UNITED STATES DEPARTMENT OF THE INTERIOR
RAY LYMAN WILBUR, Secretary
GEOLOGICAL SURVEY
W. C. MENDENHALL, Director

Water-Supply Paper 719

SURFACE WATER SUPPLY *of the* UNITED STATES

1931

PART 9
COLORADO RIVER BASIN

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Prepared in cooperation with the States of
ARIZONA, UTAH, and WYOMING

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SURFACE WATER SUPPLY OF THE COLORADO RIVER BASIN, 1931

AUTHORIZATION AND SCOPE OF WORK

This volume is one of a series of 14 reports presenting records of measurements of flow made on streams in the United States during the year ending September 30, 1931.

The data presented in these reports were collected by the United States Geological Survey under the following authority contained in the organic law (20 Stat. L., p. 394):

Provided, That this officer [the director] shall have the direction of the Geological Survey and the classification of public lands and examination of the geological structure, mineral resources, and products of the national domain.

The work was begun in 1888 in connection with special studies relating to irrigation. Since the fiscal year ending June 30, 1895, successive appropriation bills passed by Congress have carried the following items:

For gaging the streams and determining the water supply of the United States and for the investigation of underground currents and artesian wells, and for the preparation of reports upon the best methods of utilizing the water resources.

Annual appropriations for the fiscal years ending June 30, 1895–1932

1895	$12,500.00	1908–1910	$100,000.00	1926	$165,000.00
1896	24,500.00	1911–1917	150,000.00	1927	151,000.00
1897–1899	50,000.00	1918	175,000.00	1928	147,000.00
1900	70,000.00	1919	148,244.10	1929	270,500.00
1901–2	100,000.00	1920	175,000.00	1930	275,000.00
1903–1906	200,000.00	1921–1923	180,000.00	1931	565,000.00
1907	150,000.00	1924–25	170,000.00	1932	711,000.00

In the execution of the work many private and State organizations have cooperated, either by furnishing data or by assisting in collecting data. Acknowledgments for cooperation of the first kind are made in connection with the description of each station affected; cooperation of the second kind is acknowledged on page 10.

Measurements of stream flow have been made at about 6,270 points in the United States and also at many points in Alaska and the Hawaiian Islands. In July, 1931, 2,660 gaging stations were being maintained by the Geological Survey and the cooperating organizations. Many miscellaneous discharge measurements were made at other points. In connection with this work, data were also collected in regard to precipitation, evaporation, storage reservoirs, river pro-

files, and water power in many sections of the country and will be made available in water-supply papers from time to time.

DEFINITION OF TERMS

The volume of water flowing in a stream—the "run-off" or "discharge"—is expressed in various terms, each of which has become associated with a certain class of work. These terms may be divided into two groups—(1) those that represent a rate of flow, as second-feet, gallons per minute, miner's inches, and discharge in second-feet per square mile, and (2) those that represent the actual quantity of water, as run-off in inches, acre-feet, and millions of cubic feet. The principal terms used in this series of reports are second-feet, second-feet per square mile, run-off in inches, and acre-feet. They may be defined as follows:

"Second-feet" is an abbreviation for "cubic feet per second." A second-foot is the rate of discharge of water flowing in a channel of rectangular cross section 1 foot wide and 1 foot deep at an average velocity of 1 foot per second. It is generally used as a fundamental unit from which others are computed.

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

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

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

The following terms not in common use are here defined:

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

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

EXPLANATION OF DATA

The data presented in this report cover the year beginning October 1, 1930, and ending September 30, 1931. At the beginning of January in most parts of the United States much of the precipitation in the preceding three months is stored in the form of snow or ice, or in ponds, lakes, and swamps, or as underground water, and this stored water passes off in the streams during the spring break-up. At the end of September, on the other hand, the only stored water available for run-off is possibly a small quantity in the ground; therefore the

run-off for the year beginning October 1 is practically all derived from the precipitation within that year.

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

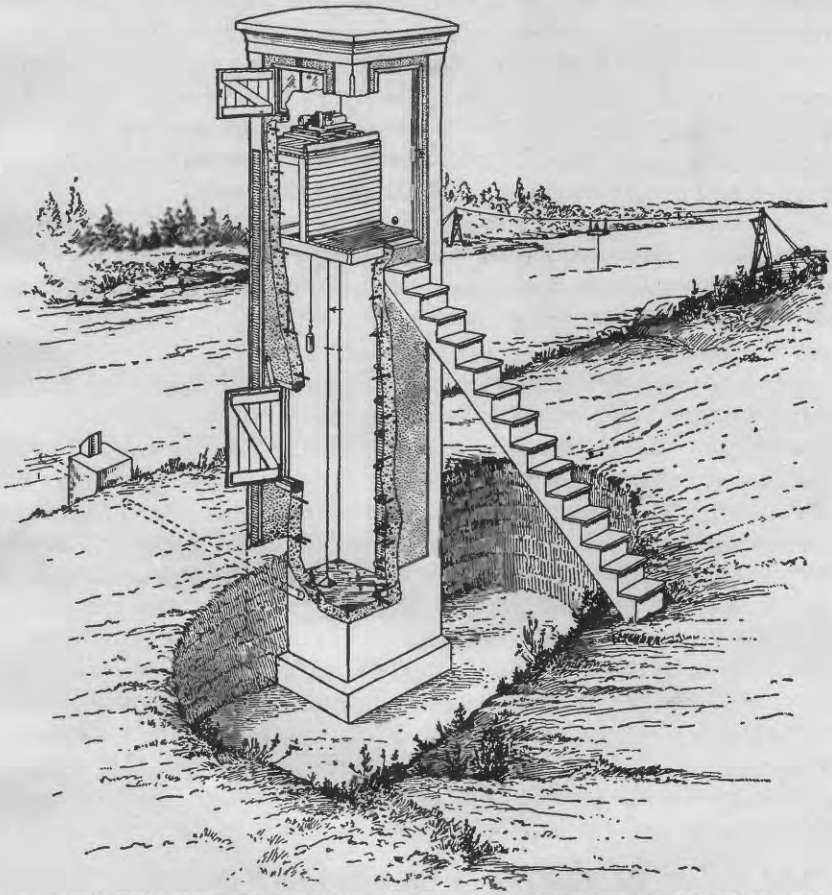

FIGURE 1.—Typical river-measurement station showing concrete well and house for water-stage recorder and staff gages, cable, and car

direct readings on a staff or chain 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. A typical gaging station, equipped with water-stage recorder and measuring cable and car, is shown in Figure 1.

Rating tables giving the discharge for any stage are prepared from the discharge measurements. The application of the daily gage

height to these rating tables gives the daily discharge from which the monthly and yearly mean discharge is computed.

The data presented for each gaging station in the area covered by this report comprise a description of the station and a table showing the daily discharge of the stream and the monthly and yearly discharge and run-off.

The description of the station gives, in addition to statements regarding location and type of gage, information as to diversions that decrease the flow at the gage, artificial regulation, maximum and minimum recorded stages, and the accuracy of the records. The maximum discharge given under "Extremes" does not represent the crest discharge unless a water-stage recorder was in operation or unless a nonrecording gage was read at the time of the crest.

The table of daily discharge gives, in general, the discharge in second-feet corresponding to the daily gage height, which may be a once-daily reading or the mean of twice-daily readings of a nonrecording gage, or the mean daily gage height obtained from a water-stage recorder graph.

At stations on streams subject to sudden or rapid diurnal fluctuation the discharge obtained from the rating table and the mean daily gage height may not be the true mean discharge for the day. If such stations are equipped with water-stage recorders, the mean daily discharge may be obtained by averaging discharge at regular intervals during the day or by using the discharge integrator, an instrument for obtaining mean daily discharge from a continuous gage-height graph and containing as an essential element the rating curve of the station.

In the table of monthly discharge the column headed "Maximum" gives the maximum daily discharge and not the discharge when the water surface was at crest height. Likewise, in the column headed "Minimum" the quantity given is the minimum daily discharge. The column headed "Mean" is the average flow in cubic feet per second during the month. On this average flow are based computations recorded in the remaining columns, which are defined on page 2.

ACCURACY OF FIELD DATA AND COMPUTED RESULTS

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

The station description gives a statement in regard to the general accuracy of the records. "Excellent" indicates that records are accurate within 5 per cent; "good," within 10 per cent; "fair," within 15 per cent; and "poor," within 20 per cent or more.

The monthly means for any station may represent with high accuracy the quantity of water flowing past the gage, but the figures showing discharge per square mile and run-off in inches may be sub-

ject to gross errors caused by the inclusion of large noncontributing districts in the measured drainage area, by lack of information concerning water diverted for irrigation or other use, or by inability to interpret the effect of artificial regulation of the flow of the river above the station. "Second-feet per square mile" and "run-off in inches" are therefore not computed if such errors appear probable. The computations are also omitted for stations on streams draining areas in which the annual rainfall is less than 20 inches.

The table of monthly discharge gives a general idea of the flow at the station. The table of daily discharge allows more detailed studies of the variation in flow. It should be borne in mind, however, that the observations in each succeeding year may be expected to throw new light on data previously published.

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

PUBLICATIONS

Investigation of water resources by the United States Geological Survey has consisted in large part of measurements of the volume of flow of streams and studies of the conditions affecting that flow, but it has comprised also investigation of such closely allied subjects as irrigation, water storage, water power, underground waters, and quality of waters. Most of the results of these investigations have been published in the series of water-supply papers, but some have appeared in the bulletins, professional papers, monographs, and annual reports.

The results of stream-flow measurements are now published annually in 12 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 the Mississippi).
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 of California.
12. North Pacific slope drainage basins, in three parts:
    A, Pacific slope basins in Washington and upper Columbia River Basin.
    B, Snake River Basin.
    C, Pacific slope basins in Oregon and lower Columbia River Basin.

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

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

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

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

Augusta, Me., State House.
Boston, Mass., 2500 Customhouse.
Hartford, Conn., 318 State Office Building.
Albany, N. Y., 603 State Public Works Building.
Trenton, N. J., 710 Trenton Trust Building.
Harrisburg, Pa., 604 Claster Building.
Charlottesville, Va., Brooks Museum, University of Virginia.
South Charleston, W. Va., Naval Ordnance Plant.
Asheville, N. C., 220 Post Office Building.
Columbia, S. C., 801 National Loan & Exchange Bank Building.
Ocala, Fla., Post Office Building.
Tuscaloosa, Ala., Post Office Building.
Chattanooga, Tenn., 630 Power Building.
Columbus, Ohio, Engineering Experiment Station, Ohio State University.
Indianapolis, Ind., 319 Federal Building.
Urbana, Ill., 302 University New Agricultural Building.
Madison, Wis., 337N State Capitol.
St. Paul, Minn., 202 Old State Capitol.
Topeka, Kans., 23 Federal Building.
Rolla, Mo., Rolla Building, School of Mines and Metallurgy.
Fort Smith, Ark., Post Office Building.
Austin, Tex., State Capitol.
Santa Fe, N. Mex., State Capitol.
Tucson, Ariz., 210 Post Office Building.
Denver, Colo., 403 Post Office Building.
Salt Lake City, Utah, 313 Federal Building.
Idaho Falls, Idaho, 228 Federal Building.
Boise, Idaho, 429 Federal Building.
Helena, Mont., 416 Power Block.
Tacoma, Wash., 406 Federal Building.
Portland, Oreg., 606 Post Office Building.
San Francisco, Calif., 303 Customhouse.
Los Angeles, Calif., 751 South Figueroa Street, room 510.
Honolulu, Hawaii, Territorial Office Building.

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

Stream-flow records have been obtained at about 6,270 points in the United States, and the data obtained have been published in the reports tabulated on pages 7 and 9.

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

[A = Annual Report; B = Bulletin; W = Water-Supply Paper]

Report	Character of data	Year
10th A, pt. 2	Descriptive information only	
11th A, pt. 2	Monthly discharge and descriptive information	1884 to Sept., 1890.
12th A, pt. 2	do	1884 to June 30, 1891.
13th A, pt. 3	Mean discharge in second-feet	1884 to Dec. 31, 1892.
14th A, pt. 2	Monthly discharge (long-time records, 1871 to 1893)	1888 to Dec. 31, 1893.
B 131	Descriptions, measurements, gage heights, and ratings	1893 and 1894.
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 and 1896.
W 15	Descriptions, measurements, and gage heights, eastern United States, eastern Mississippi River, and Missouri River above junction with Kansas.	1897.
W 16	Descriptions, measurements, and gage heights, western Mississippi River below junction of Missouri and Platte, and western United States.	1897.
19th A, pt. 4	Descriptions, measurements, ratings, and monthly discharge (also some long-time records).	1897.
W 27	Measurements, ratings, and gage heights, eastern United States, eastern Mississippi River, and Missouri River.	1898.
W 28	Measurements, ratings, and gage heights, Arkansas River and western United States.	1898.
20th A, pt. 4	Monthly discharge (also for many earlier years)	1898.
W 35 to 39	Descriptions, measurements, gage heights, and ratings	1899.
21st A, pt. 4	Monthly discharge	1899.
W 47 to 52	Descriptions, measurements, gage heights, and ratings	1900.
22d A, pt. 4	Monthly discharge	1900.
W 65, 66	Descriptions, measurements, gage heights, and ratings	1901.
W 75	Monthly discharge	1901.
W 82 to 85	Complete data	1902.
W 97 to 100	do	1903.
W 124 to 135	do	1904.
W 165 to 178	do	1905.
W 201 to 214	do	1906.
W 241 to 252	do	1907–8.
W 261 to 272	do	1909.
W 281 to 292	do	1910.
W 301 to 312	do	1911.
W 321 to 332	do	1912.
W 351 to 362	do	1913.
W 381 to 394	do	1914.
W 401 to 414	do	1915.
W 431 to 444	do	1916.
W 451 to 464	do	1917.
W 471 to 484	do	1918.
W 501 to 514	do	1919–20.
W 521 to 534	do	1921.
W 541 to 554	do	1922.
W 561 to 574	do	1923.
W 581 to 594	do	1924.
W 601 to 614	do	1925.
W 621 to 634	do	1926.
W 641 to 654	do	1927.
W 661 to 674	do	1928.
W 681 to 694	do	1929.
W 696 to 709	do	1930.
W 711 to 724	do	1931.

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 measurements" at the end of each report in the same relative order as the regular gaging stations. An index of the reports containing records obtained prior to 1904 has been published in Water-Supply Paper 119.

The following table gives, by years and drainage basins, the numbers of the papers on surface-water supply published from 1899 to 1931. The data for any particular station will be found in the reports covering the years during which the station was maintained. For example, data from 1910 to 1920 for any station in the area covered by Part 3 are published in Water-Supply Papers 283, 303, 323, 353, 383, 403, 433, 453, 473, and 503, which contain records for the Ohio River Basin for those years.

Numbers of water-supply papers containing results of stream measurements, 1899–1931

[For basins included, see p. 5]

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

[a] Rating tables and index to Water-Supply Papers 35–39 contained in Water-Supply Paper 39. Tables of monthly discharge for 1899 in Twenty-first Annual Report, part 4.
[b] James River only.
[c] Gallatin River.
[d] Green and Gunnison Rivers and Colorado River above junction with Gunnison.
[e] Mohave 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. Tables of monthly discharge for 1900 in Twenty-second Annual Report, part 4.
[h] Wissahickon and Schuylkill Rivers to James River.
[i] Scioto River.
[j] Loup and Platte Rivers near Columbus, Nebr., and all tributaries below junction with Platte.
[k] Tributaries of Mississippi from east.
[l] Lake Ontario and tributaries to St. Lawrence River proper.
[m] Hudson Bay only.
[n] New England rivers only.
[o] Hudson River to Delaware River, inclusive.
[p] Susquehanna River to Yadkin River, inclusive.
[q] Platte and Kansas Rivers.
[r] The Great Basin in California, except Truckee and Carson River Basins.
[s] Below junction with Gila.
[t] Rogue, Umpqua, and Siletz Rivers only.

COOPERATION

The work in the several States was done under cooperative agreements as follows: In Arizona with the office of the State water commissioner, Mr. Frank P. Trott; in Utah with the office of the State engineer, Mr. George M. Bacon; and in Wyoming with the office of the State engineer, Mr. John A. Whiting.

Assistance in collecting records was rendered by the following organizations and corporations: In Arizona by the Office of Indian Affairs; in Colorado by the State, through Mr. M. C. Hinderlider, State engineer, and by the United States Bureau of Reclamation; in Utah by the National Park Service, Utah Power & Light Co., and the Price River Irrigation District; and in Wyoming by the United States Weather Bureau and the Rock Springs Water Co.

DIVISION OF WORK

The data for the stations in the several States were collected and prepared for publication as follows: In Arizona, except for the station on the Virgin River at Littlefield, Ariz., by W. E. Dickinson, district engineer, assisted by D. H. Barber, J. S. Gatewood, J. A. Baumgartner, R. E. Marsh, R. E. Cook, W. S. Eisenlohr, W. L. Heckler, H. S. Leak, D. D. Lewis, C. C. McDonald, J. M. Meier, R. H. Monroe, M. B. Scott, O. R. Clark, J. E. Klohr, and C. T. Pynchon; in Colorado and Wyoming, and for the station on the Green River near Linwood, Utah, and Henrys Fork at Linwood, Utah, by Robert Follansbee, district engineer, assisted by J. H. Baily, R. E. Cabell, H. P. Eisenhuth, D. S. Jenkins, L. F. Hanks, Miss Nellie L. Esterly, and Mrs. E. L. Yeatman; in Utah, except for the stations mentioned above, and for the station on the Virgin River at Littlefield, Ariz., by A. B. Purton, district engineer, assisted by M. T. Wilson, F. M. Bell, J. A. Allis, J. B. Ringwood, F. N. Hansen, B. M. Tanner, V. R. Bennion and Miss Lysle Christensen.

The records were reviewed and manuscript assembled by D. S. Jenkins.

GAGING-STATION RECORDS

COLORADO RIVER BASIN

COLORADO RIVER AND TRIBUTARIES ABOVE GREEN RIVER

COLORADO RIVER AT GLENWOOD SPRINGS, COLO.

LOCATION.—Water-stage recorder in sec. 9, T. 6 S., R. 89 W., at Glenwood Springs, half a mile above mouth of Roaring Fork. Zero of gage is 5,720.71 feet above mean sea level.

DRAINAGE AREA.—4,560 square miles.

RECORDS AVAILABLE.—January, 1900, to September, 1931. May to July, 1899, at point just above Roaring Fork.

EXTREMES.—Maximum discharge during year, 9,710 second-feet June 8 (gage height, 7.72 feet); minimum, 85 second-feet Nov. 26, Dec. 2 (gage height, 1.50 feet).

1900–1931: Maximum discharge, 30,100 second-feet June 14, 15, 1918 (gage height, 12.55 feet); minimum, 80 second-feet Feb. 6, 1921 (gage height, 1.6 feet).

REMARKS.—Records good. Diversions for irrigation above station. During low-water period flow is regulated by Shoshone power plant 6 miles upstream.

Daily and monthly discharge, in second-feet, 1930–31

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,400	1,000	682	571	603	704	704	2,300	6,260	4,660	1,260	710
2	1,390	960	653	625	621	627	704	2,300	7,400	5,140	1,740	752
3	1,380	1,030	688	632	561	633	843	2,300	8,000	3,960	1,740	745
4	1,400	1,020	670	645	577	639	794	2,450	8,610	3,520	1,460	1,010
5	1,440	1,060	656	571	639	710	787	2,450	8,920	3,120	1,320	773
6	1,440	992	679	580	627	633	787	2,300	8,920	2,760	1,220	857
7	1,420	1,020	691	559	627	645	892	2,300	8,920	2,370	1,190	857
8	1,370	936	768	565	684	633	1,010	2,520	9,240	2,160	1,130	752
9	1,350	960	710	611	555	704	1,190	2,680	8,720	1,980	1,100	704
10	1,290	899	681	610	645	652	1,300	2,450	7,360	1,860	1,060	697
11	1,290	886	637	645	639	690	1,420	2,220	6,280	1,740	1,040	658
12	1,330	892	647	579	606	697	1,600	2,000	5,890	1,620	947	787
13	1,360	881	677	567	652	697	1,920	2,000	6,020	1,570	899	678
14	1,390	873	718	603	645	704	2,220	2,450	6,020	1,460	960	710
15	1,340	911	715	575	697	704	2,450	3,380	6,020	1,380	822	704
16	1,270	968	717	613	658	704	2,220	4,880	6,280	1,360	857	752
17	1,270	804	749	605	633	697	2,150	6,400	6,680	1,270	878	697
18	1,260	876	719	652	621	697	2,300	8,300	6,280	1,360	1,160	710
19	1,220	950	711	555	633	621	2,600	8,000	5,640	1,320	1,160	752
20	1,200	862	657	525	476	1,010	2,600	5,870	5,140	1,280	1,190	1,200
21	1,250	837	651	574	645	829	2,300	4,530	4,540	1,190	1,150	1,270
22	1,230	784	597	555	780	808	1,930	3,670	4,180	1,150	1,050	1,160
23	1,210	638	571	591	710	766	1,800	3,470	3,850	1,120	1,020	1,180
24	1,210	544	572	627	678	787	1,660	4,080	3,630	1,030	968	1,180
25	1,190	564	604	591	652	815	1,730	5,740	3,740	939	1,060	1,800
26	1,160	669	592	555	645	892	1,540	7,100	3,850	915	1,080	1,860
27	1,130	680	609	573	522	697	1,390	8,150	4,180	931	976	1,730
28	1,120	741	604	515	704	759	1,410	7,700	4,180	923	885	1,330
29	1,090	726	580	597	-------	759	1,660	6,670	4,070	907	864	1,280
30	1,000	671	578	599	-------	704	1,930	5,870	4,180	939	822	1,070
31	1,060	-------	590	561	-------	752	-------	5,360	-------	1,210	836	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	1,440	1,000	1,270	78,100
November	1,060	544	854	50,800
December	768	571	657	40,400
January	652	515	588	36,200
February	780	476	633	35,200
March	1,010	621	722	44,400
April	2,600	704	1,600	95,200
May	8,300	2,000	4,250	261,000
June	9,240	3,630	6,100	363,000
July	5,140	907	1,840	113,000
August	1,740	822	1,090	67,000
September	1,860	658	980	58,300
The year	9,240	476	1,720	1,240,000

COLORADO RIVER NEAR PALISADE, COLO.

LOCATION.—Chain gage in sec. 2, T. 11 S., R. 98 W., 2 miles above Palisade and 6 miles below mouth of Plateau Creek.
DRAINAGE AREA.—8,790 square miles.
RECORDS AVAILABLE.—April, 1902, to September, 1931.
EXTREMES.—Maximum discharge during year, 15,200 second-feet June 8 (gage height, 17.9 feet); minimum, 178 second-feet Sept. 10 (gage height, 10.7 feet).
1902–1931: Maximum discharge, 52,400 second-feet June 16, 1921 (gage height, 24.4 feet); minimum, that of 1931.
REMARKS.—Discharge estimated Dec. 1 to Feb. 28. Diversions for power and irrigation above station. Complete records furnished by United States Bureau of Reclamation.

Daily and monthly discharge, in second-feet, 1930–31

Day	Oct.	Nov.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2,320	1,760	1,240	965	2,180	9,260	5 250	650	350
2	2,120	1,810	1,240	965	2,390	10,600	6 210	710	315
3	2,120	2,040	1,240	1,100	2,620	12,400	5 720	790	280
4	2,060	2,040	1,200	965	3,120	13,600	4,920	770	455
5	2,100	1,980	1,150	830	3,120	14,100	4,390	650	455
6	2,100	1,810	1,150	710	2,940	14,300	3 580	635	280
7	2,100	1,760	1,150	830	3,120	14,500	2,700	670	200
8	2,100	1,760	1,200	1,100	3,210	15,200	2,250	622	210
9	2,040	1,760	1,150	1,340	3,120	14,300	2,180	590	200
10	1,980	1,700	1,200	1,340	3,030	11,700	1,940	574	178
11	1,980	1,640	1,240	1,340	2,780	9,420	1,700	526	200
12	2,040	1,640	1,240	1,590	2,250	8,640	1,580	494	184
13	2,040	1,640	1,150	1,880	2,620	8,790	1,370	414	194
14	2,100	1,640	1,150	2,000	2,620	9,260	1,230	362	184
15	2,100	1,590	1,150	2,120	2,860	9,740	1,110	362	315
16	1,980	1,540	1,150	2,120	4,600	9,900	1,170	345	245
17	1,920	1,440	1,150	1,940	7,300	9,740	1,060	362	280
18	1,860	1,440	1,240	1,940	10,700	9,260	965	414	490
19	1,860	1,490	1,340	2,180	10,100	8,940	1,100	465	1,070
20	1,860	1,440	1,240	2,120	8,640	7,590	965	432	1,180
21	1,860	1,390	1,150	2,060	6,340	6,880	875	494	1,670
22	1,860	1,390	1,150	1,760	4,700	6,080	875	414	922
23	1,860	1,290	1,150	1,940	5,250	5,600	790	432	1,140
24	1,760	1,240	1,150	1,880	7,020	5,030	670	414	1,390
25	1,760	1,340	1,150	1,880	8,480	4,810	590	345	2,160
26	1,700	1,440	1,100	1,940	9,420	5,140	470	345	1,960
27	1,640	1,540	1,060	1,640	11,000	5,250	470	380	1,770
28	1,640	1,540	1,010	1,480	10,700	5,600	470	310	1,920
29	1,640	1,540	965	1,420	9,580	5,140	510	239	1,320
30	1,700	1,540	1,010	1,760	8,790	5,030	630	239	1,140
31	1,760	-------	1,060	-------	8,480	-------	830	239	-------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	2,320	1,640	1,930	119,000
November	2,040	1,240	1,610	95,800
December	-------	-------	1,250	76,900
January	-------	-------	1,100	67,600
February	-------	-------	1,080	60,000
March	1,340	965	1,160	71,300
April	2,180	710	1,570	93,400
May	11,000	2,180	5,580	343,000
June	15,200	4,810	9,190	547,000
July	6,210	470	1,890	116,000
August	790	239	474	29,100
September	2,160	178	755	44,900
The year	15,200	178	2,300	1,670,000

COLORADO RIVER NEAR CISCO, UTAH

LOCATION.—Water-stage recorder in NW. ¼ sec. 17, T. 23 S., R. 24 E., 11 miles south of Cisco and 1 mile below mouth of Dolores River.

DRAINAGE AREA.—24,100 square miles.

RECORDS AVAILABLE.—November, 1914, to September, 1917; October, 1922, to September, 1931. October, 1913, to November, 1914, at Moab, 30 miles downstream; flow about same at both places.

EXTREMES.—Maximum discharge during year, 18,700 second-feet June 9 (gage height, 7.32 feet); minimum, 838 second-feet Aug. 27 (gage height, 0.68 foot).

1914–1917, 1922–1931: Maximum discharge, 76,800 second-feet June 19, 1917 (gage height, 19.7 feet); minimum, that of Aug. 27, 1931.

REMARKS.—Records good except those of estimated discharge, Dec. 17 to Feb. 13, which are fair. Diversions for irrigation and power above station.

Daily and monthly discharge, in second-feet, 1930–31

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4,580	2,860	2,680		2,800	2,310	2,280	4,850	11,700	7,890	2,950	1,060
2	6,330	2,940	2,510		2,850	2,330	2,170	5,340	13,000	8,290	2,800	992
3	4,720	2,880	2,430			2,310	2,280	5,790	14,400	8,640	2,300	1,080
4	4,450	2,840	2,490			2,270	2,250	6,350	15,500	8,260	2,380	1,070
5	4,310	2,940	2,470			2,300	2,200	7,140	16,300	7,400	2,270	1,030
6	4,200	3,010	2,540	2,000		2,280	2,050	7,300	16,300	6,520	2,840	1,030
7	4,010	3,010	2,580			2,310	1,960	6,690	16,100	5,440	2,540	1,140
8	3,920	2,920	2,590		2,900	2,190	2,020	6,410	17,000	4,600	2,110	1,050
9	3,810	2,920	2,560			2,160	2,310	7,000	17,400	3,870	1,940	1,060
10	3,630	2,800	2,580			2,140	2,580	7,190	16,300	3,440	1,920	1,060
11	3,630	2,770	2,610			2,170	2,770	6,330	13,700	2,950	1,610	1,030
12	3,700	2,840	2,590			2,220	2,700	5,570	11,700	2,590	1,530	1,030
13	4,030	2,710	2,470			2,300	3,010	5,000	10,800	2,380	1,360	1,040
14	4,060	2,730	2,630		3,090	2,350	3,480	4,780	11,200	2,220	1,210	1,020
15	3,960	2,840	2,640		3,010	2,410	4,100	5,470	11,200	2,050	1,100	1,120
16	3,870	2,710	2,540		3,030	2,380	4,500	7,560	11,300	1,920	1,060	1,290
17	3,780	3,070	2,700		2,920	2,440	4,330	10,200	12,000	1,810	1,000	1,370
18	3,630	3,570	2,660		2,800	2,460	3,850	13,500	12,400	1,730	920	1,410
19	3,610	3,420	2,540		2,630	2,610	3,920	15,700	11,500	1,610	920	2,160
20	3,590	3,400	2,190		2,580	2,680	4,550	15,100	10,200	1,660	1,040	2,900
21	3,550	3,220	2,060	2,300	2,520	2,640	5,540	12,000	9,510	1,650	1,050	2,430
22	3,460	3,070	1,950		2,440	2,680	4,900	9,740	8,640	1,510	1,090	2,840
23	3,420	2,860	1,710		2,490	2,490	4,290	8,000	7,780	1,410	1,020	3,380
24	3,380	2,680	1,640		2,460	2,630	4,080	7,220	7,360	1,370	968	11,600
25	3,280	2,490	1,840		2,460	2,540	5,340	8,500	7,080	1,270	984	7,580
26	3,240	2,590	1,980		2,330	2,470	5,680	11,500	6,690	1,210	885	4,580
27	3,200	2,680	1,940		2,310	2,520	4,720	13,900	6,880	1,120	944	4,030
28	3,140	2,750	1,950		2,360	2,540	4,310	14,600	7,250	1,120	920	3,870
29	3,090	2,730				2,280	4,030	13,600	7,500	1,250	920	3,650
30	3,120	2,800	2,000			2,410	4,200	12,200	7,440	1,570	892	3,110
31	2,990					2,360		11,600		2,490	1,040	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	6,330	2,990	3,800	234,000
November	3,570	2,490	2,900	173,000
December	2,700	1,640	2,320	143,000
January			2,200	135,000
February		2,310	2,750	153,000
March	2,680	2,140	2,390	147,000
April	5,680	1,960	3,550	211,000
May	15,700	4,780	8,910	548,000
June	17,400	6,690	11,500	684,000
July	8,640	1,120	3,270	201,000
August	2,950	885	1,500	92,200
September	11,600	992	2,400	143,000
The year	17,400	885	3,980	2,860,000

COLORADO RIVER AT LEES FERRY, ARIZ.

LOCATION.—Water-stage recorder in NE. ¼ SE. ¼ sec. 13, T. 40 N., R. 7 E., at head of Marble Gorge, at Lees Ferry, a short distance above mouth of Paria River. Zero of gage is 3,106.35 feet above mean sea level.

DRAINAGE AREA.—108,000 square miles.

RECORDS AVAILABLE.—June, 1921, to September, 1931.

EXTREMES.—Maximum discharge during year, 34,600 second-feet May 21 (gage height, 12.05 feet); minimum, 2,010 second-feet Sept. 12 (gage height, 5.51 feet).

1921–1931: Maximum discharge, about 190,000 second-feet June 18, 1921 (gage height, 26.5 feet); minimum, 750 second-feet Dec. 27, 1924 (gage height, 4.2 feet).

Elevation of flood of 1884 at mouth of Paria River, 3,137.1 feet above mean sea level.

REMARKS.—Records excellent. Discharge estimated during periods of ice effect, Dec. 18–28, Jan. 3–25. Diversions for irrigation of about 1,500,000 acres above station.

Daily and monthly discharge, in second-feet, 1930–31

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	8,920	7,900	4,740	3,220	5,130	5,750	8,330	12,300	25,600	12,700	4,710	2,530
2	8,620	7,790	5,160	3,280	5,300	5,720	7,720	11,400	24,700	13,000	4,290	2,360
3	10,100	7,720	5,360	3,500	6,520	5,720	7,360	11,200	24,400	12,800	5,910	2,220
4	10,100	7,500	5,600	3,700	6,580	5,780	6,790	11,500	25,700	14,200	8,180	2,210
5	10,600	7,260	5,720	3,700	6,720	6,000	6,480	12,000	27,400	15,500	6,000	2,420
6	10,100	7,230	5,480	3,800	6,620	5,880	6,100	12,800	29,400	15,800	5,300	2,740
7	9,580	7,160	5,040	3,900	6,520	5,880	6,160	13,600	30,100	14,000	4,260	2,530
8	9,270	7,160	5,100	4,100	6,790	5,970	6,550	15,000	29,500	12,500	3,900	2,340
9	8,770	7,260	5,240	4,300	6,850	6,060	6,960	15,700	30,300	11,100	4,580	2,180
10	8,510	7,260	5,220	4,200	6,650	6,260	6,920	15,500	31,500	10,200	4,790	2,070
11	8,330	7,160	5,160	4,200	6,450	6,450	7,060	16,400	31,800	9,150	5,330	2,050
12	8,330	6,990	5,270	4,200	6,720	6,480	7,400	17,800	30,600	8,220	5,220	2,070
13	8,700	7,060	5,270	4,100	6,720	6,260	7,540	17,200	28,500	7,130	4,770	2,150
14	8,550	6,790	5,300	4,200	6,750	5,880	7,610	16,000	26,200	6,520	4,710	2,140
15	8,440	6,650	5,330	4,400	7,020	5,880	7,750	15,300	24,300	5,970	4,900	2,120
16	8,620	6,680	5,390	4,500	7,130	6,060	8,150	14,800	23,400	5,360	4,290	2,080
17	9,070	6,520	5,270	4,600	7,610	6,260	9,190	14,300	23,200	4,960	3,860	3,350
18	8,960	8,580	5,200	4,500	8,040	6,990	10,100	15,100	22,800	4,600	3,570	3,550
19	8,810	8,960	5,100	4,500	7,750	7,300	10,500	17,900	23,300	4,390	3,360	2,620
20	8,850	8,080	5,000	4,500	7,260	7,230	11,200	25,100	23,300	3,950	3,070	4,070
21	8,960	8,220	4,900	4,400	6,650	7,330	11,300	32,100	22,600	3,660	2,760	4,550
22	9,190	8,110	4,500	4,300	6,220	7,440	11,000	33,500	20,300	3,420	2,620	3,920
23	9,310	7,720	4,200	4,400	6,060	7,580	11,500	29,500	18,800	3,050	2,660	4,580
24	9,270	7,580	3,600	4,600	6,130	7,860	12,500	26,000	17,600	2,950	2,620	7,330
25	8,960	7,230	3,300	4,500	6,100	7,930	13,000	22,500	16,000	2,990	2,590	10,200
26	8,620	6,520	3,400	4,600	5,910	7,970	13,200	19,600	14,600	2,990	2,640	15,100
27	8,510	5,720	3,200	4,660	5,810	8,360	13,600	18,700	13,600	2,790	2,480	13,000
28	8,290	5,130	3,100	4,630	5,840	9,150	14,000	20,600	13,100	2,670	2,510	10,600
29	8,040	4,630	3,120	4,740	-------	9,380	14,800	25,300	12,800	2,780	2,590	8,550
30	7,970	4,520	3,240	4,900	-------	9,380	13,600	27,100	12,500	3,200	2,740	7,440
31	7,900	-------	3,220	5,040	-------	8,850	-------	26,800	-------	2,960	2,670	-------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	10,600	7,900	8,910	548,000
November	8,960	4,520	7,100	423,000
December	5,720	3,100	4,670	287,000
January	5,040	3,220	4,260	262,000
February	8,040	5,130	6,570	365,000
March	9,380	5,720	6,940	427,000
April	14,800	6,100	9,480	564,000
May	33,500	11,200	19,800	1,160,000
June	31,800	12,500	23,300	1,380,000
July	15,800	2,670	7,270	447,000
August	8,180	2,480	4,000	246,000
September	15,100	2,050	4,500	268,000
The year	33,500	2,050	8,810	6,380,000

COLORADO RIVER AT BRIGHT ANGEL CREEK, NEAR GRAND CANYON, ARIZ.

LOCATION.—Water-stage recorder at Kaibab Bridge, one-fourth mile above Bright Angel Creek and 11 miles by trail northeast of Grand Canyon, Coconino County. Zero of gage is 2,420.3 feet above mean sea level.

DRAINAGE AREA.—139,000 square miles.

RECORDS AVAILABLE.—October, 1922, to September, 1931.

EXTREMES.—Maximum discharge during year, 34,800 second-feet May 22 (gage height, 14.41 feet); minimum, 2,520 second-feet Sept. 13 (gage height, 1.05 feet).

1922–1931: 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).

REMARKS.—Records excellent. Diversions for irrigation of about 1,500,000 acres above station.

Daily and monthly discharge, in second-feet, 1930–31

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	9,830	8,210	4,910	3,580	5,420	6,230	9,160	13,300	26,200	12,600	5,640	3,220
2	9,540	8,040	5,140	3,550	5,600	6,160	8,640	13,500	25,100	12,900	8,400	3,110
3	8,920	8,060	5,840	3,660	5,840	6,050	7,960	13,000	24,400	13,100	7,830	3,200
4	10,600	7,950	5,930	3,860	6,770	6,050	7,520	12,600	24,900	13,600	7,860	2,930
5	10,300	7,770	5,950	4,070	6,780	6,110	7,000	12,800	26,800	14,900	8,860	2,720
6	10,800	7,580	5,900	4,080	6,890	6,160	6,650	13,000	28,700	17,700	7,470	2,780
7	10,000	7,530	5,730	4,200	6,840	6,190	6,910	13,400	29,800	15,900	6,930	3,120
8	9,710	7,410	5,510	4,210	6,790	6,160	7,050	14,300	30,100	14,500	8,090	2,930
9	9,220	7,420	5,560	4,420	6,960	6,250	7,170	15,900	29,300	12,700	7,380	2,680
10	8,850	7,470	5,600	4,620	6,980	6,500	7,200	16,000	30,500	11,600	6,190	2,580
11	8,550	7,420	5,550	4,570	6,790	6,740	7,100	15,800	31,900	10,400	6,500	2,870
12	8,530	7,300	5,590	4,530	6,700	6,810	7,440	17,700	31,600	9,290	7,290	2,700
13	8,550	7,180	5,690	4,500	6,920	6,650	7,830	18,300	29,800	8,340	5,980	2,560
14	8,810	7,160	5,690	4,400	6,980	6,470	7,840	17,100	27,500	7,460	5,380	2,630
15	8,820	7,020	5,680	4,560	7,080	6,150	7,860	16,000	25,400	6,760	5,570	2,840
16	8,730	6,990	5,650	4,790	7,500	6,150	7,920	15,600	24,000	6,180	5,270	3,140
17	9,030	7,100	5,700	4,870	8,100	6,530	8,510	14,900	23,500	5,770	4,960	2,750
18	9,340	7,280	5,610	4,980	9,020	6,950	9,640	14,700	23,100	5,290	4,720	3,440
19	9,120	9,690	5,570	4,900	8,700	7,650	10,500	15,900	23,100	4,910	4,140	4,610
20	9,060	8,830	5,470	4,830	8,070	7,900	10,900	21,400	23,600	5,200	3,880	3,290
21	9,100	8,190	5,310	4,860	7,560	8,120	11,600	29,000	23,600	4,750	3,640	4,920
22	9,330	8,430	5,200	4,740	7,020	8,380	11,400	33,800	22,000	5,040	3,350	5,460
23	9,480	8,190	4,850	4,690	6,750	8,380	11,200	31,300	20,200	4,690	3,180	5,630
24	9,530	8,010	4,510	4,760	6,570	8,460	11,900	27,800	18,600	3,980	3,070	5,810
25	9,380	7,880	3,980	4,980	6,530	8,540	12,800	24,400	17,300	3,600	3,460	8,710
26	9,160	7,520	3,680	4,880	6,540	8,690	13,000	21,000	15,900	3,480	3,400	12,400
27	8,970	6,820	3,780	4,920	6,330	8,970	13,600	19,000	14,500	3,620	3,190	15,400
28	8,730	5,950	3,580	4,950	6,260	9,360	13,800	19,100	13,700	3,600	2,940	12,600
29	8,570	5,390	3,480	4,920	-------	9,740	14,800	23,200	13,300	3,680	2,900	10,900
30	8,430	4,990	3,450	5,080	-------	9,760	15,100	26,700	12,900	3,350	2,940	8,850
31	8,300	-------	3,600	5,220	-------	9,550	-------	26,900	-------	5,160	3,240	-------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	10,800	8,300	9,200	566,000
November	9,690	4,990	7,490	446,000
December	5,950	3,450	5,090	313,000
January	5,220	3,550	4,550	280,000
February	9,020	5,420	6,940	385,000
March	9,760	6,050	7,350	452,000
April	15,100	6,650	9,670	575,000
May	33,800	12,600	18,900	1,170,000
June	31,900	12,900	23,700	1,410,000
July	17,700	3,350	8,200	504,000
August	8,860	2,900	5,280	325,000
September	15,400	2,560	5,030	299,000
The year	33,800	2,560	9,280	6,720,000

COLORADO RIVER NEAR TOPOCK, ARIZ.

LOCATION.—Water-stage recorder in NW. ¼ sec. 13, T. 15 N., R. 21 W., at lower end of Mohave Canyon, 3 miles southeast of Topock. Zero of gage is 423.2 feet above mean sea level.

DRAINAGE AREA.—174,000 square miles.

RECORDS AVAILABLE.—February, 1917, to September, 1931.

EXTREMES.—Maximum discharge during year, 32,000 second-feet May 24 (gage height, 15.82 feet); minimum discharge, 2,380 second-feet Sept. 15; minimum gage height, 8.04 feet Aug. 4.

1917–1931: Maximum discharge, 174,000 second-feet June 22, 1921; minimum, 1,800 second-feet Jan. 4, 1925.

REMARKS.—Records excellent. Diversions for irrigation of about 1,500,000 acres above station.

Daily and monthly discharge, in second-feet, 1930–31

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	7,260	8,970	7,170	4,100	5,490	6,900	9,680	14,000	24,700	13,400	3,700	4,300
2	7,170	8,720	6,300	3,940	5,430	6,600	9,610	15,200	26,500	12,700	5,230	4,440
3	8,970	8,680	5,850	3,820	5,800	6,450	9,540	14,700	25,800	12,400	3,720	4,510
4	10,500	8,590	5,490	3,940	6,130	6,540	8,940	13,100	24,600	12,400	5,070	3,610
5	10,300	8,460	5,250	4,010	6,600	6,660	8,300	13,500	24,200	12,000	7,050	3,740
6	9,780	8,460	5,740	4,200	6,270	6,450	8,460	12,800	24,200	12,400	8,140	3,320
7	10,800	8,560	6,190	4,200	6,960	6,270	7,440	12,000	24,400	12,800	8,270	3,170
8	11,100	8,360	6,130	4,250	7,790	6,190	7,630	12,700	26,200	14,400	9,270	3,100
9	11,100	8,110	6,080	4,630	7,470	6,130	6,720	12,700	29,000	17,100	8,110	2,740
10	10,700	8,270	6,050	4,730	7,470	6,390	6,300	13,100	28,400	15,300	6,330	2,500
11	10,400	7,980	5,940	4,760	7,530	6,480	6,750	14,100	29,200	14,000	7,790	2,680
12	10,200	7,690	5,940	4,610	7,560	6,330	6,720	15,500	27,900	12,400	8,040	2,780
13	9,950	7,530	6,000	4,860	7,760	6,450	6,900	16,300	29,500	11,500	7,260	2,780
14	9,610	7,320	6,020	5,070	7,760	6,780	6,960	15,800	30,400	10,200	7,950	2,560
15	9,130	7,530	5,820	4,970	7,690	6,810	7,200	17,300	30,200	9,100	7,790	2,420
16	9,040	7,630	5,880	4,810	7,500	6,840	7,470	17,600	27,700	8,270	6,840	2,620
17	8,970	7,380	6,240	4,910	7,760	6,690	7,530	16,600	25,900	7,410	5,630	2,700
18	8,840	8,270	6,130	4,910	7,920	6,480	7,690	16,000	23,900	6,720	5,230	2,520
19	8,780	7,720	6,190	5,020	7,850	6,220	7,820	15,300	22,800	6,360	5,680	2,580
20	9,300	8,520	6,420	4,940	8,110	6,240	8,240	14,500	22,800	5,770	5,360	2,740
21	9,850	8,240	6,360	5,150	9,100	6,750	8,840	14,600	22,000	5,200	5,100	2,990
22	9,680	9,000	5,990	5,360	9,410	7,410	9,240	15,900	22,800	4,780	4,580	2,560
23	9,440	9,470	5,880	5,230	8,360	8,170	10,200	23,200	22,600	4,660	4,180	4,180
24	9,410	8,620	5,630	5,200	8,170	7,950	11,000	30,700	22,400	4,890	3,500	4,200
25	9,540	8,430	5,630	5,170	7,500	8,140	11,100	30,200	21,200	4,460	3,630	3,820
26	9,750	8,720	5,630	5,020	7,380	8,680	11,000	28,500	19,000	4,460	3,320	5,710
27	9,810	8,300	5,330	4,910	7,110	8,400	12,500	25,000	18,000	4,840	3,190	5,680
28	9,980	8,430	5,070	4,970	6,960	8,560	13,300	22,800	16,200	4,080	2,970	7,020
29	9,510	8,490	4,680	5,300	-------	8,680	13,800	20,600	15,200	3,700	3,100	12,400
30	9,240	7,850	4,200	5,230	-------	8,650	14,000	18,600	14,300	3,590	4,710	14,900
31	9,200	-------	4,250	5,520	-------	9,130	-------	19,800	-------	4,250	5,570	-------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	11,100	7,170	9,590	590,000
November	9,470	7,320	8,280	492,000
December	7,170	4,200	5,790	356,000
January	5,520	3,820	4,770	293,000
February	9,410	5,430	7,390	410,000
March	9,130	6,130	7,110	437,000
April	14,000	6,300	9,030	537,000
May	30,700	12,000	17,500	1,080,000
June	30,400	14,300	24,100	1,430,000
July	17,100	3,590	8,890	547,000
August	9,270	2,970	5,690	350,000
September	14,900	2,420	4,180	248,000
The year	30,700	2,420	9,350	6,770,000

COLORADO RIVER AT YUMA, ARIZ.

LOCATION.—Water-stage recorder 1,000 feet below highway bridge at Yuma and 5 miles below Gila River. Zero of gage is 102.79 feet above mean sea level.

DRAINAGE AREA.—245,000 square miles.

RECORDS AVAILABLE.—April, 1878, to September, 1931. Gage heights only prior to January, 1902.

EXTREMES.—Maximum discharge during year, 29,000 second-feet June 16; maximum gage height, 22.78 feet May 26; minimum discharge, 58 second-feet Sept. 23 (gage height, 15.80 feet).

1902–1931: Maximum daily mean discharge, 240,000 second-feet Jan. 22, 1916; minimum, that of Sept. 23, 1931.

REMARKS.—Records for river gaging station excellent; for canal and wasteway fair. Many diversions for irrigation from Colorado River and tributaries. Considerable water diverted around station on account of power development on main canal of Yuma reclamation project (pp. 18–19). Water not required for irrigation is returned to river below river station. Supplementing the records of discharge at river station are records of diversion to Yuma Main Canal at Laguna Dam, 14 miles upstream, and discharge of wasteway which returns water from this canal to river half a mile downstream from river station. Daily-discharge records for canal and wasteway furnished by United States Bureau of Reclamation.

Daily discharge, in second-feet, 1930–31

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3,030	5,960	5,680	2,240	3,130	5,220	5,900	10,400	15,400	11,200	805	1,040
2	3,160	6,140	5,410	2,200	3,080	4,890	5,990	10,000	18,100	10,600	606	4,070
3	4,140	5,930	4,290	1,920	3,290	5,000	6,300	10,800	20,900	9,980	738	4,250
4	3,920	6,230	3,760	1,990	3,290	4,650	6,790	11,600	22,900	9,040	1,310	4,650
5	5,050	5,620	3,810	1,830	3,580	4,380	7,220	12,200	22,500	8,950	1,840	3,390
6	7,040	5,570	3,290	1,890	3,920	4,270	6,490	10,300	21,700	8,550	1,930	2,360
7	6,900	5,620	3,200	1,720	4,060	4,310	6,230	10,600	21,200	8,860	19,400	1,640
8	5,960	5,390	2,980	1,910	4,540	4,460	5,460	10,500	21,100	8,420	8,820	1,220
9	7,150	5,680	3,520	2,210	4,500	4,000	4,820	9,320	21,600	9,000	6,970	774
10	7,760	5,520	3,460	2,100	5,290	4,060	4,540	10,100	23,200	11,700	7,410	505
11	8,000	5,260	3,700	2,580	5,310	3,990	4,110	10,100	25,000	12,700	6,050	425
12	7,800	4,800	3,900	2,920	5,760	4,060	3,870	10,000	25,400	11,400	4,540	424
13	7,300	4,870	3,580	2,870	6,110	4,220	3,900	10,800	25,100	10,000	6,230	141
14	7,300	4,850	3,790	2,890	5,790	4,040	4,130	11,900	25,200	8,730	6,790	124
15	6,900	4,760	3,520	3,020	6,300	4,230	4,060	12,800	25,600	7,150	8,170	168
16	6,860	5,140	3,730	3,330	11,600	4,350	4,250	12,500	26,900	6,230	11,700	415
17	6,490	4,800	3,380	3,190	11,000	4,610	4,270	14,600	25,200	5,730	7,330	308
18	5,930	4,940	3,380	3,420	11,000	4,110	4,670	14,300	23,700	4,560	5,170	216
19	6,260	4,590	3,730	3,440	14,000	4,140	4,740	13,700	22,900	4,200	3,510	252
20	5,990	5,100	3,560	3,240	16,300	3,810	4,850	12,500	20,500	3,570	3,020	186
21	6,170	5,170	3,760	3,090	10,000	3,560	5,070	11,800	19,900	3,090	3,130	138
22	6,170	5,120	3,500	3,200	8,290	3,680	4,910	11,200	19,300	2,570	2,540	70
23	6,830	5,650	3,970	3,300	8,040	3,460	5,700	11,000	18,000	2,290	2,240	66
24	6,930	5,960	3,400	3,680	8,550	3,820	6,360	13,300	18,200	2,250	1,980	76
25	6,260	7,000	3,510	3,360	6,860	4,590	7,300	21,800	19,000	1,730	1,690	150
26	6,490	6,110	3,450	3,330	6,520	4,940	8,600	26,400	18,900	1,500	934	1,330
27	6,460	6,050	3,400	3,270	6,050	5,490	9,230	25,500	16,100	1,550	750	983
28	6,460	6,490	3,400	2,780	5,410	5,650	9,040	24,400	15,300	1,400	684	1,790
29	6,590	5,930	3,130	2,870	-------	5,820	9,420	22,000	14,000	1,200	756	2,790
30	6,620	6,170	2,750	2,840	-------	5,900	10,000	17,900	12,900	1,480	1,700	2,350
31	6,860	-------	2,350	2,700	-------	6,260	-------	16,900	-------	1,220	843	------

Monthly discharge, in second-feet, of Colorado River at Yuma, Ariz., 1930–31

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	8,000	3,030	6,280	386,000
November	7,000	4,590	5,550	330,000
December	5,680	2,350	3,620	223,000
January	3,680	1,720	2,750	169,000
February	16,300	3,080	6,840	380,000
March	6,260	3,460	4,520	278,000
April	10,000	3,870	5,940	353,000
May	26,400	9,320	13,900	855,000
June	26,900	12,900	20,900	1,240,000
July	12,700	1,200	6,160	379,000
August	19,400	606	4,180	257,000
September	4,650	66	1,210	72,000
The year	26,900	66	6,800	4,920,000

Daily and monthly discharge, in second-feet, of Yuma Main Canal at Laguna Dam, near Yuma, Ariz., 1930–31

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,900	1,890	2,070	1,910	1,800	1,880	1,960	1,570	2,080	2,000	1,500	1,640
2	1,860	1,930	1,660	1,560	1,880	1,970	1,940	1,840	1,740	2,030	1,640	1,760
3	1,540	2,090	1,900	1,840	1,570	1,630	1,920	1,880	2,000	1,630	1,760	1,880
4	1,900	1,680	1,930	1,870	1,830	1,940	1,920	2,050	2,020	1,830	1,510	1,550
5	1,920	1,900	1,590	1,860	1,850	1,880	1,900	1,680	1,630	1,880	1,640	1,760
6	2,070	1,930	1,880	1,520	1,550	1,560	2,070	1,960	1,920	2,090	1,850	1,760
7	1,700	1,600	1,920	1,760	1,840	1,800	1,700	1,960	1,900	1,750	1,560	1,730
8	1,980	1,890	2,010	1,810	1,870	1,860	2,020	1,560	2,090	1,990	1,840	1,730
9	2,020	1,930	1,630	1,500	1,960	1,940	2,010	1,840	1,730	2,020	1,910	1,680
10	1,640	2,100	1,900	1,780	1,650	1,890	1,620	1,880	2,010	1,620	2,070	1,630
11	1,890	1,710	1,940	1,850	1,920	1,880	1,840	1,950	1,920	1,560	1,690	1,320
12	1,930	1,920	1,610	1,590	1,900	1,870	1,840	1,710	1,560	1,880	1,790	1,240
13	2,060	1,960	1,910	1,420	1,560	1,550	1,970	1,860	1,850	2,060	1,890	1,510
14	1,690	1,620	1,940	1,550	1,680	1,840	1,650	1,900	1,870	1,730	1,610	1,570
15	1,930	1,890	2,020	1,590	1,820	1,890	1,950	1,400	2,090	1,990	1,800	1,580
16	1,940	1,930	1,640	1,340	1,870	2,000	1,960	1,750	1,760	1,990	1,900	1,610
17	1,590	2,040	1,810	1,310	1,520	1,640	1,570	1,870	1,990	1,530	2,080	1,530
18	1,890	1,630	1,940	1,870	1,770	1,920	1,840	2,050	1,920	1,870	1,720	1,260
19	1,930	1,890	1,610	1,720	1,870	1,970	1,870	1,710	1,560	1,880	1,900	1,290
20	2,090	1,930	1,900	1,440	1,550	1,870	2,030	1,930	1,840	2,020	1,900	1,480
21	1,660	1,600	1,940	1,640	1,850	1,870	1,670	1,950	1,860	1,940	1,560	1,580
22	1,910	1,900	2,030	1,700	1,880	1,860	1,920	1,620	2,080	1,890	1,780	1,490
23	1,940	1,930	1,630	1,580	1,890	1,930	1,890	1,830	1,720	1,910	1,820	1,450
24	1,590	2,060	1,880	1,820	1,640	1,920	1,560	1,870	1,990	1,540	1,890	1,520
25	1,890	1,650	1,930	1,810	1,960	2,020	1,850	2,040	1,980	1,710	1,520	1,600
26	1,940	1,910	1,600	1,700	1,970	2,010	1,730	1,690	1,640	1,780	1,680	1,780
27	2,100	1,930	1,890	1,530	1,600	2,000	1,940	1,900	1,840	1,850	1,760	1,710
28	1,700	1,600	2,260	1,740	1,840	1,950	1,640	1,940	1,840	1,580	1,360	1,920
29	1,930	1,890	1,980	1,790	-------	1,890	1,860	1,570	2,080	1,720	1,400	1,940
30	1,920	1,930	1,600	1,480	-------	1,690	1,890	1,820	1,710	1,830	1,740	1,930
31	1,590	-------	1,840	1,760	-------	1,960	-------	1,870	-------	1,430	1,490	-------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	2,100	1,540	1,860	114,000
November	2,100	1,600	1,860	111,000
December	2,260	1,590	1,850	114,000
January	1,910	1,310	1,660	102,000
February	1,970	1,520	1,780	99,000
March	2,020	1,550	1,870	115,000
April	2,070	1,560	1,850	110,000
May	2,050	1,400	1,820	112,000
June	2,090	1,560	1,870	112,000
July	2,090	1,430	1,820	112,000
August	2,080	1,360	1,730	106,000
September	1,940	1,240	1,610	96,100
The year	2,260	1,240	1,800	1,300,000

Daily and monthly discharge, in second-feet, of Yuma Main Canal wasteway at Yuma, Ariz., 1930–31

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,050	1,140	1,160	1,220	1,620	1,060	1,110	1,210	1,040	897	1,110	1,060
2	1,150	1,180	1,030	1,130	1,200	900	1,170	1,580	922	1,070	1,520	1,420
3	1,060	1,180	1,130	1,300	865	757	1,290	1,760	930	1,220	884	1,480
4	1,150	1,040	1,220	1,620	1,150	784	1,620	1,240	1,100	1,720	760	1,570
5	1,390	1,100	1,070	1,360	1,220	958	1,760	1,070	1,040	1,680	859	1,590
6	1,080	1,230	1,310	1,140	1,120	793	1,190	1,100	1,400	1,020	1,300	1,770
7	910	1,100	1,710	1,100	1,480	1,200	1,010	1,230	1,700	841	1,280	1,730
8	962	1,220	1,300	1,260	1,700	1,590	1,210	1,170	1,130	855	1,420	1,280
9	1,120	1,320	1,160	1,310	1,230	970	1,290	1,480	991	999	1,740	1,190
10	1,050	1,080	1,160	1,580	1,010	991	1,040	1,740	997	1,040	1,160	1,260
11	1,140	1,020	1,290	1,740	908	1,090	1,420	1,180	1,130	1,100	992	1,120
12	1,220	1,000	1,110	1,360	1,180	1,090	1,710	1,050	1,090	1,460	983	1,030
13	1,100	1,160	1,410	878	1,100	1,120	1,090	1,020	1,330	993	1,180	1,400
14	983	1,150	1,660	1,000	1,520	1,040	839	1,170	1,690	815	1,080	923
15	1,020	1,170	1,250	1,020	1,790	1,180	999	1,030	1,080	831	1,450	802
16	1,110	1,270	1,090	877	1,630	976	1,190	1,320	898	992	1,710	944
17	1,080	1,250	1,170	1,080	1,150	832	1,070	1,740	897	907	1,110	1,080
18	1,470	1,080	1,300	1,630	1,060	893	1,320	1,120	1,040	1,140	882	863
19	1,730	1,090	1,130	1,030	1,230	992	1,710	939	1,010	1,260	767	1,030
20	1,200	1,220	1,470	959	1,130	1,030	1,140	1,020	1,320	972	1,030	1,360
21	1,090	1,100	1,640	1,070	1,400	1,370	987	1,200	1,680	889	1,180	949
22	1,040	1,400	1,230	1,140	1,840	1,760	1,090	1,130	1,090	890	1,610	670
23	1,080	1,650	1,150	1,130	1,730	1,040	1,240	1,430	904	1,100	1,720	826
24	988	1,220	1,340	1,390	1,080	891	1,170	1,820	894	1,090	969	932
25	1,300	1,110	1,610	1,620	928	897	1,540	1,110	1,040	1,320	797	993
26	1,690	1,100	1,080	1,040	1,080	1,020	1,740	973	1,000	1,600	753	1,140
27	1,170	1,270	1,210	936	884	1,080	1,380	1,010	1,090	936	1,010	1,200
28	1,030	1,200	1,320	1,190	921	1,210	1,060	1,200	1,290	763	1,100	999
29	1,080	1,320	1,240	1,200	-------	1,390	1,130	952	995	761	1,270	1,010
30	1,200	1,630	1,110	840	-------	1,020	1,300	1,260	905	1,020	1,640	1,050
31	1,100	-------	1,090	1,400	-------	988	-------	1,490	-------	978	991	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	1,730	910	1,150	70,900
November	1,650	1,000	1,200	71,400
December	1,710	1,030	1,260	77,700
January	1,740	840	1,210	74,500
February	1,840	865	1,260	69,700
March	1,760	757	1,060	65,300
April	1,760	839	1,260	75,000
May	1,820	939	1,250	76,800
June	1,700	894	1,120	66,700
July	1,720	761	1,070	65,800
August	1,740	753	1,170	71,900
September	1,770	670	1,160	68,800
The year	1,840	670	1,180	854,000

BLUE RIVER AT DILLON, COLO.

LOCATION.—Water-stage recorder in sec. 18, T. 5 S., R. 77 W., on edge of Dillon, a short distance above mouths of Snake River and Tenmile Creek.

DRAINAGE AREA.—129 square miles.

RECORDS AVAILABLE.—October, 1910, to September, 1931.

EXTREMES.—Maximum discharge during year, 505 second-feet June 8 (gage height, 2.75 feet); minimum occurred during winter.

1910–1931: Maximum discharge, 1,180 second-feet June 14, 1924 (gage height, 3.6 feet); minimum, 14 second-feet Jan. 30, Feb. 9, 1915 (gage height, 1.10 feet).

REMARKS.—Records good except those for winter period, which were estimated on basis of four current-meter measurements and temperature records. Practically no diversions above station.

Daily and monthly discharge, in second-feet, 1930–31

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	75	47						76	342	321	120	57
2	75	48						78	364	356	131	55
3	76	46	36				a30	71	397	306	124	51
4	78	44						73	425	254	111	51
5	78	43						75	416	236	98	49
6	76	43						71	456	219	96	48
7	75	41		22				76	471	205	95	48
8	72	41						88	493	192	95	49
9	71	40						94	440	179	95	48
10	71	40					a40	86	387	169	95	47
11	71	39			18			79	351	152	92	46
12	76	41						78	333	148	86	45
13	76	39						82	333	146	80	45
14	73	36					44	103	333	140	72	44
15	71	36					49	161	351	136	68	44
16	69						54	208	397	132	72	46
17	68					21	59	263	425	131	76	46
18	64						64	325	392	131	86	47
19	60						69	263	360	131	82	49
20	59						67	208	333	120	82	51
21	58						63	181	306	117	78	53
22	57						57	156	294	109	75	55
23	57	a35					55	163	280	104	71	55
24	56						51	224	277	103	71	54
25	57						50	284	277	103	68	54
26	56						56	356	277	103	67	52
27	56						59	387	314	100	67	51
28	51						64	364	321	100	67	51
29	51						67	333	342	107	63	52
30	50						72	287	325	119	59	50
31	48							284		112	57	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	78	48	65.5	4,030
November	48		38.3	2,280
December			a30.0	1,840
January			a20.0	1,230
February			a18.0	1,000
March			a20.0	1,230
April	72		49.0	2,920
May	387	71	180	11,100
June	493	277	360	21,400
July	356	100	161	9,900
August	131	57	83.8	5,150
September	57	44	49.8	2,960
The year	493		89.8	65,000

a Interpolated.

SNAKE RIVER AT DILLON, COLO.

LOCATION.—Water-stage recorder in sec. 18, T. 5 S., R. 77 W., at highway bridge 100 yards above mouth of river at Dillon.

DRAINAGE AREA.—92 square miles.

RECORDS AVAILABLE.—October, 1910, to September, 1919; December, 1929, to September, 1931.

EXTREMES.—Maximum discharge during year, 491 second-feet June 7 (gage height, 3.56 feet); minimum probably occurred during winter.

1910–1919, 1929–1931: Maximum discharge, 1,170 second-feet June 15, 1918; minimum, 3 second-feet Nov. 9, 1912.

REMARKS.—Records good except those for winter period, which are based on four current-meter measurements and temperature records. Snake River Ditch diverts about 30 second-feet above station for power development.

Daily and monthly discharge, in second-feet, 1930–31

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	17	14						29	220	211	32	14
2	18	15						30	238	175	28	15
3	20	17	12				25	24	268	166	27	15
4	20	15						23	265	132	25	14
5	16	13						21	259	116	30	14
6	16	14						27	289	107	48	14
7	15	13		11				28	323	92	29	13
8	15	15						28	295	78	27	13
9	14	15						22	244	70	23	13
10	13	17					40	20	198	66	24	12
11	14	16			20			22	195	64	22	12
12	14	16						25	211	58	20	12
13	14	15						32	200	51	20	12
14	13	16					59	59	190	47	20	11
15	13	12				18	48	86	214	40	20	11
16	13						48	114	244	33	23	11
17	14						58	190	223	34	37	11
18	14	10					59	173	202	36	24	12
19	13						55	86	180	33	23	13
20	13						43	55	166	28	22	12
21	12						41	39	163	26	22	12
22	12						33	33	146	24	20	11
23	12						21	57	144	22	20	11
24	13						17	105	137	21	18	12
25	14	12					19	114	137	21	17	12
26	12						22	139	161	21	16	12
27	14						24	99	144	22	16	11
28	12						28	59	178	28	15	11
29	14						29	57	161	42	14	11
30	15						29	101	214	27	14	11
31	15							175		28	14	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	20	12	14.3	879
November	17		13.1	780
December			12	738
January			12	738
February			18	1,000
March			20	1,230
April	59	17	35.9	2,140
May	190	20	66.8	4,110
June	323	137	207	12,300
July	211	21	61.9	3,810
August	48	14	22.9	1,410
September	15	11	12.3	732
The year	323		41.3	29,900

TENMILE CREEK AT DILLON, COLO.

LOCATION.—Water-stage recorder in sec. 18, T. 5 S., R. 77 W., at highway bridge 300 yards above mouth at Dillon.

DRAINAGE AREA.—113 square miles.

RECORDS AVAILABLE.—October, 1910, to September, 1919; April, 1930, to September, 1931.

EXTREMES.—Maximum discharge during year, 1,170 second-feet May 25 (gage height, 5.04 feet); minimum occurred during winter.

1910–1919, 1930–31: Maximum discharge, 1,630 second-feet June 16, 1917; minimum, 2 second-feet Feb. 15–17, 20, 1918.

REMARKS.—Records good except those for winter period, which were based on four current-meter measurements and temperature records. Small diversions for irrigation above station. No regulation.

Daily and monthly discharge, in second-feet, 1930–31

Day	Oct.	Nov.	Dec.	Jan.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	70	47					112	514	215	118	36
2	66	43					115	535	169	77	36
3	63	38	27				107	584	156	63	34
4	65	36					98	521	156	58	31
5	63	35					82	521	129	52	30
6	63	35					84	507	111	54	30
7	62	33		22			118	535	100	58	31
8	60	35					159	439	92	66	30
9	57	42					96	340	86	56	29
10	56	38					84	274	82	50	27
11	58	38					60	274	80	45	33
12	58	47					94	274	78	42	29
13	54	38					192	282	75	40	29
14	50	39				94	300	289	72	39	30
15	48	40					389	314	70	36	29
16	51						521	322	72	56	30
17	47				20		750	293	73	66	33
18	50						556	256	70	50	30
19	52						309	240	68	48	43
20	51						218	218	65	45	50
21	47						178	192	60	42	47
22	44						180	183	58	36	42
23	42	32					327	180	56	38	38
24	38						521	180	57	34	47
25	40						640	167	57	33	47
26	44						712	192	60	33	38
27	35						549	197	60	33	35
28	43						420	192	63	31	34
29	36						300	180	78	31	33
30	42						274	197	60	30	31
31	44						389		75	29	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	70	35	51.6	3,170
November	47		35.5	2,110
December			25	1,540
January			20	1,230
February			18	1,000
March			25	1,540
April			90	5,360
May	750	60	288	17,700
June	584	167	313	18,600
July	215	56	87.2	5,360
August	118	29	48.0	2,950
September	50	27	34.7	2,060
The year	750		86.6	62,600

ROARING FORK AT GLENWOOD SPRINGS, COLO.

LOCATION.—Water-stage recorder in sec. 9, T. 6 S., R. 89 W., 1,500 feet above mouth of river at Glenwood Springs, Garfield County. Zero of gage is 5,720.73 feet above mean sea level.

DRAINAGE AREA.—1,460 square miles.

RECORDS AVAILABLE.—April, 1906, to September, 1909; September, 1910, to September, 1931.

EXTREMES.—Maximum discharge during year, 5,210 second-feet June 8 (gage height, 4.57 feet); minimum, 243 second-feet Jan. 26 (gage height, 0.86 foot). 1906–1909, 1910–1931: Maximum discharge, 17,600 second-feet June 14, 1918, and June 14, 1921; minimum, 225 second-feet Dec. 16, 1906 (gage height, 1.15 feet).

REMARKS.—Records good except those for periods Dec. 11–16, May 25–30, June 23–27, July 14–17, which were estimated. Diversions for irrigation above station.

Daily and monthly discharge, in second-feet, 1930–31

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	745	520	460	490	319	301	295	772	3,040	2,070	727	325
2	781	520	475	543	319	307	307	772	2,960	1,690	683	338
3	754	520	475	535	313	301	301	826	3,700	1,550	583	344
4	754	520	505	475	307	301	283	908	3,740	1,890	528	325
5	736	520	482	418	313	307	289	808	3,310	1,610	490	325
6	649	520	498	453	319	295	307	736	3,470	1,410	505	332
7	640	505	460	411	319	271	338	844	4,150	1,260	583	351
8	624	490	468	446	313	283	384	994	4,130	1,160	615	351
9	615	475	490	439	319	265	384	918	3,510	1,050	551	338
10	624	475	468	404	319	307	384	817	2,600	918	475	344
11	658	468	446	390	307	307	404	700	2,300	994	439	325
12	700	460	425	404	325	319	446	640	2,490	1,010	390	313
13	683	460	425	364	319	307	475	754	2,840	994	377	313
14	683	468	404	325	307	307	512	1,070	2,710	944	358	313
15	658	490	400	338	307	313	512	1,490	3,310	895	351	325
16	640	475	402	325	307	313	498	1,910	3,610	845	358	351
17	632	490	405	351	301	325	505	2,450	3,360	795	364	351
18	624	543	397	344	301	332	583	2,700	2,870	745	390	377
19	607	528	358	312	307	344	692	1,930	2,700	683	390	658
20	599	520	325	295	319	332	666	1,470	2,520	640	377	899
21	591	512	370	338	313	313	583	1,240	2,360	591	358	763
22	583	432	325	351	295	325	575	1,070	2,130	543	364	683
23	559	390	289	325	277	319	543	1,170	2,070	490	364	658
24	543	432	377	313	277	307	528	1,620	1,890	446	364	1,290
25	535	439	377	283	277	307	559	2,390	1,670	418	351	1,170
26	551	460	358	243	295	301	520	2,680	2,390	390	338	937
27	543	475	418	289	307	289	512	2,260	2,260	404	313	844
28	520	482	418	295	307	289	520	1,840	1,900	446	295	781
29	512	482	432	295	-------	307	551	1,890	2,000	599	295	763
30	475	460	468	301	-------	301	692	1,620	2,080	528	295	727
31	505	-------	475	313	-------	301	-------	2,340	-------	512	332	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	781	475	62	38,300
November	543	390	48	28,800
December	505	289	42	25,900
January	543	243	36	22,600
February	325	277	30	17,000
March	344	271	30	18,800
April	692	283	47	28,100
May	2,700	640	1,41	86,700
June	4,150	1,670	2,80	167,000
July	2,070	390	92	56,600
August	727	295	42	26,200
September	1,290	313	54	32,100
The year	4,150	243	757	548,000

TAYLOR RIVER AT ALMONT, COLO.

LOCATION.—Water-stage recorder in sec. 22, T. 51 N., R. 1 E., in Almont, 300 feet above junction with East River.

DRAINAGE AREA.—440 square miles.

RECORDS AVAILABLE.—July, 1910, to September, 1931.

EXTREMES.—Maximum discharge during year, 824 second-feet May 18 (gage height, 2.88 feet); minimum occurred during winter.

1910–1931: Maximum discharge, 3,760 second-feet June 9, 1920 (gage height, 5.0 feet); minimum, 50 second-feet several days during August, 1913 (gage height, 1.2 feet).

REMARKS.—Records good except those for period Nov. 11 to Feb. 16, Mar. 6–9, which were based on one current-meter measurement and temperature records. Small diversions for irrigation above station.

Daily and monthly discharge, in second-feet, 1930–31

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	238	129				100	106	228	584	403	203	105
2	207	124				100	106	233	536	271	161	106
3	191	124				101	109	215	512	246	137	104
4	195	113				102	109	197	512	298	124	103
5	191	113				102	112	179	475	246	118	103
6	187	118	104	100	98		111	207	512	207	132	104
7	187	113				98	132	228	552	187	132	104
8	183	113					164	238	512	172	140	105
9	175	113					158	191	431	158	132	105
10	175	121				102	183	183	339	150	121	103
11	207					102	207	144	315	150	116	102
12	203					102	233	168	327	144	113	104
13	187	110				102	246	203	339	140	112	104
14	183				96	102	260	315	315	137	110	104
15	175					108	271	410	327	135	111	105
16	172		100	98		102	288	460	345	137	113	105
17	164				94	102	298	505	327	140	140	102
18	175	105			93	105	315	617	288	158	140	100
19	175				112	108	315	382	260	132	126	106
20	172				100	109	310	271	256	137	121	154
21	168				93	102	315	224	238	147	113	129
22	168				94	102	179	215	224	129	113	116
23	161				96	102	199	293	220	132	112	112
24	147				97	102	183	417	215	137	112	113
25	161				97	102	161	528	211	137	113	118
26	168	103	98	95	100	102	154	536	220	124	112	121
27	147				102	96	161	468	224	121	111	126
28	154				101	94	168	339	215	135	111	154
29	147				-------	93	175	315	224	150	112	129
30	137				-------	100	147	389	282	126	104	121
31	129	-------			-------	102	-------	512	-------	135	102	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	238	129	175	10,800
November	129	----------	110	6,550
December	----------	----------	101	6,210
January	----------	----------	97.6	6,000
February	112	93	97.7	5,430
March	109	93	101	6,210
April	315	106	196	11,700
May	617	144	316	19,400
June	584	211	345	20,500
July	403	121	168	10,300
August	203	102	123	7,560
September	154	100	112	6,660
The year	617	----------	162	117,000

UNCOMPAHGRE RIVER NEAR COLONA, COLO.

LOCATION.—Water-stage recorder in NE. ¼ sec. 32, T. 47 N., R. 8 W., 3 miles south of Colona and short distance below mouth of Billy Creek.
DRAINAGE AREA.—419 square miles.
RECORDS AVAILABLE.—April, 1917, to September, 1931.
EXTREMES.—Maximum discharge during year, 958 second-feet June 16 (gage height, 2.72 feet); minimum occurred during winter.
1917–1931: Maximum discharge, 4,080 second-feet June 13, 14, 1921; minimum, 16 second-feet Sept. 3, 1918.
REMARKS.—Few small diversions above station. Records of daily discharge furnished by United States Bureau of Reclamation.

Daily and monthly discharge, in second-feet, 1930–31

Day	Oct.	Nov.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	173	95		111	195	600	450	265	98
2	152	95		111	195	580	380	180	84
3	160	95		98	200	640	356	142	71
4	136	97		102	200	640	530	115	73
5	136	98		100	195	495	335	105	71
6	133	97		116	190	550	297	170	69
7	135	95		143	233	600	243	190	73
8	141	97		155	230	570	210	204	73
9	136	94		130	202	480	185	191	70
10	130	88		134	180	335	160	156	73
11	202	89		165	155	330	156	137	80
12	170	88		185	158	450	140	124	75
13	160	90		200	208	530	130	129	79
14	150	95	121	187	280	515	125	117	76
15	150	97	115	180	340	640	130	109	82
16	145	91	120	155	460	660	135	109	80
17	136	100	128	154	550	605	125	109	71
18	141	103	130	201	530	505	145	100	83
19	136	102	130	225	340	480	141	93	110
20	135	92	106	175	225	410	125	87	141
21	130	80	109	160	170	400	110	76	130
22	130		119	167	150	360	100	69	120
23	130		111	155	230	365	95	67	105
24	110		102	154	320	345	90	63	252
25	107		105	145	495	370	90	60	185
26	115		95	134	490	400	100	58	162
27	105		91	145	300	390	120	57	155
28	101		91	155	250	370	110	56	151
29	100		92	220	300	472	165	53	146
30	100		86	205	425	693	255	52	140
31	98		95		535		275	55	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	202	98	135	8,300
November 1–21	103	80	94.2	3,920
March 14–31	130	86	108	3,860
April	225	98	156	9,280
May	550	150	288	17,700
June	693	330	493	29,300
July	530	90	194	11,900
August	265	52	113	6,950
September	252	69	106	6,310

UNCOMPAHGRE RIVER AT DELTA, COLO.

LOCATION.—Water-stage recorder in NW. ¼ sec. 24, T. 15 S., R. 96 W., half a mile west of Delta and 1½ miles above mouth.

DRAINAGE AREA.—1,110 square miles.

RECORDS AVAILABLE.—April, 1924, to September, 1931. From April, 1903, to October, 1923, at station 3½ miles upstream.

EXTREMES.—Maximum discharge during year, 742 second-feet Oct. 4 (gage height, 3.07 feet); minimum, 40 second-feet Apr. 4 (gage-height, 0.84 foot). 1903–1931: Maximum discharge, 2,880 second-feet June 29, 1927; minimum, 7 second-feet several days in July, 1910.

REMARKS.—Records good. Practically entire flow of river diverted above station. Field data furnished by United States Bureau of Reclamation.

Daily and monthly discharge, in second-feet, 1930–31

Day	Oct.	Nov.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	559	289	-------	51	75	122	512	92	65
2	634	295	-------	45	74	124	403	72	65
3	657	355	-------	43	87	179	344	65	62
4	713	348	-------	42	104	198	368	70	60
5	690	338	-------	66	84	181	347	67	62
6	680	322	-------	176	76	188	266	70	65
7	662	348	-------	132	72	251	183	87	62
8	657	348	-------	88	70	278	165	97	62
9	547	335	-------	98	84	257	156	84	63
10	518	310	-------	71	87	221	145	88	63
11	555	289	-------	67	95	206	130	82	62
12	581	292	-------	130	92	218	122	75	63
13	547	292	-------	176	97	284	113	80	63
14	522	295	-------	109	109	269	109	63	62
15	475	329	-------	102	107	305	105	63	67
16	463	355	-------	68	115	305	105	65	63
17	479	365	-------	66	218	296	90	67	62
18	479	392	-------	75	237	232	81	78	70
19	460	402	-------	67	160	203	80	87	104
20	448	385	-------	75	149	203	71	82	130
21	434	-------	-------	74	151	193	74	63	75
22	413	-------	-------	71	141	198	71	62	81
23	416	-------	-------	68	145	198	65	62	74
24	427	-------	-------	67	149	203	60	62	111
25	430	-------	167	78	176	213	58	63	229
26	423	-------	181	78	234	196	58	62	160
27	430	-------	167	87	226	208	58	61	134
28	365	-------	206	78	186	218	63	60	139
29	295	-------	206	80	141	242	90	61	143
30	292	-------	116	80	128	389	78	63	130
31	289	-------	61	-------	124	-------	97	63	-------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	713	289	501	30,800
November 1–20	402	289	334	13,200
March 25–31	206	61	158	2,190
April	176	42	83.6	4,970
May	237	70	129	7,930
June	389	122	226	13,400
July	512	58	151	9,280
August	97	60	71.5	4,400
September	229	60	88.4	5,260

GREEN RIVER BASIN

GREEN RIVER NEAR DANIEL, WYO.

LOCATION.—Chain gage near line between Tps. 32 and 33 N., R. 110 W., 6 miles southeast of Daniel.

DRAINAGE AREA.—932 square miles.

RECORDS AVAILABLE.—April, 1915, to September, 1931.

EXTREMES.—Maximum discharge during year, 1,410 second-feet June 18 (gage height, 3.40 feet); minimum occurred during winter.

1915–1931: Maximum discharge, 8,750 second-feet June 16, 1918 (gage height, 7.0 feet); minimum occurred during winter.

REMARKS.—Records good except those for periods Oct. 19–22, 24, 25, Nov. 16–25, Apr. 1–13, which were estimated. Diversion for irrigation above station. Flow regulated by natural lakes in Green River Basin.

Daily and monthly discharge, in second-feet, 1930–31

Day	Oct.	Nov.	Apr.	May	June	July	Aug.	Sept.
1	312	283		438	752	930	498	235
2	326	267		454	860	860	565	226
3	353	257	350	484	1,020	796	491	214
4	414	244		460	551	624	443	205
5	485	248		410	344	572	389	214
6	578	262		384	394	544	368	232
7	622	277		339	465	484	394	238
8	694	290	420	307	586	426	389	255
9	782	296		290	696	379	363	245
10	860	283		286	841	344	334	226
11	955	275		273	1,070	311	320	208
12	922	262	500	266	1,170	262	344	197
13	890	267		311	1,060	226	374	189
14	850	255	484	368	961	235	421	181
15	755	245	460	405	930	242	460	183
16	630	245	432	438	1,060	255	484	178
17	548	240	394	498	1,240	282	478	171
18	499	205	374	524	1,380	311	460	163
19	480	190	344	544	1,340	294	426	171
20	465	170	307	524	1,110	286	405	169
21	450	130	282	484	940	269	368	176
22	435	150	266	448	796	255	374	192
23	420	160	277	416	778	242	353	208
24	400	180	266	400	805	262	334	220
25	380	200	255	426	900	286	320	235
26	364	229	273	460	1,000	303	307	226
27	335	240	311	517	1,130	320	282	208
28	326	242	344	551	1,060	339	259	197
29	309	240	363	593	1,130	368	269	181
30	312	240	394	640	1,050	416	259	174
31	302	------	------	680	------	465	245	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	955	302	531	32,600
November	296	130	236	14,000
April	------	255	373	22,200
May	680	266	438	27,000
June	1,380	344	914	54,400
July	930	226	393	24,200
August	565	245	380	23,400
September	255	163	204	12,100

GREEN RIVER AT GREEN RIVER, WYO.

LOCATION.—Chain gage in sec. 22, T. 18 N., R. 107 W., 100 feet below railroad bridge at Green River. Zero of gage is 6,071.06 feet above mean sea level.
DRAINAGE AREA.—7,670 square miles.
RECORDS AVAILABLE.—May, 1895, to October, 1906; March, 1915, to September, 1931.
EXTREMES.—Maximum discharge during year, 2,950 second-feet June 11 (gage height, 2.86 feet); minimum occurred during winter.
1895–1906, 1915–1931: Maximum discharge, 22,200 second-feet June 19, 1918 (gage height, 12.3 feet); minimum, 160 second-feet Nov. 17, 1898.
REMARKS.—Records good except those for winter period, which were based on two current-meter measurements and temperature records. Diversions for irrigation above station.

Daily and monthly discharge, in second-feet, 1930-31

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	827	872					943	833	1,440	1,520	678	450
2	920	872					921	899	1,370	1,460	755	450
3	1,930	872				410	855	932	1,340	1,400	716	432
4	1,400	860					811	866	1,520	1,240	656	416
5	1,360	838					932	899	1,990	1,100	621	407
6	1,370	816	540	295	345		1,020	954	2,340	978	610	390
7	1,380	761					1,070	899	2,410	911	575	369
8	1,340	741				425	1,220	758	2,450	846	598	348
9	1,310	714					1,470	790	2,430	781	565	320
10	1,500	741					1,400	790	2,730	716	586	308
11	1,930	741				538	1,720	768	2,950	656	565	308
12	2,020	714				545	1,620	737	2,830	565	525	308
13	2,000	761				632	1,480	706	2,680	505	545	308
14	1,950	723				855	1,410	668	2,490	441	565	320
15	1,840	705				758	1,380	641	2,250	432	703	314
16	1,730	678	500	290	365	779	1,270	822	1,940	407	1,010	308
17	1,660	535				726	1,090	1,130	2,030	376	885	314
18	1,610	696				877	1,030	1,380	1,960	362	807	320
19	1,560	588				932	965	1,520	2,110	334	820	314
20	1,580	484				998	932	1,480	2,250	362	781	334
21	1,510	376				987	888	1,410	2,200	369	742	314
22	1,500	400				1,060	811	1,340	1,940	355	690	314
23	1,430	450				954	779	1,300	1,740	355	644	334
24	1,320	500				855	811	1,130	1,560	348	598	348
25	1,280	570			390	844	737	1,020	1,480	355	555	383
26	1,180	650	370	325		800	695	998	1,400	355	515	407
27	1,190	620				600	677	1,140	1,420	355	505	424
28	1,140	600				700	695	1,340	1,480	355	515	398
29	1,120	550			-------	800	677	1,480	1,560	362	495	383
30	1,040	550			-------	920	716	1,620	1,540	369	485	369
31	944	-------			-------	930	-------	1,540	-------	575	466	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	2,020	827	1,450	89,200
November	872	376	666	39,600
December	----------	----------	467	28,700
January	----------	----------	304	18,700
February	----------	----------	365	20,300
March	1,060	----------	686	42,200
April	1,720	677	1,030	61,300
May	1,620	641	1,060	65,200
June	2,950	1,340	2,000	119,000
July	1,520	334	630	38,700
August	1,010	466	638	39,200
September	450	308	357	21,200
The year	2,950	----------	805	583,000

GREEN RIVER NEAR LINWOOD, UTAH

LOCATION.—Water-stage recorder in SW. ¼ sec. 21, T. 3 N., R. 21 E., 2 miles south of Wyoming-Utah line and 5 miles southeast of Linwood: Henrys Fork enters 1 mile below.

DRAINAGE AREA.—14,300 square miles.

RECORDS AVAILABLE.—October, 1928, to September, 1931.

EXTREMES.—Maximum discharge during year, 3,260 second-feet June 12 (gage height, 2.64 feet); minimum, 282 second-feet Sept. 15 (gage height, −0.46 foot).

1928–1931: Maximum discharge, 13,400 second-feet Aug. 15, 1930 (gage height, 7.45 feet); minimum, that of 1931.

REMARKS.—Records good except those for winter period, which were based on two current-meter measurements and temperature records, and those for July 20–28 and Sept. 5–7, 9, 11, 13, 14, 17, 18, 20–23, 25, 28–30, which were based on comparison with records at Green River. Diversions for irrigation above station.

Daily and monthly discharge, in second-feet, 1930–31

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,000	1,100					1,200	723	1,800	1,600	664	475
2	1,300	1,040					1,220	772	1,660	1,550	626	457
3	1,800	1,030					1,250	855	1,530	1,450	675	439
4	2,100	1,000					1,280	930	1,470	1,340	717	466
5	1,800	1,010					1,210	855	1,860	1,240	729	458
6	1,480	980	615	305	360	485	1,180	864	2,230	1,100	699	442
7	1,460	940					1,230	920	2,600	960	681	420
8	1,470	900					1,310	846	2,710	920	648	403
9	1,470	882					1,380	788	2,710	873	626	362
10	1,450	846					1,560	780	2,690	810	636	321
11	1,950	828					1,620	846	2,950	717	626	341
12	2,100	828					1,900	950	3,230	664	600	329
13	2,160	819				920	1,920	873	3,200	626	585	330
14	2,120	837					1,760	795	2,950	585	585	310
15	2,060	828	565	300	380		1,710	729	2,720	540	675	284
16	1,970	788					1,730	693	2,530	535	735	313
17	1,900	795					1,640	855	2,310	535	1,000	313
18	1,830	717					1,460	1,350	2,150	530	1,160	313
19	1,750	780				1,160	1,280	1,730	2,140	466	1,120	313
20	1,660	680					1,180	1,960	2,270	430	1,080	313
21	1,680	600					1,110	1,920	2,350	420	1,010	313
22	1,630	460				1,240	1,080	1,760	2,260	405	864	313
23	1,560	480				1,190	1,000	1,640	2,010	400	780	313
24	1,550	530				1,200	855	1,510	1,780	390	723	313
25	1,520	590			410	1,280	900	1,330	1,640	390	670	333
26	1,450	670	390	335		1,170	802	1,180	1,640	400	620	353
27	1,390	740				1,100	780	1,210	1,780	410	580	361
28	1,380	710				705	742	1,340	1,430	420	580	390	
29	1,350	660			-------	855	742	1,510	1,510	570	570	410
30	1,300	630			-------	1,020	729	1,680	1,580	658	565	420
31	1,190	-------			-------	1,040	-------	1,850	-------	795	540	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	2,160	1,000	1,640	101,000
November	1,100	460	790	47,000
December	----------	----------	519	31,900
January	----------	----------	314	19,300
February	----------	----------	381	21,200
March	----------	----------	878	54,000
April	1,920	729	1,260	75,000
May	1,960	693	1,160	71,300
June	3,230	1,430	2,190	130,000
July	1,600	390	733	45,100
August	1,160	540	722	44,400
September	475	284	364	21,700
The year	3,230	----------	914	662,000

GREEN RIVER AT GREEN RIVER, UTAH

LOCATION.—Water-stage recorder in NW. ¼ SW. ¼ sec. 15, T. 21 S., R. 16 E., 1 mile southeast of Green River and 22 miles above 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, 1931. December, 1910, to June 1924, at Little Valley, 7 miles downstream.

EXTREMES.—Maximum discharge during year, 13,100 second-feet May 21 (gage height, 8.65 feet); minimum, 630 second-feet Sept. 19 (gage height, 4.62 feet). 1894–1899, 1905–1931: Maximum discharge, 68,800 second-feet May 29, 1897; minimum, 510 second-feet Dec. 1, 1919.

REMARKS.—Records good except those for December and January, which are fair. Diversions for irrigation above station.

Daily and monthly discharge, in second-feet, 1930–31

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3,820	3,260	1,540	1,440	1,360	2,470	2,930	4,130	8,760	2,950	1,130	1,210
2	3,550	3,210	1,540	1,430	1,580	2,500	2,870	3,990	8,560	2,930	1,240	1,070
3	3,990	3,170	1,630	1,420	1,640	2,560	2,910	4,160	8,370	2,770	1,340	990
4	3,960	3,140	1,780	1,440	1,710	2,710	3,170	4,600	8,130	2,730	1,350	1,030
5	3,790	3,060	1,820	1,360	1,560	2,890	3,280	5,480	8,510	2,770	1,500	1,000
6	3,710	2,970	1,880	1,430	1,600	2,890	3,550	6,120	9,350	2,690	1,950	1,030
7	3,680	2,890	1,860	1,430	1,640	3,020	4,130	6,360	9,750	2,630	1,960	990
8	3,820	2,850	1,880	1,470	1,670	3,040	3,990	7,160	9,900	2,500	1,960	908
9	4,250	2,810	1,900	1,510	1,880	2,710	3,630	7,990	9,750	2,320	2,560	864
10	4,250	2,830	1,950	1,500	1,880	2,750	3,450	7,750	10,100	2,150	2,190	842
11	4,130	2,810	1,960	1,510	1,890	2,730	3,420	7,200	10,400	2,030	1,830	842
12	4,020	2,790	1,960	1,540	1,860	2,850	3,820	7,430	10,900	1,890	1,610	820
13	3,900	2,790	1,960	1,570	1,890	3,190	4,540	7,520	10,100	1,770	1,490	787
14	3,870	2,750	2,010	1,580	1,940	3,740	5,040	6,710	9,200	1,650	1,360	765
15	3,870	2,750	2,000	1,580	1,980	3,400	5,010	6,030	8,760	1,570	1,330	743
16	3,960	2,770	2,040	1,530	2,000	3,420	5,150	5,870	8,610	1,470	1,310	765
17	4,190	2,830	2,060	1,500	1,980	3,600	5,790	6,280	8,230	1,400	1,390	700
18	4,470	2,910	2,140	1,610	2,040	3,450	6,160	7,710	7,850	1,340	1,290	660
19	4,540	2,930	2,190	1,630	2,070	3,500	6,620	10,600	7,200	1,260	1,200	640
20	4,570	2,950	2,140	1,610	2,120	3,630	6,490	12,000	6,620	1,170	1,240	650
21	4,380	2,630	2,090	1,670	2,140	3,840	6,120	12,800	6,240	1,110	1,220	680
22	4,190	2,220	2,060	1,650	2,170	4,130	6,360	12,700	5,720	1,040	1,390	680
23	4,020	1,400	2,040	1,650	2,190	4,600	7,340	10,600	5,080	978	1,580	710
24	3,840	1,200	1,980	1,420	2,200	4,640	7,710	9,300	4,730	930	1,680	930
25	3,760	1,270	1,900	1,510	2,270	4,700	7,340	8,180	4,570	875	1,600	886
26	3,710	1,340	1,760	1,510	2,310	5,010	7,200	7,340	4,320	831	1,510	864
27	3,600	1,400	1,640	1,560	2,390	5,040	6,490	7,340	3,930	787	1,390	1,330
28	3,600	1,490	1,570	1,580	2,450	4,800	5,560	8,370	3,520	743	1,240	1,580
29	3,520	1,490	1,540	1,630	-------	4,250	4,940	9,750	3,240	732	1,150	1,610
30	3,420	1,530	1,500	1,610	-------	3,520	4,470	10,200	3,020	966	1,100	1,720
31	3,330	-------	1,440	1,610	-------	3,120	-------	9,600	-------	1,490	1,060	-------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	4,570	3,330	3,930	242,000
November	3,260	1,200	2,480	148,000
December	2,190	1,440	1,860	114,000
January	1,670	1,360	1,530	94,100
February	2,450	1,360	1,940	108,000
March	5,040	2,470	3,510	216,000
April	7,710	2,870	4,980	296,000
May	12,800	3,990	7,780	478,000
June	10,900	3,020	7,450	443,000
July	2,950	732	1,690	104,000
August	2,560	1,060	1,490	91,600
September	1,720	640	943	56,100
The year	12,800	640	3,300	2,390,000

EAST FORK RIVER AT NEWFORK, WYO.

LOCATION.—Staff gage in sec. 33, T. 32 N., R. 108 W., a quarter of a mile south of Newfork.

DRAINAGE AREA.—348 square miles.

RECORDS AVAILABLE.—April, 1905, to October, 1906; May, 1915, to September, 1924; April to September, 1931.

EXTREMES.—Maximum discharge during period, 916 second-feet May 16 (gage height, 3.48 feet); minimum, 43 second-feet Sept. 16 (gage height, 0.48 foot). 1905–6, 1915–1924, 1931: Maximum discharge, 2,940 second-feet June 9, 1917 (gage height, 6.7 feet); minimum, 25 second-feet Apr. 4, 1920.

REMARKS.—Records good. Diversion above station. Flow partly regulated by small lakes on headwaters.

Daily and monthly discharge, in second-feet, 1931

Day	Apr.	May	June	July	Aug.	Sept.	Day	Apr.	May	June	July	Aug.	Sept.
1	------	52	178	60	56	45	16	------	876	82	49	60	43
2	------	53	236	59	49	45	17	60	710	85	50	57	44
3	------	60	233	58	48	45	18	65	439	80	48	55	45
4	------	58	221	58	50	45	19	71	224	77	48	53	45
5	------	56	200	58	51	46	20	71	120	73	48	53	46
6	------	54	162	57	56	46	21	64	92	69	48	52	47
7	------	66	137	57	57	45	22	60	77	68	53	52	49
8	------	120	168	57	55	45	23	58	88	68	52	51	50
9	------	94	164	56	55	45	24	58	168	65	53	50	52
10	------	71	137	56	53	45	25	58	284	64	53	50	50
11	------	62	108	56	53	45	26	57	263	66	53	48	50
12	------	68	108	54	55	45	27	57	203	68	53	47	49
13	------	195	102	52	57	45	28	55	171	64	53	46	49
14	------	534	90	50	58	45	29	53	148	63	57	45	47
15	------	686	81	49	61	44	30	53	140	62	58	45	47
							31	------	127	------	58	45	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
April 17–30	71	53	60	1,670
May	876	52	205	12,600
June	236	62	113	6,720
July	60	48	53.9	3,310
August	61	45	52.4	3,220
September	52	43	46.3	2,760
The period				30,300

NEW FORK NEAR BOULDER, WYO.

LOCATION.—Staff gage about sec. 8, T. 32 N., R. 108 W., 1 mile west of Boulder and one-eighth mile above Boulder Creek.
DRAINAGE AREA.—578 square miles.
RECORDS AVAILABLE.—May, 1915, to September, 1931.
EXTREMES.—Maximum discharge during year, 1,030 second-feet June 9, 10 (gage height, 3.92 feet); minimum probably occurred during winter.
1915–1931: Maximum discharge, 12,300 second-feet June 17, 1918 (gage height, 8.7 feet); minimum, 42 second-feet Dec. 15–17, 1915.
REMARKS.—Records good. Diversions for irrigation above station. Discharge estimated Nov. 16–30, Apr. 1–8.

Daily and monthly discharge, in second-feet, 1930–31

Day	Oct.	Nov.	Apr.	May	June	July	Aug.	Sept.
1	140	204		55	390	345	166	89
2	143	204		55	415	326	153	81
3	173	204	80	62	484	308	145	81
4	170	204		68	610	283	145	81
5	173	197		68	814	271	150	81
6	167	197		62	800	267	156	81
7	163	197	85	62	814	263	156	81
8	173	197		59	884	251	179	79
9	197	197	89	61	1,020	232	156	77
10	197	173	89	66	1,020	217	160	66
11	212	160	73	66	955	186	150	62
12	242	167	73	64	898	182	153	66
13	258	176	77	62	884	176	163	70
14	274	176	73	62	761	156	203	73
15	292	176	73	68	735	156	251	72
16	306		77	68	683	148	214	68
17	310		70	120	696	132	192	62
18	306	150	62	221	716	135	172	64
19	306		58	291	683	130	153	70
20	302		56	350	634	120	145	73
21	292		56	313	592	120	140	73
22	292		54	275	506	120	135	73
23	284	140	58	244	468	125	130	83
24	270		59	200	435	125	118	79
25	266		59	203	415	125	111	73
26	266		62	251	446	125	107	73
27	253		66	331	473	125	102	70
28	254	160	66	430	400	163	102	66
29	242		62	446	385	182	102	66
30	219		61	405	360	169	102	66
31	208			203		160	98	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	310	140	237	14,600
November	204		169	10,100
April	89	54	70.9	4,220
May	446	55	171	10,500
June	1,020	360	646	38,400
July	345	120	188	11,600
August	251	98	149	9,160
September	89	62	73.3	4,360

PINE CREEK AT PINEDALE, WYO.

LOCATION.—Water-stage recorder in sec. 4, T. 33 N., R. 109 W., at Pinedale, 3 miles above mouth. Zero of gage is 7,164.3 feet above mean sea level.
DRAINAGE AREA.—128 square miles.
RECORDS AVAILABLE.—May, 1915, to September, 1931.
EXTREMES.—Maximum discharge during year, 559 second-feet June 9 (gage height, 2.98 feet); minimum, 2 second-feet Apr. 1–26, May 6–8.
1915–1931: Maximum discharge, 2,310 second-feet June 17, 1918 (gage height, 5.0 feet); minimum, that of Apr. 1–26, May 6–8, 1931.
REMARKS.—Records good except those for period Nov. 18 to Apr. 22, which were estimated. Diversions for irrigation above station. Flow regulated by Fremont Lake.

Daily and monthly discharge, in second-feet, 1930–31

Day	Oct.	Nov.	Apr.	May	June	July	Aug.	Sept.
1	36	53		3	6	143	35	34
2	38	53		2	7	124	37	34
3	42	52		3	17	107	38	33
4	40	52		3	95	93	35	29
5	40	52		3	178	100	34	20
6	42	50	2	2	270	111	76	17
7	46	48		2	362	109	34	17
8	48	48		2	475	58	30	16
9	50	46		5	537	46	28	14
10	54	44		6	532	42	37	12
11	56	43		3	505	40	48	12
12	58	42		4	470	38	45	11
13	61	39	2	4	425	30	64	11
14	64	38		4	366	26	72	11
15	68	36		4	358	24	66	11
16	72	36		4	350	22	64	11
17	74	35		4	366	21	63	12
18	74			4	362	21	61	13
19	74			4	334	22	60	13
20	76		2	4	292	22	58	13
21	74	25		4	198	20	56	13
22	74			4	198	24	56	13
23	74		2	4	182	24	64	14
24	70		2	4	190	24	64	14
25	70		2	4	188	22	63	14
26	70		2	4	188	24	56	13
27	63	26	3	5	182	24	53	13
28	61		3	5	178	22	53	13
29	58		3	5	162	33	53	13
30	56	28	3	5	138	31	48	12
31	55	------	------	5	------	31	35	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	76	36	59.3	3,650
November	53	------	36.6	2,180
December	------	------	18.0	1,110
January	------	------	12.0	738
February	------	------	7.0	389
March	------	------	3.0	184
April	3	2	2.1	125
May	6	2	3.8	234
June	537	6	270	16,100
July	143	20	47.7	2,930
August	76	28	51.2	3,150
September	34	11	15.9	946
The year	537	------	43.8	31,700

BOULDER CREEK NEAR BOULDER, WYO.

LOCATION.—Chain gage in sec. 4, T. 32 N., R. 108 W., 2 miles northwest of Boulder.

DRAINAGE AREA.—112 square miles.

RECORDS AVAILABLE.—April, 1904, to October, 1906; May, 1915, to October, 1924; May to September, 1931.

EXTREMES.—Maximum discharge during period, 779 second-feet June 4, 5 (gage height, 3.44 feet); minimum, 3 second-feet May 1–6, 13 (gage height, 0.34 foot).

1904–1906, 1915–1924, 1931: Maximum discharge, 3,240 second-feet June 14, 1918 (gage height, 6.8 feet); minimum, 0.9 second-foot Aug. 31, 1915.

REMARKS.—Records good. Flow regulated by dam at Boulder Lake. Diversion for irrigation above station.

Daily and monthly discharge, in second-feet, 1931

Day	Apr.	May	June	July	Aug.	Sept.	Day	Apr.	May	June	July	Aug.	Sept.
1		3	118	36	12	15	16		45	225	16	12	6
2		3	236	37	13	14	17	7	39	242	36	11	6
3		3	504	37	12	12	18		53	242	39	11	6
4		3	662	44	12	10	19		56	190	41	12	6
5		3	651	39	11	9	20		65	145	41	12	6
6		3	610	37	12	9	21		62	116	41	12	6
7		4	550	28	10	8	22		58	99	41	12	6
8		4	550	25	6	6	23		85	93	24	12	6
9		4	600	24	7	7	24		156	77	24	10	6
10		4	526	24	7	7	25		214	45	12	11	6
11		4	265	24	8	6	26		230	54	12	11	6
12		4	192	19	9	6	27		214	62	11	10	6
13		3	214	18	9	6	28		134	50	11	9	6
14		5	211	16	9	6	29		78	47	12	10	5
15		35	228	16	15	6	30		88	46	11	10	5
							31		91		11	10	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
May	230	3	56.5	3,470
June	662	45	262	15,600
July	44	11	26.0	1,600
August	15	6	10.5	646
September	15	5	7.2	428
The period				21,700

MIDDLE PINEY CREEK NEAR BIG PINEY, WYO.

LOCATION.—Staff gage in NW. ¼ SW. ¼ sec. 30, T. 30 N., R. 113 W., 15 miles west of Big Piney.

DRAINAGE AREA.—46 square miles.

RECORDS AVAILABLE.—April, 1915, to September, 1918; April to September, 1931.

EXTREMES.—Maximum discharge during period, 45 second-feet July 1 (gage height, 1.40 feet); minimum, 2 second-feet Apr. 23–25, Aug. 20, 21 (gage height, 0.60 foot).

1915–1918, 1931: Maximum discharge, 282 second-feet June 16–18, 1918 (gage height, 2.65 feet); minimum, that of 1931.

REMARKS.—Records good. Small diversion above station.

Daily and monthly discharge, in second-feet, 1931

Day	Apr.	May	June	July	Aug.	Sept.	Day	Apr.	May	June	July	Aug.	Sept.
1	------	3	10	44	12	4	16	4	4	30	13	4	4
2	------	3	11	37	11	4	17	4	4	32	14	4	4
3	------	3	10	36	9	4	18	3	5	33	11	4	4
4	------	3	10	35	8	4	19	3	5	32	8	3	4
5	------	3	9	28	8	4	20	3	5	30	8	2	4
6	------	3	10	6	8	4	21	3	5	27	7	2	4
7	------	3	10	4	9	4	22	3	6	23	7	3	4
8	------	4	11	4	8	4	23	2	6	12	8	3	4
9	------	3	11	4	8	4	24	2	6	5	8	4	4
10	------	3	12	5	8	4	25	2	6	4	8	4	4
11	------	3	12	14	6	4	26	3	7	8	7	4	4
12	------	3	12	22	4	4	27	3	7	11	8	4	4
13	------	4	12	21	4	4	28	3	7	10	8	4	4
14	------	4	12	17	4	4	29	3	7	19	11	4	4
15	------	4	14	17	4	4	30	3	8	36	12	4	4
							31	------	8	------	13	4	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
April 16–30	------	------	2.9	86
May	8	3	4.7	289
June	36	4	15.9	946
July	44	4	14.5	892
August	12	2	5.4	332
September	4	4	4.0	238
The period	------	------	------	2,780

BIG SANDY CREEK NEAR FARSON, WYO.

LOCATION.—Water-stage recorder in sec. 18, T. 27 N., R. 106 W., half a mile above head gate of Eden Canal and 18 miles north of Farson.

DRAINAGE AREA.—322 square miles.

RECORDS AVAILABLE.—May, 1915, to September, 1917; April, 1921, to October, 1924; May, 1927, to September, 1931.

EXTREMES.—Maximum discharge during year, 376 second-feet May 17 (gage height, 3.38 feet); minimum, 1 second-foot Sept. 16–21.

1915–1917, 1921–1924, 1927–1931; Maximum discharge, 1,330 second-feet Aug. 14, 1930 (gage height, 5.96 feet); minimum, that of Sept. 16–21, 1931.

REMARKS.—Records fair. Diversions for irrigation above station. No regulation.

Daily and monthly discharge, in second-feet, 1930–31

Day	Oct.	Apr.	May	June	July	Aug.	Sept.
1	25	-------	35	117	44	38	3
2	26	-------	51	175	40	25	3
3	31	-------	60	195	35	20	2
4	36	-------	74	200	31	18	2
5	48	-------	71	193	25	14	2
6	56	-------	71	180	22	14	2
7	54	-------	84	169	18	11	2
8	49	-------	158	160	15	9	2
9	56	-------	120	189	13	7	2
10	71	-------	90	175	18	5	2
11	73	-------	69	149	19	4	2
12	69	-------	54	132	17	3	2
13	71	-------	63	124	13	3	2
14	64	-------	162	109	8	3	2
15	56	-------	268	102	6	3	2
16	44	-------	277	84	5	3	1
17	38	-------	301	109	4	6	1
18	31	-------	255	115	4	22	1
19	38	88	162	102	8	7	1
20	42	92	113	88	18	6	1
21	37	82	84	76	26	6	1
22	36	67	71	66	23	5	2
23	34	43	60	59	17	4	2
24	-------	36	56	56	14	4	2
25	-------	31	106	51	15	4	2
26	-------	22	162	49	26	4	2
27	-------	18	162	48	27	3	3
28	-------	16	136	51	23	3	4
29	-------	20	113	54	18	3	4
30	-------	22	106	48	16	3	3
31	-------	-------	104	-------	34	3	-------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October 1–23	73	----------	47.2	2,150
April 19–30	92	----------	44.8	1,070
May	301	35	119	7,320
June	200	48	114	6,780
July	44	4	19.4	1,190
August	38	3	8.5	523
September	4	1	2.1	125

HAMS FORK AT DIAMONDVILLE, WYO.

LOCATION.—Staff gage in SW. ¼ sec. 24, T. 21 N., R. 116 W., at Diamondville.
DRAINAGE AREA.—386 square miles.
RECORDS AVAILABLE.—May, 1918, to September, 1931.
EXTREMES.—Maximum discharge during year, 285 second-feet Apr. 13 (gage height, 2.05 feet); no flow Aug. 25 to Sept. 30.
1918–1931: Maximum discharge, 3,250 second-feet May 11, 1923 (gage height, 4.55 feet); no flow Aug. 29–31, 1919, Aug. 25 to Sept. 30, 1931.
REMARKS.—Records good except those during period Nov. 14 to Mar. 14, which were based on one current-meter measurement and temperature records. Diversions for irrigation above station. No regulation.

Daily and monthly discharge, in second-feet, 1930–31

Day	Oct.	Nov.	Jan.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	34	23			20	103	88	10	9	0
2	36	25			21	100	86	9	10	0
3	43	26		12	21	115	86	8	9	0
4	43	28			21	207	82	4	8	0
5	42	24			28	183	80	3	7	0
6	37	24			37	156	76	0	8	0
7	36	19			55	152	70	0	7	0
8	39	20		10	191	171	68	13	7	0
9	40	20			191	141	72	14	8	0
10	49	28			167	124	70	14	8	0
11	56	24			175	115	64	13	6	0
12	56	32			191	105	64	13	5	0
13	53	23		14	275	93	64	12	2	0
14	50				242	100	60	11	0	0
15	50			16	160	141	50	10	3	0
16	49	18		14	164	171	31	10	6	0
17	47			13	156	199	26	9	4	0
18	37		8	16	175	191	23	9	5	0
19	36			15	148	175	21	8	8	0
20	36			16	121	152	20	6	6	0
21	36			16	105	134	21	3	6	0
22	34			18	91	115	19	2	6	0
23	32	15		17	78	96	18	5	4	0
24	34			17	76	98	17	5	3	0
25	34			19	82	103	16	4	0	0
26	34			68	76	100	16	3	0	0
27	34			34	74	103	15	4	0	0
28	34	17		46	76	113	15	4	0	2
29	31			40	93	108	13	1	0	8
30	24			36	110	100	13	2	0	7
31	24			18		96		6	0	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	56	24	39.4	2,420
November	32		20.0	1,190
December			11	676
January			10	615
February			12	666
March	68		18.9	1,160
April	275	20	114	6,780
May	207	93	131	8,060
June	88	13	45.5	2,710
July	14	0	6.9	424
August	10	0	4.7	289
September	8	0	.6	36
The year	275	0	34.6	25,000

HENRYS FORK AT LINWOOD, UTAH

LOCATION.—Staff gage in sec. 23, T. 12 N., R. 109 W., at Wyoming-Utah State line at Linwood. Zero of gage is 5,992.57 feet above mean sea level.
DRAINAGE AREA.—531 square miles.
RECORDS AVAILABLE.—October, 1928, to September, 1931.
EXTREMES.—Maximum discharge during year, 1,020 second-feet July 29 (gage height, 3.4 feet); minimum, 0.1 second-foot July 25, Aug. 14, Sept. 12, 14, 15, 20 (gage height, 0.54 foot).
1929–1931: Maximum discharge, 2,590 second-feet Aug. 13, 1930 (gage height, 4.8 feet); minimum, that of July 25, Aug. 14, Sept. 12, 14, 15, 20, 1931.
REMARKS.—Records good except those during winter, which were based on two current-meter measurements and temperature records. Diversions for irrigation above station.

Daily and monthly discharge, in second-feet, 1930–31

Day	Oct.	Nov.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	80	69				101	12	69	5	5	3.4
2	85	66				105	25	83	4.4	1.7	1.4
3	89	65				79	34	79	2.6	.7	1.0
4	87	63				68	31	91	2.6	.5	1.0
5	91	65				69	17	97	2.4	.3	.4
6	93	65			42	85	15	103	2.3	.4	.2
7	85	66				89	16	93	1.8	2.3	.2
8	89	63		37		89	14	87	1.7	1.7	.2
9	83	62				80	15	82	1.5	.7	.2
10	83	65				74	18	65	1.4	.4	.2
11	89	65				79	16	39	.5	.3	.2
12	109	68				75	13	36	.3	.3	.1
13	93	66	29			72	10	142	.3	.2	.2
14	91	65				74	13	50	.2	.1	.2
15	85	59				63	46	50	.3	105	.1
16	89	51			48	52	109	36	.2	8	.1
17	83	54				43	184	31	.2	1.3	.2
18	83	52				42	226	29	.2	40	.2
19	85	50				37	150	12	.2	20	.2
20	85	37				31	95	11	.2	9	.1
21	83	35				27	75	9	.2	1.4	.2
22	83	35			55	26	58	6	.2	1.4	.2
23	82				52	30	36	6	.2	1.5	.3
24	80				58	20	36	2.7	.2	.3	2.2
25	77				66	26	47	2.6	.1	.2	.7
26	77	32			45	27	80	16	.2	.3	.2
27	72				23	28	135	4.0	.2	.2	.2
28	77				22	27	119	2.4	.2	.2	.2
29	71				30	22	89	6	.2	.2	.2
30	68				40	19	77	5	109	.2	.2
31	66				40		69		55	101	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	109	66	83.6	5,140
November	69		51.4	3,060
December			30	1,840
January			30	1,840
February			40	2,220
March	66	22	44.5	2,740
April	105	19	55.3	3,290
May	226	10	60.6	3,730
June	142	2.4	44.8	2,670
July	109	.1	6.26	385
August	105	.1	9.83	604
September	3.4	.1	0.48	29
The year	226		38.1	27,500

BURNT FORK AT BURNTFORK, WYO.

LOCATION.—Chain gage in sec. 11, T. 12 N., R. 112 W., one-fourth mile west of Burntfork and 1 mile above mouth. Zero of gage is 7,094.82 feet above mean sea level.

DRAINAGE AREA.—73 square miles.

RECORDS AVAILABLE.—July, 1929, to September, 1931.

EXTREMES.—Maximum discharge during year, 13 second-feet July 27 (gage height, 3.0 feet); minimum, 0.6 second-foot July 22 (gage height, 2.44 feet).

1929–1931: Maximum discharge, 445 second-feet Aug. 10, 1930 (gage height, 4.7 feet); minimum, that of July 22, 1931.

REMARKS.—Records fair. Diversions for irrigation above station.

Daily and monthly discharge, in second-feet, 1930–31

Day	Oct.	Nov.	Jan.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	8.5	6.3			4.2	2.5	2.5	2.2	1.5	2.2
2	8.5	6.3			4.2	2.5	2.8	2.2	1.5	2.0
3	8.5	6.3			4.2	2.5	2.6	2.0	2.5	1.8
4	9	6.1			3.5	2.5	2.2	1.4	2.5	1.8
5	11	6.1			3.5	2.5	2.2	1.2	2.2	1.5
6	10	6.1			3.5	2.5	2.2	1.1	1.8	1.5
7	10	6.1		*4	3.5	2.5	2.6	1.2	1.8	1.4
8	10	5.9			3.5	2.5	2.3	1.1	1.8	1.4
9	10	5.9			3.5	2.2	2.2	2.5	1.7	1.2
10	9	5.9			3.6	2.2	2.3	2.2	1.7	1.5
11	9	5.9			3.6	2.2	2.5	2.2	1.8	1.5
12	9	5.9			4.2	2.6	2.5	1.8	1.8	1.5
13	8.5	5.9			4.2	5.9	2.2	1.1	1.8	1.5
14	7.2	5.9	8		4.0	6.8	2.2	1.0	3.3	1.5
15	7.0	5.9		3.8	4.2	6.1	2.5	1.0	2.3	1.5
16	7.0	5.9		3.5	4.2	4.3	2.6	1.0	2.2	1.5
17	7.0	6.1		3.8	4.2	3.1	2.8	1.0	2.0	1.5
18	7.5	6.1		3.8	4.2	2.5	2.8	.9	1.8	1.5
19	7.5	6.1		3.6	4.3	2.2	3.5	.9	1.8	1.5
20	7.2	6.1		3.3	4.0	2.2	3.0	.7	2.2	1.4
21	7.0	6.1		3.3	3.8	2.2	1.5	.8	2.2	1.5
22	7.0	6.1		3.5	3.8	2.2	1.2	.6	2.2	2.2
23	6.8	6.1		3.8	4.2	2.0	1.2	.8	2.0	2.2
24	6.5	*6		4.0	3.1	1.7	1.2	.8	2.2	2.2
25	6.5	*7		4.2	3.0	2.5	1.2	1.2	2.0	2.2
26	6.5	*8		4.2	3.0	2.5	1.5	1.2	1.8	2.2
27	6.5	8.5		*3	2.8	4.2	2.0	3.8	1.8	2.2
28	6.5	8.5		*3	2.8	4.0	1.7	1.1	1.8	2.2
29	6.5	8.5		*4	2.8	4.2	1.5	1.8	1.8	2.2
30	6.5	8.5		*4	2.5	3.6	1.5	2.0	2.0	2.2
31	6.5			4.2		3.0		1.2	2.2	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	11	6.5	7.88	485
November	8.5	*5.9	6.47	385
December			*8	492
January			*8	492
February			*6	333
March	4.2	3.0	3.84	236
April	4.3	2.5	3.67	218
May	6.8	1.7	3.05	188
June	3.5	1.2	2.17	129
July	3.8	.6	1.42	87
August	3.3	1.5	2.00	123
September	2.2	1.2	1.75	104
The year	11	.6	4.52	3,270

* Estimated.

ASHLEY CREEK NEAR VERNAL, UTAH

LOCATION.—Water-stage recorder in sec. 1, T. 3 S., R. 20 E., three-fourths mile above heading of Utah Power & Light Co.'s canal and 12 miles northwest of Vernal.

DRAINAGE AREA.—101 square miles.

RECORDS AVAILABLE.—June, 1914, to September, 1931. Fragmentary records March, 1900, to December, 1904, at station below mouth of Dry Fork, and October, 1911, to June, 1914, at power plant.

EXTREMES.—Maximum discharge during year, 560 second-feet May 15, minimum, 31 second-feet several days in September.

1911–1931: Maximum discharge, 2,050 second-feet May 29, 1921; minimum discharge, 25 second-feet Mar. 11, 1927.

REMARKS.—Records fair. No diversions above station. Discharge estimated Nov. 18 to May 1 from weekly gage readings.

Daily and monthly discharge, in second-feet, 1930–31

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	103	72						54	147	63	42	35
2	98	72						51	155	62	42	35
3	95	71					32	52	147	61	40	35
4	93	71						52	13[illegible]	58	38	33
5	92	69			34			55	12[illegible]	56	37	32
6	92	71				34		71	126	54	36	31
7	92	69						120	118	53	39	31
8	93	67					35	133	112	52	43	31
9	93	66		42				109	10[illegible]	50	43	31
10	93	64						95	10[illegible]	50	42	32
11	102	63						85	100	49	42	32
12	100	61						96	96	47	39	32
13	95	60			34	34		153	114	46	39	32
14	93	58						272	96	45	38	32
15	95	56						359	85	43	37	32
16	87	52		41			39	305	82	43	39	31
17	87	51						298	79	42	39	31
18	88	50						228	78	42	40	31
19	88							135	72	42	40	31
20	87				34	33		116	67	42	39	31
21	85							112	66	41	38	31
22	84							124	64	39	37	31
23	84			39				193	63	38	36	31
24	84						63	259	62	37	36	31
25	84	48						245	62	38	35	34
26	81							198	62	37	35	34
27	81				34	32		155	62	37	34	34
28	79							137	6[illegible]	39	34	32
29	74							129	6[illegible]	40	33	32
30	71		44	37			55	133	63	42	33	31
31	71							153		42	35	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	103	71	88.5	5,440
November	72		57.3	3,410
December			46	2,830
January			40	2,460
February			34	1,890
March			33	2,030
April			45	2,680
May	359	51	151	9,280
June	155	61	92.3	5,490
July	63	37	46.1	2,830
August	43	33	38.1	2,340
September	35	31	32.1	1,910
The year	359	31	58.8	42,600

UTAH POWER & LIGHT CO.'S TAILRACE NEAR VERNAL, UTAH

LOCATION.—Indicating gage in NW. ¼ sec. 18, T. 3 S., R. 21 E., at Vernal power plant of Utah Power & Light Co. 10 miles northwest of Vernal.

RECORDS AVAILABLE.—May to September, 1917; March, 1920, to September, 1931 (discontinued).

REMARKS.—Flow regulated by operation of power plant. Gage-height record furnished by Utah Power & Light Co. Records fair. Discharge estimated Mar. 18–23, Aug. 6–31.

Daily and monthly discharge, in second-feet, 1930–31

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

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	30	16	21.4	1,320
November	31	18	22.8	1,360
December	30	20	23.5	1,440
January	30	20	23.7	1,460
February	25	19	23.2	1,290
March	25	18	22.5	1,380
April	24	18	22.0	1,310
May	23	18	20.1	1,240
June	30	14	21.3	1,270
July	26	15	20.2	1,240
August	------	------	19.8	1,220
September	27	15	20.5	1,220
The year	31	14	21.7	15,800

NORTH FORK OF DUCHESNE RIVER AT PROVO RIVER TRAIL, NEAR HANNA, UTAH

LOCATION.—Water-stage recorder in SE. ¼ sec. 27, T. 3 N., R. 9 W. Uinta meridian, 400 feet below Provo River trail bridge, 7 miles above Hades Creek, and 12 miles northwest of Hanna.

DRAINAGE AREA.—39 square miles.

RECORDS AVAILABLE.—July, 1929, to September, 1931.

EXTREMES.—Maximum discharge during year, 455 second-feet May 16 (gage height, 2.90 feet); minimum (estimated), 1 second-foot Aug. 30, 31.

1929–1931: Maximum discharge, 851 second-feet June 11, 1930; minimum, that of Aug. 30–31, 1931.

REMARKS.—Records good. Discharge estimated Nov. 15 to Apr. 21, Aug. 19–20, Aug. 31 to Sept. 6, Sept. 17–24, 30.

Daily and monthly discharge, in second-feet, 1930–31

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	51	23						22	217	24	9	
2	42	23						23	214	22	8	
3	39	24						26	206	22	7	
4	35	24						28	180	22	6	2
5	32	23						33	171	20	6	
6	31	23						44	159	20	8	
7	36	21						63	150	20	8	2
8	41	21						60	131	18	6	2
9	35	20						56	120	18	5	3
10	31	20						47	104	17	5	3
11	34	18					18	44	94	17	5	3
12	29	20						62	88	16	5	4
13	27	20						102	81	15	5	4
14	25	20						176	75	14	5	4
15	25				18			251	71	13	6	4
			19	18		18						
16	24							306	64	12	6	5
17	25							356	58	11	7	
18	25							288	51	11	7	
19	26							168	46	10	7	
20	27							110	42	10	7	
												5
21	27							91	39	9	7	
22	27	20					22	91	36	9	10	
23	26						19	146	34	9	8	
24	26						19	245	32	9	7	
25	26						18	292	31	8	6	5
26	25						17	225	32	8	5	5
27	25						17	162	33	9	4	5
28	23						19	140	31	10	3	7
29	22				------		20	150	28	12	2	6
30	22						23	193	25	11	1	6
31	22	------			------		------	231	------	13	1	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	51	22	29.4	1,810
November	------	------	20.7	1,230
December	------	------	19	1,170
January	------	------	18	1,110
February	------	------	18	1,000
March	------	------	18	1,110
April	23	------	18.4	1,090
May	356	22	136	8,360
June	217	25	88.1	5,240
July	24	8	14.2	873
August	10	1	5.9	363
September	7	------	4.0	238
The year	356	1	32.6	23,600

DUCHESNE RIVER NEAR TABIONA, UTAH

LOCATION.—Tape gage Oct. 1–8 and staff gage thereafter in SW. ¼ sec. 17, T 2 S., R. 6 W. Uinta meridian, 5½ miles above Rock Creek and 8 miles southeast of Tabiona.

DRAINAGE AREA.—352 square miles.

RECORDS AVAILABLE.—January, 1919, to September, 1931.

EXTREMES.—Maximum discharge during year, 521 second-feet July 26 (gage height, 5.48 feet); minimum, 37 second-feet July 13 (gage height, 3.38 feet). 1919–1931: Maximum discharge, about 2,500 second-feet June 13, 1921; minimum, that of July 13, 1931.

REMARKS.—Records good. Small diversions for irrigation above station. Discharge estimated Nov. 18 to Jan. 31.

Daily and monthly discharge, in second-feet, 1930–31

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	194	154			85	91	91	91	264	50	81	73
2	185	148			81	94	66	101	247	50	73	76
3	190	144			92	92	67	106	201	5[illegible]	71	76
4	194	146			96	85	91	119	188	53	59	55
5	197	142			94	70	88	124	192	50	59	57
6	194	140			95	79	85	181	183	5[illegible]	62	55
7	199	137			94	79	86	226	183	48	89	59
8	197	133			92	78	86	201	188	43	84	55
9	194	135			94	79	82	208	183	43	62	55
10	199	131			91	82	81	199	179	4[illegible]	59	57
11	194	133			88	84	84	239	166	40	57	57
12	192	128			88	86	85	338	158	38	59	57
13	190	116			85	82	91	389	154	37	55	55
14	192	92			86	81	107	453	146	44	76	57
15	188	104	95		85	79	112	472	142	66	76	59
16	183	102		90	84	86	100	483	142	59	73	62
17	183	106			88	94	88	338	121	64	76	57
18	188	116			91	91	85	292	101	59	55	59
19	183				84	88	94	208	76	55	73	59
20	179				85	89	85	162	76	53	57	59
21	177				84	86	86	168	73	57	62	62
22	175				82	96	92	226	71	53	64	64
23	172				85	94	91	255	66	53	53	68
24	170	100			86	96	84	292	68	55	53	66
25	166				85	92	74	396	55	57	55	64
26	162				88	98	77	362	55	52[illegible]	68	64
27	160				89	78	73	280	64	8[illegible]	66	62
28	158				88	85	73	264	68	92	64	64
29	162				------	67	79	269	76	10[illegible]	64	62
30	156				------	84	88	264	55	12[illegible]	71	59
31	158	------			------	85	------	258	------	9[illegible]	76	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	199	156	182	11,200
November	154	----------	117	6,960
December	----------	----------	95	5,840
January	----------	----------	90	5,530
February	96	82	88 0	4,890
March	98	67	85 5	5,260
April	112	66	85 7	5,100
May	483	91	257	15,800
June	264	55	131	7,800
July	521	37	73 9	4,540
August	89	53	66 2	4,070
September	76	55	61.1	3,640
The year	521	37	111	80,600

DUCHESNE RIVER AT DUCHESNE, UTAH

LOCATION.—Staff gage in NE. ¼ NW. ¼ sec. 1, T. 4 S., R. 5 W. Uinta meridian, in Duchesne, 1 mile above mouth of Strawberry River.

DRAINAGE AREA.—660 square miles.

RECORDS AVAILABLE.—December, 1917, to September, 1931.

EXTREMES.—Maximum discharge during year, 978 second-feet May 16 (gage height, 2.28 feet); minimum, 15 second-feet July 11 (gage height, 0.56 foot).

1918–1931: Maximum discharge, 4,420 second-feet June 10, 1922 (gage height, 8.65 feet); minimum, that of July 11, 1931.

REMARKS.—Records good. Discharge estimated for ice-affected period Nov. 17 to Mar. 13. Diversions for irrigation above and below station.

Daily and monthly discharge, in second-feet, 1930–31

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	266	243					134	150	785	84	120	107
2	278	249					127	150	687	74	84	100
3	292	249					127	150	687	66	74	90
4	278	249					127	142	578	62	66	70
5	313	249					127	134	595	58	58	70
6	320	249					120	134	632	48	74	70
7	334	249				170	120	134	595	37	134	74
8	348	249					127	134	525	27	120	70
9	348	249					134	134	508	18	107	70
10	334	243					134	165	459	17	84	66
11	379	232					134	220	410	15	70	62
12	364	232					134	379	379	17	54	62
13	348	220					134	426	364	17	45	54
14	348	220				165	134	595	348	17	42	54
15	348	211			170	170	134	785	334	42	51	58
16	348	211	190	180		173	127	978	278	42	58	79
17	334					175	127	890	266	42	51	70
18	334					182	127	838	220	45	45	74
19	306					175	127	687	211	54	508	70
20	306					170	127	508	201	58	54	66
21	292					165	134	475	165	51	45	70
22	278					160	150	492	150	54	42	74
23	278	200				157	165	459	134	70	45	79
24	278					150	173	525	114	70	39	97
25	278					137	201	785	107	70	45	90
26	278					130	192	848	150	66	79	84
27	266					140	173	687	114	134	70	90
28	266					150	165	492	107	114	70	95
29	255				------	140	165	475	120	142	66	90
30	255				------	134	157	508	100	157	74	84
31	243	------			------	134	------	726	------	142	165	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	379	243	306	18,800
November	249	----------	220	13,100
December	----------	----------	190	11,700
January	----------	----------	180	11,100
February	----------	----------	170	9,440
March	----------	----------	162	9,960
April	201	120	142	8,450
May	978	134	458	28,200
June	785	100	344	20,500
July	157	15	61.6	3,790
August	508	39	85.1	5,230
September	107	54	76.3	4,540
The year	978	15	200	145,000

DUCHESNE RIVER AT MYTON, UTAH

LOCATION.—Chain gage in NW. ¼ sec. 25, T. 3 S., R. 2 W. Uinta meridian, at Myton, 3 miles below mouth of Lake Fork.

DRAINAGE AREA.—2,750 square miles.

RECORDS AVAILABLE.—October, 1899, to November, 1910; July, 1911, to September, 1931.

EXTREMES.—Maximum discharge during year, 1,180 second-feet May 18 (gage height, 3.38 feet); minimum, less than 1 second-foot July 16.

1899–1910, 1911–1931: Maximum discharge, 12,800 second-feet June 10, 1922 (gage height, 7.94 feet); minimum, that of July 16, 1931.

REMARKS.—Records fair. Discharge estimated for ice-affected period Nov. 21 to Mar. 24. Diversions for irrigation above station. Flow affected by storage in reservoir on Strawberry River.

Daily and monthly discharge, in second-feet, 1930–31

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	452	340					340	201	595	23	64	128
2	424	320					340	180	564	11	40	4
3	424	300					291	195	474	11	17	3
4	397	300					315	209	503	10	7	2
5	370	300					290	201	446	10	2	2
6	345	310					253	244	418	11	2	2
7	345	310					253	244	400	11	92	2
8	397	291					267	267	392	7	41	1
9	397	275					267	286	392	4	25	1
10	408	262					276	300	340	2	11	1
11	397	262					267	315	258	1	4	1
12	420	272					260	315	253	1	2	1
13	440	272				300	253	330	253	1	2	1
14	440	276					267	366	230	1	1	1
15	424	300			280		253	660	213	1	1	1
16	397	350	290	280			267	694	209	1	1	2
17	397	402					201	940	180	1	2	2
18	376	402					180	1,180	172	1	2	1
19	370	350					180	1,050	142	1	2	1
20	360	350					180	595	101	1	2	1
21	350						161	564	80	1	2	1
22	350						161	418	64	1	2	1
23	340						201	446	64	1	2	1
24	340						244	315	59	1	2	3
25	350					325	267	576	41	1	2	7
26	345	300				325	267	844	41	1	2	7
27	340					231	267	595	222	1	1	5
28	340					253	222	340	130	1	1	3
29	335				------	275	222	340	41	2	1	3
30	335				------	300	201	330	78	64	2	4
31	340	------			------	325	------	450	------	8	2	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	452	335	379	23,300
November	402	----------	308	18,300
December	----------	----------	280	17,800
January	----------	----------	280	17,200
February	----------	----------	290	15,600
March	----------	----------	298	18,300
April	340	161	247	14,700
May	1,180	180	451	27,700
June	595	41	245	14,600
July	844	1	33.2	2,040
August	92	1	10.9	670
September	128	1	6.4	381
The year	1,180	1	236	171,000

STRAWBERRY RIVER AT DUCHESNE, UTAH

LOCATION.—Staff gage in SW. ¼ NE. ¼ sec. 2, T. 4 S., R. 5 W. Uinta meridian, three-fourths mile west of Duchesne and 1½ miles above mouth.

DRAINAGE AREA.—1,040 square miles.

RECORDS AVAILABLE.—June, 1908, to November, 1910; March, 1914, to September, 1931.

EXTREMES.—Maximum discharge during year, 1,340 second-feet July 30 (gage height, 8.30 feet); minimum discharge, 1 second-foot several days in July.

1908–1931: Maximum discharge, 3,230 second-feet May 27, 1922 (gage height, 7.7 feet); minimum discharge, that of July, 1931.

REMARKS.—Records fair. Discharge estimated because of ice effect Nov. 24 to Mar. 23. Diversions for irrigation above station. Flow affected by storage in Strawberry Valley Reservoir, which is diverted to the Great Salt Lake Basin.

Daily and monthly discharge, in second-feet, 1930–31

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	68	68					68	102	56	30	60	106
2	72	68					68	99	56	30	48	37
3	88	68					75	99	50	26	41	30
4	72	68					72	99	50	26	34	28
5	75	68					75	99	48	21	34	24
6	75	65					75	102	44	16	88	19
7	75	65					75	112	44	14	72	16
8	68	65					88	112	41	11	37	16
9	68	65					106	102	41	9	30	16
10	68	65					110	112	41	9	30	14
11	88	65					100	106	39	9	26	12
12	75	68				70	110	97	39	7	22	11
13	75	68					106	97	39	6	17	11
14	68	62					78	91	34	6	16	11
15	68	62			60		88	106	34	6	21	11
16	68	62	50	50			83	106	30	6	28	11
17	68	68					78	95	30	4	22	11
18	68	75					78	91	30	4	22	14
19	68	65					83	91	22	3	114	11
20	68	52					83	91	22	2	21	14
21	68	50					75	91	22	2	16	16
22	68	50					78	88	22	1	16	16
23	68	50					78	83	19	1	16	17
24	68					75	83	75	16	1	16	48
25	68					62	88	75	16	1	11	24
26	68	50				83	86	75	291	1	10	22
27	68					68	86	68	60	1	11	22
28	68					62	91	62	41	1	7	60
29	68				------	62	91	62	37	110	7	32
30	68				------	62	91	62	30	610	56	30
31	68	------			------	68	------	62	------	95	341	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	88	68	70.7	4,350
November	75	----------	60.4	3,590
December	----------	----------	50	3,070
January	----------	----------	50	3,070
February	----------	----------	60	3,330
March	----------	----------	69.4	4,270
April	110	68	84.9	5,050
May	112	62	90.7	5,580
June	291	16	44.8	2,670
July	610	1	34.5	2,120
August	341	7	41.6	2,560
September	106	11	23.7	1,410
The year	610	1	56.2	41,100

WEST FORK OF LAKE FORK NEAR MOUNTAIN HOME, UTAH

LOCATION.—Water-stage recorder in NE. ¼ sec. 19, T. 2 N., R. 5 W. Uinta meridian, half a mile below Moon Lake and 13 miles northwest of Mountain Home.
DRAINAGE AREA.—108 square miles.
RECORDS AVAILABLE.—September, 1921, to September, 1931 (fragmentary).
EXTREMES.—1921–1931: Maximum discharge recorded, 2,000 second-feet Sept. 9, 1927 (gage height, 3.85 feet); minimum not determined.
REMARKS.—Records fair. No diversions above station. Flow slightly regulated by storage in Brown Duck Lake Reservoir. Station not operated during winter.

Daily and monthly discharge, in second-feet, 1930–31

Day	Oct.	Nov.	May	June	July	Aug.	Sept.
1	139	88	45	437	124	80	43
2	141	88	49	420	120	72	42
3	137	86	53	416	115	65	40
4	132	------	53	362	106	60	39
5	126	------	56	312	[a] 95	57	38
6	124	------	64	312	[a] 80	58	37
7	124	------	88	297	69	62	36
8	130	------	94	268	65	63	34
9	139	------	92	254	60	59	33
10	141	------	86	234	60	56	33
11	150	------	77	225	58	52	33
12	146	------	78	218	57	50	32
13	143	------	106		57	48	32
14	135	------	172		59	48	31
15	130	------	293	[a] 205	60	56	34
16	120	------	407		62	59	36
17	118	------	542	189	68	59	36
18	117	------	492	170	69	58	35
19	115	------	342	141	68	59	34
20	115	------	241	132	62	62	33
21	113	------	178	126	56	59	33
22	109	------	152	128	53	56	32
23	106	------	160		51	54	34
24	102	------	261		51	51	37
25	102	------	420		51	49	38
26	100	------	433	[a] 126	54	46	38
27	99	------	327		59	44	37
28	94	------	265		63	42	38
29	90	------	261		67	41	39
30	89	------	315		72	41	38
31	88	------	411	------	84	43	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	150	88	120	7,380
May	542	45	213	13,100
June	437	------	216	12,900
July	124	51	70.2	4,320
August	80	41	55.1	3,390
September	43	31	35.8	2,130

[a] Estimated.

LAKE FORK NEAR MYTON, UTAH

LOCATION.—Water-stage recorder in sec. 21, T. 3 S., R. 2 W. Uinta meridian, half a mile above mouth and 3½ miles northwest of Myton.
DRAINAGE AREA.—468 square miles.
RECORDS AVAILABLE.—July, 1900, to December, 1903; June, 1907, to November, 1910; July, 1911, to September, 1931.
EXTREMES.—Maximum discharge during year, 191 second-feet May 18 (gage height, 2.52 feet); no flow Aug. 15.
1900–1903, 1907–1931: Maximum discharge, 5,600 second-feet Nov. 24, 1927; practically no flow July 24, 1916, Aug. 15, 1931.
REMARKS.—Records fair. Diversions for irrigation above station.

Daily and monthly discharge, in second-feet, 1930–31

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	28	46					83	25	28	8	5	2
2	36	45					73	19	25	9	a5	9
3	38	44					70	a19	34	10	5	7
4	42	42					63	20	30	3	4	
5	46	46					a57	20	a32	a4	3	
6	50	42					52	26	52	5	5	
7	57	46					38	22	a48	1	5	
8	61	42					38	26	44	3	7	
9	68	41					28	19	36	3	a5	
10	68	40					30	a23	26	3	3	
11	70	38					23	26	30	4	1	
12	69	44					a23	28	22	a3	1	
13	68	42				a40	22	70	25	3	1	
14	70	44					20	98	a22	3	1	
15	66	42	a42	a40	a38		19	183	19	1	0	
16	55	43					20	163	20	3	a1	a2
17	63	44					20	a177	25	3	1	
18	61						20	191	22	1	1	
19	61						a20	42	18	a2		
20	61						20	36	22	3		
21	63						19	28	a21	2		
22	55						15	28	20	1		
23	57						30	26	19	2		
24	57	a45					48	a27	20	1		
25	52						61	28	9	2	a2	
26	52					42	a40	48	11	a2		
27	52					28	20	98	9	1		
28	46					14	22	48	a10	1		
29	52				------	31	19	28	11	4		
30	48				------	48	22	22	9	5		
31	50	------			------	52	------	a25	------	6		------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	70	28	55.5	3,410
November	----------	----------	43.9	2,610
December	----------	----------	42	2,580
January	----------	----------	40	2,460
February	----------	----------	38	2,110
March	52	14	39.2	2,410
April	83	15	34.5	2,050
May	191	19	52.9	3,250
June	52	9	24.0	1,430
July	10	1	3.3	203
August	7	0	2.6	158
September	9	----------	2.4	143
The year	191	0	31.5	22,800

a Estimated.

UINTA RIVER NEAR NEOLA, UTAH

LOCATION.—Water-stage recorder in SW. ¼ sec. 25, T. 2 N., R. 2 W. Uinta meridian, 100 feet below bridge, 1 mile above mouth of 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, 1931.

EXTREMES.—Maximum discharge during year, 593 second-feet May 15 (gage height, 1.83 feet); minimum not recorded.

1929–1931: Maximum discharge, 1,080 second-feet May 30, 1930 (gage height, 2.70 feet); minimum not recorded.

REMARKS.—Records fair. Water diverted from Pole Creek and used at Uinta Power & Light Co.'s power plant enters stream 500 feet above gage.

Daily and monthly discharge, in second-feet, 1930–31

Day	Oct.	Nov.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	196	130		64	71	310	196	123	96
2	184	126	e50	64	76	291	177	112	89
3	174	123		64	82	319	163	104	86
4	170	126	49	64	78	286	152	101	84
5	166	120		64	82	224	139	104	84
6	170	117	e50	64	91	228	130	120	82
7	177	115			146	305	117	156	82
8	181	117			159	286	109	136	80
9	181	106	53	e68	130	263	106	123	75
10	177	104	65		112	237	106	112	73
11	181	101	78	73	98	241	104	106	71
12	170	109		75	109	246	104	101	98
13	174	109			192	237	96	93	93
14	163				329	259	96	98	86
15	163		e78		429	272	98	123	93
16	149				450	263	93	117	104
17	152				461	246	93	109	91
18	149		78	e75	363	291	93	106	91
19	146		78		237	296	93	117	91
20	142		78		181	281	91	117	89
21	139	e100	78		156	281	86	106	89
22	133		78		156	277	86	104	89
23	130		78		200	272	86	101	91
24	130			75	305	286	86	98	101
25	130		e70		378	259	86	96	89
26	130			e75	324	259	96	91	86
27	130				237	263	106	86	86
28	126		62		204	250	112	84	93
29	130		60	75	212	259	133	82	89
30	130		57	71	212	220	126	86	82
31	130		60		286		142	104	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	196	126	155	9,530
November			107	6,370
December			e80	4,920
January			e70	4,300
February			e60	3,330
March			66.1	4,060
April			71.7	4,270
May	461	71	211	13,000
June	319	220	267	15,900
July	196	86	113	6,450
August	156	82	107	6,580
September	104	71	87.8	5,220
The year	461		117	83,900

e Estimated.

WHITEROCKS RIVER NEAR WHITEROCKS, UTAH

LOCATION.—Water-stage recorder in SW. ¼ sec. 18, T. 2 N., R. 1 E. Uinta meridian, 25 feet below bridge, three-fourths mile above heading of United States Whiterocks and Farm Creek Canals, and 6½ miles north of Whiterocks. Prior to Oct. 16, records obtained at site 1¼ miles upstream. No inflow or diversions between two locations.

DRAINAGE AREA.—115 square miles (revised).

RECORDS AVAILABLE.—August, 1921, to September, 1928; February, 1930, to September, 1931. September, 1899, to August, 1904, April, 1907, to November, 1910, near present site. November, 1917, to June, 1921, below diversion of United States Whiterocks Canal and above Farm Creek Canal.

EXTREMES.—1918–1931: Maximum discharge recorded, 2,570 second-feet June 21, 1922; minimum, less than 14 second-feet during winter 1920–21.

REMARKS.—Records fair. Station above main diversions. Flow slightly regulated by storage in small mountain lakes.

Daily and monthly discharge, in second-feet, 1930–31

Day	Oct.	Nov.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	149					44	147	88	72	61
2	140					44	162	78	60	54
3	122					50	162	66	53	50
4	118					47	149	61	50	49
5	114	a 55				50	139	55	50	48
6	114					55	141	52	55	48
7	114					122	138	51	118	46
8	114				a 35	134	130	50	105	44
9	122	52				91	127	49	91	43
10	118	53				68	123	47	73	43
11	118	49				58	103	46	66	43
12	122	50				69	102		62	42
13	122	51				154	100		58	41
14	114	50				247	94		61	41
15	114	49	30	36	30	273	92	a 44	65	43
16	91	53			35	262	92		68	52
17	86	52			40	247	89		68	47
18	84	54			44	232	103	42	64	45
19	84	54			54	147	103	40	75	47
20	84				58	116	100	39	69	46
21	79				55	92	98	38	64	44
22	77				54	91	95	38	63	43
23	75				49	139	97	39	62	50
24	73				45	182	98	39	60	66
25	72	a 50			43	213	103	39	56	54
26	66				45	191	105	46	53	51
27	65		29		43	156	105	49	50	51
28	63				45	136	102	48	50	55
29	58			30	47	118	111	82	49	52
30	58				45	113	103	66	50	48
31	58					139		102	63	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	149	58	96.4	5,930
November			51.9	3,090
December			a 45	2,770
January			a 35	2,150
February			a 30	1,670
March			a 33	2,030
April	58		40.7	2,420
May	273	44	132	8,120
June	162	89	114	6,780
July	102	38	52.1	3,200
August	118	49	64.6	3,970
September	61	41	48.2	2,870
The year	273		62.1	45,000

a Estimated.

FISH CREEK ABOVE RESERVOIR NEAR SCOFIELD, UTAH

LOCATION.—Water-stage recorder in SE. ¼ sec. 18, T. 12 S., R. 7 E., at mouth of canyon, 500 feet above bridge and 4 miles north of Scofield.
DRAINAGE AREA.—62 square miles.
RECORDS AVAILABLE.—June to September, 1931.
REMARKS.—Records good. Gage-height record and results of several discharge measurements furnished by Price River Water Conservation District. Discharge estimated June 1, 3–8, Sept. 19–30.

Daily and monthly discharge, in second-feet, 1931

Day	June	July	Aug.	Sept.	Day	June	July	Aug.	Sept.
1	40	11	4	4	16	23	5	4	3
2	38	11	4	4	17	21	5	4	3
3		11	4	4	18	20	5	4	3
4		11	4	4	19	18	5	4	3
5		8	4	4	20	17	4	4	
	35								
6		8	4	4	21	16	4	4	
7		6	4	4	22	15	4	4	
8		11	4	4	23	15	4	4	
9	33	11	4	4	24	14	4	4	
10	32	11	4	3	25	14	4	4	
									3
11	31	6	4	3	26	14	4	4	
12	31	6	4	3	27	14	4	4	
13	31	6	4	3	28	12	4	4	
14	26	5	4	3	29	12	4	4	
15	25	5	4	3	30	12	4	4	
					31		4	4	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
June		12	24.5	1,460
July	11	4	6.3	387
August	4	4	4.0	246
September	4		3.3	196

FISH CREEK NEAR SCOFIELD, UTAH

LOCATION.—Staff gage in sec. 10, T. 12 S., R. 7 E., below Horsley Dam, 5 miles northeast of Scofield, and 10 miles above mouth.

DRAINAGE AREA.—163 square miles.

RECORDS AVAILABLE.—November, 1917, to September, 1921, and 1925 fragmentary; April, 1926, to September, 1931.

REMARKS.—Records fair. Small diversions for irrigation above station. Flow completely regulated by Horsley Dam. Gage-height record furnished by Price River Water Conservation District. Discharge estimated Oct. 1 to Apr. 2.

Daily and monthly discharge, in second-feet, 1930–31

Day	Oct.	Apr.	May	June	July	Aug.	Sept.	Day	Oct.	Apr.	May	June	July	Aug.	Sept.
1		2	68	120	100	23	14	16		75	78	70	61	14	5
2		8	60	120	100	20	14	17		85	78	81	72	16	6
3		14	60	120	100	20	12	18		85	86	82	77	16	6
4		25	60	120	100	19	12	19		100	107	76	84	14	6
5		25	60	123	100	17	11	20		100	107	76	89	36	5
6		25	60	123	95	16	10	21		82	107	76	92	35	5
7		25	64	69	94	15	8	22		47	107	79	95	28	5
8	25	25	78	50	73	14	7	23	2	42	107	81	88	26	5
9		30	78	50	68	14	7	24		40	107	88	69	23	5
10		34	78	47	63	24	7	25		31	107	91	31	20	5
11		34	78	42	55	44	6	26		33	107	88	30	16	5
12		34	78	48	55	41	6	27		38	107	85	28	15	5
13		61	78	48	56	34	6	28		54	107	96	28	14	5
14		72	78	48	59	14	6	29		78	110	100	28	12	5
15		72	78	52	59	14	6	30		78	115	100	28	14	5
								31		------	120	------	27	14	------

	Maximum	Minimum	Mean	Run-off in acre-feet
October	----------	----------	13.1	806
November	----------	----------	2	119
December	----------	----------	2	123
January	----------	----------	2	123
February	----------	----------	2	111
March	----------	----------	2	123
April	100	2	48.5	2,890
May	120	60	87.5	5,380
June	123	42	81.6	4,860
July	100	27	67.9	4,180
August	44	12	20.7	1,270
September	14	5	7.0	416
The year	123	----------	28.2	20,400

PRICE RIVER NEAR HELPER, UTAH

LOCATION.—Chain gage in SE. ¼ sec. 36, T. 13 S., R. 9 E., three-fourths mile above diversion dam of Price River Irrigation Co. and 2 miles south of Helper.

DRAINAGE AREA.—530 square miles.

RECORDS AVAILABLE.—February, 1904, to September, 1931.

EXTREMES.—Maximum discharge during year, about 525 second-feet Aug. 6 (gage height, 9.7 feet); minimum, 2 second-feet Nov. 18.

1904–1931: Maximum discharge, between 9,000 and 10,000 second-feet during floods early in September, 1927; minimum, that of Nov. 18, 1930.

REMARKS.—Records fair. Main irrigation diversions are below station. Flow affected by storage in reservoir on Fish Creek.

Daily and monthly discharge, in second-feet, 1930–31

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	126	14	8	5	12	19	31	97	134	102	32	37
2	46	13	5	5	12	22	29	97	134	98	33	21
3	58	12	8	5	13	22	23	100	134	102	29	16
4	76	12	8	6	12	27	24	104	130	102	33	15
5	46	12	8	7	13	19	35	104	130	102	29	15
6	35	10	8	8	10	26	47	100	134	102	61	12
7	33	14	8	8	10	30	53	107	134	102	29	12
8	26	12	7	8	13	31	59	104	64	79	27	12
9	296	8	7	12	16	32	53	104	66	66	29	11
10	403	7	8	10	24	37	47	107	70	66	25	7
11	35	6	8	9	16	42	41	111	57	66	39	7
12	26	4	8	7	20	41	82	100	57	66	45	6
13	22	4	8	7	19	40	85	111	57	62	46	6
14	18	4	8	6	16	40	90	100	56	72	29	12
15	14	4	9	7	18	38	90	100	56	61	21	8
16	12	4	10	7	13	36	95	100	79	50	50	8
17	12	4	10	7	10	30	90	97	79	71	26	8
18	12	2	9	8	13	19	106	97	95	79	29	10
19	13	3	9	8	13	16	106	111	95	82	39	10
20	14	3	9	8	12	13	102	137	87	85	53	10
21	22	3	8	7	12	16	98	132	79	85	48	12
22	22	4	8	7	14	26	82	132	91	85	39	12
23	20	4	8	7	16	36	59	132	79	91	39	14
24	18	4	7	7	17	30	58	124	88	79	39	12
25	18	12	7	8	18	19	64	137	95	59	35	9
26	18	18	7	8	20	19	57	124	95	46	29	8
27	18	12	5	7	20	13	50	124	88	35	21	8
28	18	9	5	8	20	16	53	124	97	31	14	7
29	18	9	5	11	------	32	56	124	106	37	14	7
30	16	12	5	11	------	32	98	128	102	52	29	7
31	16	------	5	12	------	32	------	132	------	39	24	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	403	12	49.3	3,030
November	14	2	8.0	476
December	10	5	7.5	461
January	12	5	7.8	480
February	24	10	15.1	839
March	42	13	27.5	1,690
April	106	23	65.4	3,890
May	137	97	113	6,950
June	134	56	92.3	5,490
July	102	31	72.7	4,470
August	61	14	33.4	2,050
September	37	6	11.3	672
The year	403	2	42.1	30,500

GOOSEBERRY CREEK NEAR SCOFIELD, UTAH

LOCATION.—Water-stage recorder in SW. ¼ sec. 6, T. 13 S., R. 6 E., 300 feet below old Mammoth Dam, 5½ miles above confluence with Fish Creek, and 7 miles west of Scofield.

DRAINAGE AREA.—16.4 square miles.

RECORDS AVAILABLE.—October, 1930, to September, 1931.

EXTREMES.—Maximum discharge during year, 98 second-feet, May 3 (gage height, 1.09 feet); minimum not determined.

REMARKS.—Records good except those for estimated periods, which are fair. An average of about 2,000 acre-feet is diverted annually above this station to Cottonwood Creek in the Great Basin, of which about 500 acre-feet is brought over the divide into Gooseberry Creek from Boulger Creek, a tributary of Huntington Creek. A small reservoir on Gooseberry Creek about 5 miles upstream with a capacity of about 1,200 acre-feet is used to regulate these diversions. Gage-height record and results of several discharge measurements furnished by Price River Water Commissioner.

Daily and monthly discharge, in second-feet, 1930-31

Day	Oct.	Nov.	Dec.	Apr.	May	June	July	Aug.	Sept.
1		8			51	19	7	3	2
2		8			57	18	6	3	2
3		8			66	17	6	3	2
4		8			62	18	6	3	2
5		8			62	18	6	3	2
6		8			62	16	6	3	2
7		8			58	16	6	3	2
8		8		e 5	51	16	5	3	2
9		8			47	16	5	3	2
10		8			43	16	5	3	2
	e 4								
11		8			43	14	5	3	
12					43	14	4	3	
13			4		43	14	4	3	
14					43	13	4	3	
15					43	12	4	3	
16					42	11	4	3	
17					40	11	4	3	
18					38	11	4	3	
19					36	10	4	3	
20				e 25	36	10	4	3	
		e 6							e 2
21	4				39	9	4	3	
22	4				32	9	4	3	
23	4				29	9	3	2	
24	4				27	8	3	2	
25	4			26	26	11	3	2	
26	4			26	28	10	3	2	
27	5			32	29	9	3	2	
28	7			48	25	8	3	2	
29	9			52	23	8	3	2	
30	8			51	21	8	3	2	
31	8				20		3	3	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	9		4.5	277
November	8		6.7	399
December			e 4	246
January			e 3	184
February			e 3	167
March			e 3	184
April	52		17.8	1,060
May	66	20	40.8	2,510
June	19	8	12.6	750
July	7	3	4.3	264
August	3	2	2.7	168
September			2.0	119
The year	66		8.8	6,330

e Estimated.

HUNTINGTON CREEK NEAR HUNTINGTON, UTAH

LOCATION.—Water-stage recorder in SE. ¼ sec. 6, T. 17 S., R. 8 E., about 1 mile above Fish Creek and 7 miles northwest of Huntington.

DRAINAGE AREA.—188 square miles.

RECORDS AVAILABLE.—May, 1909, to September, 1931.

EXTREMES.—Maximum discharge during year, 262 second-feet May 16 (gage height, 2.65 feet); minimum not determined.

1909–1931: Maximum discharge, about 2,500 second-feet Aug. 2 or 3, 1930 (gage height, 7.5 feet); probably no flow Nov. 5, 1926 (gage height, 1.24 feet).

REMARKS.—Records fair. Small irrigation diversions above station. Flow slightly regulated by small storage reservoirs.

Daily and monthly discharge, in second-feet, 1930–31

Day	Oct.	Nov.	Dec.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	82	42			35	43	116	114	84	38	29
2	67	42			35	39	118	113	84		26
3	67	42			37	31	135	106	83		25
4	62	42			36	34	127	104	82		24
5	58	42			33	40	142	99	82	e 35	24
6	56	39			31	46	163	97	80		24
7	54	35			32	55	171	90	82		23
8	55	34		e 30	35	55	142	88	82	33	23
9	56	32			36	46	127	83	82		23
10	54	34			32	50	122	78	82		22
11	56	33			33	55	123	77	82		22
12	53	33			31	58	144	76	80		23
13	53	33			30	60	159	77	78		24
14	51	33			30	55	169	94	78	e 32	
15	49				31	56	173	94	67		
16	43			30	35	66	187	92	64		e 25
17	45				36	82	191	90	63		
18	46		35		35	100	163	86	64		
19	46				33	114	129	83	60	31	
20	43				34	113	116	69	59	29	
21	42	e 35		e 31	37	102	116	69	56	30	26
22	40				42	97	116	69	56	27	
23	42				34	95	125	69	58	26	
24	42				31	97	140	66	58	25	
25	43			31	32	86	140	64	59	25	e 28
26	40			32	24	80	125	83	59	25	
27	42			31	36	77	116	97	64	24	
28	40			31	42	84	107	92	66	24	
29	38				42	102	106	90	55	23	31
30	39	37			37	118	109	88	69	26	27
31	40				38		116		49	35	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	82	38	49.8	3,060
November			35.9	2,140
December			e 32.0	1,970
January			e 30.0	1,840
February			30.5	1,690
March	42	24	34.4	2,120
April	118	31	71.2	4,240
May	191	106	137	8,420
June	114	64	86.6	5,150
July	84	49	69.9	4,300
August		23	30.7	1,890
September		22	25.6	1,520
The year	191	22	52.9	38,300

e Estimated.

SAN JUAN RIVER BASIN

SAN JUAN RIVER NEAR BLUFF, UTAH

LOCATION.—Water-stage recorder in SE. ¼ sec. 7, T. 42 S., R. 19 E., 2,000 feet below Gypsum Wash and 20 miles southwest of Bluff.

DRAINAGE AREA.—24,000 square miles.

RECORDS AVAILABLE.—October, 1914, to September, 1917; March, 1927, to September, 1931.

EXTREMES.—Maximum discharge during year, 8,500 second-feet Aug. 1 (gage height, 10.4 feet); minimum discharge, 56 second-feet Sept. 6.

1914–1917; 1927–1931: Maximum discharge, about 70,000 second-feet Sept. 10, 1927 (gage height, 32.0 feet); minimum, that of Sept. 6, 1931.

REMARKS.—Records good except those for the period Dec. 24 to Feb. 1, which are fair. Diversions for irrigation above station. Discharge estimated Dec. 24–28, Jan. 1–28.

Daily and monthly discharge, in second-feet, 1930–31

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,190	460	652		1,200	526	680	2,590	3,890	2,070	2,550	148
2	715	449	659		1,240	520	673	2,350	4,590	3,020	3,480	113
3	427	438	638		1,180	490	606	2,530	5,400	3,610	3,150	176
4	508	432	593		995	466	659	2,830	4,820	4,740	1,170	117
5	550	449	556		950	416	846	3,150	5,640	3,340	680	82
6	508	449	574		1,090	427	959	3,480	5,560	3,410	432	62
7	484	460	574		1,170	478	846	3,080	4,460	2,350	1,930	95
8	484	490	562	300	1,050	508	782	2,770	4,590	1,740	1,290	133
9	484	484	562		822	508	806	2,890	5,240	1,430	1,160	88
10	400	466	574		752	466	1,010	3,280	5,560	1,140	1,050	161
11	427	484	586		738	405	1,190	3,150	4,440	918	1,060	89
12	438	460	586		673	416	1,120	2,770	3,890	775	1,120	66
13	490	454	586		854	438	1,080	2,350	3,220	619	822	82
14	626	427	612		1,010	478	1,270	2,180	3,340	526	632	124
15	775	466	574		1,220	544	1,390	2,290	3,410	460	508	1,560
16	673	454	568		1,560	580	1,430	2,830	3,220	380	454	2,180
17	645	514	520		1,290	580	1,410	4,030	3,220	258	680	918
18	600	730	466		1,040	568	1,550	4,820	3,150	309	562	1,820
19	574	830	227		830	612	1,440	4,740	3,020	380	606	3,450
20	593	806	173		708	680	1,290	5,400	2,590	176	318	2,120
21	561	752	206		666	768	1,300	5,000	2,240	213	632	1,850
22	556	673	170	350	659	745	1,560	4,100	1,960	460	490	3,340
23	532	687	113		701	708	1,670	3,280	1,850	314	514	2,240
24	544	632			652	659	1,660	2,710	1,630	186	270	3,960
25	556	626			693	760	1,820	2,710	1,500	143	176	2,530
26	496	606	150		532	1,220	2,020	3,410	1,490	104	153	2,410
27	493	580			526	968	2,180	4,520	1,480	99	135	2,890
28	496	600			544	934	2,350	5,000	1,360	83	128	2,180
29	484	612	175	400	------	782	1,960	4,240	1,360	1,020	111	2,020
30	484	638	200	450	------	738	2,240	3,340	1,900	870	95	1,690
31	460	------	250	500	------	694	------	3,220	------	910	108	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	1,190	400	557	34,200
November	830	427	554	33,000
December	659	------	410	25,200
January	------	------	335	20,600
February	------	526	905	50,300
March	1,220	405	616	37,900
April	2,350	606	1,330	79,100
May	5,400	2,180	3,390	208,000
June	5,640	1,360	3,330	198,000
July	4,740	83	1,160	71,300
August	3,480	95	854	52,500
September	3,960	62	1,290	76,800
The year	5,640	62	1,230	887,000

PARIA RIVER BASIN

PARIA RIVER AT LEES FERRY, ARIZ.

LOCATION.—Water-stage recorder in NW. ¼ NE. ¼ sec. 13, T. 40 N., R. 7 E., half a mile above mouth and 1 mile northwest of Lees Ferry.

DRAINAGE AREA.—1,520 square miles.

RECORDS AVAILABLE.—November, 1923, to September, 1931.

EXTREMES.—Maximum discharge during year, 2,190 second-feet Nov. 18 (gage height, 7.53 feet); minimum, 0.3 second-foot May 11.

1923–1931: Maximum discharge, 16,100 second-feet Oct. 5, 1925 (gage height, 17.5 feet); no flow several times in December and January of many years.

REMARKS.—Records good. Discharge estimated during period of ice effect Jan. 2–3. Diversions for irrigation above station.

Daily and monthly discharge, in second-feet, 1930–31

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	383	13	21	9	41	10	7	13	3	3	73	78
2	53	13	18	9	46	9	8	11	4	3	21	48
3	22	14	15	9	43	12	5	52	3	3	9	18
4	19	14	19	9	41	13	5	61	4	2	5	8
5	14	13	16	12	55	13	4	41	40	2	5	5
6	15	13	16	7	59	11	4	19	20	2	4	5
7	14	13	14	6	43	9	3	13	8	2	4	5
8	12	13	9	6	33	12	3	8	4	24	4	5
9	11	12	10	5	33	11	3	5	3	15	3	5
10	12	14	9	4	35	14	3	4	3	5	3	5
11	13	14	9	5	33	14	4	3	3	2	3	4
12	14	15	5	5	32	15	3	3	2	2	2	4
13	15	16	6	6	30	13	3	3	2	2	3	5
14	16	16	9	5	28	13	3	3	2	2	3	6
15	15	20	8	7	32	14	3	3	2	2	3	9
16	13	21	5	6	59	12	3	3	2	3	73	28
17	12	24	5	8	39	12	3	3	2	3	48	12
18	13	412	4	12	28	13	3	2	3	3	53	7
19	13	58	6	9	21	14	2	2	3	3	50	2
20	13	14	5	9	20	15	2	3	3	21	26	3
21	13	9	5	10	25	14	2	2	4	11	14	3
22	13	6	5	7	15	9	2	2	3	9	9	4
23	13	8	8	8	11	9	2	2	2	7	5	7
24	12	15	9	7	11	8	2	2	2	4	28	183
25	13	20	9	7	12	9	5	2	5	3	13	57
26	13	23	9	7	13	19	18	2	5	3	7	28
27	12	30	3	8	14	20	9	4	4	3	5	32
28	12	23	3	10	14	9	28	6	2	3	3	27
29	13	22	3	9	------	11	20	12	2	44	3	15
30	13	20	5	9	------	10	15	5	2	74	20	12
31	13	------	5	19	------	7	------	4	------	172	29	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	383	11	26.8	1,650
November	412	6	30.6	1,820
December	21	3	8.8	541
January	19	4	8.0	494
February	59	11	30.9	1,720
March	20	7	12.1	742
April	28	2	5.9	351
May	61	2	9.6	591
June	40	2	4.9	292
July	172	2	14.1	867
August	73	2	17.1	1,050
September	183	2	21.0	1,250
The year	412	2	15.7	11,400

LITTLE COLORADO RIVER BASIN

LITTLE COLORADO RIVER AT ST. JOHNS, ARIZ.

LOCATION.—Water-stage recorder in sec. 27, T. 13 N., R. 28 E., at highway bridge at eastern edge of St. Johns.

DRAINAGE AREA.—938 square miles.

RECORDS AVAILABLE.—April, 1906, to December, 1909; May, 1929, to September, 1931.

EXTREMES.—Maximum discharge during year, 1,300 second-feet July 28 (gage height, 3.53 feet); no flow on many days.

1929–1931: Maximum discharge, 1,410 second-feet Aug. 26, 1929 (gage height, 3.65 feet); no flow on many days of each year.

REMARKS.—Records good. Diversions for irrigation above station. Regulation by numerous storage reservoirs upstream and by operation of St. Johns hydroelectric plant a short distance upstream.

Daily and monthly discharge, in second-feet, 1930–31

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	2	7	4	4	3	6	6	0	36	4	0
2	0	0	7	4	6	4	4	8	1	57	2	0
3	1	2	1	4	6	5	4	7	0	50	1	0
4	1	2	1	3	6	3	3	4	0	15	10	0
5	2	3	6	5	5	4	3	2	0	1	1	0
6	2	2	9	5	5	4	4	3	0	0	0	3
7	2	2	5	5	5	5	2	2	0	0	0	3
8	2	2	7	5	3	4	4	2	0	0	0	0
9	1	1	6	4	5	6	2	3	0	0	2	0
10	2	2	6	5	5	6	1	2	0	0	5	1
11	2	2	7	3	5	5	1	2	0	0	4	2
12	1	3	6	5	6	5	1	1	0	0	3	2
13	1	3	6	6	6	6	2	1	0	0	0	1
14	1	4	4	6	6	6	1	1	0	0	0	9
15	2	5	8	5	3	4	1	2	0	0	3	2
16	2	3	8	6	5	5	1	14	0	0	1	6
17	2	3	8	6	7	4	2	3	0	0	0	7
18	2	5	10	4	7	5	1	1	0	0	0	6
19	1	4	8	5	5	4	1	0	0	0	0	10
20	1	6	8	5	6	5	1	0	0	1	1	4
21	1	6	6	6	5	7	1	0	0	0	0	2
22	1	6	7	5	4	4	1	0	0	0	0	1
23	1	4	9	6	5	6	3	0	0	0	0	1
24	2	5	8	5	5	5	2	0	0	7	0	9
25	1	6	8	3	8	7	2	0	0	3	0	6
26	1	7	6	6	11	5	2	0	0	0	0	3
27	1	5	7	5	6	8	3	0	0	0	1	3
28	0	6	4	6	5	6	3	0	0	111	0	5
29	1	6	5	7	------	5	4	0	0	90	0	4
30	2	5	4	5	------	8	5	0	0	40	4	4
31	1	------	4	5	------	5	------	0	------	70	3	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	2	0	1.3	79
November	7	0	3.7	222
December	10	1	6.3	389
January	7	3	5.0	305
February	11	3	5.5	307
March	8	3	5.1	315
April	6	1	2.4	141
May	14	0	2.1	127
June	1	0	.03	2
July	111	0	15.5	954
August	10	0	1.5	89
September	10	0	3.1	186
The year	111	0	4.3	3,120

LITTLE COLORADO RIVER NEAR HUNT, ARIZ.

LOCATION.—Water-stage recorder in sec. 4, T. 14 N., R. 25 E., 3 miles below Zuni River and 5 miles northwest of Hunt. Datum of gage was lowered 2.00 feet Sept. 1, 1931.

DRAINAGE AREA.—7,240 square miles.

RECORDS AVAILABLE.—May, 1929, to September, 1931.

EXTREMES.—Maximum discharge during year, 3,600 second-feet Aug. 5 (gage height, 12.5 feet, revised datum); no flow on various days April to July.

1929–1931: Maximum discharge, 8,000 second-feet July 28, 1929 (gage height, 19.0 feet, revised datum); no flow on various days May to July, 1929, and April to July, 1931.

REMARKS.—Records good. Discharge estimated during periods of ice effect Dec. 22 to Jan. 7, Jan. 11–14, 19–25. Diversions for irrigation above station. Some regulation by reservoirs upstream.

Daily and monthly discharge, in second-feet, 1930–31

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3	2	2	1	10	8	2	1	1	0	422	24
2	3	2	2	1	11	8	2	0	0	16	387	24
3	3	2	2	1	11	7	2	1	0	34	158	23
4	3	2	2	1	11	6	2	1	0	4	140	20
5	3	2	1	1	11	6	2	0	0	2	693	17
6	3	2	1	1	11	5	2	0	0	1	650	16
7	3	2	1	1	12	5	1	0	0	1	554	13
8	3	2	1	1	11	4	1	0	0	0	199	286
9	3	2	1	1	11	4	0	0	0	0	551	85
10	3	2	1	1	11	4	0	0	0	0	303	35
11	3	2	1	1	11	3	0	1	0	0	418	25
12	3	2	1	1	10	2	0	1	0	0	226	30
13	3	2	1	1	11	3	0	0	0	0	170	35
14	3	2	1	1	10	3	0	0	0	0	113	70
15	3	2	1	1	10	3	0	0	0	0	81	260
16	3	3	1	1	11	3	0	1	0	0	54	537
17	3	2	1	1	10	3	0	1	0	0	54	271
18	3	3	1	1	10	3	1	1	0	1	60	270
19	3	5	1	1	10	3	0	1	0	72	81	397
20	3	3	1	1	10	2	0	1	0	28	50	489
21	3	3	1	1	9	2	0	1	0	11	42	366
22	3	3	1	1	8	2	0	1	0	11	328	346
23	2	2	1	2	9	2	0	1	0	46	223	256
24	2	2	1	2	8	2	1	0	0	11	99	163
25	2	2	1	2	9	2	0	0	0	5	60	106
26	2	2	1	2	9	3	0	0	0	3	40	80
27	2	2	1	3	8	2	0	0	0	3	34	64
28	2	48	1	3	8	2	1	0	0	376	28	132
29	2	23	1	6	------	2	2	0	0	377	24	273
30	2	2	1	10	------	2	1	0	0	265	42	109
31	2	------	1	10	------	2	------	1	------	645	146	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	3	2	2.7	167
November	48	2	4.5	268
December	2	1	1.1	69
January	10	1	2.0	123
February	12	8	10.0	557
March	8	2	3.5	214
April	2	0	.7	40
May	1	0	.5	28
June	1	0	.03	2
July	645	0	61.7	3,790
August	693	24	207	12,800
September	537	13	161	9,560
The year	693	0	38.1	27,600

LITTLE COLORADO RIVER NEAR WOODRUFF, ARIZ.

LOCATION.—Water-stage recorder in sec. 7, T. 16 N., R. 22 E., 4 miles below Silver Creek and 1½ miles northwest of Woodruff.

DRAINAGE AREA.—9,040 square miles.

RECORDS AVAILABLE.—March, 1905, to December, 1908, and December, 1915, to December, 1919, fragmentary; April, 1929, to September, 1931.

EXTREMES.—Maximum discharge during year, 7,750 second-feet Aug. 7 (gage height, 10.90 feet); no flow on several days in May and June.

1929–1931: Maximum discharge, 10,700 second-feet July 21, 1929 (gage height, 12.45 feet); no flow on many days during spring or summer of each year.

A maximum discharge of 25,000 second-feet was recorded Dec. 5, 1919.

REMARKS.—Records good. Discharge estimated during period of ice effect Dec. 21 to Jan. 28, and on July 20. Diversions for irrigation above station. Some regulation by reservoirs upstream.

Daily and monthly discharge, in second-feet, 1930–31

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	6	5	57	11	52	37	15	135	1	30	677	193
2	6	4	36	16	46	37	9	64	0	74	528	81
3	5	4	28	26	39	34	6	32	1	296	353	41
4	7	5	28	30	37	35	4	10	1	134	494	35
5	10	5	26	28	37	35	2	4	1	28	649	39
6	12	4	22	25	37	59	2	2	1	6	2,950	115
7	12	3	20	22	51	64	3	2	0	2	2,670	626
8	12	3	18	20	75	50	4	1	0	2	368	368
9	8	3	19	19	54	39	4	1	0	1	620	164
10	6	3	22	18	48	34	7	1	0	2	810	72
11	4	4	23	17	37	30	6	1	0	49	337	48
12	4	4	22	17	30	26	4	1	0	4	284	41
13	5	3	21	17	32	17	5	1	0	2	196	64
14	7	4	21	17	80	7	7	0	0	1	258	110
15	8	8	20	18	344	5	9	3	0	1	293	136
16	8	7	18	19	433	8	6	48	0	271	127	499
17	8	8	22	19	206	19	4	108	0	40	75	360
18	6	11	18	19	127	20	2	13	0	21	54	157
19	5	23	18	19	96	19	2	3	0	31	67	439
20	4	15	15	19	78	16	1	1	0	200	81	456
21	4	15	14	20	69	9	1	1	0	40	71	360
22	4	15	13	20	64	8	1	1	0	40	905	322
23	4	16	12	20	61	8	15	1	0	20	533	277
24	5	16	12	21	52	7	12	1	1	800	172	170
25	6	14	11	21	41	7	4	1	1	72	86	120
26	5	12	10	22	39	6	3	2	5	28	57	100
27	5	11	9	23	37	8	2	1	70	15	39	89
28	4	118	8	25	37	7	13	1	6	174	32	86
29	4	470	8	28	------	8	111	1	5	1,760	85	318
30	5	144	8	39	------	14	68	1	91	390	53	146
31	5	------	9	73	------	17	------	2	------	958	421	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	12	4	6.3	385
November	470	3	31.9	1,900
December	57	8	19.0	1,170
January	73	11	22.8	1,400
February	433	30	83.5	4,640
March	64	5	22.3	1,370
April	111	1	11.1	659
May	135	0	14.3	881
June	91	0	6.1	365
July	1,760	1	177	10,900
August	2,950	32	463	28,500
September	626	35	201	12,000
The year	2,950	0	88 5	64,200

LITTLE COLORADO RIVER AT GRAND FALLS, ARIZ.

LOCATION.—Water-stage recorder in T. 24 N., R. 11 E., unsurveyed, on Navajo Indian Reservation at Grand Falls, 38 miles northeast of Flagstaff. Zero of gage is about 4,440 feet above mean sea level.

DRAINAGE AREA.—22,100 square miles.

RECORDS AVAILABLE.—November, 1925, to September, 1931.

EXTREMES.—Maximum discharge during year, 6,800 second-feet Aug. 1 (gage height, 13.17 feet); no flow on many days.

1925–1931: Maximum discharge, 50,500 second-feet Apr. 5, 1929 (gage height, 30.0 feet); no flow during periods of each year.

A discharge of about 120,000 second-feet (gage height, 47.0 feet) occurred on Sept. 19, 1923.

REMARKS.—Records good. Discharge estimated during period of ice effect Jan. 11–27, and for the periods Dec. 22 to Jan. 3 and May 11 to June 3. Diversions for irrigation above station.

Daily and monthly discharge, in second-feet, 1930–31

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	0	534	6	43	85	261	1,920	0	0	3,680	455
2	0	0	299	6	35	99	202	1,080	0	444	3,020	291
3	0	0	222	6	30	138	190	882	0	364	1,110	155
4	0	0	200	6	57	147	200	780	1	451	550	113
5	0	0	168	6	55	125	550	440	0	1,280	428	75
6	0	0	125	7	49	100	594	303	0	292	1,030	43
7	0	0	100	11	45	91	465	228	0	134	3,580	20
8	0	0	93	11	37	425	322	156	0	91	2,050	94
9	0	0	91	14	31	421	274	114	0	47	906	534
10	0	0	73	14	28	312	306	87	0	20	1,310	316
11	0	0	61	14	72	268	306	60	0	9	1,630	160
12	0	0	48	14	125	202	255	40	0	4	468	95
13	0	0	36	14	123	180	208	30	0	1	312	72
14	0	0	35	15	116	181	170	25	0	0	244	74
15	0	0	25	15	116	375	160	15	0	3	262	40
16	0	0	18	15	1,370	475	150	15	0	15	904	57
17	0	0	17	15	1,100	594	140	30	0	44	301	732
18	0	0	14	16	644	666	130	50	0	154	244	514
19	0	0	12	16	400	840	120	10	0	292	180	411
20	0	0	9	16	288	978	110	1	0	599	200	382
21	0	0	6	17	248	978	95	0	0	1,490	190	512
22	0	0	5	18	208	958	85	0	0	460	182	1,370
23	0	8	4	19	245	858	73	0	0	196	561	474
24	0	39	4	19	237	876	54	0	0	102	651	302
25	0	36	4	20	197	952	46	0	0	148	267	209
26	0	23	5	22	169	894	51	0	0	346	155	151
27	0	20	5	25	120	750	417	0	0	215	90	124
28	0	26	5	30	102	672	415	0	0	142	54	90
29	0	31	6	49	-------	500	318	0	0	101	31	74
30	0	322	6	56	-------	334	335	0	0	2,300	22	60
31	0	-------	6	60	-------	318	-------	0	-------	1,970	272	-------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	0	0	0	0
November	322	0	16.8	1,000
December	534	4	72.1	4,440
January	60	6	18.5	1,130
February	1,370	28	225	12,500
March	978	85	477	29,300
April	594	46	233	13,900
May	1,920	0	202	12,400
June	1	0	.03	2
July	2,300	0	378	23,200
August	3,680	22	835	51,300
September	1,370	20	267	15,900
The year	3,680	0	228	165,000

SILVER CREEK NEAR WOODRUFF, ARIZ.

LOCATION.—Water-stage recorder in sec. 32, T. 16 N., R. 22 E., half a mile above mouth and 3 miles south of Woodruff.

DRAINAGE AREA.—942 square miles.

RECORDS AVAILABLE.—April, 1929, to September, 1931.

EXTREMES.—Maximum discharge during year, 2,850 second-feet Sept. 6 (gage height, 6.24 feet); no flow on several days in May and June.

1929–1931: Maximum discharge, 12,100 second-feet July 21, 1929 (gage height, 11.67 feet); no flow on several days in spring and summer of each year.

REMARKS.—Records good. Discharge estimated during period of ice effect Dec. 21 to Jan. 16. Diversions for irrigation above station.

Daily and monthly discharge, in second-feet, 1930–31

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4	4	31	6	17	31	15	90	0	16	51	16
2	6	3	22	8	22	30	12	39	0	38	19	25
3	4	4	17	18	17	26	8	19	0	59	10	13
4	7	4	17	22	21	30	6	12	1	24	12	10
5	8	4	15	21	21	31	4	5	0	9	204	29
6	8	3	13	18	19	57	4	1	0	3	156	251
7	8	4	13	16	43	55	6	0	0	3	6.4	421
8	6	3	12	15	57	43	6	0	0	2	80	101
9	5	3	14	14	41	35	9	0	0	1	117	44
10	4	4	15	14	33	28	10	0	0	3	29	28
11	4	5	15	13	26	24	6	0	1	29	22	24
12	4	4	15	13	21	21	6	0	0	2	12	24
13	4	2	15	13	17	14	7	0	0	3	7	28
14	7	4	16	14	92	7	9	0	0	1	38	78
15	7	6	14	15	367	9	9	0	0	1	65	34
16	6	5	14	15	428	13	5	14	0	351	38	24
17	7	4	19	16	183	17	2	5	0	30	15	22
18	5	6	13	16	107	19	2	1	0	12	6	58
19	2	9	10	17	78	17	2	0	0	22	3	90
20	2	6	10	17	63	13	2	0	0	17	4	44
21	2	5	9	17	57	10	1	0	0	4	2	36
22	2	6	8	17	51	9	1	0	0	4	28	32
23	2	8	7	17	41	10	9	0	0	1	40	28
24	3	7	7	16	37	8	4	0	0	403	7	26
25	4	6	6	16	31	7	2	1	0	32	2	24
26	4	6	5	15	30	6	2	0	15	12	1	22
27	3	6	4	15	30	7	2	0	59	7	1	21
28	3	63	4	16	30	7	12	0	4	68	1	22
29	4	76	4	15	------	16	17	0	1	317	17	24
30	4	47	4	14	------	15	18	2	66	29	202	32
31	4	------	5	15	------	17	------	1	------	40	67	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	8	2	4.6	284
November	76	2	10.6	629
December	31	4	12.0	740
January	22	6	15.3	940
February	428	17	70.7	3,930
March	57	6	20.4	1,250
April	18	1	6.6	393
May	90	0	6.1	377
June	66	0	4.9	292
July	403	1	49.8	3,060
August	6.4	1	62.6	3,850
September	421	10	54.4	3,240
The year	684	0	26.2	19,000

CHEVELON FORK NEAR WINSLOW, ARIZ.

LOCATION.—Water-stage recorder in sec. 27, T. 18 N., R. 17 E., 3 miles above 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 September, 1931.

EXTREMES.—Maximum discharge during year, 548 second-feet Mar. 19 (gage height, 4.86 feet); minimum discharge, 1 second-foot Sept. 20; minimum gage height, 1.97 feet Nov. 14.

1929–1931: Maximum discharge, 16,100 second-feet Apr. 4, 1929 (gage height, 17.8 feet); minimum, 1 second-foot Jan. 10, 1930, Sept. 20, 1931.

REMARKS.—Records good. Discharge estimated during period of ice effect Dec. 21 to Jan. 6, and for the period Sept. 19–25. No diversions above station.

Daily and monthly discharge, in second-feet, 1930–31

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4	4	4	4	4	64	109	252	4	4	30	3
2	4	4	4	4	4	57	113	179	4	4	7	3
3	4	4	44	4	4	49	204	127	4	4	5	3
4	4	4	41	4	4	48	213	94	4	4	4	3
5	4	4	32	4	4	58	170	72	4	4	5	2
6	4	4	29	4	4	166	129	53	4	4	5	2
7	4	4	25	4	4	215	100	33	3	4	49	3
8	4	4	18	4	32	177	86	24	3	4	19	2
9	4	4	19	4	89	135	75	17	3	4	20	2
10	3	4	17	4	69	105	72	14	3	4	6	2
11	4	4	14	4	56	91	69	11	3	4	4	2
12	4	4	12	4	52	121	52	9	3	4	4	2
13	4	4	11	4	52	206	36	7	3	3	4	3
14	4	3	10	4	75	250	29	6	3	6	6	3
15	4	4	9	4	84	294	23	6	2	16	8	3
16	4	3	7	4	64	306	19	6	2	12	4	2
17	4	3	8	5	94	366	16	6	2	28	3	2
18	4	5	10	5	102	428	13	6	3	22	3	2
19	4	4	8	5	82	456	10	5	3	6	3	2
20	4	4	7	5	77	442	10	5	3	6	2	2
21	4	4	6	5	84	393	10	4	3	5	2	3
22	4	4	6	5	93	368	13	4	3	4	2	3
23	4	4	5	5	70	379	32	4	3	4	2	3
24	4	4	5	5	64	390	8	4	3	4	2	4
25	4	4	4	5	41	319	238	4	4	5	2	4
26	4	4	4	4	43	274	233	4	4	4	2	4
27	4	4	4	4	48	250	142	4	6	10	2	4
28	4	16	4	4	69	192	127	4	6	10	2	4
29	4	21	4	4	------	163	102	4	6	11	2	4
30	4	5	4	4	------	159	368	4	4	10	2	4
31	4	------	4	4	------	142	------	4	------	20	2	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	4	3	4.0	244
November	21	3	4.9	294
December	44	4	12.2	752
January	5	4	4.3	264
February	102	4	52.4	2,910
March	456	48	228	14,000
April	368	8	94.0	5,600
May	252	4	31.5	1,940
June	6	2	3.5	208
July	28	3	7.5	464
August	49	2	6.9	422
September	4	2	2.8	169
The year	456	2	37.7	27,300

CLEAR CREEK NEAR WINSLOW, ARIZ.

LOCATION.—Water-stage recorder in SE. ¼ sec. 9, T. 18 N., R. 16 E., 1½ miles above mouth and 5 miles southeast of Winslow. Datum of gage was lowered 4.04 feet July 10, 1931. Control is Santa Fe Railway Co.'s diversion dam. Gage height of zero flow over dam is 4.68 feet.

DRAINAGE AREA.—607 square miles.

RECORDS AVAILABLE.—March, 1929, to September, 1931. June, 1906, to January, 1909, at station 3 miles upstream.

EXTREMES.—Maximum discharge during year, 850 second-feet Mar. 24 (gage height, 6.17 feet, revised datum); no flow on many days.

1929–1931: Maximum discharge, 39,000 second-feet Apr. 4, 1929 (gage height, 18.1 feet, revised datum); no flow on many days of each year.

REMARKS.—Records good. Water diverted above station for municipal and industrial use.

Daily and monthly discharge, in second-feet, 1930–31

Day	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Aug.
1	0	21	0	0	94	182	625	
2	0	98	0	0	85	161	476	0
3	0	81	0	0	69	309	417	0
4	0	73	0	0	62	467	334	0
5	0	66	0	0	73	425	258	0
6	0	62	0	0	153	334	192	0
7	0	49	0	0	253	296	147	0
8	0	32	0	0	224	296	115	0
9	0	26	0	0	187	342	94	0
10	0	23	0	0	161	327	69	0
11	0	21	0	0	147	264	49	0
12	0	21	0	0	147	224	39	0
13	0	21	0	0	197	207	36	0
14	0	17	0	37	264	187	30	0
15	0	14	0	59	314	176	23	26
16	0	11	0	59	364	161	17	6
17	0	9	0	94	425	151	14	3
18	0	6	0	133	513	133	9	0
19	0	5	0	115	614	142	6	0
20	0	4	0	98	668	147	5	0
21	0	1	0	106	657	119	2	0
22	0	0	0	119	592	102	1	0
23	0	0	0	106	625	90	0	0
24	0	0	0	94	726	73	0	0
25	19	0	0	73	625	121	0	0
26	25	0	0	59	542	258	0	0
27	19	0	0	62	476	202	0	0
28	16	0	0	81	342	161	0	0
29	15	0	0	-------	277	274	0	0
30	13	0	0	-------	236	690	0	66
31	-------	0	0	-------	213	-------	0	3

Month	Maximum	Minimum	Mean	Run-off in acre-feet
November	25	0	3.6	212
December	98	0	21.3	1,310
January	0	0	0	0
February	133	0	46.2	2,570
March	726	62	333	20,500
April	690	73	234	13,900
May	625	0	95.4	5,870
August	66	0	3.4	206
The year	726	0	61.6	44,600

NOTE.—No flow over dam during October, June, July, September.

MOENKOPI WASH NEAR TUBA CITY, ARIZ.

LOCATION.—Water-stage recorder in T. 31 N., R. 10 E., unsurveyed, on Navajo Indian Reservation, at highway bridge 5 miles southwest of Tuba City and 17 miles above mouth.

DRAINAGE AREA.—2,270 square miles.

RECORDS AVAILABLE.—July, 1926, to September, 1931.

EXTREMES.—Maximum discharge during year, 2,760 second-feet Sept. 15 (gage height, 6.95 feet); no flow on several days.

1926–1931: Maximum discharge, 15,100 second-feet Aug. 4, 1929 (gage height, 15.4 feet); no flow on several days each year.

REMARKS.—Records good. Diversions for irrigation above station; none below station.

Daily and monthly discharge, in second-feet, 1930–31

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	41	4	4	4	8	0	1	1	0	3	30	2
2	11	4	4	4	8	3	2	2	0	1	4	5
3	5	4	6	4	6	3	2	4	0	2	3	19
4	5	4	6	4	7	3	1	10	1	11	0	13
5	5	4	4	4	11	3	1	3	0	14	4	2
6	5	6	4	5	11	2	2	0	0	7	113	3
7	3	5	3	5	9	3	3	1	0	6	36	2
8	4	5	4	5	7	4	2	1	0	3	9	2
9	3	5	5	6	7	3	2	2	0	3	2	2
10	3	5	6	6	6	3	2	0	0	3	1	2
11	4	4	4	6	5	1	1	0	0	3	0	2
12	4	4	5	6	6	2	0	0	0	3	0	2
13	4	5	8	6	14	2	1	0	0	2	0	3
14	4	6	4	6	15	3	1	0	0	0	1	33
15	4	6	4	6	11	4	0	0	0	0	1	480
16	4	6	3	6	11	3	2	0	0	18	27	37
17	3	5	4	6	8	3	1	85	0	18	124	9
18	4	6	4	6	7	2	0	8	0	22	73	5
19	4	6	5	6	6	2	0	4	0	37	8	4
20	4	4	4	6	6	2	0	1	0	7	1	4
21	4	3	4	6	6	2	0	1	0	4	0	7
22	4	4	4	5	6	3	0	0	0	2	0	7
23	4	5	2	5	4	2	1	0	0	0	0	4
24	4	6	1	6	2	1	0	0	0	0	0	4
25	3	4	3	6	3	2	2	0	0	0	0	4
26	1	5	3	6	2	3	0	0	0	0	0	4
27	4	5	3	7	1	3	0	4	0	0	0	4
28	4	7	3	7	1	2	0	3	0	46	0	4
29	4	6	4	7	------	3	1	0	0	11	0	4
30	4	5	4	8	------	3	2	0	0	318	16	4
31	4	------	4	8	------	3	------	0	------	38	16	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	41	1	5.3	325
November	7	3	4.9	294
December	8	1	4.1	250
January	8	4	5.7	353
February	15	1	6.9	385
March	4	0	2.5	155
April	3	0	1.0	60
May	85	0	4.2	258
June	1	0	.0	2
July	318	0	18.8	1,150
August	124	0	15.1	930
September	480	2	22.6	1,340
The year	480	0	7.6	5,500

BRIGHT ANGEL CREEK BASIN

BRIGHT ANGEL CREEK NEAR GRAND CANYON, ARIZ.

LOCATION.—Staff gage one-fourth mile above mouth and 11 miles by trail from Grand Canyon, Coconino County. Datum of gage was lowered 0.50 foot Sept. 5, 1931.

DRAINAGE AREA.—100 square miles.

RECORDS AVAILABLE.—October, 1923, to September, 1931.

EXTREMES.—Maximum discharge during year, 45 second-feet June 25 (gage height, 1.20 feet, revised datum); minimum discharge, 15 second-feet Aug. 8 (gage height, 0.46 foot, revised datum).

1923–1931: Maximum discharge, about 1,000 second-feet July 27, 1926 Sept. 16, 1927; minimum discharge, 14 second-feet Aug. 18 1930.

REMARKS.—Records good. Minor diversions for irrigation above station.

Daily and monthly discharge, in second-feet, 1930–31

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	22	22	22	22	22	23	23	37	22	21	19	20
2	22	22	22	22	22	22	23	38	22	20	19	20
3	22	22	22	24	22	22	27	38	22	22	19	20
4	21	22	22	23	24	21	28	40	22	20	18	20
5	21	22	22	22	26	22	28	40	22	20	18	19
6	22	22	22	22	25	22	28	40	22	18	19	19
7	22	22	22	23	24	22	30	38	22	19	19	19
8	22	22	22	23	23	22	33	38	21	19	19	19
9	22	22	22	23	23	22	34	36	21	19	18	19
10	23	22	22	23	22	22	33	34	22	19	18	19
11	23	22	22	22	22	22	37	31	21	19	18	19
12	22	22	21	22	23	22	38	30	21	20	18	19
13	22	22	21	22	30	22	38	29	21	19	21	19
14	21	24	21	22	26	22	40	28	21	19	24	23
15	21	23	22	22	28	22	42	28	20	18	20	20
16	22	23	22	22	27	22	42	27	20	18	20	20
17	21	25	22	22	26	22	41	26	20	19	19	21
18	21	26	22	22	25	22	41	26	20	19	20	19
19	21	24	22	22	24	23	42	26	20	20	20	19
20	21	22	22	22	24	23	41	26	20	19	21	20
21	21	21	22	22	25	23	42	26	20	19	19	20
22	21	21	22	22	24	23	42	26	20	20	20	20
23	21	21	22	22	24	24	40	25	19	19	19	20
24	21	20	22	22	24	24	38	25	20	19	19	20
25	21	20	23	22	24	26	37	25	22	19	19	20
26	21	20	23	21	23	25	36	26	20	19	19	20
27	22	20	23	22	23	24	36	25	20	19	19	19
28	22	21	23	21	23	24	37	24	20	19	19	20
29	22	22	22	21	------	24	37	23	21	20	20	19
30	22	22	22	21	------	23	38	23	21	19	22	19
31	22	------	22	23	------	23	------	23	------	19	21	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	23	21	21.6	1,330
November	26	20	22.0	1,310
December	23	21	22.0	1,350
January	24	21	22.1	1,360
February	30	22	24.2	1,340
March	26	21	22.7	1,400
April	42	23	35.7	2,130
May	40	23	29.9	1,840
June	22	19	20.8	1,240
July	22	18	19.3	1,190
August	24	18	19.5	1,200
September	23	19	19.7	1,170
The year	42	18	23.3	16,900

VIRGIN RIVER BASIN

VIRGIN RIVER AT VIRGIN, UTAH

LOCATION.—Chain gage in SE. ¼ sec. 22, T. 41 S., R. 12 W., half a mile below North Creek and at east edge of Virgin.
DRAINAGE AREA.—990 square miles.
RECORDS AVAILABLE.—April, 1909, to September, 1931 (fragmentary).
EXTREMES.—Maximum discharge during year (estimated), 3,550 second-feet Nov. 17 (gage height, 5.80 feet); minimum, 23 second-feet Sept. 30.
1909–1931: Maximum discharge (estimated), 12,000 second-feet Oct. 27, 1912 (gage height, 11.6 feet); minimum, that of Sept. 30, 1931.
REMARKS.—Records poor. Diversions for irrigation above station.

Daily and monthly discharge, in second-feet, 1930–31

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	173	100	127	91	253	127	161	118	100	48	138	276
2	127	100	118	91	138	161	173	118	76	44	100	79
3	138	100	138	100	127	149	138	138	55	44	100	41
4	138	91	127	109	149	211	127	173	48	55	76	51
5	138	100	138	100	211	173	127	138	184	55	334	58
6	149	109	138	100	184	149	127	149	82	55	171	51
7	138	109	138	82	138	149	149	138	55	55	127	51
8	118	100	149	91	138	127	138	149	55	48	127	79
9	91	109	127	91	127	127	109	138	48	48	109	114
10	127	118	127	118	127	109	118	82	48	62	10	86
11	427	118	149	100	127	118	127	76	44	62	82	95
12	82	118	118	109	138	118	127	82	55	68	76	86
13	82	118	109	109	138	127	127	76	48	76	76	51
14	82	149	127	100	138	118	138	76	48	62	76	58
15	76	138	118	109	197	118	127	68	38	68	68	95
16	82	200	100	91	173	127	127	91	55	76	82	65
17	82	2,000	109	100	127	138	138	76	48	82	68	51
18	109	350	138	100	127	138	149	68	48	82	100	58
19	82	140	118	138	138	138	127	68	55	82	76	65
20	91	127	118	91	184	127	109	76	55	171	118	72
21	109	138	109	118	138	127	109	76	48	82	127	72
22	109	138	118	100	127	138	109	55	55	76	118	65
23	100	173	184	109	149	138	118	62	48	76	138	51
24	100	184	100	118	149	138	161	55	48	68	109	51
25	100	184	118	118	161	149	149	62	436	82	100	46
26	91	173	127	109	161	138	161	100	100	76	100	46
27	91	161	118	118	149	109	239	149	76	127	91	41
28	100	173	118	127	127	123	197	109	48	118	91	46
29	109	149	100	118	-------	127	138	91	55	76	100	36
30	100	138	100	138	-------	118	109	82	55	118	118	23
31	91	-------	149	197	-------	118	-------	82	-------	225	342	-------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	427	26	117	7,190
November	2,000	91	204	12,100
December	184	100	125	7,690
January	197	82	109	6,700
February	253	127	151	8,390
March	211	109	135	8,300
April	239	109	138	8,210
May	173	55	97.5	6,000
June	436	38	73.8	4,390
July	225	44	79.6	4,890
August	342	68	118	7,260
September	276	23	68.6	4,080
The year	2,000	23	118	85,200

VIRGIN RIVER AT LITTLEFIELD, ARIZ.

LOCATION.—Staff gage in SE. ¼ sec. 5, T. 40 N., R. 15 W., about half a mile below Beaver Dam wash and about the same distance above Littlefield.
DRAINAGE AREA.—4,400 square miles.
RECORDS AVAILABLE.—October, 1929, to September, 1931.
EXTREMES.—Maximum discharge during year (estimated), 3,000 second-feet Nov. 18; minimum, 35 second-feet July 14, 15.
1929–1931: Maximum discharge (estimated), 6,500 second-feet Aug. 9 (gage height, 8.65 feet); minimum, 27 second-feet July 5, 7, 13, 1930.
REMARKS.—Records fair except those for discharge above 300 second-feet, which are poor. No diversions in Arizona above this point except a few second-feet from the Beaver Dam Springs. Mesquite Canal diverts water a few miles downstream for irrigation in Nevada.

Daily and monthly discharge, in second-feet, 1930–31

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	175	183	338	213	448	240	79	145	65	52	76	152
2	167	183	307	222	333	235	74	87	61	49	74	576
3	156	179	288	283	292	231	79	74	61	49	82	343
4	156	168	283	292	375	235	79	69	61	48	520	167
5	152	152*	297	283	414	222	87	67	69	48	1,160	117
6	148	156	278	288	501	222	79	54	74	46	343	93
7	156	152	254	278	307	213	79	54	58	46	302	93
8	171	145	235	258	288	213	74	49	63	43	160	84
9	258	130	222	235	258	164	74	52	63	43	124	84
10	532	137	231	226	297	111	72	58	63	38	114	84
11	1,130	148	235	226	297	117	72	58	58	38	101	69
12	563	137	240	235	283	87	72	58	58	37	93	67
13	235	134	235	231	307	79	63	56	61	37	84	67
14	283	148	258	204	283	74	63	58	63	35	79	63
15	359	167	231	204	442	74	72	63	65	35	79	124
16	338	254	196	192	392	79	63	63	67	40	74	111
17	254	283	179	204	283	76	56	67	63	44	67	87
18	240	1,860	183	222	297	96	56	69	63	46	67	67
19	222	501	192	235	359	96	74	63	63	49	63	67
20	209	454	183	235	302	90	72	63	65	51	63	67
21	196	392	188	222	283	85	74	63	65	58	61	67
22	192	392	167	222	240	86	69	65	61	111	54	56
23	196	343	156	222	235	88	63	61	61	67	56	58
24	192	333	156	217	235	90	63	69	63	72	63	58
25	213	354	152	213	235	92	74	84	63	69	58	56
26	204	380	156	213	226	95	87	69	61	69	67	56
27	192	354	152	213	235	87	111	96	61	127	63	58
28	196	348	160	217	235	74	477	101	56	107	79	56
29	196	359	152	254	-------	74	204	90	56	93	93	58
30	188	359	148	258	-------	111	156	69	54	93	107	65
31	188	-------	152	278	-------	87	-------	65	-------	82	107	-------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	1,130	148	260	16,000
November	1,860	130	309	18,400
December	338	148	213	13,100
January	292	192	235	14,400
February	501	226	310	17,200
March	240	74	127	7,810
April	477	56	93.9	5,590
May	145	49	69.6	4,280
June	74	54	62.2	3,700
July	127	35	58.8	3,620
August	1,160	54	146	8,980
September	576	56	106	6,310
The year	1,860	35	165	119,000

MUKUNTUWEAP RIVER NEAR SPRINGDALE, UTAH

LOCATION.—Staff gage near center of sec. 15, T. 41 S., R. 10 W., half a mile inside south entrance to Zion National Park and 3 miles northeast of Springdale.
RECORDS AVAILABLE.—June to November, 1923; April, 1925, to September, 1931.
EXTREMES.—Maximum discharge recorded during year, 2,370 second-feet Aug. 6 (gage height, 9.00 feet); minimum, 33 second-feet July 14, 15, 16.
1925–1931: Maximum discharge, about 3,000 second-feet Aug. 3, 1929 (gage height, 11.0 feet); minimum, 24 second-feet Dec. 17, 31, 1927.
REMARKS.—Records fair except those for estimated period Oct. 19 to Mar. 28, based on comparison with flow of Virgin River at Virgin, Utah, which are poor. About 4 second-feet diverted around station during irrigation season.

Daily and monthly discharge, in second-feet, 1930–31

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	86	55	50	45	55	60	65	71	52	35	67	56
2	52						71	78	41	35	93	44
3	52						71	67	41	34	93	42
4	52						65	78	109	34	93	41
5	58						71	65	52	44	376	40
6	58						78	74	109	44	1,140	39
7	58						71	65	47	42	48	39
8	58						67	65	44	39	42	36
9	58						71	86	50	38	39	34
10	58						71	86	49	38	40	34
11	86						86	81	49	39	34	34
12	58						78	78	44	34	44	36
13	58						93	75	41	34	42	36
14	52						86	71	41	33	36	39
15	52						78	63	41	33	34	39
16	52						86	58	38	33	39	39
17	52						78	144	36	36	42	39
18	52						81	52	38	36	38	39
19							65	168	38	36	36	39
20							65	144	38	41	36	39
21							67	127	37	39	36	34
22							71	109	38	38	34	39
23							78	78	38	36	39	38
24							75	78	41	35	34	37
25	50						71	65	42	34	36	38
26							71	118	65	36	34	36
27							127	93	39	47	34	
28						55	93	52	38	44	34	
29						58	78	55	36	47	34	38
30						62	71	52	36	43	34	
31						62		52		109	224	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	86		54.9	3,380
November			55	3,270
December			50	3,070
January			45	2,770
February			55	3,050
March			59.9	3,680
April	127	65	76.6	4,560
May	168	52	82.2	5,050
June	109	36	46.9	2,790
July	109	33	40.2	2,470
August	1,140	34	96.3	5,920
September	56	34	38.6	2,300
The year	1,140	33	58.5	42,300

WILLIAMS RIVER BASIN

WILLIAMS RIVER AT PLANET, ARIZ.

LOCATION.—Water-stage recorder in NE. ¼ sec. 36, T. 11 N., R. 17 W., 12 miles above mouth and 1 mile west of Planet. Zero of gage is 556.56 feet above mean sea level.

DRAINAGE AREA.—5,140 square miles.

RECORDS AVAILABLE.—September, 1910, to December, 1915 (fragmentary); October, 1928, to September, 1931.

EXTREMES.—Maximum discharge during year, 55,500 second-feet Aug. 5 (gage height, 12.3 feet); minimum discharge, 9 second-feet July 21; minimum gage height, 0.75 foot Oct. 5.

1928–1931: Maximum discharge, that of Aug. 5, 1931; minimum, 9 second-feet Sept. 5, 1930, July 21, 1931.

REMARKS.—Records good except those for Aug. 5–7, which are fair. Minor diversions above station for irrigation.

Daily and monthly discharge, in second-feet, 1931

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	17	15	18	16	16	18	14	43	13	19	79	1,130
2	17	15	17	16	15	19	15	46	12	22	76	723
3	16	15	16	15	14	19	15	42	14	21	64	1,310
4	16	15	16	14	17	19	15	36	15	19	87	944
5	16	16	16	15	30	19	14	25	15	20	12,400	420
6	16	15	16	13	30	18	16	22	17	20	7,150	295
7	16	15	15	16	86	18	16	24	15	21	1,240	195
8	16	16	15	16	89	18	18	25	16	21	584	136
9	17	16	14	16	40	18	18	24	17	21	362	111
10	17	16	15	16	27	18	19	26	18	20	276	88
11	16	16	14	16	23	18	18	25	20	18	380	68
12	28	15	15	17	21	19	20	26	20	18	437	46
13	25	15	16	17	355	19	21	26	21	20	295	36
14	16	16	16	16	3,450	20	20	25	21	19	4,890	28
15	15	15	15	17	2,690	19	21	24	20	18	1,510	24
16	17	15	15	16	2,470	18	20	22	18	18	565	22
17	16	15	14	16	926	18	20	21	20	16	293	23
18	16	29	15	16	357	19	18	21	20	14	169	23
19	16	162	14	16	200	18	19	19	18	11	96	22
20	16	43	15	16	98	18	20	19	16	10	55	21
21	17	18	14	16	41	18	20	19	16	10	56	22
22	18	14	14	16	25	17	28	18	16	20	140	21
23	17	14	15	17	23	17	121	18	17	11	85	21
24	17	16	16	16	18	16	70	18	17	13	218	21
25	18	16	16	16	18	16	28	15	18	15	97	21
26	17	16	16	16	19	15	21	17	17	12	49	22
27	16	16	15	16	21	14	68	18	17	11	36	23
28	16	18	16	15	19	15	148	18	18	11	33	24
29	16	17	16	17	------	15	90	16	20	11	36	23
30	16	18	17	16	------	14	50	16	22	12	122	20
31	16	------	17	16	------	14	------	15	------	59	504	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	28	15	17.1	1,050
November	162	14	21.9	1,310
December	18	14	15.5	950
January	17	13	15.9	978
February	3,450	14	398	22,100
March	20	14	17.5	1,070
April	148	14	33.4	1,990
May	46	15	23.5	1,450
June	22	12	17.5	1,040
July	59	10	17.8	1,090
August	12,400	33	1,040	64,200
September	1,310	20	196	11,700
The year	12,400	10	150	109,000

GILA RIVER BASIN

GILA RIVER AT FULLER'S RANCH, NEAR DUNCAN, ARIZ.

LOCATION.—Water-stage recorder in SE. ¼ SW. ¼ sec. 18, T. 19 S., R. 19 W., N. Mex., at head of canyon immediately downstream from Fuller's ranch, 16 miles east of Duncan, Ariz. Zero of gage is approximately 3,875 feet above mean sea level.

DRAINAGE AREA.—3,140 square miles.

RECORDS AVAILABLE.—June to September, 1931. May, 1914, to September, 1915, at station 6 miles downstream and one-fourth mile above intake of Sunset Canal; January, 1923, to September, 1926, at a point 8 miles downstream; both published as "Gila River near Duncan, Ariz."

EXTREMES.—Maximum discharge during 1931 period, 9,100 second-feet Aug. 3 (gage height, 13.6 feet); minimum, 19 second-feet June 30 (gage height, 3.49 feet).

REMARKS.—Records good. Discharge estimated June 1–2. Diversions for irrigation above station. Station is above all diversions for Duncan Valley.

Daily and monthly discharge, in second-feet, 1931

Day	June	July	Aug.	Sept.	Day	June	July	Aug.	Sept.
1	110	30	184	91	16	53	70	188	408
2	110	30	279	89	17	46	55	166	578
3	115	1,160	607	87	18	44	62	162	470
4	103	242	1,320	101	19	41	84	182	847
5	80	185	940	96	20	35	131	192	1,000
6	68	148	472	296	21	35	110	220	1,080
7	56	120	349	154	22	33	87	262	684
8	51	96	324	184	23	33	76	614	448
9	50	82	837	179	24	30	58	254	370
10	50	72	1,430	154	25	31	53	202	320
11	51	64	919	128	26	30	44	160	288
12	55	61	540	115	27	29	42	169	320
13	53	87	360	101	28	27	33	137	271
14	55	64	279	182	29	26	30	103	375
15	52	68	224	439	30	65	111	91	292
					31		62	91	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
June	115	26	53.9	3,210
July	1,160	30	117	7,170
August	1,430	91	395	24,300
September	1,080	87	338	20,100
The period				54,800

GILA RIVER AT VIRDEN BRIDGE, NEAR DUNCAN, ARIZ.

LOCATION.—Water-stage recorder in SE. ¼ NE. ¼ sec. 13, T. 19 S., R. 21 W., at Virden Bridge, N. Mex., 9 miles east of Duncan, Ariz.

DRAINAGE AREA.—3,290 square miles.

RECORDS AVAILABLE.—October, 1926, to September, 1931 (discontinued). May, 1914, to September, 1915, at station 2½ miles upstream and one-fourth mile above intake of Sunset Canal; January, 1923, to September, 1926, at a point half a mile upstream and below intake of Sunset Canal; both published as "Gila River near Duncan, Ariz."

EXTREMES.—Maximum discharge during year, 6,350 second-feet Aug. 4 (gage height, 7.60 feet); minimum, 1 second-foot June 30 (gage height, 2.54 feet).
1926–1931: Maximum discharge, 7,400 second-feet Aug. 11, 1930 (gage height, 9.43 feet); no flow on various days of most years.

REMARKS.—Records good. Discharge estimated Sept. 14–17. Diversions for irrigation above station. Station is above all diversions for Duncan Valley except Sunset Canal.

Daily and monthly discharge, in second-feet, 1930–31

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	15	36	71	77	48	202	247	945	53	11	115	60
2	13	38	66	68	55	191	262	866	50	2	286	59
3	14	36	66	63	50	181	295	887	48	1,030	248	42
4	14	41	71	68	58	184	299	818	38	238	1,640	67
5	15	36	68	66	68	198	299	713	28	165	948	70
6	22	38	71	68	68	220	287	630	21	110	450	211
7	22	41	71	66	88	239	274	526	10	70	330	327
8	24	41	74	68	91	235	243	482	6	50	288	161
9	24	4	77	68	94	216	220	443	6	54	504	161
10	21	38	74	71	103	202	209	433	6	36	1,430	128
11	28	34	74	71	94	195	202	412	6	26	837	80
12	26	38	74	68	103	184	180	362	6	24	471	68
13	31	41	74	66	243	174	170	334	6	45	349	65
14	33	38	74	63	504	164	170	295	8	36	288	150
15	29	41	74	58	1,020	177	177	266	6	29	232	380
16	31	55	77	58	1,390	191	167	262	6	32	180	370
17	29	80	74	60	870	195	191	254	4	22	137	550
18	34	74	68	63	596	209	270	254	4	25	123	337
19	34	85	63	63	438	191	353	254	4	45	128	694
20	36	97	66	66	401	195	367	231	3	77	111	847
21	34	88	68	60	372	198	334	206	3	56	161	1,000
22	36	71	68	60	330	198	348	167	2	38	175	662
23	33	66	68	60	299	198	396	134	3	29	515	457
24	34	85	68	55	278	209	549	118	3	21	280	362
25	36	80	58	50	254	220	614	118	2	16	180	300
26	41	71	48	53	231	243	504	134	1	10	130	254
27	41	63	53	53	209	262	417	115	1	12	130	300
28	36	68	63	55	198	247	391	55	1	8	99	300
29	38	71	74	48	-------	239	824	50	1	8	72	321
30	36	71	66	50	-------	243	998	46	59	54	50	260
31	38	-------	63	53	-------	250	-------	46	-------	26	50	-------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	41	13	29.0	1,780
November	97	34	56.8	3,380
December	77	48	68.5	4,210
January	77	48	61.8	3,800
February	1,390	48	305	17,000
March	262	164	208	12,800
April	998	167	342	20,300
May	945	46	350	21,500
June	59	1	13.2	783
July	1,030	2	77.6	4,770
August	1,640	50	353	21,700
September	1,000	42	301	17,900
The year	1,640	1	180	130,000

GILA RIVER BELOW DUNCAN, ARIZ.

LOCATION.—In NE. ¼ sec. 14, T. 8 S., R. 31 E., half a mile upstream from heading of Colmonero Canal and 2½ miles northwest of Duncan.
DRAINAGE AREA.—3,600 square miles.
RECORDS AVAILABLE.—September, 1926, to September, 1931 (discontinued); discharge measurements only.
REMARKS.—Below all diversions in Duncan Valley except Colmonero Canal.

Discharge measurements, in second-feet, 1930–31

Oct. 22	50.2	Feb. 6	77.8	May 26	84.6
Nov. 11	56.3	Mar. 8	227	June 23	8.4
Dec. 2	105	Mar. 25	235	July 27	9.3
Dec. 21	82.3	Apr. 14	184	Sept. 12	68.4
Jan. 13	83.6	May 3	854		

GILA RIVER AT YORK, ARIZ.

LOCATION.—In SE. ¼ sec. 19, T. 6 S., R. 31 E., at York.
DRAINAGE AREA.—3,880 square miles.
RECORDS AVAILABLE.—May, 1923, to September, 1931 (discontinued); discharge measurements only.
REMARKS.—Below all diversions in Duncan Valley, and below all diversions from Gila River above San Francisco River.

Discharge measurements, in second-feet, 1930–31

Oct. 22	47.5	Feb. 5	52.9	May 25	62.4
Nov. 10	53.7	Mar. 7	201	June 24	17.3
Dec. 1	99.5	Mar. 23	185	July 27	11.2
Dec. 20	74.1	Apr. 13	191	Sept. 11	96.8
Jan. 12	83.2	May 3	845		

GILA RIVER NEAR CLIFTON, ARIZ.

LOCATION.—Water-stage recorder in SE. ¼ sec. 25, T. 5 S., R. 29 E., at highway bridge 7 miles south of Clifton and 5 miles above San Francisco River.

DRAINAGE AREA.—4,040 square miles.

RECORDS AVAILABLE.—March, 1928, to September, 1931. November, 1910, to July, 1918, at station 4 miles upstream, published as "Gila River at Guthrie, Ariz."

EXTREMES.—Maximum discharge during year, 6,900 second-feet Sept. 4 (gage height, 10.95 feet); minimum, 21 second-feet June 27 (gage height, 3.53 feet). 1928–1931: Maximum discharge, 9,500 second-feet July 30, 1929 (gage height, 14.5 feet); minimum, 12 second-feet June 26, 1929.

REMARKS.—Records good. Discharge interpolated Dec. 14–18. Diversions for irrigation above station. Station is below all diversions from Gila River above San Francisco River.

Daily and monthly discharge, in second-feet, 1930–31

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	28	68	110	111	67	218	228	1,100	41	74	68	80
2	28	69	108	111	67	225	220	1,050	40	45	224	75
3	28	68	107	113	64	220	228	1,020	39	763	1,110	75
4	28	68	107	114	63	207	272	857	40	451	1,680	370
5	29	66	107	113	69	196	304	694	40	179	2,850	123
6	30	65	108	117	70	205	336	583	36	131	638	99
7	32	67	106	118	75	230	281	514	34	90	469	597
8	34	68	104	115	82	237	218	449	34	68	297	153
9	34	66	110	111	91	230	188	385	32	53	655	153
10	36	68	113	108	93	203	163	352	32	45	2,390	134
11	34	67	111	107	93	186	153	318	30	41	997	110
12	38	65	110	107	102	159	151	245	30	37	622	90
13	40	67	111	100	117	150	171	220	29	36	425	79
14	42	74	110	102	366	134	163	186	29	35	307	102
15	47	86	108	106	740	132	137	153	28	62	270	252
16	48	81	107	104	1,500	159	134	137	28	38	192	394
17	53	88	106	103	1,170	177	144	121	28	32	146	542
18	54	94	104	98	746	175	167	134	28	39	123	636
19	57	98	103	95	535	173	243	123	28	36	102	1,030
20	58	102	98	92	444	159	372	121	26	42	115	929
21	59	115	99	84	389	159	336	107	24	108	87	1,120
22	58	113	102	87	356	183	294	102	24	47	118	893
23	60	107	104	83	307	200	368	93	24	39	452	583
24	57	106	107	80	261	203	434	81	23	38	436	434
25	56	106	108	79	235	200	583	85	24	50	216	356
26	57	102	106	78	209	250	546	75	23	36	151	335
27	63	97	98	78	198	272	468	72	22	33	121	279
28	67	100	97	76	203	266	686	67	23	97	114	507
29	64	105	99	75	------	230	694	55	27	79	91	314
30	66	110	104	73	------	225	1,180	46	43	126	339	347
31	66	------	108	73	------	223	------	42	------	61	80	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	67	28	46.8	2,880
November	115	65	85.2	5,070
December	113	97	106	6,510
January	118	73	97.1	5,970
February	1,500	63	311	17,300
March	272	132	200	12,300
April	1,180	134	329	19,600
May	1,100	42	309	19,000
June	43	22	30.3	1,800
July	763	32	97.1	5,970
August	2,850	68	512	31,500
September	1,120	75	373	22,200
The year	2,850	22	207	150,000

GILA RIVER NEAR SOLOMONSVILLE, ARIZ.

LOCATION.—Water-stage recorder in NE. ¼ sec. 31, T. 6 S., R. 28 E., 8 miles northeast of Solomonsville and 11 miles below San Francisco River.
DRAINAGE AREA.—7,950 square miles.
RECORDS AVAILABLE.—April, 1914, to September, 1931.
EXTREMES.—Maximum discharge during year, 12,300 second-feet Feb. 15 (gage height, 6.45 feet); minimum, 52 second-feet June 27 (gage height, 1.14 feet).
1914–1931: Maximum discharge, about 100,000 second-feet Jan. 19, 1916 (gage height, 15.0 feet, present datum); minimum, 26 second-feet July 4, 1923.
REMARKS.—Records good. Discharge estimated Aug. 31 to Sept. 7, Sept. 20–24. Diversions for irrigation above station. Station is above all diversions for Safford Valley except Brown Canal.

Daily and monthly discharge, in second-feet, 1930–31

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	78	133	219	160	156	406	461	1,630	112	344	889	300
2	76	137	207	188	156	399	447	1,610	112	288	700	300
3	73	133	199	188	160	406	468	1,610	106	598	1,470	250
4	73	133	199	185	156	393	523	1,400	103	1,280	2,650	475
5	76	133	199	181	192	368	530	1,170	100	480	4,490	325
6	76	130	195	181	257	387	546	1,040	95	330	1,400	375
7	76	130	195	192	207	434	530	900	89	230	1,000	1,000
8	78	133	188	195	199	440	468	796	89	167	1,190	600
9	81	130	211	192	199	427	440	763	86	143	1,310	338
10	81	130	219	185	211	375	420	701	84	118	3,520	312
11	89	130	215	181	207	338	393	652	78	106	1,600	262
12	95	127	211	174	231	306	381	555	73	109	1,120	219
13	100	127	203	174	502	296	375	484	76	97	852	185
14	106	133	207	177	1,450	285	375	434	78	102	633	188
15	103	160	207	170	7,990	306	338	393	73	146	563	439
16	106	170	207	170	6,540	333	322	368	68	127	447	640
17	106	163	207	174	2,740	344	356	333	64	214	390	1,450
18	112	177	199	174	1,430	350	387	327	59	174	330	1,100
19	112	244	195	174	973	368	447	301	55	256	434	3,410
20	112	215	192	177	829	344	563	267	57	160	429	2,600
21	112	215	188	177	711	350	530	253	57	232	253	1,950
22	112	211	185	170	633	362	523	235	59	170	462	1,450
23	109	203	181	174	546	375	662	215	57	140	750	1,000
24	112	199	181	174	499	381	701	188	55	109	1,170	800
25	106	203	181	170	454	387	888	174	66	211	387	700
26	115	199	181	167	420	484	852	174	62	195	317	785
27	121	195	174	163	413	624	752	167	57	160	387	773
28	127	199	170	160	406	555	720	167	57	136	290	1,500
29	130	244	167	156	------	530	1,230	146	71	373	235	2,130
30	127	235	170	153	------	484	1,560	130	289	373	1,520	1,200
31	130	------	163	153	------	461	------	121	------	781	350	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	130	73	100	6,170
November	244	127	169	10,100
December	219	163	194	11,900
January	195	153	174	10,700
February	7,990	156	1,030	57,300
March	624	285	397	24,400
April	1,560	322	573	34,100
May	1,630	121	571	35,100
June	289	55	82.9	4,930
July	1,280	97	269	16,600
August	4,490	235	1,020	62,600
September	3,410	185	902	53,700
The year	7,990	55	452	328,000

GILA RIVER NEAR ASHURST, ARIZ.

LOCATION.—In sec. 30, T. 5 S., R. 24 E., at Eden Ford, 1½ miles southeast of Ashurst.
DRAINAGE AREA.—10,900 square miles.
RECORDS AVAILABLE.—December, 1920, to September, 1931; discharge measurements only.
REMARKS.—Below all diversions in Safford Valley.

Discharge measurements, in second-feet, 1930–31

Date	Discharge	Date	Discharge	Date	Discharge
Oct. 16	1.6	Feb. 22	717	May 23	8.5
Nov. 6	2.0	Mar. 9	258	June 17	5.1
Nov. 28	171	Mar. 20	12.1	July 25	2.6
Dec. 16	94.0	Apr. 10	105	Aug. 12	362
Jan. 10	64.7	May 7	666	Sept. 9	303
Feb. 1	7.2				

GILA RIVER AT CALVA, ARIZ.

LOCATION.—Water-stage recorder 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.

DRAINAGE AREA.—11,500 square miles.

RECORDS AVAILABLE.—March, 1929, to September, 1931.

EXTREMES.—Maximum discharge during year, 9,900 second-feet Aug. 11 (gage height, 7.1 feet); minimum, 1 second-foot July 2 (gage height, 2.58 feet).

1929–1931: Maximum discharge, that of Aug. 11, 1931; no flow July 4–7, 1930.

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

Daily and monthly discharge, in second-feet, 1930–31

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	18	32	241	135	53	373	160	1,720	25	4	384	366
2	16	38	236	124	51	390	160	1,990	22	2	254	260
3	17	36	219	131	53	351	146	1,990	25	4	524	225
4	16	43	192	156	61	358	127	1,890	28	44	1,750	203
5	17	49	209	174	65	328	138	1,480	26	460	4,750	193
6	17	47	198	164	56	292	236	1,020	22	178	4 680	236
7	16	56	187	174	53	328	254	739	22	80	1,240	342
8	16	47	219	164	58	292	236	582	21	60	1,060	777
9	16	47	209	142	56	299	209	509	21	35	1,500	686
10	14	56	198	131	65	328	198	407	21	25	6,620	335
11	14	61	198	131	75	247	169	390	17	32	5,540	451
12	14	58	214	146	90	209	142	305	16	16	1,750	209
13	14	68	219	156	226	160	142	286	14	12	1,040	138
14	14	81	225	156	403	142	131	241	12	40	726	96
15	12	99	203	138	4,860	135	120	180	12	44	1,060	78
16	14	96	209	124	8,170	120	116	220	14	7	530	73
17	14	116	182	116	5,250	100	105	140	11	73	407	261
18	14	112	160	102	2,810	90	84	204	10	19	320	1,430
19	14	124	164	96	1,600	75	124	93	11	14	299	4,110
20	15	178	169	112	1,040	63	140	93	9	8	254	3,450
21	16	198	174	105	792	65	214	73	9	6	241	2,210
22	17	214	164	93	686	70	286	63	9	6	203	1,680
23	17	203	182	90	674	70	434	56	7	5	245	1,240
24	17	187	174	81	593	58	509	43	6	8	1,150	834
25	16	182	169	84	550	70	651	42	5	48	634	674
26	16	174	174	78	479	73	766	58	4	3	366	560
27	21	178	156	73	434	73	834	58	3	3	247	1,020
28	25	164	142	68	381	147	860	45	3	2	260	685
29	21	160	138	65	------	146	1,270	36	10	5	187	3,180
30	21	192	131	63	------	169	1,240	32	9	312	3,090	1,380
31	26	------	127	58	------	151	------	22	------	102	1,360	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	26	12	16.6	1,020
November	214	32	110	6,540
December	241	127	187	11,500
January	174	58	117	7,200
February	8,170	51	1,060	58,900
March	390	58	186	11,400
April	1,270	84	340	20,200
May	1,990	22	484	29,800
June	28	3	14.1	841
July	460	2	53.5	3,290
August	6,620	187	1,380	84,600
September	4,110	73	913	54,300
The year	8,170	2	400	290,000

SAN CARLOS RESERVOIR AT COOLIDGE DAM, ARIZ.

LOCATION.—In NW. ¼ sec. 17, T. 3 S., R. 18 E., unsurveyed, at Coolidge Dam.
DRAINAGE AREA.—12,900 square miles.
RECORDS AVAILABLE.—November, 1928, to September, 1931.
EXTREMES.—Maximum contents during year, 180,300 acre-feet Mar. 11 (elevation, 2,437.24 feet); minimum, 69,700 acre-feet Aug. 3 (elevation, 2,412.00 feet).

1928–1931: Maximum contents, that of Mar. 11, 1931; water below outlet gates in 1928 and several months in 1929.

REMARKS.—Lowest outlet in dam at elevation 2,383.00 feet. For sea-level elevation of water surface add 2,000.00 feet to gage heights in table. Records of daily gage heights and contents furnished by United States Indian Service. Records published for each fifth day only.

Gage height, in feet, 1930–31

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	424.40	421.76	422.44	424.48	425.70	436.42	435.66	432.78	430.74	422.96	412.04	424.95
6	423.60	421.44	423.01	424.83	425.62	436.97	435.28	434.34	429.74	421.66	415.69	425.58
11	423.14	421.15	423.43	425.20	425.56	437.24	434.62	434.44	428.58	420.24	421.40	425.79
16	422.73	421.04	423.83	425.51	429.50	436.96	433.67	433.86	427.38	418.90	424.33	424.98
21	422.41	421.37	424.15	425.74	434.83	436.65	432.72	432.93	425.97	416.69	424.39	427.26
26	422.13	421.81	424.30	425.86	435.99	436.18	432.18	431.96	424.54	414.17	423.83	428.92

Contents, in acre-feet, 1930–31

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	117,100	106,000	109,000	117,400	122,600	175,800	171,600	156,000	146,200	111,300	69,800	119,300
6	113,900	104,800	111,500	118,800	122,300	178,900	169,500	164,400	141,300	105,600	82,600	122,100
11	112,100	103,600	113,200	120,400	122,000	180,300	165,900	164,900	135,300	100,000	104,600	123,100
16	110,300	103,200	114,800	121,800	140,200	178,900	160,700	161,700	130,200	94,600	116,800	119,400
21	108,800	104,500	116,100	122,800	167,100	177,100	155,800	156,800	123,800	88,200	117,100	129,700
26	107,600	106,200	116,700	123,400	173,400	174,500	153,300	152,300	117,200	77,100	114,800	137,600

GILA RIVER AT COOLIDGE DAM, ARIZ.

LOCATION.—Water-stage recorder in SW. ¼ sec. 17, T. 3 S., R. 18 E., unsurveyed, 600 feet below Coolidge Dam. Zero of gage is 2,309.5 feet above mean sea level.

DRAINAGE AREA.—12,900 square miles.

RECORDS AVAILABLE.—April, 1914, to September, 1931. July, 1899, to November, 1905, at station 8 miles upstream, below San Carlos River. August, 1910, to February, 1911, at station 9 miles upstream, above San Carlos River.

EXTREMES.—Maximum discharge during year, 1,020 second-feet July 20 (gage height, 5.95 feet); no flow on various days.

1914–1928: Maximum discharge, 130,000 second-feet Jan. 20, 1916; no flow for various periods.

1929–1931: Maximum discharge, that of July 20, 1931; no flow on various days of each year.

REMARKS.—Records good. Discharge estimated May 1–11, June 26–28, Sept. 14–16. Discharge regulated by Coolidge Dam after Nov. 15, 1928.

Daily and monthly discharge, in second-feet, 1930–31

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	397	130	0	80	143	0	323	460	479	770	457	4
2	366	136	0	28	147	0	338	500	479	758	371	4
3	319	136	0	1	147	0	352	500	474	614	403	4
4	319	139	0	0	147	0	361	500	485	530	452	3
5	314	134	0	0	150	23	352	500	479	535	361	3
6	285	134	0	0	139	38	458	500	479	558	174	3
7	236	136	0	0	120	38	524	500	569	502	40	128
8	240	134	0	0	120	102	507	500	569	541	3	197
9	240	134	0	0	120	161	541	500	563	637	2	200
10	214	134	0	0	124	173	631	540	558	654	2	270
11	197	134	0	0	124	206	620	585	541	677	2	306
12	168	139	0	0	124	280	637	608	546	694	2	400
13	150	139	0	0	52	289	688	614	530	700	2	479
14	154	143	0	0	0	285	677	597	558	677	3	500
15	154	139	0	0	0	293	643	591	614	787	4	500
16	147	139	11	0	0	285	648	586	597	840	3	500
17	147	110	24	0	0	297	666	580	574	823	190	520
18	145	35	23	0	0	293	643	574	569	846	289	524
19	143	1	39	0	0	289	620	569	569	942	441	397
20	143	0	46	0	0	285	631	563	563	948	552	319
21	143	0	46	0	0	285	631	558	671	942	563	275
22	143	0	61	0	0	365	631	518	740	924	746	208
23	139	0	91	0	0	403	586	524	740	936	735	211
24	105	0	91	72	0	397	563	518	740	918	735	214
25	80	0	94	112	0	397	569	518	758	924	740	243
26	76	0	94	112	0	397	552	535	760	924	746	314
27	76	0	96	126	0	382	580	530	760	930	711	310
28	110	0	96	136	0	397	574	479	760	912	637	306
29	130	0	96	139	------	392	591	490	782	924	597	221
30	130	0	96	139	------	371	524	490	787	918	446	103
31	130	------	86	145	------	338	------	496	------	642	46	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	397	76	185	11,400
November	143	0	77.5	4,610
December	96	0	35.2	2,160
January	145	0	35.2	2,160
February	150	0	59.2	3,290
March	403	0	241	14,800
April	688	323	555	33,000
May	614	460	533	32,800
June	787	474	610	36,300
July	948	502	772	47,500
August	746	2	337	20,700
September	524	3	256	15,200
The year	948	0	309	224,000

GILA RIVER AT WINKELMAN, ARIZ.

LOCATION.—In NW. ¼ sec. 24, T. 5 S., R. 15 E., at highway bridge at Winkelman, 1 mile above San Pedro River.
DRAINAGE AREA.—13,300 square miles.
RECORDS AVAILABLE.—September, 1917, to June, 1918. Discharge measurements only December, 1928, to September, 1931.
REMARKS.—Principal discharge regulated at Coolidge Dam 30 miles upstream.

Discharge measurements, in second-feet, 1930–31

Date	Discharge	Date	Discharge	Date	Discharge
Oct. 13	157	Jan. 27	117	May 19	643
Nov. 3	136	Feb. 20	29.1	June 8	600
Nov. 24	9.1	Mar. 16	258	July 9	706
Dec. 13	5.8	Apr. 6	366	Sept. 19	647
Jan. 5	14.8	Apr. 28	594		

GILA RIVER AT KELVIN, ARIZ.

LOCATION.—Water-stage recorder in NW. ¼ sec. 12, T. 4 S., R. 13 E., at Kelvin, 15 miles below San Pedro River.
DRAINAGE AREA.—18,300 square miles.
RECORDS AVAILABLE.—January, 1911, to September, 1931.
EXTREMES.—Maximum discharge during year, 28,600 second-feet Aug. 30 (gage height, 10.6 feet); minimum, 24 second-feet Jan. 12 (gage height, 2.30 feet).
1911–1931: Maximum discharge, about 132,000 second-feet Jan. 20, 1916 (gage height, 19.5 feet); minimum, less than 1 second-foot in summer of various years.
REMARKS.—Records good. Discharge estimated Oct. 7–12. Diversions for irrigation above station. Discharge partly regulated by storage in San Carlos Reservoir, after Nov. 15, 1928.

Daily and monthly discharge, in second-feet, 1930–31

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	434	149	81	104	213	284	347	409	522	1,030	1,010	804
2	409	139	65	100	219	239	319	394	522	957	732	434
3	370	149	65	129	213	178	326	417	541	828	1,300	875
4	347	149	69	189	232	160	347	425	522	665	816	532
5	347	154	69	124	277	129	355	442	532	590	1,280	305
6	340	160	65	84	264	114	363	477	532	590	1,110	213
7	300	166	65	58	245	129	468	486	532	571	2,200	154
8	250	160	60	48	219	139	486	468	532	532	678	200
9	250	172	63	43	213	178	503	468	581	590	3,260	378
10	250	178	73	36	195	258	571	477	551	632	5,410	486
11	250	184	65	35	195	271	610	551	561	676	2,290	503
12	200	178	63	28	464	298	571	551	571	1,090	892	477
13	184	172	60	28	1,740	340	665	551	541	709	486	632
14	149	201	63	27	1,340	355	676	561	551	720	445	720
15	144	271	55	28	3,250	340	665	561	600	732	964	720
16	144	219	55	31	4,020	326	654	581	600	866	400	931
17	139	219	46	33	1,180	312	676	551	610	918	275	840
18	134	662	48	33	590	333	665	561	610	944	315	892
19	139	468	69	35	370	333	665	561	600	970	486	2,510
20	129	195	73	35	264	319	610	522	610	1,010	654	1,070
21	134	119	88	35	226	305	581	541	610	1,010	698	541
22	134	80	88	35	213	312	581	532	720	984	756	425
23	129	60	88	35	201	378	621	522	720	984	889	326
24	134	63	139	36	195	394	561	532	698	998	946	312
25	119	58	172	43	166	425	532	532	687	998	1,440	312
26	77	58	166	139	195	434	551	541	709	970	853	355
27	73	53	166	172	207	425	551	532	720	970	804	485
28	73	179	139	201	232	402	619	532	687	957	904	578
29	96	284	124	219	------	409	561	503	744	1,300	1,010	842
30	134	134	124	195	------	394	486	522	918	1,540	7,670	417
31	134	------	129	213	------	370	------	522	------	1,100	2,660	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	434	73	198	12,200
November	662	53	181	10,800
December	172	46	86.9	5,350
January	219	27	82.3	5,060
February	4,020	166	619	34,400
March	434	114	299	18,400
April	676	319	540	32,100
May	581	394	510	31,400
June	918	522	614	36,600
July	1,540	532	885	54,400
August	7,670	275	1,410	86,500
September	2,510	154	609	36,200
The year	7,670	27	502	363,000

GILA RIVER AT ASHURST-HAYDEN DAM, NEAR FLORENCE, ARIZ.

LOCATION.—Chain gage in sec. 8, T. 4 S., R. 11 E., at Ashurst-Hayden Dam, 10 miles northeast of Florence.

DRAINAGE AREA.—18,600 square miles. The figure published in Water-Supply Paper 704 is in error.

RECORDS AVAILABLE.—July, 1923, to September, 1931, gage heights only.

EXTREMES.—Maximum stage during year, 3.7 feet Aug. 30; no flow over dam on many days.

1923–1931: Maximum stage, 8.0 feet Sept. 28, 1926; no flow over dam on many days each year.

REMARKS.—Florence-Casa Grande Canal diverts water at this dam. Other diversions for irrigation upstream. A considerable quantity of water is passed through the sluice gates in the dam and does not appear in this record. Flow largely regulated by storage in San Carlos Reservoir. Crest of dam raised 1 foot in February, 1931. At time of flow over dam, Feb. 13–24, crest had been raised for about three-quarters of its length. Record for this period shows height of water over that portion of crest which had not yet been raised. Later records show height of water over completed crest. Gage-height record furnished by United States Indian Service.

Daily height, in feet, 1930–31

Day	Nov.	Feb.	Apr.	June	July	Aug.	Sept.
1					0.15	a 0.30	0.60
2							.50
3							a .75
4						.20	.25
5						.20	
6						a .05	
7						.55	
8						a .35	
9						1.90	
10						1.70	
11						1.70	
12					.45	.55	
13		0.90				.50	
14		.80				a .25	.05
15		.60				.65	a .05
16		1.15				a .05	a .05
17							
18	a 0.20						a .20
19	.10						.95
20		a .35					.35
21		.15					.25
22		.15					.15
23		.15				.20	
24		.05	a 0.30				
25					a .30	.60	
26						a .05	a .10
27							a .30
28						a .35	a .20
29	.25		a .10	0.30	.15	.55	.45
30	.15				.30	2.25	a .10
31					a .15	1.05	

a Flow for part of day only.

NOTE.—Figures show height of water over crest of dam; water below crest on days for which no height is shown.

GILA RIVER AT GILLESPIE DAM, ARIZ.

LOCATION.—Water-stage recorder in SE. ¼ NE. ¼ sec. 28, T. 2 S., R. 5 W., at Gillespie Dam, 8 miles below Hassayampa River. Zero of gage is at average elevation of crest of dam and is 753.8 feet above mean sea level.

DRAINAGE AREA.—49,700 square miles.

RECORDS AVAILABLE.—August, 1921, to September, 1931.

EXTREMES.—Maximum discharge during year, 17,200 second-feet Feb. 16 (gage height, 2.5 feet); no flow on many days.

1921–1931: Maximum discharge, 70,000 second-feet Dec. 28, 1923 (gage height, 6.0 feet); no flow for various periods each year.

REMARKS.—Records good. Water passed through sluice gates included in this record. During period when water level is below crest of dam a small quantity not included in this record is released through gate. Diversions for irrigation upstream. Discharge partly regulated by storage reservoirs.

Daily and monthly discharge, in second-feet, 1930–31

Day	Nov.	Dec.	Jan.	Feb.	Mar.	Aug.	Sept.
1	0	0	0	0	335	0	3,500
2	0	0	0	0	260	0	1,120
3	0	0	2	0	235	0	515
4	0	0	0	0	190	0	285
5	0	0	4	135	130	746	285
6	0	0	0	207	110	2,660	190
7	0	0	0	158	90	1,850	48
8	0	0	0	123	90	983	0
9	0	0	0	26	75	1,510	0
10	0	0	0	60	45	3,380	0
11	0	0	0	20	45	4,450	0
12	0	0	0	76	30	5,780	0
13	0	0	0	914	15	2,610	0
14	0	0	0	7,850	2	1,260	0
15	0	0	0	13,600	0	556	0
16	0	0	4	16,500	0	328	0
17	0	0	1	13,800	0	260	0
18	40	0	0	6,360	52	190	0
19	0	0	0	3,330	150	110	0
20	0	0	0	1,860	89	346	0
21	335	0	0	1,330	90	12	333
22	112	4	0	1,010	64	0	160
23	41	0	0	856	0	0	8
24	36	0	0	840	0	0	0
25	0	0	0	625	0	0	0
26	0	0	0	500	0	0	0
27	0	0	0	385	0	0	0
28	0	0	0	360	0	0	0
29	0	0	0	-------	0	0	0
30	0	0	0	-------	0	0	0
31	-------	0	0	-------	0	4,730	-------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
November	335	0	18.8	1,120
December	4	0	.1	8
January	4	0	.4	22
February	16,500	0	2,530	141,000
March	335	0	67.6	4,160
August	5,780	0	1,020	63,000
September	3,500	0	215	12,800
The year	16,500	0	306	222,000

NOTE.—No flow during months omitted.

GILA RIVER NEAR DOME, ARIZ.

LOCATION.—Water-stage recorder in SW. ¼ sec. 4, T. 8 S., R. 21 W., 3 miles west of Dome and 18 miles above mouth of Gila River.

DRAINAGE AREA.—58,100 square miles.

RECORDS AVAILABLE.—May, 1929, to September, 1931. October, 1903, to December, 1906, at a station 4 miles upstream.

EXTREMES.—Maximum discharge during year, 11,400 second-feet Feb. 19 (gage height, 13.78 feet); no flow during most of year.

1929–1931: Maximum discharge, that of Feb. 19, 1931; no flow during most of each year.

Maximum mean daily discharge (estimated), 200,000 second-feet Jan. 22, 1916.

REMARKS.—Records good. Diversions for irrigation above station. Regulation by storage reservoirs upstream.

Daily and monthly discharge, in second-feet, 1930–31

Day	Feb.	Mar.	Aug.	Sept.	Day	Feb.	Mar.	Aug.	Sept.
1	0	267	0	8	16	1,630	0	1,300	0
2	0	204	0	1	17	3,000	0	752	0
3	0	159	0	935	18	5,900	0	482	0
4	0	123	0	1,240	19	10,200	0	373	0
5	0	91	39	761	20	7,760	0	222	0
6	0	67	25	474	21	3,050	0	107	0
7	0	51	0	300	22	1,950	0	37	0
8	0	36	0	184	23	1,290	0	5	0
9	0	31	0	100	24	884	0	0	0
10	0	17	0	50	25	654	0	0	0
11	0	9	0	20	26	488	0	0	0
12	0	5	0	5	27	388	0	0	0
13	0	2	86	1	28	332	0	0	0
14	136	1	1,250	0	29	-------	0	0	0
15	1,680	0	2,640	0	30	-------	0	0	0
					31	-------	0	3	-------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
February	10,200	0	1,410	78,000
March	267	0	34.3	2,110
August	2,640	0	236	14,500
September	1,240	0	136	8,090
The year	10,200	0	142	103,000

NOTE.—No flow during months omitted.

SUNSET CANAL NEAR DUNCAN, ARIZ.

LOCATION.—Staff gage in NE. ¼ sec. 18, T. 19 S., R. 20 W., N. Mex., 2 miles below intake and 9½ miles east of Duncan, Ariz.

RECORDS AVAILABLE.—October, 1914, to September, 1915; July, 1922, to September, 1931 (discontinued).

REMARKS.—Records good. Intake on right side of Gila River in NW. ¼ sec. 21, T. 19 S., R. 20 W., N. Mex. Water used for irrigation near Virden. Diversions from canal above station.

Daily and monthly discharge, in second-feet, 1930–31

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	39	48	27	0	31	38	44	43	53	33	49	29
2	39	46	28	0	25	32	39	60	55	26	20	32
3	33	47	22	22	19	33	21	38	57	50	12	25
4	36	47	21	24	18	33	34	35	58	0	30	42
5	40	47	21	25	23	33	42	38	52	0	5	13
6	44	39	22	25	31	36	40	40	48	40	0	41
7	45	43	23	25	38	17	31	47	45	54	0	15
8	45	43	23	24	42	16	31	39	45	49	0	26
9	41	43	17	20	42	16	35	50	46	34	0	34
10	36	42	13	22	0	25	35	45	47	31	19	37
11	38	41	13	22	15	30	37	42	42	40	16	41
12	38	40	13	22	29	27	48	52	43	46	18	39
13	43	39	13	22	36	30	26	52	43	38	22	40
14	42	40	13	22	40	41	46	53	41	40	28	21
15	41	42	13	22	21	40	55	58	39	45	26	42
16	44	26	13	14	19	24	28	57	39	48	36	34
17	44	11	13	14	0	43	48	46	40	47	40	28
18	44	14	9	14	0	18	45	49	39	45	40	21
19	42	14	13	11	0	33	45	52	32	36	47	33
20	44	14	15	13	0	33	48	50	27	47	50	31
21	45	14	15	19	0	37	23	40	26	45	44	32
22	45	14	17	19	0	38	60	51	25	52	42	31
23	40	14	17	19	0	43	46	54	24	49	37	37
24	40	14	15	29	0	43	41	54	22	32	30	44
25	33	11	19	29	24	20	46	27	23	31	44	40
26	36	17	28	28	24	36	45	0	20	36	39	38
27	38	28	28	28	35	31	44	13	21	35	38	30
28	43	27	22	29	35	35	23	55	19	36	34	22
29	41	27	11	32	-------	39	12	48	23	26	35	45
30	42	27	15	32	-------	41	13	39	33	48	37	34
31	48	-------	18	31	-------	44	-------	52	-------	52	37	-------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	48	33	40.9	2,520
November	48	11	30.6	1,820
December	28	9	17.7	1,090
January	32	0	21.2	1,310
February	42	0	19.5	1,080
March	44	16	32.4	1,990
April	60	12	37.7	2,240
May	60	0	44.5	2,740
June	58	19	37.6	2,240
July	54	0	38.4	2,360
August	50	0	28.2	1,740
September	45	13	32.6	1,940
The year	60	0	31.9	23,100

MODDLE CANAL NEAR DUNCAN, ARIZ.

LOCATION.—Water-stage recorder in NW. ¼ sec. 10, T. 19 S., R. 21 W., N. Mex., half a mile below intake and 7 miles east of Duncan, Ariz.

RECORDS AVAILABLE.—October, 1914, to September, 1915; July, 1922, to September, 1931 (discontinued).

REMARKS.—Records good. Discharge estimated Apr. 5, May 1. Intake on left side of Gila River in NW. ¼ sec. 11, T. 19 S., R. 21 W., N. Mex. Water used for irrigation near Franklin.

Daily and monthly discharge, in second-feet, 1930–31

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	21	45	31	38	26	24	50	18	37	22	36	36
2	17	46	30	32	28	33	48	25	39	12	31	21
3	17	45	32	34	31	17	46	21	36	25	7	18
4	19	48	34	37	43	8.8	43	26	32	9.5	11	32
5	19	47	33	36	51	10	15	42	25	30	6.3	45
6	24	40	34	34	50	15	5.6	50	22	20	0	37
7	25	21	34	33	47	22	26	58	21	20	0	18
8	29	24	34	32	41	7.5	40	50	28	26	0	42
9	30	23	37	34	44	36	46	44	37	36	8.4	41
10	27	22	39	36	50	52	44	50	26	26	23	48
11	35	20	38	37	46	46	42	53	15	16	5	45
12	32	21	37	37	43	44	40	45	15	16	.2	42
13	38	24	38	36	30	47	43	47	15	25	0	39
14	44	24	39	36	0	45	36	48	19	20	0	47
15	40	27	38	36	.5	49	33	47	16	21	9.8	34
16	43	36	39	40	7.7	54	33	60	15	20	31	43
17	39	45	35	32	0	53	39	58	17	18	38	39
18	40	43	31	32	0	56	62	48	15	16	32	24
19	43	43	28	31	0	51	22	52	13	28	43	32
20	45	36	30	29	0	53	22	50	12	43	40	5.6
21	42	34	31	25	0	55	31	53	11	42	40	0
22	42	27	32	26	0	56	29	43	12	30	23	0
23	33	24	31	26	0	55	23	38	11	24	37	0
24	33	33	30	25	0	56	11	50	12	14	14	0
25	35	30	24	24	0	56	1	51	11	10	30	0
26	43	27	17	18	0	57	3.6	54	10	3	38	16
27	30	24	19	13	9.0	57	15	52	9.2	5.4	43	46
28	16	24	25	13	21	54	6.7	42	10	8.0	43	44
29	30	29	31	14	-------	51	13	36	11	11	35	43
30	30	31	25	28	-------	51	12	38	21	28	39	24
31	40	-------	29	26	-------	53	-------	36	-------	19	37	-------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	45	16	32.3	1,990
November	48	20	32.1	1,910
December	39	17	31.8	1,950
January	40	13	30.0	1,840
February	51	0	20.3	1,130
March	57	7.5	42.7	2,630
April	62	1	29.4	1,750
May	60	18	44.7	2,750
June	39	9.2	19.1	1,140
July	43	3	20.8	1,280
August	43	0	22.6	1,390
September	48	0	28.7	1,710
The year	62	0	29.6	21,500

VALLEY CANAL NEAR DUNCAN, ARIZ.

LOCATION.—Staff gage in SW. ¼ sec. 32, T. 18 S., R. 21 W., N. Mex., half a mile below intake and 6 miles east of Duncan, Ariz.

RECORDS AVAILABLE.—October, 1914, to September, 1915; July, 1923, to September, 1931 (discontinued).

REMARKS.—Records good. Intake on right side of Gila River in NW. ¼ sec. 4, T. 19 S., R. 21 W., N. Mex. Water used for irrigation near Duncan.

Daily and monthly discharge, in second-feet, 1930–31

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	7.5	0	28	21	25	14	34	0	16	22	30	21
2	8.6	0	28	28	24	14	34	0	17	2.8	42	23
3	9.7	0	27	30	20	14	34	0	15	31	8.0	16
4	11	6.1	9.0	32	15	22	33	9.2	17	31	30	18
5	9.7	14	4.0	32	20	38	31	15	12	34	13	30
6	8.6	18	6.2	32	23	38	31	13	11	34	19	20
7	8.4	24	2.1	34	26	21	30	11	10	31	30	18
8	8.6	21	2.3	32	27	9.8	31	4.7	8.4	19	31	17
9	8.2	21	1.9	30	28	0	31	3.2	8.4	9.5	36	17
10	6.9	23	2.1	27	30	0	20	7.8	11	13	31	16
11	8.8	24	1.8	30	30	9.2	0	31	6.3	14	30	13
12	12	24	1.8	29	31	19	0	44	7.3	13	29	10
13	9.5	25	2.2	28	41	20	12	46	6.1	13	29	11
14	12	25	3.4	29	23	21	24	47	4.5	9.5	30	25
15	9.5	27	8.2	28	23	23	32	50	6.3	8.2	28	27
16	10	28	16	27	22	23	35	49	5.1	8.8	26	28
17	9.5	28	18	27	9.0	24	33	50	4.2	4.1	22	28
18	10	29	18	26	0	26	30	50	8.4	4.3	20	17
19	12	31	20	26	0	24	30	50	5.5	13	20	6.3
20	5.7	30	20	29	7.4	22	29	49	5.7	25	20	3.0
21	0	30	20	28	18	23	30	49	4.9	24	25	14
22	0	29	20	28	21	20	34	48	4.9	23	21	31
23	0	29	21	27	22	21	33	48	5.0	18	32	26
24	0	28	21	27	23	24	35	7.3	2.6	8.6	20	19
25	0	28	23	28	25	37	29	31	2.1	7.8	26	17
26	0	27	25	28	24	35	25	47	1.9	6.9	25	14
27	0	25	25	31	19	33	27	49	1.9	9.5	22	12
28	0	26	24	32	14	32	26	45	1.6	5.1	20	0.1
29	0	28	24	31	------	32	27	29	1.8	3.8	16	9.9
30	0	28	25	24	------	34	8.5	17	2.2	23	15	20
31	0	------	26	23	------	34	------	16	------	6.5	17	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	12	0	6.01	369
November	31	0	22.5	1,340
December	28	1.8	15.3	940
January	34	21	28.5	1,750
February	41	0	21.1	1,170
March	38	0	22.8	1,400
April	35	0	27.0	1,600
May	50	0	29.6	1,820
June	17	1.6	7.17	426
July	34	2.8	15.4	945
August	42	8.0	24.6	1,510
September	31	.1	17.6	1,050
The year	50	0	19.8	14,300

BLACK-McCLESKY CANAL AT DUNCAN, ARIZ.

LOCATION.—Staff gage in SE. ¼ sec. 19, T. 8 S., R. 32 E., at Duncan, one-fourth mile below intake.

RECORDS AVAILABLE.—April to September, 1915; July, 1923, to September, 1931 (discontinued).

REMARKS.—Records good. Intake on left side of Gila River in SE. ¼ sec. 19, T. 8 S., R. 32 E. Water used for irrigation near Duncan.

Daily and monthly discharge, in second-feet, 1930-31

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	13	15	16	8.9	9.7	6.4	12	20	7.4	5.0	13	6.7
2	12	16	16	9.6	8.4	6.2	11	19	10	5.5	33	5.3
3	11	17	14	9.6	8.5	7.1	12	21	12	21	42	3.1
4	12	15	16	9.4	8.4	5.8	11	19	13	0	18	3.1
5	15	15	18	9.4	12	5.0	12	17	11	2.1	18	11
6	12	15	18	9.8	11	6.1	10	16	98.7	5.2	0	19
7	12	15	18	11	11	5.9	4.4	15	6.7	7.9	0	15
8	12	14	15	12	12	5.9	4.4	14	8.8	4.0	0	2.4
9	12	16	13	12	13	5.9	5.7	14	11	12	0	2.6
10	14	14	13	12	15	5.5	9.3	18	13	12	18	3.1
11	15	15	14	12	14	4.8	5.1	23	8.4	11	4.9	2.9
12	14	15	15	11	15	4.6	12	23	8.8	19	3.0	4.3
13	16	14	16	11	16	5.0	6.1	21	8.9	20	0	3.1
14	13	15	16	10	16	4.8	2.6	20	8.5	15	0	18
15	15	16	11	11	17	5.0	5.5	21	8.7	11	0	9.7
16	16	17	5.9	7.8	17	5.0	7.6	22	7.0	9.6	0	19
17	17	18	5.5	5.0	17	5.3	6.1	20	4.8	5.0	0	26
18	13	19	5.7	11	19	7.1	3.1	20	4.8	21	0	26
19	11	13	5.5	10	18	9.3	9.3	19	5.4	20	0	24
20	13	12	5.2	11	12	9.3	15	17	5.0	28	0	16
21	16	6.7	7.5	11	8.1	9.4	11	17	4.1	22	5.2	19
22	15	6.6	7.9	9.4	8.3	10	11	17	3.4	18	13	5.9
23	16	6.4	11	9.3	7.9	11	16	13	3.9	12	19	5.5
24	16	12	11	9.8	8.1	11	16	13	4.0	9.7	22	6.1
25	16	18	10	9.8	7.2	12	17	12	4.1	9.6	17	6.1
26	16	18	11	9.7	6.7	12	16	9.7	5.4	9.8	15	10
27	16	19	10	11	6.7	12	15	6.7	4.0	10	7.1	15
28	16	18	9.4	11	6.6	12	21	17	4.0	12	8.0	15
29	15	18	8.9	11	------	6.5	0	13	5.4	9.4	8.1	15
30	16	15	9.6	12	------	5.8	20	9.2	7.8	20	7.1	15
31	16	------	9.6	9.7	------	0	------	7.9	------	14	7.4	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	17	11	14.3	877
November	19	6.4	14.8	880
December	18	5.2	11.7	719
January	12	5.0	10.2	629
February	19	6.6	11.8	654
March	12	0	7.15	440
April	21	0	10.2	609
May	23	6.7	16.6	1,020
June	13	3.4	7.27	432
July	28	0	12.3	755
August	42	0	8.99	553
September	26	2.4	11.1	660
The year	42	0	11.4	8,230

COLMONERO CANAL NEAR DUNCAN, ARIZ.

LOCATION.—Staff gage in SE. ¼ sec. 33, T. 7 S., R. 31 E., 3 miles below intake and 6 miles northwest of Duncan.

RECORDS AVAILABLE.—September, 1914, to September, 1915; July, 1923, to September, 1931 (discontinued).

REMARKS.—Records good. Diversions from canal for irrigation above station. Intake on right side of Gila River in SE. ¼ sec. 11, T. 8 S., R. 31 E. Water used for irrigation near Sheldon.

Daily and monthly discharge, in second-feet, 1930–31

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.9	3.2	3.2	1.4	1.8	0	6.7	0	0	2.5	0	0
2	4.3	3.1	2.2	1.4	1.9	0	6.8	4.	0	5.3	0	6.5
3	4.5	3.1	2.2	1.7	2.2	0	4.7	4.6	2.9	4.4	3.2	6.5
4	5.1	2.7	2.4	1.7	2.9	0	4.0	3.5	3.8	0	0	6.0
5	5.2	2.3	3.6	2.0	3.2	1.5	4.9	3.0	5.1	0	0	5.0
6	3.8	2.3	3.6	2.0	3.5	1.6	4.6	0	9.4	3.4	0	5.0
7	5.5	2.5	3.9	1.7	3.9	4.0	4.6	.8	9.0	8.3	0	3.2
8	4.6	2.7	4.0	1.7	5.4	3.9	7.6	2.0	7.7	3.9	0	1.5
9	3.5	2.8	4.0	2.9	5.4	4.1	9.7	1.7	7.5	2.0	0	2.5
10	3.0	3.0	3.9	2.9	5.4	.9	10	4.1	7.4	5.6	0	3.6
11	4.7	3.1	3.9	1.1	5.3	2.3	11	10	6.6	.9	0	2.5
12	5.4	3.4	3.9	1.2	5.5	7.3	11	10	7.5	6.4	0	2.7
13	5.1	3.5	4.0	1.3	6.0	7.1	4.0	8.8	5.7	2.5	2.4	2.0
14	5.7	3.8	3.9	2.2	6.4	7.5	8.9	6.9	5.6	5.4	3.6	7.2
15	5.5	5.0	3.9	2.7	6.3	8.0	11	4.1	7.8	1.8	2.1	0
16	6.1	7.4	4.0	3.0	0	8.2	9.7	2.3	6.8	1.8	0	1.4
17	6.1	6.8	4.0	2.5	0	8.7	10	1.3	4.8	0	0	.8
18	5.9	5.8	4.0	2.2	0	8.5	8.2	7.3	3.9	7.3	1.6	0
19	5.9	4.7	3.0	2.0	0	8.8	11	8.8	7.1	7.5	1.8	0
20	5.5	2.7	2.9	1.3	0	9.1	10	7.5	8.5	6.1	2.5	0
21	5.7	2.9	2.0	1.3	.8	8.3	7.9	9.9	6.0	2.5	3.5	0
22	5.9	3.2	1.9	2.0	.7	8.3	9.6	8.6	5.7	7.3	5.7	0
23	5.9	4.1	1.8	1.5	0	9.3	5.1	10	1.4	5.5	6.5	0
24	5.4	4.1	1.4	1.2	0	9.8	3.9	5.5	3.7	4.6	5.2	0
25	5.7	4.1	1.2	1.4	0	9.3	3.5	9.0	3.2	2.3	4.7	1.1
26	5.4	4.2	1.1	1.3	0	4.6	3.4	9.8	1.0	5.5	2.0	1.3
27	5.1	4.4	1.1	1.6	0	0	2.6	11	0	6.0	1.2	1.6
28	4.2	4.3	1.2	1.7	0	4.7	3.4	9.4	1.0	7.9	1.5	2.2
29	4.0	4.8	1.2	1.8	-------	9.1	0	7.6	3.4	6.2	4.8	0
30	3.9	4.1	1.3	2.0	-------	8.9	.7	3.4	4.5	5.9	.6	0
31	3.5	-------	1.4	1.7	-------	7.0	-------	0	-------	7.9	0	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	6.1	2.9	4.94	303
November	7.4	2.3	3.80	226
December	4.0	1.1	2.78	171
January	3.0	1.1	1.82	112
February	6.4	0	2.38	132
March	9.8	0	5.51	339
April	11	0	6.62	394
May	11	0	5.64	347
June	9.4	0	4.90	292
July	8.3	0	4.41	271
August	6.5	0	1.71	105
September	7.2	0	2.09	124
The year	11	0	3.89	2,820

YORK CANAL AT YORK, ARIZ.

LOCATION.—In SE. ¼ sec. 19, T. 6 S., R. 31 E., at York, half a mile below intake.
RECORDS AVAILABLE.—September, 1914, to September, 1915, gage heights and discharge measurements. May, 1923, to September, 1931 (discontinued), discharge measurements only.
REMARKS.—Intake on right side of Gila River in SW. ¼ sec. 29, T. 6. S, R. 31 E. Water used for irrigation near York.

Discharge measurements, in second-feet, 1930–31

Nov. 10	0.1	Feb. 5	1.9	May 3	1.8
Dec. 1	.8	Mar. 7	3.2	May 25	5.0
Dec. 20	1.0	Mar. 23	.5	July 27	1.0
Jan. 12	.8	Apr. 13	3.0	Sept. 9	3.2

SAN FRANCISCO RIVER AT CLIFTON, ARIZ.

LOCATION.—Water-stage recorder in SW. ¼ SE. ¼ sec. 30, T. 4 S., R. 30 E., at Railroad Boulevard bridge at Clifton. Zero of gage is 3,432.3 feet above mean sea level.

DRAINAGE AREA.—2,790 square miles.

RECORDS AVAILABLE.—July, 1927, to September, 1931. Fragmentary record, October, 1910, to July, 1918, at several points within 2 miles upstream.

EXTREMES.—Maximum discharge during year, 3,330 second-feet Sept. 29 (gage height, 8.6 feet); minimum, 32 second-feet June 28 (gage height, 2.65 feet).

1927–1931: Maximum discharge, 7,100 second-feet Sept. 23, 1929 (gage height, 10.1 feet); minimum, 15 second-feet June 24, 1929 (gage height, 2.74 feet).

Minimum known discharge, 2 second-feet June 29, 1917.

REMARKS.—Records good. Diversions for irrigation and municipal supply above station.

Daily and monthly discharge, in second-feet, 1930–31

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	46	46	83	55	68	136	192	537	78	120	430	183
2	46	48	76	55	70	131	205	596	77	98	202	173
3	46	46	71	62	70	122	222	581	76	131	149	149
4	46	48	71	76	74	123	229	498	70	697	514	138
5	45	48	70	76	134	129	219	400	64	190	976	163
6	46	48	70	65	116	136	210	337	60	132	371	165
7	46	46	70	61	93	136	198	294	58	86	287	528
8	46	48	67	60	85	131	192	254	60	71	853	380
9	44	48	74	58	82	125	190	235	60	60	1,070	163
10	46	48	77	62	80	122	181	217	57	64	719	127
11	51	48	76	68	78	118	169	198	53	69	412	113
12	53	49	68	65	98	118	161	183	50	55	229	95
13	54	49	65	64	403	120	159	169	48	51	175	90
14	53	51	64	60	848	118	153	157	46	64	146	118
15	50	61	62	55	2,630	134	144	149	45	62	131	240
16	49	64	62	58	1,420	134	147	151	41	112	144	175
17	45	64	61	62	547	134	171	163	39	76	159	820
18	44	80	60	64	326	136	181	161	37	183	157	471
19	42	127	58	62	240	134	186	151	37	146	322	2,230
20	44	90	57	64	208	142	179	144	36	97	212	1,350
21	44	72	54	61	188	147	175	134	38	86	163	616
22	45	62	53	62	163	147	173	125	37	82	250	383
23	45	60	51	62	149	149	248	114	36	60	309	281
24	45	61	51	62	140	157	219	105	37	64	205	254
25	46	62	53	65	132	163	205	100	40	81	149	245
26	49	64	53	67	136	245	181	98	37	118	125	232
27	51	62	58	68	142	282	171	97	34	61	150	305
28	53	71	61	71	142	214	245	93	34	44	115	971
29	50	116	61	72	-------	196	396	85	42	227	97	1,440
30	45	98	61	72	-------	196	383	80	91	168	857	532
31	45	-------	58	70	-------	192	-------	78	-------	359	201	-------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	54	42	47.1	2,900
November	127	46	62.8	3,740
December	83	51	63.7	3,920
January	76	55	64.0	3,940
February	2,630	68	316	17,600
March	282	118	151	9,260
April	396	144	203	12,100
May	596	78	216	13,300
June	91	34	50.6	3,010
July	697	44	126	7,760
August	1,070	97	332	20,400
September	2,230	90	438	26,000
The year	2,630	34	171	124,000

BROWN CANAL NEAR SOLOMONSVILLE, ARIZ.

LOCATION.—Water-stage recorder in SE. ¼ SE. ¼ sec. 30, T. 6 S., R. 28 E., one-fourth mile below intake and 10 miles east of Solomonsville.

RECORDS AVAILABLE.—June, 1914, to September, 1915; December, 1920, to September, 1931.

REMARKS.—Records good. Discharge estimated Mar. 29 to Apr. 10, Sept. 27–28. Intake on right side of Gila River in SE. ¼ sec. 30., T. 6 S., R. 28 E. Water used for irrigation east of Solomonsville.

Daily and monthly discharge, in second-feet, 1920–31

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4.1	3.7	4.8	10	5.0	0		7.5	2.6	12	15	0
2	4.8	3.9	5.4	9.3	0	0		7.3	2.0	10	15	0
3	3.7	3.9	3.8	9.1	0	7.8		7.3	1.9	18	25	0
4	3.7	3.9	.4	5.1	0	22		9.0	1.3	41	4	0
5	3.9	3.9	.4	0	0	26	15	12	1.5	24	0	0
6	4.1	3.9	.4	5.3	0	26		11	1.6	12	0	0
7	4.3	3.7	.4	8.7	0	29		9.3	1.6	9	0	0
8	4.6	3.7	.4	8.7	6.7	30		8.1	1.6	5.6	0	16
9	4.8	3.5	.4	7.7	9.1	30		6.7	1.6	3.7	0	29
10	5.0	3.4	.4	7.3	9.1	29		7.1	1.6	2.6	0	23
11	4.8	3.4	.4	7.7	8.9	28	10	12	1.8	2	0	15
12	3.7	3.2	.5	7.9	9.1	29	11	17	1.8	2	0	11
13	2.6	3.0	.5	7.7	19	21	13	19	1.0	1.6	0	10
14	3.0	3.0	.5	7.7	34	15	13	14	.7	1.6	0	10
15	4.6	2.9	.5	7.7	37	15	11	6.3	1.0	3.9	0	11
16	4.6	2.6	.5	7.1	4.7	15	9.9	6.5	1.4	3.2	0	8.1
17	4.4	2.6	.5	7.1	0	15	6.5	7.9	1.6	7.9	0	20
18	4.6	2.5	.4	7.5	0	15	6.7	7.1	1.7	8.9	0	28
19	4.4	2.4	.4	6.9	0	15	7.1	7.1	2.3	28	.4	27
20	4.3	2.4	.4	6.1	0	14	7.7	8	1.8	8.5	24	19
21	4.1	2.2	.4	4.6	0	14	7.7	8	1.1	16	28	29
22	3.9	2.2	.4	3.5	0	15	7.9	10	2.0	12	34	27
23	3.9	2.4	.4	8.8	0	15	8.3	10	1.6	8	42	25
24	3.9	2.6	.5	10	0	15	8.7	9.3	1.2	3.4	13	25
25	3.7	2.8	.5	10	0	15	8.9	8.9	1.2	9.3	0	20
26	3.7	2.8	.6	10	9	25	8.9	8.5	1.0	12	0	20
27	3.5	2.6	.6	10	0	35	9.1	6.3	.8	6.1	0	20
28	3.9	2.6	7.2	10	0	30	9.1	3.9	1.0	3.4	3.0	15
29	3.7	3.2	13	7	------		8.9	3.7	1.2	21	22	0
30	3.4	4.1	11	7.1	------	20	9.3	3.0	11	26	40	0
31	3.7	------	11	6.9	------		------	2.8	------	30	20	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	5.0	2.6	4.05	249
November	4.1	2.2	3.10	184
December	13	0.4	2.16	133
January	10	0	7.50	461
February	37	0	5.09	283
March	35	0	19.5	1,200
April	----------	6.5	11.1	660
May	19	2.8	8.54	525
June	11	0.7	1.82	108
July	41	1.6	11.4	700
August	42	0	9.21	566
September	29	0	13.6	809
The year	42	0	8.12	5,880

MICHELANA CANAL NEAR SOLOMONSVILLE, ARIZ.

LOCATION.—Staff gage in SE. ¼ SE. ¼ sec. 4, T. 7 S., R. 27 E., three-fourths mile below head gate, 4½ miles below intake, and 4 miles northeast of Solomonsville.

RECORDS AVAILABLE.—October, 1914, to September, 1915; December, 1920, to September, 1931 (discontinued).

REMARKS.—Records good. Intake on right side of Gila River in SW. ¼ sec. 31, T. 6 S., R. 28 E. Water used for irrigation near Solomonsville.

Daily and monthly discharge, in second-feet, 1930–31

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.7	3.7	3.5	3.3	2.7	0.7	12	5.4	2.5	5.7	17	4.6
2	2.7	3.5	3.3	3.2	2.7	2.4	18	12	2.3	9.5	16	3.5
3	3.0	3.2	3.2	3.2	2.7	4.0	18	6.4	2.3	8.0	28	2.9
4	3.0	3.2	3.2	3.2	2.7	5.2	16	3.5	1.9	18	15	2.5
5	3.0	3.0	3.2	3.2	2.9	4.8	16	2.7	1.5	21	9.6	2.1
6	3.0	3.0	3.1	3.3	2.9	5.4	18	2.3	.8	25	10	2.9
7	3.0	2.9	3.1	3.5	2.7	7.3	18	5.9	.4	14	2.8	4.3
8	3.0	3.0	3.1	3.5	1.7	5.5	12	5.5	.4	7.1	0.2	4.8
9	3.0	3.0	3.1	3.5	0	6.6	8.7	2.3	.5	4.0	0.2	7.1
10	3.0	3.0	3.1	3.5	0	7.6	8.5	2.3	2.3	2.4	1.4	4.3
11	3.0	3.0	3.2	3.5	0	7.6	8.5	2.3	4.2	2.3	.3	2.4
12	3.0	3.0	3.2	3.5	0	9.5	8.3	2.1	3.6	4.3	.1	2.1
13	3.0	3.0	3.2	3.5	3.6	7.4	8.3	1.6	5.9	5.9	0	2.0
14	3.0	3.0	3.2	3.3	7.6	7.1	8.0	1.7	8.7	6.9	0	1.8
15	3.0	3.0	3.2	3.3	12	7.3	7.8	1.6	9.1	7.8	0	3.7
16	3.2	3.0	3.2	3.3	9.8	7.3	7.8	1.7	9.5	8.5	4.6	6.2
17	3.5	3.0	3.2	3.3	4.9	7.8	11	9.5	7.4	12	8.9	4.3
18	3.7	3.0	3.2	3.3	.9	10	14	15	5.2	12	9.1	3.5
19	3.7	3.1	3.2	3.2	.8	12	7.8	13	4.9	16	14	5.9
20	3.3	3.2	3.2	3.2	.7	10	6.7	6.4	2.7	9.3	11	7.3
21	2.9	3.2	3.2	3.1	.7	9.1	3.6	13	1.1	6.9	14	6.0
22	3.1	3.2	3.2	2.9	.7	9.1	2.2	8.2	1.5	6.7	16	4.9
23	3.5	3.2	3.2	2.7	.7	9.1	2.2	5.9	1.1	4.9	14	3.7
24	3.7	3.2	3.2	2.6	.7	9.3	2.3	5.5	.7	4.3	26	2.6
25	3.8	3.2	3.1	2.4	.7	10	2.4	5.4	.4	8.5	11	1.9
26	3.8	3.2	3.1	2.4	.7	11	2.4	4.2	.5	12	9.3	1.2
27	3.6	3.2	3.1	2.4	.7	11	2.7	3.7	.4	9.3	7.1	1.9
28	3.6	3.2	3.1	2.4	.7	10	2.3	3.2	.3	6.6	5.4	4.9
29	3.6	3.2	3.3	3.1	------	9.8	3.8	1.3	.4	15	11	4.3
30	3.6	3.5	3.3	6.2	------	9.8	4.8	1.5	1.0	16	13	3.2
31	3.6	------	3.3	3.1	------	10	------	4.0	------	20	8.7	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	3.8	2.7	3.25	200
November	3.7	2.9	3.14	187
December	3.5	3.1	3.19	196
January	6.2	2.4	3.23	199
February	12	0	2.39	133
March	12	0.7	7.86	483
April	18	2.2	8.74	520
May	15	1.3	5.13	316
June	9.5	0.3	2.78	166
July	25	2.3	10.0	615
August	28	0	9.15	563
September	7.3	1.2	3.76	224
The year	28	0	5.25	3,800

FOURNESS CANAL NEAR SOLOMONSVILLE, ARIZ.

LOCATION.—Staff gage in SE. ¼ SE. ¼ sec. 35, T. 6 S., R. 27 E., three-fourths mile below intake and 8 miles east of Solomonsville.

RECORDS AVAILABLE.—October, 1914, to September, 1915; December, 1920, to May, 1931 (discontinued).

REMARKS.—Records good Oct. 1 to Mar. 15. Discharge not determined after Mar. 15 except for Mar. 22, Apr. 11, May 5, 23, on which days discharge measurements were made and daily discharge estimated therefrom. Intake on left side of Gila River in NE. ¼ sec. 1, T. 7 S., R. 27 E. Water used for irrigation near Solomonsville.

Daily and monthly discharge, in second-feet, 1930–31

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May
1	0.2	0.5	0.5	0.8	0	0		
2	.2	.5	.5	.8	0	0		
3	.2	.6	.5	.7	0	0		
4	.1	.5	.7	.7	0	0		
5	.1	.5	.6	.7	0	0		4.8
6	.1	.5	.6	.8	0	0		
7	.2	.5	.7	.9	0	0		
8	.2	.5	.8	.7	0	0		
9	.2	.5	.8	.7	0	0		
10	.2	.5	.8	.7	0	0		
11	.2	.5	1.0	.7	0	0	4.7	
12	.3	.5	1.0	.8	0	0		
13	.3	.4	1.0	.8	0	0		
14	.3	.5	1.0	1.0	12	0		
15	.3	.9	1.5	1.2	7.5	0		
16	.3	1.1	1.8	1.3	0			
17	.3	1.2	1.4	1.5	0			
18	.3	1.2	.9	1.3	0			
19	.4	1.6	.9	1.4	0			
20	.4	1.9	.7	1.5	0			
21	.4	1.9	.7	1.2	0			
22	.4	1.5	.7	1.3	0	6.5		
23	.4	1.5	.7	1.3	0			1.6
24	.4	1.1	.7	1.2	0			
25	.4	1.1	.7	1.3	0			
26	.3	1.3	.7	1.2	0			
27	.4	1.5	.7	1.2	0			
28	.4	1.1	.7	1.2	0			
29	.5	2.1	.7	1.8				
30	.5	.6	.7	1.6				
31	.5		.7	1.2				

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	0.5	0.1	0.30	18.6
November	2.1	.4	.95	56.7
December	1.8	.5	.82	50.4
January	1.8	.7	1.08	66.4
February	12	0	.70	38.7
The period				231

SAN JOSE CANAL NEAR SOLOMONSVILLE, ARIZ.

LOCATION.—Water-stage recorder in NW. ¼ NE. ¼ sec. 10, T. 7 S., R. 27 E., 2 miles below intake and 4 miles east of Solomonsville.

RECORDS AVAILABLE.—April, 1914, to September, 1915; December, 1920, to September, 1931 (discontinued).

REMARKS.—Records excellent. One diversion from canal above station. Intake on left side of Gila River in SW. ¼ sec. 36, T. 6 S., R. 27 E. Water used for irrigation near Solomonsville and Safford.

Daily and monthly discharge, in second-feet, 1930–31

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	22	21	14	40	30	51	94	30	29	44	71	50
2	22	32	12	40	31	51	96	31	26	45	61	62
3	22	27	12	37	31	52	96	30	26	38	62	68
4	23	26	13	30	32	49	95	30	26	58	54	74
5	23	25	14	30	35	47	95	57	26	70	48	28
6	18	31	14	27	41	61	92	72	20	83	43	0
7	12	34	14	26	24	70	91	72	25	54	39	22
8	12	38	14	32	0	67	91	85	24	43	39	52
9	18	33	14	37	0	77	91	85	22	35	27	66
10	22	28	15	36	0	78	88	77	21	20	3	72
11	23	32	15	39	22	86	91	82	22	22	0	67
12	23	31	14	39	46	88	95	90	22	23	0	68
13	25	29	14	36	54	79	96	106	22	18	0	64
14	27	29	14	35	54	56	90	96	22	21	0	64
15	26	17	14	45	31	61	76	77	22	28	0	63
16	26	29	14	42	21	67	74	92	22	33	0	43
17	26	26	14	37	34	76	54	87	22	35	14	53
18	28	13	14	39	33	76	41	71	17	26	34	50
19	28	17	14	36	41	76	73	68	22	32	77	38
20	22	12	14	35	41	73	77	68	19	33	77	16
21	23	12	13	35	43	73	83	60	16	37	77	13
22	31	11	23	35	42	78	75	56	16	32	77	26
23	28	12	31	35	49	90	52	56	16	26	59	43
24	29	12	32	35	45	82	46	49	14	24	36	46
25	26	12	32	38	67	86	44	46	14	34	43	56
26	27	12	32	32	60	94	43	46	12	53	48	62
27	27	12	32	28	54	108	44	42	12	36	44	73
28	27	18	30	30	53	108	28	34	13	27	41	41
29	32	20	30	30	------	108	9	32	14	59	53	0
30	29	16	31	30	------	111	29	31	35	81	38	0
31	29	------	34	31	------	102	------	31	------	60	41	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	32	12	24.4	1,500
November	38	11	22.7	1,350
December	34	12	19.3	1,180
January	45	26	34.7	2,140
February	67	0	36.2	2,010
March	111	47	76.5	4,700
April	96	9	71.6	4,260
May	106	30	60.9	3,750
June	35	12	20.6	1,230
July	83	18	39.7	2,440
August	77	0	38.9	2,390
September	74	0	46.0	2,740
The year	111	0	41.0	29,700

MONTEZUMA CANAL NEAR SOLOMONSVILLE, ARIZ.

LOCATION.—Water-stage recorder in SE. ¼ NW. ¼ sec. 17, T. 7 S., R. 27 E., 1 mile below intake and 2 miles east of Solomonsville.

RECORDS AVAILABLE.—April, 1914, to September, 1915; December, 1920, to September, 1931 (discontinued).

REMARKS.—Records good except those for June 17 to July 5, which are fair. Intake on left side of Gila River in NE. ¼ sec. 17, T. 7 S., R. 27 E. Water used for irrigation near Solomonsville and Safford.

Daily and monthly discharge, in second-feet, 1930–31

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	24	35	49	29	43	88	91	61	23	46	73	35
2	24	36	48	29	44	87	92	67	21	56	88	78
3	23	35	47	30	45	86	94	64	20	40	85	62
4	23	35	46	31	46	85	98	58	20	70	76	54
5	24	34	47	36	52	88	100	57	21	76	70	59
6	24	32	46	39	66	90	100	60	23	77	76	40
7	24	31	46	39	54	95	99	43	20	57	83	67
8	24	30	46	37	56	96	97	36	20	40	84	66
9	25	30	48	33	59	91	97	45	20	31	42	75
10	26	29	45	33	58	82	95	60	21	27	0	77
11	28	28	37	37	53	78	86	69	21	24	0	68
12	28	29	37	42	50	70	82	67	20	24	0	63
13	26	29	36	43	66	66	85	62	20	23	0	61
14	27	31	36	41	92	69	86	55	20	22	0	60
15	26	35	36	39	112	84	84	63	20	28	0	73
16	27	36	36	38	93	82	85	63	20	27	0	64
17	26	35	36	39	77	84	73	59	19	35	0	76
18	25	34	36	28	67	84	82	67	18	33	6	45
19	25	42	36	13	54	77	103	66	20	48	55	60
20	26	38	34	55	75	71	106	57	22	39	76	55
21	26	35	33	64	65	73	105	55	18	38	56	65
22	25	35	33	64	79	77	99	52	21	30	68	65
23	25	35	32	63	72	82	82	52	20	30	85	65
24	28	35	32	57	90	89	46	54	20	24	10	57
25	28	35	32	52	88	84	55	49	22	36	0	40
26	30	34	31	45	83	80	48	45	22	39	38	29
27	35	33	31	40	82	81	42	37	24	34	85	47
28	37	33	30	42	85	86	42	32	22	26	80	59
29	37	38	30	41	------	90	49	28	23	54	60	35
30	36	50	30	42	------	90	55	27	27	50	55	0
31	36	------	30	44	------	89	------	26	------	63	0	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	37	23	27.4	1,680
November	50	28	34.2	2,040
December	49	30	37.8	2,320
January	64	13	40.8	2,510
February	112	43	68.1	3,780
March	96	66	83.0	5,110
April	106	42	81.9	4,880
May	69	26	52.8	3,240
June	27	18	20.9	1,250
July	77	22	40.2	2,470
August	88	0	43.6	2,680
September	77	0	56.7	3,370
The year	112	0	48.8	35,300

UNION CANAL NEAR SOLOMONSVILLE, ARIZ.

LOCATION.—Water-stage recorder in SE. ¼ NE. ¼ sec. 14, T. 7 S., R. 26 E., 1¾ miles below intake and 1½ miles northwest of Solomonsville.

RECORDS AVAILABLE.—April, 1914, to September, 1915; January, 1921, to September, 1931 (discontinued).

REMARKS.—Records good. Intake on left side of Gila River in NW. ¼ sec. 18, T. 7 S., R. 27 E. Water used for irrigation near Safford and Thatcher.

Daily and monthly discharge, in second-feet, 1930–31

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	34	45	49	53	65	73	128	100	72	91	122	81
2	31	46	46	54	66	68	154	96	71	68	116	56
3	31	46	44	60	69	66	155	105	70	74	120	56
4	31	47	48	67	68	76	150	109	67	123	105	70
5	31	48	61	60	72	110	142	115	67	115	73	88
6	32	50	60	54	84	83	148	112	64	110	65	92
7	31	50	67	52	75	95	146	113	53	91	33	102
8	32	52	69	52	80	91	150	122	50	71	60	94
9	33	50	71	55	75	88	146	121	50	67	69	79
10	33	51	71	54	75	91	149	117	42	55	32	79
11	35	56	70	50	78	119	148	130	33	52	0	86
12	38	60	68	48	73	113	148	145	31	50	0	87
13	46	61	65	50	71	108	147	140	29	42	0	72
14	48	62	70	59	72	117	145	142	27	40	0	73
15	49	78	75	54	55	114	134	134	22	52	0	115
16	51	65	75	50	64	116	138	138	20	57	0	88
17	50	53	72	49	75	113	147	128	18	73	0	92
18	52	64	68	25	86	112	154	118	13	68	0	63
19	52	67	65	0	73	117	154	112	8	92	0	46
20	56	57	60	0	64	114	154	108	6	66	0	38
21	58	65	59	0	72	116	148	110	17	78	45	59
22	52	67	55	0	58	122	133	102	11	73	95	71
23	54	63	49	32	46	125	110	94	10	68	124	74
24	54	55	49	47	52	130	121	82	10	56	120	75
25	54	56	49	48	61	134	121	78	11	65	141	83
26	56	57	50	56	68	136	114	80	13	64	136	84
27	54	57	49	73	61	150	112	79	12	68	146	94
28	56	54	45	73	65	150	95	80	11	48	125	79
29	56	60	46	71	-------	148	94	81	9	107	105	59
30	55	56	51	71	-------	153	96	80	40	79	105	64
31	50	-------	54	70	-------	151	-------	72	-------	111	105	-------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	58	31	45.0	2,770
November	78	45	56.6	3,370
December	75	44	59.0	3,630
January	73	0	48.0	2,950
February	86	46	68.7	3,810
March	153	66	113	6,940
April	155	94	136	8,090
May	145	72	108	6,630
June	72	6	31.9	1,900
July	123	40	73.4	4,510
August	146	0	65.8	4,050
September	115	38	76.6	4,560
The year	155	0	73.5	53,200

SAN SIMON CREEK NEAR SAN SIMON, ARIZ.

LOCATION.—Water-stage recorder in SW. ¼ sec. 10, T. 14 S., R. 31 E., 4½ miles southeast of San Simon.

DRAINAGE AREA.—803 square miles.

RECORDS AVAILABLE.—June to September, 1931. August, 1919, to September, 1925, at a station 3½ miles downstream.

EXTREMES.—Maximum discharge during 1931 period, 3,900 second-feet Aug. 10 (gage height, 11.15 feet); no flow on many days.

1919–1925, 1931: Maximum discharge, 5,350 second-feet July 21, 1923; no flow greater part of each year.

REMARKS.—Records fair. Discharge estimated Sept. 29. Diversions for irrigation above station.

Daily discharge, in second-feet, 1931

Date	Discharge	Date	Discharge	Date	Discharge
July 3	12	Aug. 5	22	Sept. 4	1
Aug. 1	111	Aug. 9	332	Sept. 10	1
Aug. 2	79	Aug. 10	921	Sept. 14	6
Aug. 3	17	Aug. 11	16	Sept. 29	5
Aug. 4	214	Aug. 20	9		

NOTE.—No flow during period June 1 to Sept. 30, 1931, except as shown in table. Monthly run-off during July, 24 acre-feet; August, 3,410 acre-feet; September, 26 acre-feet; the period, 3,460 acre-feet.

SAN SIMON CREEK NEAR SOLOMONSVILLE, ARIZ.

LOCATION.—Water-stage recorder in NW. ¼ NE. ¼ sec. 25, T. 7 S., R. 26 E., 1 mile southwest of Solomonsville and 2½ miles above mouth. Zero of gage is 2,960.3 feet above mean sea level.

DRAINAGE AREA.—2,280 square miles.

RECORDS AVAILABLE.—June to September, 1931.

EXTREMES.—Maximum discharge during period, 27,500 second-feet Aug. 9 (gage height, 19.0 feet); no flow on many days.

REMARKS.—Records good. Discharge estimated Sept. 1–5, 10–14. Diversions for irrigation above station. Part of low flow is waste water from San Jose Canal.

Daily discharge, in second-feet, 1931

Day	June	July	Aug.	Sept.	Day	June	July	Aug.	Sept.
1	0	1	0	10	16	0	20	0	4
2	0	3	444	10	17	0	0	1	8
3	0	0	294	10	18	0	0	7	878
4	0	0	386	10	19	0	0	2	475
5	0	0	703	10	20	0	1	23	10
6	0	0	81	118	21	0	0	1	6
7	0	0	1	3	22	0	0	52	6
8	0	0	34	86	23	0	0	289	3
9	0	9	3,210	76	24	0	0	182	3
10	0	0	1,780	10	25	0	0	11	3
11	0	0	307	10	26	0	2	13	3
12	0	0	37	10	27	0	0	11	9
13	0	2	5	10	28	0	113	12	368
14	0	0	218	10	29	0	20	13	146
15	0	200	34	15	30	0	0	1,420	10
					31		0	15	

NOTE.—Monthly run-off during July, 736 acre-feet; August, 19,000 acre-feet; September, 4,620 acre-feet; the period, 24,400 acre-feet.

GRAHAM CANAL NEAR SAFFORD, ARIZ.

LOCATION.—Staff gage in SE. ¼ NE. ¼ sec. 6, T. 7 S., R. 26 E., 1¾ miles below intake and 2 miles north of Safford.

RECORDS AVAILABLE.—October, 1914, to September, 1915; December, 1920, to September, 1931 (discontinued).

REMARKS.—Records good. Diversions from canal above gage. Intake on right side of Gila River in NW. ¼ sec. 9, T. 7 S., R. 26 E. Water used for irrigation near Safford and Pima.

Daily and monthly discharge, in second-feet, 1930–31

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	16	24	0	51	37	75	75	78	15	73	65	0
2	8.7	29	0	49	35	74	80	81	17	29	56	0
3	9.5	29	32	32	28	72	85	87	15	29	47	43
4	11	30	70	7	29	69	90	70	17	76	20	12
5	10	29	67	55	30	50	90	75	14	72	0	60
6	8.5	29	61	54	24	67	85	74	17	51	30	51
7	8.3	23	40	55	34	80	90	76	15	67	54	54
8	8.7	23	34	51	39	77	81	80	15	13	47	56
9	8.7	24	33	45	47	72	80	81	14	22	19	55
10	9.7	33	23	64	57	75	77	81	14	9.7	33	63
11	10	24	27	63	49	63	83	80	14	9.5	19	53
12	11	26	28	62	43	42	104	76	7.7	7.3	0	31
13	12	26	30	65	74	50	77	84	4.2	18	0	27
14	9.0	28	46	57	35	51	89	81	11	3.4	48	24
15	0.7	47	44	56	0	53	75	90	12	67	50	51
16	9.5	40	33	57	28	69	51	62	8.3	71	51	73
17	10	62	46	53	43	41	65	44	9.2	37	64	59
18	13	64	47	63	50	62	94	66	8.7	14	64	35
19	12	37	45	76	67	79	110	58	8.5	14	69	45
20	10	36	49	76	72	57	98	55	9.2	16	67	48
21	10	39	61	69	79	48	100	40	9.2	10	67	9
22	11	37	52	90	82	56	92	37	9.5	11	62	0
23	11	36	51	52	79	55	72	31	9.0	12	64	0
24	11	36	52	28	76	61	76	24	8.0	6.9	0	0
25	11	36	59	31	77	61	82	23	7.8	8.5	0	0
26	11	35	56	30	75	77	85	22	7.1	20	0	0
27	4.9	33	54	34	78	85	71	22	7.5	8.3	3.5	19
28	11	33	50	35	77	79	29	15	8.3	8.0	25	0
29	12	33	50	36	------	73	78	5.4	8.0	48	12	0
30	13	18	51	34	------	75	81	9.1	8.7	7.8	0	0
31	12	------	51	35	------	72	------	16	------	58	0	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	16	0.7	10.1	623
November	64	18	33.3	1,980
December	70	0	43.6	2,680
January	90	7	50.5	3,100
February	82	0	51.6	2,860
March	85	41	65.2	4,010
April	110	29	81.5	4,850
May	90	5.4	55.6	3,420
June	17	4.2	11.0	652
July	76	3.4	28.9	1,780
August	69	0	33.4	2,060
September	73	0	28.9	1,720
The year	110	0	41.1	29,700

SMITHVILLE CANAL NEAR THATCHER, ARIZ.

LOCATION.—Staff gage in NW. ¼ sec. 35, T. 6 S., R. 25 E., three-fourths mile below intake and 1½ miles north of Thatcher.
RECORDS AVAILABLE.—October, 1914, to September, 1915; December, 1920, to September, 1931 (discontinued).
REMARKS.—Records good. Intake on left side of Gila River in NE. ¼ sec. 35, T. 6 S., R. 25 E. Water used for irrigation near Pima.

Daily and monthly discharge, in second-feet, 1930–31

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	8.0	23	32	34	16	0	50	66	25	37	45	23
2	5.8	24	30	34	19	0	52	60	29	24	39	15
3	5.8	22	29	32	19	0	60	43	29	56	38	12
4	2.3	27	28	35	18	0	63	39	23	49	33	0
5	8.2	27	27	38	19	0	62	51	15	29	47	0
6	3.7	26	27	34	23	52	63	65	13	15	51	41
7	4.6	31	28	26	26	53	62	59	11	16	55	31
8	5.5	24	28	18	29	61	57	54	11	16	58	37
9	8.0	20	27	25	34	64	57	52	11	14	44	43
10	4.7	19	27	29	34	64	54	39	11	16	49	50
11	6.1	21	26	14	22	47	55	34	11	16	49	31
12	6.8	23	25	21	11	34	52	51	11	18	50	21
13	8.8	21	25	30	12	28	49	61	11	13	42	21
14	13	19	24	30	13	29	50	56	11	13	35	24
15	33	29	24	30	0	50	46	49	11	29	34	50
16	9.5	29	25	31	0	47	39	40	18	15	18	50
17	5.9	30	24	29	0	41	45	36	16	9.7	23	49
18	3.2	31	24	31	0	38	43	31	10	9.3	32	42
19	9.7	35	24	32	0	37	40	32	8.3	14	39	38
20	6.6	37	24	34	35	39	60	31	7.6	11	52	43
21	14	35	25	31	37	44	64	31	7.9	13	15	44
22	23	34	25	34	39	44	62	28	8.3	15	13	45
23	7.7	33	25	34	39	43	62	23	8.8	9.7	46	47
24	6.1	32	25	29	0	39	59	17	7.7	10	20	40
25	8.8	31	25	20	0	53	59	17	7.9	9.0	46	38
26	26	30	25	21	0	53	63	16	8.2	19	47	38
27	8.5	31	30	20	0	58	61	12	11	19	44	45
28	15	31	31	19	0	51	37	12	7.6	10	43	45
29	15	31	32	18	------	50	16	17	8.8	7.7	25	27
30	30	32	31	22	------	49	68	28	10	7.4	25	17
31	32	------	32	18	------	48	------	19	------	43	28	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	33	2.3	11.1	685
November	37	19	27.9	1,660
December	32	24	26.9	1,650
January	38	14	27.5	1,690
February	39	0	15.9	883
March	64	0	39.2	2,410
April	68	16	53.7	3,190
May	66	12	37.7	2,320
June	29	7.6	12.6	752
July	56	7.4	18.8	1,160
August	58	13	38.2	2,350
September	50	0	33.6	2,000
The year	68	0	28.7	20,800

DODGE-NEVADA CANAL NEAR PIMA, ARIZ.

LOCATION.—Staff gage in NW. ¼ SE. ¼ sec. 18, T. 6 S., R. 25 E., 1 mile below intake and 1 mile north of Pima.

RECORDS AVAILABLE.—December, 1920, to September, 1931 (discontinued).

REMARKS.—Records good. One diversion from canal above gage. Intake on left side of Gila River in NW. ¼ sec. 20, T. 6 S., R. 25 E. Water used for irrigation near Pima.

Daily and monthly discharge, in second-feet, 1930–31

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.3	18	23	7.2	8.3	0	39	40	14	14	44	28
2	6.5	26	25	7.2	7.6	0	55	43	14	11	38	21
3	6.1	24	18	14	8.3	11	50	46	13	13	22	21
4	6.3	15	8.5	23	11	13	46	47	13	45	14	25
5	6.1	11	5.2	29	12	5.9	47	48	15	42	48	31
6	8.0	10	10	31	16	0	48	46	12	24	9.3	33
7	4.7	8.7	15	27	13	0	60	45	14	15	11	34
8	4.9	7.6	19	24	16	0	60	46	10	12	16	32
9	5.0	7.4	22	18	23	0	60	39	7.6	10	10	33
10	8.7	7.6	25	17	23	0	50	31	7.4	9.6	8.0	38
11	11	11	22	15	19	12	41	42	6.1	9.1	13	30
12	11	18	23	11	24	0	34	37	8.5	9.3	17	26
13	7.0	12	28	9.6	39	0	31	15	12	8.5	21	20
14	8.1	12	27	6.1	40	18	28	27	12	7.8	31	19
15	2.4	21	28	7.2	25	26	35	34	10	9.1	24	31
16	6.5	26	28	8.3	6.6	21	29	40	10	8.5	24	56
17	6.1	26	21	4.2	3.0	29	22	36	10	13	21	41
18	5.2	23	17	3.3	15	20	42	41	8.7	7.0	17	41
19	5.0	23	14	14	37	20	49	33	8.9	7.4	25	18
20	5.2	19	13	2.4	23	22	57	25	8.9	7.6	28	6.5
21	7.4	24	8.5	0	22	23	50	22	9.6	8.3	25	14
22	4.1	24	11	4.7	22	0	44	28	9.1	9.1	12	42
23	2.2	22	10	11	32	0	42	20	8.7	3.9	40	36
24	3.3	23	5.2	13	39	27	38	19	7.0	5.9	46	30
25	1.6	21	12	5.9	35	42	44	17	6.6	8.9	46	30
26	2.0	18	9.6	6.3	0	38	41	17	8.3	10	32	29
27	2.2	18	1.4	8.5	0	41	45	18	8.3	3.8	26	30
28	6.1	19	1.5	7.6	0	39	43	18	8.5	3.3	19	31
29	7.4	21	1.8	8.9	------	43	35	15	7.4	39	13	31
30	10	24	9.6	9.8	------	40	37	16	7.2	26	38	29
31	14	------	4.6	10	------	42	------	14	------	27	26	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	14	1.6	5.85	360
November	26	7.4	18.0	1,070
December	28	1.4	15.1	926
January	31	0	11.7	722
February	40	0	18.6	1,030
March	43	0	17.2	1,060
April	60	22	43.4	2,580
May	48	14	31.1	1,910
June	15	6.1	9.86	587
July	45	3.3	13.8	849
August	48	8.0	24.7	1,520
September	56	6.5	29.6	1,760
The year	60	0	19.9	14,400

CURTIS-KEMPTON CANAL NEAR EDEN, ARIZ.

LOCATION.—Staff gage in SE. ¼ NE. ¼ sec. 4, T. 6 S., R. 24 E., 2 miles below intake and 1½ miles southeast of Eden.
RECORDS AVAILABLE.—December, 1920, to September, 1931 (discontinued).
REMARKS.—Records good. Diversions from canal above gage. Intake on right side of Gila River in NW. ¼ sec. 12, T. 6 S., R. 24 E. Water used for irrigation near Eden.

Daily and monthly discharge, in second-feet, 1930–31

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	9.3	18	18	33	28	0	41	15	14	10	32	33
2	6.6	15	18	32	29	0	44	22	13	17	17	33
3	9.0	18	18	32	28	0	43	29	13	15	14	30
4	9.6	19	18	29	26	0	43	21	14	35	7.4	24
5	10	20	9.9	31	24	0	44	37	11	35	4.9	26
6	7.6	19	19	32	20	9.4	40	36	11	36	4.2	19
7	7.8	17	19	32	23	34	38	32	11	26	20	17
8	8.0	16	21	31	25	33	36	30	10	12	23	32
9	6.3	17	19	31	23	35	43	32	9.1	12	6.9	26
10	6.7	19	18	33	28	30	45	35	9.8	8.8	19	22
11	8.5	20	19	34	25	20	44	38	9.8	7.0	9.0	18
12	9.8	23	18	32	19	14	43	37	9.0	3.6	0	24
13	8.8	22	26	23	9.1	15	36	24	7.2	14	0	17
14	8.0	24	28	28	11	13	43	29	8.8	6.2	2.1	16
15	6.9	25	29	29	0	10	47	35	11	5.8	4.0	15
16	7.2	29	24	28	0	7.3	37	27	10	7.4	0	25
17	6.7	28	22	28	0	13	32	39	10	7.2	1.8	30
18	6.6	29	23	28	0	13	47	35	4.6	6.0	7.4	30
19	8.0	27	22	28	0	11	37	29	0	7.4	17	28
20	7.8	27	24	29	0	17	41	30	4.3	9.4	27	13
21	7.8	27	25	29	0	14	38	25	8.6	7.9	30	9.8
22	9.9	27	26	29	0	19	41	19	8.6	8.2	14	9.0
23	8.6	27	28	28	2.6	20	42	18	8.4	7.8	11	8
24	5.5	27	28	27	5.2	22	40	18	7.9	5.9	18	8
25	5.9	27	28	26	2.1	24	26	19	8.4	5.6	9.6	8
26	6.6	27	28	28	0	30	41	18	8.5	3	21	8
27	19	22	28	28	0	37	41	14	7.8	3	28	6.5
28	15	18	28	28	0	41	39	8.9	7.4	4.5	30	2.6
29	19	19	29	28	-------	41	47	19	6.2	29	28	0
30	7.9	18	29	28	-------	39	22	15	6.7	39	30	0
31	12	-------	32	26	-------	39	-------	14	-------	37	30	-------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	19	5.5	8.92	548
November	29	15	22.4	1,330
December	32	9.9	23.3	1,430
January	34	23	29.3	1,800
February	29	0	11.7	651
March	41	0	19.4	1,190
April	47	22	40.0	2,380
May	39	8.9	25.8	1,590
June	14	0	8.97	534
July	39	3	13.9	856
August	32	0	15.0	925
September	33	0	17.9	1,070
The year	47	0	19.8	14,300

FORT THOMAS CONSOLIDATED CANAL AT ASHURST, ARIZ.

LOCATION.—Staff gage in NE. ¼ SE. ¼ sec. 30, T. 5 S., R. 24 E., 2 miles below intake and 1 mile southeast of Ashurst.

RECORDS AVAILABLE.—December, 1920, to September, 1931 (discontinued).

REMARKS.—Records good except those for Nov. 16–27, which are fair. Intake on left side of Gila River in NW. ¼ sec. 4, T. 6 S., R. 24 E. Water used for irrigation near Fort Thomas.

Daily and monthly discharge, in second-feet, 1930–31

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	14	28	16	42	32	43	69	61	22	47	39	0
2	13	45	16	41	23	44	69	61	22	38	55	0
3	7.2	45	15	45	23	41	69	57	21	22	33	0
4	11	42	17	42	23	34	70	44	22	10	0	19
5	11	40	48	50	20	33	72	43	24	6.9	66	58
6	11	41	48	50	20	35	72	45	24	0	30	56
7	14	32	51	51	24	18	76	57	22	0	0	60
8	10	32	54	50	11	33	73	50	20	0	0	45
9	14	53	51	47	0	37	72	52	21	0	33	43
10	8.1	47	51	47	0	40	71	58	24	.5	39	34
11	14	45	51	49	0	47	74	74	24	7.2	36	29
12	14	58	51	50	0	58	71	74	23	9.0	0	17
13	9.2	58	54	48	0	59	66	48	23	15	0	7.7
14	9.2	61	51	43	0	54	62	48	16	18	0	11
15	8.1	56	52	43	43	44	51	50	12	19	0	12
16	10		50	45	42	43	51	52	10	18	0	28
17	6.2		50	41	38	42	63	54	15	16	0	71
18	8.1		43	34	0	40	72	44	24	15	0	71
19	16		47	50	0	38	72	42	24	14	0	31
20	15		51	50	0	39	75	36	14	16	0	0
21	14	10	49	48	0	38	78	34	13	17	0	0
22	16		49	39	0	45	83	33	15	18	0	8.5
23	16		52	39	0	45	82	27	14	17	0	12
24	15		49	42	0	42	81	26	13	13	0	19
25	15		48	42	0	37	80	28	12	9.9	0	11
26	44		50	40	0	38	81	27	11	19	0	29
27	39		48	42	11	78	84	27	3	18	0	0
28	18	9.6	50	23	42	81	84	26	0	14	0	0
29	26	12	47	33	-------	81	85	26	13	20	0	63
30	39	12	42	34	-------	79	65	27	17	49	0	69
31	39	-------	40	26	-------	68	-------	24	-------	32	0	-------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	44	6.2	16.3	1,000
November	61	9.6	27.9	1,660
December	54	15	44.9	2,760
January	51	23	42.8	2,630
February	43	0	12.6	698
March	81	18	46.9	2,880
April	85	51	72.4	4,310
May	74	24	43.7	2,690
June	24	0	17.3	1,030
July	49	0	16.1	989
August	66	0	10.7	657
September	71	0	26.8	1,600
The year	85	0	31.6	22,900

SAN CARLOS RIVER NEAR PERIDOT, ARIZ.

LOCATION.—Water-stage recorder 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.

DRAINAGE AREA.—1,070 square miles.

RECORDS AVAILABLE.—March, 1929, to September, 1931. Fragmentary record August, 1910, to January, 1911, April, 1914, to September, 1915, at a station 5½ miles downstream.

EXTREMES.—Maximum discharge during year, 7,000 second-feet Aug. 7 (gage height, 6.95 feet); no flow on several days.

1929–1931: Maximum discharge, that of Aug. 7, 1931; no flow on several days of each year.

REMARKS.—Records good. Minor diversions for irrigation above station.

Daily and monthly discharge, in second-feet, 1930–31

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	5	31	13	11	22	11	10	1	55	92	42
2	1	7	17	11	9	20	12	11	1	28	112	22
3	1	8	11	5	11	15	11	13	1	20	146	13
4	2	7	9	13	8	15	12	13	1	130	61	11
5	2	5	9	13	9	17	11	8	1	26	159	9
6	4	7	10	13	38	15	10	7	1	7	45	8
7	6	6	11	15	28	15	9	7	0	2	262	25
8	4	6	15	12	26	17	7	6	0	2	350	121
9	4	7	10	12	17	22	8	7	1	2	98	15
10	2	8	11	17	22	17	7	5	1	2	76	13
11	2	9	9	17	15	20	8	5	1	565	42	9
12	2	10	10	11	12	13	6	6	1	69	17	6
13	3	9	9	12	1,470	10	5	6	1	111	7	7
14	4	8	13	17	1,440	11	7	5	1	54	5	8
15	5	10	17	12	4,010	11	8	3	1	13	5	5
16	3	9	13	11	1,430	11	9	3	1	173	15	6
17	5	9	11	11	424	7	9	3	1	30	7	53
18	6	22	10	12	159	9	8	4	1	9	3	222
19	6	31	10	11	103	9	7	3	1	7	26	99
20	7	22	10	15	72	8	6	2	1	2	68	20
21	8	24	15	11	58	7	8	2	0	19	80	13
22	6	22	12	12	52	7	6	2	0	7	50	8
23	6	17	17	12	42	7	14	2	0	2	20	5
24	6	15	17	11	45	9	9	1	1	2	10	6
25	5	15	15	13	48	10	8	0	19	2	3	3
26	5	11	15	12	26	15	7	1	10	1	2	10
27	9	9	8	9	20	15	6	2	2	1	2	33
28	10	70	12	11	22	33	5	1	2	7	2	233
29	9	38	15	12	-------	24	15	1	22	428	1	36
30	7	61	13	11	-------	13	17	1	76	95	1,550	3
31	6	-------	11	10	-------	12	-------	1	-------	67	152	-------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	10	0	4.7	290
November	70	5	16.2	966
December	31	8	12.8	785
January	17	5	12.2	748
February	4,010	8	344	19,100
March	33	7	14.1	865
April	17	5	8.9	528
May	13	0	4.5	280
June	76	0	5.0	298
July	565	1	62.5	3,840
August	1,550	1	112	6,880
September	233	3	35.5	2,110
The year	4,010	0	50.7	36,700

SAN PEDRO RIVER AT PALOMINAS, ARIZ.

LOCATION.—Water-stage recorder in SE. ¼ sec. 33, T. 23 S., R. 22 E., at bridge half a mile east of Palominas, 12 miles southwest of Bisbee, and 4 miles downstream from the international boundary.

DRAINAGE AREA.—991 square miles.

RECORDS AVAILABLE.—May, 1930, to September, 1931.

EXTREMES.—Maximum discharge during year, 8,900 second-feet Aug. 8 (gage height, 9.6 feet); minimum, 0.3 second-foot June 23.

1930–31: Maximum discharge, 9,400 second-feet Aug. 7, 1930 (gage height, 9.75 feet); no flow June 29, July 1, 1930.

REMARKS.—Records good. Discharge estimated Sept. 22–24. No diversions above station in Arizona and probably none in Mexico.

Daily and monthly discharge, in second-feet, 1930–31

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4	6	9	7	8	19	7	5	2	8	278	301
2	4	6	9	8	8	18	6	5	3	12	396	842
3	4	6	9	8	6	17	5	6	2	112	40	113
4	4	6	9	8	8	19	5	6	2	49	46	76
5	5	6	9	8	10	19	7	6	2	17	611	60
6	7	7	9	8	8	17	8	6	1	10	1,200	55
7	7	6	8	8	8	17	8	5	1	6	107	60
8	7	6	8	8	8	17	6	5	2	4	1,710	145
9	6	6	11	8	8	16	6	4	2	4	1,000	100
10	7	6	17	8	8	15	6	3	2	4	299	70
11	8	8	13	8	8	14	5	3	2	4	75	60
12	8	8	10	8	30	12	5	4	2	2	39	55
13	8	9	10	7	395	10	5	4	1	2	32	55
14	8	10	10	8	143	10	5	4	1	4	40	583
15	6	20	10	8	171	9	6	4	1	4	33	150
16	6	13	10	8	302	9	5	4	1	7	98	72
17	6	8	10	8	117	9	7	3	1	11	34	58
18	6	10	8	8	58	8	8	3	1	14	23	125
19	6	17	7	8	31	7	6	2	1	4	21	62
20	6	10	9	8	24	8	6	2	1	83	30	51
21	8	8	9	8	20	8	8	2	1	24	87	43
22	9	8	8	8	18	6	8	2	1	45	111	35
23	10	8	9	8	17	5	17	3	1	10	153	25
24	8	8	10	8	17	5	11	2	1	5	50	20
25	8	8	10	8	18	6	6	2	1	3	30	157
26	52	8	9	8	22	8	5	2	4	2	25	50
27	24	8	8	8	35	8	5	2	2	1	20	42
28	12	10	8	9	27	8	8	2	1	1	86	35
29	10	12	8	8	------	6	8	2	5	76	312	55
30	8	10	8	8	------	6	6	2	24	263	1,160	48
31	7	------	8	8	------	6	------	2	------	25	115	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	52	4	9.0	553
November	20	6	8.7	520
December	17	7	9.4	575
January	9	7	8.0	490
February	395	6	54.8	3,040
March	19	5	11.0	678
April	17	5	6.8	405
May	6	2	3.5	212
June	24	1	2.4	143
July	263	1	26.3	1,620
August	1,710	20	266	16,400
September	842	20	120	7,150
The year	1,710	1	43.9	31,800

SAN PEDRO RIVER AT CHARLESTON, ARIZ.

LOCATION.—Water-stage recorder in SW. ¼ 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, 6 miles above Babocomari River and three-fourths mile north of Charleston. Zero of gage is 3,923 feet above mean sea level.

DRAINAGE AREA.—1,480 square miles.

RECORDS AVAILABLE.—May, 1928, to September, 1931. Several stations have been maintained at various locations both upstream and downstream, 1904 to 1906, 1910 to 1928.

EXTREMES.—Maximum discharge during year, 24,500 second-feet Aug. 9 (gage height, 12.0 feet); minimum, 2 second-feet June 12.

1928–1931: Maximum discharge, that of Aug. 9, 1931; minimum, 2 second-feet July 12, 1928, June 12, 1931.

Maximum stage known, 21.9 feet Sept. 28, 1926 (discharge, about 98,000 second-feet).

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

Daily and monthly discharge, in second-feet, 1930–31

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	18	28	28	28	12	48	8	12	8	30	42	342
2	20	12	30	32	20	28	8	12	9	22	870	1,520
3	22	12	25	30	10	32	9	10	15	62	375	507
4	15	27	28	35	10	32	9	9	6	260	411	278
5	20	18	25	32	12	25	9	15	5	90	834	210
6	15	10	42	28	9	25	8	8	5	50	1,520	140
7	12	15	42	20	8	20	8	12	4	30	346	80
8	9	15	42	22	5	22	9	12	5	20	627	497
9	8	12	25	22	8	15	5	15	5	20	4,090	380
10	9	10	35	33	6	15	6	10	4	8	1,570	170
11	9	9	35	28	6	12	5	8	4	5	357	100
12	9	18	61	18	25	15	6	7	3	5	120	140
13	8	15	35	9	396	15	5	7	3	5	208	80
14	12	22	35	18	370	18	9	8	4	5	205	649
15	9	20	35	22	265	18	7	8	4	6	100	438
16	8	32	30	22	476	18	5	7	4	131	166	130
17	9	28	25	18	239	20	8	6	5	4	130	114
18	9	32	35	9	110	22	8	4	5	51	42	796
19	9	22	35	28	54	9	8	6	5	34	28	265
20	9	30	25	35	48	20	8	8	5	183	28	32
21	8	18	15	28	22	20	8	8	5	20	168	20
22	12	22	42	25	20	9	8	6	5	100	179	12
23	18	25	35	15	12	9	9	4	5	30	370	10
24	18	22	25	15	18	18	12	5	6	8	344	90
25	10	20	18	12	9	18	9	6	6	8	105	259
26	43	18	15	12	28	18	9	7	8	6	25	77
27	94	15	12	18	54	9	8	7	6	6	576	7
28	32	22	9	28	68	10	15	7	8	180	70	90
29	25	22	15	28	------	9	25	6	10	226	531	21
30	22	22	22	12	------	9	22	6	70	605	1,800	74
31	25	------	28	28	------	8	------	7	------	181	186	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	94	8	17.6	1,080
November	32	9	19.8	1,180
December	61	9	29.3	1,800
January	35	9	22.9	1,410
February	476	5	82.9	4,600
March	48	8	18.3	1,120
April	25	5	9.1	541
May	15	4	8.2	502
June	70	3	7.9	470
July	605	4	77.1	4,740
August	4,090	25	530	32,600
September	1,520	7	251	14,900
The year	4,090	3	89.7	64,900

SAN PEDRO RIVER NEAR MAMMOTH, ARIZ.

LOCATION.—Water-stage recorder in NE. ¼ sec. 18, T. 8 S., R. 17 E., at highway bridge 1½ miles north of Mammoth.
DRAINAGE AREA.—3,850 square miles.
RECORDS AVAILABLE.—May to September, 1931.
EXTREMES.—Maximum discharge during period, 18,000 second-feet Aug. 10 (gage height, 10.9 feet); no flow on many days during the period.
REMARKS.—Records fair. Discharge estimated June 29 to July 30. Diversions for irrigation above station.

Daily and monthly discharge, in second-feet, 1931

Day	June	July	Aug.	Sept.	Day	June	July	Aug.	Sept.
1	0	100	160	440	16	0	0	160	180
2	0	50	160	873	17	0	0	108	140
3	0	25	673	1,470	18	0	0	152	414
4	0	10	252	284	19	0	0	59	1,390
5	0	5	933	132	20	0	0	93	444
6	0	5	2,010	90	21	0	0	78	180
7	0	5	2,260	35	22	0	0	167	85
8	0	5	818	142	23	0	0	65	47
9	0	0	4,090	122	24	0	0	973	41
10	0	0	5,410	292	25	0	0	748	26
11	0	150	1,170	220	26	0	0	170	50
12	0	10	463	85	27	0	0	60	75
13	0	5	245	78	28	0	0	682	726
14	0	0	762	220	29	150	150	505	338
15	0	0	531	412	30	200	300	3,260	156
					31		350	1,660	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
June	200	0	11.7	694
July	350	0	37.7	2,320
August	5,410	59	932	57,300
September	1,470	26	306	18,200
The period				78,500

NOTE.—No flow during May.

SAN PEDRO RIVER AT WINKELMAN, ARIZ.

LOCATION.—In SW. ¼ sec. 23, T. 5 S., R. 15 E., at mouth, 1 mile west of Winkelman.
DRAINAGE AREA.—4,720 square miles.
RECORDS AVAILABLE.—December, 1928, to September, 1931; discharge measurements only. April to August, 1890; monthly discharge, published as "San Pedro River at Dudleyville, Ariz."
REMARKS.—Diversions for irrigation above station.

Discharge measurements, in second-feet, 1930–31

Oct. 7	6.7	Jan. 12	33.3	Apr. 27	9.7
Oct. 13	12.0	Jan. 19	27.6	Apr. 28	12.6
Oct. 21	6.8	Jan. 27	28.6	May 4	13.3
Oct. 27	10.8	Feb. 9	39.0	May 12	4.4
Nov. 3	6.4	Feb. 20	151	May 19	1.9
Nov. 4	9.1	Mar. 16	35.2	May 25	1.2
Nov. 10	24.4	Mar. 16	24.9	June 8	1.5
Nov. 24	36.1	Mar. 23	9.9	June 8	.6
Nov. 24	34.4	Mar. 30	13.3	July 6	9.7
Dec. 13	40.2	Apr. 6	20.6	July 9	10.7
Dec. 15	33.5	Apr. 6	14.5	July 21	5.3
Dec. 29	36.1	Apr. 13	12.2	Sept. 18	191
Jan. 5	60.9	Apr. 20	12.9		

ARAVAIPA CREEK NEAR FELDMAN, ARIZ.

LOCATION.—Water-stage recorder in NW. ¼ sec. 9, T. 7 S., R. 17 E., 6 miles above the mouth and 6 miles southeast of Feldman.

DRAINAGE AREA.—535 square miles.

RECORDS AVAILABLE.—May to September, 1931. April, 1919, to September, 1921, at station 5¾ miles downstream.

EXTREMES.—Maximum discharge during 1931 period, 4,700 second-feet Aug. 30 (gage height, 8.11 feet); minimum, 3 second-feet July 24 (gage height, 3.04 feet).

A maximum discharge of 20,000 second-feet occurred Aug. 2, 1919.

REMARKS.—Records good. Discharge estimated May 1–5. Diversions for irrigation above station.

Daily and monthly discharge, in second-feet, 1931

Day	May	June	July	Aug.	Sept.	Day	May	June	July	Aug.	Sept.
1	6	8	31	69	17	16	8	5	11	26	8
2	6	8	22	32	27	17	8	5	9	11	64
3	6	8	38	44	16	18	8	5	58	8	339
4	6	8	27	59	12	19	8	5	23	24	616
5	65	8	20	32	10	20	8	5	9	14	39
6	7	8	14	26	8	21	8	5	5	11	26
7	7	8	10	20	25	22	8	5	4	17	19
8	6	7	8	18	24	23	7	5	4	14	20
9	6	8	8	235	16	24	7	5	4	7	19
10	6	8	8	24	16	25	6	5	3	8	18
11	5	8	213	15	12	26	6	12	4	6	16
12	6	7	30	15	9	27	6	6	4	6	15
13	6	7	16	19	9	28	6	6	4	22	38
14	5	6	14	168	9	29	5	9	174	51	21
15	7	7	12	20	8	30	5	90	236	446	20
						31	7	------	74	26	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
May	65	5	8.4	518
June	90	5	9.6	569
July	236	3	35.4	2,180
August	446	6	48.2	2,960
September	616	8	49.9	2,970
The period				9,200

SANTA CRUZ RIVER NEAR NOGALES, ARIZ.

LOCATION.—Water-stage recorder in NW. ¼ sec. 18, T. 24 S., R. 15 E., unsurveyed, on Spanish land grant of Buena Vista, 5½ miles east of Nogales and three-fourths mile downstream from international boundary.

DRAINAGE AREA.—473 square miles.

RECORDS AVAILABLE.—May, 1930, to September, 1931. Fragmentary records March to November, 1907, April, 1909, to June, 1920, at station 5¼ miles downstream. April, 1921, to June, 1922, at station 6 miles downstream.

EXTREMES.—Maximum discharge during year, 4,600 second-feet Aug. 4 (gage height, 7.45 feet); no flow on several days.

1930–31: Maximum discharge, 6,300 second-feet Aug. 7, 1930 (gage height, 8.55 feet); no flow on several days of each year.

REMARKS.—Records good. Minor diversions for irrigation above station.

Daily and monthly discharge, in second-feet, 1930–31

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1	2	2	5	5	39	16	3	1	2	152	90
2	1	2	3	5	4	41	13	3	1	1	424	578
3	1	2	4	8	4	39	15	2	1	1	188	111
4	1	2	3	7	6	38	13	2	0	1	936	56
5	1	2	3	5	7	35	13	1	0	1	706	61
6	1	2	3	6	7	35	13	2	0	1	656	49
7	1	2	3	6	6	31	13	2	0	44	472	83
8	1	2	5	5	6	31	13	2	0	1	410	71
9	1	2	5	5	6	28	11	2	0	1	934	74
10	1	2	6	5	6	27	13	2	0	1	879	38
11	1	2	6	6	7	23	10	2	0	0	484	30
12	1	2	6	6	315	23	9	2	0	0	209	28
13	1	2	6	6	568	22	8	1	0	1	158	31
14	1	2	6	5	312	21	9	1	0	1	100	1,240
15	1	3	6	5	773	20	7	1	0	7	94	273
16	2	2	6	5	525	15	7	1	0	1	249	138
17	1	2	6	5	240	17	7	1	0	89	99	104
18	1	4	5	4	137	13	5	1	0	50	64	111
19	1	3	5	3	104	11	4	1	0	6	48	321
20	1	3	5	4	93	13	5	1	0	105	166	136
21	1	3	6	5	84	14	5	1	0	128	312	78
22	1	3	6	5	70	17	5	1	0	20	131	62
23	1	3	6	5	59	15	5	1	0	10	78	52
24	1	4	6	5	52	14	5	1	0	3	234	46
25	1	4	6	5	46	14	3	0	0	3	140	104
26	2	3	6	6	76	20	4	0	0	2	70	52
27	2	3	7	7	78	17	4	1	0	1	50	39
28	2	4	7	7	59	18	3	1	0	0	72	134
29	2	3	7	6	------	18	3	0	0	30	136	227
30	2	3	7	6	------	14	2	1	20	549	195	106
31	1	------	6	5	------	14	------	1	------	162	141	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	2	1	1.2	73
November	4	2	2.6	155
December	7	2	5.3	325
January	8	3	5.4	333
February	773	4	131	7,250
March	41	11	22.5	1,380
April	16	2	8.1	482
May	3	0	1.3	81
June	20	0	.8	46
July	549	0	39.4	2,420
August	936	48	290	17,800
September	1,240	28	151	8,970
The year	1,240	0	54.4	39,300

SANTA CRUZ RIVER AT TUCSON, ARIZ.

LOCATION.—Water-stage recorder in NE. ¼ sec. 14, T. 14 S., R. 13 E., at Congress Street Bridge in Tucson.
DRAINAGE AREA.—2,100 square miles.
RECORDS AVAILABLE.—October, 1905, to September, 1931.
EXTREMES.—Maximum discharge during year, 9,200 second-feet Aug. 10 (gage height, 11.3 feet); no flow during greater part of year.
1905–1931: Maximum discharge, 11,400 second-feet Sept. 28, 1926 (gage height, 12.2 feet); no flow during greater part of each year.
REMARKS.—Records good. Diversions for irrigation above station.

Daily and monthly discharge, in second-feet, 1930–31

Day	Nov.	Dec.	Jan.	Feb.	May	June	July	Aug.	Sept.
1	0	0	0	0	0	0	100	148	e 85
2	0	0	0	0	0	0	0	0	385
3	0	0	e 1	0	0	0	0	114	e 90
4	0	0	0	0	0	0	0	63	e 7
5	0	0	0	0	0	0	0	590	e 2
6	0	0	0	0	0	0	0	825	e 1
7	0	0	0	0	0	0	0	447	10
8	0	0	0	0	0	0	0	790	e 2
9	0	e 1	0	0	0	0	0	2,530	0
10	0	0	0	0	0	0	0	3,460	0
11	0	0	0	0	0	0	36	310	0
12	0	0	0	e 1	0	0	280	167	0
13	0	0	0	300	0	0	70	211	0
14	0	0	0	110	0	0	e 60	e 10	42
15	0	0	0	468	70	0	e 1	36	450
16	0	0	0	1,160	2	0	0	530	e 50
17	0	0	0	244	0	0	0	e 5	e 2
18	e 1	0	0	31	0	0	0	e 1	0
19	0	0	0	0	0	0	0	14	0
20	0	0	0	0	0	0	0	253	0
21	0	0	0	0	0	0	15	960	e 1
22	0	0	0	0	0	0	e 25	e 25	0
23	0	0	0	0	0	0	e 20	e 2	0
24	0	0	0	0	0	0	e 20	e 1	0
25	0	0	0	0	0	0	e 1	0	0
26	0	0	0	e 3	0	0	0	0	0
27	0	0	0	e 1	0	0	0	e 5	0
28	0	0	0	0	0	0	13	e 105	e 40
29	0	0	0	------	0	0	510	185	320
30	0	0	0	------	0	e 30	1,390	e 15	e 35
31	------	0	0	------	0	------	2'2	306	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
November	1	0	0.03	2
December	1	0	.03	2
January	1	0	.03	2
February	1,160	0	82.8	4,600
May	70	0	2.3	143
June	30	0	1.0	60
July	1,390	0	88.5	5,440
August	3,460	0	371	24,000
September	450	0	50.7	3,020
The year	3,460	0	51.5	37,300

e Estimated.

NOTE.—No flow during months omitted.

SONOITA CREEK NEAR PATAGONIA, ARIZ.

LOCATION.—Water-stage recorder in sec. 20, T. 22 S., R. 15 E., unsurveyed, in Spanish land grant of San Jose de Sonoita, 5½ miles downstream from Patagonia.

DRAINAGE AREA.—210 square miles.

RECORDS AVAILABLE.—June, 1930, to September, 1931.

EXTREMES.—Maximum discharge during year, 1,900 second-feet July 28 (gage height, 6.95 feet); minimum, 1 second-foot May 24.

1930–31: Maximum discharge, 2,600 second-feet Aug. 7, 1930 (gage height, 7.3 feet); minimum, 1 second-foot July 4, 1930, May 24, 1931.

REMARKS.—Records good. Minor diversions for irrigation and mining above station.

Daily and monthly discharge, in second-feet, 1930–31

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4	5	7	6	5	19	9	7	4	8	8	195
2	4	6	8	6	5	19	9	6	4	6	15	50
3	4	6	8	7	5	19	8	6	4	6	91	14
4	4	6	8	7	6	18	8	6	4	6	32	12
5	4	6	8	7	6	19	8	6	3	4	49	13
6	4	6	8	8	6	18	8	5	2	3	51	17
7	4	6	8	7	6	18	8	4	2	4	14	14
8	6	6	9	7	6	17	7	4	2	4	205	11
9	6	6	8	6	6	15	6	4	3	5	25	11
10	6	6	7	6	6	14	6	4	3	5	36	9
11	6	6	6	6	6	15	6	4	4	5	14	8
12	6	6	6	6	313	15	7	4	2	6	14	6
13	5	6	7	6	314	14	7	3	2	17	12	6
14	5	8	7	6	65	14	8	4	2	4	8	15
15	4	8	7	6	600	14	8	4	2	8	8	12
16	4	6	8	6	352	13	7	4	2	6	6	6
17	4	6	7	6	79	12	7	4	2	7	6	6
18	4	8	7	6	27	12	7	4	2	7	6	13
19	4	6	8	5	24	12	6	4	2	14	7	13
20	4	6	8	5	24	9	6	4	2	36	97	9
21	4	6	8	6	19	8	6	3	2	12	16	8
22	4	6	7	6	22	9	8	3	2	17	14	9
23	4	7	6	6	19	11	7	2	2	15	12	9
24	4	7	6	6	19	9	7	2	2	11	116	11
25	5	7	6	6	19	12	7	2	4	12	13	13
26	5	7	6	6	32	12	7	2	4	11	12	9
27	5	8	6	6	35	12	7	2	4	9	21	13
28	5	9	6	6	29	11	7	2	4	115	9	42
29	4	8	6	5	------	11	7	3	30	13	11	14
30	4	8	7	5	------	11	7	3	14	56	6	22
31	5	------	6	5	------	11	------	4	------	13	7	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	6	4	4.5	280
November	9	5	6.6	393
December	9	6	7.1	436
January	8	5	6.1	373
February	600	5	73.4	4,080
March	19	8	13.6	839
April	9	6	7.2	428
May	7	2	3.8	236
June	30	2	4.0	240
July	115	3	14.5	889
August	205	6	30.4	1,870
September	195	6	19.7	1,170
The year	600	2	15.5	11,200

RILLITO CREEK NEAR TUCSON, ARIZ.

LOCATION.—Water-stage recorder in sec. 23, T. 13 S., R. 13 E., at Oracle Road Bridge, 4 miles above confluence with Santa Cruz River, and 4 miles north of Tucson.

DRAINAGE.—903 square miles.

RECORDS AVAILABLE.—January, 1911, to September, 1931.

EXTREMES.—Maximum discharge during year, 7,200 second-feet Aug. 10 (gage height, 8.45 feet); no flow during greater part of year.

1911–1931: Maximum discharge, 24,000 second-feet Sept. 23, 1929; no flow during greater part of each year.

REMARKS.—Records good. Discharge estimated July 1, Aug. 11. Diversions for irrigation above station.

Daily and monthly discharge, in second-feet, 1930–31

Day	Feb.	Mar.	June	July	Aug.	Sept.	Day	Feb.	Mar.	June	July	Aug.	Sept.
1	0	39	0	6	3	0	16	1,030	0	0	0	12	0
2	0	8	0	0	1	0	17	170	0	0	0	0	0
3	0	3	0	0	16	0	18	46	0	0	0	0	0
4	0	2	0	0	8	0	19	4	0	0	0	0	42
5	0	2	0	0	100	0	20	0	0	0	0	86	0
6	0	1	0	0	328	0	21	0	0	0	0	50	0
7	0	0	0	0	45	0	22	0	0	0	0	0	0
8	0	0	0	0	643	5	23	0	0	0	0	0	0
9	0	0	0	0	489	0	24	0	0	0	0	0	0
10	0	0	0	0	1,180	0	25	0	0	0	0	0	0
11	0	0	0	0	7	0	26	45	0	0	0	0	0
12	12	0	0	0	10	0	27	84	0	0	0	0	0
13	243	0	0	0	30	0	28	56	0	0	0	2	0
14	188	0	0	0	130	0	29	-------	0	0	0	0	16
15	888	0	0	0	7	0	30	-------	0	9	2	17	0
							31	-------	0	-------	8	0	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
February	1,030	0	98.8	5,490
March	39	0	1.8	109
June	9	0	.3	18
July	8	0	.5	32
August	1,180	0	102	6,280
September	42	0	2.1	125
The year	1,180	0	16.6	12,100

NOTE.—No flow during months omitted.

SALT RIVER NEAR ROOSEVELT, ARIZ.

LOCATION.—Staff gage in sec. 5, T. 3 N., R. 14 E., near diversion dam for power canal, 3 miles above upper end of Roosevelt Reservoir, and 13 miles east of Roosevelt.

DRAINAGE AREA.—4,310 square miles.

RECORDS AVAILABLE.—October, 1913, to September, 1931.

EXTREMES.—Maximum daily mean discharge during year, 18 800 second-feet Feb. 15; minimum, 146 second-feet Dec. 24.

1913–1931: Maximum daily mean discharge, 79,200 second-feet Jan. 19, 1916; minimum, 97 second-feet July 1, 1929.

REMARKS.—Only minor diversions above station. Daily-discharge record furnished by Salt River Valley Water Users' Association.

Daily and monthly discharge, in second-feet, 1930–31

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	160	161	612	189	197	750	1,030	2,520	389	320	1,080	715
2	171	162	538	193	197	725	1,150	2,460	375	380	994	610
3	169	160	455	193	201	662	1,560	2,490	365	297	1,390	585
4	165	161	405	200	208	600	1,920	1,950	351	330	847	525
5	153	168	350	202	216	600	1,860	1,740	341	330	653	467
6	151	160	312	200	227	638	1,840	1,490	327	245	1,180	448
7	151	161	268	198	420	812	1,750	1,320	314	218	852	515
8	151	167	255	194	428	843	1,680	1,220	313	205	710	497
9	150	171	237	194	410	750	1,810	1,070	303	187	1,940	575
10	147	162	225	196	387	700	1,790	983	274	183	2,380	608
11	156	162	213	194	374	635	1,610	937	277	192	1,720	565
12	159	167	205	196	366	650	1,480	833	290	263	1,360	515
13	161	165	189	191	925	655	1,440	777	281	207	1,060	487
14	171	165	194	192	8,600	667	1,300	725	279	273	882	470
15	166	169	187	192	18,800	680	1,190	688	258	232	853	538
16	163	180	174	194	11,400	705	1,130	665	244	200	827	505
17	167	164	171	194	6,550	730	1,090	650	227	203	670	517
18	164	168	171	194	5,450	763	1,050	790	214	319	560	538
19	161	600	170	193	4,150	790	1,070	730	206	305	640	1,600
20	151	575	170	192	3,050	875	1,050	700	196	321	670	5,890
21	173	488	168	190	2,050	937	889	667	191	348	850	4,800
22	161	435	166	189	1,380	938	854	625	187	395	838	3,060
23	152	385	154	191	1,160	945	854	580	176	398	742	2,110
24	150	325	146	190	1,080	992	889	543	172	346	1,200	1,520
25	149	270	147	190	1,020	1,050	979	510	180	296	578	1,330
26	155	276	147	189	750	1,160	1,060	502	182	288	495	1,200
27	159	270	163	192	712	1,210	926	493	176	281	450	1,220
28	155	276	170	195	703	1,000	864	472	185	282	427	1,090
29	161	750	175	193	-------	890	1,380	473	181	252	455	1,340
30	161	765	168	192	-------	983	1,520	445	472	774	625	1,380
31	160	-------	165	195	-------	950	-------	435	-------	740	1,340	-------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	173	147	159	9,760
November	765	160	280	16,600
December	612	146	235	14,400
January	202	189	193	11,900
February	18,800	197	2,550	142,000
March	1,210	600	816	50,200
April	1,920	854	1,300	77,400
May	2,520	435	983	60,500
June	472	172	264	15,700
July	774	183	310	19,100
August	2,380	427	944	58,100
September	5,890	448	1,210	71,800
The year	18,800	146	756	547,000

SALT RIVER NEAR CHRYSOTILE, ARIZ.

LOCATION.—Water-stage recorder in sec. 5, T. 5 N., R. 18 E., unsurveyed, on San Carlos Indian Reservation, near Chrysotile, 8 miles above Cibecue Creek. Zero of gage is 3,406 feet above mean sea level.

DRAINAGE AREA.—2,830 square miles.

RECORDS AVAILABLE.—September, 1924, to September, 1931.

EXTREMES.—Maximum discharge during year, 7,400 second-feet Feb. 15 (gage height, 6.67 feet); minimum, 103 second-feet Dec. 23 (gage height, 1.45 feet).

1924–1931: Maximum discharge, 14,600 second-feet Feb. 17, 1927 (gage height, 9.9 feet); minimum, 103 second-feet June 29, 1929, Dec. 23, 1930 (gage height, 1.45 feet).

REMARKS.—Records excellent except those for estimated period July 2–10, which are good. Only minor diversions above station.

Daily and monthly discharge, in second-feet, 1930–31

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	179	153	273	168	199	421	1,190	2,430	372	544	1,020	636
2	149	153	229	179	216	401	1,680	2,240	349	500	1,100	544
3	143	149	212	190	225	383	2,020	1,950	343	300	798	459
4	139	149	199	203	225	389	2,160	1,790	332	300	596	395
5	139	149	195	195	274	440	2,170	1,560	326	300	910	354
6	139	153	190	160	444	529	2,100	1,400	316	250	683	522
7	139	156	190	164	438	574	2,060	1,280	300	200	974	473
8	139	153	186	168	364	529	2,160	1,180	289	200	1,930	667
9	139	153	186	168	323	480	2,160	1,100	284	200	1,780	667
10	143	153	186	179	265	446	1,900	1,030	284	200	1,870	604
11	139	153	186	182	273	433	1,750	947	279	170	850	536
12	149	153	186	168	338	440	1,700	863	269	213	680	480
13	156	156	186	153	3,280	473	1,540	801	255	204	700	446
14	153	164	182	156	3,350	515	1,400	758	245	187	596	466
15	153	195	182	168	5,700	559	1,380	716	231	241	620	487
16	153	190	175	175	3,470	589	1,310	758	222	222	501	544
17	149	179	168	182	1,700	651	1,230	873	209	349	446	544
18	149	336	168	175	1,060	733	1,260	819	200	284	473	1,390
19	168	334	153	164	766	810	1,270	784	187	269	536	4,720
20	164	263	143	153	620	910	1,190	741	183	343	566	4,090
21	156	220	136	160	582	976	1,180	675	172	408	582	2,650
22	149	190	136	171	566	1,020	1,140	604	168	372	446	1,750
23	149	179	130	175	508	1,090	1,160	552	168	332	566	1,360
24	149	182	143	175	480	1,180	1,340	529	172	295	421	1,110
25	149	190	146	182	414	1,220	1,450	515	172	316	383	976
26	149	186	153	186	395	1,280	1,290	515	176	274	343	863
27	149	186	179	179	395	1,120	1,180	501	164	264	337	845
28	149	245	190	179	414	1,100	1,240	466	195	245	349	1,260
29	149	382	175	186	------	1,100	1,750	440	183	231	289	1,450
30	153	364	164	195	------	1,090	2,150	408	817	337	840	1,650
31	153	------	164	195	------	1,060	------	389	------	636	675	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	179	139	150	9,190
November	382	149	190	11,800
December	273	130	177	10,900
January	203	153	175	10,800
February	5,700	199	976	54,200
March	1,280	383	740	45,500
April	2,170	1,140	1,580	94,200
May	2,430	389	955	58,700
June	817	164	263	15,600
July	636	170	293	18,200
August	1,930	289	737	45,300
September	4,720	354	1,100	65,300
The year	5,700	130	603	440,000

VERDE RIVER ABOVE CAMP CREEK, NEAR McDOWELL, ARIZ.

LOCATION.—Water-stage recorder in sec. 17, T. 5 N., R. 7 E., 500 feet above mouth of Camp Creek and 10 miles north of McDowell.

DRAINAGE AREA.—6,240 square miles.

RECORDS AVAILABLE.—February, 1925, to September, 1931. August to September, 1889; April, 1897, to November, 1899; January, 1901, to February, 1925, at a point three-fourths mile above mouth of Verde River.

EXTREMES.—Maximum daily mean discharge during year, 22,600 second-feet Feb. 15; minimum, 77 second-feet June 17.

1897–1931: Maximum daily mean discharge, 61,500 second-feet Nov. 27, 1905; minimum, 32 second-feet July 19, 20, 1904.

REMARKS.—Only minor diversions above station. Daily-discharge record furnished by Salt River Valley Water Users' Association.

Daily and monthly discharge, in second-feet, 1930–31

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	288	217	1,320	233	195	860	391	812	101	111	855	1,700
2	433	205	1,050	230	194	1,090	363	660	98	125	940	1,920
3	335	205	778	232	212	980	334	544	94	121	770	795
4	267	205	616	242	220	780	315	560	107	121	657	657
5	239	219	463	257	222	700	318	432	93	122	555	596
6	213	218	405	242	250	825	303	357	100	123	1,940	468
7	200	211	389	246	306	1,190	282	303	97	115	2,260	374
8	212	217	365	246	458	1,060	271	275	112	120	2,810	264
9	200	223	303	244	569	825	260	250	103	117	1,360	221
10	187	212	303	248	507	675	252	228	96	140	910	213
11	221	216	262	247	420	610	246	207	100	131	905	195
12	215	220	257	250	371	537	238	185	90	107	852	158
13	220	218	270	248	2,910	423	224	195	92	123	680	143
14	235	216	254	238	11,200	382	205	189	90	136	932	165
15	233	242	246	226	22,600	410	221	184	92	154	1,220	156
16	225	242	245	224	14,600	495	228	183	87	123	1,070	155
17	211	243	245	230	9,050	510	231	187	77	112	837	256
18	206	323	240	228	5,200	600	230	202	84	127	555	300
19	200	2,780	247	216	3,050	638	217	174	83	134	525	375
20	200	1,820	244	222	2,050	635	219	171	78	133	468	310
21	200	1,110	230	221	1,880	657	197	140	86	136	382	242
22	210	763	231	214	2,040	620	202	134	94	126	350	192
23	205	449	220	234	1,580	585	203	128	93	119	280	183
24	193	394	225	221	1,300	558	194	131	92	120	247	180
25	200	335	227	219	1,060	540	195	125	106	143	257	193
26	205	323	233	227	752	490	220	112	115	365	245	183
27	203	310	235	218	668	483	203	112	106	168	228	195
28	207	279	233	201	660	430	216	115	117	127	195	179
29	194	912	233	206	-------	417	283	106	105	118	207	149
30	203	1,890	246	194	-------	398	308	106	122	260	218	163
31	212	-------	234	193	-------	337	-------	106	-------	825	442	-------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	433	187	225	13,800
November	2,780	205	514	30,600
December	1,320	220	356	21,900
January	257	193	229	14,100
February	22,600	194	3,020	168,000
March	1,190	337	639	39,300
April	391	194	252	15,000
May	812	106	246	15,100
June	122	77	97.0	5,770
July	825	107	161	9,920
August	2,810	195	779	47,900
September	1,920	143	376	22,400
The year	22,600	77	557	404,000

TONTO CREEK NEAR ROOSEVELT, ARIZ.

LOCATION.—Staff gage in sec. 14, T. 6 N., R. 10 E., 6 miles above upper end of Roosevelt Reservoir and 15 miles northwest of Roosevelt.
DRAINAGE AREA.—813 square miles.
RECORDS AVAILABLE.—October, 1913, to September, 1931.
EXTREMES.—Maximum daily mean discharge during year, 7,850 second-feet Feb. 15; minimum, 2 second-feet June 20.
1913–1931: Maximum daily mean discharge, 20,000 second-feet Dec. 28, 1923; no flow Sept. 4–10, 1924.
REMARKS.—Only minor diversions above station. Daily-discharge record furnished by Salt River Valley Water Users' Association.

Daily and monthly discharge, in second-feet, 1930–31

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	15	4	625	6	6	125	150	650	7	5	200	250
2	10	4	450	6	6	125	140	500	7	4	75	125
3	8	4	250	6	6	90	140	275	7	4	70	75
4	8	4	150	6	6	90	140	275	5	4	350	50
5	8	4	50	6	10	90	140	160	5	4	185	40
6	8	4	25	6	20	90	140	150	4	4	550	35
7	8	4	20	6	20	70	125	130	4	4	175	25
8	6	4	15	15	20	75	125	130	4	4	350	20
9	6	4	15	15	20	75	125	125	4	4	650	16
10	6	4	10	12	20	75	125	125	4	4	300	18
11	6	4	10	6	16	75	125	120	4	4	275	18
12	6	4	8	10	16	75	125	120	4	4	270	15
13	6	4	8	8	2,000	70	125	120	4	4	150	15
14	6	4	8	6	6,550	70	120	90	4	4	150	18
15	6	4	8	6	7,850	70	120	75	3	4	160	30
16	6	4	8	6	2,950	65	120	80	3	4	150	25
17	6	4	8	6	1,800	65	120	35	3	4	120	16
18	6	100	8	6	725	65	120	35	3	20	120	15
19	6	1,150	8	6	200	65	120	35	3	15	100	50
20	6	600	8	6	100	60	110	35	2	10	50	40
21	6	205	8	6	80	60	110	30	3	40	50	25
22	6	50	8	6	80	60	110	20	3	30	50	20
23	6	50	6	6	70	60	500	20	3	50	50	20
24	6	25	6	6	70	55	160	20	3	55	50	20
25	6	10	6	6	50	55	160	10	3	30	40	16
26	6	5	6	6	50	55	150	10	3	25	40	16
27	6	5	6	6	40	52	150	10	3	20	30	16
28	6	5	6	6	40	52	160	10	3	20	20	14
29	5	600	6	6	-------	52	500	10	3	20	40	14
30	5	1,000	6	6	-------	50	825	8	4	15	30	20
31	4	-------	6	6	-------	50	-------	7	-------	50	25	-------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	15	4	6.6	407
November	1,150	4	129	7,680
December	625	6	56.8	3,490
January	15	6	7.0	428
February	7,850	6	815	45,300
March	125	50	70.5	4,340
April	825	110	179	10,700
May	650	7	110	6,780
June	7	2	3.8	228
July	55	4	15.1	930
August	650	20	157	9,670
September	250	14	35.9	2,140
The year	7,850	2	127	92,100

WHITEWATER BASIN

WHITEWATER DRAW NEAR DOUGLAS, ARIZ.

LOCATION.—Water-stage recorder in SW. ¼ SE. ¼ sec. 10, T. 24 S., R. 27 E., at highway bridge 2 miles west of Douglas and 1½ miles upstream from international boundary.

DRAINAGE AREA.—1,020 square miles.

RECORDS AVAILABLE.—August, 1911, to April, 1922; June, 1930, to September, 1931.

EXTREMES.—Maximum discharge during year, 3,450 second-feet Aug. 10 (gage height, 12.15 feet); no flow on several days.

1930–31: Maximum discharge, that of Aug. 10, 1931; no flow on several days each year.

Maximum known discharge, 4,050 second-feet (estimated) July 28, 1919.

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

Daily and monthly discharge, in second-feet, 1930–31

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1	1	1	1	1	4	1	1	1	0	12	162
2	1	1	1	1	1	2	1	1	1	0	85	282
3	1	1	1	1	1	1	2	1	1	4	50	30
4	1	1	2	1	2	1	2	1	1	42	221	8
5	1	1	1	1	1	1	1	1	1	5	975	4
6	1	1	1	1	1	1	2	1	1	2	81	2
7	1	1	1	1	1	1	2	1	1	1	118	14
8	1	1	1	1	1	1	1	1	1	1	18	6
9	1	1	3	1	1	1	1	1	1	1	429	2
10	1	1	7	1	1	1	1	1	1	1	1,390	1
11	1	1	2	1	1	1	1	1	1	1	60	2
12	1	1	1	1	9	1	1	1	1	1	11	2
13	1	1	1	1	54	1	1	1	1	1	25	2
14	1	1	1	1	52	1	1	1	1	1	20	10
15	1	2	1	1	47	1	1	1	1	13	4	6
16	1	1	1	1	20	1	2	1	1	49	2	2
17	1	1	1	1	10	1	1	9	1	4	2	2
18	1	2	1	1	5	1	2	2	1	6	1	2
19	2	2	1	1	3	1	1	1	1	2	2	146
20	1	1	1	1	1	1	1	1	1	27	1	62
21	1	1	1	1	1	1	1	1	1	2	2	9
22	2	1	1	1	1	1	1	1	1	1	4	3
23	2	1	1	1	1	1	1	1	1	6	7	1
24	2	1	1	1	1	1	1	1	1	2	3	1
25	2	2	1	1	1	1	1	1	1	1	1	201
26	21	1	1	1	20	2	1	1	12	1	1	68
27	13	1	1	1	11	2	1	1	1	1	1	88
28	3	2	1	1	6	1	5	1	0	1	1	5
29	2	2	1	1	-------	1	2	1	1	7	25	12
30	2	1	1	1	-------	2	1	1	0	2	1,010	2
31	2	-------	1	1	-------	1	-------	1	-------	73	189	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	21	1	2.4	145
November	2	1	1.2	71
December	7	1	1.3	81
January	1	1	1.0	61
February	54	1	9.1	506
March	4	1	1.2	75
April	5	1	1.4	81
May	9	1	1.3	79
June	12	0	1.3	77
July	73	0	8.4	514
August	1,390	1	153	9,420
September	282	1	37.9	2,260
The year	1,390	0	18.5	13,400

MISCELLANEOUS DISCHARGE MEASUREMENTS

In addition to the records of stream flow obtained at gaging stations and reported in the preceding pages, measurements of flow were made at a number of other points, as shown by the following table:

Miscellaneous discharge measurements in Colorado River drainage basin during the year ending September 30, 1931

Date	Stream	Tributary to or diverting from—	Locality	Gage height	Discharge
				Feet	*Sec-ft.*
Mar. 13	Dolores River	Colorado River	In SW. ¼ sec. 9, T. 23 S., R. 24 E., about 12 miles southeast of Cisco, Utah.		184
May 13	do	do	do		735
June 13	Castle Creek	do	At drift fence above all diversions at Castleton, Utah.		2.7
May 9	do	do	In NE. ¼ sec. 35, T. 24 S., R. 22 E., about 2,000 feet upstream from Colorado River, below all diversions, near Castleton, Utah.		4.8
June 13	do	do	do		2.8
Sept. 27	Utah Power & Light Co.'s canal	Ashley Creek	In NE. ¼ sec. 12, T. 3 S., R. 20 E., Uinta base and meridian, 300 feet below canal head gate and about 1 mile below Ashley Creek gaging station, near Vernal, Utah.	0.40	34.4
Oct. 22	North Fork of Duchesne River.	Duchesne River	In NE. ¼ sec. 35, T. 2 N., R. 9 W., Uinta base and meridian, at former gaging station near Hanna, Utah.	.91	45.6
18	Lake Fork	do	In S. ½ sec. 31, T. 2 N., R. 1 E., Uinta base and meridian, below United States Lake Fork Canal and near site of former gaging station "Lake Fork near Altonah, Utah."	1.06	134
July 21	East Fork (Yellowstone Fork) of Lake Fork.	Lake Fork	In NW. ¼ sec. 21, T. 1 N., R. 4 W., Uinta base and meridian, 100 feet above Payne Canal heading about 7 miles northwest of Altonah, Utah.		59.1
Apr. 18	Fish Creek	Price River	In sec. 17, T. 12 S., R. 7 E., below Pondtown Creek and 4 miles north of Scofield, Utah.		66.8
May 9	Pondtown Creek	Fish Creek	In NE. ¼ sec. 18, T. 12 S., R. 7 E., above Pleasant Valley Reservoir, near Scofield, Utah.	1.00	13.2
23	do	do	do	.65	5.1
June 2	do	do	do	.52	4.0
Apr. 18	Pleasant or Clear Creek.	do	In sec. 20, T. 12 S., R. 7 E., below Kimball Creek, at Madsen Ranch, and 3 miles north of Scofield, Utah.		8.0
30	do	do	Kimball Creek, Utah		9.0
May 9	do	do	do	.60	16.2
23	do	do	do	.15	6.3
June 2	do	do	do	.10	5.5
24	Cottonwood Creek	San Rafael River	Former gaging station near Orangeville, Utah, in SW. ¼ sec. 10, T. 18 S., R. 7 E.	4.60	76.0
July 12	do	do	do	4.40	42.8
May 15	Beck Creek	Cottonwood Creek	In NE. ¼ NW. ¼ sec. 24, T. 17 S., R. 4 E., about one-fourth mile below junction of Right and Left Forks and 10 miles southeast of Ephraim, Utah.	1.15	91.7
May 17	do	do	do	1.26	125
21	do	do	do	.45	23.1
23	do	do	do	.67	36.1
June 9	do	do	do	.29	8.6
11	do	do	do	.25	8.5
19	do	do	do	.14	4.3
25	do	do	do	.10	3.1
July 3	do	do	do	.04	2.5
10	do	do	do	.00	1.9
Mar. 18	Woodruff Canal	Silver Creek	At Silver Creek diversion dam near Woodruff, Ariz.		6.8
Feb. 15	Mineral Creek	Gila River	At mouth at Kelvin, Ariz		642
15	do	do	do		803
16	do	do	do		454
16	do	do	do		321

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