarks.- Records good. Discharge represents waste from Sunset canal to Gila River by way of Carlyle Canyon. Intake of wasteway is between State line and station on Sunset canal above State line.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.6	1.7	0.4	0	0	1.4	1.3	8.2	0	1.5	0	1.1
2	4.7	1.7	.4	.6	0	1.0	.7	1.7	.2	.5	0	0
3	3.0	7.0	0	.3	0	3.7	0	.1	1.0	0	0	0
4	.2	6.5	0	0	0	5.0	.7	0	1.5	0	0	0
5	1.6	1.4	0	0	0	8.0	1.1	3.9	.4	.2	0	0
6	4.1	2.2	0	.6	0	3.3	1.2	2.0	.1	0	0	.4
7	.5	1.1	0	1.9	0	4.2	.7	1.2	.1	0	.2	1.7
8	.6	3.1	0	1.9	0	3.4	.3	5.2	.1	0	.1	0
9	.8	8.0	0	1.4	0	3.3	1.0	1.0	1.1	.1	0	0
10	4.7	9.7	0	1.0	0	2.7	0	.2	.8	0	0	0
11	3.6	10	0	2.1	0	.4	.1	.8	.8	0	0	0
12	5.9	3.1	0	2.6	0	2.9	0	1.5	1.6	0	0	0
13	5.3	1.6	0	1.6	0	5.2	0	.4	.4	0	.2	0
14	2.1	.2	0	1.1	0	4.5	1.2	0	.2	0	.1	0
15	7.0	.8	0	.7	0	.2	1.5	0	.3	0	0	.1
16	3.4	2.0	1.0	.2	1.4	1.4	.1	0	1.6	.1	0	.4
17	1.7	1.7	2.1	.4	0	4.0	.1	0	5.0	.4	.1	0
18	3.2	.1	.3	.4	0	.1	1.5	.2	.3	1.2	.3	0
19	1.8	0	0	.2	0	.2	2.5	1.1	.2	0	0	0
20	2.1	0	2.2	.1	0	.7	.6	.2	.1	.2	.1	0
21	.4	.2	2.6	.1	.8	1.3	0	.4	.3	0	1.3	0
22	0	.7	2.6	.1	1.6	2.4	1.2	0	0	0	.3	0
23	2.7	.8	2.3	0	.5	5.8	1.1	0	3.4	0	.2	0
24	1.4	.6	.5	.1	1.6	3.8	1.9	.1	1.2	0	.7	0
25	1.4	.1	.6	0	1.5	2.3	.9	1.5	2.1	.1	.1	0
26	.4	.4	1.9	0	1.7	1.8	4.3	1.5	1.3	0	0	0
27	2.0	.1	1.2	.2	2.6	.5	5.7	2.8	.8	0	0	0
28	2.0	0	.2	.4	4.8	.8	.7	2.3	0	0	0	0
29	.6	0	.5	0	-	.9	6.2	0	.1	0	.7	0
30	.1	.4	.3	0	-	1.6	4.6	.6	2.8	0	.7	0
31	2.6	-	.3	0		3.3	-	.3	-	.2	.6	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	71.5	7.0	0	2.31	142
November	65.2	10	0	2.17	129
December	19.4	2.6	0	.63	38
Calendar year 1940	512.1	11	0	1.40	1,010
January	18.0	2.6	0	.58	36
February	16.5	4.8	0	.59	33
March	80.1	8.0	.1	2.58	159
April	41.2	6.2	0	1.37	82
May	37.2	8.2	0	1.20	74
June	27.8	5.0	0	.93	55
July	4.5	1.5	0	.15	8.9
August	5.7	1.3	0	.18	11
September	3.7	1.7	0	.12	7.3
Water year 1940-41	390.8	10	0	1.07	775

Moddle canal near Virden, N. Mex.

Location.- Water-stage recorder and concrete control, lat. 32°40', long. 108°59', in SW¼NW¼ sec. 11, T. 19 S., R. 21 W., half a mile downstream from intake, 1½ miles southeast of Virden, and about 3 miles southeast of Duncan, Ariz.

Records available.- October 1914 to September 1915, July 1922 to September 1931, and January 1939 to September 1941 in reports of Geological Survey. January 1936 to December 1938 in files in office of Gila Water Commissioner, appointed by the United States District Court for Arizona.

Extremes.- Maximum gage height during year, 5 feet September 29 (discharge not determined); no flow at times.
1939-41: Maximum gage height, that of September 29, 1941; no flow at times.

Remarks.- Records good except those estimated, which are poor. Canal diverts from left bank of Gila River in NW¼SE¼ sec. 11, T. 19 S., R. 21 W., for irrigation in Virden Valley. No diversions between intake and station.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	24	33	9.1	1.8	0.4	4.3	26	17	27	15	7.2	22
2	34	33	9.1	0	0	12	30	16	29	14	5.4	8.1
3	31	33	9.4	0	0	27	32	5.2	35	13	1.4	12
4	30	32	9.8	0	0	28	22	22	33	13	1.0	28
5	30	31	9.1	0	0	18	5.4	14	25	13	4.3	28
6	27	32	8.8	0	0	12	6.0	14	24	6.4	2.9	26
7	27	33	7.8	0	1.8	5.9	33	17	30	0	2.2	17
8	23	36	7.8	0	9.7	2.2	33	21	39	0	1.4	17
9	22	32	7.8	0	0	1.3	30	22	38	0	16	19
10	32	0	7.5	0	0	11	34	21	38	0	17	22
11	33	0	6.8	0	0	28	36	23	45	0	15	24
12	34	0	21	0	0	30	40	28	35	0	14	22
13	35	6.4	28	0	0	31	40	28	35	2.2	13	22
14	35	18	25	0	.6	36	40	28	30	2.7	14	25
15	32	18	22	0	.8	30	40	23	23	1.3	9.3	18
16	31	18	20	1.4	0	25	38	16	28	5.7	25	14
17	29	19	20	2.1	0	15	37	21	29	14	0	12
18	25	19	22	0	4.3	12	36	26	26	32	0	8.4
19	20	13	24	0	15	12	1.9	36	23	42	0	9.8
20	20	0	24	0	15	12	0	35	19	26	24	13
21	21	0	22	0	17	12	0	13	23	0	43	14
22	22	0	20	0	24	13	20	16	27	0	26	13
23	23	0	19	0	12	16	28	25	36	0	16	13
24	28	.3	17	.4	0	25	36	23	34	17	12	15
25	28	3.4	22	2.2	0	22	36	23	27	30	12	17
26	26	10	15	6.5	15	17	40	28	13	26	11	16
27	26	10	10	6.8	16	10	27	34	8.4	21	13	15
28	28	10	13	6.3	4.0	4.3	7.4	33	12	13	20	6.6
29	29	10	15	10	-	2.2	27	30	16	10	0	a20
30	29	9.8	16	9.1	-	5.7	24	29	16	9.4	29	a70
31	32	-	10	6.8	-	11	-	28	-	10	28	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	866	35	20	27.9	1,720
November	459.9	36	0	15.3	912
December	480	28	6.8	15.5	952
Calendar year 1940	6,751.9	45	0	18.4	13,410
January	53.4	10	0	1.72	106
February	135.6	24	0	4.84	269
March	490.9	36	1.3	15.8	974
April	805.7	40	0	26.9	1,600
May	715.2	36	5.2	23.1	1,420
June	e23.4	45	e.4	27.4	1,630
July	336.7	42	0	10.9	668
August	383.1	43	0	12.4	760
September	566.9	70	6.6	18.9	1,120
Water year 1940-41	6,116.8	70	0	16.8	12,130

a No gage-height record; discharge computed on basis of records for station downstream and the capacity of the canal.

Moddle canal at New Mexico-Arizona State line, near Virden, N. Mex.

Location.- Water-stage recorder and 4-foot concrete Parshall flume, lat. 32°41', long. 109°02', in NE¼SE¼ sec. 6, T. 19 S., R. 21 W., about 500 feet upstream from New Mexico-Arizona State line and about 2¾ miles west of Virden.

Records available.- February 1939 to September 1941.

Extremes.- Maximum discharge during year, 41 second-feet Aug. 16 (gage height, 1.73 feet); no flow at times.

1939-41: Maximum discharge, 60 second-feet Oct. 7, 1939 (gage height, 2.27 feet), from rating curve extended above 26 second-feet by logarithmic plotting; no flow at times.

Remarks.- Records good. Canal diverts from left bank of Gila River in NW¼SE¼ sec. 11, T. 19 S., R. 21 W., for irrigation in Virden Valley. Many diversions above and below station.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5.9	11	0.1	0	0.1	0.2	8.5	10	17	9.5	6.2	27
2	5.9	12	0	0	0	3.6	13	10	21	9.5	5.6	6.5
3	7.7	11	0	0	0	6.2	13	1.0	22	12	2.0	6.9
4	6.3	12	1.3	0	0	6.0	16	6.3	17	14	.3	23
5	5.5	6.7	.7	0	0	6.2	8.2	2.8	21	14	2.4	25
6	8.3	3.7	.7	0	0	6.2	3.7	1.1	21	9.2	.1	25
7	12	2.6	.7	0	0	3.3	19	7.7	22	0	0	15
8	14	4.6	.8	0	.1	.5	24	9.7	25	0	0	12
9	10	0	.7	0	0	0	25	12	24	0	6.5	12
10	10	0	.6	0	0	0	25	16	23	0	13	12
11	10	0	.4	0	0	3.9	25	17	28	0	16	13
12	8.9	0	.2	0	0	4.1	29	20	27	.2	14	12
13	7.9	0	.2	0	0	3.7	28	21	26	.1	14	13
14	6.9	1.9	.2	0	0	3.7	27	22	24	0	14	14
15	9.8	1.6	.2	0	.7	2.2	22	20	20	.3	10	11
16	10	1.0	2.4	0	0	2.0	17	14	19	3.8	18	8.8
17	9.1	.2	3.4	0	0	2.7	13	14	15	7.5	1.2	9.0
18	3.4	.3	3.8	0	.4	5.1	14	20	17	14	0	7.4
19	5.3	.2	3.2	0	3.1	4.1	3.0	17	19	19	0	7.0
20	9.8	.2	1.9	0	5.4	6.7	0	8.2	17	24	8.9	12
21	9.8	.2	1.7	0	3.9	11	0	4.2	22	0	23	11
22	9.8	.1	1.9	0	4.8	13	14	7.0	23	0	23	10
23	7.9	.1	1.9	0	1.7	10	20	16	26	0	16	11
24	8.1	.1	1.9	0	0	15	22	22	26	9.3	13	12
25	9.8	.1	1.4	0	0	16	25	23	20	24	13	13
26	10	.1	.4	2.1	0	12	22	22	12	21	12	14
27	10	0	.4	2.2	3.4	4.6	11	23	7.2	20	10	13
28	7.7	2.1	.8	.4	2.2	0	0	20	9.4	13	21	13
29	6.7	.1	1.2	.1	-	.4	9.1	18	14	9.3	2.0	7.2
30	11	.1	1.1	.1	-	1.1	12	14	11	8.8	19	0
31	9.8	-	.6	.1	-	.8	-	16	-	8.2	29	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	267.3	14	3.4	8.62	530
November	72.0	12	0	2.40	143
December	34.8	3.8	0	1.12	69
Calendar year 1940	2,228.9	30	0	6.09	4,420
January	5.0	2.2	0	.16	9.9
February	25.8	5.4	0	.92	51
March	154.3	16	0	4.98	306
April	468.5	29	0	15.6	929
May	435.0	23	1.0	14.0	863
June	595.6	28	7.2	19.9	1,180
July	250.7	24	0	8.09	497
August	313.2	29	0	10.1	621
September	375.8	27	0	12.5	745
Water year 1940-41	2,998.0	29	0	8.21	5,940

Shriver canal at Virden, N. Mex.

Location.- Water-stage recorder and concrete control, lat. 32°40', long. 109°00', in S½SE¼ sec. 3, T. 19 S., R. 21 W., a quarter of a mile downstream from heading, 1 mile southeast of Virden, N. Mex., and about 9 miles southeast of Duncan, Arizona.

Records available.- January 1939 to September 1941.

Extremes.- Maximum gage height during year, 3.86 feet Sept. 29 (discharge not determined); no flow at times.

1939-41: Maximum discharge recorded, 29 second-feet Oct. 8, 1939 (gage height, 3.27 feet) from rating curve extended above 6 second-feet by logarithmic plotting; maximum gage height that of Sept. 29, 1941; no flow at times.

Remarks.- Records fair except those for periods of no gage-height record, which are poor. Canal diverts water from left bank of Gila River for irrigation on lands in New Mexico.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0						0	0	3.2	0	2.4	0
2	0						0	0	3.0	0	4.3	0
3	0						0	0	3.0	0	3.8	1.7
4	0						0	0	3.6	0	3.4	2.4
5	0						0	2.6	3.2	0	2.9	1.9
6	0						0	6.6	2.8	0	2.2	.8
7	0						0	7.0	2.0	0	1.7	.5
8	0.2						0	7.3	1.1	0	1.2	2.1
9	1.6						0	6.8	.5	.9	4.9	2.5
10	1.2						0	6.3	0	2.5	4.9	1.7
11	.5						0	5.9	0	2.4	3.3	1.2
12	0						0	5.5	.7	.6	1.8	.9
13	0						0	5.2	2.0	0	3.6	.7
14	0						0	4.7	1.3	0	6.2	.9
15	0						1.8	4.0	.6	0	2.9	1.0
16	0							3.5	1.8	0	0	1.0
17	0							2.7	4.4	0	0	.9
18	0						a3	1.6	4.4	2.1	0	.6
19	0							1.1	3.9	1.4	0	.2
20	0							.6	3.2	.4	0	0
21	0						4.5	.5	2.1	0	.9	0
22	0						2.9	0	2.1	0	.7	.1
23	0						1.5	0	2.9	0	.4	.1
24	0						.7	0	3.0	0	.3	.1
25	0						.5	0	4.0	0	2.1	.1
26	0						1.3	0	4.3	0	2.1	.1
27	.1						0	0	3.5	.6	1.2	0
28	0						0	.4	1.1	.2	2.4	0
29	0						0	1.1	0	.2	6.3	a0
30	0						0	1.7	0	.4	6.3	a0
31	0						-	3.6	-	.6	0	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	3.6	1.6	0	0.12	7.1
November	0	0	0	0	0
December	0	0	0	0	0
Calendar year 1940	439.0	6.8	0	1.20	871
January	0	0	0	0	0
February	0	0	0	0	0
March	0	0	0	0	0
April	28.2	4.5	0	.94	56
May	78.7	7.3	0	2.54	156
June	67.7	4.4	0	2.26	134
July	12.3	2.5	0	.40	24
August	72.2	6.3	0	2.33	143
September	21.5	2.5	0	.72	43
Water year 1940-41	284.2	7.3	0	.78	563

a No gage height record, discharge interpolated.
Note.- No gage-height record Nov. 27 to Dec. 2, Sept. 29, 30.

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Valley canal near Virden, N. Mex.

Location.- Water-stage recorder and 4-foot concrete Parshall flume, lat. 32°41', long. 109°01', in SW¼SW¼ sec. 32, T. 18 S., R. 21 W., 1¼ miles downstream from intake, about 2½ miles west of Virden, and about 4½ miles southeast of Duncan, Ariz.

Records available.- October 1914 to September 1915, July 1923 to September 1931, and May 1939 to September 1941 in reports of Geological Survey. January 1936 to December 1938 (at site about half a mile downstream and below wasteways) in files in office of Gila River Water Commissioner, appointed by United States District Court for Arizona.

Extremes.- Maximum discharge during year not determined; no flow at times.
1939-41: Maximum recorded discharge, 95 second-feet Aug. 5, 1939 (gage height, 2.87 feet); no flow at times.

Remarks.- Records good. Canal diverts from right bank of Gila River in NE¼NW¼ sec. 4, T. 19 S., R. 21 W., New Mexico for irrigation in Duncan Valley in Arizona.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	17	15	30	35	15	6.6	24	14	20	19	7.9	23
2	18	15	31	1.e	12	6.8	27	33	36	14	5.0	15
3	16	15	32	4.8	9.1	11	30	28	35	16	4.1	12
4	15	14	33	10	7.2	14	27	22	35	18	8.0	8.1
5	15	13	34	6.8	5.7	10	22	27	34	15	4.8	8.7
6	16	14	e14	1.5	5.7	8.3	19	33	33	19	1.5	15
7	14	16	0	4.6	19	6.9	16	34	33	26	3.1	20
8	13	18	0	4.6	30	4.9	13	34	31	23	3.1	19
9	9.0	22	0	0	20	3.6	10	34	28	20	22	18
10	6.4	24	0	0	16	2.9	9.8	34	25	15	30	19
11	7.7	24	0	0	16	5.0	9.3	34	22	14	24	25
12	7.1	26	0	0	15	2.0	19	34	22	12	15	24
13	3.6	26	0	2.4	15	2.2	35	34	25	7.5	11	22
14	3.4	24	22	2.2	11	4.0	37	33	30	6.6	8.1	24
15	e3.9	23	31	.7	9.3	22	38	32	28	7.3	21	24
16	8.2	24	26	.1	7.3	36	38	31	23	4.9	21	25
17	7.9	24	22	4.5	6.6	29	37	28	21	19	27	24
18	7.3	24	22	10	6.6	22	38	23	26	31	33	22
19	6.7	27	12	8.9	6.2	23	40	21	29	35	31	18
20	7.7	31	0	7.9	5.7	17	42	17	24	35	24	a0
21	8.2	31	0	7.2	7.0	13	41	27	17	a7.2	25	a0
22	7.3	30	0	6.6	9.6	17	39	37	16	.7	28	7.3
23	7.3	20	17	5.9	13	18	11	37	20	26	24	13
24	8.8	.2	27	5.0	15	25	27	30	21	31	21	14
25	9.9	16	15	4.9	13	24	37	a0	29	33	18	16
26	9.9	28	17	4.9	14	20	38	1.2	30	25	14	15
27	9.5	28	22	4.5	11	15	12	16	28	18	2.5	14
28	10	27	16	4.9	8.5	15	18	32	26	22	7.4	26
29	12	29	15	19	-	26	24	32	24	21	26	e62
30	10	29	12	22	-	22	16	31	23	17	23	e40
31	14	-	26	18	-	23	-	17	-	12	16	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	309.8	18	3.4	9.99	614
November	658.2	31	.2	21.9	1,310
December	476.0	34	0	15.4	944
Calendar year 1940	4,964.2	34	0	13.6	9,850
January	208.7	35	0	6.73	414
February	329.5	30	5.7	11.8	654
March	455.2	36	2.0	14.7	903
April	794.1	42	9.3	26.5	1,580
May	840.2	37	0	27.1	1,670
June	794.0	36	16	26.5	1,570
July	570.2	35	.7	18.4	1,130
August	509.5	33	1.5	16.4	1,010
September	571.1	62	0	19.0	1,130
Water year 1940-41	6,516.5	62	0	17.9	12,930

a No gage-height record; discharge computed on basis of comparison with discharge of ditch station downstream operated by Gila River Water Commissioner.
e Gage reading not representative of average for day; discharge computed on basis of available record and capacity of canal.

San Francisco River near Glenwood, N. Mex.

Location.- Water-stage recorder, lat. 33°15'05", long. 108°52'40", in NE¼NW¼ sec. 23, T. 12 S., R. 20 W., a quarter of a mile upstream from the hot springs and 6 miles south of Glenwood. Datum of gage is 4,552.06 feet above mean sea level, datum of 1929.

Drainage area.- 1,660 square miles.

Records available.- October 1930 to February 1934 (at site 4½ miles upstream) and February 1934 to September 1941 in reports of Geological Survey. October 1927 to December 1931 (at site 4½ miles upstream) in reports of State engineer.

Average discharge.- 12 years (1928-31, 1932-41), 73.6 second-feet.

Extremes.- Maximum discharge during year, 4,900 second-feet Dec. 25 (gage height, 6.64 feet), from rating curve extended above 1,240 second-feet by logarithmic plotting; minimum daily, 24 second-feet Nov. 14.

1930-41: Maximum discharge, 6,000 second-feet July 25, 1940 (gage height, 7.32 feet), from rating curve extended above 800 second-feet by logarithmic plotting; minimum daily, 7.7 second-feet June 21, 1934.

Remarks.- Records good except those for periods of no gage-height record and those above 2,000 second-feet, all of which are poor. Diversions above station for irrigation.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	151	30	41	a1,400	203	358	564	724	134	43	26	61
2	89	29	41	a780	167	491	588	1,190	125	39	26	223
3	71	29	39	a500	151	540	533	742	118	39	29	75
4	58	27	41	a330	135	428	463	678	108	39	64	58
5	53	26	39	a260	132	414	421	734	110	39	88	56
6	51	26	39	a210	135	435	463	774	102	39	67	56
7	49	27	41	a180	617	370	421	790	96	45	77	56
8	42	29	39	a130	914	318	364	766	96	39	61	56
9	41	29	39	96	540	290	340	694	92	32	56	56
10	39	29	48	96	400	270	334	686	84	32	77	54
11	42	27	177	101	394	260	324	649	78	27	61	56
12	39	26	764	381	470	265	346	635	72	32	51	56
13	39	25	820	421	407	435	414	586	64	36	51	65
14	38	24	296	280	324	1,380	382	488	63	42	53	a58
15	35	25	170	231	285	3,850	346	410	63	42	85	54
16	34	25	115	203	296	a2,700	307	345	58	69	134	51
17	34	26	99	170	358	a2,400	296	290	51	57	128	49
18	34	36	101	141	388	a900	302	275	51	101	115	48
19	32	148	94	126	400	a700	290	252	49	94	77	50
20	31	129	84	126	435	a540	255	216	48	92	140	72
21	30	66	77	115	533	a560	227	182	48	102	162	86
22	29	49	73	101	737	a480	215	167	48	80	165	56
23	27	46	73	91	674	a580	203	167	48	125	164	48
24	27	51	75	87	580	620	195	315	152	152	80	45
25	26	53	2,240	99	519	604	215	240	167	77	69	44
26	25	51	620	107	491	556	1,020	213	78	66	61	40
27	26	44	260	91	414	470	2,340	196	66	a54	54	42
28	34	41	184	938	346	428	1,710	188	a60	a45	53	86
29	32	41	164	620	-	463	1,220	176	a53	a37	54	1,700
30	31	41	253	442	-	519	810	164	46	31	54	691
31	30	-	1,410	265	-	533	-	149	-	31	54	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	1,319	151	25	42.5	2,620
November	1,255	148	24	41.8	2,490
December	8,556	2,240	39	276	16,970
Calendar year 1940	30,497	2,240	11	83.3	60,490
January	9,118	1,400	87	294	18,090
February	11,445	914	132	409	22,700
March	23,157	3,850	260	747	45,930
April	15,908	2,340	195	530	31,550
May	14,081	1,190	149	454	27,930
June	2,428	167	46	80.9	4,820
July	1,778	152	27	57.4	3,530
August	2,436	165	26	78.6	4,830
September	4,148	1,700	40	138	8,230
Water year 1940-41	95,629	3,850	24	262	189,700

Peak discharge.- Dec. 25 (6:15 a.m.) 4,900 sec.-ft.; Dec. 31 (1 a.m.) 4,450 sec.-ft.; Jan. 28 (1:40 p.m.) 2,900 sec.-ft.; Mar. 15 (8:30 a.m.) 4,300 sec.-ft.; Apr. 27 (8:30 a.m.) 2,900 sec.-ft.; Sept. 29 (3 p.m.) 2,340 sec.-ft.

a No gage-height record; discharge computed on basis of weather records and records for Gila River near Gila, near Red Rock, and near Virden, N. Mex.

San Francisco River at Clifton, Ariz.

Location.- Water-stage recorder, lat. 33°03'00", long. 109°17'45", in SW¼SE¼ sec. 30, T. 4 S., R. 30 E., at Railroad Boulevard bridge at Clifton. Datum of gage is 3,430.5 feet above mean sea level, datum of 1929, unadjusted.

Drainage area.- 2,790 square miles.

Records available.- July 1927 to October 1933, May 1935 to September 1941. October 1910 to July 1918 (fragmentary) at several sites, none of which was more than 2 miles upstream.

Average discharge.- 12 years (1927-33, 1935-41), 191 second-feet.

Extremes.- Maximum discharge during year, 8,700 second-feet Dec. 31 (gage height, 11.55 feet); minimum, 51 second-feet July 13 (gage height, 2.47 feet).
1927-41: Maximum discharge, 12,400 second-feet Feb. 8, 1937 (gage height, 12.7 feet); probably no flow at times in 1934; minimum discharge recorded, 8 second-feet June 18, 19, 1939.

Remarks.- Records good. Diversions above station for irrigation, mining, and municipal supply. During the year 51 discharge measurements were made.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	282	62	97	2,770	706	794	992	1,250	285	87	62	150
2	178	62	92	1,320	584	915	1,080	2,500	268	78	56	153
3	136	59	91	880	489	992	1,080	1,540	259	69	74	173
4	116	60	89	690	438	890	965	1,260	240	65	87	114
5	128	59	87	558	409	841	865	1,220	222	62	120	96
6	104	60	87	518	409	817	890	1,280	212	62	160	86
7	94	69	86	440	1,240	749	890	1,320	199	62	194	83
8	87	72	86	382	2,030	635	817	1,280	186	71	172	76
9	78	69	86	353	1,080	624	771	1,200	181	70	138	76
10	75	68	91	327	841	584	749	1,200	173	65	114	72
11	76	65	294	321	794	546	749	1,140	162	65	124	67
12	78	63	1,690	881	865	546	727	1,100	149	61	116	64
13	76	63	1,680	1,070	865	706	794	1,050	138	58	113	108
14	70	60	788	820	727	1,690	727	915	129	62	135	144
15	68	60	494	666	664	5,320	706	794	126	86	205	116
16	66	59	346	578	644	4,420	644	706	121	203	355	99
17	65	58	293	487	685	2,810	624	624	114	144	1,340	89
18	62	69	337	406	727	1,970	644	584	106	146	377	82
19	60	636	321	359	749	1,650	644	546	100	199	237	108
20	60	653	276	330	771	1,540	604	527	96	166	348	147
21	59	228	251	308	915	1,440	565	456	92	170	316	150
22	58	163	232	282	1,160	1,320	527	412	90	185	265	141
23	56	166	210	262	1,160	1,160	508	395	93	171	288	136
24	53	212	204	245	1,160	1,100	482	695	104	241	216	105
25	55	163	3,910	282	1,140	1,100	489	459	251	181	158	98
26	53	140	1,760	308	1,100	992	1,480	445	190	145	132	92
27	52	125	850	264	940	890	2,970	392	141	126	116	87
28	60	112	621	2,080	841	817	2,330	384	119	110	104	936
29	63	104	491	2,170	-	817	1,760	357	105	98	127	4,710
30	68	100	675	1,280	-	890	1,380	337	94	86	121	1,770
31	63	-	6,030	890	-	915	-	312	-	74	99	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	2,599	282	52	83.8	5,160
November	3,939	653	58	131	7,810
December	22,545	6,030	86	727	44,720
Calendar year 1940	67,670	6,030	21	185	134,200
January	22,527	2,770	245	727	44,680
February	24,253	2,030	409	866	48,110
March	40,530	5,320	546	1,307	80,390
April	28,453	2,970	482	948	56,440
May	26,580	2,500	312	857	52,720
June	4,745	285	90	158	9,410
July	3,468	241	58	112	6,880
August	6,469	1,340	56	209	12,830
September	10,328	4,710	64	344	20,490
Water year 1940-41	196,436	6,030	52	538	389,600

Peak discharge.- Dec. 25 (7:30 a.m.) 6,070 sec.-ft.; Dec. 31 (2:40 a.m.) 7,600 sec.-ft.; Sept. 28 (11:30 p.m.) 6,520 sec.-ft.; Sept. 29 (11 a.m.) 7,300 sec.-ft.

San Simon Creek near San Simon, Ariz.

Location.- Water-stage recorder, lat. 32°13', long. 109°10', in SW¼ sec. 10, T. 14 S., R. 31 E., 4½ miles southeast of San Simon.

Drainage area.- 803 square miles.

Records available.- June 1931 to October 1933, May 1935 to June 1941 (discontinued). August 1919 to September 1925, at site 3½ miles downstream.

Average discharge.- 13 years (1919-25, 1931-33, 1935-40), 5.3 second-feet.

Extremes.- Maximum discharge during period, 373 second-feet Apr. 26 (gage height, 5.24 feet); no flow during greater part of period.
1919-25, 1931-41: Maximum discharge, 5,350 second-feet July 21, 1923; no flow greater part of each year.

Remarks.- Records poor. Small diversions above station for irrigation.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	0		0	0	0	0					
2	0	0		0	0	0	0					
3	0	0		0	0	0	0					
4	0	0		0	0	0	0					
5	0	0		0	0	1	0					
6	0	0		0	0	0	0					
7	0	0		0	0	0	0					
8	0	0		0	0	0	0					
9	0	0		0	0	0	0					
10	0	0		0	0	0	0					
11	0	0		1	0	0	0					
12	9	0		2	0	0	0					
13	0	0		0	0	0	0					
14	0	0		0	0	0	0					
15	0	0		0	0	0	0					
16	0	0		0	0	0	0					
17	0	0		0	0	0	0					
18	0	0		0	0	0	0					
19	0	0		0	0	0	0					
20	0	0		0	0	0	0					
21	0	0		0	0	0	0					
22	0	0		0	1	0	0					
23	0	1		0	0	0	0					
24	0	6		0	0	0	0					
25	0	0		0	0	0	0					
26	0	0		0	0	0	50					
27	0	0		0	0	0	3					
28	0	0		0	0	0	0					
29	0	0		0	-	0	0					
30	0	0		0	-	0	0					
31	0	-		0	-	-	-					

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	9	9	0	0.3	18
November	7	6	0	.2	14
December	0	0	0	0	0
Calendar year 1940	3,000	692	0	8.2	5,960
January	3	2	0	.1	6
February	1	1	0	.04	2
March	1	1	0	.03	2
April	53	50	0	1.8	105
May	0	0	0	0	0
June	0	0	0	0	0
July	-	-	-	-	-
August	-	-	-	-	-
September	-	-	-	-	-
The period	-	-	-	-	147

San Simon Creek near Solomonsville, Ariz.

Location.- Water-stage recorder, lat. 32°48', long. 109°38', in NW¼NE¼ sec. 25, T. 7 S., R. 26 E., 1 mile southwest of Solomonsville and 2½ miles upstream from mouth. Datum of gage is 2,960.15 feet above mean sea level, datum of 1929.

Drainage area.- 2,280 square miles.

Records available.- June 1931 to September 1932, May 1935 to September 1941.

Extremes.- Maximum discharge during year, 13,000 second-feet Aug. 17 (gage height, 17.55 feet), by slope-area method; no flow on many days.
1931-41: Maximum discharge, 27,500 second-feet Aug. 9, 1931 (gage height, 19.0 feet), by slope-area method; no flow on many days in each year.

Remarks.- Records fair except those below 5 second-feet, which are poor. Small diversions above station for irrigation. Records do not include waste water from San Jose canal, which diverts from Gila River.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1	0	0	0	0	0	0			0	0	0
2	0	0	0	0	0	0	0			0	0	0
3	0	0	0	0	0	0	0			0	0	0
4	0	0	0	0	0	0	0			0	0	0
5	0	0	0	0	0	0	0			0	4	0
6	0	0	0	0	0	0	0			0	0	0
7	0	0	0	0	0	0	0			0	50	0
8	0	0	0	0	0	0	0			0	1	0
9	0	0	0	0	0	0	0			0	99	0
10	0	0	0	0	0	0	0			0	12	0
11	0	0	3	0	0	0	0			0	0	0
12	0	0	2	0	0	1	0			0	0	2
13	26	0	0	0	0	.4	0			0	0	1
14	25	0	0	0	0	0	0			0	88	0
15	0	0	0	0	0	0	0			0	13	0
16	0	0	0	0	0	0	0			10	724	0
17	0	0	0	0	0	0	0			0	2,010	0
18	0	0	0	0	0	0	0			33	222	0
19	0	180	0	0	0	0	0			86	20	0
20	0	4	0	0	0	0	0			44	200	0
21	0	0	0	0	1	0	0			40	10	0
22	0	0	0	0	25	0	0			15	2	0
23	0	48	0	0	3	0	0			17	25	0
24	0	0	0	0	0	0	0			2	0	0
25	0	0	0	0	0	0	205			0	0	0
26	0	0	0	0	0	0	185			0	0	0
27	0	0	0	0	0	0	39			0	0	0
28	0	0	0	2	0	0	5			0	0	935
29	0	0	0	0	-	0	.2			0	0	445
30	0	0	56	0	-	0	0			0	40	618
31	0	-	48	0	-	0	-			0	0	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	52	26	0	1.7	103
November	232	180	0	7.7	460
December	109	56	0	3.5	216
Calendar year 1940	5,300	466	0	14.5	10,500
January	2	2	0	.1	4
February	29	25	0	1.0	58
March	1.4	1	0	.05	3
April	434.2	205	0	14.5	861
May	0	0	0	0	0
June	0	0	0	0	0
July	247	86	0	8.0	490
August	3,510	2,010	0	113	6,960
September	2,051	985	0	68.4	4,070
Water year 1940-41	6,667.6	2,010	0	18.3	13,220

Peak discharge.- Aug. 17 (12:10 a.m.) 13,000 sec.-ft.; Sept. 28 (4 p.m.) 3,580 sec.-ft.; Sept. 28 (9 p.m.) 4,370 sec.-ft.; Sept. 30 (11:30 a.m.) 790 sec.-ft.

San Carlos River near Peridot, Ariz.

Location.- Water-stage recorder, lat. 33°16', long. 110°26', in sec. 7, T. 2 S., R. 19 E., unsurveyed, on San Carlos Indian Reservation, at railroad bridge at head of San Carlos Reservoir, 2 miles south of Peridot. Datum of gage is 2,506.6 feet above mean sea level (Southern Pacific R. R. bench mark).

Drainage area.- 1,070 square miles.

Records available.- March 1929 to September 1941. August 1910 to January 1911, April 1914 to September 1915 (fragmentary) at site 5½ miles downstream.

Average discharge.- 12 years (1929-41), 67.4 second-feet.

Extremes.- Maximum discharge during year, 40,600 second-feet Mar. 14 (gage height, 11.4 feet), from rating curve extended above 23,000 second-feet on basis of records of inflow to San Carlos Reservoir; minimum, 0.2 second-foot Oct. 26.
1929-41: Maximum discharge, that of Mar. 14, 1941; no flow on several days in most years.

Remarks.- Records good except those for periods of unstable control and those above 100 second-feet, which are fair. Small diversions above station for irrigation. During the year 48 discharge measurements were made.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	16	4	12	1,620	150	166	105	28	10	4	6	6
2	8	4	12	454	124	156	350	28	10	4	6	6
3	5	4	12	198	119	156	1,270	28	9	4	6	6
4	4	4	12	e75	110	119	785	24	9	3	6	5
5	22	4	12	e55	103	115	e410	24	9	3	e75	4
6	16	6	12	e55	103	262	e230	23	9	3	e170	4
7	8	6	10	e65	2,170	132	e140	21	8	3	e40	4
8	3	6	10	e45	2,000	88	e90	20	8	3	e80	4
9	40	6	10	e40	e640	74	e75	20	8	3	e550	4
10	38	7	12	e35	e250	62	57	20	8	3	e210	4
11	6	7	15	1,340	162	59	54	19	7	3	100	3
12	5	7	635	2,210	128	160	56	19	8	3	50	3
13	4	8	1,610	696	110	5,050	430	17	8	4	36	4
14	4	6	454	e220	100	13,200	e280	15	8	4	30	e30
15	3	5	128	e140	82	14,200	94	15	7	3	39	e10
16	3	5	68	e130	74	e2,400	79	14	6	4	49	8
17	2	6	57	e95	70	e760	68	13	6	3	53	7
18	2	15	103	73	65	396	60	12	6	3	30	8
19	2	763	68	70	103	318	54	12	6	3	23	9
20	2	398	56	59	318	240	51	13	6	28	25	14
21	3	82	42	52	192	162	47	13	6	172	22	10
22	4	44	35	55	240	137	48	15	4	e50	26	7
23	.5	37	32	55	1,090	106	44	13	4	e70	16	6
24	.5	48	236	51	e790	94	40	12	6	e45	12	5
25	1	37	3,520	2,030	3,590	82	38	12	5	30	10	5
26	.5	26	431	1,030	2,060	76	35	10	4	21	10	5
27	2	21	225	e270	e750	71	33	11	4	17	8	6
28	5	16	132	2,100	e330	70	30	11	4	12	7	2,040
29	6	15	115	1,760	-	66	29	12	4	10	6	1,020
30	4	12	3,100	e610	-	66	28	12	4	6	8	154
31	5	-	5,840	e310	-	65	-	10	-	6	7	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	224.5	40	0.5	7.24	445
November	1,609	763	4	53.6	3,190
December	17,016	5,840	10	549	33,750
Calendar year 1940	26,037.5	5,840	0	71.1	51,640
January	15,998	2,210	35	516	31,730
February	16,023	3,590	65	572	31,780
March	39,110	14,200	59	1,262	77,570
April	5,110	1,270	28	170	10,140
May	516	28	10	16.6	1,020
June	201	10	4	6.7	399
July	532	172	3	17.2	1,060
August	1,718	550	6	55.4	3,410
September	3,401	2,040	3	113	6,750
Water year 1940-41	101,458.5	14,200	.5	278	201,200

Peak discharge.- Dec. 25 (2:20 a.m.) 14,600 sec.-ft.; Dec. 30 (10:45 p.m.) 18,100 sec.-ft.; Dec. 31 (4:30 p.m.) 13,200 sec.-ft.; Mar. 14 (12:20 p.m.) 40,600 sec.-ft.; Mar. 15 (2 p.m.) 21,600 sec.-ft.

e Stage-discharge relation unstable.

San Pedro River at Palominas, Ariz.

Location.- Water-stage recorder, lat. 31°23', long. 110°07', in SE¼ sec. 33, T. 23 S., R. 22 E., at bridge half a mile east of Palominas, 4 miles downstream from the international boundary, and 12 miles southwest of Bisbee.

Drainage area.- 741 square miles, of which 649 square miles are in Mexico.

Records available.- May 1930 to October 1933, May 1935 to July 1941 (discontinued).

Extremes.- Maximum discharge during period, 5,900 second-feet Jan. 28 (gage height, 11.50 feet), from rating curve extended above 1,000 second-feet on basis of slope-area determinations at gage heights 12.25 and 16.45 feet; minimum, 2 second-feet June 13-29, July 3.

1930-41: Maximum discharge, 22,000 second-feet Aug. 14, 1940 (gage height, 16.45 feet), by slope-area method; no flow June 29 and July 1, 1930.

Greatest flood known occurred Sept. 28, 1926 (gage height, about 24.2 feet, present datum).

Remarks.- Records good except those above 500 second-feet and those for periods of no gage-height record, which are poor. No diversions above station in Arizona and probably none in Mexico.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	34	6	8	13	15	16	13	5	4	3		
2	17	6	7	13	15	16	13	5	3	3		
3	11	6	7	12	10	16	13	5	3	2		
4	10	7	7	11	10	16	12	5	3	5		
5	10	8	7	11	10	16	12	5	3	3		
6	10	9	7	11	10	16	11	5	3	3		
7	9	9	7	11	10	15	11	5	3	3		
8	9	15	7	11	200	15	12	4	3	3		
9	9	11	9	10	50	15	12	4	3	3		
10	9	7	11	10	30	15	12	4	3	3		
11	9	7	15	10	25	15	12	4	3	3		
12	9	7	17	10	25	15	15	4	3	3		
13	13	7	15	10	20	16	36	4	2	3		
14	11	7	14	10	21	16	25	4	2	3		
15	8	7	13	10	20	15	20	4	2	3		
16	7	7	13	9	19	14	15	4	2	3		
17	6	7	16	9	19	14	15	4	2	-		
18	5	8	14	9	18	14	10	4	2	-		
19	6	9	13	9	18	14	10	4	2	-		
20	5	9	13	9	18	14	10	4	2	-		
21	6	8	11	9	18	14	9	4	2	-		
22	6	7	11	9	18	14	9	4	2	-		
23	6	7	11	9	23	13	8	4	2	-		
24	7	7	11	9	23	13	8	4	2	-		
25	6	8	12	9	20	13	7	4	2	-		
26	6	8	12	8	18	13	7	4	2	-		
27	7	8	12	9	17	13	6	4	2	-		
28	7	8	12	1,690	16	13	6	4	2	-		
29	7	8	11	200	-	12	6	4	2	-		
30	6	8	11	40	-	12	6	4	3	-		
31	6	-	13	20	-	13	-	4	-	-		

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	277	34	5	8.9	549
November	236	15	6	7.9	468
December	347	17	7	11.2	688
Calendar year 1940	16,142.9	6,420	.7	44.1	32,020
January	2,220	1,690	8	71.6	4,400
February	716	200	10	25.6	1,420
March	446	16	12	14.4	885
April	361	36	6	12.0	716
May	131	5	4	4.2	260
June	74	4	2	2.5	147
July 1-16	47	3	2	2.9	93
August	-	-	-	-	-
September	-	-	-	-	-
The period	-	-	-	-	9,630

Peak discharge.- Jan. 28 (7:15 a.m.) 5,900 sec.-ft.

Note.- No gage-height record Jan. 29 to Feb. 13 and Apr. 15 to May 13; discharge computed on basis of records for station at Charleston.

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San Pedro River at Charleston, Ariz.

Location.- Water-stage recorder, lat. 31°39', long. 110°11', in SW¼ sec. 35, T. 20 S., R. 21 E., unsurveyed, in Spanish land grant of San Juan de las Boquillas y Nogales, at Charleston dam site, three-quarters of a mile north of Charleston and 6 miles upstream from Babocomari River. Datum of gage is 3,923.0 feet above mean sea level (Southern Pacific Railroad bench mark).

Drainage area.- 1,250 square miles, of which 696 square miles are in Mexico.

Records available.- May 1928 to December 1933 and May 1935 to September 1941. 1904 to 1906 and 1910 to 1928, at several sites upstream or downstream.

Average discharge.- 24 years (1915-33, 1935-41), 71.8 second-feet.

Extremes.- Maximum discharge during year, 10,800 second-feet Aug. 16 (gage height, 8.53 feet); minimum, 4 second-feet July 5.

1928-41: Maximum discharge, 31,000 second-feet Aug. 13, 1940 (gage height, 13.1 feet), from rating curve extended above 8,500 second-feet on basis of slope-area determination at gage height 21.9 feet; minimum, 1 second-foot June 27, 1939.

Maximum discharge known, about 98,000 second-feet Sept. 28, 1926 (gage height, 21.9 feet, from floodmarks), by slope-area measurement.

Remarks.- Records good except those above 200 second-feet and those for period of partial record, which are fair. Diversions above station for irrigation.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	61	17	24	26	32	28	24	19	11	5	16	30
2	36	17	22	27	28	28	24	21	11	5	16	28
3	31	15	22	25	26	28	24	20	11	5	36	30
4	28	16	23	24	24	29	23	19	10	5	18	30
5	25	16	23	25	27	29	22	17	10	5	22	26
6	22	17	22	25	28	29	22	17	10	6	33	26
7	21	19	22	26	28	27	22	16	9	17	53	454
8	19	20	22	25	405	25	22	16	8	30	546	370
9	17	24	24	24	128	26	21	16	9	12	2,530	a80
10	17	21	27	25	62	28	20	16	9	10	353	a50
11	19	21	27	27	53	27	19	16	9	7	66	a30
12	21	20	32	27	51	27	25	15	10	10	47	a70
13	21	20	31	26	47	27	28	14	10	8	160	a160
14	29	20	31	27	42	26	42	14	10	8	237	a50
15	22	21	28	26	38	26	34	15	9	7	86	a40
16	19	22	28	24	35	25	28	14	8	7	1,140	33
17	18	22	29	25	34	23	26	15	8	110	860	61
18	18	22	29	25	34	23	25	16	8	632	61	55
19	21	23	29	24	32	23	27	14	8	106	28	21
20	20	23	29	24	31	22	27	14	8	379	25	19
21	20	23	27	24	31	22	25	15	8	130	25	17
22	20	21	27	24	29	22	23	15	8	31	24	15
23	19	22	27	24	41	23	23	15	8	365	189	14
24	18	22	26	24	39	22	24	14	8	189	38	14
25	18	21	26	25	39	21	24	13	7	212	28	13
26	17	21	24	24	34	21	24	12	7	56	26	13
27	17	21	24	22	31	22	23	12	6	38	25	13
28	17	22	24	1,720	31	23	21	12	6	38	24	139
29	18	23	24	428	-	22	20	12	5	26	34	403
30	17	24	24	103	-	21	19	11	5	21	65	114
31	17	-	25	47	-	21	-	11	-	17	39	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	703	81	17	22.7	1,390
November	616	24	15	20.5	1,220
December	802	32	22	25.9	1,590
Calendar year 1940	29,912	9,100	4	81.7	59,320
January	2,972	1,720	22	95.9	5,890
February	1,460	405	24	52.1	2,900
March	766	29	21	24.7	1,520
April	731	42	19	24.4	1,450
May	466	21	11	15.0	924
June	254	11	5	8.5	504
July	2,497	632	5	80.5	4,950
August	6,850	2,530	16	221	13,590
September	2,418	454	13	80.6	4,800
Water year 1940-41	20,535	2,530	5	56.3	40,730

Peak discharge.- Jan. 28 (11 a.m.) 6,700 sec.-ft.; July 17 (11 p.m.) 1,480 sec.-ft.; Aug. 9 (4:30 a.m.) 6,700 sec.-ft.; Aug. 16 (9:20 p.m.) 10,800 sec.-ft.; Sept. 7 (4 p.m.) 2,530 sec.-ft.; Sept. 29 (6:30 a.m.) 1,250 sec.-ft.

a No gage-height record at low stages; daily mean gage heights computed on basis of partial record and study of weather records.

San Pedro River near Mammoth, Ariz.

Location.- Water-stage recorder, lat. 32°44', long. 110°39', in NE¼ sec. 18, T. 8 S., R. 17 E., at highway bridge 1½ miles north of Mammoth. Datum of gage is 2,307.06 feet above mean sea level, datum of 1929.

Drainage area.- 3,610 square miles.

Records available.- May 1931 to June 1941 (discontinued).

Average discharge.- 10 years (July 1931 to June 1941), 71.1 second-feet.

Extremes.- Maximum discharge during period, 10,100 second-feet Jan. 29 (gage height, 9.7 feet); no flow during part of period.

1931-41: Maximum discharge, 50,000 second-feet Aug. 14, 1940 (gage height, 12.7 feet), from rating curve based on four float-velocity measurements between 20,000 and 41,000 second-feet; no flow during part of each year.

Greatest flood known occurred Sept. 28, 1926 (discharge, 90,000 second-feet, estimated on basis of peak discharge of San Pedro River at Charleston and of Gila River at Kelvin).

Remarks.- Records fair except those above 1,000 second-feet, which are poor. Diversions above station for irrigation.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	60	0	0	1,030	112	a55	21	12	0			
2	60	0	0	175	88	a50	22	15	0			
3	40	0	0	95	79	43	34	19	0			
4	23	0	0	36	74	45	26	14	0			
5	14	0	0	15	76	71	19	11	0			
6	6	0	0	12	74	136	19	9	0			
7	0	0	0	5	360	76	18	6	0			
8	0	0	0	8	618	26	19	3	0			
9	0	0	0	5	343	29	16	3	0			
10	0	0	1	4	258	4	12	3	0			
11	0	0	8	7	136	2	15	2	0			
12	0	0	214	7	102	18	19	2	0			
13	0	0	212	6	85	59	21	1	0			
14	0	0	20	5	68	160	17	1	0			
15	0	0	0	3	54	690	14	1	0			
16	0	0	0	2	52	963	11	1	0			
17	0	0	0	1	46	376	11	0	0			
18	0	0	31	2	43	204	12	0	0			
19	0	120	2	2	48	120	15	0	0			
20	0	33	0	1	36	60	15	0	0			
21	0	4	0	1	33	29	12	0	0			
22	0	0	1	1	29	28	9	0	0			
23	0	3	1	1	119	26	9	0	0			
24	0	0	4	2	136	24	7	0	0			
25	0	0	480	2	120	26	9	0	0			
26	0	0	100	1	136	28	14	0	0			
27	0	0	31	1	95	26	12	0	0			
28	0	0	5	66	a65	26	10	0	0			
29	0	0	2	2,320	-	22	8	0	0			
30	0	0	477	360	-	19	8	0	0			
31	0	-	4,180	127	-	21	-	0	-			

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	203	60	0	6.5	403
November	160	120	0	5.3	317
December	5,769	4,180	0	186	11,440
Calendar year 1940	37,291	19,200	0	102	73,960
January	4,303	2,320	1	139	8,530
February	3,487	618	29	125	6,920
March	3,462	963	2	112	6,870
April	454	34	7	15.1	900
May	103	19	0	3.3	204
June	0	0	0	0	0
July	-	-	-	-	-
August	-	-	-	-	-
September	-	-	-	-	-
The period	-	-	-	-	35,580

Peak discharge.- Dec. 31 (3 a.m.) 9,290 sec.-ft.; Jan. 29 (3 a.m.) 10,100 sec.-ft.

a No gage-height record; discharge computed on basis of recorded range in stage and records for stations on the Gila River below Coolidge Dam and at Kelvin and on Aravaipa Creek near Feldman.

San Pedro River at Winkelman, Ariz.

Location.- Measuring section, lat. 32°59', long. 110°47', in SW¼ sec. 23, T. 5 S., R. 15 E., at mouth, 1 mile west of Winkelman.

Drainage area.- 4,480 square miles.

Records available.- April to August 1890 (monthly discharges only, published as San Pedro River at Dudleyville, Ariz.), December 1928 to July 1941 (discharge measurements only, of which those for October 1933 to September 1934 were published as miscellaneous measurements). Station discontinued.

Remarks.- Diversions above station for irrigation. This record shows flow into the Gila River. See miscellaneous measurements (p. 306) for flow in canal, which diverts just above mouth of San Pedro River.

Discharge measurements, water year October 1940 to September 1941

Day	Discharge (second-feet)	Day	Discharge (second-feet)
Oct. 1.....	51.2	Feb. 3.....	109
15.....	6.98	12.....	138
28.....	5	Mar. 3.....	86.4
Nov. 1.....	6.42	19.....	211
14.....	5.86	Apr. 2.....	41.7
Dec. 2.....	11.5	May 2.....	50
28.....	47	15.....	24
Jan. 8.....	44.1	June 2.....	12.2
22.....	27.8	July 2.....	1.5

Aravaipa Creek near Feldman, Ariz.

Location.- Water-stage recorder, lat. 32°50', long. 110°38', in NW¼ sec. 9, T. 7 S., R. 17 E., 6 miles upstream from mouth and 6 miles southeast of Feldman. After Jan. 8, staff gage 100 feet upstream and across channel, at datum 0.32 foot higher.

Drainage area.- 540 square miles.

Records available.- May 1931 to June 1941 (discontinued). April 1919 to September 1921, at site 6 miles downstream.

Average discharge.- 10 years (July 1931 to June 1941), 31.2 second-feet.

Extremes.- Maximum discharge during period, 9,600 second-feet Dec. 31 (gage height, 10.88 feet); minimum, 3 second-feet Oct. 4.

1931-41: Maximum discharge, 10,000 second-feet Aug. 15, 1935 (gage height, 10.9 feet), from rating curve extended above 3,000 second-feet; minimum, 0.3 second-foot Aug. 30, 1940.

A discharge of 20,000 second-feet occurred Aug. 2, 1919.

Remarks.- Records fair except those above 100 second-feet, and those for period of no gage-height record, which are poor. Diversions above and below station for irrigation. Staff gage read twice daily.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5	7	19	600	46	58	52	41	13			
2	5	7	13	a250	37	142	66	41	13			
3	5	6	9	a150	36	68	54	33	13			
4	5	6	9	a80	33	41	34	50	13			
5	16	6	10	a60	30	495	33	32	13			
6	7	6	11	a50	32	252	39	29	12			
7	6	6	11	a40	1,750	130	37	24	12			
8	5	7	11	36	704	91	30	23	12			
9	5	6	10	30	220	73	32	21	12			
10	5	6	21	28	88	63	29	21	12			
11	6	7	134	30	58	58	36	22	11			
12	7	7	276	75	61	73	56	21	10			
13	7	7	250	27	52	78	43	22	10			
14	7	9	40	20	48	237	39	14	10			
15	7	9	20	22	45	2,020	27	14	11			
16	7	11	17	25	41	964	28	14	11			
17	5	11	16	24	41	218	29	18	11			
18	5	140	13	22	39	97	30	20	11			
19	6	1,530	13	22	61	100	30	19	10			
20	8	104	11	20	68	70	34	17	8			
21	8	39	10	20	78	70	33	18	8			
22	7	24	10	20	111	61	29	19	8			
23	6	40	10	20	124	50	28	18	9			
24	7	34	20	20	78	58	33	19	10			
25	7	35	900	160	516	56	36	17	10			
26	7	31	100	20	350	46	63	19	10			
27	7	31	60	20	156	43	39	18	9			
28	7	32	32	500	73	97	32	16	9			
29	7	32	20	280	-	70	33	15	9			
30	7	20	1,830	125	-	33	34	14	9			
31	7	-	4,060	56	-	43	-	10	-			

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	206	16	5	6.6	409
November	2,216	1,530	6	73.9	4,400
December	7,966	4,060	9	257	15,800
Calendar year 1940	16,155.3	4,060	.4	44.1	32,060
January	2,852	600	20	92.0	5,660
February	4,976	1,750	30	178	9,870
March	5,955	2,020	33	192	11,810
April	1,138	83	27	37.9	2,260
May	677	50	10	21.8	1,340
June	319	13	8	10.6	633
July	-	-	-	-	-
August	-	-	-	-	-
September	-	-	-	-	-
The period	-	-	-	-	52,180

Peak discharge.- Nov. 19 (4:20 a.m.) 4,450 sec.-ft.; Dec. 25 (2 a.m.) 2,300 sec.-ft.; Dec. 31 (3:30 a.m.) 9,600 sec.-ft.; Jan. 28 (6 a.m.) 2,600 sec.-ft.; Feb. 7 (9:30 a.m.) 5,400 sec.-ft.; Mar. 15 (3 p.m.) 5,400 sec.-ft.

a No gage-height record; discharge computed on basis of records for stations on Gila River below Coolidge Dam and at Kelvin and on San Pedro River near Mammoth.

Florence-Casa Grande canal near Florence, Ariz.

Location.- Water-stage recorder and Parshall flume, lat. 33°05', long. 111°17', in NE¼ sec. 14, T. 4 S., R. 10 E., at China Wash, 3 miles downstream from Ashurst-Hayden Dam and head and 6½ miles northeast of Florence.

Records available.- January 1928 to September 1941.

Remarks.- Records given herein are those of discharge at gaging station less flow pumped from wells into canal in reach between head and gaging station. Records represent flow diverted from Gila River at Ashurst-Hayden Dam except for water wasted by sluicing or lost from canal between head and gaging station. All sluicing is done above station. Discharge at gaging station computed on basis of gage heights and rating for Parshall flume; that of pumps on basis of records of pumpage.

Canal diverts water from left bank of Gila River at Ashurst-Hayden Dam in NW¼ sec. 8, T. 4 S., R. 11 E., for irrigation of lands under San Carlos Project. Most of the diverted water passed through San Carlos Reservoir and was released from Coolidge Dam; the remainder originated below Coolidge Dam, mostly from San Pedro River Basin.

Cooperation.- Records furnished by Office of Indian Affairs; records of daily diversion are available in files of that organization at Coolidge, Ariz.

Monthly diversions, in second-feet, water year October 1940 to September 1941

Month	Net diversion to canal				Water sluiced above station (acre-feet)
	Maximum	Minimum	Mean	Run-off in acre-feet	
October	256	34	121	7,430	20
November	661	30	115	6,850	395
December	669	0	200	12,280	3,410
Calendar year 1940	744	0	213	154,900	7,630
January	310	0	136	8,360	6,180
February	272	0	158	8,770	10,680
March	299	0	116	7,120	16,030
April	537	173	306	18,200	950
May	688	332	560	34,420	778
June	777	543	638	37,980	877
July	944	539	787	48,400	2,130
August	965	0	623	38,290	6,270
September	875	0	616	36,670	2,280
Water year 1940-41	965	0	366	264,800	50,000

Queen Creek near Florence Junction, Ariz.

Location.- Water-stage recorder, lat. 33°17'15", long. 111°19'30", in SW¼NE¼ sec. 4, T. 2 S., R. 10 E., at highway bridge three-quarters of a mile downstream from mouth of Whitlow canyon, 1⅝ miles north of Florence Junction, and 3¼ miles downstream from Whitlow dam site. Datum of gage is 1,918.77 feet above mean sea level (unadjusted).

Drainage area.- 191 square miles.

Records available.- August 1939 to June 1941 (discontinued). January 1896 to August 1899 and February 1915 to September 1920 at several sites at or near Whitlow dam site (drainage area, 143 square miles).

Extremes.- Maximum discharge during period, 9,900 second-feet Dec. 31 (gage height, 9.62 feet); no flow for parts of period.
1939-41: Maximum discharge, 13,200 second-feet Aug. 7, 1939 (gage height, 10.6 feet, from floodmarks), by slope-area method; no flow part of each year.
Maximum discharge observed at Whitlow dam site, 10,000 second-feet, Aug. 1, 1919.

Remarks.- Records fair except those for periods of no gage-height record, which are poor. Small diversions above station for irrigation and mining.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	0	0	298	23	218	729	108				
2	0	0	0	92	16	701	441	148				
3	0	0	0	33	9	170	310	24				
4	0	0	0	9	6	105	100	10				
5	76	0	0	4	6	318	80	5				
6	0	0	0	2	4	116	60	0				
7	0	0	0	1	791	91	50	0				
8	0	0	0	1	165	66	40	0				
9	0	0	0	0	74	56	40	0				
10	0	0	0	0	56	50	30	0				
11	0	0	156	20	56	43	30	0				
12	0	0	635	1,190	51	354	142	0				
13	0	0	86	170	40	704	137	0				
14	0	0	0	104	22	2,670	100	0				
15	0	0	0	81	15	3,010	56	0				
16	0	0	0	53	14	701	47	0				
17	0	0	46	34	8	415	40	0				
18	0	435	0	25	3	253	30	0				
19	0	514	0	15	108	174	20	0				
20	0	0	0	6	74	159	15	0				
21	0	0	0	1	49	129	10	0				
22	0	0	0	0	89	94	5	0				
23	0	0	0	0	85	69	3	0				
24	0	0	867	31	396	69	1	0				
25	0	0	487	256	980	52	0	0				
26	1	0	24	108	181	41	0	0				
27	121	0	4	70	96	22	0	0				
28	0	0	1	519	74	21	0	0				
29	0	0	0	120	-	20	0	0				
30	0	0	2.730	62	-	20	0	0				
31	0	-	3,020	44	-	15	-	0				

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	196	121	0	6.4	393
November	949	514	0	31.6	1,880
December	8,056	3,020	0	260	15,980
Calendar year 1940	9,337	3,020	0	25.5	18,520
January	3,349	1,190	0	108	6,640
February	3,491	980	3	125	6,920
March	10,928	3,010	15	353	21,680
April	2,516	729	0	83.9	4,990
May	295	148	0	9.5	585
June	0	0	0	0	0
July	-	-	-	-	-
August	-	-	-	-	-
September	-	-	-	-	-
The period	-	-	-	-	59,070

Peak discharge.- Dec. 24 (11 p.m.) 8,020 sec.-ft.; Dec. 30 (1:30 p.m.) 8,020 sec.-ft.; Dec. 30 (4:30 p.m.) 8,940 sec.-ft.; Dec. 31 (12:30 p.m.) 9,900 sec.-ft.; Mar. 14 (8:30 p.m.) 8,320 sec.-ft.; Mar. 15 (1 a.m.) 6,980 sec.-ft.

Note.- No gage-height record Mar. 28-31, Apr. 4-11, 17-24 and May 4-7; discharge computed on basis of one discharge measurement, three field estimates of flow, weather records, and ground-water records.

Santa Cruz River near Nogales, Ariz.

Location.- Water-stage recorder, lat. 31°21', long. 110°51', in NW¼ sec. 18, T. 24 S., R. 15 E., unsurveyed, in Spanish land grant of Buena Vista, three-quarters of a mile downstream from international boundary and 5½ miles east of Nogales.

Drainage area.- 542 square miles of which 357 square miles are in Mexico.

Records available.- May 1930 to December 1933, July 1935 to September 1941. March to November 1907 and April 1909 to June 1920 (fragmentary), at site 5¼ miles downstream. April 1921 to June 1922 at site 6 miles downstream.

Extremes.- Maximum discharge during year, 1,980 second-feet July 21 (gage height, 7.0 feet); no flow several periods during summer months.

1930-41: Maximum discharge, 14,000 second-feet Aug. 31, 1935 (gage height, 12.3 feet), from rating curve extended above 3,000 second-feet; no flow for several days or parts of days each year.

Remarks.- Records good except those below 1 second-foot in July, August, and September, which are fair. Several small diversions above station for irrigation.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1	2	3	25	11	17	12	2	0.9	0	0.2	15
2	.9	1	3	16	11	16	13	2	.9	0	.5	a.5
3	1	1	2	12	9	15	13	2	.4	0	.5	a.2
4	1	2	2	10	9	14	12	2	.5	0	61	a.2
5	1	2	2	10	12	13	9	2	.2	0	112	a.2
6	1	2	2	9	12	13	8	2	.3	0	27	3
7	.7	2	2	9	127	13	7	2	.3	0	100	a.2
8	.4	2	2	9	91	13	6	1	.2	0	6	a.2
9	.5	2	3	9	29	12	5	1	.3	0	58	a.2
10	.9	2	4	9	23	13	4	1	.4	0	11	a.2
11	.9	2	4	9	18	12	6	2	.4	0	2	14
12	.9	2	6	9	16	13	13	1	.2	0	2	.7
13	1	2	6	8	16	12	22	1	.1	32	2	2
14	1	2	6	8	14	13	14	1	0	0	144	.4
15	.7	2	6	8	14	14	9	1	0	0	7	.3
16	.7	2	6	8	14	12	6	1	0	0	32	.2
17	.9	2	8	7	15	12	3	1	0	0	116	.2
18	.9	2	8	7	15	11	2	1	0	0	16	.1
19	1	3	8	7	14	12	4	1	0	0	2	.1
20	1	4	8	6	15	10	4	2	0	0	.8	.1
21	1	4	8	6	16	9	2	2	0	167	.5	.1
22	1	4	7	6	20	10	2	2	0	129	14	.2
23	1	4	7	5	60	10	2	2	0	88	2	.2
24	1	4	7	5	60	8	2	2	0	121	.5	.1
25	1	4	8	5	40	7	2	2	0	2	.4	.1
26	1	4	8	5	27	6	2	2	0	2	.4	.1
27	1	4	7	7	22	4	2	2	0	1	.3	0
28	1	3	7	43	18	6	2	.9	0	.4	6	.7
29	2	3	6	31	-	6	2	.5	0	.4	15	.7
30	2	4	9	13	-	9	2	.9	0	.4	.4	.5
31	2	-	30	11	-	8	-	1	-	.4	13	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	31.4	2	0.4	1.01	62
November	79	4	1	2.6	157
December	195	30	2	6.3	387
Calendar year 1940	3,901.6	273	0	10.7	7,740
January	332	43	5	10.7	659
February	748	127	9	26.7	1,480
March	343	17	4	11.1	680
April	192	22	2	6.4	381
May	46.3	2	.5	1.49	92
June	5.1	.9	0	.17	10
July	543.6	167	0	17.5	1,080
August	752.5	144	.2	24.3	1,490
September	40.7	15	0	1.36	81
Water year 1940-41	3,308.6	167	0	9.06	6,560

Peak discharge.- July 21 (4:30 p.m.) 1,980 sec.-ft.; July 22 (5 p.m.) 965 sec.-ft.; July 23 (11 p.m.) 595 sec.-ft.; Aug. 4 (8:45 p.m.) 658 sec.-ft.; Aug. 5 (4 p.m.) 725 sec.-ft.; Aug. 7 (4:15 p.m.) 1,020 sec.-ft.

a No gage-height record at low stages; discharge computed on basis of partial record and weather records.

Santa Cruz River at Continental, Ariz.

Location.- Water-stage recorder, lat. 31°51', long. 110°59', in NE¼ sec. 23, T. 18 S., R. 13 E., in Spanish land grant of San Ignacio de la Canoa, at highway bridge at Continental.

Drainage area.- 1,640 square miles, of which 403 square miles are in Mexico.

Records available.- May 1940 to September 1941.

Extremes.- Maximum discharge during year, 3,670 second-feet Aug. 9 (gage height, 5.4 feet); no flow most of year.
1940-41: Maximum discharge, 12,100 second-feet Aug. 14, 1940 (gage height, 8.85 feet) by float-area method; no flow during greater part of each year.

Remarks.- Records good except those below 10 second-feet, which are poor. Many small diversions above station for irrigation.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0		0	80	0					0	0	0
2	0		0	2	0					0	0	0
3	0		0	0	0					0	0	0
4	0		0	0	0					0	25	0
5	0		0	0	0					0	14	0
6	0		0	0	0					0	a2	0
7	0		0	0	11					0	a1	52
8	0		0	0	0					0	a.5	11
9	0		0	0	0					0	195	0
10	0		0	0	0					0	58	0
11	0		0	0	0					0	2	0
12	0		0	0	0					0	0	0
13	0		0	0	0					0	14	0
14	0		0	0	0					0	7	0
15	0		0	0	0					0	20	0
16	0		0	0	0					0	a0	0
17	0		0	0	0					0	a0	0
18	0		0	0	0					0	a3	1
19	0		0	0	0					0	a0	0
20	0		0	0	0					2	0	0
21	0		0	0	0					12	0	0
22	0		0	0	0					90	0	0
23	0		0	0	0					363	0	0
24	0		0	0	0					29	0	0
25	0		0	0	0					0	0	0
26	0		0	0	0					0	0	0
27	.1		0	.4	0					0	0	0
28	0		0	.3	0					0	0	1
29	0		0	0	-					0	0	0
30	0		0	0	-					0	0	0
31	0		14	0	-					0	0	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	0.1	0.1	0	0.003	0.2
November	0	0	0	0	0
December	14	14	0	.5	28
Calendar year 1940	6,384.1	3,080	0	17.4	12,660
January	82.7	80	0	2.67	164
February	11	11	0	.4	22
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	496	363	0	16.0	984
August	341.5	195	0	11.0	677
September	65	52	0	2.2	129
Water year 1940-41	1,010.3	363	0	2.77	2,000

Peak discharge.- July 23 (5:30 p.m.) 3,190 sec.-ft.; Aug. 9 (6:10 p.m.) 3,670 sec.-ft.
a No gage-height record at low stages; discharge computed on basis of partial record, field estimates of flow Aug. 8 and 18, and weather records.

Santa Cruz River at Tucson, Ariz.

Location.- Water-stage recorder, lat. 32°13', long. 110°59', in NE¼ sec. 14, T. 14 S., R. 13 E., at Congress Street Bridge in Tucson. Datum of gage is 2,327.16 feet above mean sea level, datum of 1929.

Drainage area.- 2,190 square miles, of which 403 square miles are in Mexico.

Records available.- October 1905 to September 1941.

Average discharge.- 29 years (1912-41), 22.6 second-feet.

Extremes.- Maximum discharge during year, 2,490 second-feet Aug. 14 (gage height, 8.48 feet); no flow during greater part of year.
1905-41: Maximum discharge, about 15,000 second-feet Dec. 23, 1914, from rating curve extended above 9,000 second-feet; no flow during greater part of each year.

Remarks.- Records good above 20 second-feet, poor below. Many diversions above station for irrigation.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1	0	0	35	0		0	9		0	0	0
2	0	0	0	5	0		0	7		0	0	0
3	0	0	0	0	0		0	0		0	0	0
4	0	0	0	0	0		0	0		0	0	0
5	0	0	0	0	0		0	0		0	148	0
6	0	0	0	0	0		0	0		0	20	0
7	0	0	0	0	29		0	0		0	221	96
8	0	0	0	0	2		0	0		0	150	38
9	0	0	0	0	12		0	0		0	52	0
10	0	0	0	0	2		0	0		0	99	0
11	0	0	2	0	2		0	0		0	0	0
12	0	0	0	0	1		1	0		0	0	0
13	0	0	0	0	1		0	0		0	0	252
14	0	0	0	0	0		0	0		0	250	0
15	0	0	0	0	0		0	0		0	68	0
16	0	0	0	0	0		0	0		0	58	0
17	0	0	0	0	0		0	0		0	0	2
18	0	0	0	0	0		0	0		0	0	153
19	0	25	0	0	0		0	0		0	0	0
20	0	0	0	0	0		0	0		0	0	0
21	0	0	0	0	0		0	0		0	0	0
22	0	0	0	0	4		0	0		9	8	0
23	0	0	0	0	8		0	0		245	1	0
24	0	0	0	0	0		0	0		80	0	0
25	0	0	0	0	0		0	0		0	0	0
26	0	0	0	0	0		0	0		0	0	0
27	0	0	0	1	0		0	0		0	0	0
28	0	0	0	251	0		0	0		0	0	100
29	0	0	0	11	-		0	0		0	7	13
30	0	0	18	1	-		0	0		0	0	0
31	0	-	16	0	-		-	0		0	0	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	1	1	0	0.03	2
November	25	25	0	.8	50
December	36	18	0	1.2	71
Calendar year 1940	6,826	4,270	0	18.7	13,540
January	304	251	0	9.8	603
February	61	29	0	2.2	121
March	0	0	0	0	0
April	1	1	0	.03	2
May	16	9	0	.5	32
June	0	0	0	0	0
July	334	245	0	10.8	662
August	1,082	250	0	34.9	2,150
September	654	252	0	21.8	1,300
Water year 1940-41	2,514	252	0	6.89	4,990

Peak discharge.- July 23 (10 p.m.) 1,740 sec.-ft.; Aug. 5 (5:15 p.m.) 1,840 sec.-ft.; Aug. 9 (11:30 p.m.) 1,590 sec.-ft.; Aug. 14 (6:50 p.m.) 2,490 sec.-ft.; Sept. 7 (7:40 p.m.) 1,540 sec.-ft.; Sept. 13 (6 a.m.) 1,300 sec.-ft.

Santa Cruz River at Rillito, Ariz.

Location.- Water-stage recorder, lat. 31°24', long. 111°09', in NE¼SW¼ sec. 8, T. 12 S., R. 12 E., 1 mile southeast of Rillito, 7¾ miles downstream from Cañada del Oro, and 8¾ miles downstream from Rillito Creek. Datum of gage is 2,053.43 feet above mean sea level, datum of 1929. Supplementary staff gages and recording gage 900 feet upstream at different datum used at times during the year.

Drainage area.- 3,530 square miles.

Records available.- October 1939 to September 1941.

Extremes.- Maximum discharge during year, 7,800 second-feet Dec. 31 (gage height, 8.52 feet); no flow during greater part of year.
1939-41: Maximum discharge, 17,000 second-feet Aug. 14, 1940 (gage height, 9.9 feet); no flow during greater part of each year.

Remarks.- Records good except those prior to Mar. 14, which are poor. Many diversions above station for irrigation.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1		0	0	700	0	0		0		0	0	0
2		0	0	100	0	0		6		0	0	0
3		0	0	5	0	0		1		0	0	0
4		0	0	0	0	0		0		0	0	0
5		0	0	0	0	0		0		0	171	0
6		0	0	0	0	0		0		0	13	0
7		0	0	0	550	0		0		7	86	0
8		0	0	0	300	0		0		4	682	128
9		0	0	0	70	0		0		0	319	0
10		0	0	0	30	0		0		0	124	0
11		0	0	0	5	0		0		0	6	0
12		0	220	0	0	0		0		0	1	0
13		0	50	0	0	16		0		0	0	339
14		0	15	0	0	130		0		0	199	0
15		0	0	0	0	496		0		0	61	0
16		0	0	0	0	544		0		0	58	0
17		0	5	0	0	111		0		5	0	0
18		0	25	0	0	41		0		0	0	455
19		350	0	0	0	0		0		0	0	6
20		0	0	0	0	0		0		1	0	1
21		0	0	0	0	0		0		0	0	0
22		0	0	0	0	0		0		1	0	0
23		0	0	0	40	0		0		108	0	0
24		0	0	0	60	0		0		173	0	0
25		0	350	0	15	0		0		3	0	0
26		0	80	0	40	0		0		0	0	0
27		0	2	0	10	0		0		0	0	0
28		0	0	300	0	0		0		0	0	110
29		0	0	50	-	0		0		0	0	43
30		0	500	10	-	0		0		0	0	0
31		-	4,000	0	-	0		0		-	0	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	0	0	0	0	0
November	350	350	0	11.7	694
December	5,247	4,000	0	169	10,410
Calendar year 1940	15,784	7,490	0	43.1	31,300
January	1,165	700	0	37.6	2,310
February	1,120	550	0	40.0	2,220
March	1,338	544	0	43.2	2,650
April	0	0	0	0	0
May	7	6	0	.2	14
June	0	0	0	0	0
July	302	173	0	9.7	599
August	1,720	682	0	55.5	3,410
September	1,082	455	0	36.1	2,150
Water year 1940-41	12,331	4,000	0	33.8	24,460

Peak discharge.- Dec. 31 (5 a.m.) 7,800 sec.-ft.; Aug. 8 (2:40 a.m.) 6,000 sec.-ft.; Aug. 9 (12:15 a.m.) 2,720 sec.-ft.; Aug. 14 (9 p.m.) 2,740 sec.-ft.

Santa Cruz River near Laveen, Ariz.

Location.- Water-stage recorder, lat. 33°13', long. 112°10', in NE¼NE¼ sec. 29, T. 2 S., R. 2 E., on Gila River Indian Reservation, at highway bridge 3 miles south of Komatke, 9 miles upstream from mouth, and 9½ miles south of Laveen. Datum of gage is 1,021.1 feet above mean sea level, adjustment of 1912 (levels by Office of Indian Affairs).

Drainage area.- 8,970 square miles.

Records available.- January 1940 to September 1941.

Extremes.- Maximum discharge during year, 1,580 second-feet Mar. 15 (gage height, 10.03 feet); no flow Oct. 1-4.
1940-41: Maximum discharge, that of Mar. 15, 1941; no flow on several days during each year.

Remarks.- Records good. Several diversions above station for irrigation.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	0.7	3	952	11	23	52	20	3	1	4	5
2	0	.7	2	1,150	9	234	69	142	3	1	3	2
3	0	.7	2	667	7	112	74	98	2	.9	1	2
4	0	.5	2	460	14	43	49	51	2	.9	.7	1
5	223	.5	2	103	12	261	16	9	2	.8	2	3
6	135	.4	2	40	8	463	10	8	2	.8	1	4
7	20	.4	2	20	48	470	9	11	2	.8	208	2
8	8	.4	2	10	81	146	9	6	2	.8	11	2
9	2	.5	2	7	277	47	9	5	2	.8	2	2
10	.8	.5	2	6	98	20	9	4	2	.8	48	2
11	.7	.5	2	4	56	19	10	4	2	.8	110	1
12	.5	.5	2	3	22	50	526	4	2	.8	50	2
13	.4	.5	15	8	14	647	725	4	2	.8	8	7
14	.4	.7	6	22	10	931	508	4	2	.8	8	4
15	.4	.7	7	28	9	1,460	67	4	2	1	19	3
16	.4	.7	6	12	8	887	13	4	2	.9	42	2
17	.4	.7	24	11	7	592	9	4	2	1	36	1
18	.4	.7	5	10	7	178	8	4	2	.8	16	1
19	.4	169	3	8	7	141	8	4	1	.8	4	2
20	.4	476	3	6	64	77	9	4	1	.7	2	5
21	.4	237	3	5	84	74	9	4	2	.7	2	2
22	.4	63	3	4	131	63	8	4	1	.7	3	1
23	.4	69	3	5	28	49	8	3	1	192	4	2
24	.4	31	9	6	26	40	8	3	1	301	3	4
25	.4	14	13	8	145	25	8	3	1	461	2	2
26	4	9	5	5	262	15	8	3	1	64	1	1
27	4	6	11	5	210	10	8	3	1	15	.7	.9
28	2	5	8	5	41	8	8	3	1	4	.5	77
29	1	4	6	10	-	8	7	3	1	2	.4	114
30	.7	3	360	17	-	8	7	3	1	1	126	150
31	.7	-	955	19	-	9	-	3	-	2	8	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	407.6	223	0	13.1	808
November	1,096.3	476	.4	36.5	2,170
December	1,470	955	2	47.4	2,920
Calendar year 1940	6,103.7	955	0	16.7	12,100
January	3,616	1,150	3	117	7,170
February	1,696	277	7	60.6	3,360
March	7,110	1,460	8	229	14,100
April	2,268	725	7	75.6	4,500
May	429	142	3	13.8	851
June	51	3	1	1.7	101
July	1,060.4	461	.7	34.2	2,100
August	726.3	208	.4	23.4	1,440
September	406.9	150	.9	13.6	807
Water year 1940-41	20,337.5	1,460	0	55.7	40,330

Peak discharge.- Dec. 31 (8:50 a.m.) 1,120 sec.-ft.; Jan. 2 (1:30 p.m.) 1,230 sec.-ft.; Mar. 13 (8 a.m.) 1,380 sec.-ft.; Mar. 15 (12 m.) 1,580 sec.-ft.; Apr. 13 (2:30 p.m.) 908 sec.-ft.; July 25 (5:45 p.m.) 950 sec.-ft.

Sonoita Creek near Patagonia, Ariz.

Location.- Water-stage recorder, lat. 31°30', long. 110°49', in sec. 21, T. 22 S., R. 15 E., unsurveyed, in Spanish land grant of San Jose de Sonoita, 5 miles downstream from Patagonia. Prior to Mar. 6, 1940, water-stage recorder 2,700 feet downstream at datum 18.00 feet lower.

Drainage area.- 210 square miles.

Records available.- June 1930 to December 1933, July 1935 to September 1941.

Extremes.- Maximum discharge during year, 2,150 second-feet Aug. 9 (gage height, 8.02 feet); no flow on several days in July.

1930-41: Maximum discharge, about 20,000 second-feet sometime in August 1934 (gage height, 18.0 feet, present site and datum, from floodmarks), by slope-area method; no flow for several days during summer of each year.

Remarks.- Records good except those for periods of no gage-height record and those for Aug. 3-9, which are fair. Several small diversions above station for irrigation and mining. Low-water records at present site not comparable with those at former site; for comparison, results of low-water discharge measurements, in second-feet, during water year 1941, made at the present site and former site, 2,700 feet downstream, are given below.

Date	Discharge measurement		Date	Discharge measurement	
	Present site	Former site		Present site	Former site
Oct. 17.....	0.76	1.87	Mar. 17.....	3.33	4.64
Nov. 8.....	1.23	2.83	Apr. 17.....	2.81	3.91
Dec. 5.....	1.78	2.96	May 19.....	1.09	2.34
17.....	18.1	19.7	June 29.....	.44	1.14
Jan. 3.....	19.8	20.7	July 28.....	0	.65
23.....	3.09	4.51	Sept.17.....	2.26	3.71
Feb. 24.....	36.1	39.0	24.....	2.01	3.22

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1	2	2	89	23	24	3	2	0.9	0.3	0.4	4
2	.8	2	2	23	19	24	3	2	.9	.1	.5	2
3	1	1	2	16	19	22	4	1	.6	.1	5	2
4	1	2	2	19	19	20	3	1	.6	.2	13	1
5	1	2	2	20	22	17	3	.6	.6	.1	3	1
6	1	2	2	20	24	16	3	.5	.6	.4	3	2
7	.8	2	2	16	92	9	3	.8	.6	.3	13	3
8	.8	2	2	13	48	7	3	.6	1	.3	2	2
9	.8	2	2	10	27	7	3	.5	1	.4	181	1
10	1	2	2	10	27	7	3	.5	1	.1	30	1
11	1	2	3	9	27	6	3	.5	1	.1	3	6
12	1	1	4	9	23	6	4	.5	.8	0	2	3
13	2	1	3	8	10	6	3	.4	.8	0	51	4
14	1	1	3	8	8	5	3	.4	.6	.1	30	3
15	1	2	2	7	7	4	3	.3	.6	0	15	3
16	1	1	2	7	6	4	3	.3	.6	1	3	3
17	1	2	12	7	14	3	3	.4	.6	0	2	2
18	1	2	5	6	26	3	2	.5	.5	0	2	19
19	1	3	3	9	20	3	2	1	.5	0	2	5
20	1	2	2	7	26	3	2	2	.5	.1	2	4
21	1	2	1	6	12	3	2	2	.5	.1	2	3
22	1	2	1	6	25	2	2	3	.4	2	8	2
23	1	2	1	3	87	2	1	3	.4	19	2	2
24	1	2	2	8	44	2	1	3	.4	2	2	2
25	1	2	4	3	38	2	1	2	.3	.6	2	2
26	1	2	3	3	38	2	2	2	.3	.5	2	2
27	1	2	3	2	32	2	2	2	.3	.5	1	2
28	2	1	3	44	27	2	.8	2	.3	.4	2	9
29	1	2	3	26	-	2	2	1	.2	.3	3	5
30	2	2	3	24	-	2	2	1	.2	.4	3	3
31	2	-	292	24	-	2	-	1	-	.3	5	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	34.2	2	0.6	1.10	68
November.....	55	2	1	1.8	109
December.....	375	292	1	12.1	744
Calendar year 1940.....	1,849.3	292	0	5.05	3,670
January.....	462	89	2	14.9	916
February.....	790	92	6	28.2	1,570
March.....	219	24	2	7.1	434
April.....	74.8	4	.8	2.49	148
May.....	37.8	3	.3	1.22	75
June.....	17.6	1	.2	.59	35
July.....	29.7	19	0	.96	69
August.....	394.9	181	.4	12.7	783
September.....	103	19	1	3.4	204
Water year 1940-41.....	2,593.0	292	0	7.10	5,140

Peak discharge.- Dec. 31 (8 p.m.) 474 sec.-ft.; Aug. 9 (6:20 p.m.) 2,150 sec.-ft.

Note.- No gage-height record June 14-28 and Sept. 19-23; discharge computed on basis of partial gage-height record, weather records, and interpolation.

Rillito Creek near Wrightstown, Ariz.

Location.- Water-stage recorder, lat. 32°16', long. 110°51', in NE¼NE¼ sec. 31, T. 13 S., R. 15 E., at highway bridge 1 mile downstream from Sabino Creek, 2 miles upstream from Pantano Wash, and 3½ miles northwest of Wrightstown.

Drainage area.- 221 square miles.

Records available.- June 1940 to September 1941.

Extremes.- Maximum discharge during year, 9,000 second-feet Dec. 30 (gage height, 7.85 feet); no flow during greater part of several months.
1940-41: Maximum discharge, that of Dec. 30, 1940; no flow during parts of each year.

Remarks.- Records good. Several small diversions above station for irrigation.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1		0	0	826	79	106	17	3		0	0	0
2		0	0	363	60	109	38	4		0	0	0
3		0	0	220	49	100	71	5		0	0	0
4		0	0	134	38	71	49	9		0	0	0
5		0	0	82	38	148	36	9		0	0	0
6		0	0	87	47	116	33	9		0	0	0
7		0	0	63	808	79	28	9		0	0	0
8		0	0	56	479	51	19	11		0	.3	0
9		0	0	45	298	36	10	11		0	0	0
10		0	0	42	215	20	9	9		0	0	0
11		0	145	76	153	13	13	8		0	0	0
12		0	715	97	124	42	13	7		0	0	0
13		0	215	82	103	309	18	5		0	0	0
14		0	65	58	75	646	13	4		0	0	0
15		0	31	45	53	1,120	9	3		0	0	0
16		0	17	35	47	762	8	3		0	0	0
17		0	159	23	45	396	7	2		0	0	0
18		0	178	17	45	265	6	2		0	0	0
19		118	71	13	45	183	6	1		0	0	0
20		1	47	11	53	119	7	1		0	0	0
21		0	31	9	53	90	6	.9		0	0	0
22		0	23	10	60	74	6	.9		0	0	0
23		0	14	9	386	60	5	.8		210	0	0
24		0	9	9	265	45	5	.7		103	0	0
25		0	981	14	271	35	5	.6		18	0	0
26		0	200	26	244	30	5	.6		3	0	0
27		0	109	21	153	26	5	.5		1	0	0
28		0	65	454	123	14	4	.4		.6	0	7
29		0	45	303	-	11	3	.3		.5	0	.9
30		0	1,710	178	-	10	3	.1		.1	0	0
31		-	2,860	113	-	10	-	0		0	0	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	0	0	0	0	0
November	119	118	0	4.0	236
December	7,690	2,860	0	248	15,250
Calendar year	-	-	-	-	-
January	3,521	826	9	114	6,980
February	4,412	808	38	158	8,750
March	5,096	1,120	10	164	10,110
April	457	71	3	15.2	906
May	120.8	11	0	3.90	240
June	0	0	0	0	0
July	336.2	210	0	10.8	667
August	.3	.3	0	.01	.6
September	7.9	7	0	.26	16
Water year 1940-41	21,760.2	2,860	0	59.6	43,200

Peak discharge.- Dec. 25 (3:30 a.m.) 2,140 sec.-ft.; Dec. 30 (11:25 p.m.) 9,000 sec.-ft.; Dec. 31 (4:30 p.m.) 2,560 sec.-ft.; Feb. 7 (11:30 a.m.) 1,800 sec.-ft.; Mar. 14 (3 p.m.) 1,520 sec.-ft.; Mar. 15 (10:30 p.m.) 1,540 sec.-ft.

Rillito Creek near Tucson, Ariz.

Location.- Water-stage recorder, lat. 32°18', long. 110°59', in sec. 23, T. 13 S., R. 13 E., at Oracle Road Bridge, 4 miles upstream from mouth and 4 miles north of Tucson. Datum of gage is 2,290.78 feet above mean sea level, datum of 1929.

Drainage area.- 903 square miles.

Records available.- January 1911 to September 1941.

Average discharge.- 28 years (1913-41), 25.9 second-feet.

Extremes.- Maximum discharge during year, 9,900 second-feet Dec. 31 (gage height, 9.70 feet); no flow during greater part of year.

1911-41: Maximum discharge, 28,000 second-feet Dec. 23, 1914, estimated by the Arizona Agricultural Experiment Station in 1941 on the basis of their original flood record; no flow during greater part of each year.

A discharge of 24,000 second-feet occurred Sept. 23, 1929.

Remarks.- Records fair except those for periods of no gage-height record, which are poor. Several small diversions above station for irrigation.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1		0	0	604	0	a40				0	0	0
2		0	0	177	0	a40				0	0	0
3		0	0	52	0	a40				0	0	0
4		0	0	5	0	a30				0	0	0
5		0	0	1	0	a45				0	1	0
6		0	0	1	0	a60				0	0	0
7		0	0	0	606	a25				0	248	0
8		0	0	0	441	a15				0	487	a1
9		0	0	0	183	a5				0	137	0
10		0	0	0	104	a1				0	0	0
11		0	8	0	a60	0				0	0	0
12		0	480	1	a50	0				0	0	0
13		0	100	0	a30	154				0	0	39
14		0	1	0	a5	433				0	14	1
15		0	0	0	0	815				0	44	0
16		0	0	0	0	726				0	0	0
17		0	40	0	0	394				0	0	0
18		0	50	0	0	268				0	0	265
19		81	10	0	0	194				0	0	6
20		0	1	0	0	118				0	0	0
21		0	0	0	0	61				0	0	0
22		0	0	0	0	a35				14	0	0
23		0	0	0	117	a15				57	0	0
24		0	0	0	208	a5				9	0	0
25		0	600	0	a140	0				0	0	0
26		0	100	0	a120	0				0	0	0
27		0	5	0	a100	0				0	0	0
28		0	0	343	a70	0				0	0	11
29		0	0	154	-	0				0	2	2
30		0	1,060	a40	-	0				0	2	0
31		-	3,990	a2	-	0				0	0	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	0	0	0	0	0
November	81	81	0	2.7	161
December	6,445	3,990	0	208	12,780
Calendar year 1940	10,734	3,990	0	29.3	21,290
January	1,380	604	0	44.5	2,740
February	2,234	606	0	79.8	4,430
March	3,519	815	0	114	6,980
April	0	0	0	0	0
May	0	0	0	0	0
June	0	0	0	0	0
July	80	57	0	2.6	159
August	935	487	0	30.2	1,850
September	325	265	0	10.8	645
Water year 1940-41	14,999	3,990	0	41.1	29,740

Peak discharge.- Dec. 31 (1:45 a.m.) 9,900 sec.-ft.; Feb. 7 (1:45 p.m.) 1,540 sec.-ft.; Mar. 15 (11:15 p.m.) 1,320 sec.-ft.; Aug. 7 (11:30 p.m.) 7,040 sec.-ft.; Aug. 8 (11:45 p.m.) 1,360 sec.-ft.; Sept. 18 (12:30 a.m.) 1,640 sec.-ft.

a No gage-height record; discharge computed on basis of five discharge measurements, field estimates, weather records, and records for Rillito Creek near Wrightstown and for Pantano Wash near Tucson.

Sabino Creek near Tucson, Ariz.

Location.- Water-stage recorder and concrete control, lat. 32°19', long. 110°49', in E½ sec. 9, T. 13 S., R. 15 E., half a mile north of Coronado National Forest boundary and 12 miles northeast of Tucson.

Drainage area.- 35.0 square miles.

Records available.- June 1932 to September 1941.

Extremes.- Maximum discharge during year, 3,180 second-feet Dec. 30 (gage height, 7.13 feet); minimum, 0.01 second-foot June 29 to July 14.
1932-41: Maximum discharge, 4,100 second-feet Mar. 3, 1938 (gage height, 7.13 feet), from rating curve for spillway of dam 1,000 feet downstream, extended above 2,500 second-feet by logarithmic plotting; no flow at times during several years.

Remarks.- Records excellent except those for Mar. 12-22 and July 23 to Sept. 30, which are good. No diversions above station. Slight regulation by several small dams constructed to provide recreational lakes.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.08	0.04	3	226	41	72	23	12	0.7	0.01	1.2	0.6
2	.06	.04	2.7	131	34	82	37	16	.6	.01	.8	.5
3	.04	.04	2.5	90	29	73	40	14	.5	.01	.6	.3
4	.04	.04	2.5	68	25	58	36	12	.4	.01	.9	.2
5	20	.04	2.4	55	30	64	30	11	.4	.01	.9	.1
6	14	.04	2.2	53	34	59	27	12	.3	.01	.7	.1
7	4.6	.06	2	44	122	48	24	15	.3	.01	6.5	.08
8	2.2	.06	1.6	39	118	48	21	15	.2	.01	8.6	.08
9	1.2	.06	1.6	33	100	35	18	15	.1	.01	7.7	.04
10	.9	.06	3.6	35	95	30	17	14	.1	.01	4.8	.03
11	.6	.06	125	78	84	26	16	12	.08	.01	3.2	.02
12	.4	.08	262	82	76	69	21	10	.06	.01	2.4	3.5
13	.3	.08	105	62	59	165	25	8.9	.04	.01	1.6	35
14	.3	.04	46	46	46	256	23	7.8	.03	.01	9.8	6.8
15	.2	.04	28	36	38	380	21	6.6	.02	.1	36	3.6
16	.1	.04	21	30	35	225	18	5.9	.02	.7	32	2.0
17	.06	.04	116	24	32	145	16	4.8	.02	.6	12	1.2
18	.04	.06	86	21	30	114	15	4.1	.02	.4	7.8	1.1
19	.04	128	49	18	36	93	15	3.6	.02	.3	5.7	2.2
20	.03	24	31	15	41	72	13	3.6	.02	1.2	6.3	2.0
21	.03	12	23	14	41	58	12	3.2	.02	1.4	5.6	1.4
22	.03	7.5	18	12	50	47	11	3	.02	14	3.9	1.1
23	.03	6.5	15	11	133	38	10	2.7	.02	104	11	.9
24	.03	6.2	37	11	112	33	9.6	2.2	.02	166	6.6	.7
25	.03	5.1	383	18	119	28	9.2	1.8	.02	31	3.9	.6
26	.03	4.4	110	23	107	24	10	1.6	.02	12	3	.4
27	.04	3.9	62	18	82	21	11	1.5	.02	7.2	2.2	.4
28	.04	3.6	42	126	76	19	11	1.2	.02	4.4	1.5	69
29	.04	3.4	32	100	-	17	10	1	.01	2.7	1.2	23
30	.04	3.2	803	67	-	16	10	.9	.01	1.8	1.1	8.6
31	.04	-	597	49	-	16	-	.8	-	1.5	.8	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	45.57	20	0.03	1.47	90
November	208.72	128	.04	6.96	414
December	3,015.1	603	1.6	97.3	5,980
Calendar year 1940	4,506.48	803	0	12.3	8,930
January	1,635	226	11	52.7	3,240
February	1,825	133	25	65.2	3,620
March	2,453	380	16	79.1	4,870
April	559.8	40	9.2	18.7	1,110
May	223.4	16	.8	7.21	443
June	4.11	.7	.01	.137	8.2
July	349.44	166	.01	11.3	693
August	190.3	36	.6	6.14	377
September	165.55	69	.02	5.52	328
Water year 1940-41	10,674.99	803	.01	29.2	21,170

Peak discharges.- Nov. 19 (5:30 p.m.) 483 sec.-ft.; Dec. 24 (11:45 p.m.) 1,180 sec.-ft.; Dec. 30 (6:30 p.m.) 3,180 sec.-ft.; Mar. 14 (11:30 a.m.) 500 sec.-ft.; Mar. 15 (5 p.m.) 525 sec.-ft.; July 24 (8:30 a.m.) 516 sec.-ft.

Pantano Wash near Tucson, Ariz.

Location.- Water-stage recorder supplemented by staff gage, lat. 32°15', long. 110°51', NE¼NW¼ sec. 6, T. 14 S., R. 15 E., at highway bridge, 1¾ miles upstream from mouth and 7 miles east of Tucson.

Drainage area.- 602 square miles.

Records available.- June 1940 to June 1941 (discontinued).

Extremes.- Maximum discharge during period, 300 second-feet Dec. 31 (gage height, 2.10 feet); no flow during greater part of period.
1940-41: Maximum discharge, 9,200 second-feet Aug. 13, 1940 (gage height, 4.50 feet); no flow during greater part of each year.

Remarks.- Records poor. Several small diversions above station.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1		0	0	60	0	0						
2		0	0	0	0	0						
3		0	0	0	0	0						
4		0	0	0	0	0						
5		0	0	0	0	0						
6		0	0	0	0	0						
7		0	0	0	15	0						
8		0	0	0	10	0						
9		0	0	0	0	0						
10		0	0	0	0	0						
11		0	0	0	0	0						
12		0	2	0	0	0						
13		0	0	0	0	0						
14		0	0	0	0	0						
15		0	0	0	0	1						
16		0	0	0	0	1						
17		0	4	0	0	0						
18		1	0	0	0	0						
19		3	0	0	0	0						
20		0	0	0	0	0						
21		0	0	0	0	0						
22		0	0	0	2	0						
23		0	0	0	0	0						
24		0	0	0	0	0						
25		0	30	0	0	0						
26		0	1	0	0	0						
27		0	0	0	0	0						
28		0	0	50	0	0						
29		0	0	0	-	0						
30		0	10	0	-	0						
31		-	130	0	-	0						

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	0	0	0	0	0
November	4	3	0	.1	8
December	177	130	0	5.7	351
Calendar year	-	-	-	-	-
January	110	60	0	3.5	218
February	27	15	0	1.0	54
March	2	1	0	.1	4
April	0	0	0	0	0
May	0	0	0	0	0
June	0	0	0	0	0
July	-	-	-	-	-
August	-	-	-	-	-
September	-	-	-	-	-
The period	-	-	-	-	635

Note.- No gage-height record except part of Dec. 31; discharge computed on basis of partial record, three discharge measurements, many staff gage readings and floodmarks, many field estimates of flow, and comparison with records of Rillito Creek near Wrightstown and near Tucson.

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Salt River near Chrysotile, Ariz.

Location.- Water-stage recorder, lat. 33°48', long. 110°30', in sec. 5, T. 5 N., R. 18 E., unsurveyed, on San Carlos Indian Reservation, 1,200 feet upstream from bridge on U. S. Highway 60, 5½ miles northeast of Chrysotile, and 8 miles upstream from Cibecue Creek. Datum of gage is 3,353.5 feet above mean sea level, datum of 1929.

Drainage area.- 2,830 square miles.

Records available.- September 1924 to September 1941.

Average discharge.- 17 years, 687 second-feet.

Extremes.- Maximum discharge during year, 52,200 second-feet Mar. 14 (gage height, 15.08 feet); minimum, 153 second-feet Nov. 18 (gage height, 1.67 feet).
1924-41: Maximum discharge, 52,900 second-feet Feb. 7, 1937 (gage height, 15.18 feet); minimum, 89 second-feet July 14, 1939 (gage height, 1.39 feet).

Remarks.- Records excellent except those for period of no gage-height record, which are fair. Several small diversions above station.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,200	237	357	6,320	1,330	2,240	4,650	5,600	1,750	679	289	304
2	836	220	362	3,050	1,100	2,390	5,710	5,490	1,670	641	274	294
3	656	215	385	1,870	925	3,360	6,420	4,960	1,580	605	269	279
4	542	211	397	1,390	847	2,520	5,160	5,600	1,520	576	308	256
5	1,110	211	414	1,140	831	2,310	4,070	6,930	1,520	583	554	242
6	639	207	414	1,130	805	2,660	3,980	8,040	1,580	605	500	228
7	463	199	420	1,010	2,080	2,240	3,620	8,340	1,470	569	435	220
8	414	190	432	866	3,950	1,930	3,280	8,040	1,470	555	385	220
9	357	190	420	822	2,270	1,690	3,360	7,470	1,420	562	671	211
10	324	203	444	797	1,580	1,640	3,620	7,470	1,280	508	2,230	207
11	309	194	652	7,170	1,580	1,580	3,800	7,400	1,140	463	575	199
12	294	182	2,890	12,100	1,750	1,640	3,620	7,200	1,010	432	420	199
13	279	182	6,440	5,940	1,930	6,920	3,980	6,800	969	408	432	194
14	279	171	3,400	3,000	1,640	31,100	4,850	5,900	987	403	496	301
15	265	164	1,820	2,310	1,580	28,300	4,450	5,000	1,030	397	508	325
16	242	164	1,180	1,990	1,690	12,700	3,800	4,500	1,060	385	470	260
17	233	164	1,120	1,520	1,990	7,120	3,710	4,200	1,050	438	564	251
18	220	175	2,270	1,220	2,180	5,270	3,890	3,700	1,090	528	564	233
19	211	1,820	1,870	1,070	2,620	4,650	3,530	3,300	1,130	687	501	237
20	203	1,310	1,420	1,010	3,110	4,360	3,190	2,900	1,130	831	476	248
21	194	715	1,130	960	3,440	4,160	2,880	2,600	1,120	797	444	251
22	190	621	969	881	3,800	3,710	2,660	2,300	1,110	679	501	242
23	182	495	873	839	3,800	3,280	2,590	2,000	1,090	955	562	228
24	179	496	2,230	805	3,710	3,360	2,520	1,800	1,090	634	495	233
25	175	488	12,600	1,600	4,220	3,360	2,880	1,800	1,020	627	438	224
26	186	470	3,520	2,220	5,470	3,030	3,440	1,900	978	521	397	215
27	277	397	1,940	1,360	2,960	2,660	4,070	2,000	907	457	352	211
28	428	374	1,470	2,170	2,450	2,660	4,650	1,950	847	408	324	1,530
29	260	346	1,300	5,000	-	2,680	5,060	1,900	797	368	304	3,890
30	274	357	2,520	1,990	-	3,360	5,270	1,850	741	335	330	1,630
31	251	-	11,500	1,690	-	3,800	-	1,800	-	309	324	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	11,672	1,200	175	377	23,150
November	11,267	1,820	164	376	22,350
December	67,159	12,600	357	2,166	133,200
Calendar year 1940	202,317	12,600	96	553	401,300
January	75,240	12,100	797	2,427	149,200
February	65,638	5,470	805	2,344	130,200
March	163,380	31,100	1,580	5,270	324,100
April	118,710	6,420	2,520	3,957	235,500
May	140,740	8,340	1,800	4,540	279,200
June	35,556	1,750	741	1,185	70,520
July	16,945	955	309	547	33,610
August	15,392	2,230	269	497	30,530
September	13,561	3,890	194	452	26,900
Water year 1940-41	735,260	31,100	164	2,014	1,458,000

Peak discharge.- Dec. 13 (8:40 a.m.) 8,340 sec.-ft.; Dec. 25 (6:15 a.m.) 22,500 sec.-ft.; Dec. 31 (4:50 a.m.) 13,600 sec.-ft.; Jan. 12 (12 m.) 14,900 sec.-ft.; Mar. 14 (7:30 p.m.) 52,200 sec.-ft.; May 6 (8:20 p.m.) 8,640 sec.-ft.

Note.- No gage-height record May 11 to June 2; discharge computed on basis of records for station near Roosevelt.

Salt River near Roosevelt, Ariz.

Location.- Water-stage recorder, lat. 33°37', long. 110°55', in NE¼ sec. 9, T. 3 N., R. 14 E., unsurveyed, 100 feet downstream from bridge on Globe-Young highway, a quarter of a mile downstream from Pinal Creek, 1 mile upstream from diversion dam for power canal, 14 miles east of village of Roosevelt, and 17 miles upstream from Roosevelt Dam. Datum of gage is 2,177.14 feet above mean sea level, datum of 1929.

Drainage area.- 4,310 square miles.

Records available.- October 1913 to September 1941.

Average discharge.- 28 years, 1,014 second-feet.

Extremes.- Maximum discharge during year, 117,000 second-feet Mar. 14 (gage height, 24.4 feet) from rating curve extended above 55,000 second-feet on basis of velocity-area studies and float-area measurements at 66,000 and 102,000 second-feet; minimum, 205 second-feet Oct. 25 (gage height, 5.87 feet).

1913-41: Maximum discharge, that of Mar. 14, 1941; minimum, 91 second-feet June 30, 1934.

Minimum discharge known, about 42 second-feet Aug. 5, 1911.

Remarks.- Records excellent except those above 50,000 second-feet, which are good. Several small diversions above station for irrigation. During the year 222 discharge measurements were made. See pp. 288, 289 for records for Tonto Creek, which also contributes to Roosevelt Reservoir.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,390	327	444	11,100	2,120	2,810	5,560	6,290	1,910	864	375	381
2	997	306	435	4,580	1,650	4,650	5,790	6,290	1,840	793	346	346
3	758	298	444	2,780	1,370	4,410	7,820	5,920	1,780	716	330	336
4	616	290	459	2,050	1,210	3,570	7,300	5,920	1,650	657	325	315
5	1,110	278	474	1,720	1,150	3,080	5,200	7,820	1,650	648	662	309
6	1,270	274	488	1,590	1,110	3,370	4,860	8,900	1,720	674	655	304
7	596	267	496	1,450	2,210	3,080	4,300	8,900	1,720	666	588	267
8	485	259	496	1,230	5,530	2,560	3,880	8,900	1,650	632	500	258
9	440	255	501	1,130	3,280	2,260	3,880	8,350	1,590	624	640	258
10	392	255	511	1,050	2,340	2,190	3,980	8,080	1,520	608	2,440	246
11	361	255	624	13,500	2,050	2,050	4,300	7,820	1,400	592	1,280	246
12	348	244	2,300	16,800	2,260	2,120	4,300	7,560	1,230	538	616	250
13	331	240	7,870	8,850	2,480	9,470	5,800	7,300	1,170	492	478	250
14	319	237	4,890	4,260	2,190	60,200	6,540	6,790	1,150	471	538	729
15	306	226	2,380	3,180	2,050	58,500	6,290	5,920	1,170	485	624	566
16	286	222	1,600	2,560	2,190	21,200	5,090	4,980	1,190	500	538	588
17	274	222	1,340	2,120	2,400	9,880	4,630	4,520	1,210	500	552	320
18	259	263	2,130	1,720	2,640	7,040	4,520	4,190	1,260	616	652	304
19	255	1,600	2,460	1,450	2,870	6,040	4,190	3,880	1,270	691	568	295
20	247	1,890	1,780	1,360	3,770	5,440	3,770	3,570	1,240	927	560	313
21	233	1,110	1,450	1,240	4,190	5,090	3,470	3,180	1,240	963	522	309
22	226	744	1,220	1,190	4,860	4,740	3,280	2,720	1,230	891	485	299
23	219	622	1,100	1,100	4,520	4,300	3,180	2,400	1,230	914	568	285
24	212	585	1,970	1,020	4,740	4,080	3,080	2,190	1,500	1,110	576	276
25	208	579	21,900	2,010	4,630	4,190	3,180	1,910	1,230	945	522	276
26	245	585	5,660	2,840	6,790	3,880	3,880	1,910	1,160	742	478	272
27	418	533	2,740	1,940	4,080	3,470	4,410	2,120	1,100	608	431	267
28	807	469	1,840	2,090	3,180	3,180	4,980	2,120	1,030	545	387	1,560
29	428	440	1,590	5,900	-	3,370	5,560	2,050	981	478	357	4,640
30	344	430	4,090	3,060	-	3,880	5,800	1,980	927	444	352	2,100
31	352	-	17,300	2,560	-	4,300	-	1,980	-	405	393	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	14,732	1,390	208	475	29,220
November	14,305	1,890	222	477	28,370
December	92,979	21,900	435	2,999	184,400
Calendar year 1940	252,917	21,900	106	691	501,600
January	109,430	16,800	1,020	3,530	217,100
February	83,860	6,790	1,110	2,995	166,300
March	258,400	60,200	2,050	8,335	512,500
April	143,820	7,820	3,080	4,794	285,300
May	156,460	8,900	1,910	5,047	310,300
June	40,948	1,910	927	1,365	81,220
July	20,739	1,110	405	669	41,140
August	18,368	2,440	325	593	36,430
September	16,966	4,640	246	566	33,650
Water year 1940-41	971,007	60,200	208	2,660	1,926,000

Peak discharge.- Dec. 13 (3:50 p.m.) 11,600 sec.-ft.; Dec. 25 (12:20 p.m.) 31,600 sec.-ft.; Dec. 31 (2:15 p.m.) 24,900 sec.-ft.; Jan. 11 (2:05 p.m.) 31,600 sec.-ft.; Mar. 14 (11:20 p.m.) 117,000 sec.-ft.

Reservoir system on Salt River at and below Roosevelt Dam, Ariz.

Location.- This system comprises four storage reservoirs created by four separate dams on Salt River: Roosevelt Lake, formed by Roosevelt Dam, in sec. 20, T. 4 N., R. 12 E., unsurveyed; Apache Lake, formed by Horse Mesa Dam, 17 miles downstream from Roosevelt Dam; Canyon Lake, formed by Mormon Flat Dam, 26 miles downstream from Roosevelt Dam; Sahuaro Lake, formed by Stewart Mountain Dam, 36 miles downstream from Roosevelt Dam.

Drainage area.- 6,220 square miles at Stewart Mountain Dam.

Records available.- October 1934 to September 1941.

Extremes.- Maximum contents of system during year, 1,764,000 acre-feet May 22; minimum contents, 26,870 acre-feet Oct. 1.
1934-41: Maximum contents, that of May 22, 1941; minimum contents, 20,680 acre-feet Sept. 16, 1940.

Remarks.- Total capacity of the four reservoirs is 1,771,000 acre-feet, divided as follows: Roosevelt Lake, 1,398,000 acre-feet; Apache Lake, 245,000 acre-feet; Canyon Lake, 58,000 acre-feet; Sahuaro Lake, 70,000 acre-feet. Records given herein represent usable contents. Dead storage negligible. Capacity storage not utilized in order to provide flood control regulation. Water from this system is used for irrigation of Salt River Valley and for the generation of power. The four dams forming these reservoirs completely develop the fall in Salt River from Roosevelt Lake to Stewart Mountain Dam.

Cooperation.- Records of daily contents furnished by Salt River Valley Water Users' Association.

Contents at 12 p.m., in thousands of acre-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	26.87	58.03	76.14	396.2	650.3	893.6	1,565	1,760	1,759	1,740	1,674	1,606
2	27.24	58.32	76.88	412.3	654.8	909.6	1,582	1,760	1,758	1,737	1,671	1,603
3	26.89	58.66	77.45	421.1	658.4	925.0	1,603	1,759	1,758	1,736	1,668	1,600
4	27.55	58.97	75.14	426.3	661.4	937.0	1,621	1,758	1,757	1,733	1,665	1,596
5	31.36	59.19	78.90	431.4	664.0	948.3	1,634	1,760	1,757	1,731	1,662	1,593
6	34.49	60.11	79.73	435.0	668.1	959.8	1,645	1,759	1,757	1,729	1,660	1,590
7	36.28	60.94	80.87	438.8	680.2	969.2	1,655	1,759	1,756	1,726	1,657	1,587
8	37.21	61.20	81.82	442.5	694.2	976.4	1,663	1,758	1,755	1,723	1.655	1,582
9	37.84	61.60	82.58	445.2	704.3	982.4	1,671	1,755	1,755	1,721	1,652	1,579
10	39.21	62.12	83.90	448.9	711.4	988.7	1,679	1,754	1,756	1,718	1,653	1,578
11	40.13	61.72	84.95	475.3	716.9	994.9	1,689	1,754	1,756	1,716	1,653	1,573
12	39.68	61.00	89.71	510.5	722.5	1,005.0	1,707	1,753	1,756	1,713	1,652	1,570
13	41.86	60.54	106.20	532.5	728.3	1,043.0	1,730	1,758	1,755	1,710	1,650	1,567
14	43.92	59.97	118.20	544.4	733.9	1,196.0	1,741	1,759	1,755	1,707	1,648	1,555
15	44.70	59.50	123.60	553.3	739.2	1,322.0	1,750	1,759	1,755	1,704	1,645	1,564
16	45.54	58.88	126.90	559.5	746.4	1,382.0	1,752	1,759	1,754	1,702	1,643	1,562
17	46.51	58.27	131.00	563.9	753.3	1,410.0	1,752	1,759	1,755	1,700	1,641	1,559
18	47.35	58.60	136.70	568.7	760.1	1.427.0	1,757	1,758	1,755	1,698	1,639	1,557
19	48.29	61.61	141.80	572.1	767.9	1.442.0	1,756	1,758	1,755	1,695	1,638	1,555
20	48.93	64.11	146.40	575.4	777.4	1,456.0	1,756	1,760	1,755	1,693	1,635	1,552
21	49.66	66.23	149.70	578.1	788.9	1,467.0	1,757	1,762	1,755	1,690	1,632	1,549
22	50.61	67.63	153.00	580.2	802.3	1,478.0	1,758	1,764	1,754	1,688	1,630	1,648
23	51.40	68.77	155.40	582.5	814.2	1,487.0	1,758	1,763	1,753	1,687	1,627	1,644
24	52.10	69.77	183.40	586.4	824.9	1,496.0	1,758	1,762	1,752	1,686	1,624	1,541
25	52.88	70.77	225.10	592.5	843.1	1,504.0	1,758	1,762	1,749	1,686	1,622	1,539
26	52.98	71.81	245.90	599.0	860.7	1,513.0	1,760	1,761	1,748	1,687	1,620	1,536
27	53.97	72.72	253.90	605.6	873.8	1,521.0	1,760	1,761	1,746	1,686	1,617	1,535
28	55.55	73.69	256.90	613.8	884.1	1,527.0	1,759	1,760	1,745	1,685	1,615	1,537
29	56.61	74.54	261.60	627.3	-	1.534.0	1,759	1,759	1,744	1,684	1,612	1,542
30	57.12	75.38	297.00	637.4	-	1.541.0	1,761	1,759	1,742	1,680	1,610	1,546
31	57.50	-	359.30	644.4	-	1,551.0	-	1,759	-	1,677	1,608	-

Salt River at Stewart Mountain Dam, Ariz.

Location.- Water-stage recorder, lat. 33°33', long. 111°32', in SE¼ sec. 33, T. 3 N., R. 8 E., unsurveyed, in Tonto National Forest, three-quarters of a mile downstream from Stewart Mountain Dam and 9 miles upstream from Verde River. Datum of gage is 1,396.33 feet above mean sea level, datum of 1929.

Drainage area.- 6,220 square miles.

Records available.- October 1934 to September 1941.

Extremes (regulated.- Maximum discharge during year, 11,700 second-feet May 7 (gage height, 15.97 feet); minimum, 7 second-feet Oct. 31 to Nov. 9, Feb. 27 to Mar. 3, Mar. 18-22.

1934-41: Maximum discharge, that of May 7, 1941; minimum, 3 second-feet Jan. 8-20, 1935.

Remarks.- Records excellent. Flow regulated at Stewart Mountain Dam and by three other dams having a combined capacity of 1,771,000 acre-feet (see p. 288). Discharge occurred over spillway of Roosevelt Dam from Apr. 13 to July 24 and at Stewart Mountain Dam from Apr. 15 to May 15. Water is available for diversion at Granite Reef Dam 13 miles downstream for irrigation in the Salt River Valley (see p. 297). During the year 45 discharge measurements were made.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	538	7	11	12	12	7	9	6,890	1,800	1,650	1,920	1,400
2	538	7	11	11	11	7	9	9,240	1,910	1,650	1,920	1,760
3	532	7	11	10	10	7	8	11,000	1,910	1,650	1,920	1,920
4	486	7	11	10	10	8	8	10,700	1,910	1,600	1,920	1,920
5	15	7	11	10	10	8	9	8,140	1,910	1,600	1,920	1,920
6	12	7	11	10	10	8	9	10,300	1,860	1,800	1,920	1,920
7	11	7	11	10	12	8	10	10,900	1,700	1,860	1,920	1,860
8	11	7	11	10	10	8	10	11,300	1,600	1,860	1,920	1,860
9	11	7	11	10	9	8	10	11,100	1,600	1,860	1,920	1,920
10	11	33	11	10	9	8	10	8,970	1,600	1,860	1,650	1,920
11	11	457	11	10	9	8	10	7,770	1,600	1,800	1,360	1,920
12	11	527	11	10	9	9	12	8,020	1,600	1,800	1,700	1,860
13	11	527	10	10	e	9	10	4,990	1,650	1,800	1,700	1,810
14	11	521	10	10	8	29	2,000	7,570	1,650	1,800	1,700	1,650
15	11	461	10	10	8	12	5,210	5,980	1,550	1,800	1,700	1,500
16	11	456	10	10	8	8	7,570	4,980	1,650	1,800	1,700	1,450
17	11	430	10	10	8	8	5,560	3,980	1,650	1,750	1,550	1,500
18	11	61	10	10	8	7	2,340	3,990	1,650	1,700	1,550	1,550
19	12	16	10	10	8	7	4,910	2,900	1,650	1,750	1,860	1,550
20	12	14	10	11	8	7	4,330	2,490	1,600	1,750	1,920	1,550
21	12	14	10	11	8	7	3,130	2,490	1,600	1,700	1,920	1,500
22	12	14	10	11	8	7	3,250	2,620	1,650	1,750	1,970	1,450
23	12	14	10	12	8	8	3,680	2,680	1,650	1,860	1,970	1,450
24	12	14	11	12	8	9	3,820	2,680	1,650	1,700	1,810	1,500
25	12	12	11	12	8	9	3,290	2,310	1,700	1,000	1,500	1,500
26	12	11	11	12	8	9	3,020	2,190	1,700	695	1,600	1,450
27	12	11	11	12	7	9	4,680	2,190	1,700	700	1,600	1,400
28	12	11	11	12	7	9	6,240	2,250	1.700	904	1,600	1,170
29	12	11	11	13	-	9	5,820	2,370	1,700	1,430	1,550	905
30	10	11	34	12	-	9	4,170	2,250	1,650	1,920	1,550	992
31	7	-	27	12	-	9	-	1,960	-	1,920	1,400	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	2,402	538	7	77.5	4,760
November	3,689	527	7	123	7,320
December	369	34	10	11.9	732
Calendar year 1940	193,993	1,590	7	530	384,800
January	335	13	10	10 8	664
February	247	12	7	8.8	490
March	275	29	7	8.9	545
April	73.144	7,570	8	2,438	145,100
May	177,200	11,300	1,960	5,716	351,500
June	50,750	1,910	1,550	1,692	100,700
July	50,719	1,920	695	1,636	100,600
August	54,140	1,970	1,360	1,746	107,400
September	48,057	1,920	905	1,602	95,320
Water year 1940-41	461,327	11,300	7	1,264	915,100

Peak discharge.- Apr. 17 (1:20 a.m.) 9,830 sec.-ft.; May 3 (8:50 p.m.) 11,500 sec.-ft.; May 7 (4:30 p.m.) 11,700 sec.-ft.

Tonto Creek above Gun Creek, near Roosevelt, Ariz.

Location.- Water-stage recorder, lat. 33°59', long. 111°18', in NE¼SW¼ sec. 2, T. 7 N., R. 10 E., in Tonto National Forest, 600 feet upstream from Gun Creek, and 26 miles upstream from Roosevelt Dam. 23½ miles northwest of the village of Roosevelt. Datum of gage is 2,523.14 feet above mean sea level, datum of 1929.

Drainage area.- 678 square miles.

Records available.- December 1940 to September 1941.

Extremes.- Maximum discharge during year, 32,000 second-feet Mar. 14 (gage height, 15.1 feet), by slope-area method; minimum observed, 15 second-feet Sept. 10 (gage height, 3.28 feet).

Remarks.- Records good below 2,000 second-feet and fair above. Small diversions above station for irrigation. For comparison with station near Roosevelt, 10 miles downstream, operated 1913-40, a number of discharge measurements were made at both sites. Those made at this etation are listed below, and for results of those made on same days at station near Roosevelt see daily discharge table on next page.

Day	Discharge (second-feet)	Day	Discharge (second-feet)
1941		1941	
Feb. 4.....	258	Aug. 5.....	40
June 3.....	76	19.....	39
17.....	44	Sept.2.....	25
July 1.....	28	16.....	27
15.....	30		

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1			-	1,820	456	952	665	358	81	28	28	30
2			-	1,170	370	2,860	1,540	3,690	77	27	27	26
3			-	750	302	1,200	2,210	1,500	76	26	28	24
4			-	523	265	872	1,310	1,490	74	26	74	22
5			-	420	230	1,740	1,040	1,240	70	26	49	22
6			-	390	220	1,440	786	824	69	26	54	20
7			-	332	1,510	972	608	715	67	26	62	18
8			-	278	1,060	771	811	608	67	51	50	17
9			-	248	715	669	463	542	67	52	179	17
10			-	245	547	563	436	468	64	35	342	17
11			-	1,160	472	492	430	409	61	44	103	17
12			-	1,120	506	502	2,640	358	58	38	58	18
13			-	719	449	2,090	4,010	317	53	31	42	20
14			-	543	358	16,500	3,170	278	50	30	42	34
15			-	470	333	6,500	2,110	252	48	30	90	35
16			-	399	1,030	2,530	1,600	223	44	28	61	27
17			-	320	708	1,550	1,190	195	41	28	77	22
18			-	252	591	1,200	896	176	41	33	54	39
19			-	223	692	989	736	155	40	61	40	69
20			-	190	955	809	614	143	38	41	34	40
21			178	167	1,250	669	516	135	38	37	33	30
22			159	145	1,130	552	440	130	35	38	30	30
23			129	142	1,340	477	379	130	34	38	27	27
24			994	134	1,080	454	353	118	41	112	27	23
25			8,000	590	1,890	449	362	123	42	79	27	23
26			1,150	659	1,700	405	436	111	37	72	22	22
27			830	523	1,200	358	502	96	31	53	20	22
28			670	596	989	333	436	96	30	41	18	77
29			586	829	-	333	418	90	30	35	68	87
30			3,910	755	-	325	383	86	30	31	54	46
31			4,070	737	-	329	-	85	-	30	40	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	-	-	-	-	-
November.....	-	-	-	-	-
December 21-31.....	20,676	8,000	129	1,880	41,010
Calendar year	-	-	-	-	-
January.....	16,849	1,820	134	544	33,420
February.....	22,348	1,890	220	798	44,330
March.....	49,885	16,500	325	1,609	98,950
April.....	31,190	4,010	353	1,040	61,860
May.....	15,141	3,690	85	488	30,030
June.....	1,534	81	30	51.1	3,040
July.....	1,253	112	26	40.4	2,490
August.....	1,860	342	18	60.0	3,690
September.....	921	87	17	30.7	1,830
The period.....	-	-	-	-	320,600

Peak discharge.- Dec. 25 (3 a.m.) 26,700 sec.-ft.; Dec. 30 (9 p.m.) 14,200 sec.-ft.; Mar. 2 (4:20 a.m.) 6,610 sec.-ft.; Mar. 14 (8:45 p.m.) 32,000 sec.-ft.; Apr. 13 (9:20 p.m.) 7,530 sec.-ft.; May 2 (12:15 p.m.) 10,600 sec.-ft.

Tonto Creek near Roosevelt, Ariz.

Location.- Staff gage, lat. 33°52', long. 111°18', in sec. 14, T. 6 N., R. 10 E., 16 miles upstream from Roosevelt Dam and 16 miles northwest of village of Roosevelt.

Drainage area.- 841 square miles.

Records available.- October 1913 to December 1940 (destroyed by flood Dec. 25).

Average discharge.- 27 years (1913-40), 142 second-feet.

Extremes.- Maximum discharge and gage height during period not determined; minimum discharge observed, 2 second-feet Oct. 21-26.
1913-40: Maximum discharge not determined; no flow at times during dry years.

Remarks.- Records fair except those for period of no gage-height record, which are poor. Staff gage read once daily. Small diversions above station for irrigation. See p. 285 for records of flow of Salt River, which also contributes to Roosevelt Reservoir.

Cooperation.- Gage readings furnished by Salt River Valley Water Users' Association.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	14	23	31							†14		
2	12	20	31									†12
3	8	17	26						†77			
4	6	14	23		†310							
5	768	12	23								†25	
6	238	12	23									
7	78	9	19									
8	44	9	16									
9	40	7	16									
10	74	8	29									
11	22	8	49									
12	16	7	474									
13	11	7	955									
14	11	4	604									
15	9	5	276							†15		
16	8	5	177									†12
17	8	5	153						†31			
18	7	6	1,230									
19	5	16	448									
20	3	191	295									
21	2	94	206									
22	2	82	167									
23	2	65	138									
24	2	67	a1,150									
25	2	59	a8,800									
26	2	49	a1,450									
27	64	48	a1,000									
28	224	37	a830									
29	68	41	a720									
30	33	32	a4,500									
31	23	-	a4,900									

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	1,804	768	2	58.2	3,580
November	959	191	4	32.0	1,900
December	28,657	8,800	16	925	56,840
Calendar year 1940	37,544.4	8,800	.4	103	74,470
January	-	-	-	-	-
February	-	-	-	-	-
March	-	-	-	-	-
April	-	-	-	-	-
May	-	-	-	-	-
June	-	-	-	-	-
July	-	-	-	-	-
August	-	-	-	-	-
September	-	-	-	-	-
The period	-	-	-	-	62,320

† Discharge measurement.
a No gage-height record; discharge computed on basis of record at station above Gun Creek.

Verde River near Camp Verde, Ariz.

Location.- Water-stage recorder, lat. 34°27', long. 111°47', in sec. 1, T. 12 N., R. 5 E., unsurveyed, just downstream from Camp Verde dam site, about 750 feet upstream from Chasm Creek, and 9 miles southeast of Camp Verde. Datum of gage is 2,874.1 feet above mean sea level, datum of 1929.

Drainage area.- 5,000 square miles (includes 344 square miles in Aubrey Valley Playa, a closed basin).

Records available.- April 1934 to September 1941. December 1912 to March 1920, at site 15 miles upstream published as Verde River at Camp Verde, Ariz. (drainage area 4,220 square miles).

Extremes.- Maximum discharge during year, 30,000 second-feet Mar. 14 (gage height, 16.85 feet); minimum, 87 second-feet June 17.
1934-41: Maximum discharge, 97,000 second-feet Mar. 3, 1938 (gage height, 26.1 feet), by slope-area method, verified by comparison with records for other stations on Verde River; minimum, 41 second-feet July 17, 1940.

Remarks.- Records good except those for period of incomplete gage-height record, which are fair. Small diversions above station for irrigation.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	285	285	278	3,000	811	1,700	747	699	a140	115	137	108
2	248	248	288	1,560	680	10,400	2,210	603	126	110	134	108
3	226	226	295	1,020	568	7,340	3,810	754	120	110	134	98
4	223	220	288	774	493	3,270	3,610	865	126	108	118	113
5	4,290	207	275	599	450	2,100	3,100	886	128	126	115	106
6	3,130	204	265	522	437	2,940	2,100	669	131	123	120	113
7	1,020	201	252	478	949	2,370	1,400	514	134	118	126	110
8	589	195	245	411	2,210	1,270	1,000	429	134	110	157	118
9	406	195	245	377	1,430	935	837	355	139	110	224	115
10	327	192	245	446	1,110	844	747	305	128	110	292	113
11	285	198	292	637	1,320	824	693	263	123	108	259	108
12	261	198	2,710	1,450	2,620	741	5,610	239	128	113	217	118
13	238	195	2,380	1,510	2,690	2,030	9,330	228	115	103	239	220
14	232	184	1,180	1,110	1,630	13,900	9,090	221	101	113	210	2,010
15	223	190	732	960	1,430	15,700	9,580	221	91	118	182	981
16	213	195	456	782	3,920	6,480	10,800	217	91	103	196	520
17	207	192	390	626	2,600	3,520	8,770	217	91	103	192	350
18	201	201	2,680	493	2,440	2,620	3,840	213	91	113	196	275
19	195	443	1,760	406	2,220	2,000	2,320	213	96	108	175	292
20	187	1,120	1,070	365	3,420	1,690	1,590	217	93	110	157	236
21	184	900	698	338	11,000	1,500	1,230	217	91	115	139	213
22	184	754	517	331	7,660	1,060	1,000	221	96	118	134	203
23	187	568	446	316	5,500	935	872	221	105	113	123	203
24	184	493	931	324	3,130	970	844	210	113	193	113	203
25	181	450	9,950	534	5,980	1,080	879	a200	110	350	110	192
26	195	424	5,100	1,000	5,060	970	970	a200	120	518	105	186
27	486	369	1,940	853	2,500	693	1,440	a190	105	419	101	166
28	900	327	1,180	900	1,690	675	1,190	a170	110	422	101	196
29	740	299	885	1,040	-	681	1,040	a170	115	232	101	210
30	516	282	1,100	1,220	-	657	851	a160	120	175	103	259
31	350	-	2,780	1,020	-	675	-	a150	-	154	105	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	17,093	4,290	181	551	33,900
November	10,155	1,120	184	338	20,140
December	41,853	9,950	245	1,350	83,010
Calendar year 1940	140,467	9,950	43	384	278,600
January	25,402	3,000	316	819	50,380
February	76,148	11,000	437	2,720	151,000
March	92,590	15,700	657	2,987	183,600
April	91,500	10,800	693	3,050	181,500
May	10,437	886	150	337	20,700
June	3,411	140	91	114	6,770
July	5,041	518	103	163	10,000
August	4,815	292	101	155	9,550
September	8,245	2,010	98	275	16,350
Water year 1940-41	386,690	15,700	91	1,059	766,900

Peak discharge.- Oct. 5 (8 p.m.) 11,100 sec.-ft.; Dec. 25 (11:45 a.m.) 11,900 sec.-ft.; Feb. 21 (4 p.m.) 14,600 sec.-ft.; Mar. 2 (9 a.m.) 19,000 sec.-ft.; Mar. 14 (8:45 p.m.) 30,000 sec.-ft.; Apr. 16 (5:30 a.m.) 14,100 sec.-ft.

a Gage-height record incomplete; discharge computed on basis of partial records and records for station above Bartlett Reservoir near Cave Creek.

Verde River below East Verde River, near Pine, Ariz.

Location.- Water-stage recorder, lat. 34°16', long. 111°41', in sec. 30, T. 11 N., R. 7 E., unsurveyed, 2½ miles downstream from East Verde River and 15 miles southwest of Pine. Datum of gage is 2,401.6 feet above mean sea level, datum of 1929.

Drainage area.- 5,610 square miles (includes 344 square miles in Aubrey Valley Playa, a closed basin).

Records available.- June 1934 to May 1941 (discontinued).

Extremes.- Maximum discharge during period, 49,700 second-feet Mar. 14 (gage height, 18.2 feet), from rating curve extended above 27,000 second-feet based on velocity-area studies; minimum daily, 220 second-feet Oct. 20, affected by regulation of flow of Fossil Creek by power plant.

1934-41: Maximum discharge, 110,000 second-feet Mar. 3, 1938 (gage height, 24.7 feet), by slope-area method, verified by comparison with records for other stations on Verde River; minimum, 48 second-feet (regulated) July 17, 1939 (gage height, 6.22 feet).

Remarks.- Records good except those for period of no gage-height record, which are fair. Small diversions above station for irrigation. Some regulation by power plant, 9 miles above station, using water from Fossil Creek.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	395	370	340	4,800	1,100	1,920	1,520	1,100				
2	313	350	350	2,460	894	11,900	4,670	1,350				
3	290	310	355	1,460	766	7,490	5,660	1,480				
4	280	300	350	1,080	658	3,840	4,560	1,420				
5	4,450	280	345	850	586	3,600	3,840	1,440				
6	4,120	260	334	734	565	3,840	2,760	1,140				
7	1,260	258	313	688	1,710	2,960	2,010	904				
8	743	262	304	565	2,960	1,740	1,550	766				
9	580	262	304	506	1,880	1,280	1,300	726				
10	440	249	313	539	1,360	1,160	1,180	-				
11	380	249	472	765	1,420	1,140	1,210	-				
12	340	266	3,000	1,680	2,680	1,040	8,340	-				
13	300	258	3,340	1,980	3,280	2,550	15,100	-				
14	290	253	1,630	1,460	2,010	23,000	13,300	-				
15	280	253	1,000	1,220	1,590	24,800	13,700	-				
16	250	262	743	1,080	3,810	9,060	15,000	-				
17	255	262	850	816	3,390	4,440	11,200	-				
18	250	266	2,780	635	2,760	3,390	4,820	-				
19	250	389	2,150	513	2,560	2,660	3,070	-				
20	220	1,320	1,320	464	3,760	2,380	2,120	-				
21	230	1,080	890	434	12,000	2,100	1,740	-				
22	230	863	682	401	8,530	1,700	1,500	-				
23	230	736	582	390	6,060	1,440	1,330	-				
24	225	608	3,960	384	3,720	1,460	1,240	-				
25	230	570	13,300	1,160	6,800	1,600	1,270	-				
26	350	544	6,210	1,700	5,770	1,510	1,370	-				
27	820	480	2,620	1,200	3,070	1,220	1,800	-				
28	1,100	424	1,570	1,270	2,090	1,150	1,700	-				
29	907	383	1,150	1,630	-	1,160	1,490	-				
30	696	350	2,470	1,640	-	1,100	1,260	-	†178			
31	474	-	5,300	1,420	-	1,120	-	-				

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	21,178	4,450	220	683	42,010
November	12,717	1,320	249	424	25,220
December	59,327	13,300	304	1,914	117,700
Calendar year 1940	183,049	13,300	73	500	363,100
January	35,924	4,800	384	1,159	71,250
February	87,779	12,000	565	3,135	174,100
March	129,650	24,800	1,040	4,182	257,200
April	131,610	15,100	1,180	4,387	261,000
May 1-9	10,326	1,480	726	1,147	20,480
June	-	-	-	-	-
July	-	-	-	-	-
August	-	-	-	-	-
September	-	-	-	-	-
The period	-	-	-	-	969,000

Peak discharge.- Dec. 25 (3:30 a.m.) 18,900 sec.-ft.; Feb. 21 (5:50 p.m.) 17,900 sec.-ft.; Mar. 2 (11:10 a.m.) 21,600 sec.-ft.; Mar. 14 (10:30 p.m.) 49,700 sec.-ft.; Apr. 13 (6:30 p.m.) 17,400 sec.-ft.; Apr. 16 (8:20 a.m.) 18,400 sec.-ft.

† Result of discharge measurement.

Note.- No gage-height record Oct. 10-26, Nov. 1-6; discharge computed on basis of known upper limit of discharge and comparison with records for stations at Camp Verde and above Bartlett Reservoir near Cave Creek.

Verde River above Bartlett Reservoir, near Cave Creek, Ariz.

Location.- Water-stage recorder, lat. 33°57', long. 111°41', in SE¼ sec. 13, T. 7 N., R. 6 E., unsurveyed, 16 miles upstream from Bartlett Dam and 17 miles northeast of Cave Creek post office. Datum of gage is 1,829.5 feet above mean sea level, datum of 1929.

Drainage area.- 6,040 square miles.

Records available.- September 1938 to September 1941. February 1925 to February 1939, (prior to closing of Bartlett Dam) at site 21 miles downstream, published as Verde River above Camp Creek near McDowell, Ariz. (drainage area, 6,180 square miles). Records were also obtained August to September 1889, January 1895 to November 1899, January 1901 to February 1925, at site 38 miles downstream and three-quarters of a mile upstream from mouth, published as Verde River near McDowell, Ariz. (drainage area, 6,620 square miles).

Average discharge.- 16 years (1925-41), 660 second-feet.

Extremes.- Maximum discharge during year, 43,800 second-feet Mar. 14 (gage height, 17.85 feet); minimum, 114 second-feet, Sept. 8 (gage height, 3.79 feet).

1938-41: Maximum discharge, 100,000 second-feet Mar. 3, 1938 (gage height, 25.0 feet, from floodmarks), based on comparison with other stations on Verde River; minimum, 56 second-feet, July 18, 1939 (gage height, 2.55 feet).

Flood of Mar. 3, 1938, is known to be the highest, at least since 1924.

Remarks.- Records excellent. Small diversions above station. Low flow slightly regulated by power plant, 45 miles above station, using water from Fossil Creek. During the year 89 discharge measurements were made.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	524	457	353	6,610	1,440	2,360	1,210	1,330	271	173	232	173
2	376	382	340	3,500	1,120	11,000	3,340	1,330	259	176	207	149
3	316	348	344	2,050	898	10,400	6,710	1,730	259	170	194	156
4	302	308	357	1,480	776	5,750	4,960	1,800	247	168	203	156
5	2,190	305	348	1,120	679	5,110	4,200	1,600	235	163	575	158
6	6,290	285	340	933	630	4,840	3,200	1,330	241	176	244	166
7	1,770	270	324	813	1,580	3,900	2,350	1,140	241	227	267	170
8	968	270	308	735	3,250	2,580	1,750	920	235	221	205	131
9	697	267	289	679	2,410	1,850	1,510	800	221	180	330	151
10	562	259	308	646	1,710	1,530	1,380	707	244	176	539	178
11	439	245	390	776	1,530	1,440	1,330	651	241	168	490	173
12	378	256	1,550	1,330	1,910	1,450	7,460	585	227	168	406	166
13	344	259	4,280	2,210	3,400	2,500	16,700	536	218	176	345	168
14	301	256	2,140	1,710	2,480	21,200	15,600	495	216	153	338	531
15	269	245	1,340	1,310	1,800	30,200	13,600	430	199	191	321	1,600
16	278	249	933	1,190	3,100	12,500	15,200	398	178	180	278	947
17	256	256	735	968	3,900	5,740	11,500	370	176	178	284	688
18	259	256	2,450	813	2,970	4,110	5,550	360	173	213	259	472
19	249	278	2,640	674	2,970	3,280	3,590	318	178	176	268	386
20	249	860	1,790	563	3,300	2,780	2,590	324	178	173	253	370
21	218	1,190	1,150	519	9,280	2,290	2,060	324	176	151	227	332
22	228	968	832	480	10,500	1,960	1,750	328	176	168	207	256
23	232	832	679	457	7,310	1,650	1,600	335	168	176	196	271
24	228	657	2,370	452	4,420	1,420	1,460	342	176	236	186	271
25	225	604	14,500	644	7,240	1,560	1,420	328	191	394	160	271
26	408	553	7,810	1,850	7,400	1,560	1,670	310	183	490	160	253
27	601	514	3,260	1,290	4,080	1,380	1,660	328	183	590	166	238
28	1,230	466	2,050	1,290	2,750	1,210	1,800	304	176	488	158	299
29	1,040	412	1,440	1,760	-	1,210	1,560	284	170	486	234	271
30	764	378	3,500	1,900	-	1,170	1,420	287	166	342	173	304
31	578	-	8,030	1,600	-	1,140	-	284	-	268	196	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	22,789	6,290	218	735	45,200
November	12,885	1,190	245	430	25,560
December	67,180	14,500	289	2,167	133,200
Calendar year 1940	192,717	14,500	68	527	382,200
January	42,522	6,610	452	1,372	84,340
February	94,833	10,500	630	3,387	188,100
March	151,070	30,200	1,140	4,873	299,600
April	140,130	16,700	1,210	4,671	277,900
May	20,608	1,800	284	665	40,880
June	6,204	271	166	207	12,310
July	7,395	590	151	239	14,670
August	8,301	575	158	268	16,460
September	9,845	1,600	131	328	19,530
Water year 1940-41	583,762	30,200	131	1,599	1,158,000

Peak discharge.- Oct. 6 (3:45 a.m.) 11,800 sec.-ft.; Dec. 25 (2:30 a.m.) 19,600 sec.-ft.; Feb. 22 (12:15 a.m.) 16,000 sec.-ft.; Mar. 2 (4:30 p.m.) 23,400 sec.-ft.; Mar. 14 (10 p.m.) 43,800 sec.-ft.; Apr. 13 (8:30 p.m.) 22,300 sec.-ft.

Bartlett Reservoir at Bartlett Dam, Ariz.

Location.- Water-stage recorder, lat. 33°49', long. 111°38', in sec. 34, T. 6 N., R. 7 E., unsurveyed, at Bartlett Dam on Verde River. Datum of gage is 1,610.00 feet (adjustment of 1912), or 1,609.46 feet (datum of 1929) above mean sea level.

Drainage area.- 6,160 square miles at Bartlett Dam.

Records available.- July 1939 to September 1941.

Extremes.- Maximum contente during year, 184,800 acre-feet Feb. 17 (gage height, 188.80 feet); minimum, 1,760 acre-feet Oct. 4 (gage height, 28.77 feet).
1939-41: Maximum contents, that of Feb. 17, 1941; no storage at times.

Remarks.- Reservoir is formed by concrete multiple-arch dam; storage began Feb. 5, 1939; dam completed in May 1939. Capacity, 182,600 acre-feet between gage heights 0.0 (sill of outlet gates) and 188.0 feet (top of spillway gates). Natural flow passing through reservoir when outlet gates are open prevents withdrawal of storage to elevation of gate sill. No dead storage. Water is used for irrigation of lands below reservoir and for municipal supply. Figures given herein represent usable contents in reservoir except that storage above 182,600 acre-feet is uncontrolled.

Contents at 12 p.m. in acre-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2,380	15,400	14,700	143,400	182,700	183,000	182,100	182,900	183,300	131,400	98,600	64,800
2	2,150	15,100	14,900	150,200	182,600	182,900	183,700	182,200	183,200	129,400	96,700	63,600
3	1,820	14,600	14,800	154,300	182,800	182,700	183,900	183,000	182,400	127,500	94,800	61,900
4	1,770	13,900	14,300	157,100	182,900	183,100	183,600	183,600	180,900	125,900	92,600	59,800
5	5,190	12,900	13,800	159,200	183,000	182,700	183,500	182,800	179,400	124,300	91,400	57,800
6	17,400	11,900	13,400	160,900	183,000	182,700	183,100	183,400	178,100	122,800	90,100	55,400
7	20,800	10,800	13,000	162,400	183,900	182,700	182,800	183,400	176,800	120,900	88,800	52,900
8	22,300	9,540	12,800	163,700	184,200	182,800	182,900	183,100	175,400	119,000	88,200	50,300
9	23,000	8,450	12,800	165,000	182,900	183,000	183,100	182,500	174,100	116,800	87,700	47,400
10	23,100	7,610	12,800	166,100	183,200	182,900	182,900	183,400	172,400	114,700	88,900	44,500
11	22,300	7,800	13,300	167,200	182,700	183,000	182,900	183,700	170,400	112,800	89,900	41,400
12	21,100	8,150	15,200	169,100	183,000	183,100	183,400	183,400	168,900	111,100	90,800	38,200
13	20,100	8,380	23,600	173,000	183,700	183,600	183,100	183,000	166,900	109,400	91,000	35,300
14	18,900	8,520	27,800	176,100	182,600	183,600	183,400	183,000	165,400	107,300	91,000	33,700
15	18,000	8,660	30,300	178,300	182,600	183,000	183,400	183,100	163,900	105,100	91,200	35,300
16	17,000	8,940	31,900	180,300	184,600	183,300	182,700	183,000	162,300	102,800	91,100	35,100
17	16,000	9,160	33,200	181,600	182,700	183,600	182,700	182,800	160,200	101,000	91,000	34,000
18	15,100	8,860	37,200	182,500	182,900	183,000	182,800	182,800	157,800	100,300	90,300	32,300
19	14,300	8,910	42,100	182,700	183,100	183,200	182,900	182,900	165,400	99,500	89,300	30,300
20	13,700	9,790	45,200	182,800	183,100	183,400	182,800	183,000	153,200	98,800	87,600	28,200
21	13,100	11,500	47,000	182,700	182,900	183,000	182,700	183,200	151,200	97,500	85,400	26,300
22	12,200	12,700	48,100	182,600	182,900	183,100	182,800	183,200	149,500	95,600	83,200	24,200
23	11,300	13,800	49,000	182,500	182,700	183,400	183,100	183,300	147,600	94,400	81,100	22,000
24	10,400	14,400	53,000	182,600	182,800	183,400	183,100	183,300	145,600	94,700	79,000	19,500
25	9,600	14,900	82,400	182,700	182,700	183,500	182,900	183,400	143,500	95,700	76,700	17,400
26	9,550	15,200	96,900	183,600	182,700	183,500	183,200	183,400	141,300	96,600	74,500	15,500
27	10,100	15,200	103,100	182,400	182,700	183,100	182,900	183,400	139,200	97,800	72,300	13,900
28	12,400	14,800	105,600	182,600	182,700	182,600	183,300	183,400	137,300	98,600	70,100	14,000
29	13,800	14,400	106,800	183,500	-	182,600	182,800	183,400	135,400	99,600	68,300	14,400
30	14,900	14,400	115,100	183,600	-	182,600	182,700	183,300	133,500	100,200	67,100	15,000
31	15,400	-	131,300	183,300	-	182,400	-	183,300	-	100,100	65,900	-

Monthly gage height and contents, water year October 1940 to September 1941

Date	Gage height (feet)†	Contents (acre-feet)	Change in contents during month (acre-feet)
Sept.30	31.55	2,250	-
Oct. 31	71.50	15,400	+13,150
Nov. 30	69.40	14,400	-1,000
Dec. 31	167.44	131,300	+116,900
Calendar year 1940	-	-	+130,600
Jan. 31	188.26	183,300	+52,000
Feb. 28	188.04	182,700	-600
Mar. 31	187.91	182,400	-300
Apr. 30	188.04	182,700	+300
May 31	188.26	183,300	+600
June 30	168.43	133,500	-49,800
July 31	151.86	100,100	-33,400
Aug. 31	130.31	65,900	-34,200
Sept.30	70.63	15,000	-50,900
Water year 1940-41	-	-	+12,800

† Gage height at midnight.

Verde River above Camp Creek, near McDowell, Ariz.

Location.- Water-stage recorder, lat. 33°47', long. 111°39', in sec. 16, T. 3 N., R. 7 E., unsurveyed, half a mile upstream from Camp Creek, 5.3 miles downstream from Bartlett Dam, and 10 miles north of McDowell. Datum of gage is 1,529.8 feet above mean sea level, datum of 1929.

Drainage area.- 6,180 square miles.

Records available.- February 1925 to September 1941. August to September 1889, January 1895 to November 1899, and January 1901 to February 1925, at site 17 miles downstream, and three-quarters of a mile above mouth.

Average discharge.- 38 years (1903-41), 806 second-feet (adjusted for storage in Bartlett Reservoir since 1939).

Extremes.- Maximum discharge during year, 45,800 second-feet (regulated) Mar. 15 (gage height, 17.07 feet); minimum, 4 second-feet (regulated) Aug. 12.

1897-1939 (unregulated): Maximum discharge at site near mouth, 96,000 second-feet (estimated) Nov. 27, 1905; at present site, 95,000 second-feet Mar. 4, 1938 (gage height, 21.9 feet) from rating curve extended above 44,000 second-feet on basis of slope-area computation, velocity-area studies, logarithmic extension, and relation of mean depth to discharge per unit width, verified by comparison of peak discharge and total run-off of flood with peak discharge and total run-off of flood at other stations on the Verde River and at stations on Salt and Gila Rivers; minimum, 32 second-feet July 19 and 20, 1904.

1939-41 (regulated): Maximum discharge, that of Mar. 15, 1941; minimum, 3 second-feet Dec. 22-26, 1940.

Remarks.- Records excellent except those for Aug. 7-10, which are good. Small diversions above station. Flow regulated at Bartlett Dam since Feb. 5, 1939. (see p. 293). Discharge over spillway at Bartlett Dam occurred during period Jan. 19 to June 2, 1941. During the year 56 discharge measurements were made.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	523	453	181	26	1,760	2,140	1,350	1,150	269	1,170	838	731
2	523	568	225	18	1,240	10,200	2,560	1,210	269	1,160	1,160	723
3	512	591	374	14	908	9,870	7,250	1,860	597	1,070	1,160	970
4	353	717	614	13	748	4,840	4,780	1,560	880	952	1,190	1,230
5	156	819	626	14	742	5,120	4,450	2,000	970	952	1,140	1,190
6	65	819	568	13	742	4,560	3,870	1,110	854	943	907	1,350
7	220	908	512	11	1,430	4,040	2,900	1,150	854	1,040	836	1,400
8	248	942	408	10	2,960	2,460	2,260	1,120	854	1,200	475	1,400
9	326	860	353	14	3,250	1,680	1,600	1,100	872	1,250	375	1,550
10	505	767	270	45	1,570	1,600	1,660	252	926	1,240	27	1,660
11	853	190	159	82	1,660	1,360	1,660	450	1,140	1,090	8	1,720
12	942	65	202	82	1,620	1,470	7,060	691	1,060	1,030	5	1,720
13	873	115	117	76	2,780	2,120	16,900	666	1,070	997	225	1,720
14	866	164	115	64	3,250	19,600	16,100	419	1,040	1,160	332	1,300
15	813	161	124	74	1,710	32,700	13,700	425	934	1,350	260	988
16	806	101	166	117	1,760	13,900	15,700	425	961	1,350	321	1,050
17	774	89	175	234	4,930	5,830	11,300	425	1,190	1,250	340	1,300
18	742	413	142	290	2,710	4,520	5,960	388	1,300	700	549	1,300
19	680	260	153	537	2,600	3,230	3,830	241	1,300	655	744	1,350
20	585	217	252	448	3,170	2,730	2,840	241	1,250	644	1,050	1,400
21	534	318	302	534	9,040	2,820	2,260	255	1,140	1,030	1,250	1,230
22	692	302	298	528	10,800	2,030	1,850	269	1,010	1,400	1,250	1,300
23	736	290	248	511	7,500	1,550	1,500	274	1,010	987	1,250	1,350
24	748	298	103	478	4,640	1,600	1,500	285	1,110	82	1,240	1,400
25	680	327	24	585	6,950	1,600	1,450	300	1,170	23	1,230	1,350
26	544	375	165	1,300	7,200	1,660	1,420	300	1,180	18	1,240	1,170
27	211	517	608	1,970	4,240	1,770	1,920	295	1,160	15	1,250	1,040
28	194	656	742	1,290	2,560	1,470	1,790	300	1,100	11	1,230	423
29	135	662	723	1,300	-	1,120	1,880	285	1,050	8	1,170	73
30	248	442	356	1,810	-	1,120	1,500	279	1,070	6	755	71
31	380	-	66	1,980	-	1,250	-	274	-	414	795	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	16,467	942	65	531	32,660
November	13,406	942	65	447	26,590
December	9,373	742	24	302	18,590
Calendar year 1940	126,323	1,650	5	345	250,500
January	14,448	1,970	10	466	28,660
February	94,470	10,800	742	3,370	187,400
March	151,960	32,700	1,120	4,902	301,400
April	144,800	16,900	1,350	4,827	287,200
May	19,999	2,000	241	645	39,670
June	29,589	1,300	269	986	58,690
July	25,197	1,400	5	813	49,980
August	24,602	1,250	5	794	48,800
September	35,459	1,720	71	1,182	70,330
Water year 1940-41	579,770	32,700	5	1,588	1,150,000

Peak discharge.- Feb. 22 (4 a.m.) 16,300 sec.-ft.; Mar. 2 (5:50 p.m.) 23,100 sec.-ft.; Mar. 15 (1:15 a.m.) 45,800 sec.-ft.; Apr. 12 (8:15 p.m.) 21,700 sec.-ft.; Apr. 13 (10:50 p.m.) 24,300 sec.-ft.; Apr. 16 (3 p.m.) 19,800 sec.-ft.

Note.- Increase in contents in Bartlett Reservoir during calendar year 1940 was equivalent to a mean discharge of 180 second-feet; increase during water year 1940-41 was equivalent to a mean discharge of 17.6 second-feet.

Granite Creek near Prescott, Ariz.

Location.- Water-stage recorder, lat. 34°34', long. 112°27', in SW¼ sec. 26, T. 14 N., R. 2 W., unsurveyed, at highway bridge, 2 miles north of Prescott and 4½ miles upstream from Willow Creek. Datum of gage is 5,207.3 feet above mean sea level (Arizona Highway Department bench mark).

Drainage area.- 39 square miles.

Records available.- July 1932 to July 1941 (discontinued).

Extremes.- Maximum discharge during period, 1,530 second-feet Mar. 1 (gage height, 7.00 feet), from rating curve extended above 500 second-feet; no flow on several days in October and November.

1932-41: Maximum discharge, 2,900 second-feet Feb. 7, 1937, from rating curve extended above 1,500 second-feet; no flow during part of each year.

Remarks.- Records good. City of Prescott takes water for municipal supply from storage reservoirs on tributaries of creek. Water stored for irrigation in reservoir 3 miles below station (capacity, about 4,000 acre-feet).

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	1	2	86	31	256	38	17	2	0.6		
2	0	.7	2	55	26	330	103	16	2	.6		
3	0	0	2	40	23	134	82	14	2	.6		
4	9	0	1	32	20	96	55	14	2	-		
5	129	.1	1	31	19	99	48	12	2	-		
6	16	.2	1	25	22	78	38	10	2	-		
7	5	0	1	22	41	58	30	10	2	-		
8	2	0	1	19	34	44	25	9	2	-		
9	1	0	1	18	29	38	20	8	2	-		
10	.6	0	1	19	26	31	18	8	2	-		
11	.3	.2	19	51	36	26	80	8	2	-		
12	.2	.1	38	50	44	28	158	7	1	-		
13	.2	0	35	43	35	100	261	7	1	-		
14	.1	0	19	37	29	364	184	6	1	-		
15	.1	0	12	33	33	262	147	6	1	-		
16	0	0	11	26	30	123	150	6	1	-		
17	0	0	57	21	27	80	110	5	1	-		
18	.1	.3	46	19	24	58	82	5	.9	-		
19	.1	6	28	17	26	42	60	5	.9	-		
20	.1	5	21	15	73	34	47	5	.8	-		
21	.1	4	16	14	212	27	40	5	.7	-		
22	0	4	13	13	131	24	34	6	.7	-		
23	0	5	12	12	83	19	28	5	.7	-		
24	0	5	167	48	120	18	24	4	.7	-		
25	0	5	142	82	134	16	21	4	.7	-		
26	39	4	63	53	103	14	36	4	.7	-		
27	11	3	40	41	77	13	33	3	.6	-		
28	6	3	31	42	58	11	26	3	.6	-		
29	3	3	38	51	-	11	21	2	.6	-		
30	2	2	71	45	-	10	18	2	.6	-		
31	2	-	128	38	-	12	-	2	-	-		

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	226.9	129	0	7.32	450
November	51.6	6	0	1.72	102
December	1,020	167	1	32.9	2,020
Calendar year 1940	1,984.2	167	0	5.42	3,930
January	1,098	86	12	35.4	2,180
February	1,546	212	19	55.2	3,070
March	2,456	364	10	79.2	4,870
April	2,017	261	18	67.2	4,000
May	218	17	2	7.0	432
June	37.2	2	.6	1.24	73.8
July 1-3	1.8	.6	.6	.6	3.6
August	-	-	-	-	-
September	-	-	-	-	-
The period	-	-	-	-	17,200

Peak discharge.- Oct. 5 (5 a.m.) 530 sec.-ft.; Dec. 24 (4:10 p.m.) 616 sec.-ft.; Feb. 21 (5:15 a.m.) 487 sec.-ft.; Mar. 1 (10:30 p.m.) 1,530 sec.-ft.; Mar. 14 (1:35 p.m.) 579 sec.-ft.; Apr. 13 (5:40 p.m.) 499 sec.-ft.

Oak Creek near Cornville, Ariz.

Location.- Water-stage recorder, lat. 34°46', long. 111°53', in SE¼ sec. 23, T. 16 N., R. 4 E., at bridge 0.2 mile upstream from Page Springs, 4 miles northeast of Cornville, and 11 miles upstream from mouth.

Drainage area.- 357 square miles.

Records available.- July 1940 to September 1941.

Extremes.- Maximum discharge during year, 5,280 second-feet Mar. 14 (gage height, 7.36 feet); minimum, 10 second-feet June 23, 24 (gage height, 2.16 feet).
1940-41: Maximum discharge, that of Mar. 14, 1941; minimum, 6 second-feet July 27, 1940 (gage height, 1.98 feet).
Maximum stage known, 23 feet (from floodmarks) Mar. 3, 1938.

Remarks.- Records good except those for period of no gage-height record, which are fair. Several small diversions above station for irrigation.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	42	43	49	388	134	717	a200	96	21	16	17	18
2	42	39	47	210	112	1,650	584	82	20	15	17	17
3	39	37	45	148	102	568	785	79	20	15	17	16
4	40	36	42	100	95	378	770	86	19	15	17	17
5	1,790	36	40	83	91	341	825	108	20	14	20	17
6	352	37	39	115	125	360	531	82	28	16	22	16
7	97	37	38	78	468	279	a240	65	25	16	23	16
8	59	37	37	63	313	210	a200	53	27	17	25	15
9	45	36	36	71	210	210	a170	45	28	17	28	16
10	40	39	38	102	197	230	a140	39	28	18	42	16
11	38	38	262	205	299	a180	a230	37	23	18	38	16
12	37	39	748	312	749	a170	1,490	34	18	20	29	18
13	37	38	431	222	388	976	1,320	31	17	17	25	154
14	37	38	264	170	236	2,840	752	24	18	19	23	96
15	36	38	161	156	373	1,660	1,170	23	18	20	25	58
16	36	39	100	114	711	537	2,140	21	17	19	26	39
17	36	38	475	83	474	376	1,570	20	17	18	24	34
18	36	40	927	61	467	366	651	20	16	17	24	101
19	35	464	364	53	445	415	363	20	17	18	22	56
20	34	242	204	50	1,490	426	241	21	17	18	20	37
21	34	188	128	50	2,440	343	180	23	16	16	16	31
22	31	169	95	50	1,180	a230	a140	23	14	14	16	30
23	31	116	80	50	936	260	a120	23	11	13	17	30
24	31	104	506	66	991	325	a100	23	16	20	17	30
25	31	109	1,560	277	1,100	329	a100	23	16	24	17	30
26	35	83	442	170	666	a210	a130	24	14	23	17	30
27	80	64	246	182	422	a140	240	23	14	21	16	27
28	24e	52	167	190	382	a150	230	21	16	20	16	30
29	132	46	139	203	-	a180	200	21	17	18	18	77
30	76	46	401	199	-	a140	120	21	18	16	19	35
31	52	-	528	164	-	a170	-	21	-	16	21	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	3,689	1,790	31	119	7,320
November	2,370	464	36	79.0	4,700
December	8,639	1,560	36	279	17,140
Calendar year	-	-	-	-	-
January	4,385	388	50	141	8,700
February	15,596	2,440	91	557	30,930
March	15,366	2,840	140	496	30,480
April	15,932	2,140	100	531	31,600
May	1,232	108	20	39.7	2,440
June	566	28	11	18.9	1,120
July	546	24	13	17.6	1,080
August	674	42	16	21.7	1,340
September	1,125	154	15	37.5	2,230
Water year 1940-41	70,120	2,840	11	192	139,100

Peak discharge.- Oct. 5 (9 a.m.) 4,100 sec.-ft.; Dec. 25 (3 a.m.) 3,300 sec.-ft.; Feb. 21 (5 a.m.) 3,410 sec.-ft.; Mar. 1 (12 p.m.) 3,980 sec.-ft.; Mar. 14 (9:40 a.m.) 5,280 sec.-ft.; Apr. 16 (8:30 p.m.) 3,860 sec.-ft.

a No gage-height record; discharge computed on basis of known upper limit of discharge, adjacent record, and weather records.

Diversion for city of Phoenix from Verde River, at McDowell, Ariz.

Location.- Water-stage recorder and weir, lat. 33°34', long 111°40', in NE¼ sec. 30, T. 3 N., R. 7 E., on canal, 2 miles northwest of mouth of Verde River, 3.9 miles downstream from intake, and 4¾ miles south of McDowell.

Records available.- February 1922 to September 1941 (monthly diversion).

Remarks.- Water is diverted from infiltration galleries and shallow wells on right bank of Verde River in SE¼ sec. 6, T. 3 N., R. 7 E., three-quarters of a mile downstream from McDowell and 6¾ miles upstream from mouth of Verde River for municipal supply of Phoenix and is carried 29 miles to that city by pipe line. Negligible amount of waste occurs below point of measurement.

Cooperation.- Records collected by city of Phoenix and furnished by Salt River Valley Water Users' Association.

Monthly diversions, in second-feet, water year October 1940 to September 1941

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	30	14	21.5	1,320
November	22	15	19.0	1,130
December	19	10	14.5	892
Calendar year 1940	46	0	26.7	19,420
January	21	0	15.9	979
February	22	16	19.1	1,060
March	26	9	19.1	1,170
April	44	0	21.9	1,300
May	36	14	28.3	1,740
June	42	16	35.2	2,100
July	49	20	36.9	2,270
August	44	24	35.0	2,150
September	39	13	27.5	1,690
Water year 1940-41	49	0	24.5	17,800

Diversions from Salt River at Granite Reef Dam, Ariz.

Location.- Water-stage recorders at heads of Arizona and South canals, which divert on right and left banks, respectively, at Granite Reef Dam on Salt River, in lat. 33°31', long. 111°42', 3½ miles downstream from Verde River.

Records available.- January 1913 to September 1941 (monthly diversion).

Remarks.- Records given herein are those of discharge at the two gaging stations less flow returned from the canals to the river by wasteways between stations and irrigated lands and represent the flow diverted from Salt River for irrigation in Salt River Valley. Discharge at gaging stations computed on basis of gage heights and 108 current-meter measurements; flow returned to river at canal wasteway computed from records for rated gates or weirs.

Flow at Granite Reef Dam is regulated by Roosevelt Dam, completed in 1913, and three other dams on Salt River between Roosevelt Dam and mouth of Verde River (see p. 286), namely, Mormon Flat Dam, completed in 1925, Horse Mesa Dam, completed in 1927, and Stewart Mountain Dam, completed in 1930, and by Bartlett Dam on Verde River, completed in 1939.

Cooperation.- Records furnished by Salt River Valley Water Users' Association.

Monthly diversions, in second-feet, water year October 1940 to September 1941

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	965	135	582	35,820
November	869	265	533	31,740
December	701	0	288	17,700
Calendar year 1940	1,860	0	818	594,000
January	1,720	51	425	26,110
February	1,590	482	1,073	59,610
March	1,770	0	694	42,650
April	2,950	660	1,735	103,200
May	3,120	1,420	2,446	150,500
June	2,880	2,070	2,592	154,200
July	2,990	697	2,319	142,600
August	3,040	1,330	2,411	148,200
September	3,460	1,050	2,686	159,800
Water year 1940-41	3,460	0	1,481	1,072,000

Agua Fria River near Mayer, Ariz.

Location.- Water-stage recorder, lat. 34°19', long. 112°04', in NW¼SE¼ sec. 20, T. 11 N., R. 3 E., at Sycamore dam site, 700 feet downstream from Bigbug Creek and 12 miles southeast of Mayer. Altitude of gage, 3,434 feet (levels by Maricopa County Municipal Water Conservation District No. 1).

Drainage area.- 588 square miles.

Records available.- January 1940 to September 1941.

Extremes.- Maximum discharge during year, 13,000 second-feet Mar. 1 (gage height, 11.97 feet), by slope-area method; minimum, 0.2 second-foot Nov. 16.
1940-41: Maximum discharge, that of Mar. 1, 1941; minimum, 0.1 second-foot July 28-30 and Aug. 2-3, 1940.

Remarks.- Records good except those for Dec. 11 to Apr. 30 and those above 100 second-feet, which are fair. Diversions above station for irrigation and mining. Figures of daily discharge do not include water diverted just above station to Perry canal.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	a3	2	0.9	430	6	2,020	45	42	8	2	0.5	0.5
2	a3	2	2	130	5	910	70	45	7	2	.5	.5
3	a2	2	.8	70	5	250	150	40	7	2	.5	.5
4	a2	2	.7	40	5	120	60	38	5	2	78	.5
5	385	2	.7	27	5	210	48	39	9	2	54	.5
6	13	2	.7	19	5	180	45	34	13	2	25	.5
7	4	2	.5	11	160	100	40	31	10	9	19	.5
8	3	1	.5	7	130	70	40	29	8	14	144	.5
9	6	1	.7	6	50	70	25	27	7	15	110	.5
10	2	3	1	6	15	60	15	24	6	5	30	.5
11	.9	1	30	17	10	50	380	20	5	4	6	.5
12	.7	1	200	89	9	45	2,460	19	5	3	4	.5
13	.5	1	35	64	9	88	2,300	16	5	2	4	120
14	.5	.9	4	32	7	1,610	760	16	5	2	4	6
15	.5	.5	3	19	6	700	682	16	5	2	3	3
16	.5	.4	3	17	10	280	538	15	4	1	3	2
17	.5	.5	45	14	8	190	386	14	3	4	3	200
18	.5	.8	160	9	6	140	255	12	3	118	2	50
19	.5	2	20	7	20	120	200	10	3	17	2	6
20	.5	2	5	7	230	90	a150	10	2	5	2	5
21	.5	2	3	6	450	80	a100	10	3	1	1	4
22	.5	2	2	5	170	60	a80	13	3	1	1	4
23	.5	3	2	5	180	60	a60	11	3	.5	1	4
24	.5	2	1,250	7	120	55	a50	11	3	181	.5	4
25	.5	2	500	79	283	50	a40	16	2	17	.5	4
26	17	3	60	62	129	50	120	12	2	7	.5	4
27	8	2	15	25	62	40	a130	8	2	4	.5	4
28	2	2	8	23	43	35	a90	6	2	3	.5	6
29	2	2	7	67	-	35	a60	8	2	2	.5	7
30	2	2	550	40	-	30	a50	8	2	1	1	6
31	2	-	420	16	-	30	-	8	-	.5	.5	-

	Observed					Diversion by Perry canal (acre-feet)	Adjusted for diversion	
	Discharge				Runoff in acre-feet		Runoff in acre-feet	Mean (second-feet)
	Second-foot-days	Maximum	Minimum	Mean				
October	464.1	385	0.5	15.0	921	23	944	15.3
November	51.1	3	.4	1.70	101	30	131	2.20
December	3,330.5	1,250	.5	107	6,610	10	6,620	108
Calendar year 1940	7,381.6	1,250	.1	20.2	14,640	308	14,950	20.6
January	1,356	430	5	43.7	2,690	0	2,690	43.7
February	2,138	450	5	76.4	4,240	0	4,240	76.4
March	7,828	2,020	30	253	15,530	0	15,530	253
April	9,429	2,460	15	314	18,700	0	18,700	314
May	608	45	6	19.6	1,210	0	1,210	19.6
June	144	13	2	4.8	286	38	324	5.4
July	431	181	.5	13.9	855	38	893	14.5
August	502	144	.5	16.2	996	35	1,030	16.8
September	445	200	.5	14.8	883	3	886	14.9
Water year 1940-41	26,726.7	2,460	.4	73.2	53,020	177	53,200	73.5

Peak discharge.- Dec. 24 (8:10 p.m.) 6,830 sec.-ft.; Mar. 1 (10 p.m.) 13,000 sec.-ft.; Mar. 14 (5 p.m.) 7,100 sec.-ft.; Apr. 11 (11:50 p.m.) 4,200 sec.-ft.; Apr. 12 (4:40 p.m.) 3,660 sec.-ft.; Apr. 13 (6 p.m.) 4,480 sec.-ft.

a No gage-height record; discharge Oct. 1-4 computed on basis of recorded range in stage and weather records; Apr. 20-25, 27-30 on basis of known upper limit of discharge, adjacent good record, and weather records.

Agua Fria River at Lake Pleasant Dam, Ariz.

Location.- Staff gage, lat. 33°51', long. 112°16', in NW¼ sec. 21, T. 6 N., R. 1 E., at left upstream end of Lake Pleasant Dam, 24¼ miles upstream from mouth of New River. Datum of gage is 1,431.2 feet above mean sea level, datum of 1929.

Drainage area.- 1,460 square miles.

Records available.- November 1910 to September 1924 (published as Agua Fria River near Glendale, Ariz.), October 1933 to September 1941.

Extremes.- Maximum discharge known, about 105,000 second-feet Nov. 27, 1919; no flow during spring and summer of several years.

Remarks.- Records poor. Figures given herein represent flow into Lake Pleasant. Discharge computed on basis of three factors as follows: 1. Change in contents of Lake Pleasant and in contents of small reservoir behind diversion dam 1¼ miles downstream from Lake Pleasant. 2. (a) Release from Lake Pleasant as measured by water-stage recorder and sharp-crested rectangular weir in canal 650 feet downstream from intake at diversion dam, rated and frequently checked by a Clausen-Pierce weir rule; and (b) spill from Lake Pleasant as measured over diversion dam, computed from staff-gage readings of head and theoretical weir rating for the dam, checked by one discharge measurement. 3. Effect of rainfall and evaporation on lake; evaporation assumed as 0.7 of that measured once daily in 3-foot-square buried land pan near left end of Lake Pleasant Dam. Effect of bank storage and bank release in Lake Pleasant is not taken into account. Diversions above Lake Pleasant for irrigation.

Cooperation.- Records collected and prepared in cooperation with the Maricopa County Municipal Water Conservation District No. 1.

Monthly discharge, water year October 1940 to September 1941

Month	Mean (second-feet)	Runoff in acre-feet
October	60.2	3,700
November	5.5	328
December	309	19,000
Calendar year 1940	43.8	31,780
January	188	11,530
February	305	16,960
March	1,207	74,190
April	1,147	68,240
May	62.4	3,840
June	14.1	837
July	73.4	4,510
August	66.7	4,100
September	33.0	1,960
Water year 1940-41	289	209,200

Note.- Spill over Lake Pleasant diversion dam occurred Apr. 15 to May 13, 1941 and amounted to 10,370 acre-feet, which is included in the above table.

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Lake Pleasant at Lake Pleasant Dam, Ariz.

Location.- Staff gage, lat. 33°51', long. 112°16', in NW¼ sec. 21, T. 6 N., R. 1 E., at left upstream end of Lake Pleasant Dam on Agua Fria River. Datum of gage is 1,431.2 feet above mean sea level, datum of 1929.

Drainage area.- 1,460 square miles.

Records available.- February 1928 to September 1941.

Extremes.- Maximum contents during year, 178,500 acre-feet Apr. 19 (gage height, 170.13 feet) of which 500 acre-feet was uncontrolled storage; minimum, 73 acre-feet Dec. 3, 4. 1928-41: Maximum contents, that of Apr. 19, 1941; no storage Sept. 5, 1933, July 19 to Aug. 13, 1940.

Remarks.- Lake is formed by multiple-arch dam; dam completed and storage began in 1927. Capacity, 178,000 acre-feet between gage heights 57.0 feet (22.0 feet above center line of outlet works) and 170.0 feet (top of spillway gates). There is no storage below gage height 57.0 feet because of accumulated silt. Water released from reservoir flows down river channel 1¼ miles to diversion dam where it is diverted for irrigation near Beardsley. Figures given herein represent usable contents in Lake Pleasant except that storage above 178,000 acre-feet is uncontrolled. Contents of small reservoir formed by diversion dam is not included.

Cooperation.- Gage-height record furnished by Maricopa County Municipal Water Conservation District No. 1.

Contents at 5 p.m., in acre-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	690	1,740	213	21,900	31,100	48,400	122,000	178,000	172,600	156,000	135,900	115,900
2	694	1,720	126	23,000	31,400	68,900	122,400	178,200	172,300	155,300	135,200	115,200
3	694	1,690	73	23,500	31,600	73,200	123,300	178,200	171,900	154,500	134,500	114,400
4	696	1,670	73	23,800	31,800	74,900	123,900	178,100	171,600	153,900	133,700	113,600
5	2,610	1,610	76	24,000	31,900	81,300	124,300	178,000	171,100	153,300	133,300	112,700
6	3,510	1,570	85	24,300	32,100	84,200	124,900	177,900	170,700	152,600	132,700	112,000
7	3,610	1,550	94	24,600	32,400	85,800	125,000	177,900	170,300	151,800	132,200	111,200
8	3,630	1,520	99	24,700	33,200	86,900	125,100	177,800	169,900	151,100	131,600	110,500
9	3,600	1,450	107	24,800	33,600	87,600	125,400	177,700	169,400	150,400	131,100	109,700
10	3,420	1,400	116	24,900	33,900	88,200	125,600	177,600	169,100	149,700	131,200	108,900
11	3,330	1,380	131	25,100	34,100	88,700	125,700	177,500	168,600	148,800	130,700	108,100
12	3,240	1,340	142	25,400	34,300	89,300	135,500	177,400	168,100	148,000	130,100	107,300
13	3,160	1,270	413	25,900	34,500	90,300	151,100	177,400	167,600	147,200	129,400	106,600
14	3,060	1,200	516	26,300	34,700	92,800	166,400	177,400	167,100	146,400	128,900	106,100
15	2,950	1,130	555	26,600	34,900	110,000	171,500	177,300	166,500	145,600	128,000	105,500
16	2,840	1,060	577	26,800	35,100	114,100	175,000	177,200	166,000	144,700	127,400	104,900
17	2,750	1,030	598	26,900	35,300	115,800	177,800	177,000	165,400	144,000	126,900	104,100
18	2,640	964	900	27,000	35,500	117,200	178,400	176,800	164,800	143,200	126,200	103,700
19	2,520	901	1,200	27,100	35,700	118,100	178,500	176,500	164,300	142,400	125,600	103,200
20	2,440	847	1,320	27,200	36,200	118,900	178,300	176,100	163,700	141,700	124,800	102,700
21	2,360	779	1,380	27,300	37,700	119,400	178,100	175,900	163,000	140,900	124,200	102,300
22	2,220	722	1,420	27,400	39,200	119,900	178,000	175,700	162,400	140,200	123,500	101,800
23	2,140	671	1,440	27,500	40,500	120,300	177,900	175,400	161,800	139,400	122,700	101,300
24	2,070	613	1,510	27,600	41,400	120,500	178,100	175,200	161,000	139,600	121,900	100,700
25	1,980	571	9,770	28,000	43,900	120,800	178,100	174,900	160,300	139,800	121,200	100,100
26	1,890	523	11,000	28,500	45,700	121,000	178,200	174,600	159,600	139,400	120,500	99,400
27	1,860	462	11,300	29,000	47,000	121,200	178,200	174,300	158,800	138,900	119,800	98,900
28	1,860	400	11,500	29,200	47,800	121,300	178,200	174,000	158,100	138,400	118,900	98,600
29	1,820	335	11,600	29,700	-	121,400	178,100	173,600	157,500	137,800	118,200	98,300
30	1,790	264	13,400	30,300	-	121,600	178,100	173,300	156,700	137,100	117,500	97,900
31	1,760	-	19,200	30,800	-	121,700	-	173,000	-	136,500	116,800	-

Monthly gage height and contents, water year October 1940 to September 1941

Date	Gage height (feet)	Contents (acre-feet)	Change in contents during month (acre-feet)
Sept.30.....	61.49	661	-
Oct. 31.....	67.32	1,760	+1,099
Nov. 30.....	58.92	264	-1,496
Dec. 31.....	99.80	19,200	+18,936
Calendar year 1940...	-	-	+11,900
Jan. 31.....	109.89	30,800	+11,600
Feb. 28.....	120.95	47,800	+17,000
Mar. 31.....	152.21	121,700	+73,900
Apr. 30.....	170.03	178,100	+56,400
May 31.....	168.55	173,000	-5,100
June 30.....	163.73	156,700	-16,300
July 31.....	157.29	136,500	-20,200
Aug. 31.....	150.45	116,800	-19,700
Sept.30.....	143.47	97,900	-18,900
Water year 1940-41...	-	-	+97,200

Hassayampa River near Wagoner, Ariz.

Location.- Water-stage recorder, lat. 34°18', long. 112°34', in NE¼SE¼ sec. 9, T. 11 N., R. 3 W., at bridge on Kirkland Junction-Wagoner road, 5½ miles upstream from Milk Creek and 7½ miles upstream from Wagoner. Datum of gage is 3,741.51 feet above mean sea level, datum of 1929 (preliminary figure).

Drainage area.- 79 square miles.

Records available.- January 1940 to September 1941.

Extremes.- Maximum discharge during year, 1,700 second-feet Apr. 16 (gage height, 3.1 feet); minimum, 1 second-foot on many days.
1940-41: Maximum discharge, that of Apr. 16, 1941; minimum, 0.8 second-foot on several days in 1940.

Remarks.- Records fair except those for Mar. 15 to Sept. 30 and those above 100 second-feet, which are poor. Small diversions above station for irrigation.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2	1	1	13	18	250	73	50	17	7	6	5
2	1	1	1	16	17	490	100	40	17	6	6	4
3	1	1	1	16	21	100	89	40	17	6	6	5
4	6	1	1	7	20	65	81	40	17	5	6	5
5	90	2	1	3	12	70	100	35	17	5	7	5
6	36	1	1	3	10	85	81	35	18	5	6	4
7	14	1	1	2	12	110	61	33	15	7	6	3
8	2	1	1	2	8	250	44	29	14	5	5	3
9	2	1	1	2	7	120	36	28	13	4	30	3
10	2	1	1	3	7	60	30	28	13	4	30	3
11	2	1	1	3	7	92	75	26	12	5	12	2
12	1	1	2	7	6	40	214	28	10	5	9	7
13	1	1	1	10	5	70	166	26	9	5	6	35
14	2	1	1	10	4	230	297	23	10	4	5	25
15	2	1	1	13	4	180	590	23	9	4	5	8
16	1	1	1	11	6	120	670	21	9	4	5	6
17	1	1	2	10	3	120	260	21	8	4	4	4
18	2	1	1	7	2	140	180	20	7	4	5	5
19	2	1	1	6	2	140	150	20	7	3	7	5
20	1	1	1	4	20	100	100	20	6	3	7	4
21	2	1	1	3	250	90	90	21	6	25	6	3
22	2	1	1	2	230	80	90	22	6	9	5	3
23	2	1	1	1	150	100	95	22	5	9	5	3
24	2	1	20	1	190	100	150	21	5	13	5	4
25	2	1	60	12	160	100	90	21	5	9	5	4
26	2	1	15	10	80	55	85	19	6	8	5	4
27	2	1	10	9	50	45	89	18	6	6	5	3
28	2	1	2	9	60	40	76	17	6	5	5	4
29	2	1	2	17	-	40	65	17	6	5	50	4
30	2	1	4	21	-	37	55	17	7	5	8	3
31	1	-	10	20	-	38	-	17	-	5	5	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	192	90	1	6.2	381
November	31	2	1	1.0	61
December	148	60	1	4.8	294
Calendar year 1940	762.1	90	8	2.08	1,510
January	253	21	1	8.2	502
February	1,361	250	2	48.6	2,700
March	3,557	490	37	115	7,060
April	4,302	670	30	143	8,530
May	798	50	17	25.7	1,680
June	303	18	5	10.1	601
July	194	25	3	6.3	385
August	277	50	4	8.9	549
September	176	35	2	5.9	349
Water year 1940-41	11,592	670	1	31.8	22,990

Peak discharge.- Feb. 21 (7:30 p.m.) 850 sec.-ft.; Mar. 2 (12:05 a.m.) 1,250 sec.-ft.; Apr. 16 (4:30 a.m.) 1,700 sec.-ft.
Faulty intake action below about 100 second-feet, Mar. 15 to Sept. 30; discharge computed on basis of 13 discharge measurements and gage-height record of seepage into well.

Hassayampa River near Morristown, Ariz.

Location.- Water-stage recorder, lat. 33°53', long. 112°39', in SE¼ sec. 3, T. 6 N., R. 4 W., 600 feet downstream from San Domingo wash, 900 feet upstream from bridge of Atchison, Topeka, and Santa Fe R. R., and 3.0 miles northwest of Morristown (formerly known as Hot Springs Junction). Datum of gage is 1,831.16 feet above mean sea level, datum of 1929.

Drainage area.- 774 square miles.

Records available.- October 1938 to September 1941.

Extremes.- Maximum discharge during year, 6,100 second-feet Mar. 2 (gage height, 8.36 feet) by slope-area method; no flow on many days.
1938-41: Maximum discharge, 6,200 second-feet Sept. 6, 1939 (gage height, 8.7 feet) from rating curve extended above 1,600 second-feet on basis of slope-area measurement at gage height 8.36 feet; no flow on many days.

Remarks.- Records poor. Many small diversions above station for irrigation and mining.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	1	1	10	10	760	100	131	5	0	0	4
2	0	1	1	5	10	2,050	120	157	4	0	0	3
3	0	1	1	5	10	690	200	140	2	0	0	2
4	0	1	1	4	10	414	181	120	2	0	0	2
5	400	1	1	4	10	840	170	100	2	0	0	1
6	8	1	1	4	10	580	140	88	2	0	0	1
7	1	1	1	4	15	410	120	72	2	0	0	1
8	0	1	1	3	10	310	95	57	2	0	0	1
9	0	1	1	3	10	240	100	55	2	0	300	1
10	0	1	2	3	10	190	100	45	1	0	50	1
11	0	0	2	5	10	171	250	41	1	0	4	1
12	0	0	2	20	10	149	1,850	41	1	0	1	1
13	0	0	2	10	10	430	1,450	34	1	0	0	1
14	0	0	2	10	10	1,500	1,200	31	1	0	0	1
15	0	0	2	5	10	1,450	970	29	1	0	0	1
16	0	0	2	5	10	820	890	25	1	0	0	1
17	0	0	2	5	10	640	820	23	1	0	0	1
18	0	0	5	5	10	470	620	18	1	1	0	1
19	0	1	2	5	10	350	440	16	1	5	0	1
20	0	2	2	5	90	230	450	16	1	1	0	1
21	0	2	2	5	330	200	290	16	0	0	0	1
22	0	1	2	5	360	150	300	16	0	2	0	1
23	0	1	1	5	270	140	300	17	0	1	0	1
24	0	1	450	5	290	120	270	15	0	230	0	1
25	0	1	270	20	1,080	80	290	15	0	80	0	1
26	0	1	10	20	471	85	300	13	0	1	0	1
27	1	1	5	10	436	70	260	11	0	1	0	1
28	1	1	3	10	329	65	200	9	0	1	0	1
29	1	1	2	30	-	65	144	7	0	0	210	1
30	1	1	2	20	-	57	110	6	0	0	25	1
31	1	-	82	15	-	59	-	6	-	0	5	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	414	400	0	13.4	821
November	24	2	0	.8	48
December	863	450	1	27.8	1,710
Calendar year 1940	1,480.0	450	0	4.04	2,940
January	265	30	3	8.5	526
February	3,851	1,080	10	138	7,640
March	13,785	2,050	57	445	27,340
April	12,730	1,850	95	424	25,250
May	1,370	157	6	44.2	2,720
June	34	5	0	1.1	67
July	323	230	0	10.4	641
August	595	300	0	19.2	1,180
September	37	4	1	1.2	73
Water year 1940-41	34,291	2,050	0	93.9	68,020

Peak discharge.- Dec. 24 (9:30 p.m.) 3,350 sec.-ft.; Mar. 2 (12:20 a.m.) 6,100 sec.-ft.; Mar. 14 (7:20 p.m.) 4,060 sec.-ft.; Apr. 11 (11:50 p.m.) 3,020 sec.-ft.; Aug. 9 (7:40 p.m.) 3,460 sec.-ft.
Note.- No gage-height record at low and medium stages Oct. 1 to Nov. 26, Dec. 26 to Feb. 19 and Aug. 10 to Sept. 30; discharge computed on basis of discharge measurements and field estimates, weather records, adjoining record, records for Hassayampa River near Wagoner and Agua Fria River near Mayer, and (Aug. 11-16) recorded ground-water elevations.

Gillespie canal at Gillespie Dam, Ariz.

Location.- Water-stage recorder, lat. 33°14', long. 112°45', in SE¼NE¼ sec. 28, T. 2 S., R. 5 W., 200 feet downstream from head gates at Gillespie Dam. Datum of gage is 743.91 feet above mean sea level, datum of 1929.

Records available.- May 1935 to September 1941.

Extremes.- Maximum discharge during year, 209 second-feet Sept. 30 (gage height, 7.98 feet); no flow on several days.
1935-41: Maximum discharge, 280 second-feet Aug. 18, 1936 (gage height, 7.13 feet); no flow on several days during 1940-41.

Remarks.- Records good. Canal diverts water from left bank of Gila River at Gillespie Dam for irrigation near Gila Bend. For records of the other diversion at this dam, see Enterprise canal at Gillespie Dam on following page.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	42	52	92	93	160	164	179	169	193	131	133	133
2	37	52	91	110	163	157	180	168	193	130	120	126
3	37	52	86	122	167	169	178	168	194	127	116	116
4	41	55	87	131	168	171	178	171	197	123	122	113
5	77	53	89	135	168	164	174	166	42	125	127	108
6	116	53	89	136	167	170	174	166	164	122	118	104
7	74	51	91	162	166	167	173	170	192	118	118	99
8	58	52	91	188	168	168	174	172	203	112	126	94
9	52	53	88	182	166	170	172	172	204	105	152	89
10	52	55	86	168	166	169	174	170	204	106	180	88
11	52	53	87	161	166	171	176	166	203	106	191	90
12	51	57	89	161	166	170	176	168	201	107	189	91
13	51	66	96	168	168	166	170	172	198	103	188	92
14	50	61	94	172	168	158	160	174	195	98	191	95
15	51	55	88	172	167	150	156	168	191	98	192	96
16	50	54	90	173	164	150	167	172	187	96	192	93
17	50	54	96	172	166	106	175	174	185	99	192	94
18	48	58	99	172	168	82	168	149	182	109	194	91
19	48	59	102	172	166	88	172	0	180	113	191	88
20	49	64	105	171	164	142	170	73	174	112	186	119
21	49	187	106	171	166	166	169	175	168	111	188	182
22	50	125	111	170	166	166	168	171	164	105	191	178
23	49	0	114	169	167	109	174	176	157	104	192	160
24	49	36	128	168	154	119	175	175	150	108	184	130
25	46	97	109	168	135	186	172	178	145	148	169	110
26	45	102	0	168	171	186	176	182	143	174	148	102
27	47	95	42	174	168	187	175	184	142	184	131	100
28	52	88	86	179	168	186	179	188	140	190	124	100
29	53	94	113	148	-	124	181	191	136	184	119	117
30	54	98	57	164	-	88	176	192	134	177	120	172
31	55	-	66	166	-	176	-	193	-	152	122	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	1,635	116	37	52.7	3,240
November	2,031	187	0	67.7	4,030
December	2,768	128	0	89.3	5,490
Calendar year 1940	27,958	203	0	76.4	55,450
January	4,966	188	93	160	9,850
February	4,617	171	135	165	9,160
March	4,745	187	82	153	9,410
April	5,191	181	156	173	10,300
May	5,113	193	0	165	10,140
June	5,161	204	42	172	10,240
July	3,877	190	96	125	7,690
August	4,906	194	116	158	9,730
September	3,370	182	88	112	6,680
Water year 1940-41	48,380	204	0	133	95,960

Enterprise canal at Gillespie Dam, Ariz.

Location.- Water-stage recorder, lat. 33°13', long. 112°46', in SW¼NE¼ sec. 28, T. 2 S., R. 5 W., 600 feet downstream from intake at Gillespie Dam. Datum of gage is 732.15 feet above mean sea level, datum of 1929.

Records available.- June 1935 to September 1939 (discharge measurements only), October 1939 to September 1941.

Extremes.- Maximum daily discharge during year, 34 second-feet Mar. 17; no flow May 19, June 5.
1939-41: Maximum daily discharge, that of Mar. 17, 1941; no flow May 19, June 5, 1941.

Remarks.- Records good except those above 25 second-feet, which are poor. Canal diverts water from right bank of Gila River at Gillespie Dam for irrigation between dam and Gila Bend. For records of the other diversion at this dam, see Gillespie canal at Gillespie Dam, on preceding page.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	11	9.3	13	9.9	8.0	1.7	14	15	5.5	10	9.0	9.5
2	11	9.5	12	18	7.9	1.0	10	15	8.8	10	8.8	9.4
3	11	9.7	10	18	7.9	4.0	15	16	5.0	9.9	8.8	9.1
4	11	9.8	10	18	7.7	6.0	15	16	2.7	9.7	9.6	9.0
5	14	10	10	16	11	8.7	17	18	0	9.4	8.8	8.9
6	18	10	10	14	11	8.8	17	18	10	9.3	8.8	8.8
7	15	10	10	16	11	7.9	17	18	17	8.9	8.9	8.8
8	13	10	10	17	11	7.6	16	18	17	8.8	9.0	8.6
9	12	11	9.9	17	12	7.3	16	18	17	8.5	7.3	8.5
10	12	11	9.7	14	12	7.6	15	18	17	8.5	11	8.5
11	11	10	9.7	.6	10	13	11	18	16	8.6	11	8.5
12	12	10	9.9	.6	4.0	11	10	17	16	8.6	12	8.6
13	12	11	9.9	.6	5.9	7.4	15	17	13	8.5	11	8.6
14	12	10	9.9	5.6	5.8	11	17	16	12	8.3	11	8.8
15	12	9.7	9.6	17	2.7	8.0	18	16	12	8.6	11	8.8
16	12	9.8	9.6	16	.6	29	23	16	12	8.5	11	8.8
17	12	9.8	9.7	16	.6	34	24	15	12	8.6	10	8.8
18	11	10	9.7	16	.6	15	27	13	12	9.4	11	8.8
19	11	10	9.9	16	.5	5.7	15	0	12	10	11	8.7
20	11	10	9.9	15	1.2	4.1	5.8	1.0	12	9.9	11	9.1
21	11	18	9.9	15	.5	11	5.3	9.9	11	9.9	11	11
22	11	13	10	15	.5	14	12	13	11	9.6	10	11
23	10	.2	10	15	.5	9.7	16	12	11	9.7	9.9	11
24	10	3.1	8.8	15	2.1	8.5	15	11	11	9.9	9.9	9.6
25	9.8	14	1.9	11	1.7	13	15	8.6	10	11	9.8	9.2
26	9.8	14	.1	7.4	1.2	13	15	12	10	12	9.6	9.1
27	9.8	13	.7	7.6	1.2	13	15	15	10	12	9.3	9.1
28	9.8	13	1.2	7.6	1.1	12	14	14	10	11	9.2	9.2
29	9.2	13	1.3	7.6	-	7.8	15	12	10	11	9.1	9.5
30	9.5	13	4.0	7.6	-	4.2	15	9.4	10	10	9.1	11
31	9.3	-	1.4	7.9	-	15	-	9.0	-	9.5	9.2	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	353.2	18	9.2	11.4	701
November	314.9	18	.2	10.5	625
December	251.7	13	.1	8.12	499
Calendar year 1940	3,592.6	21	.1	9.82	7,130
January	378.0	18	.6	12.2	750
February	140.2	12	.5	5.01	278
March	320.0	34	1.0	10.3	635
April	455.1	27	5.3	15.2	903
May	424.9	18	0	13.7	843
June	333.0	17	0	11.1	660
July	297.6	12	8.3	9.60	590
August	306.1	12	7.3	9.87	607
September	276.3	11	8.5	9.21	548
Water year 1940-41	3,851.0	34	0	10.6	7,640

WHITEWATER DRAW BASIN

Whitewater Draw near Douglas, Ariz.

Location.- Water-stage recorder, lat. 31°21'15", long. 109°35'00", in SW¼SE¼ sec. 10, T. 24 S., R. 27 E., at bridge on U. S. Highway 80, 1½ miles upstream from international boundary and 2 miles west of Douglas. Datum of gage is 3,887.6 feet above mean sea level (Arizona Highway Department bench mark).

Drainage area.- 1,023 square miles.

Records available.- August 1911 to April 1922, June 1930 to December 1933, May 1935 to September 1941.

Extremes.- Maximum discharge during year, 2,750 second-feet Sept. 29 (gage-height, 10.27 feet); minimum, 0.2 second-foot July 1.
1930-41: Maximum discharge, 3,450 second-feet Aug. 10, 1931 (gage height, 12.15 feet); minimum, 0.1 second-foot May 26, June 9, 1937, July 11, 1939.
Maximum discharge known, 4,050 second-feet (estimated) July 27, 1919.

Remarks.- Records good except those above 500 second-feet, which are fair. Diversions above station for irrigation.

Discharge, in second-feet, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1	0.8	0.8	0.6	0.6	0.8	0.7	0.4	0.6	0.3	0.8	10
2	1	.8	.8	.7	.6	.8	.6	12	.6	.3	.8	2
3	.9	.8	.9	.6	.6	.8	.5	2	.5	.3	2	1
4	.9	.7	.8	.6	.6	.8	.5	.8	.5	.3	1	.6
5	.9	.7	.8	.6	.7	.8	.5	.7	.5	.3	2	.6
6	.9	.7	.8	.6	.6	.8	.5	.7	.5	.4	7	3
7	1	.8	.8	.7	4	.8	.4	.7	.5	.5	2	164
8	.9	.8	.8	.7	2	.8	.4	.7	.5	.3	1	94
9	.8	.8	.8	.8	.8	.8	.4	.7	.5	.3	1	7
10	.8	.8	.8	.8	.5	.8	.4	.7	.4	.4	1	2
11	.9	.8	.8	.9	.4	.8	.3	.7	.4	.4	1	2
12	.9	.9	.8	1	.3	.8	.5	.7	.4	.5	.7	1
13	.9	1	.8	.8	.3	.8	.5	.6	.4	5	1	2
14	.8	1	.8	.7	.3	.8	.3	.7	.4	1	7	12
15	.9	1	.8	.7	.3	.8	.3	.7	.4	10	2	2
16	.9	1	.8	.8	.3	1	.4	.7	.5	29	1	1
17	.9	1	.9	.8	.3	.8	.3	.8	.4	40	27	1
18	.9	1	.9	.7	.3	.8	.3	.8	.4	23	51	1
19	.9	.9	1	.6	.3	.8	.4	.8	.4	37	23	1
20	.9	.9	1	.6	.4	.8	.4	.8	.4	444	2	.8
21	.9	.9	1	.6	.4	.8	.4	.8	.4	33	30	.7
22	.9	.9	1	.6	.6	.9	.4	.8	.5	46	25	.7
23	.9	.9	1	.6	9	.8	.3	.8	.5	219	15	.7
24	.8	.8	1	.6	2	.6	.3	.8	.4	41	8	.7
25	.8	.8	.9	.6	.9	.6	.3	.8	.4	2	2	.7
26	.8	.8	.8	.6	.8	.6	.4	.8	.5	2	1	.7
27	.8	.8	.8	.6	.8	.6	.4	.6	.4	13	1	.7
28	.8	.8	.8	.8	.8	.6	.3	.6	.4	2	1	291
29	.8	.8	.8	.6	-	.5	.3	.5	.4	1	2	869
30	.9	.8	.7	.6	-	.5	.3	.6	.4	.7	2	104
31	.8	-	.7	.6	-	.6	-	.7	-	.7	1	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	27.2	1	0.8	0.88	54
November	25.5	1	.7	.85	51
December	26.1	1	.7	.84	52
Calendar year 1940	3,035.6	511	.4	8.29	6,020
January	21.1	1	.6	.68	42
February	29.5	9	.3	1.05	59
March	23.3	1	.5	.75	46
April	12.0	.7	.3	.40	24
May	34.5	12	.4	1.11	68
June	13.5	.6	.4	.45	27
July	953.7	444	.3	30.8	1,890
August	222.3	51	.7	7.17	441
September	1,596.9	889	.6	53.2	3,170
Water year 1940-41	2,985.6	869	.3	8.18	5,920

Peak discharge.- July 20 (10:30 a.m.) 1,460 sec.-ft.; Sept. 29 (2:15 a.m.) 2,750 sec.-ft.

In addition to the records of stream flow obtained at gaging stations in the Colorado River Basin and reported in the preceding pages, measurements of flow were made at other points, indicated in the following table:

Miscellaneous discharge measurements in Colorado River Basin during water year October 1940 to September 1941

Tributaries above Green River

Date	Stream	Tributary to or diverting from-	Locality	Discharge (sec.-ft.)
Sept. 20	Rifle Creek.....	Colorado River.....	Sec. 1, T. 5 S., R. 93 W., just upstream from Middle Fork, near Rifle, Colo.	0.5
20	....do.....	....do.....	Sec. 7, T. 5 S., R. 92 W., just upstream from East Fork, near Rifle, Colo.	6.8
20	Middle Fork.....	Rifle Creek.....	Sec. 1, T. 5 S., R. 93 W., at mouth, near Rifle, Colo.	6.0

Little Colorado River Basin

Nov. 16	Lyman canal.....	Little Colorado River.	Lyman Dam outlet 300 feet below Lyman Dam, Ariz.	15.8
Apr. 30	....do.....	....do.....	....do.....	40.5
May 3	....do.....	....do.....	....do.....	23.2
July 22	....do.....	....do.....	....do.....	30.4
Sept. 2	....do.....	....do.....	....do.....	54.9
17	....do.....	....do.....	....do.....	37.4
Jan. 7	Woodruff canal...	Silver Creek.....	NW¼ sec. 32, T. 16 N., R. 22 E., 250 feet below diversion dam that is control for station on Silver Creek near Woodruff, Ariz.	3.03
18	....do.....	....do.....	....do.....	2.50
Mar. 5	....do.....	....do.....	....do.....	.66
Apr. 29	....do.....	....do.....	....do.....	6.21
June 10	....do.....	....do.....	....do.....	8.88
Sept. 5	....do.....	....do.....	....do.....	5.41

Gila River Basin

Oct. 9	Gila River.....	Colorado River.....	W½ sec. 21, T. 19 S., R. 20 W., above heading of Sunset canal, 13 miles east of Duncan, Ariz.	77.3
Nov. 1	....do.....	....do.....	....do.....	68.8
Mar. 11	Warm Springs.....	Gila River.....	SW¼ sec. 17, T. 3 S., R. 18 E., 1,700 feet downstream from Coolidge Dam, Ariz.	.97
June 2	....do.....	....do.....	....do.....	2.12
21	....do.....	....do.....	....do.....	1.55
Oct. 15	San Pedro canal..	San Pedro River....	SW¼ sec. 23, T. 5 S., R. 15 E., at mouth of San Pedro, 1 mile west of Winkelman, Ariz.	.41
28	....do.....	....do.....	....do.....	.5
Nov. 1	....do.....	....do.....	....do.....	0
4	Indian Service Cooperative canal.	Gila River.....	SW¼NW¼ sec. 16, T. 2 S., R. 2 E., about 200 feet below diversion dam that is control for station on Gila River near Laveen, Ariz.	7.25
26	....do.....	....do.....	....do.....	6.26
Dec. 16	....do.....	....do.....	....do.....	3.85
27	....do.....	....do.....	....do.....	7.83
Feb. 8	....do.....	....do.....	....do.....	34.5
23	....do.....	....do.....	....do.....	20.2
28	....do.....	....do.....	....do.....	21.8
Mar. 28	....do.....	....do.....	....do.....	10.1
Apr. 23	....do.....	....do.....	....do.....	9.02
May 15	....do.....	....do.....	....do.....	5.27
June 16	....do.....	....do.....	....do.....	5.46
July 14	....do.....	....do.....	....do.....	9.70
26	....do.....	....do.....	....do.....	6.81
Aug. 30	....do.....	....do.....	....do.....	12.2
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