UNITED STATES DEPARTMENT OF THE INTERIOR

SURFACE WATER SUPPLY *of the* UNITED STATES 1930

PART 9

COLORADO RIVER BASIN

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

GEOLOGICAL SURVEY WATER-SUPPLY PAPER 704

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

Water-Supply Paper 704

SURFACE WATER SUPPLY *of the* UNITED STATES 1930

PART 9
COLORADO RIVER BASIN

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Prepared in cooperation with the States of
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UNITED STATES
GOVERNMENT PRINTING OFFICE
WASHINGTON : 1932

For sale by the Superintendent of Documents, Washington, D. C. - Price 20 cents (paper cover)

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SURFACE WATER SUPPLY OF THE COLORADO RIVER BASIN, 1930

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, 1930.

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, 1895–1931

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		

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 6,070 points in the United States and also at many points in Alaska and the Hawaiian Islands. In July, 1930, 2,430 gaging stations were being maintained by the Geological Survey and the cooperating organiza-

tions. 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 profiles, 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, 1929, and ending September 30, 1930. 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 or 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

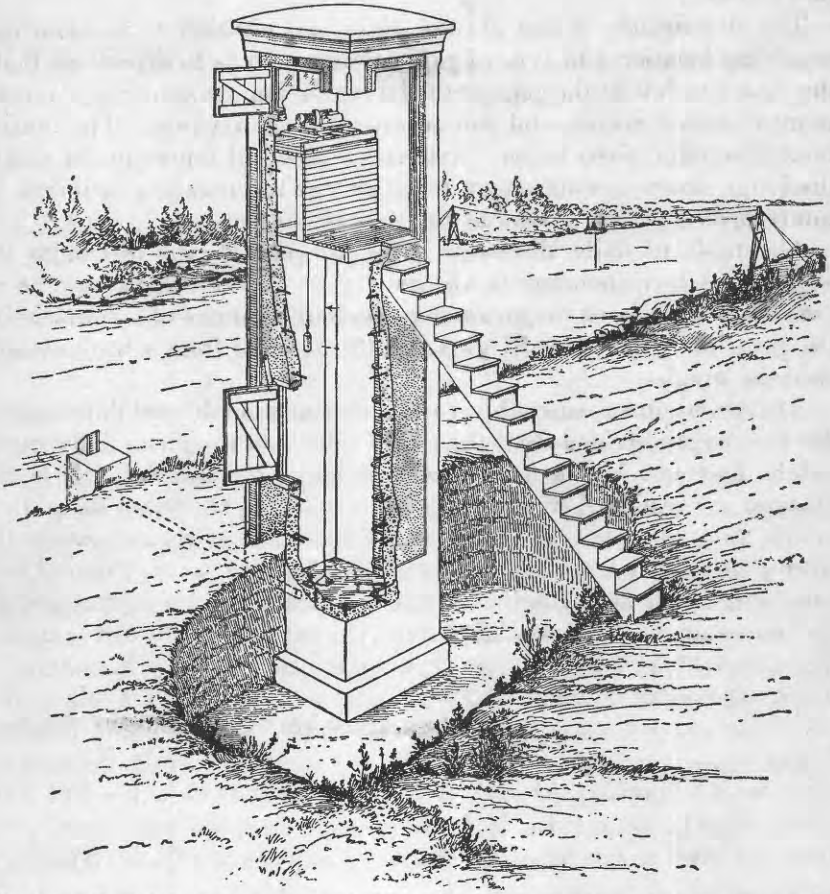

FIGURE 1.—Typical river-measurement station showing concrete well and house for water-stage recorder and staff gages, cable, and car

supplement the gage heights and discharge measurements in determining the daily flow. The records of stage are obtained either from 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.

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

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. Upper Mississippi River and Hudson Bay Basins.
6. Missouri River Basin.
7. Lower Mississippi River Basin.
8. Western Gulf of Mexico basins.

Part 9. Colorado River Basin.
10. The Great Basin.
11. Pacific slope basins in 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., 506 Broadway-Arcade Building.
Trenton, N. J., 710 Trenton Trust Building.
Harrisburg, Pa., 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.
Chicago, Ill., 1503 Consumers 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 6,070 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-term 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.
19 th 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.

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 1930. 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, 1899–1930

[For basins included, see pp. 5 and 6]

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]	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	[k] 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	442	443	444
1917	451	452	453	454	455	456	457	458	459	460	461	462	463	464
1918	471	472	473	474	475	476	477	478	479	480	481	482	483	484
1919–20	501	502	503	504	505	506	507	508	509	510	511	512	513	514
1921	521	522	523	524	525	526	527	528	529	530	531	532	533	534
1922	541	542	543	544	545	546	547	548	549	550	551	552	553	554
1923	561	562	563	564	565	566	567	568	569	570	571	572	573	574
1924	581	582	583	584	585	586	587	588	589	590	591	592	593	594
1925	601	602	603	604	605	606	607	608	609	610	611	612	613	614
1926	621	622	623	624	625	626	627	628	629	630	631	632	633	634
1927	641	642	643	644	645	646	647	648	649	650	651	652	653	654
1928	661	662	663	664	665	666	667	668	669	670	671	672	673	674
1929	681	682	683	684	685	686	687	688	689	690	691	692	693	694
1930	696	697	698	699	700	701	702	703	704	705	706	707	708	709

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

Assistance in collecting the records was rendered by the following organizations and corporations: In Colorado by the State through Mr. M. C. Henderlider, State engineer, by the United States Bureau of Reclamation, and by Mr. R. D. Webb; in Utah by the National Park Service, Utah Power & Light Co., and Price River irrigation district; in Arizona by the Indian Service; and in Wyoming by the United States Weather Bureau and Rock Spring Water Co.

DIVISION OF WORK

The data for stations in Colorado and Wyoming were collected and prepared for publication under the direction of Robert Follansbee, district engineer, assisted by P. V. Hodges, F. F. LeFever, R. E. Cabell, H. P. Eisenhuth, F. B. Campbell, D. S. Jenkins, L. F. Hanks, Miss Nellie L. Esterly, and Mrs. E. L. Yeatman.

The data for stations in Utah and on the Virgin River at Littlefield, Ariz., were collected and prepared for publication under the direction of A. B. Purton, district engineer, assisted by M. T. Wilson, J. A. Allis, J. B. Ringwood, F. N. Hansen, B. M. Tanner, and Miss Lysle Christensen.

The data for stations in Arizona except for the station on Virgin River at Littlefield were collected and prepared for publication by W. E. Dickinson, district engineer, assisted by D. H. Barber, J. S. Gatewood, J. A. Baumgartner, H. C. Pritchett, R. E. Cook, H. S. Leak, D. D. Lewis, R. E. Marsh, C. C. McDonald, J. M. Meier, R. H. Monroe, M. B. Scott, Chas. Wells, O. R. Clark, J. E. Klohr, and C. T. Pynchon.

The records were reviewed and manuscript assembled by P. R. Speer.

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, 1930. May to July, 1899, at point just above Roaring Fork.

EXTREMES.—Maximum discharge during year, 15,500 second-feet June 1 (gage height, 9.17 feet); minimum, 100 second-feet Mar. 1 (gage height, 1.47 feet). 1900–1930: Maximum discharge, 30,100 second-feet June 14, 1918 (gage height, 12.55 feet); minimum, 80 second-feet Feb. 6, 1921 (gage height, 1.6 feet).

REMARKS.—Records excellent. Diversions for irrigation above station. Flow is regulated during low water by Shoshone power plant, 6 miles upstream.

Daily and monthly discharge, in second-feet, 1929–30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2,000	1,440	1,010	801	820	806	903	6,130	15,200	4,320	4,080	1,900
2	1,940	1,310	1,070	924	785	730	1,050	6,670	13,200	4,080	3,870	1,770
3	1,880	1,350	1,050	971	876	890	1,200	7,700	10,200	3,870	3,570	1,700
4	1,940	1,420	879	773	847	883	1,160	8,300	8,460	3,770	3,280	1,640
5	2,060	1,440	880	794	826	923	1,340	7,100	7,700	3,670	3,190	1,700
6	1,940	1,440	933	884	828	923	1,900	6,260	7,700	3,470	3,280	2,030
7	1,820	1,540	993	867	829	915	2,600	5,360	8,760	3,190	3,280	2,100
8	1,820	1,650	969	850	833	856	3,280	4,880	10,200	3,020	3,280	2,030
9	1,820	1,600	1,050	840	956	848	4,760	4,300	11,300	2,930	2,930	1,960
10	2,060	1,540	1,070	830	848	760	5,240	3,870	11,300	2,760	2,930	1,960
11	2,240	1,540	1,080	820	852	744	5,490	3,670	11,700	2,760	3,020	1,840
12	2,240	1,490	1,060	622	888	746	5,680	3,470	12,400	2,760	3,190	1,700
13	2,180	1,330	1,020	1,030	850	781	5,870	3,190	14,000	3,020	3,470	1,640
14	2,000	1,070	1,070	843	830	896	5,740	3,100	14,000	3,980	4,300	1,640
15	1,940	1,100	1,030	860	800	959	5,870	3,280	12,400	4,300	6,000	1,580
16	1,880	1,110	929	957	780	1,010	5,740	3,770	11,000	3,380	6,400	1,500
17	1,820	1,290	1,000	866	865	905	4,640	4,300	10,600	2,930	5,000	1,380
18	1,790	1,370	876	881	842	1,150	3,570	4,420	10,200	2,760	4,190	1,390
19	1,760	1,410	715	774	832	962	3,380	4,420	9,910	3,020	3,770	1,390
20	1,760	1,440	697	898	896	926	3,380	4,190	9,240	3,100	3,280	1,340
21	1,700	1,180	681	729	832	912	3,470	4,420	9,080	3,100	3,020	1,280
22	1,650	936	587	734	969	996	4,530	5,870	9,240	3,100	2,680	1,290
23	1,540	838	702	748	708	1,020	5,360	6,960	9,240	3,190	2,600	1,290
24	1,490	958	712	748	950	1,030	6,000	6,260	8,150	2,930	2,450	1,370
25	1,430	835	768	817	883	1,010	6,810	6,000	6,960	2,760	2,310	1,580
26	1,420	1,060	797	867	868	995	7,250	6,670	6,260	2,680	2,240	1,580
27	1,440	1,030	871	969	813	895	7,100	8,000	5,740	2,520	2,170	1,640
28	1,490	1,270	822	843	843	823	6,960	9,570	5,240	2,380	2,170	1,580
29	1,540	1,150	680	776	-------	826	6,530	11,700	5,120	2,520	2,170	1,500
30	1,490	1,260	820	814	-------	783	6,000	13,200	4,760	3,380	2,030	1,480
31	1,490	-------	800	826	-------	840	-------	14,800	-------	4,300	2,030	-------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	2,240	1,420	1,780	110,000
November	1,650	835	1,280	76,200
December	1,080	587	891	54,800
January	1,030	622	837	51,500
February	969	708	848	47,100
March	1,150	730	895	55,000
April	7,250	903	4,430	264,000
May	14,800	3,100	6,190	381,000
June	15,200	4,760	9,640	574,000
July	4,320	2,380	3,220	198,000
August	6,400	2,030	3,300	203,000
September	2,100	1,280	1,630	97,000
The year	15,200	622	2,910	2,110,000

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, 1930.

EXTREMES.—Maximum discharge during year, 26,800 second-feet June 1 (gage height, 20.5 feet); minimum, 1,230 second-feet Mar. 3, 4.

1902–1930: Maximum discharge, 52,400 second-feet June 16, 1921 (gage height, 24.4 feet); minimum, 630 second-feet Sept. 2, 1924 (gage height, 11.4 feet).

REMARKS.—Diversions for power and irrigation above station. Discharge estimated because of ice Dec. 14 to Feb. 20. Complete records furnished by United States Bureau of Reclamation.

Daily and monthly discharge, in second-feet, 1929–30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3,780	2,220	2,220			1,320	1,880	9,260	26,800	6,740	6,080	1,760
2	3,780	2,710	2,160			1,280	2,100	9,900	22,100	6,600	5,600	1,880
3	3,680	2,860	2,160			1,230	2,100	11,500	17,600	6,080	5,720	1,640
4	3,780	2,710	2,100			1,230	2,220	12,600	14,500	5,720	4,920	1,640
5	3,480	2,640	2,100			1,320	2,570	11,700	13,200	5,360	4,600	1,760
6	3,480	2,780	1,980	1,750	1,630	1,370	2,860	10,100	13,400	5,030	4,280	1,760
7	3,390	2,710	1,980			1,420	3,080	8,480	14,700	4,920	4,500	2,250
8	3,230	2,360	2,040			1,530	4,080	7,300	17,000	4,490	4,500	2,180
9	3,480	2,710	2,100			1,530	7,740	6,600	19,700	4,280	5,600	2,060
10	3,980	2,640	2,160			1,530	7,880	5,360	19,700	3,880	4,920	2,060
11	4,180	2,640	2,220			1,580	8,180	5,250	19,900	3,780	4,500	2,000
12	3,980	2,430	2,220			1,580	8,180	4,810	20,300	3,980	4,500	1,880
13	3,780	2,360	2,220		1,700	1,700	8,790	4,390	23,000	6,340	5,360	1,820
14	3,680	2,360	2,100			1,760	9,100	4,180	23,300	5,480	5,480	1,760
15	3,480	2,360	2,100			2,060	9,100	4,500	22,300	6,210	7,160	1,700
16	3,390	2,360		1,720		2,250	8,790	5,140	20,300	5,250	9,100	1,640
17	3,230	2,290				2,180	7,020	6,470	18,600	4,390	7,880	1,580
18	3,160	2,430	1,950		1,850	2,120	5,960	7,590	18,800	3,980	6,210	1,530
19	3,080	2,500				2,120	5,030	7,300	18,800	3,980	5,140	1,530
20	3,080	2,290				2,060	4,600	7,160	17,600	4,810	4,600	1,370
21	3,000	2,040			2,160	2,000	4,600	7,160	17,000	4,700	3,980	1,480
22	2,930	1,980			1,980	2,000	6,470	9,580	17,000	4,280	3,390	1,530
23	2,710	1,920	1,600		1,920	2,000	7,740	11,500	17,600	4,280	3,030	1,580
24	2,570	1,920			1,860	1,940	9,420	10,900	15,200	4,180	2,860	1,580
25	2,430	1,980			1,700	1,880	10,600	10,400	12,700	4,080	2,620	2,320
26	2,290	1,980		1,640	1,490	1,880	11,400	11,400	10,700	3,680	2,390	2,180
27	2,220	2,040			1,490	1,820	11,000	14,100	10,100	3,310	2,390	2,120
28	2,290	2,220			1,440	1,760	11,400	17,000	9,260	3,080	2,320	2,120
29	2,430	2,220	1,700			1,580	10,600	20,100	8,940	3,160	2,250	2,000
30	2,500	2,220				1,640	9,580	23,000	8,030	3,680	2,180	2,000
31	2,500					1,880		26,300		5,140	2,120	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	4,180	2,220	3,190	196,000
November	2,860	1,920	2,360	140,000
December	2,220		1,930	119,000
January			1,700	105,000
February		1,440	1,720	95,500
March	2,250	1,230	1,730	106,000
April	11,400	1,880	6,800	405,000
May	26,300	4,180	10,000	615,000
June	26,800	8,030	16,900	1,010,000
July	6,740	3,080	4,670	287,000
August	9,100	2,120	4,520	278,000
September	2,320	1,370	1,820	108,000
The year	26,800		4,790	3,460,000

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, 1930. October, 1913, to November, 1914, at Moab, 30 miles downstream; flow about same at both places.

EXTREMES.—Maximum discharge during year, 41,000 second-feet June 1 (gage height, 12.8 feet); minimum not recorded.

1914–1917, 1922–1930: Maximum discharge, 76,800 second-feet June 19, 1917 (gage height, 19.7 feet); minimum, 844 second-feet Sept. 3 1924 (gage height, 1.14 feet).

REMARKS.—Records good except those for estimated periods, which are fair. Diversions for irrigation and power above station.

Daily and monthly discharge, in second-feet, 1929–30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug	Sept.
1	7,890	5,270	4,210				3,100	16,100	40,200	10,600	8,910	3,180
2	7,740	5,130	4,240				3,260	16,300	38,100	9,260	9,920	2,900
3	7,710	4,860	4,350	2,650	2,950	3,300	3,490	19,100	35,600	8,600	10,100	2,660
4	7,500	4,840	3,920				3,570	21,900	27,000	7,830	11,300	2,520
5	7,360	5,130	3,790		3,070		3,940	20,500	21,900	7,470	8,410	2,610
6	7,210	5,010	3,750	2,800		3,140	4,790	17,400	20,100	7,270	7,860	4,110
7	7,040	5,010	3,790	2,860		3,330	7,120	15,000	22,400	6,720	7,380	3,900
8	6,560	5,200	3,710	2,860		3,260	10,800	13,200	26,000	6,250	9,620	4,480
9	6,780	5,180	3,790	2,790		3,080	14,200	12,600	29,100	5,730	11,700	4,320
10	7,270	5,270	3,900	2,650		2,950	18,900	11,600	30,700	5,540	12,400	4,110
11	8,010	5,300	3,770	2,360		2,900	21,700	10,800	30,400	5,620	11,500	4,000
12	8,130	4,980	3,900	2,440		2,920	20,800	9,920	30,700	5,500	10,300	3,830
13	7,830	4,860	3,770	2,790	3,800	2,930	20,200	9,430	32,500	7,120	13,800	3,570
14	7,500	4,460	3,670	2,790		3,080	20,700	8,910	34,400	7,410	12,600	3,310
15	7,060	4,210	3,590	2,880		3,220	21,200	8,320	34,000	8,290	12,300	3,180
16	6,890	4,190	3,590	2,790		3,390	21,100	9,140	31,400	8,350	12,600	3,100
17	7,270	4,300	3,410			3,490	18,700	11,400	29,100	6,920	13,000	3,010
18	6,810	4,500	3,390	2,000		3,790	15,500	13,200	27,900	5,860	11,200	2,810
19	6,560	4,660	3,370			3,630	13,400	13,500	27,400	6,120	9,460	2,720
20	6,390	4,630	3,270			3,590	13,200	13,500	27,400	7,120	8,220	2,650
21	5,620	4,590			4,600	3,270	13,900	13,400	25,500	8,600	7,360	2,560
22	5,910	4,480				3,310	15,900	14,800	25,500	7,980	6,040	2,970
23	5,570	4,240		1,500		3,490	18,600	19,800	24,400	7,890	5,440	3,180
24	5,370	4,000	2,700			3,490	21,400	19,400	22,900	7,500	5,080	2,830
25	5,080	3,940			3,950	3,590	24,100	17,400	19,800	6,950	4,770	3,050
26	4,960	3,730				3,390	25,400	17,600	16,400	6,560	4,410	3,630
27	4,860	3,860	2,300	2,200		3,510	23,300	21,000	14,300	5,910	4,170	3,610
28	5,010	4,110				3,470	22,100	25,500	12,800	5,520	4,040	3,650
29	5,080	4,090	2,400		-------	3,350	20,900	29,400	11,900	5,570	3,790	3,670
30	5,130	4,170			-------	2,990	18,200	32,800	11,200	6,220	3,490	5,370
31	5,200	-------			-------	2,990	-------	37,200	-------	7,040	3,370	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	8,130	4,860	6,530	403,000
November	5,300	3,730	4,610	274,000
December	4,350	----------	3,320	204,000
January	----------	----------	2,360	145,000
February	----------	----------	3,720	207,000
March	3,790	2,900	3,290	202,000
April	25,400	3,100	15,400	916,000
May	37,200	8,320	16,800	1,030,000
June	40,200	11,200	26,000	1,550,000
July	10,600	5,500	7,070	435,000
August	13,800	3,370	8,530	524,000
September	5,370	2,520	3,390	201,000
The year	40,200	----------	8,420	6,090,000

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, 1930.

EXTREMES.—Maximum discharge during year, 73,300 second-feet June 3 (gage height, 15.15 feet); minimum, 2,400 second-feet Jan. 24 (gage height, 5.7 feet).

1921–1930: 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).

Flood of 1884 at mouth of Paria River was 3,137.1 feet above mean sea level.

REMARKS.—Records excellent. Discharge estimated during periods of ice effect, Dec. 26 to Jan. 10, Jan. 12–15, 20–27, 29, Feb. 1. Diversions for irrigation of about 1,500,000 acres above station.

Daily and monthly discharge, in second-feet, 1929–30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	22,100	10,200	6,920	4,700	5,150	12,600	9,820	43,900	58,900	24,900	15,700	10,000
2	20,600	10,400	7,300	4,600	6,160	11,300	9,150	41,100	69,600	23,900	15,700	9,580
3	19,200	10,400	7,540	4,500	6,960	10,300	8,810	38,900	71,400	22,000	16,100	9,340
4	18,100	10,300	7,790	4,600	7,230	9,540	8,810	36,900	65,600	19,600	18,800	9,900
5	16,900	10,200	8,150	5,000	6,520	9,150	8,960	38,500	57,900	17,600	21,500	9,780
6	16,000	9,860	8,620	5,600	6,190	9,000	8,960	41,200	53,000	17,000	26,600	9,740
7	15,600	9,740	8,660	5,900	6,030	8,920	9,150	40,000	47,900	15,500	22,800	10,600
8	15,300	10,300	8,040	6,000	6,160	8,580	10,100	36,800	45,200	14,600	19,700	13,800
9	15,000	10,700	7,930	6,100	6,450	8,360	11,500	34,000	46,000	14,000	18,000	13,200
10	14,500	10,400	7,720	6,400	6,720	8,330	16,400	32,000	52,600	13,700	30,300	13,700
11	14,500	10,600	7,720	6,130	6,790	8,470	26,200	29,900	55,300	13,200	39,600	11,800
12	14,800	10,500	7,790	5,700	6,920	8,290	34,600	28,100	57,900	13,000	45,000	10,100
13	15,600	10,400	7,860	5,400	7,190	7,970	40,000	26,000	58,000	13,000	41,600	9,156
14	16,700	10,400	7,790	5,200	7,610	7,900	39,600	24,600	54,700	13,100	36,000	8,580
15	16,400	10,100	7,900	5,100	8,080	7,790	38,500	23,600	60,200	14,500	33,400	8,220
16	15,900	10,000	8,260	5,220	8,810	7,930	40,300	21,500	62,600	15,000	30,800	7,930
17	15,900	9,740	8,470	5,420	9,150	7,930	41,200	20,500	60,100	14,100	27,600	7,610
18	15,300	9,110	8,290	5,540	8,960	8,110	39,900	20,200	58,900	15,000	28,200	7,260
19	16,300	8,660	8,080	5,330	8,810	8,400	39,000	22,400	54,700	17,600	32,400	7,060
20	15,300	8,730	7,820	5,000	8,700	9,110	35,600	25,000	52,800	17,600	32,100	6,890
21	14,600	8,960	7,640	4,400	8,920	9,500	32,400	25,200	49,800	17,300	28,300	6,580
22	14,000	9,230	7,330	3,800	9,660	9,310	29,700	24,600	48,500	17,300	23,900	6,260
23	13,400	9,110	6,960	3,500	10,100	9,230	29,300	24,100	48,300	17,300	20,800	6,160
24	12,900	8,920	6,190	2,900	11,100	9,740	33,000	28,000	43,200	21,300	18,400	6,030
25	12,500	8,730	5,750	2,900	14,700	9,980	37,600	34,700	41,700	19,800	17,200	6,060
26	12,100	7,900	5,250	2,900	16,200	10,100	42,300	35,200	42,300	17,400	15,000	6,680
27	11,700	7,330	4,700	4,100	13,700	10,100	44,500	32,600	38,400	17,000	13,600	6,580
28	11,100	7,020	4,200	4,220	13,700	10,300	45,200	34,300	32,800	15,900	12,800	6,290
29	11,200	6,890	4,100	4,050	-------	10,200	44,700	38,200	30,900	14,900	12,500	8,400
30	10,700	6,820	4,300	4,020	-------	10,300	44,300	43,300	27,300	13,000	11,800	9,040
31	10,400	-------	4,600	4,390	-------	10,100	-------	51,100	-------	15,600	10,600	-------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	22,100	10,400	15,000	922,000
November	10,700	6,820	9,390	559,000
December	8,660	4,100	7,090	436,000
January	6,400	2,900	4,790	295,000
February	16,200	5,150	8,670	481,000
March	12,600	7,790	9,250	569,000
April	45,200	8,810	28,700	1,700,000
May	51,100	20,200	32,100	1,980,000
June	71,400	27,300	51,600	3,070,000
July	24,900	13,000	17,200	1,060,000
August	45,000	10,600	23,800	1,460,000
September	13,800	6,030	8,740	520,000
The year	71,400	2,900	18,000	13,100,000

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

LOCATION.—Water-stage recorder at Kaibab Bridge, a quarter of a 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, 1930.

EXTREMES.—Maximum discharge during year, 71,000 second-feet June 4 (gage height, 21.6 feet); minimum, 2,740 second-feet Jan. 26 (gage height, 1.30 feet).

1922–1930: 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, 1929–30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	22,900	10,800	7,230	4,900	4,710	13,400	10,900	44,100	54,800	26,600	17,500	10,200
2	21,600	10,800	7,410	5,080	5,390	12,300	10,600	42,200	65,900	24,900	18,100	9,680
3	20,200	10,800	7,780	4,930	6,480	11,500	9,910	39,300	69,000	23,200	17,800	9,350
4	18,900	10,800	8,020	4,880	7,200	10,800	9,500	36,900	67,400	21,500	19,000	9,370
5	17,700	10,800	8,340	4,920	7,200	10,100	9,500	37,500	60,500	19,600	23,000	10,200
6	16,500	10,700	8,680	5,340	6,600	9,540	9,540	40,900	54,800	18,000	24,100	9,830
7	15,800	10,400	8,840	5,930	6,380	9,200	9,440	41,400	49,800	16,500	28,100	10,000
8	15,200	10,300	8,740	6,240	6,380	9,030	10,300	38,500	46,200	15,300	21,400	13,500
9	15,100	10,600	8,360	6,360	6,580	8,760	11,300	36,000	46,200	14,600	27,300	14,500
10	14,800	10,700	8,280	6,440	6,810	8,710	13,800	33,700	49,800	14,100	30,000	14,000
11	14,500	10,600	8,130	6,700	7,000	8,950	21,000	31,300	53,600	14,000	44,400	13,300
12	14,400	10,800	8,130	6,440	7,120	9,030	30,100	29,600	55,600	13,200	54,800	11,200
13	14,900	10,800	8,120	6,090	7,280	8,810	39,100	27,600	55,500	15,700	47,900	9,860
14	16,100	10,700	8,170	5,780	7,580	8,490	40,200	25,800	55,200	24,400	43,300	9,050
15	16,700	10,500	8,150	5,610	7,890	8,250	39,100	24,200	57,900	19,500	35,900	8,470
16	16,300	10,200	8,390	5,550	8,440	8,170	40,100	22,800	61,600	16,700	34,700	8,080
17	15,600	10,000	8,450	5,690	9,150	8,280	40,300	21,500	61,400	16,900	29,300	7,760
18	16,800	9,760	8,550	5,850	9,440	8,290	41,100	20,600	58,500	15,400	27,600	7,400
19	16,900	9,320	8,470	6,030	9,300	8,550	39,600	21,400	55,700	16,900	29,500	7,120
20	16,900	8,930	8,330	5,640	9,280	8,890	36,900	24,400	53,800	25,200	32,900	6,980
21	15,400	8,950	8,180	5,340	9,280	9,810	33,100	25,800	51,600	22,800	30,000	6,840
22	14,600	9,220	7,890	4,860	9,540	10,100	30,100	25,400	50,600	21,100	25,400	6,550
23	14,000	9,350	7,590	4,160	10,200	10,100	28,600	24,900	47,500	19,600	22,200	6,320
24	13,300	9,320	7,160	3,860	10,700	10,100	29,300	25,400	44,700	21,600	20,100	6,170
25	12,700	9,120	6,450	3,260	11,500	11,300	34,400	32,100	43,400	21,900	18,200	6,070
26	12,400	8,890	5,960	3,250	16,500	11,400	39,200	37,000	42,500	19,700	16,400	6,160
27	11,900	8,330	5,580	3,200	14,600	11,500	42,100	34,300	40,000	17,900	14,600	6,880
28	11,600	7,890	4,890	4,430	13,800	11,500	44,400	34,200	36,000	16,500	13,500	6,860
29	11,300	7,480	4,540	4,600	------	11,400	44,600	33,000	32,200	15,600	12,500	6,720
30	11,200	7,300	4,370	4,420	------	11,300	44,000	42,600	29,200	15,400	12,100	9,030
31	10,900	------	4,660	4,360	------	11,200	------	48,300	------	18,100	11,200	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	22,900	10,900	15,400	946,000
November	10,800	7,300	9,810	583,000
December	8,840	4,370	7,480	460,000
January	6,700	3,200	5,170	318,000
February	16,500	4,710	8,650	481,000
March	13,400	8,170	9,960	612,000
April	44,600	9,440	28,100	1,670,000
May	48,300	20,600	32,500	2,000,000
June	69,000	29,200	51,700	3,080,000
July	26,600	13,200	18,800	1,160,000
August	54,800	11,200	25,900	1,590,000
September	14,500	6,070	8,910	530,000
The year	69,000	3,200	18,500	13,400,000

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 (revised).

RECORDS AVAILABLE.—February, 1917, to September, 1930.

EXTREMES.—Maximum discharge during year, 65,100 second-feet June 6 (gage height, 19.74 feet); minimum discharge, 3,280 second-feet Jan. 31; minimum gage height, 7.95 feet Sept. 7.

1917–1930: 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, 1929–30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	26,600	10,900	7,820	5,460	3,960	16,000	11,100	43,300	38,400	32,600	15,300	13,100
2	24,100	10,700	7,600	4,970	4,540	13,600	11,300	42,400	44,200	30,800	17,600	12,400
3	23,000	10,700	7,020	4,810	4,610	12,700	10,600	42,400	50,600	27,000	17,100	11,600
4	21,900	10,400	6,960	4,990	4,630	12,700	10,700	42,200	57,000	25,500	18,300	10,700
5	20,400	10,500	7,350	5,040	4,730	11,900	10,200	39,600	61,400	24,000	19,900	10,400
6	19,100	10,400	7,470	5,230	5,380	11,400	9,470	36,800	64,000	21,800	20,500	9,810
7	17,400	10,400	7,920	5,200	6,330	10,400	9,070	37,100	60,200	19,700	22,400	9,440
8	16,300	10,100	7,980	5,150	7,140	9,510	8,940	38,700	56,800	18,200	23,000	10,200
9	15,300	10,300	8,400	5,300	7,080	9,270	9,170	40,200	50,000	17,700	28,600	11,100
10	15,000	10,200	8,520	5,490	6,510	9,240	9,130	38,500	47,000	16,400	27,000	11,800
11	14,600	10,100	8,940	6,660	6,390	8,430	9,710	36,000	46,200	15,200	29,400	13,800
12	14,300	10,000	8,680	6,750	6,450	8,590	10,500	33,900	46,500	15,200	29,700	14,100
13	14,300	10,200	8,400	6,750	6,630	7,950	14,200	31,800	51,000	14,200	42,200	14,200
14	13,700	10,000	8,400	6,870	6,840	8,010	25,000	28,600	52,200	13,900	55,000	13,300
15	13,500	10,100	8,490	6,900	6,900	8,430	34,400	27,300	53,800	13,200	48,800	11,300
16	14,100	10,300	8,300	6,900	6,990	9,340	37,700	25,400	53,400	18,500	44,600	10,100
17	15,200	10,000	7,980	6,330	7,170	8,720	38,800	24,000	54,200	22,300	36,600	9,540
18	15,800	9,850	8,010	5,960	7,410	8,200	38,200	23,000	55,200	18,400	34,400	9,340
19	15,200	9,880	8,490	6,050	7,880	8,170	38,000	21,900	59,600	15,800	29,900	8,460
20	14,700	9,880	8,840	5,940	8,490	8,110	39,000	20,500	58,200	16,000	27,000	8,110
21	16,100	9,580	8,360	6,050	8,810	8,240	39,000	20,000	55,800	14,500	27,800	8,200
22	16,400	9,070	8,170	6,020	8,940	8,170	35,700	22,400	53,700	19,600	33,000	7,820
23	15,900	8,720	8,240	5,820	8,780	8,680	32,200	25,400	52,400	24,800	31,800	7,050
24	14,500	8,720	8,080	5,630	8,840	9,200	31,000	24,600	48,800	21,800	28,700	7,350
25	13,600	8,780	7,790	5,540	9,070	9,540	29,100	24,800	46,800	19,900	24,800	6,750
26	12,600	9,270	8,010	5,170	10,000	9,750	28,600	24,100	43,900	20,200	22,200	6,540
27	12,100	9,300	7,850	4,630	10,300	9,610	32,200	27,500	42,400	22,000	19,700	6,420
28	11,700	8,880	7,200	4,220	11,300	10,100	36,600	32,800	41,100	21,100	17,600	6,220
29	11,600	8,750	6,540	3,940	-------	10,700	38,800	33,400	41,000	18,400	16,000	6,270
30	11,300	8,140	6,220	3,610	-------	10,900	42,600	32,000	36,400	16,700	14,700	6,420
31	11,400	-------	5,960	3,410	-------	11,000	-------	34,600	-------	16,200	13,800	-------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	26,600	11,300	15,900	975,000
November	10,900	8,140	9,800	583,000
December	8,940	5,960	7,870	484,000
January	6,900	3,410	5,510	339,000
February	11,300	3,960	7,220	401,000
March	16,000	7,950	9,890	608,000
April	42,600	8,940	24,400	1,450,000
May	43,300	20,000	31,500	1,930,000
June	64,000	36,400	50,700	3,020,000
July	32,600	13,200	19,700	1,210,000
August	55,000	13,800	27,000	1,660,000
September	14,200	6,220	9,730	579,000
The year	64,000	3,410	18,300	13,200,000

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 (revised).

RECORDS AVAILABLE.—April, 1878, to September, 1930. Gage heights only, prior to January, 1902.

EXTREMES.—Maximum discharge during year, 54,500 second-feet June 9; maximum gage height, 25.22 feet June 8; minimum discharge, 1,610 second-feet Feb. 3 (gage height, 16.41 feet).

1902–1930: Maximum daily mean discharge, 240,000 second-feet Jan. 22, 1916; minimum discharge, 857 second-feet Jan. 2. 1929.

REMARKS.—Records for river excellent; for canal waste fair. Diversions for irrigation above station. Considerable water is diverted around gaging station on account of power development on main canal of Yuma reclamation project. Water not required for irrigation is returned to river below station; amount returned is shown in table of monthly discharge. Records of water thus returned are furnished by United States Bureau of Reclamation.

Daily and monthly discharge, in second-feet, 1929–30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	30,200	9,700	6,720	3,660	2,180	8,250	8,250	36,500	29,600	36,100	13,900	11,300
2	25,200	9,040	6,460	3,460	2,000	9,950	8,420	38,700	32,200	32,700	12,400	10,600
3	24,100	9,270	6,230	3,480	1,770	13,300	8,420	40,200	36,000	29,300	12,600	9,000
4	22,400	8,730	5,410	2,780	2,520	12,100	8,770	40,000	39,600	25,400	14,000	8,290
5	21,000	8,820	5,220	2,960	2,750	10,900	8,170	39,500	44,800	25,000	14,500	8,210
6	20,500	7,920	5,440	2,830	2,670	11,000	7,920	40,000	47,000	22,000	14,600	6,660
7	18,600	8,080	5,000	3,130	2,700	10,200	7,040	37,600	49,600	21,400	16,700	6,620
8	16,700	8,340	5,540	3,030	2,750	8,860	7,000	35,000	51,900	19,900	18,500	6,420
9	15,600	8,000	5,900	3,150	4,090	8,340	6,300	35,800	53,600	17,800	19,200	9,950
10	14,900	7,920	6,020	3,200	5,220	7,720	6,300	35,800	51,300	16,400	21,300	8,510
11	14,200	7,520	6,170	3,060	5,460	7,260	6,760	36,300	48,600	14,200	24,200	7,920
12	13,300	7,760	6,520	3,620	4,780	6,490	6,590	34,900	43,400	12,400	23,400	8,510
13	13,000	7,330	7,220	5,390	4,230	6,420	6,790	33,700	43,600	12,500	25,200	9,950
14	12,800	7,520	6,460	5,680	4,290	6,170	7,680	30,400	43,600	12,200	31,700	10,400
15	12,500	7,920	6,080	5,760	4,330	5,790	13,500	29,700	46,400	11,200	42,400	10,300
16	11,600	7,720	6,020	5,840	4,760	6,140	24,600	28,300	49,000	10,500	47,700	10,100
17	12,000	8,170	6,330	5,340	4,650	7,150	31,100	26,200	50,700	10,300	43,700	8,040
18	12,100	8,130	5,870	5,140	4,800	7,300	34,600	24,600	49,400	17,300	37,400	7,000
19	13,000	7,960	5,960	4,760	4,500	6,390	33,900	22,400	50,100	16,900	33,000	6,550
20	13,700	7,640	6,200	4,230	4,870	6,360	34,700	21,000	51,600	14,800	30,600	5,700
21	13,000	7,560	5,680	3,990	5,680	6,690	34,500	18,700	53,000	13,600	25,400	5,540
22	13,300	8,080	6,230	3,740	5,840	6,490	35,300	17,800	52,800	13,200	24,100	5,290
23	14,200	7,180	6,260	3,860	6,550	6,330	35,300	18,600	51,200	11,800	27,100	5,140
24	14,500	6,830	6,140	3,790	6,930	6,140	32,900	19,700	49,200	18,000	29,000	4,200
25	14,000	6,230	5,730	3,900	6,900	6,140	30,200	22,300	47,600	19,400	27,100	3,990
26	12,500	6,620	5,870	4,070	7,040	6,390	28,200	22,100	44,400	18,000	24,300	4,250
27	11,700	6,590	5,680	4,070	6,590	7,180	27,100	22,100	44,300	17,000	20,700	3,860
28	10,900	7,300	5,260	3,650	7,520	7,150	27,000	21,400	40,900	17,900	18,000	3,760
29	10,400	7,450	5,190	3,150	-------	6,660	30,400	27,400	40,000	18,000	15,700	3,500
30	10,200	7,000	4,710	2,650	-------	7,220	33,200	30,500	39,000	17,000	14,000	3,580
31	9,750	-------	4,440	2,540	-------	8,000	-------	29,800	-------	15,000	12,900	-------

Month	Discharge in second-feet			Run-off in acre-feet		
	Maximum	Minimum	Mean	At Yuma	Canal waste returned below Yuma	Total
October	30,200	9,750	15,200	936,000	89,900	1,030,000
November	9,700	6,230	7,810	465,000	90,500	556,000
December	7,220	4,440	5,870	361,000	94,700	455,000
January	5,840	2,540	3,870	238,000	82,200	320,000
February	7,520	1,770	4,580	255,000	69,500	324,000
March	13,300	5,790	7,760	477,000	85,500	562,000
April	35,300	6,300	19,700	1,170,000	86,000	1,260,000
May	40,200	17,800	29,600	1,820,000	88,900	1,910,000
June	53,600	29,600	45,800	2,730,000	78,300	2,810,000
July	36,100	10,300	18,000	1,110,000	75,500	1,190,000
August	47,700	12,400	23,700	1,460,000	86,100	1,550,000
September	11,300	3,500	7,100	423,000	85,800	509,000
The year	53,600	1,770	15,800	11,400,000	1,010,000	12,500,000

FRASER RIVER NEAR WEST PORTAL, COLO.

LOCATION.—Water-stage recorder in NE. ¼ sec. 4, T. 2 S., R. 75 W., 1½ miles northwest of West Portal and 7 miles below mouth of Buck Creek.

DRAINAGE AREA.—28 square miles.

RECORDS AVAILABLE.—September, 1910, to September, 1930.

EXTREMES.—Maximum discharge during year, 331 second-feet June 12 (gage height, 2.18 feet); minimum, 6 second-feet Feb. 26 to Apr. 8.

1910–1930: Maximum discharge recorded, 820 second-feet June 13, 1918 (gage height, 2.9 feet); minimum, 2 second-feet Mar. 30, 1912 (gage height, 0.60 foot).

REMARKS.—Diversions for irrigation above station. Complete records furnished by State engineer of Colorado.

Daily and monthly discharge, in second-feet, 1929–30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	24	16	12	10	7	6	6	92	212	110	64	35
2	23	14	13	10	6	6	6	92	177	106	61	34
3	25	12	12	10	7	7	6	77	168	102	56	32
4	24	14	12	9	7	6	7	72	168	97	56	35
5	24	14	11	9	7	6	9	67	166	88	54	35
6	24	16	11	8	7	6	9	57	168	82	68	34
7	24	17	11	8	7	6	14	54	185	78	62	32
8	24	16	11	8	8	6	25	56	194	70	58	31
9	24	16	11	7	7	6	20	49	203	68	56	30
10	23	16	11	7	10	6	27	46	213	65	64	29
11	23	16	11	7	6	6	23	41	246	64	62	28
12	22	16	11	8	7	6	26	44	274	62	61	26
13	22	16	10	8	7	6	24	46	271	44	68	25
14	21	16	10	7	7	6	41	57	266	45	99	23
15	21	15	10	7	7	6	34	64	243	66	86	23
16	21	15	10	7	7	6	30	62	228	80	83	22
17	20	15	11	7	8	6	26	54	228	75	74	22
18	20	14	11	7	8	6	22	52	232	63	68	23
19	20	15	11	7	7	6	25	60	235	62	64	23
20	20	14	11	7	7	6	26	83	198	64	59	23
21	20	14	11	8	7	6	28	118	195	65	55	23
22	20	14	11	7	7	6	37	84	210	62	54	24
23	20	13	11	7	7	6	40	83	155	59	51	24
24	20	13	11	7	7	6	56	84	160	64	46	24
25	20	13	11	7	7	6	44	90	164	62	43	24
26	20	12	10	7	6	6	59	102	139	56	42	26
27	20	12	11	7	6	6	65	132	120	54	42	26
28	20	12	10	7	6	6	59	155	120	64	42	23
29	20	12	10	7	------	6	60	199	118	70	40	22
30	20	12	10	7	------	6	68	241	116	77	38	21
31	20	------	10	7	------	6	------	256	------	68	36	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	25	20	21.6	1,330
November	17	12	14.3	851
December	13	10	10.0	670
January	10	7	7.61	468
February	10	6	7.0	389
March	7	6	6.03	371
April	68	6	30.7	1,830
May	256	41	89.3	5,490
June	274	116	192	11,400
July	110	44	70.7	4,350
August	99	36	58.5	3,600
September	35	21	26.7	1,590
The year	274	6	44.7	32,300

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, 1930.

EXTREMES.—Maximum discharge during year, 592 second-feet May 31 (gage height, 2.89 feet); minimum occurred during winter.

1910–1930: 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.—Practically no diversions above station. Records excellent except those for winter, which were estimated on basis of three current meter measurements and temperature records.

Daily and monthly discharge, in second-feet, 1929–30

Day	Oct.	Apr.	May	June	July	Aug.	Sept.
1	80		163	534	257	260	112
2	79		186	406	254	254	107
3	79	60	222	342	242	213	106
4	79		208	310	222	208	104
5	78		181	294	205	230	104
6	75		163	298	194	224	107
7	73		152	351	186	216	109
8	72	80	148	402	172	194	112
9	72		138	420	167	181	120
10	75		127	411	167	172	109
11	75	85	119	420	169	169	106
12	75	90	115	471	167	172	101
13	72	90	114	517	208	194	92
14	69	95	114	499	306	280	90
15	68	98	122	461	227	317	90
16	66	107	140	435	179	277	89
17	64	100	154	435	165	242	88
18	64	86	156	416	184	216	85
19	63	80	154	416	197	197	83
20	60	73	150	392	181	181	82
21	58	80	150	397	176	167	80
22	57	106	176	402	199	161	79
23	55	127	189	374	194	154	79
24	51	150	179	338	181	148	80
25	50	176	172	310	194	140	80
26	48	172	186	287	181	138	79
27	51	172	224	280	169	134	78
28	54	169	287	267	169	129	78
29	54	163	321	260	197	124	78
30	52	161	397	257	224	124	76
31	51	------	528	------	227	119	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	80	48	65.1	4,000
November	----------	----------	50	2,980
December	----------	----------	35	2,150
January	----------	----------	15	922
February	----------	----------	20	1,110
March	----------	----------	25	1,540
April	176	----------	103	6,130
May	528	114	188	11,600
June	534	257	380	22,600
July	306	165	199	12,200
August	317	119	191	11,700
September	120	76	92.8	5,520
The year	534	----------	114	82,500

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, 1930.

EXTREMES.—Maximum discharge during year, 780 second-feet June 12 (gage height, 3.8 feet); minimum occurred during winter.

1910–1919, 1929–30: Maximum discharge, 1,170 second-feet June 15, 1918; minimum, 3 second-feet Nov. 9, 1912.

REMARKS.—Records excellent except those for December, January, February, March, Apr. 1–13, which were estimated because of ice. Snake River ditch diverts about 30 second-feet above station for power development.

Daily and monthly discharge, in second-feet, 1929–30

Day	Dec.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1					58	280	170	149	46
2					78	220	156	128	44
3				25	86	208	154	122	42
4					65	208	144	128	49
5	14				58	245	130	124	45
6					49	305	116	116	50
7					46	320	107	108	50
8				40	42	305	103	116	71
9					35	385	101	105	50
10					31	390	103	108	45
11				55	31	468	110	118	42
12		15	14	60	31	548	105	124	39
13				65	32	520	178	176	35
14				67	39	480	156	203	31
15				54	48	438	114	178	29
16				38	49	420	103	156	28
17				32	51	425	101	139	27
18				27	50	450	124	126	25
19				24	51	430	108	110	23
20				26	51	400	108	96	23
21				36	81	410	124	88	25
22				46	96	400	124	84	26
23				49	72	320	103	81	28
24				52	77	276	98	74	23
25				58	96	241	92	71	23
26				52	130	227	81	75	21
27				54	176	210	78	62	22
28				47	238	210	124	57	21
29				45	284	194	144	57	18
30				48	362	184	151	54	17
31					430		156	49	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
December			14	861
January			12	738
February			15	833
March			14	861
April	67	24	42.0	2,500
May	430	31	97.5	6,000
June	546	184	341	20,300
July	178	78	121	7,440
August	203	49	109	6,700
September	71	17	33.9	2,020
The period				48,300

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 to September, 1930.

EXTREMES.—Maximum discharge during year, 1,400 second-feet May 30 (gage height, 5.27 feet).

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

REMARKS.—Records excellent. Small diversions for irrigation above station. No regulation.

Daily and monthly discharge, in second-feet, 1930

Day	Apr.	May	June	July	Aug.	Sept.	Day	Apr.	May	June	July	Aug.	Sept.
1	-------	294	660	200	267	89	16	153	246	572	139	214	67
2	-------	393	472	191	202	86	17	123	221	544	134	194	66
3	-------	435	423	180	197	84	18	108	185	504	197	174	64
4	-------	258	393	172	200	89	19	105	180	510	166	161	62
5	-------	218	411	158	191	94	20	101	191	472	156	146	61
6	-------	194	565	144	202	98	21	127	330	459	172	139	66
7	-------	174	735	132	174	92	22	161	364	429	191	132	70
8	-------	161	742	123	153	98	23	194	232	376	151	130	79
9	-------	153	720	114	153	86	24	249	249	320	180	121	74
10	-------	141	668	114	158	80	25	267	352	276	153	116	73
11	-------	130	735	127	177	76	26	232	510	254	134	112	71
12	-------	127	830	139	177	74	27	254	645	238	125	108	74
13	-------	136	766	280	208	71	28	232	750	235	161	101	74
14	185	172	682	232	272	70	29	228	918	224	202	99	70
15	177	218	593	161	285	69	30	254	1,040	208	218	98	69
							31	-------	990	-------	174	92	-------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
April 14–30	267	101	185	6,240
May	1,040	127	342	21,000
June	830	208	500	29,800
July	280	114	165	10,100
August	285	92	166	10,200
September	98	61	76.5	4,550
The period				81,900

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.

DRAINAGE AREA.—1,460 square miles.

RECORDS AVAILABLE.—April, 1906, to September, 1909; September, 1910, to September, 1930.

EXTREMES.—Maximum discharge during year, 8,840 second-feet June 13 (gage height, 5.79 feet); minimum, 316 second-feet Mar. 3 (gage height, 0.97 foot). 1906–1909, 1910–1930: Maximum discharge, 17,600 second-feet June 14, 1918, June 14, 1921; minimum, 225 second-feet Dec. 16, 1906 (gage height, 1.15 feet).

REMARKS.—Records excellent except those for Nov. 4–10, 17–30, Dec. 1–5, Jan. 16 to Feb. 5, which were estimated. Diversions for irrigation above station.

Daily and monthly discharge, in second-feet, 1929–30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,490	915	600	512	405	349	420	1,640	4,800	2,580	1,960	807
2	1,450	897	610	496	405	328	458	1,930	3,470	2,320	1,740	771
3	1,460	982	580	428	398	322	488	2,220	2,940	2,180	1,760	753
4	1,540	1,000	560	435	398	342	520	1,870	2,760	2,100	1,640	735
5	1,430	1,020	560	528	398	342	602	1,660	2,800	2,010	1,520	807
6	1,370	1,050	594	480	398	342	717	1,450	3,530	1,930	1,490	843
7	1,320	1,070	594	465	412	342	888	1,330	4,560	1,880	1,600	825
8	1,330	1,050	577	465	398	342	1,070	1,230	5,310	1,770	1,620	816
9	1,460	1,020	594	391	405	377	1,270	1,150	5,720	1,720	1,540	798
10	1,490	960	568	356	384	398	1,290	1,090	4,800	1,660	1,520	789
11	1,480	924	560	450	391	349	1,200	1,070	5,580	1,680	1,540	762
12	1,410	897	552	504	412	384	1,260	982	6,700	1,690	1,530	744
13	1,350	825	552	488	405	398	1,220	924	7,290	2,050	1,750	735
14	1,300	780	552	472	412	405	1,360	934	6,700	2,130	1,950	708
15	1,280	861	536	480	405	405	1,400	1,120	5,580	1,740	1,990	690
16	1,250	897	536	455	398	442	1,220	1,370	5,440	1,570	1,700	663
17	1,240	920	552	442	398	465	1,130	1,450	5,310	1,520	1,590	654
18	1,230	950	458	420	391	420	1,040	1,360	5,180	1,640	1,470	654
19	1,210	920	398	412	398	391	1,040	1,290	5,580	1,850	1,330	654
20	1,180	810	450	412	391	391	1,010	1,210	5,050	2,020	1,230	663
21	1,130	740	405	417	405	405	1,230	1,790	5,310	1,790	1,110	645
22	1,100	670	377	422	405	428	1,480	2,420	5,050	1,700	1,040	654
23	1,060	660	420	428	412	428	1,620	2,470	4,440	1,550	1,010	699
24	1,020	660	520	428	450	405	1,820	1,790	3,490	1,700	982	708
25	1,000	700	488	428	412	412	1,970	1,950	3,000	1,580	934	816
26	1,030	720	552	425	370	420	1,810	2,650	2,740	1,430	944	798
27	1,020	720	512	422	405	391	1,880	3,510	2,600	1,370	944	780
28	1,010	680	488	422	391	377	1,790	4,800	2,690	1,390	897	753
29	1,000	650	488	422	------	398	1,620	5,580	2,910	1,480	843	735
30	982	620	496	422	------	405	1,540	6,700	2,630	1,670	843	735
31	982	------	504	405	------	412	------	6,990	------	1,600	834	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	1,540	982	1,240	76,200
November	1,070	620	852	50,700
December	610	377	524	32,200
January	528	356	443	27,200
February	450	370	402	22,300
March	465	322	388	23,900
April	1,970	420	1,210	72,000
May	6,990	924	2,190	135,000
June	7,290	2,600	4,470	266,000
July	2,580	1,370	1,780	109,000
August	1,990	834	1,380	84,800
September	843	645	740	44,000
The year	7,290	322	1,300	943,000

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, 1930.

EXTREMES.—Maximum discharge during year, 2,040 second-feet June 10 (gage height, 3.81 feet); minimum occurred during winter.

1910–1930: Maximum discharge, 3,760 second-feet June 9, 1920 (gage height, 5.0 feet); minimum, 50 second-feet on several days during August, 1913 (gage height, 1.2 feet).

REMARKS.—Records good except those for period Dec. 18 to Feb. 20, which were estimated because of ice. Diversions for irrigation above station.

Daily and monthly discharge, in second-feet, 1929–30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	382	260	168			125	110	634	1,070	520	468	215
2	403	260	172			122	140	736	960	498	382	215
3	424	260	161			122	160	762	914	482	357	233
4	389	260	168			161	200	576	950	512	333	251
5	351	251	175			168	250	505	1,160	460	310	282
				140	158							
6	333	251	172			161	300	438	1,410	431	351	282
7	468	251	175			179	350	445	1,560	424	375	266
8	452	246	168			154	410	410	1,600	403	315	260
9	417	242	164			154	431	363	1,700	375	315	242
10	369	242	168			154	505	351	1,360	369	389	215
11	351	242	172			288	520	357	1,480	363	445	208
12	363	238	172			140	634	363	1,640	417	396	187
13	339	224	175			215	694	363	1,610	445	417	191
14	333	211	164			140	702	424	1,480	617	498	172
15	345	211	158			147	694	528	1,320	417	482	168
				115	187							
16	363	215	191			147	617	608	1,290	369	410	168
17	333	211	179			140	351	528	1,240	315	357	168
18	327	271	175			140	327	490	1,180	327	315	161
19	333	233	161			140	396	468	1,090	351	310	154
20	339	191	150			140	512	842	1,010	482	310	158
21	339	175			175	140	806	1,030	1,080	490	282	158
22	315	161			175	140	869	694	1,090	584	271	164
23	315	164	136		164	122	915	702	1,000	460	271	228
24	238	175			154	122	923	860	824	396	260	207
25	215	168			154	110	779	1,020	728	403	288	211
				97								
26	215	175			154	110	736	1,290	685	363	310	207
27	260	168			154	106	806	1,340	651	403	271	220
28	260	172	145		134	98	660	1,640	626	431	246	215
29	251	183			-------	98	560	1,760	617	475	242	208
30	251	168			-------	100	536	1,800	568	452	251	211
31	260	-------			-------	105	-------	1,330	-------	438	233	-------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	468	215	3[illegible]	20,500
November	271	161	21[illegible]	12,900
December	191	----------	159	9,780
January	----------	----------	117	7,190
February	----------	----------	168	9,330
March	288	98	142	8,730
April	923	110	5[illegible]	31,500
May	1,800	351	76[illegible]	46,900
June	1,700	568	1,12[illegible]	67,200
July	617	315	43[illegible]	26,700
August	498	233	33[illegible]	20,700
September	282	154	20[illegible]	12,300
The year	1,800	----------	378	274,000

LAKE FORK AT LAKE CITY, COLO.

LOCATION.—Staff gage in sec. 34, T. 44 N., R. 4 W., near private bridge in Lake City, one-third mile above mouth of Henson Creek.

DRAINAGE AREA.—126 square miles.

RECORDS AVAILABLE.—April, 1918, to September, 1924; December, 1928, to July, 1930.

EXTREMES.—Maximum discharge during year not recorded; minimum, 7.5 second-feet Feb. 20.

1918–1924, 1928–1930: Maximum discharge, 1,560 second-feet June 12, 15, 1921; minimum, that of Feb. 20, 1930.

REMARKS.—Records fair. Flow naturally regulated by Lake San Cristobal, 4 miles upstream. Field data furnished by Mr. R. D. Webb.

Daily and monthly discharge, in second-feet, 1929–30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Apr.	May	June	July
1	160	73	29	22	14				
2	152	78	28	23	17				
3	145	72	27	23	20				
4	147	65	27	24	16			678	
5	150	58	28	26	15				
6	142	48	28	23	14				
7	142	48	29	15	14	35	161		154
8	142	49	28	15	14				
9	140	49	27	15	15				
10	142	50	27	14	16				
11	142	46	26	14	17			641	193
12	137	43	25	17	18				
13	118	39	23	20	11				
14	112	39	22	24	11	84	59		130
15	118	39	23	20	10				
16	108	38	25	15	10				
17	116	38	28	12	9				
18	110	36	25	10	9			419	162
19	104	35	21	12	8				
20	102	35	17	15	8				
21	102	35	17	14	9	118	109		179
22	86	34	17	13	9				
23	79	34	17	14	10				
24	73	34	17	16	10				
25	110	33	18	20	9			360	252
26	76	33	18	24	9				
27	74	33	19	20	9				
28	72	32	20	16	9	152	536		224
29	70	31	20	14					
30	69	30	21	14				233	
31	68		21	14					

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	160	68	113	6,950
November	78	30	43.6	2,590
December	29	17	23.2	1,430
January	26	10	17.4	1,070
February	20	8	12.1	672

HENSON CREEK AT LAKE CITY, COLO.

LOCATION.—Staff gage 1 mile above mouth and 1 mile southwest of Lake City.
DRAINAGE AREA.—82 square miles.
RECORDS AVAILABLE.—December, 1928, to July, 1930. April, 1918, to September, 1919, at station 1 mile downstream.
EXTREMES.—Maximum discharge during year not recorded; minimum, 13.5 second-feet Feb. 10.
1918–19, 1928–1930: Maximum discharge, 2,510 second-feet July 25, 1929; minimum, 9.6 second-feet Dec. 22, 1928.
REMARKS.—Records fair. No regulation. Field data furnished by R. D. Webb.

Daily and monthly discharge, in second-feet, 1929–30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Apr.	May	June	July
1	104	45	25	22	15				
2	107	57	24	22	15				
3	104	51	23	22	15				
4	104	47	23	22	15			516	
5	100	43	23	21	15				
6	100	40	23	21	15				
7	100	40	23	21	14	83	154		172
8	98	39	21	20	14				
9	91	38	20	18	14				
10	85	37	19	17	14				
11	87	37	19	16	14			451	144
12	85	37	20	16	14				
13	68	38	21	16	14				
14	68	38	22	15	14	71	44		140
15	78	39	22	15	14				
16	68	39	23	16	14				
17	64	40	24	18	14				
18	61	38	23	20	14			522	179
19	57	36	23	18	15				
20	52	34	23	18	15				
21	47	31	22	17	15	124	94		195
22	38	28	22	16	14				
23	36	25	22	15	14				
24	33	23	22	14	14				
25	32	24	22	14	14			302	187
26	33	26	22	14	14				
27	32	28	22	14	14				
28	32	27	22	15	14	142	551		164
29	32	26	22	15					
30	32	26	22	15				233	
31	32		22	15					

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	107	32	66.5	4,090
November	57	28	35.9	2,140
December	25	19	22.1	1,360
January	22	14	17.4	1,070
February	15	14	14.3	794

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 a short distance below mouth of Billy Creek.
DRAINAGE AREA.—419 square miles.
RECORDS AVAILABLE.—April, 1917, to September, 1930.
EXTREMES.—Maximum discharge during year, 1,940 second-feet June 12 (gage height, 4.00 feet); minimum occurred during winter.
1917–1930: 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, 1929–30

Day	Oct.	Nov.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	233	150	------	103	505	825	495	420	115
2	211	152	------	106	595	720	420	400	120
3	232	178	------	111	620	690	330	430	107
4	232	162	------	120	450	660	290	450	140
5	210	170	------	143	420	815	275	423	200
6	205	170	------	282	340	1,100	280	392	205
7	204	179	------	390	332	1,290	275	412	235
8	208	170	------	460	325	1,240	300	490	210
9	290	170	------	510	285	1,260	365	640	190
10	255	152	------	490	260	1,300	425	720	180
11	250	152	------	450	258	1,340	455	666	170
12	232	143	------	445	251	1,400	540	735	165
13	220	------	------	475	250	1,530	545	770	160
14	215	------	------	460	304	1,340	500	770	143
15	215	------	------	465	400	1,300	410	620	184
16	210	------	------	430	445	1,240	365	590	130
17	220	------	------	475	400	1,240	355	515	176
18	207	------	------	345	368	1,220	350	440	115
19	200	------	------	380	375	1,200	740	383	117
20	190	------	------	420	425	1,120	580	355	100
21	186	------	------	550	570	1,100	570	330	98
22	181	------	------	600	635	1,110	455	308	104
23	175	------	------	585	445	955	405	302	110
24	157	------	------	590	450	810	405	263	104
25	157	------	------	570	555	700	380	248	130
26	161	------	------	520	735	635	340	231	130
27	157	------	------	530	935	645	465	210	130
28	161	------	------	502	1,040	640	440	175	128
29	159	------	100	440	1,100	585	430	164	115
30	170	------	100	445	1,180	525	490	148	153
31	165	------	105	------	1,160	------	445	141	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	290	157	202	12,400
November 1–12	179	143	162	3,860
April	600	103	413	24,600
May	1,180	250	529	32,500
June	1,530	525	1,020	60,700
July	740	275	423	26,000
August	770	141	424	26,100
September	235	98	145	8,630

UNCOMPAHGRE RIVER AT DELTA, COLO.

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

DRAINAGE AREA.—1,110 square miles.

RECORDS AVAILABLE.—April, 1924, to September, 1930. From April, 1903, to October, 1923, at station 3½ miles upstream.

EXTREMES.—Maximum discharge during year, 2,340 second-feet Aug. 10 (gage height, 5.4 feet); minimum occurred during winter.

1903–1930: Maximum discharge, 2,880 second-feet June 29, 1927; minimum, 7 second-feet on several days in July, 1910.

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

Daily and monthly discharge, in second-feet, 1929–30

Day	Oct.	Nov.	Apr.	May	June	July	Aug.	Sept.
1	272	278	70	148	576	208	598	213
2	266	261	70	158	301	198	581	213
3	266	237	70	156	304	186	625	215
4	255	227	70	159	313	177	699	215
5	253	194	74	162	345	171	648	213
6	248	180	104	171	486	162	590	272
7	240	184	248	158	585	150	625	280
8	266	237	322	182	612	146	718	375
9	332	213	438	180	568	146	836	385
10	368	210	452	177	572	162	1,460	409
11	389	210	348	194	526	208	1,120	399
12	372	203	269	173	494	206	1,040	396
13	355	196	310	166	538	310	1,120	365
14	348	177	245	175	621	313	1,130	385
15	351	227	250	177	547	222	996	345
16	368	237	173	201	547	227	598	298
17	368	------	124	232	530	225	486	307
18	365	------	105	286	475	275	399	322
19	351	------	97	278	708	413	295	329
20	338	------	88	245	612	434	275	329
21	332	------	131	298	653	648	258	307
22	329	------	152	555	690	555	250	304
23	338	------	148	653	551	463	242	329
24	342	------	164	479	427	438	232	348
25	345	------	186	498	416	409	222	375
26	316	------	225	625	362	362	220	510
27	298	------	215	653	345	420	222	526
28	292	------	203	572	313	471	220	490
29	295	------	148	538	307	639	218	396
30	301	------	140	498	253	676	218	416
31	298	------	------	630	------	653	213	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	389	240	318	19,600
November 1-16	278	177	217	6,880
April	452	70	188	11,200
May	653	148	315	19,400
June	690	253	486	28,900
July	676	146	33[illegible]	20,400
August	1,460	213	560	34,400
September	526	213	342	20,400

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, 1930.

EXTREMES.—Maximum discharge during year, 2,470 second-feet June 13 (gage height, 4.15 feet); minimum occurred during winter.

1915–1930: Maximum discharge, 8,750 second-feet June 16, 1918 (gage height, 7.0 feet); minimum occurred during winter.

REMARKS.—Records excellent except those for Nov. 19–30, Apr. 1–12, which are fair. Diversions for irrigation above station. Flow regulated by natural lakes in Green River Basin.

Daily and monthly discharge, in second-feet, 1929–30

Day	Oct.	Nov.	Apr.	May	June	July	Aug.	Sept.
1	296	234		1,010	2,200	1,010	755	401
2	309	240		955	1,780	1,070	800	395
3	306	236	500	900	1,550	1,130	850	377
4	296	228		955	1,400	1,130	955	358
5	283	223		1,070	1,130	1,260	1,070	344
6	275	228		1,130	900	1,480	1,200	330
7	293	236		1,130	850	1,620	1,130	353
8	317	232	800	1,070	1,010	1,620	1,070	349
9	312	226		1,010	1,330	1,480	1,130	326
10	302	221		955	1,700	1,330	1,260	312
11	293	213	1,000	900	1,860	1,260	1,330	326
12	302	208	1,200	800	2,200	1,400	1,480	353
13	299	202	1,400	755	2,380	1,480	1,620	383
14	290	196	1,260	710	2,200	1,400	1,860	353
15	277	191	1,200	755	2,030	1,260	1,700	340
16	280	196	1,130	800	1,700	1,130	1,400	321
17	290	202	1,070	900	1,860	1,070	1,330	306
18	302	210	1,010	1,010	2,030	1,130	1,260	296
19	306	180	1,070	1,070	2,030	1,260	1,070	280
20	296	170	1,070	955	2,200	1,260	900	272
21	283		1,130	900	2,030	1,130	800	267
22	275		1,130	850	1,940	1,130	755	259
23	267	150	1,260	850	1,860	1,070	710	270
24	259		1,400	755	1,860	1,010	670	277
25	252		1,550	800	1,700	955	555	264
26	254		1,400	900	1,480	900	520	257
27	248		1,200	1,010	1,260	800	520	254
28	257	160	1,130	1,200	1,130	755	452	270
29	252		1,070	1,550	1,070	710	414	280
30	244		1,070	1,700	1,010	670	401	296
31	238			2,030		710	383	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	317	238	282	17,300
November	240		194	11,500
April	1,550		1,010	60,100
May	2,030	710	1,010	62,100
June	2,380	850	1,660	98,800
July	1,620	670	1,150	70,700
August	1,860	383	979	60,200
September	401	254	316	18,800

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, 1930.

EXTREMES.—Maximum discharge during year, 9,230 second-feet Aug. 15 (gage height, 5.88 feet); minimum occurred during winter.

1895–1906, 1915–1930: 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 periods affected by ice, Nov. 14–30, Mar. 1–6, which are fair. Diversions for irrigation above station.

Daily and monthly discharge, in second-feet, 1929–30

Day	Oct.	Nov.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	935	761		1,040	2,410	6,040	3,240	1,820	2,000
2	880	725		1,040	2,300	6,390	3,240	1,820	1,910
3	1,050	734		1,110	2,100	6,040	3,120	1,820	1,820
4	1,240	725	600	1,560	2,100	5,340	2,990	1,820	1,640
5	1,110	648		2,520	4,520	4,670	2,990	2,000	1,560
6	1,180	646		3,770	2,640	4,350	3,240	2,200	1,480
7	1,050	664	636	4,050	2,750	3,770	3,240	2,300	1,480
8	1,050	656	604	4,050	2,750	3,500	3,370	2,520	1,480
9	1,240	648	636	3,770	2,870	3,500	3,240	2,640	1,480
10	1,240	632	628	3,370	2,750	4,050	3,240	2,640	1,400
11	1,180	656	696	3,240	2,870	5,000	3,120	3,770	1,320
12	1,050	624	805	3,240	2,640	6,040	3,240	3,640	1,320
13	990	632	896	3,500	2,410	6,750	3,370	4,350	1,250
14	990		714	3,500	2,200	7,870	4,050	6,390	1,250
15	935		705	3,500	2,000	8,260	4,350	8,660	1,180
16	935		816	3,370	2,000	7,490	4,050	6,390	1,110
17	935	620	968	2,990	3,370	6,040	3,500	6,390	1,040
18	935		1,040	2,640	3,240	5,690	3,240	5,690	980
19	935		512	2,300	2,870	6,040	2,990	4,670	920
20	880		980	2,100	2,410	6,390	3,240	4,050	920
21	847		968	2,000	2,200	6,390	3,240	3,500	838
22	814		1,110	2,000	2,100	6,040	2,990	3,120	860
23	770	590	1,110	2,100	2,200	6,040	2,870	2,990	838
24	752		1,400	2,410	2,300	5,690	2,750	2,870	827
25	752		1,560	2,750	2,200	5,690	2,520	2,750	872
26	725		1,320	2,870	2,200	5,000	2,410	2,640	944
27	725		1,250	2,750	2,410	4,350	2,200	4,050	980
28	770	610	1,480	2,870	2,640	3,770	2,100	2,640	944
29	803		1,320	2,750	3,120	3,370	2,000	2,300	908
30	792		1,110	2,520	3,770	3,240	1,910	2,200	860
31	781	------	1,110	------	4,670	------	1,820	2,100	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	1,240	725	944	58,000
November	761	----------	636	37,800
March	1,560	----------	902	55,500
April	4,050	1,040	2,720	162,000
May	4,670	2,000	2,610	160,000
June	8,260	3,240	5,430	323,000
July	4,350	1,820	3,030	186,000
August	8,660	1,820	3,440	212,000
September	2,000	827	1,210	72,000

GREEN RIVER NEAR LINWOOD, UTAH

LOCATION.—Water-stage recorder in SW. ¼ sec. 21, T. 3 N., R. 21 E., 1½ miles south of Wyoming-Utah State line and 5 miles southeast of Linwood.
DRAINAGE AREA.—14,300 square miles.
RECORDS AVAILABLE.—October, 1928, to September, 1930.
EXTREMES.—Maximum discharge during year, 13,400 second-feet Aug. 15 (gage height, 7.45 feet); minimum, 390 second-feet Feb. 1.
1928–1930: Maximum and minimum discharges, those of 1930.
REMARKS.—Records good except those for periods of missing gage heights and those affected by ice, which are fair. Diversions for irrigation above station.

Daily and monthly discharge, in second-feet, 1929–30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,260	1,010					1,230	3,880	6,120	4,870	1,670	2,350
2	1,230	980	800				1,240	3,460	6,540	4,600	1,660	2,250
3	1,190	980			400	700	1,260	3,420	7,040	3,400	2,150	2,100
4	1,170	920					1,280	3,220	7,200	3,300	2,640	2,000
5	1,230	945	830				1,550	3,210	6,970	3,300	2,640	1,850
6	1,400	940	826			750	2,750	3,330	6,510	3,200	2,260	1,680
7	1,360		826			750	4,520	3,460	5,860	3,200	2,320	1,650
8	1,340	920	822	450	500	750	4,600	3,600	5,350	3,300	3,980	1,620
9	1,340		842			780	4,680	3,690	4,890	3,300	5,820	1,550
10	1,380		860			800	4,600	3,750	4,630	3,400	4,870	1,500
11	1,440		870			810	4,110	3,800	4,660	3,390	4,680	1,450
12	1,450	860	935			850	3,930	3,800	4,960	3,420	5,530	1,400
13	1,400		950		600	900	3,940	3,710	5,570	3,600	6,600	1,350
14	1,270		960			980	4,060	3,510	6,490	3,900	11,200	1,330
15	1,230	846	935			1,120	4,410	3,080	7,730	4,200	12,700	1,280
16	1,180	838	940			1,430	4,570	2,770	8,540	4,600	10,200	1,260
17	1,160	838	890			1,500	4,490	2,750	8,420	4,800	7,820	1,200
18	1,140		842		750	1,380	3,960	4,160	7,850	4,600	6,800	1,120
19	1,140	830	830			1,450	3,390	4,310	7,290	4,600	6,400	1,050
20	1,120					1,440	2,890	4,050	7,060	3,330	5,600	1,000
21	1,110					1,490	2,790	3,920	7,040	3,270	4,420	960
22	1,080					1,550	2,790	3,620	7,040	3,230	3,900	940
23	1,060				850	1,400	2,880	3,320	7,040	3,120	3,400	920
24	1,040			400		1,380	3,300	3,130	6,970	2,960	3,100	910
25	1,020		650			1,610	3,800	3,100	6,920	2,840	2,900	950
26	1,010	820				1,760	4,260	3,030	6,850	2,630	2,800	1,000
27	1,000				700	1,520	4,460	2,850	6,690	2,360	3,800	1,080
28	990					1,330	4,540	2,890	6,340	2,080	5,000	1,140
29	985					1,520	4,440	3,300	5,820	2,000	3,200	1,100
30	1,000					1,420	4,180	4,260	5,300	1,860	2,800	1,000
31	1,010					1,330		5,550		1,810	2,500	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	1,450	985	1,180	72,600
November	1,010		870	51,800
December	960		779	47,900
January			424	26,100
February			629	34,900
March	1,760		1,150	70,700
April	4,680	1,230	3,500	208,000
May	5,550	2,750	3,550	218,000
June	8,540	4,630	6,520	388,000
July	4,870	1,810	3,330	205,000
August	12,700	1,660	4,690	288,000
September	2,350	910	1,370	81,500
The year	12,700		2,340	1,690,000

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, 1930. December, 1910, to June, 1924, at Little Valley, 7 miles downstream.

EXTREMES.—Maximum discharge during year, 22,800 second-feet June 4 (gage height, 10.25 feet); minimum, 685 second-feet Dec. 27 (gage height, 5.01 feet).

1894–1899, 1905–1930: Maximum discharge, 68,800 second-feet May 29, 1897; minimum, 510 second-feet Dec. 1, 1919.

REMARKS.—Records fair for October to February and good for the rest of the year. Diversions for irrigation above station.

Daily and monthly discharge, in second-feet, 1929–30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5,290	3,360	2,490	1,570		4,260	3,910	16,600	20,000	9,160	3,480	6,210
2	4,910	3,310	2,580	1,620	1,800	3,940	3,680	15,100	21,200	8,080	3,420	5,740
3	4,740	3,310	2,680	1,670		3,970	3,790	13,700	22,200	7,140	5,240	5,050
4	4,540	3,340	2,750	1,780	2,210	3,650	3,680	13,100	22,500	6,490	6,530	4,680
5	4,350	3,420	2,530	1,670		3,530	3,620	13,400	20,900	6,050	5,570	4,350
6	4,160	3,420	2,510	1,480		3,500	3,680	14,300	18,400	5,570	5,180	4,040
7		3,420	2,460	1,490		3,590	3,850	14,800	16,900	5,250	4,450	4,290
8		3,420	2,560	1,400		3,500	4,100	13,700	16,900	5,050	5,080	5,220
9		3,360	2,560	1,490		3,480	4,880	13,100	17,500	4,810	6,450	4,320
10		3,280	2,460	1,540		3,360	8,260	12,800	18,100	4,780	7,280	3,880
11	4,300	3,200	2,510	1,400	3,840	3,360	11,300	11,800	18,400	4,740	8,620	3,450
12		3,140	2,680	1,230		3,280	12,600	11,000	18,400	4,840	10,600	3,280
13		3,170	2,800	1,060		3,280	13,700	10,600	19,000	5,010	10,600	3,120
14		3,120	2,800	1,150		3,250	13,400	9,800	19,600	4,950	11,600	3,010
15		2,930	2,700	1,070		3,280	13,400	9,300	20,000	5,930	11,800	2,930
16	4,910	2,750	2,730	1,150		3,340	14,000	8,850	20,300	5,850	13,100	2,880
17		2,700	2,610	1,180		3,480	14,800	8,450	20,600	5,640	17,500	2,800
18	4,400	2,780	2,400	1,150		3,620	15,100	8,400	20,300	5,320	17,800	2,750
19		2,780	2,200			3,940	14,600	8,260	19,600	5,850	14,600	2,700
20		2,750	2,330	970	5,460	4,710	12,300	8,440	17,200	6,570	11,800	2,650
21	4,000	2,800	2,280		5,710	5,260	10,800	9,120	16,000	6,330	10,300	2,560
22	3,850	2,700	2,030		6,050	5,250	9,800	10,300	15,400	6,130	9,300	2,580
23	3,730	2,530	1,820	800	6,650	4,880	9,400	10,300	15,400	5,600	8,400	3,010
24	3,650	2,130	1,600		5,820	4,550	10,000	10,300	15,100	5,180	7,410	2,800
25	3,620	1,640	1,260		5,710	4,450	10,800	10,600	14,600	5,120	6,530	4,160
26	3,500	1,540	1,010		5,600	4,580	13,100	11,600	13,700	4,880	6,330	5,430
27	3,480	1,600	754	1,200	5,150	4,780	14,600	11,300	12,800	4,610	5,680	4,450
28	3,450	1,710	780		5,220	4,580	16,000	11,600	12,000	4,320	5,120	3,850
29	3,480	1,850	940		-------	4,420	17,500	12,800	11,000	4,190	4,980	3,500
30	3,450	2,240	1,040		-------	4,220	16,900	15,100	10,300	3,850	4,880	4,160
31	3,450	-------	1,360		-------	4,100	--------	18,100	--------	6,530	5,400	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	5,290	3,450	4,160	256,000
November	3,450	1,540	2,790	166,000
December	2,800	754	2,140	132,000
January	1,780	----------	1,250	76,900
February	6,650	----------	4,160	231,000
March	5,290	3,250	3,980	245,000
April	17,500	3,620	10,300	613,000
May	18,100	8,260	11,800	726,000
June	22,500	10,300	17,500	1,040,000
July	9,160	3,530	5,510	339,000
August	17,800	3,420	8,230	506,000
September	6,210	2,560	3,800	226,000
The year	22,500	754	6,290	4,560,000

NEW FORK NEAR BOULDER, WYO.

LOCATION.—Staff gage about sec. 8, T. 32 N., R. 108 W., 1 mile west of Boulder and one-eigth mile above Boulder Creek.
DRAINAGE AREA.—578 square miles.
RECORDS AVAILABLE.—May, 1915, to September, 1930.
EXTREMES.—Maximum discharge during year, 2,700 second-feet June 13 (gage height, 5.52 feet); minimum probably occurred during winter.
1915–1930: 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.

Daily and monthly discharge, in second-feet, 1929–30

Day	Oct.	Nov.	Apr.	May	June	July	Aug.	Sept.
1	186	156	150	420	1,550	1,210	518	426
2	193	146	160	395	1,430	1,210	566	410
3	258	146	170	400	1,280	1,200	602	390
4	242	157	180	410	1,140	1,210	584	370
5	208	154	200	459	1,010	1,210	602	355
6	212	149	242	608	871	1,230	620	345
7	208	132	306	644	787	1,230	620	340
8	242		335	644	801	1,260	638	320
9	254		405	596	941	1,170	728	315
10	254		464	584	1,140	1,130	748	315
11	230	134	734	554	1,510	1,110	748	302
12	223		663	488	1,990	1,200	780	279
13	230		442	448	2,490	1,320	850	266
14	223		454	405	2,630	1,370	1,170	246
15	223		370	566	2,300	1,260	1,320	230
16	223	138	330	843	2,020	1,200	1,390	223
17	215	------	306	670	1,940	1,050	1,280	223
18	208	------	292	566	2,110	1,090	1,170	208
19	204	------	288	470	2,110	1,200	1,090	208
20	193	------	306	432	2,110	1,040	941	197
21	193	------	284	400	2,050	920	850	186
22	193	------	288	400	2,020	871	767	180
23	186	------	292	395	2,090	906	728	180
24	176	------	306	375	1,980	850	689	180
25	173	------	390	345	1,720	780	608	173
26	173	------	405	360	1,570	715	578	173
27	176	------	432	400	1,360	638	548	157
28	180	------	437	518	1,270	626	524	154
29	176	------	448	822	1,250	590	512	149
30	173	------	459	1,070	1,250	566	482	143
31	170	------	------	1,320	------	506	454	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	258	170	206	12,700
November 1–16	157	----------	141	4,480
April	734	----------	351	20,900
May	1,320	345	549	33,800
June	2,630	787	1,620	96,400
July	1,370	506	1,030	63,300
August	1,390	454	765	47,000
September	426	143	255	15,200

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, 1930.
EXTREMES.—Maximum discharge during year, 1,080 second-feet June 22 (gage height, 3.65 feet); minimum occurred during winter.
1915–1930: Maximum discharge, 2,310 second-feet June 17, 1918 (gage height, 5.0 feet); minimum, 4 second-feet Nov. 14–17, 1921.
REMARKS.—Records good. Diversions for irrigation above station. Flow regulated by Fremont Lake.

Daily and monthly discharge, in second-feet, 1929–30

Day	Oct.	Nov.	Mar.	Apr.	May	June	July	Aug.	Sept.
1		32	-------	34	50	330	651	137	153
2		30	-------	34	50	338	624	144	144
3	50	30	-------	34	51	350	630	146	133
4		30	-------	34	53	334	651	166	128
5		30	-------	34	69	315	672	196	122
6	51	30	-------	38	114	289	672	198	118
7	51	30	-------	34	118	271	665	198	120
8	51	33	-------	34	126	271	665	198	114
9	51	33	-------	42	130	319	651	230	106
10	51	32	-------	38	137	390	651	239	101
11	47	30	-------	38	120	536	578	247	95
12	49	30	-------	47	102	782	572	253	88
13		30	-------	35	99	1,000	618	283	85
14		30	-------	37	95	876	630	334	80
15		30	-------	35	122	837	585	408	77
16	50	30	26	34	122	790	518	428	72
17		30	26	32	118	829	469	403	72
18		30	27	31	114	868	418	418	69
19	52	30	49	33	108	876	390	390	66
20	50		25	33	104	844	667	350	64
21	46		26	33	101	892	346	319	63
22	43		26	34	99	1,000	315	296	58
23	41		28	30	85	1,020	271	271	55
24	39	26	32	30	74	940	253	244	52
25	37		35	32	85	837	230	236	49
26	34		35	33	86	744	216	218	47
27	34		35	36	95	679	213	204	46
28	34		34	42	112	672	227	188	46
29	34	24	34	50	137	672	210	174	45
30	33	25	34	50	182	672	171	169	45
31	33	-------	34	-------	242	-------	148	164	-------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	52	33	45.5	2,800
November	32	24	28.8	1,710
March 16–31	49	25	31.6	1,000
April	50	30	36.0	2,140
May	242	50	106	6,520
June	1,060	271	654	38,900
July	672	148	470	28,900
August	428	137	253	15,600
September	153	45	83.8	4,990

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, 1930.

EXTREMES.—Maximum discharge during year, 1,330 second-feet Aug. 14 (gage height, 5.96 feet); minimum probably occurred during winter.

1915–1917, 1921–1924, 1927–1930: Maximum discharge, that of Aug. 14, 1930; minimum, 4 second-feet Sept. 1, 1924 (gage height, 1.31 feet).

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

Daily and monthly discharge, in second-feet, 1929–30

Day	Oct.	Apr.	May	June	July	Aug.	Sept.
1	55	-------	99	488	136	29	32
2	53	-------	95	341	126	29	29
3	165	-------	140	262	123	29	26
4	80	-------	250	230	128	53	24
5	76	-------	248	212	132	40	22
6	66	-------	198	195	132	34	22
7	56	-------	154	186	121	52	22
8	52	-------	151	290	113	34	22
9	51	-------	123	442	103	44	23
10	59	-------	105	464	95	55	27
11	66	-------	99	474	93	176	30
12	56	-------	91	558	111	250	26
13	51	-------	78	688	188	600	23
14	45	-------	76	404	270	816	21
15	41	-------	91	272	220	640	20
16	39	-------	134	268	228	476	21
17	38	-------	117	311	210	311	19
18	36	-------	97	362	154	238	19
19	33	-------	97	374	128	176	18
20	31	-------	119	314	123	136	18
21	29	-------	138	311	119	107	18
22	27	-------	191	338	101	82	16
23	26	-------	172	300	84	68	16
24	24	158	140	260	76	62	15
25	21	220	158	232	62	51	22
26	21	222	232	186	49	44	27
27	25	198	278	165	43	41	30
28	27	188	368	163	40	38	32
29	26	140	436	165	35	37	31
30	26	119	474	154	33	33	29
31	24	-------	516	-------	30	32	-------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	165	21	46.0	2,830
April 24–30	222	119	178	2,470
May	516	76	183	11,300
June	688	154	314	18,700
July	270	30	116	7,130
August	816	29	155	9,530
September	32	15	23.3	1,390

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, 1930.
EXTREMES.—Maximum discharge during year, 1,110 second-feet Apr. 25 (gage height, 3.10 feet); minimum probably occurred during winter.
1918–1930: Maximum discharge, 3,250 second-feet May 11, 1923 (gage height, 4.55 feet); no flow Aug. 29–31, 1919.
REMARKS.—Records excellent. Diversions for irrigation above station.

Daily and monthly discharge, in second-feet, 1929–30

Day	Oct.	Nov.	Mar.	Apr.	May	June	July	Aug	Sept.
1	29	28	-------	28	538	673	86	34	25
2	29	24	-------	34	570	673	74	37	22
3	35	24	-------	43	619	546	56	37	22
4	31	19	-------	61	655	502	50	46	21
5	31	20	-------	92	610	474	50	46	22
6	31	30	-------	155	554	397	43	36	24
7	30	29	-------	187	502	378	39	34	24
8	31	29	-------	187	495	384	32	47	24
9	52	31	-------	275	509	397	28	36	23
10	50	31	-------	446	516	439	26	74	22
11	42	26	-------	594	446	439	24	58	20
12	34	22	-------	745	397	432	24	58	19
13	34	31	-------	800	366	390	24	56	19
14	34	36	-------	880	348	384	24	63	18
15	32	31	-------	727	366	336	24	66	20
16	31	35	14	467	530	315	22	53	21
17	34	42	12	330	554	280	21	53	20
18	31	36	12	354	516	280	16	46	21
19	30	21	10	474	488	265	21	39	20
20	30	64	10	578	467	280	22	30	19
21	29	31	11	718	495	250	24	28	17
22	29	22	17	830	578	198	26	26	22
23	25	34	18	956	509	190	26	30	30
24	26	34	16	934	474	184	29	36	30
25	25	46	21	1,040	530	171	25	39	36
26	23	44	22	912	495	150	24	53	36
27	25	50	23	781	502	128	30	34	36
28	28	49	21	682	628	116	35	63	36
29	34	40	22	586	594	103	32	34	32
30	31	36	26	538	610	92	34	34	34
31	29	-------	22	-------	610	-------	31	29	-------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	52	23	31.8	1,960
November	64	19	33.2	1,980
March 16–31	26	10	17.3	549
April	1,040	28	514	30,600
May	655	348	518	31,900
June	673	92	328	19,600
July	86	16	33.0	2,030
August	74	26	43.7	2,690
September	36	17	24.5	1,460

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, 1930.
EXTREMES.—Maximum discharge during year, 2,590 second-feet Aug. 13 (gage height, 4.8 feet); minimum, 9 second-feet July 10.
1928–1930: Maximum and minimum discharges, those of 1930.
REMARKS.—Records good except those during winter, which were estimated because of ice. Diversions for irrigation above station.

Daily and monthly discharge, in second-feet, 1929–30

Day	Oct.	Nov.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	127	84		77	137	290	24	40	108
2	129	112		88	154	182	16	47	94
3	129	131		127	172	167	17	110	87
4	135	110		156	208	143	14	104	82
5	129	108		182	190	127	13	79	94
6	129	127	40	145	165	123	13	70	108
7	129	123		139	145	139	13	77	101
8	125	97		139	137	228	15	182	127
9	141	92		137	135	305	12	139	101
10	147	108		131	118	339	10	992	95
11	137	92		123	103	394	11	803	87
12	133	87		123	99	357	68	310	70
13	127	79		119	90	339	79	1,320	70
14	123	76		116	88	228	68	440	70
15	119	101		119	82	162	40	357	67
16	116	108	50	114	87	149	31	225	68
17	114	127		103	97	160	50	290	63
18	118	125		84	103	165	119	225	68
19	114	94		79	94	143	101	212	63
20	108	90		77	80	147	90	169	60
21	104	74	60	84	74	147	70	154	56
22	104	66	65	95	79	137	61	147	57
23	103	74	77	114	106	129	48	139	73
24	84	74	60	137	87	104	43	141	76
25	80	70	67	151	79	92	40	131	82
26	103	74	74	165	80	74	39	127	84
27	106	85	57	165	147	48	31	131	80
28	104	99	63	172	261	40	30	141	80
29	104	97	67	149	414	40	26	141	76
30	99	106	77	147	489	35	23	125	73
31	99	------	74	------	461	------	23	115	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	147	80	117	7,190
November	131	66	96.3	5,730
December	------	------	50.0	3,070
January	------	------	30.0	1,840
February	------	------	40.0	2,220
March	77	------	52.9	3,250
April	182	77	125	7,440
May	489	74	154	9,470
June	394	35	171	10,200
July	119	10	39.9	2,450
August	1,320	40	248	15,200
September	127	56	80.7	4,800
The year	1,320	------	101	72,900

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, 1930.
EXTREMES.—Maximum discharge during year, 445 second-feet Aug. 10 (gage height, 4.7 feet); minimum, 2 second-feet Aug. 4, 5.
1929–30: Maximum and minimum discharges, those of 1930.
REMARKS.—Records fair. Diversions for irrigation above station.

Daily and monthly discharge, in second-feet, 1929–30

Day	Oct.	Nov.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	33	23	12	10	24	16	9	4	24
2	33	22	12	10	27	13	11	3	23
3	31	22	12	10	24	12	10	3	22
4	33	22	12	11	19	10	10	2	22
5	31	22	12	11	18	10	10	2	21
6	29	22	12	12	14	10	4	4	18
7	31	21	12	12	12	22	4	5	18
8	28	20	12	14	12	33	4	5	19
9	30	18	12	13	9	45	5	5	18
10	33	18	12	14	9	30	5	214	18
11	31	18	11	15	9	48	6	88	16
12	29	18	10	14	8	61	6	43	14
13	29	18	9	14	8	38	6	51	12
14	29	18	10	14	9	20	6	53	12
15	29	16	10	14	12	21	5	48	12
16	27	16	10	13	13	20	5	50	10
17	27	16	10	11	12	18	6	56	10
18	27	16	10	12	10	18	5	70	10
19	27	16	9	11	10	17	5	70	10
20	26	16	9	11	10	18	4	64	10
21	26	16	9	11	11	18	4	48	9
22	26	18	10	14	18	14	3	45	9
23	21	16	10	16	12	14	3	42	9
24	21		10	24	10	12	3	40	9
25	20		10	28	10	10	3	35	9
26	20		10	28	10	10	3	30	9
27	20	15	10	34	14	11	3	26	9
28	22		10	29	22	12	4	25	9
29	22		9	20	36	10	4	25	9
30	23		9	20	31	9	3	24	9
31	23	-------	10	-------	24	-------	4	24	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	33	20	27.0	1,660
November	23	15	17.8	1,060
March	12	9	10.5	646
April	34	10	15.7	934
May	36	8	15.1	929
June	61	9	20 0	1,190
July	11	3	5.2	320
August	214	2	38.8	2,390
September	24	9	13.6	809

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, 1930. October, 1911, to June, 1914, fragmentary records at power plant, and March, 1900, to December, 1904, at station below mouth of Dry Fork.

EXTREMES.—Maximum and minimum discharges during year not determined. 1911–1930: Maximum discharge, 2,050 second-feet May 29, 1921; minimum, 25 second-feet Mar. 11, 1927.

REMARKS.—Records fair. No diversions above station.

Daily and monthly discharge, in second-feet, 1929–30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	96	86						305		112	90	103
2	96	87						396		111	90	102
3	103	87		48				435		109	90	98
4	98	84						382		107	90	96
5	98	82						330		107	88	107
6	95	82						280	400	107	88	103
7	100	82			41	35		240		107	100	95
8	100	82					50	193		105	100	95
9	98	81						155		105	93	93
10	98	81		48						105	92	93
11	102	79						150	272	107	98	92
12	93								255	109	118	90
13	92							160	240	107	147	90
14	92				35	35		180	228	105	155	90
15	90							215	215	100	129	90
16	90						64		205	102	147	88
17	90			46			62		195	102	191	88
18	90						58		212	109	131	93
19	88						57		210	100	107	95
20	87						72		193	135	93	93
21	87	60				35	127	440	182	120	88	92
22	85				35		164		186	102	88	92
23	85						188		170	98	92	96
24	84			43			262		151	100	109	96
25	85						250		143	96	92	93
26	88						231		131	95	118	92
27	87		50				265	672	124	88	182	93
28	87				35	34	250	744	122	84	155	88
29	82						236	744	118	84	126	87
30	83						236	696	116	90	112	103
31	84			42				600		92	111	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	103	82	91.4	5,620
November	87		68.4	4,070
December			a 50	3,070
January			a 45	2,770
February			a 37	2,050
March			a 35	2,150
April	265		109	6,490
May	744		388	23,900
June		116	256	15,200
July	135	84	103	6,330
August	191	88	113	6,950
September	107	87	94.2	5,610
The year	744		116	84,200

a Estimated.

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, 1930.
REMARKS.—Records fair. Flow regulated by operation of power plant. Gage-height record furnished by Utah Power & Light Co.

Daily and monthly discharge, in second-feet, 1929–30

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

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	23	11	20.1	1,240
November	26	18	22.6	1,340
December	26	17	22.2	1,360
January	23	18	21.2	1,300
February	24	18	21.6	1,200
March	24	17	21.1	1,300
April	26	17	20.1	1,200
May	24	9	18.3	1,130
June	21	14	17.4	1,040
July	22	13	19.2	1,180
August	22	17	19.1	1,170
September	33	17	22.6	1,340
The year	33	9	20.4	14,800

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, 1930.
EXTREMES.—Maximum discharge during year, 851 second-feet June 11 (gage height, 3.53 feet); minimum, about 12 second-feet, occurred during winter.
REMARKS.—Records good except those for Oct. 11 to Apr. 19, which are estimated.

Daily and monthly discharge, in second-feet, 1929–30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	16							63	299	64	42	28
2	18							82	219	59	72	26
3	22							89	192	54	100	27
4	17							82	222	50	66	30
5	16							72	292	46	52	43
6	14							63	435	43	48	36
7	15							55	570	40	51	33
8	18							50	630	39	70	29
9	20							43	603	38	60	25
10	17						25	39	600	38	63	23
11								36	654	48	58	22
12								35	618	51	58	21
13								36	528	39	58	20
14								44	420	34	58	20
15					12			57	369	31	58	20
16		15	12	12		15		67	348	34	53	20
17								64	310	45	54	20
18								64	275	36	47	19
19								68	255	36	40	19
20							36	97	222	31	36	20
21	15						49	141	188	30	34	20
22							63	122	190	30	32	24
23							74	121	156	31	32	31
24							92	143	132	29	31	31
25							86	182	112	28	32	31
26							76	275	100	28	45	30
27							70	396	91	26	38	32
28							64	494	84	26	34	31
29					-------		57	576	76	28	31	30
30					-------		54	582	68	29	31	49
31		-------			-------		-------	472	-------	29	29	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	----------	----------	15.7	965
November	----------	----------	15	893
December	----------	----------	12	738
January	----------	----------	12	738
February	----------	----------	12	666
March	----------	----------	15	922
April	92	----------	39.9	2,370
May	582	35	152	9,350
June	654	68	309	18,400
July	64	26	37.7	2,320
August	100	29	48.8	3,000
September	49	19	27.0	1,610
The year	654	----------	57.9	42,000

NORTH FORK OF DUCHESNE RIVER NEAR HANNA, UTAH

LOCATION.—Staff gage in NW. ¼ NE. ¼ sec. 35, T. 2 N., R. 9 W. Uinta meric 250 feet below Hades Creek, 6 miles above West Fork, and 7 miles north of Hanna.

DRAINAGE AREA.—78 square miles.

RECORDS AVAILABLE.—August, 1921, to September, 1923; July, 1929, to tember, 1930.

EXTREMES.—Maximum and minimum discharges during year not determine 1921–1923: Maximum discharge, 1,490 second-feet June 8, 9, 1922 (height, 4.65 feet); minimum not recorded.

REMARKS.—Records fair. Discharge estimated Sept. 14–3[illegible].

Daily and monthly discharge, in second-feet, 1929–30

Day	May	June	July	Aug.	Sept.	Day	May	June	July	Aug.
1			135	67	58	16		506	73	110
2	148		122	73	56	17		413	76	98
3			114	76	53	18		399	73	90
4			110	76	58	19		375	76	87
5			102	73	61	20		358	76	80
6			98	70	61	21		348	70	83
7			94	73	61	22		378	61	80
8			92	76	58	23		259	61	76
9			90	73	53	24		229	58	83
10			90	76	51	25		212	53	80
11		802	83	80	48	26		194	51	76
12		892	106	83	46	27		175	48	76
13		683	94	122	46	28		157	46	73
14		607	76	118	45	29		153	52	70
15		526	70	114		30		144	56	67
						31			61	64

Month	Maximum	Minimum	Mean	Run-o acre-
June 11–30	892	144	390	1
July	135	46	79.6	
August	122	64	82.0	
September			53.2	
The period				2

DUCHESNE RIVER NEAR TABIONA, UTAH

LOCATION.—Tape gage 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, 1930.

EXTREMES.—Maximum discharge during year, 1,040 second-feet June 12 (gage height, 12.27 feet); minimum not recorded.

1919–1930: Maximum discharge, about 2,500 second-feet June 13, 1921; minimum, 40 second-feet Aug. 29–31, 1926.

REMARKS.—Records fair. Small diversions for irrigation above station.

Daily and monthly discharge, in second-feet, 1929–30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	165	144	132			125	115	271	638	171	104	130
2	165	142	110				118	333	578	159	109	126
3	167	146	118				121	327	526	153	142	133
4	165	144	123		100		126	330	587	148	167	130
5	161	144	128				130	336	669	138	109	175
6	163	142	120				138	327	736	130	106	177
7	165	140	112				150	310	800	120	107	157
8	169	142	118		104		171	285	855	112	113	144
9	167	138	121		104	125	186	251	890	109	110	146
10	165	137	126		102		190	246	845	107	125	142
11	165	138	123		101		192	253	805	104	121	142
12	163	140	121		102		201	251	1,000	142	144	144
13	159	138	113		104		210	264	930	128	125	148
14	161	137	110		102		215	269	718	115	128	138
15	163	137	112		104		192	271	566	109	130	140
16	165	142	112	90	102	138	169	274	526	112	133	138
17	167	140	109		98	125	167	282	500	108	130	137
18	165	140	106		96	113	163	288	489	104	142	142
19	161	138	110		101	115	171	298	482	102	140	137
20	159	137	107		107	118	192	321	446	200	126	137
21	148	137			109	117	215	456	422	128	130	132
22	142	140			117	112	243	464	395	125	123	133
23	140	142			118	107	271	471	357	120	192	142
24	140	150			107	112	282	482	310	118	153	177
25	142	144			113	110	354	492	290	118	146	169
26	142	142	100		113	112	333	562	253	117	146	161
27	142	142			118	109	238	629	241	112	142	157
28	137	138			121	100	251	700	229	109	148	155
29	138	138			------	109	296	770	219	102	142	157
30	142	135			------	113	282	790	197	96	135	190
31	146	------			------	117	------	736	------	98	133	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	169	137	156	9,590
November	150	135	140	8,330
December	132	----------	111	6,820
January	----------	----------	90	5,530
February	121	----------	105	5,830
March	----------	100	119	7,320
April	354	115	203	12,100
May	790	246	398	24,500
June	1,000	197	550	32,700
July	200	96	123	7,560
August	192	104	132	8,120
September	190	126	148	8,810
The year	1,000	----------	190	137,000

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, 1930.
EXTREMES.—Maximum discharge during year, 2,420 second-feet June 12 (gage height, 3.15 feet); minimum, 92 second-feet July 29.
1917–1930: Maximum discharge, 4,420 second-feet June 10, 1922 (gage height, 8.65 feet); minimum, 50 second-feet Aug. 4, 5, 7–14, 27–31, Sept. 1–4, 1924 (gage height, 0.6 foot).
REMARKS.—Records fair. Discharge estimated for ice-affected period, Dec. 21 to Feb. 20. Diversions for irrigation above and below station.

Daily and monthly discharge, in second-feet, 1929–30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	318	205	205			145	175	492	1,740	387	122	145
2	304	205	205			145	157	508	1,490	348	193	145
3	289	205	205			145	175	560	1,060	348	410	136
4	289	205	205			136	175	595	978	387	442	136
5	260	219	205		160	136	193	560	1,060	387	387	274
6	260	219	175			122	205	508	1,740	27[illegible]	219	260
7	246	233	175			122	205	475	1,830	240	260	274
8	246	233	175			122	274	426	2,020	175	274	246
9	274	240	175			122	274	410	2,310	17[illegible]	304	205
10	274	233	205		167	122	348	395	2,110	145	348	205
11	260	233	205			122	348	379	2,210	145	379	193
12	246	205	205			122	387	379	2,420	136	364	193
13	240	205	205			136	364	379	2,020	260	410	193
14	240	181	205			122	348	387	1,570	240	492	193
15	233	175	175			122	333	410	1,340	175	459	175
16	219	193	175	160	160	136	304	426	1,260	15[illegible]	426	175
17	260	219	193			157	260	426	1,230	27[illegible]	387	157
18	233	205	193			145	240	442	1,190	260	379	145
19	233	205	175			136	240	426	1,100	219	364	145
20	233	205	193			122	240	492	1,060	193	348	145
21	219	205			145	122	311	508	1,000	260	304	136
22	219	193			150	122	348	595	1,000	240	274	145
23	205	205			155	136	387	613	838	20[illegible]	274	193
24	205	205			157	145	467	632	736	193	260	246
25	205	205			157	136	552	687	595	145	246	233
26	205	205	180		157	145	508	945	508	145	233	219
27	205	205			150	145	508	1,120	467	13[illegible]	260	240
28	205	205			145	145	492	1,410	426	117	246	240
29	205	205			------	136	426	1,660	426	92	205	219
30	205	205			------	145	467	2,310	426	9[illegible]	181	205
31	205	------			------	193	------	1,920	------	9[illegible]	157	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	318	205	240	14,800
November	240	175	209	12,400
December	205	175	19[illegible]	11,600
January	------	------	150	9,840
February	------	------	158	8,780
March	193	122	13[illegible]	8,360
April	552	157	324	19,300
May	2,310	379	693	42,600
June	2,420	426	1,270	75,600
July	387	92	215	13,200
August	492	122	310	19,100
September	274	136	19[illegible]	11,500
The year	2,420	92	341	247,000

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, 1930.

EXTREMES.—Maximum discharge during year, 4,270 second-feet June 12 (gage height, 5.90 feet); minimum, 46 second-feet July 30.

1899–1910, 1911–1930: Maximum discharge, 12,800 second-feet June 10, 1922 (gage height, 7.94 feet); minimum, 6 second-feet Sept 4–9, 1924.

REMARKS.—Records fair. Mean monthly discharge for January and February estimated. Diversions for irrigation above station. Flow affected by storage in reservoir on Strawberry River. Result of one current-meter measurement furnished by Uinta Basin water commissioner.

Daily and monthly discharge, in second-feet, 1929–30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	278	278	350		-------	212	350	576	2,600	301	234	172
2	278	255	301		-------	230	350	640	1,810	234	376	172
3	301	290	278		-------	255	255	640	1,490	212	476	104
4	326	326	278		-------	301	278	700	1,490	212	576	120
5	278	301	301		-------	326	278	766	1,110	172	546	457
6	278	278	301		-------	350	290	708	1,390	146	350	402
7	278	326	301		-------	376	301	576	2,680	120	350	340
8	255	301	301		-------	376	301	515	3,200	104	376	278
9	301	255	301		-------	330	402	515	3,820	55	640	255
10	402	255	402		-------	278	376	457	3,540	66	624	192
11	326	255	402		391	255	376	430	3,900	77	608	212
12	301	212	350		-------	278	402	402	4,270	104	608	212
13	290	154	350		-------	301	490	457	3,610	158	780	192
14	278	212	301		-------	301	576	430	2,620	212	900	182
15	278	301	275	300	-------	326	576	402	2,300	154	674	172
16	255	301	255		-------	326	515	430	2,030	136	486	192
17	278	340	255		-------	326	515	515	2,030	104	440	192
18	301	376	255		-------	278	376	515	1,590	255	402	172
19	301	376	278		-------	301	350	515	1,590	255	376	136
20	290	301	255		-------	278	390	515	1,700	266	255	136
21	278	212	255		-------	278	430	546	1,490	278	255	164
22	255	234	255		-------	301	515	1,020	1,300	255	212	192
23	255	301	255		-------	275	515	820	1,200	154	172	212
24	255	315	255		-------	255	708	780	900	154	192	234
25	255	326	255		-------	278	940	900	708	154	212	413
26	255	350	255		-------	278	940	1,020	576	120	212	350
27	255	402			-------	255	840	1,490	457	112	192	350
28	255	376			-------	255	744	2,500	430	104	221	302
29	278	457	275		-------	278	744	3,200	390	55	212	255
30	278	402			-------	278	674	3,330	350	46	212	278
31	301	-------			-------	278	-------	3,400	-------	212	190	-------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	402	255	284	17,500
November	457	154	302	18,000
December	402	255	290	17,800
January	-------	-------	300	18,400
February	-------	-------	325	18,000
March	376	212	291	17,900
April	940	255	493	29,300
May	3,400	402	958	58,900
June	4,270	350	1,890	112,000
July	301	46	161	9,900
August	900	172	399	24,500
September	457	104	235	14,000
The year	4,270	46	492	356,000

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, 1930.

EXTREMES.—Maximum discharge during year, 561 second-feet July 31, Sept. 5 (gage height, 6.90 feet); minimum, 32 second-feet Sept. 2–4.

1908–1910, 1914–1930: Maximum discharge, 3,230 second-feet May 27, 1922 (gage height, 7.7 feet); minimum, 30 second-feet Nov. 20, 1914.

REMARKS.—Records fair. Discharge estimated because of ice effect Nov. 23 to Feb. 28. Diversions for irrigation above station. Flow affected by storage of water in Strawberry Valley Reservoir, which is diverted to Great Salt Lake Basin.

Daily and monthly discharge, in second-feet, 1929–30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	87	90			-------	82	76	283	218	61	152	38
2	87	90			-------	76	76	253	218	51	114	32
3	87	90			-------	82	87	299	218	51	128	32
4	87	90			-------	73	87	299	202	51	76	110
5	87	90			-------	82	90	283	180	44	100	a 300
6	88	90			-------	87	90	261	157	44	87	78
7	90	90			-------	76	90	253	157	44	73	68
8	94	90			-------	82	114	246	137	121	94	62
9	128	90			88	73	144	246	132	55	128	56
10	112	94			-------	61	163	225	132	61	128	58
11	94	94			-------	66	246	218	121	58	106	51
12	90	94			-------	61	218	218	110	70	152	51
13	90	85			-------	73	225	218	110	58	a 250	51
14	90	88			-------	70	236	225	100	58	106	51
15	90	90			-------	73	225	236	100	47	90	46
16	90	90	75	70	-------	73	192	246	100	44	76	46
17	90	96			-------	76	157	261	100	44	87	46
18	90	90			-------	73	144	261	100	a 200	82	46
19	90	90			-------	73	152	272	100	106	73	46
20	90	88			-------	73	157	261	100	66	61	46
21	90	85			-------	73	180	283	100	58	55	46
22	90	83			-------	73	218	299	100	61	51	72
23	90				-------	73	253	253	100	58	76	72
24	90				-------	73	312	261	90	58	87	83
25	90				-------	73	466	253	90	58	61	172
26	90	80			-------	76	411	253	82	58	110	75
27	90				-------	73	384	253	82	47	47	68
28	90				-------	73	366	236	73	44	51	68
29	90				-------	73	324	236	73	44	44	62
30	90				-------	73	291	218	58	128	38	62
31	90	-------			-------	94	-------	218	-------	a 250	38	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	128	87	91.6	5,630
November	96	----------	87.2	5,190
December	----------	----------	a 75	4,610
January	----------	----------	a 70	4,300
February	----------	----------	a 90	5,000
March	94	61	74.6	4,590
April	466	76	206	12,300
May	299	218	252	15,500
June	218	58	121	7,200
July	250	44	70.9	4,360
August	250	38	91.0	5,600
September	300	32	69.7	4,150
The year	466	32	108	78,400

a Estimated.

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 me ian, half a mile below Moon Lake and 13 miles northwest of Mountain H
DRAINAGE AREA.—108 square miles.
RECORDS AVAILABLE.—September, 1921, to September, 1930, fragmentary.
EXTREMES.—1921–1930: Maximum discharge, 2,000 second-feet Sept. 9, 1 (gage height, 3.85 feet); minimum not determined.
REMARKS.—Records fair. Discharge estimated May 1–5. No record Oct 1929, to Apr. 30, 1930. No diversions above station. Flow slightly regul by storage in Brown Duck Lake Reservoir.

Daily and monthly discharge, in second-feet, 1930

Day	May	June	July	Aug.	Sept.	Day	May	June	July	Aug.
1		500	203	146	117	16	111	600	206	228
2		450	209	172	111	17	118	622	254	215
3	170	400	212	215	109	18	126	537	251	215
4		400	206	212	118	19	139	551	237	200
5		450	197	186	139	20	181	568	228	183
6	158	600	195	172	141	21	268	515	225	165
7	148	760	192	175	135	22	297	450	212	158
8	135	800	192	203	132	23	286	403	197	152
9	122	820	192	212	124	24	312	354	192	160
10	111	760	195	212	117	25	382	308	178	158
11	102	800	200	222	109	26	502	282	162	162
12	99	850	225	244	104	27	690	268	150	158
13	94	750	218	300	95	28	840	254	137	148
14	94	580	212	308	94	29	922	234	124	139
15	99	590	209	261	92	30	873	209	122	132
						31	695	-------	128	120

Month	Maximum	Minimum	Mean	Run-o acre-
May	922	94	282	1
June	850	209	522	3
July	254	122	195	1
August	308	120	191	1
September	141	80	105	
The period				7

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, 1930.

EXTREMES.—Maximum discharge during year, 2,480 second-feet June 12 (gage height, 7.12 feet); minimum, 16 second-feet May 14.

1900–1903, 1907–1930: Maximum discharge, 5,600 second-feet Nov. 24, 1927; probably no flow July 24, 1916.

REMARKS.—Records fair except those for period of ice effect, Nov. 15 to Feb. 28, which are estimated. Diversions for irrigation above station.

Daily and monthly discharge, in second-feet, 1929–30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	61	33			-------	59	53	28	671	21	17	21
2	53	44			-------	60	44	29	280	18	43	21
3	41	46			-------	64	43	27	98	17	40	21
4	37	49			-------	55	41	28	256	19	38	23
5	35	53			-------	66	40	28	481	18	35	42
6	36	65			-------	57	40	27	607	18	37	39
7	37	61			-------	64	41	22	1,110	19	28	30
8	35	71			-------	49	40	24	1,620	18	40	26
9	40	77			-------	60	55	21	2,000	21	147	23
10	51	77			-------	71	40	19	1,460	24	135	21
11	47	77			98	69	38	20	2,190	23	124	21
12	37	74			-------	49	37	20	2,480	26	106	21
13	38	98			-------	55	35	17	1,260	23	93	21
14	38	85			-------	66	34	16	825	21	128	21
15	40				-------	64	28	17	771	20	139	21
16	40		80	70	-------	64	26	17	695	19	99	21
17	41				-------	64	19	18	639	21	90	19
18	40				-------	53	18	26	481	29	81	21
19	41				-------	66	17	34	631	23	40	21
20	40				-------	59	18	40	551	22	24	21
21	40				-------	69	19	49	474	22	20	21
22	38	100			-------	49	22	101	350	21	21	21
23	41				-------	55	28	71	222	19	21	26
24	40				-------	59	38	57	129	20	21	27
25	40				-------	57	44	100	59	27	21	31
26	41				-------	61	53	459	40	23	21	30
27	40				-------	57	47	504	27	22	21	31
28	40				-------	57	41	915	24	22	21	31
29	41				-------	55	37	1,380	22	21	23	31
30	37				-------	60	32	1,680	20	17	21	30
31	41	-------			-------	64	-------	1,170	-------	18	21	-------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	61	35	40.9	2,510
November	----------	33	83.7	4,980
December	----------	----------	80	4,920
January	----------	----------	70	4,300
February	----------	----------	90	5,000
March	71	49	59.9	3,680
April	55	17	35.6	2,120
May	1,680	16	225	13,800
June	2,480	20	682	40,600
July	29	17	21.0	1,290
August	147	17	55.4	3,410
September	42	19	25.1	1,490
The year	2,480	16	122.0	88,100

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 9 miles north of Neola.

DRAINAGE AREA.—181 square miles.

RECORDS AVAILABLE.—July, 1921, to September, 1927, fragmentary; September, 1929, to September, 1930.

EXTREMES.—Maximum discharge during year, 1,080 second-feet May 30 (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 500 feet above gage. Results of three discharge measurements furnished by Uinta Basin water commissioner.

Daily and monthly discharge, in second-feet, 1929–30

Day	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	------	203	78	------		------			147	529	340	241	216
2	------	208	81	52		------			232	519	330	241	203
3	------	237	78	------		------			314	424	314	300	203
4	------	203	71	------		------		55	291	424	290	259	228
5	------	191	74	------		------			232	513	272	241	263
6	------	187		------		------			191	707	291	241	237
7	------	191		------		------		60	176	839	280	246	232
8	------	199		60		------		69	154	850	272	339	228
9	------	208		------		------		74	140	878	291	339	208
10	------	195		------		------		69	124	806	378	339	216
11	263	180		------		------		76	120	888	404	450	203
12	286	168		------		71		76	120	905	409	482	187
13	254	165		------		------		69	105	806	388	529	183
14	228	157		------		------		66	120	630	394	482	176
15	220	150		66		------		58	130	640	378	424	172
16	208	150		------	50	------	40	48	161	646	378	394	168
17	203	154		------		------		44	168	696	435	404	165
18	195	150	70	------		------		46	180	614	435	409	172
19	187	137		------		------		46	199	556	358	363	157
20	224	130		------		------		56	291	570	296	324	165
21	291	124		------		------		76	455	582	281	296	154
22	383	114		------		------		102	455	503	241	296	176
23	383	105		------		------		137	353	440	228	300	199
24	329	100		------		------		203	358	388	237	310	191
25	310	102		------		------		199	487	348	220	286	176
26	286	100		------		------		187	598	365	199	277	165
27	263	97		------		------		195	746	383	180	263	168
28	241	94		------		------		180	850	358	176	259	161
29	228	81		------		------		157	927	350	224	241	154
30	220	83		------		------		140	910	340	220	232	191
31	------	81	------	------		------		------	778	------	220	224	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
1929				
September 11–30	383	187	260	10,300
1929–30				
October	237	81	150	9,220
November	------	------	71.1	4,230
December	------	------	*60	3,690
January	------	------	*50	3,070
February	------	------	*60	3,330
March	------	------	*40	2,460
April	203	44	92.1	5,480
May	927	105	339	20,800
June	905	340	583	34,700
July	435	176	302	18,600
August	529	224	324	19,900
September	263	154	191	11,400
The year	927	------	189	137,000

* Estimated.

WHITEROCKS RIVER NEAR WHITEROCKS, UTAH

LOCATION.—Water-stage recorder in sec. 18, T. 2 N., R. 1 E. Uinta meridian, 8 miles north of Whiterocks and 2 miles above heading of United States Whiterocks and Farm Creek Canals.

DRAINAGE AREA.—118 square miles.

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

EXTREMES.—1917–1928, 1930: Maximum discharge, 2,750 second-feet June 21, 1922 (gage height, 5.40 feet); minimum, less than 14 second-feet during winter 1920–21.

REMARKS.—Records fair. No diversions above station. Results of two discharge measurements furnished by Uinta Basin water commissioner.

Daily and monthly discharge, in second-feet, 1930

Day	Feb.	May	June	July	Aug.	Sept.	Day	Feb.	May	June	July	Aug.	Sept.
1			409	167	149	149	16			353	148	249	102
2			390	162	144	144	17			341	158	306	99
3			353	158	162	140	18			341	212	288	95
4		213	372	154	136	149	19			347	197	255	91
5			447	149	122	172	20			335	187	233	87
6			618	149	126	162	21			294	202		87
7			738	149	167	154	22			271	177		91
8			738	167	172	149	23			255	162		110
9			584	167	177	136	24			228	162	200	118
10			611	167	202	126	25			207	167		110
11			618	172	260	122	26			192	148		110
12			584	182	271	118	27			187	148	192	114
13	30		472	167	277	114	28			182	154	202	106
14			396	162	277	106	29			177	172	172	106
15			366	149	249	102	30			172	182	162	131
							31				172	158	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
June	738	172	376	23,000
July	212	149	167	10,300
August	306	122	203	12,500
September	172	87	120	7,140
The period	738	87	218	52,900

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 confluence with White River.

DRAINAGE AREA.—163 square miles.

RECORDS AVAILABLE.—November, 1917, to September, 1921; June, 1925, to September, 1930.

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.

Daily and monthly discharge, in second-feet, 1929–30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	181	17	17						175	193	72	115
2	178	3	17						175	193	60	115
3	175	3							175	202	22	107
4		3							175	202	22	92
5		18						5	175	202	25	42
6		18	16						175	202	38	18
7		18							183	211	34	18
8	60	18							193	191	22	18
9		18							193	129	22	18
10		18						12	193	182	22	18
11		18	13					22	193	184	21	36
12		31						78	193	184	18	78
13		31						78	193	184	18	72
14	51	10						78	193	195	18	66
15	25	10		5	5	5	5	78	202	202	18	65
16	14	18						78	202	202	18	50
17	16							78	202	86	18	46
18	16							78	193	28	18	46
19	16							80	157	28	18	42
20	16	18						92	157	28	18	31
21	16		5					92	157	27	23	25
22	16							92	157	22	42	25
23	16							98	157	22	46	25
24	16							115	157	29	59	25
25	10							115	157	46	66	38
26	16	17						118	157	46	66	38
27	16							149	160	49	74	38
28	16							175	175	72	83	34
29	17				-------			175	175	72	85	28
30	17				-------			175	175	72	90	28
31	17	-------			-------		-------	175	-------	72	115	-------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	----------	10	47.1	2,900
November	31	----------	16.6	988
December	17	----------	8 9	547
January	----------	----------	a 5	307
February	----------	----------	a 5	278
March	----------	----------	a 5	307
April	----------	----------	a 5	298
May	175	----------	73.4	4,510
June	202	157	177	10,500
July	211	22	121	7,440
August	115	18	41	2,520
September	115	18	46.2	2,750
The year	211	----------	46.2	33,300

a Estimated.

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, 1930.
EXTREMES.—Maximum discharge during year, about 1,500 second-feet Aug. 3 (gage height, 12.0 feet); minimum, 12 second-feet Sept. 23.
1904–1930: Maximum discharge, between 9,000 and 10,000 second-feet during floods early in September, 1927; minimum, 4 second-feet during December, 1905, January, 1906, Aug. 8, 1925.
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, 1929–30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	130	22	24	21	21	20	39	94	200	149	67	117
2	128	22	22	21	e 21	e 22	47	86	188	170	248	108
3	128	e 21	25	21	21	28	53	94	188	175	500	104
4	106	20	27	21	23	24	56	e 100	188	e 172	329	e 115
5	102	20	27		24	23	75	106	188	170	68	126
6	79	17	25		24	24	137	90	188	170	68	35
7	68	18	24		28	24	110	90	188	170	300	26
8	72	20	e 24		26	24	108	90	e 188	202	400	e 26
9	83	20	24		24	19	106	90	188	e 170	144	26
10	72	e 21	25		23	e 18	110	90	194	140	96	26
11	68	22	25		26	18	110	106	188	137	96	26
12	56	27	e 25		34	19	110	177	191	140	57	e 26
13	e 54	e 30	25		e 30	21	e 108	157	191	137	60	88
14	53	32	25		26	38	106	152	191	140	46	81
15	e 55	e 27	25		28	30	98	e 160	e 185	144	46	81
16	56	22	e 25		28	28	86	172	177	154	e 46	67
17	41	19	24		e 26	24	90	177	177	149	46	60
18	27	20	24	20	24	26	86	177	284	51	38	60
19	25	18	20		23	21	83	177	172	48	38	51
20	e 24	20	13		21	24	90	191	157	51	26	43
21	24	e 18	13		19	28	110	183	172	48	43	e 40
22	24	16	16		19	34	115	177	300	e 46	38	35
23	24	25	e 18		e 19	48	119	177	177	44	38	12
24	24	e 25	20		19	28	149	177	152	36	38	104
25	24	25	24		18	e 26	e 135	177	147	43	38	57
26	24	24	14		e 18	24	123	177	147	48	38	46
27	e 24	29	18		19	e 25	123	177	142	67	38	38
28	24	27	22		e 26	26	e 120	177	142	67	67	38
29	e 24	25	e 22		-------	28	119	188	137	67	67	43
30	24	24	22		-------	30	106	188	128	81	e 85	67
31	24	-------	22		-------	38	-------	217	-------	74	104	-------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	130	24	54.5	3,350
November	32	16	22.5	1,340
December	27	13	22.2	1,360
January	-------	-------	20.1	1,240
February	34	18	23.5	1,310
March	48	18	26.1	1,600
April	149	39	101	6,010
May	217	86	148	9,100
June	300	128	182	10,800
July	202	36	112	6,890
August	500	26	107	6,580
September	126	12	59.1	3,520
The year	500	12	73.3	53,100

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, 1930, fragmentary.

EXTREMES.—Maximum discharge during year, about 2,500 second-feet Aug. 2 or 3 (gage height, 7.5 feet); minimum, less than 30 second-feet during winter.
1909–1930: Maximum discharge, that of Aug. 2 or 3, 1930; 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, 1929–30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	46	------			------		43	224	235	------	------	------
2	46	------			------		45	298	214	------	------	------
3	47	------			------		45	288	198	------	------	------
4	46	------			------		51	246	203	------	106	------
5	45	------			------	40	60	211	216	------	99	------
6	45	------			------		70	181	221	------	90	------
7	46	------			33		83	176	230	------	109	------
8	50	------			------	40	91	159	216	114	152	------
9	49	------			------		100	144	211	------	118	------
10	52	------			------		119	138	214	------	118	------
11	48	------			------		146	142	214	------	136	------
12	47	------			------	40	138	148	206	------	109	------
13	48	------			------		144	159	184	------	100	------
14	48	------			------		121	176	163	------	84	38
15	48	38			------		116	198	154	------	69	------
16	51	------	35	30	------	40	98	208	148	------	63	------
17	54	------			------		90	196	144	------	63	------
18	50	------			------			186	142	------	50	------
19	49	------			------	40		214	167	------	46	------
20	47	------			------			282	172	------	44	39
21	46	------			------	42		304	156	------	44	39
22	45	------			------	46		244	------	------	43	42
23	43	------			------	46		238	------	------	44	56
24	43	------			------	45	200	261	------	------	45	67
25	43	------			------	45		301	------	------	48	62
26	42	------			------	47		324	------	------	44	55
27	42	------			------	43		345	------	------	43	58
28	40	------			------	42		352	74	------	42	59
29	40	------			------	44		355	------	------	40	63
30	43	------			------	47	186	321	114	------	40	111
31	45	------			------	48	------	273	------	------	39	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	54	40	46.3	2,850
November	------	------	[a] 38	2,260
December	------	------	[a] 35	2,150
January	------	------	[a] 30	1,840
February	------	------	[a] 35	1,940
March	48	------	41.8	2,570
April	------	43	138	8,210
May	355	138	235	14,400
August 4–31	152	39	72.4	4,020

[a] 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, 1930.

EXTREMES.—Maximum discharge during year, 28,500 second-feet Aug. 9 (gage height, 18.8 feet); minimum, 196 second-feet Dec. 24.

1914–1917, 1927–1930: Maximum discharge, about 70,000 second-feet Sept. 10, 1927 (gage height, 32.0 feet); minimum, 97 second-feet Feb. 10, 1929.

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

Daily and monthly discharge, in second-feet, 1929–30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4,300	1,310	930	485	743	1,050	1,270	4,560	10,400	1,600	3,990	421
2	3,810	1,320	922	507	784	1,060	1,360	4,270	10,400	1,320	4,130	381
3	3,410	1,260	922	485	601	907	1,470	4,270	7,200	1,150	4,200	381
4	3,410	1,230	907	452	645	798	1,500	5,330	5,920	1,050	3,640	381
5	2,910	1,200	848	524	723	757	1,630	5,580	5,490	922	3,920	431
6	2,680	1,230	827	690	729	870	2,030	4,640	5,580	855	2,710	607
7	2,510	1,250	798	834	798	930	2,930	3,920	6,360	743	2,490	812
8	2,350	1,230	855	577	777	960	4,340	3,380	8,080	716	3,320	798
9	2,350	1,250	855	524	834	975	5,490	3,130	8,490	664	13,900	651
10	2,200	1,240	777	474	999	930	5,920	2,890	8,380	710	11,400	577
11	2,290	1,220	743	479	1,140	892	6,000	2,600	7,980	952	15,800	507
12	2,290	1,220	791	518	1,190	900	5,740	2,490	7,380	4,480	12,400	501
13	2,120	1,090	855	468	1,410	877	5,090	2,380	7,380	1,600	8,910	441
14	2,290	1,120	812	426	1,660	907	4,640	2,220	7,480	2,270	5,490	426
15	2,020	1,050	770	463	1,960	960	4,860	2,100	7,380	2,270	4,130	411
16	2,350	922	743	613	2,010	1,090	5,330	2,160	6,540	1,420	3,520	377
17	2,240	884	777	518	1,830	1,260	5,090	2,950	5,660	1,410	3,070	354
18	2,180	1,010	784	474	1,460	1,630	4,480	4,130	5,170	2,380	2,600	354
19	2,040	1,090	791	349	1,260	1,980	3,640	3,780	4,940	2,490	2,380	363
20	1,920	1,090	696	536	1,200	1,590	3,260	3,380	5,010	4,710	2,050	319
21	1,850	1,030	670	426	1,250	1,300	3,450	2,950	4,340	3,850	1,800	323
22	1,710	968	386	396	1,320	1,170	4,100	2,890	4,130	5,170	1,420	319
23	1,580	930	264	319	1,420	1,150	5,280	4,940	3,990	5,660	1,310	315
24	1,530	841	229	298	2,180	1,250	6,310	5,740	3,710	5,010	1,050	298
25	1,520	791	264	268	1,770	1,800	6,910	4,780	3,380	4,130	900	287
26	1,460	827	268	243	1,870	2,020	6,910	5,090	2,710	3,320	827	290
27	1,420	863	287	240	1,520	1,910	7,200	6,270	2,320	2,890	777	401
28	1,370	819	490	315	1,240	2,130	6,090	6,820	2,100	2,770	729	463
29	1,360	863	553	458	-------	1,810	5,660	7,880	1,900	5,010	696	406
30	1,350	877	496	632	-------	1,500	5,170	8,280	1,730	4,060	607	447
31	1,400	-------	530	777	-------	1,280	-------	10,600	-------	4,940	501	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	4,300	1,350	2,200	135,000
November	1,320	791	1,070	63,700
December	930	229	672	41,300
January	834	240	476	29,300
February	2,180	601	1,260	70,000
March	2,130	757	1,250	76,900
April	7,200	1,270	4,440	264,000
May	10,600	2,100	4,400	271,000
June	10,400	1,730	5,720	340,000
July	5,660	664	2,600	160,000
August	15,800	501	4,020	247,000
September	812	287	435	25,900
The year	15,800	229	2,380	1,720,000

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, 1930.

EXTREMES.—Maximum discharge during year, 7,150 second-feet Aug. 11 (gage height, 11.0 feet); no flow during part of Dec. 25.

1923–1930: Maximum discharge, 16,100 second-feet Oct. 5, 1925 (gage height, 17.5 feet); no flow on several nights in December and January of most years.

REMARKS.—Records good. Discharge estimated during periods of ice effect, Dec. 23–28, 30, 31, Jan. 1, 2, 10, 11, 13, 14, 19–25, Feb. 1,2. Diversions for irrigation above station.

Daily and monthly discharge, in second-feet, 1929–30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	12	12	13	13	13	13	8	3	2	3	110	3
2	12	10	12	17	12	16	9	3	3	2	89	3
3	12	10	13	13	18	17	11	3	3	2	58	4
4	12	11	10	11	18	17	9	3	3	2	129	4
5	13	11	10	21	17	16	7	5	3	2	31	4
6	13	11	13	8	21	17	7	12	3	2	21	5
7	12	10	12	17	32	21	7	16	2	2	17	40
8	13	11	11	15	34	13	7	13	2	2	326	480
9	16	10	13	8	36	16	6	14	2	1	111	65
10	14	9	14	13	47	15	5	12	2	12	103	26
11	11	11	15	13	42	12	6	9	2	11	1,220	15
12	11	12	14	10	51	14	6	9	2	10	567	0
13	10	7	13	12	54	12	5	8	2	5	261	7
14	10	8	14	3	48	12	5	6	2	83	143	6
15	11	9	14	6	46	10	5	4	2	48	92	5
16	10	16	15	5	41	10	4	3	2	28	28	5
17	36	13	15	12	34	26	3	3	3	60	18	5
18	22	14	20	26	26	26	3	3	3	59	12	5
19	21	12	20	18	23	17	3	3	16	32	6	5
20	16	12	18	18	22	15	3	16	53	320	3	5
21	13	12	13	18	22	14	3	7	18	232	3	5
22	10	12	11	16	22	12	2	4	12	30	2	5
23	9	9	6	16	23	10	3	2	6	15	30	5
24	9	11	6	26	28	9	3	2	5	15	67	5
25	8	12	2	30	23	8	3	2	3	10	23	5
26	8	11	10	14	16	8	3	2	2	10	15	5
27	12	20	6	14	17	8	3	2	2	6	10	5
28	14	17	8	17	16	7	3	3	2	6	17	5
29	10	17	10	17	------	8	3	3	2	6	10	5
30	10	14	8	15	------	7	3	3	3	325	5	459
31	11	------	10	21	------	6	------	2	------	219	5	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	36	8	12.9	795
November	20	7	11.8	702
December	20	2	11.9	732
January	30	3	14.9	918
February	54	12	28.6	1,590
March	26	6	13.3	817
April	11	2	4.9	294
May	16	2	5.8	357
June	53	2	5.6	331
July	325	1	50.3	3,090
August	1,220	2	114	7,010
September	480	3	40.2	2,390
The year	1,220	1	26.3	19,000

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, 1930.

EXTREMES.—Maximum discharge during year, 850 second-feet Aug. 8 (gage height, 2.88 feet); no flow on many days.

1929–30: Maximum discharge, 1,410 second-feet Aug. 26, 1929 (gage height, 3.65 feet); no flow on many days 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, 1929–30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	15	11	9	7	10	13	5	1	0	0	1	0
2	15	11	10	9	3	9	6	0	0	0	0	1
3	15	9	10	10	11	10	4	0	0	0	2	0
4	10	7	10	10	10	10	2	0	0	0	3	0
5	10	7	10	7	10	11	2	0	0	0	47	0
6	10	7	10	12	9	11	3	0	0	0	3	0
7	10	7	10	12	10	11	2	0	0	0	2	0
8	10	8	10	12	10	11	3	0	0	0	65	0
9	10	8	11	11	6	7	5	0	0	0	18	0
10	8	6	12	13	12	9	3	0	1	0	17	0
11	7	6	14	12	10	10	1	0	0	2	14	0
12	30	8	10	9	10	9	0	0	0	40	5	0
13	19	6	9	15	10	10	1	0	0	31	3	0
14	10	12	9	16	16	10	1	0	0	0	3	0
15	68	15	5	11	8	10	1	0	0	0	3	0
16	30	15	5	14	4	11	4	0	0	0	2	0
17		15	5	14	20	12	4	0	0	65	2	1
18		15	6	18	9	12	5	0	0	120	3	1
19		15	6	23	10	11	9	0	0	60	2	0
20	20	21	7	24	9	10	16	0	0	1	1	0
21		26	7	15	11	9	9	0	0	1	1	0
22		18	5	15	11	9	4	0	2	1	1	0
23		12	7	15	7	6	3	0	0	1	1	0
24	20	14	9	19	10	9	3	0	0	0	1	0
25	20	18	8	12	11	10	2	0	0	0	1	0
26	15	11	8	8	11	6	2	0	0	0	1	0
27	11	11	8	11	11	3	1	0	0	0	0	0
28	12	9	10	11	12	3	2	0	0	0	1	0
29	14	10	10	13	-------	4	4	0	0	0	0	0
30	12	10	10	11	-------	3	2	0	0	7	0	0
31	12	-------	8	12	-------	5	-------	0	-----	27	0	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	68	7	13.3	819
November	26	6	11.6	690
December	14	5	8.6	532
January	24	7	12.9	795
February	20	3	10.0	557
March	13	3	8.8	543
April	16	0	3.6	216
May	1	0	0.0	2
June	2	0	0.1	6
July	120	0	11.5	706
August	65	0	6.5	403
September	1	0	0.1	6
The year	120	0	7.3	5,280

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.

DRAINAGE AREA.—7,240 square miles.

RECORDS AVAILABLE.—May, 1929, to September, 1930.

EXTREMES.—Maximum discharge during year, 965 second-feet Aug. 7; maximum gage height, 4.74 feet Oct. 16; minimum discharge, 1 second-foot May 16.

1929–30: Maximum discharge, 8,000 second-feet July 28, 1929 (gage height, 17.0 feet); no flow on various days in May, June, July, 1929.

REMARKS.—Records good. Discharge interpolated Mar. 28 to Apr. 5, June 20–22, and estimated during periods of ice effect, Nov. 23–27, Dec. 21 to Jan. 4, Jan. 10–15, 19–24. Diversions for irrigation above station. Some regulation by reservoirs upstream.

Daily and monthly discharge, in second-feet, 1929–30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	70	5	10		15	9	12	3	2	2	63	5
2	70	4	10	10	15	9	11	3	2	2	29	5
3	70	4	9		14	8	9	3	2	2	62	3
4	50	4	9		14	7	8	3	2	2	53	2
5	50	4	9	11	14	7	6	3	2	2	25	28
6	60	4	9	11	13	6	5	3	2	2	56	23
7	56	4	9	10	12	7	4	3	2	2	152	11
8	53	4	9	11	12	8	4	2	2	2	124	7
9	49	4	9	14	11	8	4	2	2	2	65	5
10	48	4	9	14	11	7	4	2	2	2	388	4
11	43	4	9	12	11	7	4	2	2	13	300	3
12	42	4	9	8	10	7	3	2	2	4	146	3
13	84	4	10	7	10	7	3	2	2	2	156	3
14	73	4	10	10	9	7	3	2	2	2	132	3
15	85	4	11	9	9	7	3	2	2	2	93	3
16	403	5	11	12	9	7	3	1	2	2	66	3
17	150	5	10	12	9	9	3	2	2	2	55	3
18	74	5	9	14	9	10	3	2	2	210	43	3
19	56	5	10	12	9	25	3	2	2	10	35	3
20	48	5	10	13	8	27	3	1	2	5	30	3
21	44	5	10	10	8	24	3	2	2	250	27	3
22	35	6		15	7	20	3	2	2	115	23	2
23	20	6		15	7	20	3	2	2		21	2
24	10	7		15	7	26	3	2	2		18	2
25	5	8		17	7	23	3	2	2	20	16	3
26	4	5	10	13	8	23	3	2	2		15	3
27	4	10		13	8	19	3	2	2	40	12	3
28	21	10		19	6	18	3	2	2	10	11	3
29	40	11		18	-------	16	3	2	2	50	10	3
30	15	11		16	-------	15	3	2	2	83	10	3
31	7	-------		16	-------	13	-------	2	-------	130	10	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	403	4	59.3	3,650
November	11	4	5.5	327
December	11	----------	9.7	597
January	19	7	12.5	768
February	15	6	10.1	559
March	27	7	13.1	805
April	12	3	4.3	254
May	3	1	2.2	133
June	2	2	2.0	119
July	250	2	33.2	2,040
August	388	10	72.5	4,450
September	28	2	5.0	298
The year	403	1	19.3	14,000

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, 1930.

EXTREMES.—Maximum discharge during year, 8,000 second-feet Aug. 11 (gage height, 11.05 feet); no flow on many days in May, June, July.

1929–30: Maximum discharge, 10,700 second-feet July 21, 1929 (gage height, 12.45 feet); no flow on many days in spring or summer each year.

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

REMARKS.—Records good. Discharge estimated during periods of ice effect, Nov. 25–29, Dec. 7–10, 14–20, 23, 24, 26–30, Jan. 1–6, 9–14, 21–26, Jan. 31 to Feb. 3. Diversions for irrigation above station. Some regulation by reservoirs upstream.

Daily and monthly discharge, in second-feet, 1929–30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	89	21	17	27	21	37	34	0	0	0	418	9
2	74	17	16	19	20	29	34	0	1	0	699	50
3	106	14	14	17	22	28	37	1	4	0	254	8
4	106	14	14	18	24	27	56	0	3	0	345	9
5	76	15	14	13	24	25	54	0	0	0	69	19
6	74	14	12	28	26	25	37	0	0	0	49	29
7	76	12	8	26	26	48	29	2	0	0	383	47
8	68	13	8	20	26	61	26	3	0	0	615	41
9	61	15	10	15	23	58	23	3	0	0	383	24
10	58	15	11	15	23	48	22	2	0	63	599	15
11	58	12	17	10	22	42	18	3	0	28	2,500	7
12	54	11	16	15	21	34	12	2	0	539	829	6
13	51	14	14	16	21	32	7	3	0	478	297	4
14	121	15	14	22	27	29	6	2	0	69	238	3
15	109	16	12	28	30	30	4	2	0	153	153	3
16	257	15	12	23	28	30	3	1	0	42	126	3
17	409	16	15	19	24	34	4	1	0	92	96	3
18	127	15	14	19	22	71	2	2	0	334	74	4
19	76	13	12	23	24	117	1	3	0	519	58	4
20	64	10	13	24	40	186	1	2	0	59	46	4
21	55	9	12	16	46	378	1	1	0	429	39	4
22	35	8	7	10	49	509	1	0	0	482	33	4
23	25	5	12	10	56	405	1	1	0	76	43	3
24	15	6	12	14	119	290	1	2	1	37	24	2
25	12	9	12	17	139	197	1	1	1	27	22	1
26	13	8	10	21	58	134	1	3	1	57	18	1
27	13	13	13	29	64	106	1	4	1	32	18	2
28	15	17	24	27	50	83	0	6	1	32	11	4
29	38	19	17	23	------	64	0	4	0	106	14	4
30	53	18	21	28	------	46	0	1	0	179	10	7
31	28	------	24	21	------	37	------	0	------	219	8	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	409	12	77.9	4,790
November	21	5	13.3	791
December	24	7	13.8	847
January	29	10	19.8	1,220
February	139	20	38.4	2,130
March	509	25	105	6,430
April	56	0	13.9	827
May	6	0	1.8	109
June	4	0	.4	26
July	539	0	131	8,040
August	2,500	8	273	16,800
September	50	1	10.8	643
The year	2,500	0	58.9	42,700

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, 1930.

EXTREMES.—Maximum discharge during year, 13,700 second-feet July 19 (gage height, 16.9 feet); no flow on several days.

1925–1930: 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 occurred Sept. 19, 1923 (gage height, 47.0 feet).

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

Daily and monthly discharge, in second-feet, 1929–30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	July	Aug.	Sept.
1	200	10	13	0	25	206	500	45	0	1,150	2
2	180	10	16	0	26	176	475	25	0	1,300	5
3	150	19	17	0	28	152	450	14	0	1,240	1
4	130	33	20	0	20	127	400	8	0	420	0
5	130	27	19	5	22	101	341	5	0	570	0
6	130	19	16	9	24	84	632	3	0	470	0
7	110	13	11	10	21	61	909	1	0	520	11
8	90	10	11	10	20	48	1,070	1	0	2,650	1,770
9	67	9	12	6	22	41	1,150	0	0	4,080	702
10	49	9	11	7	20	42	1,120	0	0	5,240	197
11	45	9	9	7	17	60	1,240	0	0	5,570	80
12	41	9	11	4	15	78	1,050	0	826	3,910	40
13	37	5	10	4	13	90	798	0	4,510	2,870	15
14	37	4	9	3	11	90	648	0	1,720	1,570	10
15	37	4	8	4	10	99	525	0	1,750	1,100	5
16	253	5	7	31	8	112	450	17	1,080	653	2
17	1,780	4	6	28	6	148	375	92	588	330	1
18	1,180	7	5	22	3	242	300	102	263	190	0
19	477	6	6	24	1	256	232	81	3,100	90	0
20	300	7	5	18	0	249	170	57	3,850	50	0
21	150	6	5	12	0	335	132	32	924	30	0
22	130	4	3	4	0	328	108	15	1,400	15	0
23	101	3	2	4	0	693	91	5	1,510	30	0
24	74	2	2	4	1	1,080	74	1	600	45	0
25	56	2	1	5	1	1,130	72	0	330	10	0
26	49	2	1	7	0	1,120	66	0	210	2	0
27	40	2	0	6	214	933	51	0	180	0	0
28	25	2	0	14	190	992	51	0	180	0	0
29	20	2	0	26	-------	875	84	0	160	2	0
30	16	6	0	27	-------	700	70	0	1,220	1	0
31	13	-------	0	29	-------	600	-------	0	1,080	0	-------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	1,780	13	197	12,100
November	33	2	8.3	496
December	20	0	7.6	468
January	31	0	10.6	655
February	214	0	25.6	1,420
March	1,130	41	363	22,300
April	1,240	51	454	27,000
May	102	0	16.3	1,000
July	4,510	0	822	50,500
August	5,570	0	1,100	67,700
September	1,770	0	94.7	5,640
The year	5,570	0	261	189,000

NOTE.—No flow during June.

ZUNI RIVER AT BLACKROCK, N. MEX.

LOCATION.—At reservoir on Zuni Indian Reservation at Blackrock, McKinley County, 4 miles below mouth of Rio de Los Nutrias.

DRAINAGE AREA.—692 square miles (revised).

RECORDS AVAILABLE.—Yearly discharge July, 1903, to June, 1905; July, 1908, to June, 1910. Monthly discharge October, 1910, to September, 1930.

REMARKS.—Record since July, 1908, shows flow into reservoir; obtained by means of gage and capacity curve for reservoir, quantity of water released from reservoir during periods of inflow being taken into consideration. Diversions for irrigation above reservoir. Record furnished by United States Indian Service.

Monthly run-off, in acre-feet, 1929–30

October	8,010	March	5,310	August	206
November	90	April	0	September	0
December	0	May	0		
January	0	June	702	The year	15,400
February	90	July	1,040		

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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, 1930.

EXTREMES.—Maximum discharge during year, 3,940 second-feet Aug. 11 (gage height, 6.40 feet); no flow on several days in April, May, June, July.

1929–30: 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 periods of ice effect, Dec. 14–17, 25–28, 30, 31, Jan. 2–5, 8–13, 18–26, 29–31, Feb. 1–3. Diversions for irrigation above station.

Daily and monthly discharge, in second-feet, 1929–30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	17	9	9	16	9	33	26	0	0	0	173	26
2	20	9	8	9	9	22	29	1	1	0	198	27
3	24	9	8	7	12	22	33	0	5	0	39	4
4	25	9	8	6	12	16	56	0	2	1	22	4
5	16	9	6	8	12	16	46	0	0	1	22	20
6	14	9	4	15	12	27	29	1	1	0	26	9
7	13	9	3	12	12	44	21	1	0	0	174	26
8	12	9	3	8	12	59	17	1	0	0	64	28
9	12	10	3	6	12	58	17	1	0	0	43	15
10	11	9	6	7	11	43	17	1	1	73	374	8
11	11	9	8	7	10	35	14	1	0	21	1,620	6
12	12	9	8	7	10	28	8	0	0	499	331	4
13	12	9	8	12	12	23	4	1	0	220	119	2
14	12	8	6	12	21	19	4	1	0	43	70	2
15	10	9	4	11	21	15	3	1	0	152	47	2
16	19	9	4	8	19	18	3	0	1	30	37	3
17	16	9	4	9	16	29	2	1	1	51	28	2
18	6	8	6	6	14	69	2	1	1	38	24	3
19	9	8	6	8	18	86	1	2	0	66	35	3
20	9	6	6	8	38	177	2	1	0	21	30	4
21	6	6	4	6	46	367	2	1	1	15	12	4
22	4	4	4	2	53	470	2	1	1	35	6	4
23	4	4	4	5	61	407	1	2	1	14	3	2
24	3	6	3	5	133	286	1	1	1	14	2	1
25	4	7	3	7	119	167	1	0	1	13	2	1
26	6	8	4	8	52	117	0	1	1	28	4	1
27	6	8	4	9	58	94	0	4	1	14	4	2
28	10	8	5	9	48	70	0	2	1	18	2	2
29	10	9	5	8	------	52	0	1	0	71	4	2
30	9	9	3	6	------	38	0	0	0	80	4	5
31	10	------	6	9	------	32	------	0	------	464	2	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	25	3	11.4	698
November	10	4	8.1	484
December	9	3	5.3	323
January	16	2	8.3	508
February	133	9	30.8	1,710
March	470	15	94.8	5,830
April	56	0	11.4	676
May	4	0	0.9	56
June	5	0	0.7	42
July	499	0	63.9	3,930
August	1,620	2	114	6,980
September	28	1	7.4	440
The year	1,620	0	29.9	21,700

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, 1930.

EXTREMES.—Maximum discharge during year, 519 second-feet Mar. 27 (gage height, 4.87 feet); minimum, 1 second-foot Jan. 10; minimum gage height, 1.97 feet May 30.

1929–30: Maximum discharge, 16,100 second-feet Apr. 4, 1929 (gage height, 17.8 feet); minimum, that of Jan. 10, 1930.

REMARKS.—Records good. No diversions above station.

Daily and monthly discharge, in second-feet, 1929–30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4	4	4	3	4	66	213	6	4	3	4	4
2	4	4	4	3	4	49	217	5	3	3	4	4
3	4	4	4	3	4	36	197	5	4	3	4	4
4	4	4	4	3	4	24	264	4	4	3	56	4
5	4	4	4	2	4	18	379	5	4	3	19	4
6	4	3	4	2	3	23	398	6	4	3	7	11
7	4	4	4	2	3	33	401	4	4	3	5	29
8	4	4	4	2	3	50	382	5	4	3	5	7
9	4	4	4	2	4	45	334	5	4	4	4	5
10	5	4	4	2	4	42	329	5	4	6	5	4
11	5	4	4	2	4	45	272	8	4	27	33	4
12	5	4	4	2	4	60	201	47	4	12	19	4
13	5	4	4	2	3	63	155	64	4	6	14	4
14	5	3	4	2	4	77	123	70	4	5	118	4
15	5	3	4	3	3	107	93	48	4	5	111	4
16	7	3	4	3	3	127	75	33	3	5	58	4
17	4	4	4	3	3	150	62	24	5	4	36	4
18	4	4	3	3	3	129	48	18	4	6	24	4
19	4	4	[illegible]	4	3	107	38	14	4	7	17	4
20	4	4	4	3	3	94	29	10	4	5	14	4
21	4	4	3	4	3	75	23	7	4	5	10	4
22	4	4	3	4	3	107	18	7	3	5	8	3
23	4	3	3	4	3	179	14	5	3	4	7	3
24	4	3	3	4	3	342	12	4	3	4	7	3
25	4	4	3	4	199	409	10	4	3	4	7	4
26	4	4	3	4	159	382	8	4	3	4	6	4
27	4	4	3	4	123	417	8	4	3	4	5	4
28	4	4	3	4	84	355	7	4	3	4	5	4
29	4	4	3	4	------	269	6	4	3	5	5	4
30	4	4	3	4	------	215	6	3	3	5	4	4
31	4	------	3	4	------	183	------	2	------	4	4	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	7	4	4.3	264
November	4	3	3.8	226
December	4	3	3.6	222
January	4	2	3.1	188
February	199	3	23.1	1,280
March	417	18	138	8,490
April	401	6	144	8,570
May	70	2	14.0	861
June	5	3	3.7	218
July	27	3	5.3	325
August	118	4	20.2	1,240
September	29	3	5.1	303
The year	417	2	30.6	22,200

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.

DRAINAGE AREA.—607 square miles.

RECORDS AVAILABLE.—March, 1929, to September, 1930. June, 1906, to January 1909, at station 3 miles upstream.

EXTREMES.—Maximum discharge during year, 1,080 second-feet Apr. 10 (gage height, 2.28 feet); no flow on many days.

1929–30: Maximum discharge, 39,000 second-feet Apr. 4, 1929 (gage height, 14.1 feet); 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, 1929–30

Day	Feb.	Mar.	Apr.	May	Aug.	Day	Feb.	Mar.	Apr.	May	Aug.
1	0	61	208	39	0	16	0	101	246	101	61
2	0	44	224	31	0	17	0	131	213	83	39
3	0	33	197	28	0	18	0	153	172	61	26
4	0	24	202	20	0	19	0	148	144	47	17
5	0	20	328	17	0	20	0	118	126	36	13
6	0	20	497	14	0	21	0	79	110	31	10
7	0	26	656	12	0	22	0	72	105	28	6
8	0	22	769	28	0	23	0	116	101	22	4
9	0	36	743	33	0	24	0	239	93	15	1
10	0	41	861	47	0	25	0	335	90	12	0
11	0	36	756	79	0	26	0	335	135	10	0
12	0	41	551	68	0	27	16	410	122	6	0
13	0	61	438	72	70	28	75	401	86	4	0
14	0	58	320	126	122	29	-------	304	65	2	0
15	0	72	266	131	79	30	-------	240	50	0	0
						31	-------	191	-------	0	0

Month	Maximum	Minimum	Mean	Run-off in acre-feet
February	75	0	3.2	180
March	410	20	128	7,870
April	861	50	296	17,600
May	131	0	38.8	2,390
August	122	0	14.5	889
The year	861	0	40.0	28,900

NOTE.—No flow during months for which no discharge is shown.

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 (revised).

RECORDS AVAILABLE.—July, 1926, to September, 1930.

EXTREMES.—Maximum discharge during year, 14,100 second-feet Aug. 8 (gage height, 14.9 feet); no flow on several days.

1926–1930: 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, 1929–30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4	5	7	4	5	4	1	0	0	0	554	0
2	4	4	6	5	5	4	1	0	0	0	62	0
3	4	4	5	5	5	3	0	0	0	0	25	0
4	7	5	5	5	5	4	1	0	0	0	1,430	10
5	5	5	6	6	5	2	1	2	0	0	379	28
6	2	5	8	8	6	4	1	0	0	0	71	43
7	2	5	4	7	6	2	0	0	0	0	41	29
8	1	5	4	4	6	3	0	0	0	0	2,420	280
9	2	5	5	5	5	4	0	0	0	46	2,100	46
10	1	5	4	5	5	2	16	0	0	138	2,230	11
11	1	6	5	6	5	2	9	0	0	413	5,180	5
12	1	5	5	6	4	2	5	0	0	953	219	4
13	3	4	5	6	4	2	2	0	0	1,820	451	2
14	4	4	4	7	4	2	1	1	0	657	121	1
15	8	6	3	10	4	3	2	1	0	119	50	1
16	20	8	4	12	4	1	2	0	0	143	19	1
17	62	7	8	12	4	5	1	1	0	91	12	2
18	18	6	6	9	5	3	0	1	0	27	11	2
19	8	6	7	8	5	3	0	0	0	858	5	2
20	5	6	5	8	5	2	0	0	0	143	6	2
21	5	5	3	9	3	1	2	0	1	191	4	2
22	5	4	2	7	4	1	0	0	0	25	4	2
23	5	4	4	5	7	0	0	1	0	14	8	2
24	5	4	4	10	8	0	0	1	0	13	4	1
25	5	4	4	4	5	1	0	2	0	6	5	2
26	5	6	5	5	4	2	0	1	0	4	4	2
27	5	6	3	5	4	2	0	0	0	3	1	2
28	5	8	4	5	3	2	0	0	0	1	0	2
29	5	8	4	5	------	1	0	0	0	26	0	6
30	5	7	5	5	------	1	0	0	0	126	1	208
31	5	------	6	6	------	1	------	0	------	270	0	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	62	1	7.0	430
November	8	4	5.4	321
December	8	2	4.8	298
January	12	4	6.6	405
February	8	3	4.8	268
March	5	0	2.2	137
April	16	0	1.5	89
May	2	0	.4	22
June	1	0	.0	2
July	1,820	0	196	12,100
August	5,180	0	497	30,600
September	280	0	23.3	1,380
The year	5,180	0	63.6	46,000

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.
DRAINAGE AREA.—100 square miles (revised).
RECORDS AVAILABLE.—October, 1923, to September, 1930.
EXTREMES.—Maximum discharge during year, 113 second-feet Feb. 23 (gage height, 1.25 feet); minimum, 14 second-feet Aug. 18; minimum gage height, 0.04 foot Aug. 31.
1923–1930: Maximum discharge, about 1,000 second-feet July 27, 1926, Sept. 16, 1927; minimum, that of Aug. 18, 1930.
REMARKS.—Records good. Minor diversions for irrigation above station.

Daily and monthly discharge, in second-feet, 1929–30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	20	21	22	22	22	23	28	57	35	20	24	21
2	21	21	22	21	22	22	25	56	34	20	23	21
3	21	21	22	21	22	22	24	52	34	22	22	21
4	21	22	22	21	23	22	24	52	32	20	21	22
5	21	21	22	21	22	22	26	50	30	21	21	22
6	21	21	21	22	22	23	29	45	30	21	23	21
7	21	22	21	23	22	22	37	43	29	19	22	22
8	21	22	22	23	22	22	45	42	30	21	24	21
9	22	22	22	23	22	22	53	42	29	26	22	23
10	21	22	22	23	22	22	57	39	28	25	21	20
11	21	23	22	23	22	22	64	38	28	24	23	22
12	21	22	22	23	22	21	65	39	27	24	22	22
13	22	22	22	23	22	22	74	53	27	36	21	21
14	22	22	22	24	22	22	65	65	26	23	20	21
15	22	22	22	23	22	22	66	79	26	23	19	21
16	22	22	22	23	22	23	64	84	25	22	20	21
17	21	22	22	23	22	24	64	76	25	22	20	21
18	22	22	22	23	22	24	65	67	27	23	18	20
19	21	22	22	22	22	23	64	64	28	22	18	22
20	21	22	22	23	23	23	72	62	24	26	20	20
21	21	22	22	22	23	22	85	61	26	24	19	20
22	20	22	22	22	23	22	88	61	25	23	24	21
23	20	22	22	22	67	22	87	58	24	22	21	21
24	20	22	22	21	29	23	88	57	24	24	21	23
25	20	22	22	21	27	24	95	52	24	23	21	21
26	20	22	22	22	24	26	87	48	22	22	21	21
27	20	22	22	22	24	26	69	45	22	23	22	21
28	20	22	22	21	24	26	69	42	22	22	23	21
29	20	23	22	21	------	25	64	40	22	22	21	23
30	20	23	22	21	------	24	61	41	22	22	21	22
31	21	------	22	21	------	25	------	38	------	21	18	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	22	20	20.9	1,280
November	23	21	21.9	1,310
December	22	21	21.9	1,350
January	24	21	22.1	1,360
February	67	22	24.4	1,350
March	26	21	23.0	1,410
April	95	24	60.1	3,580
May	84	38	53.2	3,270
June	35	22	26.9	1,600
July	36	19	22.8	1,400
August	24	18	21.2	1,300
September	23	20	21.3	1,270
The year	95	18	28.3	20,500

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, at east edge of Virgin.

DRAINAGE AREA.—990 square miles (revised).

RECORDS AVAILABLE.—April, 1909, to September, 1930, fragmentary.

EXTREMES.—Maximum discharge during year, about 3,000 second-feet Aug. 4 (gage height, 5.48 feet); minimum, 31 second-feet July 2, Sept. 2, 5.

1909–1930: Maximum discharge (estimated), 12,000 second-feet Oct. 27, 1912 (gage height, 11.6 feet); minimum, 24 second-feet on several days during July, 1908, July, 1928.

REMARKS.—Records poor. Discharge estimated during winter on basis of comparison with flow of Mukuntuweap River near Springdale. Diversions for irrigation above station.

Daily and monthly discharge, in second-feet, 1929–30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	106						123	178	144	41	51	36
2	98						123	178	123	3.	58	31
3	98						132	200	104	41	260	36
4	106						190	1,200	123	46	1,520	36
5	92						204	400	95	41	260	31
6	112						457	380	95	46	468	104
7	134						500	398	86	41	144	1,000
8							478	204	79	36	990	600
9							500	398	86	600	818	1.8
10							232	309	79	75	276	118
11							326	326	72	46	436	118
12						125	361	500	58	58	190	109
13							326	764	58	51	190	91
14							232	1,020	46	58	1.8	100
15					110		178	960	51	51	178	91
16		100	90	90			123	686	58	51	144	76
17							123	930	65	204	104	91
18							155	960	58	79	86	76
19							167	738	334	72	79	100
20	125						190	436	276	72	65	100
21							155	542	276	167	79	109
22							246	361	104	95	86	109
23						167	167	293	79	65	82	118
24							246	309	72	79	72	100
25						115	178	246	58	65	65	100
26							144	232	58	58	72	109
27						65	144	190	58	41	65	109
28						72	104	114	65	46	58	118
29					-------	232	72	167	51	58	46	109
30					-------	58	114	132	46	58	36	161
31		-------			-------	114	-------	132	-------	5.	41	-------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	----------	----------	121	7,440
November	----------	----------	100	5,950
December	----------	----------	90	5,530
January	----------	----------	90	5,530
February	----------	----------	110	6,110
March	----------	----------	123	7,560
April	500	72	223	13,300
May	1,200	114	448	27,500
June	334	46	98.6	5,870
July	600	31	81.4	5,010
August	1,520	36	232	14,300
September	1,000	31	140	8,330
The year	1,520	31	155	112,000

VIRGIN RIVER AT LITTLEFIELD, ARIZ.

LOCATION.—Staff gage in SE. ¼ sec. 5, T. 40 N., R. 15 W., half a mile below Beaver Dam Wash and half a mile above Littlefield.

DRAINAGE AREA.—4,400 square miles.

RECORDS AVAILABLE.—October, 1929, to September, 1930.

EXTREMES.—Maximum discharge (estimated), 6,500 second-feet Aug. 9 (gage height, 8.65 feet); minimum, 27 second-feet July 5, 7, 13 (gage height, 3.00 feet).

REMARKS.—Records fair for discharge below 300 second-feet; discharge estimated above 300 second-feet. No diversions in Arizona above this point except a few second-feet from Beaver Dam Springs. Mesquite Canal diverts water a few miles downstream for irrigation of lands in Nevada.

Daily and monthly discharge, in second-feet, 1929–30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1		98	127	141	240	188	76	90	107	36	e 35	40
2	e 80	104	137	120	240	175	82	87	104	32	46	38
3		104	137	107	245	179	96	101	96	32	e 1,800	36
4	84	107	134	152	192	175	104	e 1,100	96	28	e 2,100	38
5		111	137	192	217	196	104	e 1,200	79	27	e 5,000	38
6	e 75	107	137	156	192	196	141	e 500	74	28	e 600	43
7		114	167	192	175	196	152	e 600	74	27	e 875	e 150
8	65	145	134	192	196	209	156	e 600	72	32	e 800	e 1,000
9	65	145	148	167	196	183	188	e 610	74	196	e 6,000	e 3,400
10	72	156	148	192	175	120	209	e 580	79	90	e 3,100	e 4,500
11	74	134	141	254	217	137	217	e 540	79	54	e 2,000	
12	63	120	145	249	209	130	217	526	76	32	e 1,600	
13	72	127	156	245	217	120	240	570	74	27	e 700	
14	74	130	152	258	217	127	222	880	72	32	e 200	
15	72	130	213	283	217	137	209	1,030	72	31	127	
16	72	134	183	302	217	249	179	686	67	e 650	107	e 350
17	74	137	152	312	263	226	175	532	56	e 700	90	
18	114	127	156	322	245	240	160	660	46	e 150	87	
19	104	124	145	302	222	217	164	666	38	90	74	
20	101	148	156	240	192	196	152	471	e 700	76	54	
21	98	124	145	209	196	171	137	477	e 600	72	54	
22	98	137	156	167	196	183	120	217	107	76	58	152
23	82	141	145	171	640	160	114	273	90	61	67	156
24	96	124	137	175	795	167	130	258	54	44	263	152
25	96	130	137	254	448	152	117	188	44	38	120	156
26	98	137	137	312	278	120	107	137	38	43	107	156
27	98	137	120	302	254	104	90	117	36	38	74	156
28	120	134	127	292	240	111	87	130	35	38	69	171
29	117	137	156	292	-------	90	74	111	36	37	46	167
30	117	120	145	204	-------	74	82	107	36	e 36	38	250
31	104	-------	152	196	-------	63	-------	98	-------	e 35	38	-------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	120	63	86.9	5,340
November	156	98	127	7,560
December	213	120	147	9,040
January	322	107	224	13,800
February	795	175	262	14,600
March	249	63	161	9,900
April	240	74	143	8,510
May	1,200	87	456	28,000
June	700	35	107	6,370
July	700	27	93.2	5,730
August	6,000	35	849	52,200
September	4,500	36	488	29,000
The year	6,000	27	263	190,000

e Estimated.

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, 1930.

EXTREMES.—Maximum discharge during year, 428 second-feet May 16 (gage height, 5.80 feet); minimum, 34 second-feet July 27, 28, 31.

1925–1930: Maximum discharge, about 3,000 second-feet Aug. 3, 1929 (gage height, 11.0 feet); minimum, 24 second-feet Dec. 17, 31, 1928.

REMARKS.—Records fair. About 4 second-feet diverted around station during irrigation season.

Daily and monthly discharge, in second-feet, 1929–30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1		63	43	44	50	37	68	98			39	50
2		61	43	44	56	48	70	114			44	44
3	50	61	43	44	62	60	67	132			50	50
4		55	43	44	58	62	76	208			56	50
5	49	55	46	44	50	84	100	161			50	44
6	51	55	46	44	54	63	130	159			44	50
7	50	55	46	44	62	40	159	181			56	400
8	50	55	43	46	58	60	150	157	75		50	150
9	49	55	46	44	60	58	155	146		40	44	
10	48	55	46	43	62	57	142	134			68	
11	50	55	46	43	62	46	159	125			90	60
12	51	49	46	43	61	48	155	211			62	
13	52	49	49	43	58	57	165	345			56	
14	54	46	49	44	61	70	155	394			50	52
15	54	43	49	46	58	72	134	413			62	52
16	54	43	49	50	62	70	100	428			50	52
17	56	43	46	54	58	67	108	421		50	50	52
18	55	43	46	50	61	60	100	425		50	44	52
19	54	46	49	50	61	57	103	417		39	44	52
20		43	49	50	62	70	102	331		39	44	52
21		43	49	44	58	67	100	299		50	50	52
22		43	43	46	60	70	155	312		50	50	52
23	60	43	43	43	68	76	150	252	50	39	50	52
24		43	43	43	66	72	142	244		39	50	52
25		43	41	44	63	81	134	241		39	50	58
26		43	41	56	58	76	142	230		39	50	58
27	62	46	43	54	56	81	136	206		34	50	52
28	62	43	43	47	50	75	131	168		34	44	52
29	60	43	43	50	------	70	108	157		39	50	52
30	60	43	43	54	------	67	96	138		39	50	92
31	60	------	43	56	------	100	------	125	------	34	50	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	------	------	54.9	3,380
November	63	43	48.8	2,900
December	49	41	45.1	2,770
January	56	43	46.8	2,880
February	68	50	59.1	3,280
March	100	37	65.2	4,010
April	165	67	123	7,320
May	428	98	238	14,600
June	------	------	62.5	3,720
July	------	34	40.5	2,490
August	90	39	51.5	3,170
September	400	44	69.2	4,120
The year	428	34	75.5	54,600

SANTA CLARA CREEK NEAR CENTRAL, UTAH

LOCATION.—Staff gage in sec. 11, T. 39 S., R. 16 W., on road to Pine Valley 1 mile southeast of Central and 40 feet above Hunts Spring.

DRAINAGE AREA.—84 square miles.

RECORDS AVAILABLE.—April, 1909, to September, 1930 (discontinued).

EXTREMES.—Maximum discharge during year, 85 second-feet Aug. 9 (gage height, 1.90 feet); minimum, 3 second-feet on several days during October, November, December.

1909–1930: Maximum discharge, 1,450 second-feet Oct. 6, 1916 (gage height, 5.00 feet); minimum, 3 second-feet on several days in September to December, 1929.

REMARKS.—Records fair. Gage read three or four times a week; discharge estimated or interpolated for missing days. Diversions for irrigation above station.

Daily and monthly discharge, in second-feet, 1929–30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3	4	4	5	6	6	9	25	27	8	7	5
2	3	4	4	5	6	6	9	23	25	8	7	6
3	3	4	4	5	6	6	10	26	23	8	7	6
4	3	4	4	5	6	7	12	62	20	8	7	6
5	3	4	4	5	6	7	13	44	20	8	7	6
6	3	3	4	5	6	7	20	32	18	8	7	6
7	3	3	4	5	6	7	21	24	18	8	7	6
8	3	3	4	5	6	7	25	22	18	8	7	6
9	3	3	4	5	6	7	29	21	18	8	40	7
10	3	3	4	5	6	7	31	17	18	8	15	7
11	3	3	4	5	6	7	29	18	18	8	15	7
12	3	3	4	5	6	7	26	22	18	8	15	7
13	3	3	4	5	6	7	24	22	18	8	13	7
14	3	3	3	5	6	7	21	20	17	8	10	7
15	3	3	3	5	6	7	23	20	17	8	8	7
16	3	3	3	5	6	7	21	20	17	9	7	7
17	3	4	4	5	6	7	20	20	16	8	8	7
18	3	4	4	5	6	8	20	21	16	7	8	7
19	3	4	4	5	6	8	20	21	15	7	9	7
20	3	4	4	5	6	8	20	21	17	7	9	7
21	3	4	4	5	6	8	21	21	16	7	9	7
22	3	4	4	5	6	8	21	20	17	7	9	7
23	3	4	4	5	6	8	24	20	15	7	9	7
24	3	4	4	5	6	8	27	19	14	7	8	7
25	3	4	4	5	6	8	20	18	12	7	7	7
26	3	4	4	5	6	8	17	17	10	7	7	7
27	3	4	4	5	6	8	15	15	10	7	7	8
28	3	4	4	5	6	8	12	26	9	7	7	8
29	3	4	4	5	------	8	13	27	8	7	7	8
30	4	4	4	5	------	8	27	28	8	7	7	8
31	4	------	4	5	------	9	------	29	------	7	6	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	4	3	3.1	191
November	4	3	3.6	214
December	4	3	3.9	240
January	5	5	5.0	307
February	6	6	6.0	333
March	9	6	7.4	455
April	31	9	20.0	1,190
May	62	15	23.9	1,470
June	27	8	16.4	976
July	8	7	7.6	467
August	40	6	9.5	584
September	8	5	6.8	405
The year	62	3	9.4	6,830

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.

DRAINAGE AREA.—5,140 square miles.

RECORDS AVAILABLE.—September, 1910, to December, 1915, fragmentary; October, 1928, to September, 1930.

EXTREMES.—Maximum discharge during year, 31,000 second-feet Sept. 8 (gage height, 11.15 feet); minimum, 9 second-feet Sept. 5.

1928–1930: Maximum discharge, that of Sept. 8, 1930; minimum, that of Sept. 5, 1930.

REMARKS.—Records good except those for Mar. 18–22, Sept. 8–10, which are fair. Only minor diversions above station for irrigation.

Daily and monthly discharge, in second-feet, 1929–30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	16	16	20	19	19	16	22	10	21	13	13	12
2	17	17	20	17	19	16	22	12	21	13	13	12
3	17	16	20	17	18	16	21	14	21	12	12	11
4	18	18	20	16	18	16	21	14	21	12	12	10
5	16	19	20	16	19	17	19	15	20	14	12	10
6	16	19	20	16	20	16	18	15	20	14	10	10
7	16	18	20	18	18	15	16	14	20	15	12	12
8	16	19	20	17	18	15	16	16	19	16	12	5,530
9	16	19	22	17	17	16	14	16	19	16	313	922
10	15	20	22	17	17	15	14	17	18	15	112	200
11	16	18	22	16	16	16	12	17	17	15	96	26
12	16	18	22	17	16	16	12	17	16	14	181	19
13	16	18	23	18	16	17	14	16	17	15	50	19
14	16	19	24	17	16	18	12	16	16	15	20	17
15	16	19	22	17	17	18	14	17	16	15	15	16
16	15	18	22	17	16	17	14	18	14	16	15	16
17	17	18	22	16	16	17	14	17	14	16	13	16
18	14	19	22	17	16	814	14	16	14	15	13	16
19	15	19	21	19	16	1,040	14	16	14	14	12	15
20	16	19	19	18	17	784	14	17	14	15	12	15
21	14	19	19	18	16	412	13	17	14	16	12	15
22	16	19	20	18	17	200	13	19	14	16	12	15
23	16	19	19	18	18	82	12	22	15	18	12	14
24	16	19	19	17	18	44	12	21	15	16	12	13
25	16	19	19	18	17	38	12	23	14	15	11	12
26	16	19	20	18	16	35	11	22	14	15	11	19
27	16	19	20	17	16	29	11	23	14	15	11	19
28	17	19	21	16	16	25	11	22	14	15	10	16
29	16	20	21	16	------	26	10	22	13	13	10	17
30	18	20	21	16	------	24	10	21	12	13	10	19
31	19	------	21	17	------	23	------	22	------	13	11	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	19	14	16.1	992
November	20	16	18.6	1,110
December	24	19	20.7	1,280
January	19	16	17.1	1,050
February	20	16	17.1	950
March	1,040	15	124	7,640
April	22	10	14.4	857
May	23	10	17.5	1,080
June	21	12	16.4	974
July	18	12	14.7	902
August	313	10	34.5	2,120
September	5,530	10	235	14,000
The year	5,530	10	45.5	33,000

GILA RIVER BASIN

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., 12 miles east of Duncan, Ariz.

DRAINAGE AREA.—3,290 square miles (revised).

RECORDS AVAILABLE.—October, 1926, to September, 1930. May, 1914, to September, 1915, at station 2½ miles upstream and a quarter of a mile above intake of Sunset Canal; January, 1923, to September, 1926, at a point one-half mile upstream, published as "Gila River near Duncan, Ariz."

EXTREMES.—Maximum discharge during year, 7,400 second-feet Aug. 11 (gage height, 9.43 feet); no flow on various days in June and July.

1926–1930: Maximum discharge, that of Aug. 11, 1930; no flow on various days of each year.

REMARKS.—Records good. Diversions for irrigation above station. Station is above all diversions for Duncan Valley except Sunset Canal.

Daily and monthly discharge, in second-feet, 1929–30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	63	109	68	60	50	58	287	134	2	0	234	48
2	71	100	68	60	60	58	283	100	14	0	140	37
3	85	100	68	58	55	60	270	68	15	0	127	18
4	82	100	68	55	53	60	258	71	4	0	150	57
5	68	88	68	55	53	55	231	77	3	0	33	40
6	77	88	68	58	48	50	216	85	1	0	467	22
7	68	94	66	60	48	46	239	80	0	0	1,000	524
8	60	100	66	58	48	43	258	80	2	44	2,410	460
9	63	100	66	58	48	38	254	71	0	34	854	274
10	63	100	63	58	50	38	258	63	0	150	751	243
11	71	100	63	55	53	41	270	71	0	61	1,840	144
12	364	91	63	55	48	38	270	82	0	26	2,050	88
13	841	88	60	58	43	38	266	75	0	11	1,270	77
14	240	88	63	58	43	38	274	60	1	78	968	66
15	249	85	60	60	43	41	231	37	0	54	663	46
16	188	82	60	60	46	36	220	18	0	38	487	36
17	153	80	60	58	48	59	209	20	0	115	386	31
18	140	80	60	55	48	725	198	39	0	444	308	34
19	109	80	58	58	48	751	191	64	1	152	253	28
20	109	80	58	58	58	584	181	51	7	97	220	19
21	112	77	58	63	60	561	164	25	1	127	155	14
22	106	74	63	63	55	567	150	18	0	264	144	9
23	100	71	71	60	48	573	144	38	0	440	124	10
24	88	71	58	55	82	590	201	5	0	719	94	10
25	80	74	58	48	94	614	243	6	0	504	74	10
26	90	74	55	50	97	567	235	6	0	466	128	10
27	110	74	55	53	82	509	213	22	0	759	150	8
28	106	71	58	55	66	470	209	16	0	544	105	8
29	112	71	58	55	------	407	184	1	0	438	159	9
30	110	71	58	53	------	334	157	1	0	381	244	13
31	110	------	58	48	------	291	------	1	------	270	85	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	841	60	138	8,510
November	109	71	85.4	5,080
December	71	55	62.1	3,820
January	63	48	56.7	3,490
February	97	43	56.2	3,120
March	751	36	269	16,500
April	287	144	225	13,400
May	134	1	47.9	2,950
June	15	0	1.7	101
July	759	0	201	12,300
August	2,410	33	518	31,900
September	524	8	79.8	4,750
The year	2,410	0	146	106,000

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, 1930; discharge measurements only.
REMARKS.—Below all diversions in Duncan Valley except Colmonero Canal.

Discharge measurements, in second-feet, 1929–30

Oct. 16	246	Mar. 24	581	Aug. 1	219
Nov. 12	131	Apr. 11	244	Aug. 17	387
Dec. 18	74.3	May 5	92.4	Sept. 9	292
Jan. 14	78.7	May 26	20.6	Sept. 30	22.6
Feb. 12	65.1	June 15	8.7		
Mar. 4	78.2	July 9	39.1		

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 (revised).
RECORDS AVAILABLE.—May, 1923, to September, 1930; 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, 1929–30

Oct. 17	165	Mar. 25	547	July 30	309
Nov. 11	107	Apr. 9	178	Aug. 19	251
Dec. 19	62.0	May 7	85.6	Sept. 8	540
Jan. 15	68.9	May 27	10.6	Sept. 29	14.6
Feb. 13	48.5	June 17	10.2		
Mar. 5	55.3	July 8	85.4		

GILA RIVER NEAR CLIFTON, ARIZ.

LOCATION.—Water-stage recorder in SW. ¼ sec. 30, T. 5 S., R. 30 E., at highway bridge 7 miles south of Clifton and 5 miles above San Francisco River.

DRAINAGE AREA.—4,040 square miles (revised).

RECORDS AVAILABLE.—March, 1928, to September, 1930. November, 1910, to July, 1918, at a station 4 miles upstream, published as "Gila River at Guthrie, Ariz."

EXTREMES.—Maximum discharge during year, 6,300 second-feet Aug. 11 (gage height, 11.5 feet); minimum, 16 second-feet July 1; minimum gage height, 3.75 feet Sept. 30.

1928–1930: 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 estimated Aug. 4, 5. Diversions for irrigation above station. Station is below all diversions from Gila River above San Francisco River.

Daily and monthly discharge, in second-feet, 1929–30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	103	126	103	86	73	90	317	132	22	18	246	129
2	98	128	101	86	76	80	288	114	22	18	287	77
3	71	116	99	82	82	78	267	92	22	18	140	48
4	67	105	99	76	80	74	230	84	22	66	460	141
5	55	99	99	76	76	76	214	85	22	26	210	72
6	48	103	99	78	71	65	173	110	22	22	100	91
7	48	107	99	74	69	55	175	108	21	21	1,120	489
8	50	114	97	74	63	45	167	100	21	106	2,500	800
9	45	119	92	74	50	44	185	94	21	59	2,260	338
10	41	128	88	74	51	50	201	83	21	46	774	246
11	41	126	90	74	63	48	207	72	21	275	1,690	196
12	287	130	97	78	62	38	238	84	22	57	2,880	132
13	1,200	126	101	82	63	35	252	79	21	58	2,110	109
14	306	123	94	76	63	32	256	63	21	36	1,330	91
15	301	121	92	80	65	32	226	56	22	31	883	90
16	289	121	97	73	60	30	204	45	22	36	575	78
17	196	121	90	76	56	82	180	36	22	349	429	58
18	159	121	84	78	50	355	167	34	22	160	351	50
19	150	119	82	82	58	760	163	32	22	508	249	41
20	130	116	84	90	67	602	147	29	22	133	196	38
21	126	114	92	86	63	567	142	29	21	91	136	33
22	121	114	90	90	65	557	119	29	22	293	92	31
23	107	112	101	88	60	543	114	28	22	416	66	31
24	105	112	105	92	65	567	147	28	22	1,220	49	30
25	107	110	92	86	82	597	196	28	22	863	32	28
26	105	110	97	80	105	552	207	29	22	2,230	26	27
27	105	110	97	82	121	509	196	26	19	904	64	27
28	107	110	94	78	107	486	190	24	19	1,010	60	27
29	107	112	92	78	-------	458	172	23	18	410	38	27
30	110	110	92	74	-------	410	147	22	18	360	130	27
31	128	-------	90	73	-------	368	-------	21	-------	301	163	-------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	1,200	41	158	9,740
November	130	99	116	6,910
December	105	82	94.5	5,810
January	92	73	79.9	4,910
February	121	50	70.2	3,900
March	760	30	267	16,400
April	317	114	196	11,700
May	132	21	58.7	3,610
June	22	18	21.3	1,270
July	2,230	18	327	20,100
August	2,880	26	634	39,000
September	800	27	120	7,140
The year	2,880	18	180	130,000

GILA RIVER NEAR SOLOMONSVILLE, ARIZ.

LOCATION.—Water-stage recorder in NE. ¼ sec. 31, T. 6 S., R. 28 E., 10 miles east of Solomonsville and 11 miles below San Francisco River.

DRAINAGE AREA.—7,950 square miles (revised).

RECORDS AVAILABLE.—April, 1914, to September, 1930.

EXTREMES.—Maximum discharge during year, 11,500 second-feet Aug. 11 (gage height, 6.32 feet); minimum, 37 second-feet July 2 (gage height, 1.10 feet).

1914–1930: Maximum discharge, about 100,000 second-feet Jan. 19, 1916 (gage height, 14.0 feet); minimum, 26 second-feet July 4, 1923.

REMARKS.—Records good. Discharge interpolated Oct. 30 to Nov. 4. Diversions for irrigation above station. Station is above all diversions for Safford Valley except Brown Canal.

Daily and monthly discharge, in second-feet, 1929–30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	248	235	181	167	185	199	607	280	71	45	461	260
2	280	229	174	160	181	188	598	257	76	41	485	223
3	235	223	170	163	185	181	572	223	76	48	330	174
4	207	217	170	153	177	177	515	211	76	46	694	209
5	203	210	174	150	174	170	461	203	73	88	400	183
6	192	227	177	153	174	174	413	215	71	62	240	383
7	188	239	181	163	167	163	381	244	68	71	1,900	557
8	181	230	185	170	167	156	399	215	66	107	3,680	1,690
9	174	231	181	167	153	146	440	199	62	232	3,340	500
10	163	239	181	167	140	140	476	188	59	199	1,910	406
11	160	239	181	170	146	140	499	170	62	463	3,210	344
12	257	231	185	170	146	133	540	174	59	386	5,500	285
13	1,370	231	188	174	146	127	572	181	55	153	2,810	235
14	550	227	185	181	153	127	572	163	52	203	1,440	207
15	500	219	177	181	153	124	523	156	52	239	1,230	185
16	596	215	174	181	156	133	468	146	120	271	840	170
17	427	215	170	177	156	214	427	133	188	368	652	153
18	356	215	163	177	156	613	387	133	124	861	523	127
19	301	203	150	181	153	1,340	356	127	106	710	427	112
20	262	195	150	203	156	1,040	327	115	97	768	333	95
21	239	192	163	203	163	876	306	103	81	508	271	92
22	231	188	163	181	160	864	301	92	78	641	219	92
23	211	188	153	177	163	1,010	317	89	76	523	177	89
24	207	188	163	174	177	1,080	356	92	68	1,010	156	86
25	199	188	160	156	195	1,100	440	95	64	1,400	137	81
26	195	188	156	146	203	1,010	476	95	62	2,720	130	81
27	195	185	156	174	215	948	468	86	59	1,100	295	78
28	195	188	150	185	215	876	413	76	52	1,690	207	76
29	253	188	156	181	-------	796	375	78	52	796	249	76
30	247	185	160	177	-------	672	327	81	50	598	203	78
31	241	-------	167	185	-------	616	-------	73	-------	590	296	-------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	1,370	160	299	18,400
November	239	185	211	12,600
December	188	150	169	10,400
January	203	146	172	10,600
February	215	140	168	9,350
March	1,340	124	501	30,800
April	607	301	444	26,400
May	280	73	151	9,310
June	188	50	75.2	4,470
July	2,720	41	546	33,600
August	5,500	130	1,060	64,900
September	1,690	76	244	14,500
The year	5,500	41	339	245,000

GILA RIVER NEAR ASHURST, ARIZ.

LOCATION.—In sec. 30, T. 5 S., R. 24 E., at Eden crossing ford, 1½ miles southeast of Ashurst.

DRAINAGE AREA.—10,900 square miles.

RECORDS AVAILABLE.—December, 1920, to September, 1930; discharge measurements only.

REMARKS.—Below all diversions in Safford Valley.

Discharge measurements, in second-feet, 1929–30

Oct. 12	21.1	Mar. 3	4.0	June 12	1.8
Nov. 14	150	Mar. 26	590	July 4	.9
Dec. 16	118	Apr. 13	300	Aug. 2	391
Jan. 13	3.6	May 2	74.6	Sept. 5	3.6
Feb. 8	8.3	May 24	3.6	Sept. 25	2.1

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, 1930.

EXTREMES.—Maximum discharge during year, 9,600 second-feet July 29 (gage height, 7.38 feet); no flow July 4–7.

REMARKS.—Records good. Discharge estimated Oct. 1–3, Nov. 2–5, June 19–22, June 29 to July 7. Diversions for irrigation above station.

Daily and monthly discharge, in second-feet, 1929–30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	260	198	239	53	120	43	428	234	16	4	476	53
2	300	200	208	56	139	42	398	174	16	2	413	123
3	270	200	208	56	143	42	369	132	15	1	428	75
4	245	200	219	53	120	43	342	113	15	0	398	40
5	193	200	219	51	93	40	280	120	14	0	398	34
6	184	198	239	51	96	107	200	152	13	0	377	42
7	174	198	245	61	56	105	200	143	12	0	362	382
8	148	203	256	63	47	70	174	143	11	10	3,710	915
9	140	219	245	53	42	61	139	139	9	80	5,590	701
10	132	214	214	51	43	51	161	161	8	1,660	2,510	369
11	105	214	184	56	38	49	174	143	8	590	3,450	297
12	84	193	188	63	32	47	184	109	8	490	4,350	224
13	284	208	166	75	34	51	262	75	10	210	4,630	179
14	1,250	224	152	84	34	53	291	61	9	190	3,010	128
15	740	208	152	96	36	47	268	49	8	150	1,850	99
16	867	198	161	113	36	61	239	49	5	105	1,030	93
17	547	193	184	120	36	598	229	45	5	90	700	75
18	356	188	179	113	38	492	198	42	3	135	543	61
19	323	188	170	113	38	526	161	40	3	324	420	49
20	274	193	166	156	36	768	113	32	2	450	323	45
21	224	198	143	152	38	598	139	29	2	510	219	36
22	174	203	139	143	38	516	148	26	1	797	170	32
23	135	219	132	109	38	492	175	26	42	638	139	29
24	113	193	113	84	58	562	224	22	47	413	109	28
25	135	188	102	78	70	648	268	21	21	1,120	87	25
26	128	188	120	73	45	679	336	19	14	2,080	78	24
27	138	179	99	70	43	617	369	13	12	2,740	68	21
28	148	174	87	65	42	580	356	19	10	4,420	56	21
29	294	179	75	68	------	580	323	18	8	3,210	68	21
30	300	208	68	65	------	508	256	17	6	860	47	21
31	219	------	63	68	------	459	------	17	------	580	36	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	1,250	84	287	17,600
November	224	174	199	11,800
December	256	63	166	10,200
January	156	51	81.0	4,980
February	143	32	58.2	3,230
March	768	40	308	18,900
April	428	113	247	14,700
May	234	17	77.0	4,740
June	47	1	11.8	700
July	4,420	0	707	43,500
August	5,590	36	1,160	71,300
September	915	21	141	8,410
The year	5,590	0	290	210,000

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.—December, 1928, to September, 1930.
REMARKS.—Storage of water was begun Nov. 15, 1928. Water was below outlet gates prior to Feb. 26, 1929, and again from about May 10 to about July 25, 1929. There is dead storage capacity of approximately 25,500 acre-feet below outlet gates, at elevation 2,383.00 feet. This storage is not included in contents published in the following tables. Records of daily gage heights and contents furnished by United States Indian Service. Records published for each fifth day only.

Gage height, in feet, 1928–1930

Day	Oct.	Nov.	Dec.	Jan	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1928-29												
1				*374.82	*379.76	383.31	*383.90				397.25	*419.65
6				*376.15	*380.20	383.62	*383.92				400.27	420.12
11			367.71	*376.71	381.33	383.84	*383.90				409.17	420.19
16			*369.72	377.37	382.03	*383.89	*383.85				417.21	420.53
21			371.64	378.32	382.58	*383.90					418.94	420.57
26			373.13	379.13	*383.04	*383.90					419.14	425.34
1929-30												
1	426.00	427.08	427.79	428.84	430.54	429.98	434.08	431.35	426.86	418.72	422.51	430.15
6	*426.26	427.16	427.96	428.94	430.77	429.73	434.06	430.78	425.50	417.15	422.63	428.71
11	*426.20	427.29	428.11	429.05	430.81	429.49	433.53	430.30	424.18	416.69	427.36	428.62
16	426.88	427.39	428.30	429.33	430.68	429.50	433.04	429.72	422.85	416.78	432.95	427.80
21	427.27	427.52	428.53	429.94	430.42	432.46	432.51	428.92	421.58	416.17	432.79	426.72
26	426.97	427.62	428.66	430.19	430.17	433.42	431.85	428.02	420.18	417.04	431.74	425.49

* Interpolated.

NOTE.—Add 2,000 feet to gage heights to obtain mean sea level elevations.

Contents, in acre-feet, 1929–30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1929												
1						400	*1,300				28,300	*97,500
6						800	*1,400				35,700	99,600
11						1,200	*1,300				61,000	100,000
16						*1,300	*1,200				88,500	101,100
21						*1,300					94,500	101,300
26						*1,300					95,500	121,300
1929-30												
1	124,500	129,100	132,100	136,900	145,200	142,400	162,900	149,200	127,900	9[illegible],900	109,300	143,200
6	*125,600	129,400	132,800	137,700	146,400	141,300	162,800	146,400	121,800	8[illegible],900	109,800	136,600
11	*125,400	130,000	133,500	138,200	146,600	140,200	159,900	144,000	116,200	83,200	130,100	136,000
16	128,200	130,400	134,300	139,500	145,900	140,200	157,200	141,200	110,800	8[illegible],500	156,800	132,100
21	129,900	131,000	135,400	142,200	144,600	154,600	154,800	137,600	105,300	8[illegible],300	156,000	127,200
26	128,600	131,400	136,000	143,400	143,400	159,300	151,800	133,100	99,700	8[illegible],400	151,200	121,700

* Interpolated.

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, 1930. July, 1899, to November, 1905, at station 8 miles upstream, below San Carlos River. August, 1910, to February, 1911, at point 9 miles upstream, above San Carlos River.

EXTREMES.—Maximum discharge during year, 954 second-feet Sept. 6 (gage height, 5.70 feet); no flow on various days.

1914–1927: Maximum discharge, 130,000 second-feet Jan. 2[illegible], 1916; no flow for various periods.

1928–1930: Maximum discharge, that of Sept. 6, 1930; no flow on various days of each year.

REMARKS.—Records good. Discharge estimated July 6–11. Discharge regulated by Coolidge Dam after Nov. 15, 1928.

Daily and monthly discharge, in second-feet, 1929–30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	75	81	43	2	0	178	301	599	634	651	154	804
2	74	84	44	2	0	180	298	538	645	651	238	810
3	92	86	45	2	0	178	294	459	628	662	334	810
4	103	88	45	2	0	175	301	454	651	738	338	798
5	84	87	45	2	0	183	407	382	645	730	406	840
6	72	87	46	2	0	188	485	330	651	710	415	870
7	100	88	46	2	0	199	490	317	651	710	364	840
8	66	92	46	2	44	194	485	326	662	710	162	685
9	152	92	46	1	86	196	454	322	599	710	1	685
10	231	88	46	1	81	199	444	309	605	710	1	616
11	213	90	47	1	84	199	464	369	605	535	1	566
12	217	88	46	1	94	204	464	410	622	480	0	560
13	204	88	46	1	118	213	459	410	628	490	0	571
14	188	88	45	0	113	216	464	415	651	490	68	571
15	191	93	45	0	120	219	449	410	594	495	191	556
16	187	92	45	0	118	172	449	415	634	500	316	583
17	210	92	46	0	135	127	475	410	599	500	508	583
18	213	92	46	0	175	56	490	410	605	500	605	583
19	213	90	46	0	185	1	490	406	583	490	616	588
20	216	90	46	0	180	0	544	410	594	477	708	594
21	216	95	46	0	183	0	566	410	554	40[illegible]	768	599
22	219	88	45	0	188	12	566	420	554	347	780	599
23	219	215	45	0	216	69	571	410	571	326	786	588
24	219	90	45	0	204	124	594	420	588	30[illegible]	708	594
25	192	92	46	0	183	124	605	456	583	30[illegible]	720	583
26	204	88	47	0	196	124	605	475	549	30[illegible]	768	577
27	204	80	18	0	191	122	599	490	577	242	780	583
28	150	83	2	0	185	122	588	480	571	150	828	605
29	96	78	2	0	-------	190	594	490	583	148	840	527
30	79	59	2	0	-------	225	588	495	662	146	828	425
31	81	-------	2	0	-------	264	-------	506	-------	154	822	-------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	231	66	161	9,880
November	215	59	91.5	5,440
December	47	2	39.0	2,400
January	2	0	0.7	42
February	216	0	110	6,110
March	264	0	150	9,230
April	605	294	486	28,900
May	599	309	424	26,100
June	662	549	609	36,300
July	738	146	476	29,300
August	840	0	453	27,900
September	870	425	640	38,100
The year	870	0	303	220,000

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, 1930.

REMARKS.—Principal discharge regulated at Coolidge Dam, 30 miles upstream.

Discharge measurements, in second-feet, 1928–1930

1928		1929		1930	
Dec. 16	3.1	Aug. 28	71.9	Mar. 29	134
Dec. 27	2.0	Sept. 18	123	Apr. 18	469
		Oct. 9	100	Apr. 28	557
1929		Nov. 6	91.0	May 19	392
Jan. 21	3.8	Dec. 11	44.7	June 9	538
Feb. 14	3.0			July 1	596
Mar. 6	2.6	1930		July 22	345
Mar. 27	29.2	Jan. 7	4.8	Aug. 19	628
Apr. 11	36.1	Feb. 4	3.8	Sept. 2	712
Apr. 24	19.1	Feb. 26	212	Sept. 22	634

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 (revised).

RECORDS AVAILABLE.—January, 1911, to September, 1930.

EXTREMES.—Maximum discharge during year, 42,800 second-feet Aug. 8 (gage height, 12.6 feet); minimum, 30 second-feet Jan. 4 (gage height, 2.33 feet).

1911–1930: Maximum discharge, about 132,000 second-feet Jan. 20, 1916 (gage height, 19.5 feet); discharge, less than 1 second-foot in summer of various years.

REMARKS.—Records good. Diversions for irrigation above station. Discharge partly regulated by storage in San Carlos Reservoir.

Daily and monthly discharge, in second-feet, 1929–30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	129	104	114	48	51	160	370	590	522	600	500	944
2	181	109	69	43	38	129	363	551	590	561	600	853
3	160	114	60	33	39	134	347	503	610	571	676	720
4	258	100	60	31	43	144	333	495	610	581	687	768
5	178	109	60	33	38	134	305	477	621	654	957	840
6	129	124	69	36	41	251	417	460	590	643	991	816
7	109	129	69	39	35	354	425	409	571	621	3,600	1,890
8	119	124	81	41	38	305	477	355	600	1,140	18,400	2,000
9	55	114	73	43	36	271	425	355	610	1,420	3,410	879
10	149	114	73	46	81	251	451	355	621	1,510	840	732
11	226	109	77	46	96	271	442	355	632	790	1,330	654
12	239	109	77	63	100	264	477	394	621	590	918	581
13	245	96	73	191	104	264	442	425	600	786	370	590
14	239	96	65	226	134	264	460	417	632	801	319	590
15	362	96	77	174	144	250	409	425	610	610	184	581
16	312	119	84	81	139	394	370	409	610	600	305	571
17	300	104	73	81	129	3,010	340	394	621	610	495	571
18	300	104	73	96	124	3,260	378	386	590	676	632	571
19	300	104	92	514	166	1,190	394	370	571	814	687	561
20	271	109	104	80	189	502	425	378	590	1,330	654	581
21	284	119	109	50	178	271	451	378	571	1,780	744	561
22	284	134	109	50	172	160	486	394	571	756	816	581
23	284	144	114	50	166	81	522	402	561	1,960	879	590
24	277	160	109	51	245	63	503	409	581	866	792	571
25	277	160	100	51	251	129	571	434	581	801	720	561
26	319	149	104	51	207	129	581	503	561	957	744	571
27	298	149	109	43	195	134	571	503	532	900	792	551
28	333	144	100	123	184	149	600	503	561	879	816	581
29	312	144	65	124	-------	172	581	512	532	1,240	892	581
30	154	139	53	84	-------	245	551	503	581	827	918	495
31	100	-------	53	58	-------	312	-------	512	-------	700	944	-------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	362	55	232	14,200
November	160	96	121	7,200
December	114	53	82.2	5,050
January	514	31	86.5	5,320
February	251	35	120	6,670
March	3,260	63	440	27,100
April	600	305	449	26,700
May	590	355	437	26,900
June	632	522	588	35,000
July	1,960	561	890	54,700
August	18,400	184	1,470	90,500
September	2,000	495	731	43,500
The year	18,400	31	474	343,000

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.—18,200 square miles (revised).

RECORDS AVAILABLE.—July, 1923, to September, 1930, gage heights only.

EXTREMES.—Maximum stage during year, 5.0 feet Aug. 8; no flow over dam on many days.

1923–1930: Maximum stage, 8.0 feet Sept. 28, 1926; no flow over dam on many days each year.

REMARKS.—Diversions for irrigation above station. Flow partly regulated by storage in San Carlos Reservoir. A considerable quantity of water is passed through sluice gates of dam. Gage-height record furnished by United States Indian Service.

Daily gage height, in feet, 1929–30

Day	Oct.	Jan.	Feb.	Mar.	Apr.	May	July	Aug.	Sept.
1	0.10								0.10
2									.10
3	*.20					*0.40			
4	.40								
5	.10							*0.36	
6									
7				0.40			1.12	*1.50	
8				.10			*2.60	4.40	1.30
9					*0.10		.55	1.50	.65
10							.35	*.80	.30
11	.10						.20	*.52	
12	.20						*.40	1.00	
13	.18	*0.50					*.40	.53	
14		.45					.30		
15	*.50	.38							
16		.30		.25					
17		.10		1.60					
18		.15		1.35					
19		*.20		1.05			.30		
20		*.50		.55					
21		.32		.15			.65		
22		.10					.10		
23							1.00		
24							.20		
25			0.20						
26							.10		
27									
28		.10							
29		.30					.90		
30		.25					.45		
31		.05					.20		

*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 elevation of crest of dam and is 753.8 feet above mean sea level.

DRAINAGE AREA.—49,700 square miles (revised).

RECORDS AVAILABLE.—August, 1921, to September, 1930.

EXTREMES.—Maximum discharge during year, 13,900 second-feet Aug. 10 (gage height, 2.19 feet); no flow on many days.

1921–1930: Maximum discharge, 70,000 second-feet Dec. 28, 1923 (gage height, 6.0 feet); no flow for various periods each year.

REMARKS.—Records good. During periods when water level is below crest of dam a small quantity is released through gate. Diversions for irrigation above station. Discharge partly regulated by storage reservoirs.

Daily and monthly discharge, in second-feet, 1929–30

Day	Oct.	Jan.	Feb.	Mar.	May	July	Aug.	Sept.
1	254	0	0	38	0	0	81	0
2	45	0	0	130	0	0	0	0
3	0	0	0	150	0	0	0	0
4	0	0	0	45	0	0	0	0
5	0	0	0	5	0	0	0	0
6	0	0	0	0	35	0	0	0
7	0	0	0	0	0	0	0	
8	0	0	0	0	0	0	1,510	89
9	0	0	0	0	0	0	5,030	162
10	0	0	0	0	0	0	11,100	380
11	0	12	0	0	0	0	2,770	246
12	0	142	0	46	0	86	1,400	130
13	0	246	0	90	0	6	1,160	75
14	0	385	0	60	0	0	754	75
15	0	310	0	0	0	0	489	75
16	0	170	0	32	0	0	376	75
17	0	150	0	285	0	0	234	45
18	0	170	0	824	0	0	208	45
19	0	170	0	2,700	0	0	110	15
20	0	150	0	1,950	0	0	21	0
21	0	310	0	746	0	0	0	0
22	0	252	0	385	0	10	0	0
23	0	170	0	260	0	0	0	0
24	0	130	0	588	0	0	0	0
25	0	90	0	931	0	92	0	0
26	0	90	0	321	0	50	0	0
27	0	75	69	116	0	0	0	0
28	0	60	31	30	0	0	0	0
29	0	45	------	0	0	64	0	0
30	0	30	------	0	0	93	0	0
31	0	15	------	0	0	215	0	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	254	0	9 6	593
January	385	0	102	6,290
February	69	0	3 6	198
March	2,700	0	314	19,300
May	35	0	1 1	69
July	215	0	19 9	1,220
August	11,100	0	814	50,100
September	380	0	47 1	2,800
The year	11,100	0	111	80,600

NOTE.—No flow during months for which no discharge is shown.

GILA RIVER NEAR DOME, ARIZ.

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

DRAINAGE AREA.—58,100 square miles.

RECORDS AVAILABLE.—May, 1929, to September, 1930. October, 1903, to December, 1906, at station 4 miles upstream.

EXTREMES.—Maximum discharge during year, 3,600 second-feet Aug. 14 (gage height, 10.50 feet); no flow during most of year.

1929–30: Maximum discharge, that of Aug. 14, 1930; no flow during most of each year.

1903–1906: Maximum mean daily discharge, 95,000 second-feet Mar. 1 Nov. 29, 1905; no flow during most of each year.

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

Daily and monthly discharge, in second-feet, 1929–30

Day	Oct.	Mar.	Aug.	Day	Oct.	Mar.	Aug.	Day	Oct.	Mar.	A
1	163	0	0	11	0	0	0	21	0	0	
2	244	0	0	12	0	0	0	22	0	0	
3	290	0	0	13	0	0	1,310	23	0	341	
4	156	0	0	14	0	0	2,340	24	0	304	
5	71	0	0	15	0	0	782	25	0	152	
6	26	0	0	16	0	0	513	26	0	62	
7	5	0	0	17	0	0	392	27	0	15	
8	0	0	0	18	0	0	271	28	0	0	
9	0	0	0	19	0	0	162	29	0	26	
10	0	0	0	20	0	0	100	30	0	40	
								31	0	2	

Month	Maximum	Minimum	Mean	Run-off acre-fe
October	290	0	30.8	1,
March	341	0	30.4	1,
August	2,340	0	191	11,
The year	2,340	0	21.4	15,

NOTE.—No flow during months for which no discharge is shown.

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 14 miles east of Duncan, Ariz.

RECORDS AVAILABLE.—October, 1914, to September, 1915; July, 1922, to September, 1930.

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, 1929–30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	54	40	38	38	43	51	36	47	42	7.3	7.4	17
2	54	32	38	36	43	46	39	45	40	6.6	21	32
3	53	27	38	36	42	46	49	40	44	7.3	39	43
4	53	27	38	36	42	49	46	52	45	5.6	39	43
5	53	27	38	36	41	49	39	51	43	6.4	42	40
6	51	35	38	30	43	51	46	50	42	9.7	47	37
7	47	33	38	29	44	53	38	51	39	7.8	0	36
8	48	33	36	32	40	52	41	50	32	16	0	8.8
9	46	33	36	24	40	45	45	48	42	39	0	0.5
10	47	33	36	23	38	43	50	47	42	48	0	0
11	46	33	36	22	44	43	51	47	30	46	0	19
12	48	39	36	29	45	39	51	47	27	45	0	25
13	0	37	36	30	40	40	31	48	23	47	0	45
14	0	37	36	31	40	41	45	45	28	47	0	46
15	0	39	36	31	41	41	50	43	30	47	0	48
16	0	37	36	30	42	52	45	47	41	48	0	46
17	0	39	36	30	42	54	45	45	47	49	0	40
18	0	39	33	30	42	50	45	47	28	48	0	43
19	43	39	33	31	17	25	40	46	42	48	0	34
20	45	39	32	32	17	23	25	46	48	41	0	36
21	41	39	33	32	16	24	36	42	42	47	0	39
22	29	39	33	28	17	24	51	42	39	48	11	38
23	39	39	17	29	17	24	48	43	36	47	31	39
24	38	40	33	30	10	26	49	43	25	44	44	34
25	43	39	33	36	0	29	51	42	15	0	42	35
26	43	39	33	41	0	30	51	43	12	0	44	43
27	43	37	31	38	32	12	50	43	14	0	13	40
28	43	38	30	39	52	27	50	43	11	0	30	36
29	43	38	36	43	------	28	48	42	9.7	0	34	35
30	44	38	36	43	------	19	48	42	8.3	0	26	42
31	40	------	37	43	------	37	------	42	------	3.2	32	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	54	0	36.6	2,250
November	40	27	36.1	2,150
December	38	17	34.7	2,130
January	43	22	32.8	2,020
February	52	0	33.2	1,840
March	54	12	37.8	2,330
April	51	25	44.6	2,660
May	52	40	45.5	2,790
June	48	8.3	32.2	1,920
July	49	0	26.1	1,600
August	47	0	16.2	996
September	48	0	34.0	2,020
The year	54	0	34.1	24,700

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 9 miles east of Duncan, Ariz.

RECORDS AVAILABLE.—October, 1914, to September, 1915; July, 1922, to September, 1930.

REMARKS.—Records good. 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, 1929–30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	44	24	15	26	0	29	28	44	18	1.5	26	33
2	44	22	16	27	0	27	23	40	25	1.5	33	63
3	44	22	16	28	0	30	26	46	25	1.5	45	47
4	40	22	15	29	0	34	35	47	17	1.4	28	53
5	37	22	15	28	16	28	43	43	17	1.6	20	59
6	37	23	16	29	27	23	61	41	15	1.7	29	41
7	37	21	15	29	24	20	64	42	14	3.7	14	34
8	36	22	15	28	22	27	62	39	14	6.1	32	48
9	30	24	13	29	23	35	55	33	15	9.9	25	74
10	28	24	13	28	24	24	57	33	15	27	24	57
11	17	25	13	27	32	23	56	45	12	37	25	41
12	26	23	9.4	28	38	20	27	50	10	27	7.2	45
13	23	22	9.7	29	37	19	19	43	11	22	21	53
14	0	21	19	28	37	25	30	39	11	33	24	48
15	0	21	21	30	36	36	60	34	10	38	28	40
16	0	21	21	31	34	35	55	24	14	18	27	27
17	0	20	22	30	36	27	57	22	15	58	14	31
18	0	19	22	19	37	26	58	27	14	45	12	32
19	0	16	24	0	38	24	51	31	14	49	30	27
20	0	17	26	0	44	19	43	27	15	48	53	18
21	0	20	27	0	42	19	38	19	12	51	39	14
22	0	20	29	0	37	20	46	15	12	27	34	12
23	0	20	32	0	31	29	45	23	19	37	32	17
24	0	19	28	0	45	35	37	14	10	41	18	20
25	0	17	28	0	45	35	43	18	8.8	19	17	20
26	0	18	28	0	24	28	47	18	4.9	21	19	19
27	0	18	28	0	20	36	44	31	4.8	34	25	17
28	2.5	17	27	0	22	42	46	23	4.3	0	44	17
29	23	16	27	0	------	21	45	16	2.6	0	51	20
30	28	15	27	0	------	11	46	14	2.5	6.3	24	19
31	25	------	27	0	------	12	------	15	------	28	22	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	44	0	16.7	1,020
November	25	15	20.4	1,210
December	32	9.4	20.8	1,280
January	31	0	16.2	998
February	45	0	27.5	1,530
March	42	11	26.4	1,620
April	64	19	44.9	2,670
May	50	14	30.8	1,900
June	25	2.5	12.7	757
July	58	0	22.4	1,380
August	53	7.2	27.2	1,670
September	74	12	34.9	2,070
The year	74	0	25.0	18,100

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, 1930.

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, 1929–30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5.2	22	20	0	34	28	29	33	11	4.3	0	28
2	1.0	21	20	0	33	26	28	33	9.5	3.4	0	22
3	0.3	14	20	20	33	26	28	31	11	4.0	0	20
4	18	14	21	23	32	26	34	32	9.2	4.0	0	34
5	22	14	22	25	32	29	41	32	10	4.3	0	41
6	21	15	21	25	26	27	41	32	11	2.9	0	39
7	22	16	21	27	24	24	44	32	8.4	3.4	0	48
8	23	16	17	30	25	21	43	29	10	7.8	0	44
9	25	18	16	28	26	18	43	28	9.7	19	0	44
10	29	18	16	28	24	26	43	28	8.8	21	0	43
11	31	19	17	27	23	27	41	33	8.8	18	0	39
12	32	18	16	29	21	30	44	34	8.4	17	0	35
13	0	17	15	30	20	30	46	28	8.4	10	0	29
14	2.9	18	14	32	22	24	40	26	5.5	9.5	0	28
15	5.5	18	17	32	25	17	39	24	8.4	11	0	24
16	5.0	18	22	32	26	23	37	15	7.8	20	0	21
17	5.2	17	21	30	25	33	37	14	5.1	30	0	21
18	5.0	18	21	30	12	44	36	20	3.4	32	0	21
19	3.9	18	10	35	0	33	24	19	2.9	34	2.8	16
20	2.2	19	0	36	0	24	25	29	3.8	35	11	15
21	4.2	18	0	33	13	22	37	39	4.7	41	25	14
22	4.8	18	0	33	27	22	35	15	7.3	41	30	14
23	1.4	18	0	34	29	23	36	10	6.7	41	29	16
24	1.0	19	0	33	27	23	35	8.6	6.7	21	26	13
25	1.2	18	0	34	28	24	34	9.7	7.3	0	24	12
26	9.6	20	0	32	32	24	33	8.4	4.3	0	11	11
27	19	19	0	32	35	25	33	9.7	4.5	0	39	12
28	21	20	0	33	30	27	31	9.7	4.0	0	39	9.0
29	22	18	0	34	------	32	30	8.8	3.4	0	36	9.7
30	23	20	0	33	------	30	34	9.5	5.3	0	46	9.0
31	22	------	0	34	------	32	------	10	------	0	34	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	32	0	12.5	770
November	22	14	17.9	1,060
December	22	0	11.2	688
January	36	0	28.5	1,750
February	35	0	24.4	1,360
March	44	17	26.5	1,630
April	46	24	36.0	2,140
May	39	8.4	22.3	1,370
June	11	2.9	7.18	427
July	41	0	14.0	862
August	46	0	11.4	700
September	48	9.0	24.4	1,450
The year	48	0	19.6	14,200

BLACK-McCLESKY CANAL AT DUNCAN, ARIZ.

LOCATION.—Staff gage in SE. ¼ sec. 19, T. 8 S., R. 32 E., at Duncan, a quarter of a mile below intake.
RECORDS AVAILABLE.—April to September, 1915; July, 1923, to September, 1930.
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, 1929–30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.8	4.1	4.0	3.3	2.6	16	14	20	12	0.7	5.9	7.1
2	2.9	4.3	4.3	3.1	2.4	16	15	18	13	4.5	4.8	5.9
3	11	5.0	4.3	3.1	2.8	15	19	17	10	2.1	7.2	4.4
4	10	4.9	4.4	3.1	2.9	15	20	18	9.8	1.5	12	5.9
5	8.1	2.4	4.1	3.1	2.4	12	20	25	9.7	4.4	0	7.2
6	11	1.3	4.0	3.2	2.4	11	19	20	11	2.9	2.0	7.5
7	11	2.9	4.1	1.6	1.3	12	18	18	9.8	2.0	5.3	10
8	9.3	2.7	4.1	.7	.6	13	22	18	12	.4	22	13
9	7.4	6.2	3.8	.8	.2	15	21	16	11	8.9	0	16
10	9.7	5.9	3.8	.7	.2	14	21	14	11	8.3	0	11
11	8.3	6.1	4.4	.7	.3	13	22	15	13	.2	3.7	16
12	2.5	6.3	4.3	.8	1.6	11	24	13	5.8	5.7	.2	9.4
13	10	6.3	4.3	.7	2.6	2.8	24	12	5.4	7.8	7.6	10
14	10	5.8	4.3	.7	2.1	7.8	23	11	7.0	6.4	4.5	11
15	11	6.6	4.6	1.0	1.6	16	23	8.8	9.4	12	5.3	9.7
16	3.4	6.7	4.3	.6	1.4	16	21	7.1	6.6	9.6	3.1	8.3
17	0	5.7	4.4	.6	1.8	25	19	7.5	13	11	1.9	9.0
18	0	6.2	4.3	.4	2.0	20	18	10	5.8	10	0	13
19	0	5.8	2.8	.4	1.2	18	19	11	5.0	5.2	0	16
20	0	5.8	2.2	.4	0	9.0	21	14	7.4	8.8	8.4	16
21	0	5.3	2.3	.4	0	9.6	18	15	7.2	15	7.8	15
22	0	6.6	2.3	.7	0	8.4	26	15	4.1	12	11	16
23	1.4	6.2	2.3	2.8	0	7.8	24	16	5.8	14	8.8	14
24	6.3	6.1	2.2	2.5	1.7	8.5	25	14	4.3	1.7	7.0	14
25	3.5	5.3	2.3	2.5	9.7	9.4	26	14	4.3	0	6.1	17
26	9.2	5.7	2.7	2.7	16	9.3	25	14	4.6	4.0	7.6	14
27	8.9	4.8	3.1	2.5	15	9.2	24	14	1.7	0	6.7	12
28	8.5	4.3	3.4	2.4	15	11	23	14	.3	0	8.4	12
29	8.3	4.9	3.3	2.3	------	10	22	14	1.7	4.3	8.5	12
30	7.6	5.7	4.3	2.4	------	15	21	11	1.2	8.8	10	14
31	6.8	------	4.6	2.5	------	15	------	10	------	7.8	7.2	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	11	0	6.03	371
November	6.7	1.3	5.20	309
December	4.6	2.2	3.66	225
January	3.3	0.4	1.70	105
February	16	0	3.21	178
March	25	2.8	12.6	775
April	26	14	21.2	1,260
May	25	7.1	14.3	881
June	13	0.3	7.43	442
July	15	0	5.81	357
August	22	0	5.90	363
September	17	4.4	11.5	687
The year	26	0	8.23	5,960

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, 1930.

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, 1929–30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	0.7	2.7	1.3	4.6	7.6	4.6	6.9	7.3	0.3	0	4.9
2	0	.6	2.4	1.6	5.5	6.8	2.7	6.8	8.3	.1	0	3.6
3	0	.6	2.2	2.9	4.6	6.6	3.5	7.8	5.5	.3	0	2.1
4	0	.4	1.3	3.0	3.4	5.3	4.7	11	7.1	.7	0	0
5	0	.4	0	3.5	3.4	6.9	5.2	10	7.3	3.2	0	5.8
6	0	.8	.7	3.5	3.6	7.4	6.1	4.8	6.5	3.2	0	7.1
7	1.0	.9	.1	3.4	3.6	7.6	5.7	6.6	7.1	3.4	0	7.1
8	2.2	1.0	.4	3.2	3.0	6.6	6.6	6.1	7.6	.2	0	7.1
9	1.3	.7	1.3	3.2	3.6	4.7	7.6	5.6	5.8	1.8	0	3.9
10	1.8	.5	1.3	3.3	3.8	7.6	9.6	7.0	5.4	.9	0	3.5
11	1.1	.6	1.2	3.3	3.8	8.6	11	9.8	6.1	0	0	2.0
12	2.2	.6	1.1	3.3	3.8	7.6	11	9.6	5.3	0	0	2.8
13	3.0	.6	1.3	3.5	3.9	6.4	11	6.3	3.5	0	0	2.9
14	.3	0	.6	3.4	4.1	6.6	11	4.4	3.6	.4	0	2.0
15	0	0	.5	3.8	3.5	5.5	11	3.1	1.7	3.6	0	1.1
16	0	.2	.7	3.8	4.2	2.8	11	4.2	5.4	4.5	0	1.3
17	0	.6	.4	3.9	3.8	0	11	5.9	6.1	5.4	0	3.7
18	.3	.6	.8	3.9	3.9	0	11	7.4	6.6	5.1	0	2.2
19	.3	.9	.5	3.8	3.8	0	11	8.2	6.8	4.4	1.4	4.5
20	0	.9	.4	3.9	1.7	0	10	6.7	7.0	6.4	3.3	4.6
21	0	.9	.5	3.9	.6	1.2	11	5.0	5.3	3.1	4.1	3.3
22	0	1.0	.3	3.3	0	7.6	11	8.2	4.8	0	4.2	3.0
23	0	1.4	1.8	3.9	0	7.5	9.6	6.1	6.4	0	3.9	3.5
24	.6	1.3	1.5	3.7	0	4.7	7.6	7.2	5.9	0	1.7	2.5
25	.4	1.0	.1	4.6	0	5.4	6.1	8.1	6.1	0	5.0	3.1
26	.7	.6	0	4.5	0	3.1	7.5	6.3	5.6	0	6.8	3.6
27	.8	.7	0	4.2	3.4	2.5	10	6.9	2.0	0	6.9	5.4
28	.8	.2	0	3.9	7.7	2.5	10	8.4	.8	0	6.3	5.8
29	.4	1.1	0	4.5	------	3.8	10	6.5	1.4	0	3.9	5.2
30	.6	3.3	0	3.9	------	3.3	9.4	6.1	1.1	0	3.6	4.8
31	.9	------	0	4.5	------	2.6	------	3.4	------	0	5.8	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	3.0	0	0.60	37.1
November	3.3	0	.77	45.8
December	2.7	0	.78	47.8
January	4.6	1.3	3.56	219
February	7.7	0	3.12	173
March	8.6	0	4.80	295
April	11	2.7	8.58	511
May	11	3.1	6.79	417
June	8.3	0.8	5.31	316
July	6.4	0	1.52	93.2
August	6.9	0	1.84	113
September	7.1	0	3.75	223
The year	11	0	3.44	2,500

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, 1930, 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, 1929–30

Dec. 19 ..... 1.1	Mar. 25 2	June 17 ..... 3.8
Jan. 15 ..... 1.7	Apr. 9 ..... 1.3	July 8 2
Feb. 13 ..... 1.5	May 7 ..... 5.4	Sept. 8 5
Mar. 5 ..... 2.6	May 27 ..... 5.4	

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 (revised).

RECORDS AVAILABLE.—July, 1927, to September, 1930. Fragmentary record, October, 1910, to July, 1918, at several points within 2 miles upstream.

EXTREMES.—Maximum discharge during year, 4,640 second-feet Aug. 11 (gage height, 8.75 feet); minimum, 19 second-feet July 2 (gage height, 2.53 feet).

1927–1930: 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, 1929–30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	76	87	80	70	78	83	260	132	37	22	160	73
2	92	83	78	73	78	80	257	118	39	22	158	73
3	81	80	78	68	76	80	247	108	41	22	173	60
4	78	80	76	61	74	80	229	102	38	28	140	66
5	70	81	76	64	78	80	208	100	37	33	140	163
6	64	90	74	68	76	80	208	110	36	40	140	148
7	57	87	76	73	76	80	220	104	36	32	127	281
8	56	87	74	76	76	78	250	94	36	36	888	416
9	56	89	73	74	76	76	257	89	37	79	302	163
10	56	89	72	72	76	74	266	85	36	199	816	121
11	56	83	73	67	76	74	283	81	33	228	1,730	100
12	65	80	74	78	74	74	276	78	31	280	840	87
13	100	78	74	85	74	74	260	72	30	98	533	76
14	72	76	73	90	74	74	247	67	29	130	279	70
15	150	72	72	81	74	74	241	62	32	258	186	66
16	400	72	70	76	74	85	230	60	63	160	132	61
17	138	73	72	74	74	269	200	64	167	108	106	60
18	143	76	72	76	74	396	190	62	70	650	89	53
19	104	74	73	83	73	350	170	60	50	308	81	49
20	90	74	73	98	73	250	158	58	42	244	74	49
21	78	76	73	89	78	214	155	53	40	274	67	49
22	72	76	72	80	80	226	155	51	36	404	60	47
23	70	73	68	73	83	335	173	49	34	223	57	46
24	68	74	66	68	96	412	203	51	32	158	52	46
25	72	74	64	64	104	424	229	52	30	396	57	49
26	74	80	66	72	102	384	211	52	28	652	54	49
27	74	78	67	80	92	384	200	45	28	307	353	49
28	83	78	68	92	89	384	180	43	27	469	76	49
29	112	78	67	90	------	335	160	44	26	270	203	47
30	102	78	64	87	------	283	150	42	25	234	77	47
31	96	------	68	80	------	266	------	39	------	206	61	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	400	56	93.7	5,760
November	90	72	79.2	4,710
December	80	64	71.8	4,420
January	98	61	76.8	4,720
February	104	73	79.6	4,420
March	424	74	199	12,200
April	283	150	216	12,800
May	132	39	71.8	4,420
June	167	25	40.9	2,430
July	652	22	212	13,000
August	1,730	52	265	16,300
September	416	46	90.4	5,380
The year	1,730	22	125	90,600

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, 1930.

REMARKS.—Records good. Discharge estimated Aug. 15, 16. 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, 1929–30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.9	2.3	4.1	4.3	11	6.9	21	15	1.6	1.2	0	16
2	2.4	2.3	4.1	4.4	11	6.7	14	13	1.2	1.1	0	9.3
3	.7	2.4	4.3	4.6	11	6.5	13	12	1.2	1.5	1.3	4.5
4	2.9	2.5	4.3	4.6	11	6.9	15	11	1.2	1.4	0	3.0
5	2.6	2.5	4.1	4.3	11	7.9	13	12	1.2	3.7	9.2	8.7
6	2.3	2.6	4.4	4.3	12	7.9	13	12	1.2	2.8	8.9	14
7	3.2	2.6	4.3	4.3	14	7.5	16	12	1.6	1.9	11	16
8	4.8	2.6	4.1	4.3	14	6.9	18	10	2.4	9.7	0	8
9	4.8	2.4	4.1	4.1	15	6.9	17	9.3	3.4	13	0	3
10	4.8	2.4	4	4.3	12	7.1	12	9.3	5.2	13	0	3.0
11	3.6	3.5	4	4.4	11	7.1	11	11	3.0	35	4.1	4.1
12	3.1	3.7	4	4.6	11	6.7	12	9.3	2.3	31	13	3.5
13	3.2	3.7	4	4.6	9.3	6.5	12	7.7	1.9	18	12	4.4
14	.2	3.5	4.4	4.4	6.5	6.3	13	6.7	1.7	12	11	6.3
15	.2	3.4	3.7	1.8	6.1	6.1	17	6.3	1.6	11	9	7.7
16	.4	3.2	3.7	0	6.1	6.5	15	6.7	5.2	13	9	7.7
17	.3	3.0	3.9	0	5.9	7.9	12	6.3	9.3	12	12	6.1
18	.2	3.0	3.7	5.5	5.9	20	9.5	5.9	8.7	16	14	5.6
19	1.0	2.8	3.5	7.9	5.9	29	9.3	5.2	4.6	18	14	5.9
20	2.5	1.9	3.7	8.7	6.1	27	9.9	4.8	2.8	9.0	16	6.1
21	3.5	3.2	3.9	9.5	6.5	26	13	4.6	1.7	0	23	5.2
22	3.9	5.2	4.1	9.5	6.5	23	13	5.8	1.8	0	25	5.0
23	3.7	5.0	4.1	10	6.9	20	14	5.8	2.5	0	15	4.6
24	2.4	4.6	4.3	10	5.7	16	14	3.6	1.1	2.2	9.1	4.4
25	.4	4.3	4.1	12	5.4	18	14	2.3	1.2	5.9	7.1	5.8
26	.3	4.3	4.1	12	6.9	14	12	2.2	1.4	2.0	5.8	6.7
27	.3	4.1	4.3	12	7.3	15	8.5	1.7	1.5	0	26	6.1
28	.3	4.1	4.4	14	7.3	16	12	1.5	1.4	0	21	6.1
29	.8	4.3	4.4	13	------	16	16	1.8	1.5	0	13	6.1
30	2.3	4.3	4.4	11	------	16	18	2.3	1.4	0	14	5.8
31	2.3	------	4.4	11	------	19	------	2.0	------	0	16	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	4.8	0.2	2.14	132
November	5.2	1.9	3.32	198
December	4.4	3.5	4.09	252
January	14	0	6.75	415
February	15	5.4	8.87	492
March	29	6.1	12.7	780
April	21	8.5	13.6	808
May	15	1.5	7.07	435
June	9.3	1.1	2.56	152
July	35	0	7.56	465
August	26	0	10.3	634
September	16	3.0	6.62	394
The year	35	0	7.12	5,160

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, 1930.

REMARKS.—Records good. Discharge estimated July 9. 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, 1929–30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.7	0.4	0.1	0.4	4.4	5.5	8.2	10	2.6	3.7	0	5.4
2	2.7	.4	.8	.5	7.8	5.4	9.1	10	2.5	3.7	0	5.2
3	.3	.4	1.0	.5	10	5.2	10	8.2	2.4	3.8	0	4.2
4	.3	.4	.5	.5	12	5.2	9.8	8.0	3.6	4.2	0	3.5
5	.3	.4	.8	.5	10	5.2	9.8	7.3	3.6	3.7	3.2	4.8
6	.4	.4	.7	.5	8.9	5.4	9.8	7.8	3.6	3.5	9.5	5.7
7	.8	.4	.4	.5	7.8	5.4	9.8	8.3	3.6	3.5	8.5	6.0
8	1.4	.4	.4	.5	7.8	5.2	9.6	7.8	3.6	3.6	8.6	6.4
9	1.2	.3	.6	.5	7.6	5.2	10	7.4	3.6	20	2.4	3.7
10	.8	.3	.6	.5	7.4	5.4	12	6.6	3.8	0	8.7	3.6
11	.3	.3	.6	.6	7.3	5.2	11	5.9	3.6	3.5	7.6	3.3
12	.3	.3	.7	2.0	7.3	5.0	12	5.0	3.6	5.9	14	3.2
13	.8	.3	.5	2.5	5.5	5.0	12	3.7	3.8	1.3	9.6	2.9
14	.2	.2	.4	2.5	4.2	4.9	12	4.0	3.1	0	7.6	2.5
15	.2	.3	.4	.4	4.3	4.8	13	3.7	3.2	0	1.2	2.0
16	.2	.3	.4	.4	4.3	4.9	12	3.2	3.8	0	1.2	1.7
17	.2	.3	.6	.4	4.3	5.2	12	2.4	3.6	5.5	2.1	1.6
18	.2	.3	.8	.4	4.3	6.6	12	2.1	8.2	13	4.4	1.2
19	.2	.2	.8	1.5	4.4	8.0	12	2.2	5.6	11	7.8	.9
20	.2	.2	.6	1.6	4.6	8.7	11	2.2	3.2	12	7.6	.9
21	.2	.2	.4	1.7	4.6	10	10	2.0	3.2	0	8.5	3.7
22	.5	.2	.4	.4	4.6	11	11	1.7	2.7	.2	12	5.9
23	2.3	.2	.4	2.8	4.6	11	10	1.9	2.7	2.2	6.9	5.9
24	2.1	.2	.4	3.9	4.8	9.8	10	1.5	2.4	2.1	6.4	6.6
25	.6	.2	.4	.6	5.2	11	12	3.4	2.6	2.0	5.7	6.6
26	.5	.2	.4	.2	5.5	9.5	12	6.0	3.0	2.0	4.9	6.0
27	.4	.3	.4	0	5.5	10	12	4.8	2.7	2.1	6.2	5.9
28	.4	.1	.4	0	5.5	11	10	3.5	3.1	.8	6.2	5.9
29	.4	.1	.4	0	-------	11	11	3.5	3.6	0	5.7	5.9
30	.4	.1	.4	0	-------	14	11	3.2	3.7	0	6.9	4.3
31	.4	-------	.4	0	-------	8.3	-------	3.2	-------	0	7.8	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	2.7	0.2	0.67	41.5
November	.4	.1	.28	16.5
December	1.0	.1	.52	31.9
January	3.9	0	.86	53.2
February	12	4.2	6.23	346
March	14	4.8	7.35	452
April	13	8.2	10.9	647
May	10	1.5	4.85	299
June	8.2	2.4	3.48	207
July	20	0	3.65	225
August	14	0	5.85	359
September	6.6	.9	4.18	249
The year	20	0	4.04	2,930

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 September, 1930.

REMARKS.—Records good. 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, 1929–30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	1.3	0.4	0.6	0	0	7.0	5.4	0.7	2.1	0	3.6
2	0	.4	.3	.5	.5	2.0	5.3	5.2	.8	1.5	0	2.9
3	0	.5	.4	.5	1.1	4.3	6.4	2.9	1.2	1.5	0	3.3
4	0	.4	.3	.5	1.0	4.5	8.5	2.6	1.0	1.9	0	4.8
5	0	.3	.3	.5	1.0	4.8	8.1	1.8	.8	4.1	0	5.0
6	0	.3	.6	.5	1.5	4.4	8.2	2.0	.9	3.6	0	5.8
7	.4	.3	1.1	.6	2.6	3.7	8.5	2.3	1.0	2.9	0	5.6
8	.7	.3	1.2	.7	3.3	3.8	9.0	2.1	1.0	3.2	0	3.9
9	.5	.3	1.0	.7	3.3	3.7	9.5	2.7	1.2	3.9	0	6.7
10	.5	.3	1.0	.5	3.3	3.5	8.2	1.9	1.4	3.4	3.9	6.1
11	0	.3	1.1	.5	3.3	3.4	9.7	1.9	.7	8.1	1.7	5.3
12	0	.3	1.0	.5	3.7	2.6	9.1	2.0	.6	10	7.6	3.3
13	1.0	.3	1.0	1.1	.9	1.8	9.4	1.4	.5	7.3	6.1	1.5
14	0	.3	1.0	1.8	.9	1.7	9.1	2.1	.5	3.5	3.3	1.3
15	0	.3	.8	1.6	1.0	1.7	8.0	1.9	.8	5.4	2.8	1.1
16	0	.3	.8	1.6	0	1.6	8.2	1.4	2.8	5.1	0	.9
17	0	.4	.6	.4	0	1.8	7.3	1.3	3.3	4.9	0	.9
18	0	.4	.7	.4	0	10	6.1	.9	2.4	9.2	0	.7
19	0	.3	.7	.3	0	13	5.5	1.1	.6	6.4	0	.5
20	0	.3	.7	.4	0	12	5.4	1.3	.6	3.7	0	.4
21	0	.3	.5	0	0	11	5.5	.9	0	0	1.1	.3
22	0	.2	.6	0	0	11	5.4	.7	.5	0	1.9	.3
23	0	.2	.7	0	0	11	4.8	.7	.7	0	1.8	0
24	0	.2	.7	0	0	11	5.5	.5	1.5	0	1.9	0
25	0	.3	.7	0	0	11	6.1	.7	1.4	0	3.4	0
26	0	.3	.7	0	0	11	3.2	.3	1.0	0	4.3	.1
27	4.0	.2	.7	0	0	11	0	.3	1.0	0	2.8	.1
28	3.5	.3	.7	0	0	11	0	.3	1.1	0	1.7	.2
29	2.8	.2	.6	0	------	10	0	.2	1.6	0	1.6	.2
30	2.6	.2	.5	0	------	9.6	4.9	.1	1.7	0	2.6	.2
31	1.8	------	.5	0	------	9.4	------	.4	------	0	4.0	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	4.0	0	0.57	35.3
November	1.3	.2	.33	19.8
December	1.2	.3	.71	43.4
January	1.8	0	.46	28.2
February	3.7	0	.98	54.3
March	13	0	6.49	399
April	9.7	0	6.40	381
May	5.4	.1	1.59	97.8
June	3.3	0	1.11	66.0
July	10	0	2.96	182
August	7.6	0	1.69	104
September	6.7	0	2.17	129
The year	13	0	2.13	1,540

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, 1930.

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, 1929–30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	34	30	28	47	32	36	68	49	20	14	0	76
2	21	30	27	49	30	28	68	48	19	12	54	60
3	23	31	26	50	36	32	70	49	18	14	78	30
4	40	29	26	49	37	33	70	48	18	14	68	43
5	36	30	26	47	34	34	67	49	18	16	82	51
6	33	33	25	45	35	35	62	46	18	18	82	71
7	37	34	25	51	31	35	77	40	18	21	65	56
8	36	35	27	53	26	32	77	43	18	26	0	35
9	36	36	28	50	26	30	68	48	18	34	41	34
10	36	37	29	50	26	31	77	48	18	0	41	42
11	31	35	30	53	30	32	80	48	18	0	44	61
12	31	33	31	46	29	30	73	40	16	0	47	56
13	29	34	32	42	29	28	74	28	14	0	51	47
14	26	35	33	41	31	28	77	26	14	25	48	38
15	20	34	32	36	31	24	76	26	13	35	46	39
16	23	33	33	36	31	31	72	26	24	43	44	39
17	26	33	33	30	30	37	81	26	23	49	50	35
18	18	32	32	33	29	81	83	23	26	78	72	31
19	11	32	31	10	29	102	80	26	26	81	88	28
20	20	31	31	0	28	94	70	26	22	31	91	26
21	28	30	33	0	28	95	67	25	23	50	90	26
22	28	30	33	0	28	95	71	24	18	0	58	25
23	27	30	33	0	29	91	59	25	19	0	50	25
24	26	30	34	0	32	88	55	28	16	0	43	24
25	27	29	31	0	34	87	53	36	14	46	38	23
26	29	29	30	0	37	85	50	36	13	0	36	22
27	29	29	29	16	38	86	49	23	13	30	53	22
28	33	29	33	31	37	86	49	22	14	0	54	19
29	35	29	41	26	------	83	50	22	14	0	61	21
30	29	28	48	14	------	72	48	19	14	0	53	22
31	30	------	49	20	------	71	------	18	------	0	54	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	40	11	28.6	1,760
November	37	28	31.7	1,880
December	49	25	31.6	1,940
January	53	0	29.8	1,830
February	38	26	31.2	1,730
March	102	24	56.5	3,480
April	83	48	67.4	4,010
May	49	18	33.6	2,060
June	26	13	17.9	1,070
July	81	0	20.5	1,260
August	90	0	53.9	3,320
September	76	19	37.6	2,240
The year	102	0	36.7	26,600

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, 1930.

REMARKS.—Records good except those for July 10–28, 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, 1929–30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	71	43	37	46	45	54	7.0	91	25	19	84	62
2	63	43	35	45	44	49	31	61	26	18	78	72
3	48	44	34	46	44	46	75	52	26	19	68	50
4	44	44	33	45	44	45	90	52	25	17	74	41
5	45	44	36	15	44	44	85	53	24	22	72	43
6	51	44	42	1	44	46	81	57	24	21	74	69
7	50	43	42	.5	39	46	80	65	25	25	85	35
8	50	43	40	.5	33	44	84	61	25	29	103	40
9	49	44	39	.7	33	40	88	57	24	27	91	39
10	48	44	35	.9	32	40	91	54	24	20	52	50
11	49	44	30	.9	34	37	89	50	25	64	59	30
12	48	44	34	29	35	37	83	40	26	59	56	30
13	52	40	34	53	33	34	82	31	24	59	42	54
14	20	37	34	55	32	34	80	32	24	41	49	41
15	34	37	33	55	33	33	79	34	25	33	38	44
16	40	37	36	48	34	34	76	31	29	47	41	45
17	37	38	37	41	34	42	77	26	39	43	50	37
18	35	37	36	45	35	80	86	26	34	44	65	29
19	34	41	39	49	35	88	89	26	30	74	79	28
20	33	37	42	48	37	86	86	25	28	60	78	26
21	30	37	43	54	38	90	86	26	27	76	69	24
22	27	35	44	65	39	87	68	25	26	65	52	24
23	26	34	46	70	38	85	89	23	27	73	47	23
24	26	33	47	65	42	90	83	21	27	71	43	23
25	27	32	46	66	49	92	91	14	26	69	37	27
26	27	32	47	61	52	91	91	15	26	67	35	29
27	26	32	48	55	55	93	90	23	25	84	44	27
28	26	31	48	51	57	89	92	24	23	14	47	27
29	26	35	44	56	-------	88	92	24	21	42	45	26
30	26	37	42	52	-------	85	90	25	19	60	65	26
31	34	-------	44	46	-------	69	-------	24	-------	84	61	-------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	71	20	38.8	2,380
November	44	31	38.9	2,310
December	48	30	39.6	2,430
January	70	.5	40.8	2,510
February	57	32	39.8	2,210
March	93	33	61.9	3,800
April	92	7.0	80.4	4,780
May	91	14	37.7	2,320
June	39	19	26.0	1,550
July	84	14	46.6	2,870
August	103	35	60.7	3,730
September	72	23	37.4	2,220
The year	103	.5	45.8	33,100

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, 1930.

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, 1929–30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	76	27	40	66	82	84	150	81	21	2.4	105	95
2	54	7.0	39	74	81	80	152	95	22	1.2	109	83
3	78	5.5	38	72	81	78	142	87	22	.9	102	71
4	68	28	38	65	82	79	145	81	26	1.1	108	78
5	76	40	38	77	81	77	152	74	25	15	97	78
6	63	42	36	94	81	79	155	77	22	9.6	75	94
7	54	43	36	83	78	77	150	88	20	5.5	113	75
8	53	42	36	71	79	80	154	75	18	25	69	86
9	51	42	35	74	75	80	159	71	16	49	68	82
10	49	44	36	75	75	78	155	80	15	62	82	89
11	50	43	36	79	73	75	157	74	12	110	68	95
12	49	42	36	83	73	74	150	61	13	104	91	90
13	56	42	51	76	71	75	154	65	9.4	98	89	80
14	47	41	72	81	73	75	150	75	8.2	95	95	68
15	53	42	48	81	73	75	146	74	7.6	91	104	40
16	53	41	5.0	81	73	77	140	70	26	86	104	70
17	50	41	0	80	72	80	131	64	42	69	103	67
18	46	42	0	79	73	104	130	62	56	120	105	64
19	44	41	0	79	73	110	132	55	36	117	105	54
20	42	42	2.1	80	73	122	128	52	29	102	122	49
21	55	43	54	92	75	110	123	51	20	130	100	42
22	86	42	92	90	77	94	109	45	18	97	100	40
23	84	42	88	86	79	101	88	44	15	96	83	42
24	60	42	87	83	77	98	114	44	14	97	78	42
25	41	41	86	81	75	98	92	42	13	100	70	35
26	41	42	83	80	78	108	92	37	9	58	65	29
27	41	42	82	80	83	111	91	38	6.8	102	86	32
28	42	42	71	82	84	117	91	34	5.0	65	89	36
29	47	41	62	79	------	136	81	34	4.5	77	86	38
30	46	40	59	36	------	143	73	33	4.1	100	81	37
31	44	------	55	37	------	151	------	26	------	107	80	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	86	41	54.8	3,370
November	44	5.5	38.5	2,290
December	92	0	46.5	2,860
January	94	36	76.6	4,710
February	84	71	76.8	4,260
March	151	74	94.4	5,800
April	159	73	130	7,710
May	95	26	60.9	3,750
June	56	4.1	18.5	1,100
July	130	.9	70.7	4,350
August	122	65	91.4	5,620
September	95	29	62.7	3,730
The year	159	0	68.4	49,600

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, 1930.

REMARKS.—Records good. Discharge interpolated June 13. 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, 1929–30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	57	54	40	41	45	80	47	6.8	5.5	0	31
2	0	61	54	27	40	32	84	47	5.5	5.4	10	23
3	0	59	54	25	29	23	39	46	5.4	7.5	11	20
4	0	61	55	24	26	29	72	9.5	5.4	5.0	47	30
5	0	61	55	43	27	24	120	10	6.0	7.5	88	28
6	0	52	54	40	30	30	84	24	2.7	6.8	46	23
7	0	57	54	42	19	25	90	42	5.4	5.0	60	72
8	0	57	60	67	33	17	88	47	5.4	6.8	0	71
9	0	57	61	71	31	21	100	59	4.8	47	0	67
10	0	59	31	72	27	19	82	1.0	4.4	0	0	57
11	0	52	0	65	35	16	95	8.3	4.3	0	0	48
12	0	59	0	72	31	14	92	12	4.8	2.7	0	62
13	0	61	0	38	28	26	82	74	4.8	29	41	55
14	0	60	0	39	33	26	76	16	4.8	19	55	52
15	0	58	0	35	16	20	74	9.7	4.9	40	60	53
16	0	59	0	37	23	21	12	7.5	4.4	50	38	35
17	0	59	0	44	23	38	0	9.2	13	19	28	16
18	0	57	32	30	27	81	40	6.0	8.7	84	40	19
19	0	59	58	24	21	83	69	8.3	7.5	76	37	10
20	0	57	74	34	17	81	56	6.8	7.3	69	73	13
21	0	57	69	86	21	82	55	6.4	6.6	56	34	18
22	0	57	55	35	24	87	0	1.3	12	41	33	6.9
23	12	57	39	25	25	89	28	1.4	42	72	31	7.3
24	44	57	39	24	33	83	71	6.8	6.9	72	29	7.1
25	54	56	36	27	30	68	70	6.4	9.5	76	25	6.9
26	54	56	34	25	33	52	76	6.9	6.2	44	24	8.0
27	56	57	34	35	37	70	74	6.4	5.2	24	49	7.3
28	59	57	35	58	38	91	64	6.6	6.0	0	58	6.9
29	0	57	48	35	------	88	61	6.8	0	0	27	8.5
30	24	57	48	59	------	87	57	6.2	6.0	0	42	9.2
31	59	------	56	64	------	80	------	5.5	------	0	34	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	59	0	11.7	718
November	61	52	57.7	3,430
December	74	0	38.4	2,360
January	86	24	43.3	2,660
February	41	16	28.5	1,580
March	91	14	49.9	3,070
April	120	0	66.4	3,950
May	74	1.0	17.8	1,090
June	42	0	7.22	430
July	84	0	28.1	1,730
August	88	0	32.9	2,020
September	72	6.9	29.0	1,730
The year	120	0	34.2	24,800

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, 1930.

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, 1929–30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	27	22	17	4.9	21	18	24	16	11	6.2	0	32
2	30	23	20	19	24	16	31	15	8.2	5.7	18	28
3	31	23	18	12	23	15	36	22	8.2	6.0	19	17
4	29	20	16	12	22	15	31	35	10	5.8	8.2	16
5	29	21	18	14	20	15	29	36	12	5.2	11	17
6	28	20	18	17	19	18	26	32	13	4.7	13	31
7	27	19	14	15	18	16	26	35	11	4.4	27	40
8	26	18	12	16	17	15	28	31	10	6.8	28	37
9	25	19	17	20	18	19	32	33	6.8	26	22	31
10	25	19	25	18	17	19	36	35	6.8	29	16	32
11	22	20	26	18	16	16	38	28	6.4	35	16	29
12	24	19	24	20	18	20	41	22	8.3	20	18	25
13	25	19	21	22	19	20	38	26	8.3	8.3	11	31
14	22	17	16	19	17	16	25	20	5.7	25	.4	24
15	22	18	18	25	20	24	23	19	6.0	27	3.3	30
16	33	18	28	23	17	26	25	17	5.0	28	2.3	15
17	42	18	28	21	20	30	21	18	8.3	22	1.0	17
18	41	18	28	23	20	31	23	18	14	27	.8	16
19	40	18	28	22	19	35	25	17	5.3	26	.3	17
20	39	17	13	23	18	37	22	16	4.8	27	.4	22
21	37	17	15	22	14	42	22	13	4.2	27	.7	24
22	34	17	13	20	18	39	23	14	12	22	3.7	11
23	27	17	9.3	21	14	40	20	13	6.9	22	11	9.2
24	19	16	8.3	19	17	41	23	12	4.8	25	9.3	9.0
25	20	17	10	22	19	37	24	10	6.6	25	12	8.2
26	20	18	7.0	21	21	36	30	12	8.3	25	9.3	8.0
27	18	17	3.6	20	22	38	28	10	8.3	16	9.2	8.5
28	19	15	4.2	21	21	37	28	13	6.9	0	15	8.2
29	24	15	3.5	20	-------	32	26	14	6.4	0	15	13
30	23	15	3.7	21	-------	31	22	13	6.3	0	17	20
31	20	-------	5.3	26	-------	21	-------	9.2	-------	0	21	-------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	42	18	27.4	1,680
November	23	15	18.3	1,090
December	28	3.5	15.7	968
January	26	4.9	19.3	1,180
February	24	14	18.9	1,050
March	42	15	26.3	1,620
April	41	20	27.5	1,640
May	36	9.2	20.1	1,240
June	14	4.2	7.9	476
July	35	0	16.4	1,010
August	28	0	10.9	672
September	40	8.0	20.9	1,240
The year	42	0	19.1	13,900

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, 1930.

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, 1929–30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	12	24	12	4.7	4.4	32	25	25	6.3	7.2	15	28
2	21	25	16	2.8	4.1	30	22	27	5.7	9.8	4.4	16
3	25	29	12	.2	5.6	8.8	25	28	5.0	4	3.1	16
4	17	25	12	0	30	8.3	27	33	5.9	6.6	2.9	14
5	10	24	14	0	28	12	25	27	6.1	6.1	20	13
6	11	28	15	0	31	14	25	28	5.0	6.3	18	18
7	17	23	13	0	35	13	38	30	5.2	6.3	26	14
8	15	26	11	0	31	14	29	29	5.6	5.4	22	3.4
9	17	26	17	4.9	25	15	28	29	4.4	31	22	1.4
10	18	24	18	10	26	15	30	28	4.5	.6	24	1.6
11	20	18	20	11	31	14	33	27	4.4	6.3	20	6.3
12	31	22	21	17	26	18	37	21	5.4	32	31	1.5
13	55	22	20	25	31	14	33	26	4.7	30	7.2	2.8
14	45	20	21	22	29	18	35	20	4.2	21	5.4	2.0
15	37	20	17	19	17	14	32	21	5.2	11	.6	13
16	32	22	27	20	15	20	31	15	5.0	15	1.1	7.0
17	12	19	29	29	11	24	29	12	5.4	12	1.5	9.3
18	21	20	29	32	7.2	28	30	12	6.8	16	1.2	7.4
19	30	18	30	30	6.6	27	25	12	3.2	14	1.9	6.8
20	31	18	25	32	8.6	29	28	12	3.4	30	3.9	7.0
21	29	17	26	30	8.6	29	28	10	3.1	21	2.2	7.0
22	26	18	18	25	12	32	28	7.4	19	30	1.2	6.1
23	2.9	15	12	29	13	34	21	7.7	23	30	7.0	6.8
24	21	17	17	26	15	34	23	5.2	24	31	11	6.3
25	21	17	14	29	10	27	30	8.1	9.5	33	7.4	4.9
26	25	16	10	28	23	29	30	9.3	5.2	31	11	7.2
27	24	16	6.1	28	24	27	30	4.2	4.2	5.7	12	7.4
28	26	14	4.7	26	28	26	29	5.6	3.5	28	14	9.1
29	32	8.8	6.1	28	-------	28	27	7.4	4.4	11	14	6.1
30	30	14	4.4	28	-------	27	26	5.9	7.4	7.9	16	12
31	21	-------	4.2	33	-------	26	-------	5.7	-------	4.2	16	-------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	55	2.9	23.7	1,460
November	29	8.8	20.2	1,200
December	30	4.2	16.2	995
January	33	0	18.4	1,130
February	35	4.1	19.1	1,060
March	34	8.3	22.2	1,360
April	38	21	28.6	1,700
May	33	4.2	17.4	1,070
June	24	3.1	6.82	406
July	33	.6	16.2	998
August	31	.6	11.1	680
September	28	1.4	8.71	518
The year	55	0	17.4	12,600

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, 1930.
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, 1929–30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	5.6	23	28	0	21	42	23	2.6	3.4	8.5	12
2	0	6.5	24	31	0	21	43	7.4	2.4	3.8	16	20
3	0	9.6	23	28	28	19	44	22	2.1	3.0	14	14
4	0	14	22	17	31	21	40	32	1.6	1.7	29	11
5	0	24	22	23	31	19	42	36	3.6	3.5	29	8.8
6	5.9	22	19	25	32	17	26	38	6.5	4.7	9.1	9.8
7	5.8	28	22	18	28	17	9.4	38	7.4	4.9	18	21
8	4.9	26	22	18	12	17	5.1	38	2.1	5.0	22	18
9	5.0	24	22	29	0	17	1.5	37	9.3	5.4	38	22
10	4.4	23	24	30	0	11	11	31	8.0	22	30	31
11	6.5	24	24	30	0	12	39	30	7.4	39	32	36
12	11	23	24	29	0	15	28	27	7.4	40	32	35
13	29	20	17	31	16	14	16	25	7.4	36	32	31
14	0	22	15	31	19	14	13	18	7.4	20	33	12
15	0	26	13	30	22	12	25	14	6.9	24	31	31
16	0	29	14	31	20	13	37	13	6.6	29	20	26
17	0	28	15	28	22	21	33	13	7.6	28	20	23
18	0	23	19	29	19	30	33	12	12	40	16	19
19	0	22	26	28	18	36	39	9.9	8.0	37	6.1	11
20	0	22	26	28	18	23	39	11	2.6	37	7.9	16
21	0	24	25	31	18	3.8	35	11	9.3	41	26	12
22	0	24	26	26	23	1.5	36	12	10	40	24	11
23	0	23	24	27	10	8.8	36	15	37	38	17	11
24	0	22	24	22	23	11	38	4.7	10	35	12	11
25	20	23	24	25	21	26	38	8.5	9.1	33	10	11
26	10	23	24	27	22	19	34	0	9.3	20	6.2	12
27	9.4	24	24	27	22	28	34	8.5	9.0	21	1.0	12
28	11	24	25	27	23	12	31	0	8.8	24	17	11
29	0	24	26	29	------	16	29	8.0	6.0	21	9.8	10
30	0	23	25	28	------	35	24	4.1	4.0	27	7.9	11
31	11	------	27	0	------	38	------	.7	------	14	7.8	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	29	0	4.82	266
November	29	5.6	21.9	1,300
December	27	13	22.3	1,370
January	31	0	26.1	1,610
February	32	0	17.1	948
March	38	1.5	18.4	1,130
April	44	1.5	30.0	1,790
May	38	0	17.7	1,090
June	37	1.6	7.71	459
July	41	1.7	22.0	1,390
August	38	1.0	18.2	1,150
September	36	8.8	17.3	1,030
The year	44	0	18.7	13,500

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, 1930.
REMARKS.—Records good. Discharge estimated July 20. 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, 1929–30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	25	26	34	3.2	30	73	44	22	14	58	10
2	0	10	43	22	3.2	31	74	53	17	11	53	19
3	0	10	42	32	3.2	33	79	54	19	11	50	16
4	0	10	44	19	14	31	62	58	18	11	47	16
5	0	1.0	44	22	26	30	69	58	14	11	42	17
6	0	1.0	43	32	25	36	69	56	5.6	11	48	18
7	0	4.8	36	25	27	27	78	52	4.9	11	57	40
8	5.7	9.9	34	23	30	28	81	56	12	8.3	58	76
9	46	39	40	24	30	27	73	57	15	47	53	43
10	82	38	41	37	33	24	75	39	14	78	51	57
11	69	25	42	40	30	27	75	23	14	69	48	50
12	31	37	40	44	31	22	75	27	13	37	0	38
13	70	29	38	43	30	23	74	33	12	0	0	42
14	59	34	42	53	18	24	73	34	12	0	0	42
15	42	33	42	55	16	25	72	24	13	0	0	39
16	32	33	50	3.7	16	45	73	28	11	0	0	33
17	6.6	34	44	3.6	22	68	72	33	17	22	0	21
18	50	34	48	3.6	22	73	69	28	19	61	0	19
19	23	23	46	3.4	22	74	70	32	12	0	0	20
20	22	34	48	3.6	21	73	71	22	12	1	0	19
21	24	36	45	3.5	22	71	46	22	15	12	0	16
22	20	34	28	9.1	21	70	19	20	37	7.9	0	15
23	1.7	36	11	22	20	70	9.0	15	78	22	12	14
24	4.2	37	24	24	55	70	36	27	48	59	26	14
25	3.1	34	28	22	26	75	59	32	18	43	20	15
26	2.2	33	32	52	20	72	58	31	23	38	2.6	14
27	2.6	34	34	52	20	71	55	26	24	44	1.0	13
28	.5	33	26	55	25	84	46	27	13	29	1.0	10
29	2.2	33	31	30	------	85	47	27	9.2	64	8.0	9.2
30	10	25	35	30	------	73	45	12	13	61	10	1.7
31	20	------	28	5.9	------	71	------	24	------	61	11	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	82	0	20.3	1,250
November	39	1.0	26.7	1,590
December	50	11	37.3	2,290
January	55	3.4	26.7	1,640
February	55	3.2	22.6	1,250
March	85	22	50.4	3,100
April	81	9.0	62.6	3,720
May	58	12	34.6	2,130
June	78	4.9	18.5	1,100
July	78	0	27.2	1,670
August	58	0	21.2	1,300
September	76	1.7	25.2	1,500
The year	85	0	31.2	22,500

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, 1930. Fragmentary record, August, 1910, to January, 1911, April, 1914, to September, 1915, at station 5½ miles downstream.

EXTREMES.—Maximum discharge during year, 5,700 second-feet Mar. 17 (gage height, 6.85 feet); no flow on several days in June, July.

REMARKS.—Records fair prior to Nov. 14, when water-stage recorder was installed; good thereafter. Discharge estimated or interpolated Oct. 1–3, 5–8, 10, 12–15, 17–25, 27–31, Nov. 1–3, 6–7, 9–13, Dec. 22 to Jan. 6, Jan. 23–28, 30–31, February 1–4. Minor diversions for irrigation above station.

Daily and monthly discharge, in second-feet, 1929–30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1			7	16		15	32	4	1	0	20	2
2	10	10	7	16	25	18	28	4	1	0	15	2
3			8	15		16	20	5	1	0	15	3
4	10	11	9	15		16	21	5	2	0	15	3
5	9	11	6	14	25	16	17	8	2	0	15	1
6	9	11	8	14	23	16	16	9	2	0	90	13
7	8	11	8	14	20	17	16	9	1	24	253	8
8	8	11	14	16	17	18	24	11	1	23	1,200	7
9	7	11	8	15	17	20	19	7	1	22	368	5
10	8	11	8	17	18	22	12	7	1	12	114	6
11	8	11	13	16	17	20	17	9	1	306	2,130	6
12		11	13	18	17	16	18	7	1	862	1,090	6
13	10	11	13	21	16	17	18	5	1	256	192	4
14		11	12	18	17	18	16	6	1	91	93	4
15		10	15	21	15	18	14	5	1	116	53	5
16	7	10	20	21	15	18	11	5	0	122	36	5
17	7	6	12	18	15	3,580	9	5	0	69	26	4
18	7	9	16	16	13	1,170	6	4	1	47	21	3
19	7	11	15	348	15	711	3	4	0	53	17	3
20	6	12	15	239	14	319	4	4	1	152	15	2
21	6	13	20	50	11	153	5	3	1	65	10	2
22	6	13	20	30	12	117	5	2	1	33	7	2
23	5	12	20		11	106	4	2	1	19	10	2
24	5	11	19		12	96	4	3	0	8	6	3
25	5	9	19	20	13	61	4	3	0	26	5	2
26	5	9	18		14	40	5	3	0	13	5	2
27	5	11	18		15	39	4	3	0	109	4	2
28	5	11	18		13	39	4	3	0	54	4	2
29		6	17	110	-------	36	6	4	0	59	3	2
30	20	5	17	40	-------	35	5	3	0	62	2	1
31		-------	16	30	-------	36	-------	1	-------	20	2	-------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	----------	5	8.8	541
November	----------	5	10.3	613
December	20	7	13.8	851
January	348	14	40.9	2,520
February	----------	11	17.0	942
March	3,580	15	220	13,500
April	32	3	12.2	728
May	11	1	4.9	303
June	2	0	.8	46
July	862	0	84.6	5,200
August	2,130	2	188	11,600
September	13	1	3.7	222
The year	3,580	0	51.2	37,000

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 to September, 1930.

EXTREMES.—Maximum discharge during period, 9,400 second-feet Aug. 7 (gage height, 9.75 feet); no flow June 29, July 1.

REMARKS.—Records good except those for estimated period, Sept. 11–30, which are fair. No diversions above station in Arizona and probably none in Mexico.

Daily and monthly discharge, in second-feet, 1930

Day	Apr.	May	June	July	Aug.	Sept.	Day	Apr.	May	June	July	Aug.	Sept.
1			2	0	24	29	16			4	16	26	15
2			2	1	34	20	17	4		10	37	24	15
3			2	2	39	10	18			8	122	19	15
4			2	1	233	10	19			4	169	16	15
5			2	2	71	8	20			4	240	15	10
6			2	2	140	22	21			58	98	15	10
7			2	103	3,430	468	22			171	1,550	16	10
8			1	233	938	173	23			89	197	15	10
9			2	234	173	40	24			14	487	15	10
10			2	60	187	30	25			5	113	15	5
11			2	34	152	25	26			4	88	15	5
12			2	12	56	25	27			2	319	25	5
13			3	13	44	20	28			1	798	15	5
14			3	12	128	15	29			0	206	10	5
15			3	5	144	15	30			1	129	10	4
							31		2		32	10	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
June	171	0	13.6	807
July	1,550	0	171	10,500
August	3,430	10	195	12,000
September	468	4	35.0	2,080
The period				25,400

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 3,923.0 feet above mean sea level.

DRAINAGE AREA.—1,480 square miles (revised).

RECORDS AVAILABLE.—May, 1928, to September, 1930. Several stations have been maintained at various locations both upstream and downstream, 1904 to 1906 and 1910 to 1928.

EXTREMES.—Maximum discharge during year, 9,740 second-feet Aug. 7 (gage height, 8.5 feet); minimum, 3 second-feet July 7.

1928–1930: Maximum discharge, 10,400 second-feet July 29, 1929 (gage height, 8.74 feet); minimum, 2 second-feet July 12, 1928.

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

REMARKS.—Records good. Discharge estimated Sept. 4–30. Diversions for irrigation above station.

Daily and monthly discharge, in second-feet, 1929–30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	233	14	19	36	26	17	18	14	8	8	52	19
2	222	13	22	28	28	21	19	14	7	7	39	28
3	24	15	24	28	26	22	21	13	7	8	45	26
4	18	15	19	28	31	28	18	11	7	8	263	25
5	18	17	19	25	29	28	17	13	6	11	111	25
6	19	16	13	26	25	24	17	16	8	6	299	50
7	19	15	14	26	22	21	18	16	6	7	3,590	850
8	19	11	15	28	19	25	14	13	6	701	1,930	350
9	19	13	14	29	19	21	12	12	6	450	500	150
10	19	16	13	28	24	22	14	14	6	129	659	50
11	18	18	17	26	31	19	15	14	6	87	199	
12	18	14	22	28	28	16	18	11	6	74	108	
13	19	18	18	29	28	21	15	12	6	78	50	35
14	19	16	18	28	21	21	14	14	6	61	61	
15	19	14	18	31	22	18	15	10	6	48	196	
16	19	17	17	29	18	22	15	10	6	54	57	
17	19	21	18	28	21	24	13	11	31	130	45	
18	19	18	17	24	20	30	11	11	14	258	36	25
19	16	16	16	24	24	65	13	10	19	640	36	
20	14	16	19	25	18	41	18	11	20	620	32	
21	14	17	19	25	16	25	15	12	31	450	29	
22	14	16	22	21	22	28	21	12	230	2,350	26	
23	13	13	18	16	19	25	21	11	91	446	29	20
24	12	18	24	24	21	22	19	13	20	604	24	
25	12	18	22	21	17	24	14	9	15	222	22	
26	12	18	25	24	19	26	15	8	15	182	21	
27	16	17	31	25	25	24	12	9	15	709	30	15
28	14	18	28	26	17	14	12	9	10	1,190	32	
29	14	19	21	26	------	14	14	8	10	628	25	
30	14	21	25	29	------	16	12	8	10	332	24	11
31	17	------	32	28	------	16	------	7	------	134	24	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	233	12	30.4	1,870
November	21	11	16.3	968
December	32	13	20.0	1,230
January	36	16	26.4	1,620
February	31	16	22.7	1,260
March	65	14	23.9	1,470
April	21	11	15.7	932
May	16	7	11.5	706
June	230	6	21.1	1,260
July	2,350	6	343	21,100
August	3,590	21	277	17,000
September	850	----------	68.1	4,050
The year	3,590	6	73.9	53,500

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, 1930; 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, 1928–1930

1928		1929		1930	
Dec. 16	15.5	Sept. 18	5.1	May 12	5.1
Dec. 27	16.0	Oct. 9	23.5	May 19	1.2
1929		Nov. 6	33.7	May 26	1.2
Jan. 21	17.1	Dec. 11	22.0	June 9	.2
Feb. 14	15.6	1930		July 1	.1
Mar. 6	6.2	Jan. 7	31.4	July 7	.1
Mar. 27	1.6	Feb. 4	25.3	July 22	249
Apr. 11	2.7	Feb. 26	41.7	Aug. 19	46.3
Apr. 24	4.1	Mar. 29	29.0	Aug. 25	17.7
May 15	1.1	Apr. 18	3.8	Sept. 2	36.1
July 16	21.7	Apr. 28	2.8	Sept. 22	7.8
Aug. 28	99.5	May 5	9.1	Sept. 23	10.7

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 the international boundary.
DRAINAGE AREA.—473 square miles.
RECORDS AVAILABLE.—May to September, 1930. 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 1930 period, 6,300 second-feet Aug. 7 (gage height, 8.55 feet); no flow on various days.
REMARKS.—Records good. Discharge estimated May 1–4, 11, 25. Minor diversions for irrigation above station.

Daily and monthly discharge, in second-feet, 1930

Day	May	June	July	Aug.	Sept.	Day	May	June	July	Aug.	Sept.
1	2	0	0	28	15	16	1	32	19	15	1
2		0	0	38	6	17	1	9	7	13	1
3		0	0	33	3	18	1	4	6	10	1
4		0	0	28	3	19	1	2	66	8	1
5	3	0	0	24	8	20	1	1	424	8	1
6	6	0	0	22	3	21	1	2	547	6	1
7	7	0	1	834	3	22	1	66	526	6	1
8	4	0	1	436	3	23	1	12	140	10	1
9	3	0	1	121	3	24	1	2	34	7	1
10	2	116	10	116	2	25	1	1	69	7	1
11	2	3	8	126	2	26	1	1	652	6	1
12	1	0	4	38	2	27	1	1	388	6	1
13	1	0	2	27	2	28	1	0	140	12	1
14	1	0	3	22	2	29	1	0	62	11	1
15	1	0	3	19	2	30	0	0	39	8	1
						31	0	-------	26	6	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
May	7	0	1.7	105
June	116	0	8.4	500
July	652	0	103	6,300
August	834	6	66.2	4,070
September	15	1	2.5	147
The period				11,100

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 (revised).

RECORDS AVAILABLE.—October, 1905, to September, 1930.

EXTREMES.—Maximum discharge during year, 1,770 second-feet Aug. 7 (gage height, 8.00 feet); no flow during greater part of year.

1905–1930: Maximum discharge, 11,400 second-feet Sept. 28, 1926 (gage height, 12.2 feet, present datum); no flow during greater part of each year.

REMARKS.—Records good. Discharge estimated Mar. 16–18, Aug. 11, 12, 26, 28, 31, Sept. 6. Water-stage recorder installed and datum raised 7.27 feet Nov. 27, 1929. Diversions for irrigation above station.

Daily and monthly discharge, in second-feet, 1929–30

Day	Feb.	Mar.	May	June	July	Aug.	Sept.
1	0	0	0	0	0	0	0
2	0	0	0	0	0	117	0
3	0	0	0	0	0	33	0
4	0	0	0	0	0	242	0
5	0	0	0	0	0	0	96
6	0	0	33	0	0	26	10
7	0	0	0	0	0	539	0
8	0	0	0	0	99	516	0
9	0	0	0	0	103	24	0
10	0	0	0	0	32	0	0
11	0	0	0	0	37	6	0
12	0	0	0	0	0	2	0
13	0	0	0	0	0	1	0
14	0	0	0	0	0	0	0
15	0	0	0	0	0	6	0
16	0	5	0	0	0	7	0
17	0	10	0	0	0	0	0
18	0	280	0	13	0	0	0
19	0	312	0	286	0	0	0
20	0	41	0	0	9	0	0
21	0	0	0	85	394	0	0
22	0	0	0	131	144	0	0
23	15	0	0	145	48	0	0
24	15	0	0	17	8	0	0
25	0	0	0	3	5	0	0
26	0	0	0	0	0	1	0
27	0	0	0	0	72	0	0
28	0	0	0	0	80	2	0
29	------	0	0	0	20	0	0
30	------	0	0	0	0	0	0
31	------	0	0	------	0	1	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
February	15	0	1.1	60
March	312	0	20.9	1,290
May	33	0	1.1	65
June	286	0	22.7	1,350
July	394	0	33.9	2,080
August	539	0	49.1	3,020
September	96	0	3.5	210
The year	539	0	11.2	8,080

NOTE.—No flow during months for which no discharge is shown.

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 to September, 1930.

EXTREMES.—Maximum discharge during period, 2,600 second-feet Aug. 7 (gage height, 7.3 feet); minimum, 1 second-foot July 4 (gage height, 3.02 feet).

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

Daily and monthly discharge, in second-feet, 1930

Day	June	July	Aug.	Sept.	Day	June	July	Aug.	Sept.
1		2	26	4	16	4	5	5	4
2		2	14	4	17	4	4	5	4
3		2	17	4	18	3	13	4	4
4		2	13	4	19	3	36	4	4
5		2	10	4	20	10	266	4	4
	3								
6		2	45	60	21	5	170	4	4
7		14	358	9	22	107	15	4	4
8		270	61	4	23	50	10	4	4
9		20	28	4	24	10	7	6	4
10		7	27	3	25	7	14	4	4
11	3	7	16	3	26	4	190	4	4
12	3	6	11	4	27	3	30	3	4
13	3	6	9	4	28	2	19	3	4
14	3	5	7	4	29	2	12	3	4
15	4	4	6	4	30	2	8	4	4
					31		6	4	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
June	107	2	7.7	520
July	270	2	37.3	2,290
August	358	3	23.0	1,410
September	60	3	6.0	355
The period				4,580

RILLITO CREEK NEAR TUCSON, ARIZ.

LOCATION.—Water-stage recorder installed July 25 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. Prior to July 25 a staff gage at a datum 10.12 feet lower was used.

DRAINAGE AREA.—903 square miles (revised)

RECORDS AVAILABLE.—January, 1911, to September, 1930.

EXTREMES.—Maximum discharge during year, 4,600 second-feet Aug. 8 (gage height, 7.76 feet); no flow during greater part of year.

1911–1930: Maximum discharge, 24,000 second-feet Sept. 27, 1929; no flow during greater part of each year.

REMARKS.—Records fair prior to July 25; good thereafter. Diversions for irrigation above station.

Daily and monthly discharge, in second-feet, 1929–30

Day	Mar.	June	July	Aug.	Sept.	Day	Mar.	June	July	Aug.	Sept.
1	0	0	0	0	0	16	14	0	0	0	0
2	0	0	0	0	0	17	712	0	0	0	0
3	0	0	0	0	0	18	597	0	0	0	0
4	0	0	0	0	0	19	221	6	0	0	0
5	0	0	0	0	0	20	77	0	332	0	0
6	0	0	0	0	3	21	16	0	292	0	0
7	0	0	0	448	322	22	2	70	242	0	0
8	0	0	35	1,040	22	23	37	1	0	0	0
9	0	0	123	128	0	24	5	0	0	0	0
10	0	0	52	4	0	25	4	0	315	0	0
11	0	0	0	7	0	26	1	0	39	0	0
12	0	0	0	0	0	27	1	0	0	0	0
13	0	0	157	0	0	28	0	0	0	9	0
14	0	0	2	0	0	29	0	0	0	2	0
15	0	0	0	0	0	30	0	0	0	0	0
						31	0	-------	0	0	-------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
March	712	0	54.4	3,350
June	70	0	2.6	153
July	332	0	51.3	3,150
August	1,040	0	52.8	3,250
September	322	0	11.6	688
The year	1,040	0	14.6	10,600

NOTE.—No flow during months for which no record is given.

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 about 3,250 feet above mean sea level.

DRAINAGE AREA.—2,830 square miles (revised).

RECORDS AVAILABLE.—September, 1924, to September, 1930.

EXTREMES.—Maximum discharge during year, 9,700 second-feet Aug. 11 (gage height, 8.0 feet); minimum, 117 second-feet July 8 (gage height, 1.50 feet).

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

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

Daily and monthly discharge, in second-feet, 1929–30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	530	258	190	182	340	584	1,210	813	457	139	627	306
2	490	244	190	195	352	523	1,230	759	451	136	370	334
3	451	244	190	168	364	503	1,180	759	426	130	328	225
4	419	244	190	156	503	497	1,160	767	394	127	284	344
5	388	244	186	160	457	497	1,270	759	364	130	268	334
6	370	254	182	164	352	523	1,600	759	346	130	349	263
7	340	278	182	186	382	692	2,000	774	328	123	496	413
8	323	284	182	190	438	677	2,300	813	317	120	557	312
9	312	278	179	186	451	641	2,320	805	312	803	584	263
10	289	273	179	179	451	641	2,290	729	306	1,300	673	234
11	278	273	182	175	426	648	2,400	692	289	1,100	3,030	212
12	296	268	182	216	413	626	2,320	662	278	800	2,100	190
13	481	249	182	239	407	626	2,100	641	268	450	1,000	182
14	323	225	175	229	413	655	1,920	612	263	334	918	175
15	508	212	171	220	432	677	1,900	591	249	268	751	168
16	550	225	171	216	457	929	1,740	584	234	605	619	
17	358	225	171	212	464	5,810	1,490	571	234	438	523	
18	340	225	175	203	470	3,520	1,300	584	263	491	438	150
19	323	225	175	258	490	3,070	1,190	577	244	769	376	
20	284	225	179	323	523	2,290	1,170	543	229	648	328	
21	268	225	179	284	577	2,010	1,160	516	225	820	306	
22	249	212	175	268	605	1,820	1,140	503	220	400	278	140
23	239	199	149	220	641	1,860	1,130	510	208	500	263	
24	239	186	149	182	744	1,970	1,250	510	190	323	258	139
25	229	186	146	190	968	2,000	1,510	503	182	376	234	139
26	229	190	149	203	829	1,960	1,440	510	179	306	225	139
27	229	195	168	225	729	1,950	1,240	516	164	365	216	143
28	229	199	171	273	669	1,790	1,100	503	160	483	203	143
29	368	190	164	584	-------	1,470	1,000	477	153	557	272	143
30	263	195	156	451	-------	1,240	900	470	146	635	216	153
31	249	-------	160	352	-------	1,180	-------	464	-------	571	199	-------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	530	229	337	20,700
November	284	186	231	13,700
December	190	146	174	10,700
January	584	156	235	14,500
February	968	340	512	28,500
March	5,810	497	1,420	87,000
April	2,400	900	1,530	91,200
May	813	464	622	38,200
June	457	146	269	16,000
July	1,300	120	464	28,500
August	3,030	199	558	34,300
September	413	----------	204	12,100
The year	5,810	120	546	395,000

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 (previous reports in error) east of Roosevelt.

DRAINAGE AREA.—4,310 square miles (revised).

RECORDS AVAILABLE.—October, 1913, to September, 1930.

EXTREMES.—Maximum daily mean discharge during year, 6,480 second-feet Mar. 18; minimum, 127 second-feet July 9.

1913–1930: 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, 1929–30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	715	288	241	210	435	822	1,380	1,100	317	243	735	269
2	630	275	241	213	388	698	1,450	950	312	241	845	263
3	595	273	236	223	400	635	1,540	875	306	239	535	440
4	540	296	241	221	395	597	1,450	835	303	245	400	280
5	507	286	236	211	510	590	1,510	853	290	130	417	500
6	486	282	236	212	515	593	1,580	855	275	131	340	432
7	438	274	233	213	405	627	1,760	835	325	130	653	405
8	405	305	230	244	405	838	1,950	830	316	170	2,630	475
9	375	308	230	248	465	817	2,510	855	312	127	1,390	533
10	335	324	225	235	500	763	2,550	847	306	182	1,100	392
11	317	290	226	231	480	757	2,440	763	302	1,500	950	288
12	315	280	224	318	475	735	2,700	675	296	1,100	3,310	265
13	305	280	228	332	460	738	2,480	632	289	950	2,940	270
14	685	269	242	320	440	682	2,400	575	284	610	2,250	254
15	380	263	224	300	460	763	1,820	523	281	685	1,880	244
16	558	256	223	280	470	812	1,610	500	278	342	1,650	238
17	760	253	221	287	472	1,310	1,520	482	279	500	1,040	234
18	457	255	221	277	525	6,480	1,390	470	275	575	875	200
19	433	257	220	292	525	4,990	1,500	460	278	1,060	780	167
20	387	259	219	430	533	4,350	1,360	470	277	1,060	712	162
21	333	256	219	415	560	3,340	1,310	435	273	485	603	159
22	302	257	219	375	607	2,320	1,090	390	271	1,130	425	157
23	275	248	221	340	670	2,650	1,100	370	265	535	337	152
24	263	254	215	299	725	2,920	1,100	370	263	610	318	149
25	255	252	211	250	1,040	2,700	1,250	363	257	420	310	149
26	245	235	211	235	1,250	2,550	1,550	352	253	545	290	148
27	246	235	211	235	1,060	2,000	1,490	353	250	435	280	144
28	258	235	211	260	867	2,080	1,410	350	247	400	273	147
29	269	235	213	297	------	1,900	1,340	347	245	610	265	148
30	499	238	215	660	------	1,680	1,210	335	244	630	317	152
31	375	------	211	535	------	1,460	------	328	------	835	315	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	760	245	418	25,700
November	324	235	267	15,900
December	242	211	22[illegible]	13,800
January	660	210	297	18,200
February	1,250	388	573	31,800
March	6,480	590	1,750	107,000
April	2,700	1,090	1,660	98,700
May	1,100	328	593	36,500
June	325	244	283	16,800
July	1,500	127	544	33,400
August	3,310	265	941	57,800
September	533	144	267	15,500
The year	6,480	127	651	471,000

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 (revised).
RECORDS AVAILABLE.—October, 1913, to September, 1930.
EXTREMES.—Maximum daily mean discharge during year, 3,500 second-feet Mar. 18; minimum, 1 second-foot on several days in October, November, December. 1913–1930: 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, 1929–30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5	1	1	3	25	25	125	14	5	3	40	25
2	5	1	1	3	18	20	150	12	5	3	40	15
3	3	1	2	3	15	20	150	12	3	3	50	8
4	3	1	2	3	15	15	125	12	3	3	50	6
5	3	2	2	3	12	15	125	50	3	3	75	6
6	2	2	2	3	13	20	125	30	3	3	50	6
7	2	2	2	3	13	20	125	100	3	3	50	10
8	2	1	2	3	13	20	125	60	3	17	225	100
9	2	1	3	3	10	25	150	40	3	5	300	25
10	2	1	3	3	8	20	150	30	3	5	200	25
11	1	1	3	3	10	20	150	20	3	725	150	25
12	1	1	3	100	15	20	150	20	3	385	200	12
13	1	1	3	50	15	15	150	20	2	380	200	10
14	1	1	3	20	8	12	150	20	2	200	100	8
15	1	1	3	60	8	12	150	20	2	150	100	8
16	1	2	3	15	5	50	150	10	2	50	75	8
17	1	2	3	10	5	350	150	10	2	40	60	8
18	1	2	3	10	5	3,500	50	10	2	55	60	8
19	1	1	3	60	5	1,750	45	10	2	525	50	5
20	1	1	3	60	5	450	45	10	2	300	50	5
21	1	1	3	75	3	100	45	10	2	325	14	5
22	1	1	3	45	3	95	45	8	2	75	12	5
23	1	1	3	30	5	100	35	8	2	40	12	5
24	1	1	3	20	5	100	35	8	3	75	12	5
25	1	1	3	15	50	90	30	8	3	75	10	5
26	1	1	3	15	40	150	30	8	3	50	10	5
27	1	1	3	15	75	175	20	8	3	40	12	5
28	1	1	3	10	30	125	20	8	3	40	12	4
29	1	1	3	20	-------	125	20	5	3	40	12	4
30	1	1	3	50	-------	125	20	5	3	40	12	6
31	1	-------	3	75	-------	125	-------	5	-------	50	35	-------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	5	1	1.6	99
November	2	1	1.2	71
December	3	1	2.7	165
January	100	3	25.4	1,560
February	75	3	15.5	861
March	3,500	12	248	15,300
April	150	20	94.7	5,630
May	100	5	19.1	1,170
June	5	2	2.8	165
July	725	3	120	7,350
August	300	10	73.5	4,520
September	100	4	12.4	738
The year	3,500	1	51.9	37,600

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 (revised).

RECORDS AVAILABLE.—February, 1925, to September, 1930. 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, 4,700 second-feet Mar. 23; minimum, 60 second-feet July 7.

1897–1930: 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, 1929–30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	203	205	235	222	309	600	750	157	103	75	382	160
2	190	206	239	230	291	398	878	157	94	70	328	135
3	185	204	238	223	282	353	1,090	154	103	81	385	377
4	168	188	238	220	278	313	1,860	156	105	92	430	283
5	169	194	238	218	283	306	1,700	202	99	96	440	190
6	172	205	240	223	283	315	1,170	247	101	88	382	185
7	171	226	240	219	275	290	965	276	101	60	330	180
8	167	223	241	223	275	637	917	257	96	236	960	175
9	181	221	241	225	280	950	850	264	94	254	1,670	1,080
10	170	207	228	225	279	675	725	250	93	150	2,260	1,180
11	169	211	240	231	270	565	675	233	93	184	1,950	720
12	172	202	240	368	266	531	575	226	85	139	1,940	472
13	171	205	241	365	259	425	459	204	79	325	1,640	350
14	163	227	240	347	254	372	340	201	94	355	1,260	288
15	171	206	221	327	254	328	292	196	86	298	880	262
16	173	214	222	288	251	350	305	177	75	248	610	228
17	173	211	222	285	244	488	275	160	73	236	430	210
18	172	226	225	290	242	1,720	260	163	137	211	370	190
19	172	217	225	308	256	2,550	238	160	118	315	297	187
20	169	227	228	455	262	1,650	225	164	135	375	275	173
21	174	226	228	420	265	2,340	205	170	120	680	234	152
22	171	228	232	352	266	3,500	192	152	109	904	217	148
23	186	213	229	332	261	4,700	190	134	114	865	207	128
24	164	235	228	296	276	4,480	187	133	96	515	190	130
25	160	237	231	285	2,600	3,500	182	124	95	485	186	138
26	158	233	237	284	1,600	2,550	177	120	100	428	173	137
27	163	229	225	283	974	1,780	175	128	103	397	153	135
28	169	233	239	281	780	1,620	178	129	91	356	169	149
29	198	234	239	315	------	1,380	162	122	89	315	154	155
30	202	228	239	341	------	1,110	153	114	82	333	237	190
31	212	------	238	326	------	838	------	109	------	492	220	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	212	158	175	10,800
November	237	188	217	12,900
December	241	221	234	14,400
January	455	218	291	17,900
February	2,600	242	443	24,600
March	4,700	275	1,340	82,500
April	1,860	153	545	32,400
May	276	109	175	10,800
June	137	73	98.8	5,880
July	904	60	312	19,200
August	2,260	153	624	38,400
September	1,180	128	283	16,800
The year	4,700	60	396	287,000

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 to September, 1930.

EXTREMES.—Maximum discharge during 1930 period, 1,700 second-feet Sept. 7 (gage height, 9.11 feet); no flow on various days.

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

REMARKS.—Records good except those for July 19, 21, 23–25, 27, 28, Aug. 7, Sept. 7, 8, which are fair. Diversions for irrigation above station.

Daily and monthly discharge, in second-feet, 1930

Day	Apr.	June	July	Aug.	Sept.	Day	Apr.	June	July	Aug.	Sept.
1		1	1	1	8	16		1	1	1	1
2		1	1	1	3	17		1	0	1	1
3		1	1	1	1	18	1	1	2	1	2
4		1	1	190	1	19		1	161	1	2
5		1	1	92	1	20		1	129	1	1
6		1	1	105	6	21		77	306	1	1
7		1	1	258	295	22		12	127	1	1
8		1	32	183	196	23		42	185	1	1
9		1	82	51	47	24		7	285	1	2
10		0	48	10	8	25		1	242	1	1
11		1	69	62	3	26		0	55	1	1
12		1	36	5	2	27		0	149	1	1
13		1	6	1	2	28		0	505	1	1
14		2	1	3	2	29		1	61	4	1
15		2	1	28	2	30		1	40	7	1
						31			8	2	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
June	77	0	5.4	321
July	505	0	81.9	5,030
August	258	1	32.8	2,020
September	295	1	19.8	1,180
The period				8,550

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, 1930

Date	Stream	Tributary to or diverting from—	Locality	Gage height	Discharge
				Feet	*Sec.-ft.*
July 12	Woodruff Canal	Silver Creek	Silver Creek diversion dam, near Woodruff, Ariz.		9.0
Dec. 12	Clear Creek	Little Colorado River	Mouth, near Winslow, Ariz.		2.1
Jan. 4	do	do	do		2.2
July 9	do	do	do		3.1
Apr. 17	San Pedro River	Gila River	International boundary between United States and Mexico.		4.1
Mar. 18	Mineral Creek	do	Mouth at Kelvin, Ariz.		312
Apr. 25	Sonoita Creek	Santa Cruz River	Railroad bridge, 3½ miles by railroad southwest of Patagonia, Ariz.		5.0
25	do	do	4½ miles by railroad southwest of Patagonia, Ariz.		4.4
25	do	do	Railroad bridge, about 5 miles by railroad southwest of Patagonia, Ariz., and 2,200 feet above gaging station, "Sonoita Creek near Patagonia, Ariz."		3.5
25	do	do	6 miles by railroad southwest of Patagonia, Ariz.		4.5
25	do	do	7 miles by railroad southwest of Patagonia,, Ariz.		3.1
25	do	do	8 miles by railroad southwest of Patagonia, Ariz.		4.3
25	do	do	About 9 miles by railroad southwest of Patagonia, Ariz.		2.8
25	do	do	About 10 miles by railroad southwest of Patagonia, Ariz.		2.9
25	do	do	11 miles by railroad southwest of Patagonia, Ariz.		2.7
25	do	do	12 miles by railroad southwest of Patagonia, Ariz.		3.0
25	do	do	13 miles by railroad southwest of Patagonia, Ariz.		2.5
25	do	do	Railroad bridge, 13¾ miles by railroad southwest of Patagonia, Ariz.		.4
25	do	do	300 feet below railroad bridge, 13¾ miles southwest of Patagonia, Ariz., and 3½ miles above mouth of creek.		0

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