

Water-Supply Paper 649

PART IX
COLORADO RIVER BASIN

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



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



CONTENTS

	Page
Authorization and scope of work.....	1
Definition of terms.....	2
Explanation of data.....	2
Accuracy of field data and computed results.....	4
Publications.....	5
Cooperation.....	9
Division of work.....	9
Gaging-station records.....	10
Colorado River Basin.....	10
Colorado River and tributaries above Green River.....	10
Colorado River at Hot Sulphur Springs, Colo.....	10
Colorado River at Glenwood Springs, Colo.....	11
Colorado River near Palisade, Colo.....	12
Colorado River near Cisco, Utah.....	14
Colorado River at Lees Ferry, Ariz.....	15
Colorado River at Bright Angel Creek, near Grand Canyon, Ariz.....	16
Colorado River near Topock, Ariz.....	17
Colorado River at Yuma, Ariz.....	18
Fraser River near West Portal, Colo.....	19
Blue River at Dillon, Colo.....	20
Roaring Fork at Glenwood Springs, Colo.....	21
Parachute Creek at Grand Valley, Colo.....	22
Taylor River at Almont, Colo.....	23
Gunnison River near Gunnison, Colo.....	24
Gunnison River near Grand Junction, Colo.....	25
Surface Creek at Cedaredge, Colo.....	26
Uncompahgre River below Ouray, Colo.....	27
Uncompahgre River near Colona, Colo.....	28
Uncompahgre River at Delta, Colo.....	29
San Miguel River at Naturita, Colo.....	30
Green River Basin.....	31
Green River near Daniel, Wyo.....	31
Green River at Green River, Wyo.....	32
Green River at Green River, Utah.....	33
New Fork near Boulder, Wyo.....	34
Pine Creek at Pinedale, Wyo.....	35
Big Sandy Creek near Farson, Wyo.....	36
Hams Fork at Diamondville, Wyo.....	37
Little Snake River near Lily, Colo.....	38
Ashley Creek near Vernal, Utah.....	39
Utah Power & Light Co.'s tailrace near Vernal, Utah.....	40
Duchesne River near Tabiona, Utah.....	41
Duchesne River at Duchesne, Utah.....	42

Gaging-station records—Continued.

Colorado River Basin—Continued.

Green River Basin—Continued.

	Page
Duchesne River at Myton, Utah.....	43
Strawberry River at Duchesne, Utah.....	44
West Fork of Lake Fork near Mountain Home, Utah.....	45
Lake Fork near Myton, Utah.....	46
Uinta River near Neola, Utah.....	47
Whiterocks River near Whiterocks, Utah.....	48
Fish Creek near Scofield, Utah.....	49
Price River near Helper, Utah.....	50
Huntington Creek near Huntington, Utah.....	51
Cottonwood Creek near Orangeville, Utah.....	52
San Juan River Basin.....	53
San Juan River near Bluff, Utah.....	53
Paria River Basin.....	54
Paria River at Lees Ferry, Ariz.....	54
Little Colorado River Basin.....	55
Little Colorado River at Grand Falls, Ariz.....	55
Zuni River at Blackrock, N. Mex.....	56
Moenkopi Wash near Tuba City, Ariz.....	56
Bright Angel Creek Basin.....	58
Bright Angel Creek near Grand Canyon, Ariz.....	58
Virgin River Basin.....	59
Virgin River at Virgin, Utah.....	59
Mukuntuweap River near Springdale, Utah.....	60
Santa Clara Creek near Central, Utah.....	61
Gila River Basin.....	62
Gila River at Virden Bridge, near Duncan, Ariz.....	62
Gila River below Duncan, Ariz.....	63
Gila River at York, Ariz.....	63
Gila River near Solomonsville, Ariz.....	63
Gila River near Ashurst, Ariz.....	64
Gila River at Coolidge Dam, Ariz.....	65
Gila River at Kelvin, Ariz.....	66
Gila River at Ashurst-Hayden Dam, near Florence, Ariz....	67
Gila River at Gillespie Dam, Ariz.....	68
Sunset Canal near Duncan, Ariz.....	69
Cosper-Windham Canal near Duncan, Ariz.....	70
Moddle Canal near Duncan, Ariz.....	71
Valley Canal near Duncan, Ariz.....	72
Duncan Canal near Duncan, Ariz.....	73
Black-McClesky Canal at Duncan, Ariz.....	74
Colmonero Canal near Duncan, Ariz.....	75
York Canal at York, Ariz.....	76
San Francisco River at Clifton, Ariz.....	76
Brown Canal near Solomonsville, Ariz.....	77
Brown Canal wasteway near Solomonsville, Ariz.....	78
Michelana Canal near Solomonsville, Ariz.....	79
Fourness Canal near Solomonsville, Ariz.....	80
San Jose Canal near Solomonsville, Ariz.....	81
Montezuma Canal near Solomonsville, Ariz.....	82
Union Canal near Solomonsville, Ariz.....	83

Gaging-station records—Continued.

Colorado River Basin—Continued.

Gila River Basin—Continued.

	Page
Graham Canal near Safford, Ariz.....	84
Smithville Canal near Thatcher, Ariz.....	85
Dodge-Nevada Canal near Pima, Ariz.....	86
Curtis-Kempton Canal near Eden, Ariz.....	87
Fort Thomas Consolidated Canal at Ashurst, Ariz.....	88
San Pedro River at Fairbank, Ariz.....	89
Santa Cruz River at Tucson, Ariz.....	90
Rillito Creek near Tucson, Ariz.....	91
Salt River near Chrysotile, Ariz.....	92
Salt River near Roosevelt, Ariz.....	93
Tonto Creek near Roosevelt, Ariz.....	94
Verde River above Camp Creek, near McDowell, Ariz.....	95
Miscellaneous discharge measurements.....	96
Index.....	97

ILLUSTRATION

FIGURE 1. Typical gaging station.....	Page 3
---------------------------------------	-----------



SURFACE WATER SUPPLY OF COLORADO RIVER BASIN, 1927

AUTHORIZATION AND SCOPE OF WORK

This volume is one of a series of 14 reports presenting results of measurements of flow made on streams in the United States during the year ending September 30, 1927.

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 in the West. 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, 1895-1928

1895.....	\$12, 500. 00	1918.....	\$175, 000. 00
1896.....	20, 000. 00	1919.....	148, 244. 10
1897-1900.....	50, 000. 00	1920.....	175, 000. 00
1901-1902.....	100, 000. 00	1921-1923.....	180, 000. 00
1903-1906.....	200, 000. 00	1924-1925.....	170, 000. 00
1907.....	150, 000. 00	1926.....	165, 000. 00
1908-1910.....	100, 000. 00	1927.....	151, 000. 00
1911-1917.....	150, 000. 00	1928.....	147, 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 9.

Measurements of stream flow have been made at about 5,330 points in the United States and also at many points in Alaska and the Hawaiian Islands. In July, 1927, 1,750 gaging stations were

being maintained by the Geological Survey and the cooperating organizations. Many miscellaneous discharge measurements were made at other points. In connection with this work data were also collected in regard to precipitation, evaporation, storage reservoirs, river 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, 1926, and ending September 30, 1927. At the beginning of January in most parts of the United States much of the precipita-

tion in the preceding three months is stored in the form of snow or ice, or in ponds, lakes, and swamps, or as underground water and this stored water passes off in the streams during the spring break-up. At the end of September, on the other hand, the only stored water available for run-off is possibly a small quantity in the ground; therefore the run-off for the year beginning October 1 is practically all derived from precipitation within that year.

The base data collected at gaging stations consist of records of stage, measurements of discharge, and general information used to supplement the gage heights and discharge measurements in determining the daily flow. The records of stage are obtained either from direct readings on a staff gage, chain gage, or from a water-stage

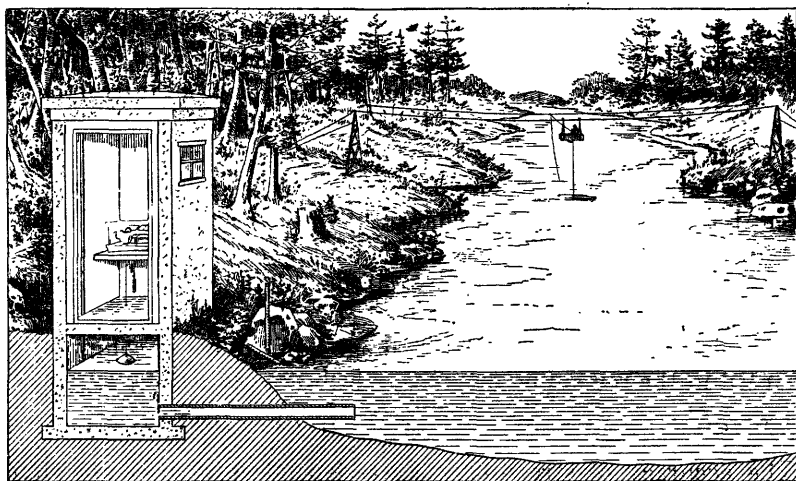


FIGURE 1.—Typical gaging station

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 determined.

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

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 non-recording 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 permanence 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 located 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 be satisfied first.

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 investigations 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 I. North Atlantic slope basins (St. John River to York River).

II. South Atlantic slope and eastern Gulf of Mexico basins (James River to the Mississippi).

III. Ohio River Basin.

IV. St. Lawrence River Basin.

V. Hudson Bay and upper Mississippi River Basins.

VI. Missouri River Basin.

VII. Lower Mississippi River Basin.

VIII. Western Gulf of Mexico basins.

IX. Colorado River Basin.

X. The Great Basin.

XI. Pacific slope basins in California.

XII. North Pacific slope basins in three volumes:

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., Statehouse.
 Boston, Mass., 2500 Customhouse.
 Hartford, Conn., 64 State Capitol.
 Albany, N. Y., 506 Broadway-Arcade Building.
 Trenton, N. J., 710 Trenton Trust Building.
 Charlottesville, Va., Brooks Museum, University of Virginia.
 South Charleston, W. Va., Naval Ordnance Plant.
 Asheville, N. C., 608 City Hall.
 Ocala, Fla., Federal Building.
 Chattanooga, Tenn., 630 Power Building.
 Tuscaloosa, Ala., Post Office Building.
 Indianapolis, Ind., 315 Federal Building.
 Lansing, Mich., 320 Old State Office Building.
 Columbus, Ohio, Engineering Experiment Station, Ohio State University.
 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.
 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, Federal Building.
 Helena, Mont., 415 Power Building.
 Tacoma, Wash., 406 Federal Building.
 Portland, Oreg., 606 Post Office Building.
 San Francisco, Calif., 303 Customhouse.
 Los Angeles, Calif., 751 South Figueroa Street.
 Honolulu, Hawaii, Territorial Office Building.

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

Stream-flow records have been obtained at about 5,330 points in the United States, and the data obtained have been published in the reports tabulated below.

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

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

Report	Character of data	Year
10th A, pt. 2.	Descriptive information only.	
11th A, pt. 2.	Monthly discharge and descriptive information.	1884 to Sept., 1890.
12th A, pt. 2.	do.	1884 to June 30, 1891.
13th A, pt. 3.	Mean discharge in second-feet.	1884 to Dec. 31, 1892.
14th A, pt. 2.	Monthly discharge (long-time records, 1871 to 1893).	1883 to Dec. 31, 1893.
B 131.	Descriptions, measurements, gage heights, and ratings.	1893 and 1894.

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

Report	Character of data	Year
16th A, pt. 2.....	Descriptive information only.....	
B 140.....	Descriptions, measurements, gage heights, ratings, and monthly discharge (also many data covering earlier years).	1895.
W 11.....	Gage heights (also gage heights for earlier years).....	1896.
18th A, pt. 4.....	Descriptions, measurements, ratings, and monthly discharge (also similar data for some earlier years).	1895 and 1896.
W 15.....	Descriptions, measurements, and gage heights eastern United States, eastern Mississippi River, and Missouri River above junction with Kansas.	1897.
W 16.....	Descriptions, measurements, and gage heights, western Mississippi River below junction of Missouri and Platte, and western United States.	1897.
19th A, pt. 4.....	Descriptions, measurements, ratings, and monthly discharge (also some long-time records).	1897.
W 27.....	Measurements, ratings, and gage heights, eastern United States, eastern Mississippi River, and Missouri River.	1898.
W 28.....	Measurements, ratings, and gage heights, Arkansas River, and western United States.	1898.
20th A, pt. 4.....	Monthly discharge (also for many earlier years).....	1898.
W 35 to 39.....	Descriptions, measurements, gage heights, and ratings.....	1899.
21st A, pt. 4.....	Monthly discharge.....	1899.
W 47 to 52.....	Descriptions, measurements, gage heights and ratings.....	1900.
22d A, pt. 4.....	Monthly discharge.....	1900.
W 65, 66.....	Descriptions, measurements, gage heights, and ratings.....	1901.
W 75.....	Monthly discharge.....	1901.
W 82 to 85.....	Complete data.....	1902.
W 97 to 100.....	do.....	1903.
W 124 to 135.....	do.....	1904.
W 165 to 178.....	do.....	1905.
W 201 to 214.....	do.....	1906.
W 241 to 252.....	do.....	1907-8.
W 261 to 272.....	do.....	1909.
W 281 to 292.....	do.....	1910.
W 301 to 312.....	do.....	1911.
W 321 to 332.....	do.....	1912.
W 351 to 362.....	do.....	1913.
W 381 to 394.....	do.....	1914.
W 401 to 414.....	do.....	1915.
W 431 to 444.....	do.....	1916.
W 451 to 464.....	do.....	1917.
W 471 to 484.....	do.....	1918.
W 501 to 514.....	do.....	1919 and 1920.
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.

• 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 1927. 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 III 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, 1899-1927

[For basins included see p. 6]

Year	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII-A	XII-B	XII-C
1899 ^a	35	b 35, 36	36	36	36	e 36, 37	37	37	d 37, 38	38, * 39	38, / 39	38	38	38
1900 ^a	47, * 48	48, * 49	49	49	49	49, * 50	50	50	50	51	51	51	51	51
1901	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	66, 75	66, 75	66, 75	66, 75	66, 75
1902	b 82, 83	b 82, 83	83	83	83	83, 84	84	84	84	85	85	85	85	85
1903	b 97, 98	b 97, 98	98	98	98	98, 99	99	99	100	100	100	100	100	100
1904	* 124, * 125	* 126, 127	128	128	128	130, * 131	131	132	133	133, * 134	134	135	135	135
1905	* 165, * 166	* 167, 168	169	170	171	172	* 169, 173	174	175, * 177	176, * 177	177	178	178	* 177, 178
1906	* 201, * 202	* 203, 204	205	206	207	208	* 205, 209	210	211	212, * 213	213	214	214	214
1907-8	241	242	243	244	245	246	247	248	249	250, * 251	251	252	252	252
1909	281	282	283	284	285	286	287	288	289	290, * 291	291	292	292	292
1910	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

^a Loup and Platte Rivers near Columbus, Nebr., and all tributaries below junction with Platte.

^b Tributaries of Mississippi from east.

^c Lake Ontario and tributaries to St. Lawrence River proper.

^d Hudson Bay only.

^e New England rivers only.

^f Hudson River to Delaware River, inclusive.

^g Susquehanna River to Yackin River, inclusive.

^h Platte and Kansas Rivers.

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

^j Below junction with Gila.

^k Rogue, Umpqua, and Siletz Rivers only.

^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 IV.

^b James River only.

^c Gallatin River

^d Green and Gunnison Rivers and Grand River above junction with Gunnison.

^e Molave 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 IV.

^h Wissachickon and Schuykill Rivers to James River.

ⁱ Scioto River.

COOPERATION

The work in Arizona, Utah, and Wyoming was carried on under cooperative agreements between the United States Geological Survey and the States. Special acknowledgments are due to the cooperating State officials, Frank P. Trott, State water commissioner of Arizona; George M. Bacon, State engineer of Utah; and John A. Whiting, State engineer of Wyoming.

The State engineer of Colorado, M. C. Hinderlider, furnished field data for some stations in Colorado and complete records for other stations.

The State of California also furnished financial assistance for work on the Colorado River in Arizona.

Acknowledgments are due to the United States Weather Bureau, United States Bureau of Reclamation, and United States Indian Service for financial assistance and cooperation.

Financial assistance for the work in Arizona was furnished by John L. Fish, city of Los Angeles, the Palo Verde Irrigation District, and the Southern California Edison Co.

Valuable assistance in the collection of data in Wyoming was rendered by the Best Flume & Power Co. and the Eden Irrigation Project, and in Utah by the Utah Power & Light Co.

DIVISION OF WORK

Data for stations in Arizona were collected and prepared for publication under the direction of W. E. Dickinson, district engineer, who was assisted by D. A. Dudley, J. H. Gardiner, D. H. Barber, J. A. Baumgartner, W. E. Code, K. C. McCarter, A. H. Williams, J. E. Klorr, F. B. Dodge, and O. R. Clark.

Data in Wyoming and Colorado were collected and prepared for publication under the direction of Robert Follansbee, district engineer, who was assisted by P. V. Hodges and Miss Nellie Esterly.

Data for stations in Utah were collected and prepared for publication under the direction of A. B. Purton, district engineer, who was assisted by M. T. Wilson, D. M. Corbett, J. A. Allis, J. B. Ringwood, and Miss Lysle Christensen.

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 HOT SULPHUR SPRINGS, COLO.

LOCATION.—Chain gage in sec. 2, T. 1 N., R. 78 W., at Hot Sulphur Springs.

DRAINAGE AREA.—785 square miles.

RECORDS AVAILABLE.—July, 1904, to September, 1909; September, 1910, to September, 1924; October, 1925, to September, 1927.

EXTREMES.—Maximum discharge during year, 4,580 second-feet May 22 (gage height, 6.75 feet); minimum occurred during winter.

1904-1909, 1910-1924, 1926-27: Maximum discharge, 10,300 second-feet June 15, 1921 (gage height, 8.7 feet); minimum, 63 second-feet February 25 and 26, 1908.

REMARKS.—Records good except for period of missing gage heights, November 16 to April 9, for which they are fair. Diversions for irrigation above station.

Daily discharge, in second-feet, 1926-27

Day	Oct.	Nov.	Apr.	May	June	July	Aug.	Sept.
1	163	149	280	1,600	2,200	1,870	683	355
2	163	115	250	1,950	2,320	1,620	734	338
3	196	125	400	2,100	2,320	1,540	883	304
4	239	85	280	1,980	2,040	1,580	774	292
5	212	219	280	1,880	1,970	1,540	655	284
6	212	122	370	1,830	2,020	1,530	588	259
7	215	193	440	2,180	2,260	1,420	717	284
8	219	231	435	2,560	3,080	1,320	728	275
9	288	120	435	1,880	3,450	1,290	848	279
10	292	100	431	1,710	3,610	1,480	768	279
11	263	150	436	1,660	3,420	1,350	705	267
12	239	175	436	1,630	3,330	1,170	638	255
13	223	160	247	1,610	3,270	1,050	610	292
14	208	143	318	1,750	2,910	1,020	533	288
15	196	135	243	1,880	2,980	912	528	284
16	189	148	247	2,480	2,580	842	485	259
17	181		223	3,380	2,430	762	448	251
18	181		288	4,130	3,150	762	419	243
19	163		364	4,170	3,270	711	404	219
20	160	200	374	4,130	3,010	672	395	227
21	167		212	4,130	2,880	666	386	204
22	156		310	4,450	2,380	825	381	212
23	153		446	4,310	2,200	819	368	247
24	149		422	3,750	2,350	883	377	251
25	146		606	2,980	2,660	694	386	346
26	139	200	797	3,150	2,530	605	404	381
27	142		1,030	2,820	3,040	605	428	359
28	146		1,370	3,110	2,910	672	433	355
29	149		1,430	3,080	2,940	689	409	359
30	125		1,530	2,500	2,480	900	472	346
31	129			2,240		768	472	

COLORADO RIVER AND TRIBUTARIES ABOVE GREEN RIVER 11

Monthly discharge of Colorado River at Hot Sulphur Springs, Colo., 1926-27

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	292	125	187	11,500
November.....	231	-----	166	9,880
December.....	-----	-----	138	8,480
January.....	-----	-----	100	6,150
February.....	-----	-----	95	5,280
March.....	-----	-----	126	7,750
April.....	1,530	223	498	29,600
May.....	4,450	1,600	2,680	165,000
June.....	3,610	1,970	2,730	162,000
July.....	1,870	605	1,050	64,600
August.....	883	368	550	33,800
September.....	381	204	286	17,000
The year.....	4,450	-----	720	521,000

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.

DRAINAGE AREA.—4,560 square miles.

RECORDS AVAILABLE.—January, 1900, to September, 1927. From May to July, 1899, at point just above Roaring Fork.

EXTREMES.—Maximum discharge during year, 18,400 second-feet May 22 (gage height, 9.83 feet); minimum, 208 second-feet December 31 (gage height, 2.14 feet).

1900-1927: Maximum discharge, 30,100 second-feet June 14 and 15, 1918 (gage height, 12.55 feet); minimum, 80 second-feet February 6, 1921 (gage height, 1.6 feet).

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

Daily discharge, in second-feet, 1926-27

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	862	862	1,210	584	690	756	1,920	6,690	10,600	9,570	3,090	2,100
2.....	928	880	1,060	612	735	716	1,680	7,610	10,600	7,930	3,090	1,980
3.....	1,040	946	966	652	719	710	1,800	8,570	11,000	7,300	3,500	1,860
4.....	1,040	946	1,080	698	720	743	2,340	8,900	10,200	6,990	3,610	1,680
5.....	1,080	918	1,000	793	695	625	2,100	8,900	9,570	7,300	3,090	1,570
6.....	1,100	880	982	785	695	725	1,800	8,570	9,570	7,300	2,750	1,570
7.....	1,100	890	1,080	751	701	820	1,980	8,900	10,200	6,690	2,830	1,510
8.....	1,110	1,060	1,100	844	678	728	2,280	9,910	11,300	6,100	3,500	1,510
9.....	1,120	899	1,080	707	626	838	2,280	9,910	12,800	5,810	4,070	1,510
10.....	1,210	734	982	757	583	739	2,040	8,250	14,000	6,100	4,320	1,570
11.....	1,290	782	812	684	581	716	2,220	7,300	14,400	6,540	3,610	1,510
12.....	1,270	871	664	652	620	730	2,160	6,990	14,000	5,530	3,190	1,510
13.....	1,200	995	570	730	643	609	1,980	7,610	13,200	4,970	3,000	1,570
14.....	1,160	1,020	573	739	748	757	1,740	7,610	12,400	4,190	2,830	1,620
15.....	1,080	975	419	706	759	752	1,620	8,900	12,400	4,190	2,680	1,740
16.....	985	899	475	691	703	823	1,510	10,200	12,400	3,950	2,680	1,620
17.....	1,110	890	554	722	723	602	1,400	12,400	11,300	3,610	2,610	1,510
18.....	1,110	790	632	713	648	840	1,330	15,200	12,000	3,400	2,410	1,570
19.....	758	799	631	720	537	743	1,380	16,500	12,800	3,190	2,280	1,460
20.....	985	899	752	706	744	602	1,620	17,000	13,200	3,090	2,220	1,510
21.....	975	985	590	741	762	667	1,740	17,400	12,400	3,090	2,100	1,340
22.....	975	1,110	738	736	698	750	1,740	17,800	11,000	3,190	2,100	1,320
23.....	975	1,100	707	692	744	680	1,740	17,800	10,200	3,400	2,100	1,340
24.....	937	1,100	553	709	726	740	1,920	16,500	10,200	3,500	1,980	1,400
25.....	928	1,120	485	642	707	808	2,160	14,000	10,600	3,400	2,040	1,620
26.....	908	1,110	542	650	693	1,010	2,610	13,200	10,600	3,000	2,040	1,740
27.....	590	1,100	528	698	908	1,170	3,400	12,800	11,000	2,830	2,220	1,980
28.....	590	1,100	564	731	803	1,280	4,700	12,800	11,300	3,000	2,340	1,920
29.....	853	1,040	512	714	-----	1,330	5,390	12,400	11,300	3,190	2,410	1,800
30.....	965	975	506	672	-----	1,740	5,810	11,700	10,600	3,400	2,340	1,800
31.....	908	-----	588	640	-----	1,920	-----	10,600	-----	3,400	2,160	-----

Monthly discharge of Colorado River at Glenwood Springs, Colo., 1926-27

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	1,290	758	1,020	62,700
November.....	1,120	734	957	56,900
December.....	1,210	419	745	45,800
January.....	844	584	706	43,400
February.....	908	537	700	38,900
March.....	1,920	602	860	52,900
April.....	5,810	1,330	2,280	136,000
May.....	17,800	6,690	11,400	701,000
June.....	14,400	9,570	11,600	690,000
July.....	9,570	2,830	4,820	296,000
August.....	4,320	1,980	2,750	169,000
September.....	2,100	1,320	1,620	96,400
The year.....	17,800	419	3,300	2,390,000

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, 1927.

EXTREMES.—Maximum discharge during year, 31,300 second-feet May 20 and 22 (gage height, 21.3 feet); minimum, 1,150 second-feet several days during February and March (gage height, 12.1 feet).

1902-1927: Maximum discharge, 52,400 second-feet June 16, 1921 (gage height, 24.4 feet); minimum, 630 second-feet September 2, 1924 (gage height, 11.4 feet).

REMARKS.—Discharge estimated December 17 to February 15. Principal diversion between Glenwood Springs and Palisade is the Government High-line Canal (capacity, 1,425 second-feet). Enough of the water diverted for power is returned to the river to supply a priority of 521 second-feet for the Grand Valley Canal. Complete records furnished by Bureau of Reclamation.

Daily discharge, in second-feet, 1926-27

Day	Oct.	Nov.	Dec.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	1,480	1,150	1,580		1,760	2,620	11,400	18,600	18,200	5,140	2,780
2.....	1,230	1,230	1,700		1,760	2,620	12,600	18,800	15,200	4,700	2,620
3.....	1,700	1,280	1,640		1,760	2,460	14,700	19,200	13,800	7,300	2,460
4.....	1,820	1,320	1,640		1,940	2,620	16,000	18,600	13,100	6,880	2,320
5.....	1,480	1,420	1,480		1,580	2,700	15,400	17,600	13,200	6,340	2,180
6.....	1,480	1,530	1,940		1,530	2,700	14,800	17,400	12,700	5,600	2,390
7.....	1,580	1,530	2,060		1,580	2,780	15,400	18,000	12,000	5,960	2,180
8.....	1,700	1,480	2,120	1,050	1,700	3,030	16,200	20,300	11,000	5,840	2,180
9.....	2,000	1,530	1,940		1,580	3,030	16,400	24,000	10,200	6,210	2,320
10.....	1,880	1,530	1,580		1,370	3,030	14,100	24,800	10,200	6,880	2,860
11.....	1,820	1,420	1,420		1,230	3,030	11,400	26,000	11,700	5,960	2,700
12.....	1,880	1,480	1,370		1,370	2,940	10,600	25,300	10,700	5,600	3,030
13.....	1,820	1,760	1,280		1,480	2,620	10,700	24,500	9,580	5,360	3,580
14.....	1,760	1,760	1,230		1,280	2,460	11,900	23,500	8,640	4,810	4,920
15.....	1,700	1,700	1,110		1,370	2,180	14,300	24,500	7,740	4,280	3,680
16.....	1,480	1,760		1,480	1,420	1,940	17,600	25,000	7,160	4,080	3,390
17.....	1,480	1,700	1,190	1,530	1,480	1,940	22,100	20,800	6,600	4,080	3,080
18.....	1,530	1,640		1,640	1,320	1,320	27,400	21,200	5,960	3,580	2,620
19.....	1,480	1,640		1,280	1,230	1,880	30,100	24,000	5,480	3,120	2,860
20.....	1,370	1,640		1,150	1,150	1,940	30,400	24,300	5,140	2,780	2,460
21.....	1,370	1,640		1,230	1,190	2,250	29,600	23,300	5,250	2,700	2,540
22.....	1,420	1,580		1,420	1,480	2,320	30,400	20,500	5,360	2,540	2,320
23.....	1,320	1,640		1,580	1,580	2,390	29,900	19,000	5,600	2,540	2,460
24.....	1,320	1,700	1,150	1,760	1,700	2,860	27,400	18,400	5,720	2,320	2,540
25.....	1,280	1,880		1,880	1,580	3,120	24,500	19,000	5,360	2,120	3,980
26.....	1,320	1,940		1,940	1,420	4,180	23,500	19,200	4,920	2,320	3,980
27.....	1,370	1,880		1,820	1,760	5,360	23,000	20,100	4,500	3,030	3,210
28.....	1,280	2,000		1,820	1,820	7,160	22,300	22,800	5,360	3,980	3,120
29.....	1,230	1,820			2,000	9,100	20,300	24,300	4,810	3,480	3,300
30.....	1,150	1,640			2,180	9,580	20,300	21,400	5,600	3,300	3,210
31.....	1,110				2,460		18,600		5,140	3,120	

COLORADO RIVER AND TRIBUTARIES ABOVE GREEN RIVER 13

Monthly discharge of Colorado River near Palisade, Colo., 1926-27

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	2,000	1,110	1,510	92,800
November.....	2,000	1,150	1,610	95,800
December.....			1,370	84,200
January.....			1,250	76,900
February.....			1,400	77,800
March.....	2,460	1,150	1,580	97,200
April.....	9,580	1,820	3,300	196,000
May.....	30,400	10,600	19,500	1,200,000
June.....	26,000	17,400	21,500	1,280,000
July.....	18,200	4,500	8,580	528,000
August.....	7,800	2,120	4,890	270,000
September.....	4,920	2,180	2,910	173,000
The year.....	30,400		5,750	4,170,000

Monthly discharge of Government High-line Canal above Palisade, Colo., 1926-27

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	637	415	465	28,600
November.....	439	0	95.8	5,700
December.....	204	0	41.7	2,560
January.....	153	0	16.5	1,010
February.....	153	0	21.0	1,170
March.....	336	0	48.8	3,000
April.....	734	336	479	28,500
May.....	938	780	893	54,900
June.....	911	664	813	48,400
July.....	982	823	887	54,500
August.....	947	0	660	40,600
September.....	672	477	559	33,300
The year.....	982	0	417	302,000

NOTE.—Monthly diversions through Government High-line Canal represent the total diversions from river immediately above station for irrigation in Grand Valley.

COLORADO RIVER NEAR CISCO, UTAH

LOCATION.—Water-stage recorder in NW. $\frac{1}{4}$ sec. 17, T. 23 S., R. 24 E., 15 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 1927. October 1913, to November, 1914, at Moab, 25 miles downstream; flow about same at both places.

EXTREMES.—Maximum discharge during year, 49,000 second-feet May 20 (gage height, 14.48 feet); minimum mean daily discharge, estimated 2,100 second-feet December 18.

1914-1917, 1922-1927: Maximum discharge, 76,800 second-feet June 19, 1917 (gage height, 19.7 feet); minimum, 844 second-feet September 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, 1926-27

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.	3,400	*2,650	*3,100			*3,100	6,840	29,300	28,000	36,000	8,380	*5,200
2.	2,580	*2,700	*3,050		*2,620	*3,000	6,750	31,200	28,200	30,000	7,560	*4,800
3.	3,650	*2,800	*3,050			3,060	6,470	32,700	28,800	24,900	11,000	*4,500
4.	4,520	*2,850	3,000		2,700	4,790	7,330	33,600	28,400	22,200	9,820	4,300
5.	4,130	*2,950	*3,000		*2,800	3,940	9,040	33,400	26,800	23,900	10,200	4,090
6.	4,110	*3,000	3,390		*3,000	3,790	10,500	32,300	25,800	20,700	9,360	3,920
7.	3,960	*3,000	*3,500		3,120	3,290	10,600	30,700	26,600	19,500	9,300	5,130
8.	3,880	*2,950	*3,700			3,140	11,000	32,300	28,300	17,600	9,920	4,430
9.	3,790	*3,000	*3,600	*2,500		3,240	11,100	33,000	31,200	16,100	10,800	4,700
10.	3,770	*2,950	*3,500		*2,900	3,510	10,200	29,900	33,400	15,200	11,500	9,620
11.	4,260	*2,900	*3,200			3,590	9,720	24,100	34,600	16,200	11,500	13,600
12.	4,320	*3,100	*3,000			3,370	9,560	20,600	34,200	17,400	10,500	14,300
13.	4,110	*3,300	*2,700			3,100	8,560	19,800	34,200	16,000	9,360	21,900
14.	3,960	*3,400	*2,600		2,470	2,840	7,380	21,000	34,200	13,900	9,010	17,300
15.	*3,810	*3,300	*2,500			2,750	6,920	25,300	34,000	12,600	8,040	14,100
16.	*3,660	*3,200	*2,300			2,990	6,360	29,900	36,200	11,400	7,440	11,900
17.	*3,510	*3,100	*2,200	2,880	*2,800	2,990	5,800	34,200	35,400	10,300	7,380	10,500
18.	*3,360	*3,050	*2,100			3,060	5,400	40,800	31,900	9,590	6,920	9,360
19.	3,220	*3,050				2,830	5,200	47,300	32,800	8,660	5,990	8,220
20.	3,200	*3,100				2,970	6,640	48,400	34,600	8,010	5,300	8,040
21.	3,100	*3,100		*3,100		2,750	7,530	47,300	34,200	7,920	*4,000	7,590
22.	*3,050	*3,150			2,930	2,610	8,410	45,900	32,100	7,920	*4,700	7,300
23.	*3,010	*3,250				2,630	9,070	45,500	29,700	8,500	*4,800	7,800
24.	*2,970	*3,300		2,650		2,880	10,500	42,400	27,900	8,750	*4,600	8,100
25.	2,930	*3,400			*3,100	2,930	12,600	37,500	27,400	8,780	*4,500	11,300
26.	2,830	*3,500	*2,360			2,930	14,800	34,000	2,7900	8,600	*5,000	10,200
27.	2,750	*3,400		2,600		3,200	17,400	33,800	27,600	7,890	*5,700	9,360
28.	*2,700	*3,500			3,160	4,130	20,100	33,400	30,700	7,440	*6,800	8,940
29.	*2,650	*3,490				4,820	24,100	32,800	39,100	8,410	*6,700	8,320
30.	*2,620	3,300				5,270	27,700	31,900	42,800	8,910	*7,000	7,800
31.	*2,600			2,650		5,750		29,800		9,070	*6,000	

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October	4,520	2,580	3,430	211,000
November	3,500	2,650	3,120	186,000
December	3,700		2,700	166,000
January			2,660	164,000
February			2,890	161,000
March	5,750	2,610	3,400	209,000
April	27,700	5,200	10,500	625,000
May	48,400	19,800	33,700	2,070,000
June	42,800	25,800	31,600	1,880,000
July	36,000	7,440	14,300	879,000
August	11,500	4,000	7,710	474,000
September	21,900	3,920	8,890	529,000
The year	48,400		10,400	7,550,000

* Estimated.

COLORADO RIVER AND TRIBUTARIES ABOVE GREEN RIVER 15

COLORADO RIVER AT LEES FERRY, ARIZ.

LOCATION.—Water-stage recorder at head of Marble Gorge, at Lees Ferry, Coconino County, a short distance above mouth of Paria River. Zero of gage is 3,106.35 feet above mean sea level.

RECORDS AVAILABLE.—June, 1921, to September, 1927.

EXTREMES.—Maximum discharge during year, 127,000 second-feet July 1 (gage height, 20.35 feet); minimum, 2,330 second-feet December 31 (gage height, 5.6 feet).

1921-1927: Maximum discharge, about 190,000 second-feet June 18, 1921 (gage height, 26.5 feet); minimum, 750 second-feet December 27, 1924 (gage height, 4.2 feet).

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

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

Daily and monthly discharge, in second-feet, 1926-27

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	6,020	5,170	6,750	2,700	5,560	9,280	13,100	38,200	60,200	119,000	17,200	14,400
2.....	5,420	5,110	6,720	2,800	5,470	10,400	14,600	42,900	56,400	106,000	16,800	14,200
3.....	5,080	5,020	6,480	2,900	5,440	9,890	15,200	49,600	53,400	73,100	16,700	13,100
4.....	6,760	5,110	6,950	3,100	5,320	9,930	15,500	55,800	52,300	65,800	15,800	11,800
5.....	6,850	5,200	6,350	3,400	5,350	10,000	16,800	58,900	51,700	59,700	15,200	10,600
6.....	8,430	5,260	6,790	3,800	5,410	11,200	18,500	61,110	49,800	55,900	18,200	10,400
7.....	9,000	5,170	6,750	4,200	5,410	10,500	20,900	63,100	47,500	59,200	19,400	11,500
8.....	8,280	5,200	7,160	4,800	5,620	11,400	23,800	63,200	46,200	53,000	25,100	14,600
9.....	8,240	5,140	10,100	5,200	5,840	10,300	25,200	60,800	46,700	44,800	20,500	14,400
10.....	8,130	5,050	11,000	5,100	6,030	10,900	26,000	62,700	48,700	42,700	18,000	23,200
11.....	8,090	5,230	11,300	5,060	6,190	10,700	26,300	61,400	54,800	40,700	17,400	43,200
12.....	7,940	5,170	10,200	5,620	6,190	10,300	25,200	55,800	59,800	40,400	18,600	43,300
13.....	7,910	5,390	8,960	5,960	5,960	11,000	22,800	50,700	63,000	41,700	19,100	58,100
14.....	8,470	5,930	7,690	6,220	5,780	11,000	22,200	46,200	64,600	38,100	18,400	103,000
15.....	8,470	5,700	7,300	6,280	5,990	10,900	21,600	42,300	66,000	34,900	16,400	110,000
16.....	8,130	5,670	6,920	6,350	6,550	10,300	19,900	42,700	67,800	30,600	15,000	78,900
17.....	7,800	5,390	6,510	6,320	9,890	9,850	18,500	47,300	67,500	27,500	14,700	55,900
18.....	7,550	5,700	5,990	6,220	11,200	9,200	17,700	55,100	69,600	25,100	13,700	45,300
19.....	7,230	5,990	5,350	6,060	9,090	9,200	16,600	64,700	69,400	22,800	13,100	33,300
20.....	7,020	5,890	4,700	6,220	10,400	8,900	15,300	74,200	67,100	21,900	12,400	30,400
21.....	6,580	5,890	4,200	6,060	9,890	8,650	14,300	84,800	69,300	20,000	11,800	31,600
22.....	6,350	5,830	4,000	6,280	8,900	8,720	13,600	89,300	70,900	18,400	11,000	26,000
23.....	6,380	5,770	4,100	6,780	7,520	8,830	14,300	89,300	69,100	17,700	9,980	23,700
24.....	6,380	5,610	4,200	7,060	6,660	8,610	15,900	87,200	65,600	17,100	9,740	21,200
25.....	6,090	5,770	4,200	6,820	6,560	8,090	17,100	84,900	61,500	17,400	9,430	20,700
26.....	5,770	6,050	4,100	6,510	6,940	7,710	19,400	78,400	57,900	18,300	8,750	22,200
27.....	5,640	6,090	3,700	6,280	7,230	7,550	24,000	72,600	56,800	19,000	9,350	28,500
28.....	5,320	6,090	3,300	6,280	8,090	8,360	28,800	69,300	53,200	18,700	13,400	27,100
29.....	5,420	6,150	2,800	6,220	-----	9,580	33,300	67,500	73,600	20,300	14,100	25,300
30.....	5,420	6,510	2,600	6,190	-----	10,400	35,100	64,700	91,200	20,300	13,500	23,500
31.....	5,390	-----	2,500	5,780	-----	11,400	-----	62,700	-----	18,100	13,900	-----

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	9,000	5,080	6,950	427,000
November.....	6,510	5,020	5,580	332,000
December.....	11,300	2,500	6,130	377,000
January.....	7,060	2,700	5,440	334,000
February.....	11,200	5,320	6,950	388,000
March.....	11,400	7,550	9,780	601,000
April.....	35,100	13,100	20,400	1,210,000
May.....	89,300	38,200	62,800	3,860,000
June.....	91,200	46,200	61,200	3,640,000
July.....	119,000	17,100	39,100	2,400,000
August.....	25,100	8,750	15,100	928,000
September.....	110,000	10,400	34,200	2,040,000
The year.....	119,000	2,500	22,800	16,500,000

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 sea level.

RECORDS AVAILABLE.—October, 1922, to September, 1927.

EXTREMES.—Maximum discharge during year, 127,000 second-feet July 2 (gage height, 29.25 feet); minimum, 2,730 second-feet January 1 (gage height, 1.30 feet).

1922-1927: Maximum discharge, that of July 2, 1927; minimum, 700 second-feet December 28, 1924 (gage height, -0.70 foot).

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

Daily and monthly discharge, in second-feet, 1926-27

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1-----	7,310	6,080	7,180	2,870	6,210	11,200	13,500	37,600	60,400	114,000	18,100	16,000
2-----	7,260	5,980	7,340	3,040	6,010	12,400	15,600	42,200	56,700	117,000	17,500	15,600
3-----	6,500	5,880	7,260	3,150	5,940	12,900	17,000	47,900	53,200	88,000	17,600	14,700
4-----	6,320	5,830	7,390	3,270	5,930	12,000	16,900	54,400	52,200	71,400	17,300	13,300
5-----	7,460	5,980	7,410	3,580	5,800	11,300	17,900	57,700	51,200	63,300	15,900	11,800
6-----	7,330	6,070	7,310	3,770	5,860	12,300	19,800	60,600	50,200	58,100	16,700	10,800
7-----	9,340	6,120	7,410	4,260	5,910	12,100	22,000	63,100	48,200	57,900	19,800	15,600
8-----	9,340	5,950	7,440	4,640	5,970	12,400	25,000	64,000	46,400	58,100	23,700	17,000
9-----	8,800	6,040	8,080	5,200	6,210	12,200	27,300	61,400	46,000	49,300	25,000	16,400
10-----	8,710	6,010	11,300	5,690	6,420	11,500	28,000	61,900	47,500	43,800	20,400	17,800
11-----	8,590	5,970	11,700	5,670	6,580	11,800	28,600	62,100	52,000	43,200	18,300	51,200
12-----	8,630	6,120	11,600	5,970	6,730	11,400	28,200	57,000	58,200	40,500	18,800	42,200
13-----	8,500	6,110	10,300	6,720	6,700	11,300	25,500	51,900	63,100	43,000	20,400	74,000
14-----	8,540	6,310	9,240	6,820	6,370	11,700	24,200	47,300	65,000	40,700	20,700	106,000
15-----	9,050	6,720	8,300	7,060	6,260	11,600	23,400	43,400	67,500	37,100	19,000	114,000
16-----	8,870	6,340	7,860	7,000	7,060	11,500	22,000	41,700	69,200	33,100	17,300	85,200
17-----	8,500	6,220	7,460	6,970	7,900	10,900	20,100	45,400	69,700	29,500	16,100	65,700
18-----	8,160	6,050	6,940	6,900	11,900	10,900	19,300	51,900	70,400	27,000	15,300	55,700
19-----	7,950	6,340	6,340	6,800	16,400	10,700	18,300	60,300	72,100	24,600	14,200	45,800
20-----	7,730	6,580	5,700	6,680	14,500	10,400	17,100	72,600	68,400	22,400	13,300	36,000
21-----	7,490	6,500	5,070	6,790	13,600	9,840	15,700	84,700	69,500	20,800	12,900	35,600
22-----	7,220	6,450	4,580	6,680	12,100	9,570	14,700	91,000	72,100	19,400	12,100	51,500
23-----	7,000	6,370	4,320	6,940	10,600	9,640	14,500	91,800	70,900	18,300	11,100	26,300
24-----	6,970	6,310	4,460	7,390	9,460	9,590	16,300	89,600	67,500	17,500	10,300	23,600
25-----	6,880	6,210	4,520	7,570	9,000	9,340	17,700	87,300	62,600	17,200	10,300	21,200
26-----	6,600	6,320	4,580	7,150	8,970	8,780	19,300	82,200	58,300	18,300	9,570	22,200
27-----	6,360	6,610	4,500	6,900	9,380	8,320	23,200	75,300	56,500	19,300	9,340	26,000
28-----	6,260	6,640	4,090	6,700	9,630	9,140	27,800	70,100	55,500	20,300	12,500	30,000
29-----	6,180	6,670	3,730	6,740	-----	10,700	32,700	67,800	74,200	19,200	16,800	27,500
30-----	6,220	6,780	3,190	6,700	-----	11,800	35,900	65,300	90,900	22,300	16,100	25,900
31-----	6,110	-----	2,970	6,610	-----	12,500	-----	62,500	-----	19,600	14,200	-----

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October-----	9,340	6,110	7,620	469,000
November-----	6,780	5,830	6,250	372,000
December-----	11,700	2,970	6,760	416,000
January-----	7,570	2,870	5,880	362,000
February-----	16,400	5,800	8,340	463,000
March-----	12,900	8,320	11,000	676,000
April-----	35,900	13,500	21,600	1,290,000
May-----	91,800	37,600	63,000	3,870,000
June-----	90,900	46,000	61,500	3,660,000
July-----	117,000	17,200	41,100	2,530,000
August-----	25,000	9,340	16,100	990,000
September-----	114,000	10,800	36,400	2,170,000
The year-----	117,000	2,870	23,800	17,300,000

COLORADO RIVER AND TRIBUTARIES ABOVE GREEN RIVER 17

COLORADO RIVER NEAR TOPOCK, ARIZ.

LOCATION.—Water-stage recorder at lower end of Mohave Canyon, 3 miles south-east of Topock, Mohave County. Zero of gage is 423.2 feet above mean sea level.

DRAINAGE AREA.—171,000 square miles.

RECORDS AVAILABLE.—February, 1917, to September, 1927.

EXTREMES.—Maximum discharge during year, 107,000 second-feet July 5 and September 17; maximum gage height, 22.2 feet July 5; minimum discharge, 3,350 second-feet January 6 (gage height, 6.12 feet).

1917-1927: Maximum discharge, 174,000 second-feet June 22, 1921; minimum, 1,800 second-feet January 4, 1925.

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

Daily and monthly discharge, in second-feet, 1926-27

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1-----	17,300	5,850	6,240	4,560	7,050	9,270	10,400	29,800	64,700	63,200	19,100	16,800
2-----	12,600	5,490	6,160	4,370	6,990	9,640	11,800	34,800	61,000	78,900	20,800	15,000
3-----	9,440	5,520	6,020	3,980	6,960	9,920	12,700	38,000	58,800	89,300	19,500	14,200
4-----	6,900	5,520	6,510	3,610	6,960	10,800	14,300	41,800	55,800	101,000	16,900	15,600
5-----	6,270	5,600	6,990	3,480	6,510	13,000	16,300	45,800	53,300	104,000	17,300	15,100
6-----	6,080	5,490	6,840	3,410	6,390	13,400	17,400	51,700	52,400	86,300	17,600	13,800
7-----	5,770	5,410	6,990	3,650	6,390	12,800	17,500	57,400	50,600	68,100	17,300	12,100
8-----	6,130	5,280	7,080	3,700	6,450	12,200	18,400	60,000	48,400	89,300	15,400	10,400
9-----	6,750	5,360	7,530	3,910	6,330	12,800	20,700	62,800	47,000	58,400	17,100	10,300
10-----	7,410	5,410	7,290	4,200	6,100	13,100	22,500	63,300	46,200	58,500	20,400	13,000
11-----	9,040	5,380	6,750	4,580	6,220	12,500	25,900	62,000	46,400	51,600	25,200	16,500
12-----	8,560	5,070	7,260	5,020	6,390	12,500	27,400	62,500	47,000	45,800	21,200	15,200
13-----	7,920	5,330	9,440	5,430	6,660	11,800	28,200	63,200	50,000	44,200	18,200	37,000
14-----	7,660	5,660	10,400	5,990	7,110	11,500	28,900	60,800	56,000	41,000	17,600	53,700
15-----	7,920	5,430	10,300	5,940	7,440	11,400	27,000	54,200	60,600	41,700	18,200	82,400
16-----	7,820	5,660	9,170	6,330	8,200	11,560	25,000	48,300	62,600	41,000	19,300	96,500
17-----	7,820	5,820	8,330	6,840	8,520	11,600	24,200	43,800	63,900	38,600	19,900	105,000
18-----	8,080	5,850	7,630	6,990	14,400	11,400	22,400	42,300	65,600	34,600	18,200	88,800
19-----	8,200	6,080	7,050	7,380	14,600	11,000	21,300	44,400	66,100	30,200	17,400	68,800
20-----	7,630	5,740	7,140	7,320	11,500	10,800	20,200	50,000	68,000	28,300	16,000	56,600
21-----	7,660	5,630	7,140	7,380	13,100	10,500	19,100	56,800	69,300	25,800	14,700	45,300
22-----	7,230	5,410	6,900	7,600	17,300	10,500	18,000	63,700	67,800	23,600	13,500	37,600
23-----	7,170	5,740	6,480	7,170	16,000	10,400	16,600	71,600	68,400	21,400	12,600	36,400
24-----	7,020	5,910	5,740	7,050	14,400	9,780	15,200	81,200	70,300	20,100	12,500	32,200
25-----	6,840	5,770	4,810	7,050	12,700	9,370	14,800	87,100	69,500	19,500	11,800	28,600
26-----	6,630	5,710	4,660	6,900	11,300	9,240	15,300	86,000	68,900	18,800	10,300	25,000
27-----	6,570	5,710	4,560	7,440	10,400	9,300	17,800	83,800	64,200	18,600	9,750	22,400
28-----	6,600	5,740	4,760	7,820	9,850	9,170	18,800	82,700	59,500	17,500	9,780	21,400
29-----	6,660	5,800	4,860	7,820	-----	8,650	20,600	79,300	56,800	18,500	9,780	22,500
30-----	6,270	6,540	5,120	7,720	-----	8,200	24,900	74,100	54,900	19,500	11,100	28,600
31-----	6,050	-----	4,780	7,140	-----	8,460	-----	69,400	-----	19,200	14,600	-----

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October-----	17,300	5,770	7,740	476,000
November-----	6,540	5,070	5,630	335,000
December-----	10,400	4,560	6,800	418,000
January-----	7,850	3,410	5,860	360,000
February-----	17,300	6,100	9,360	520,000
March-----	13,400	8,200	10,900	670,000
April-----	28,900	10,400	19,800	1,180,000
May-----	87,100	29,800	59,800	3,680,000
June-----	70,300	46,200	59,100	3,520,000
July-----	104,000	17,500	44,700	2,750,000
August-----	25,200	9,750	16,200	996,000
September-----	105,000	10,300	35,200	2,090,000
The year-----	105,000	3,410	23,500	17,000,000

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.—242,000 square miles.

RECORDS AVAILABLE.—April, 1878, to September, 1927. Gage heights only prior to January 1, 1902.

EXTREMES.—Maximum discharge during year, 92,400 second-feet February 21 (gage height, 29.4 feet); minimum, 2,000 second-feet January 9 (gage height, 16.35 feet).

1902-1927: Maximum mean daily discharge, 240,000 second-feet January 22, 1916; minimum, 1,150 second-feet January 8, 1925.

REMARKS.—Diversions for irrigation above station. Records furnished by United States Bureau of Reclamation.

Daily and monthly discharge, in second-feet, 1926-27

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	8,640	4,960	4,800	4,460	5,680	12,700	7,000	18,400	74,000	58,000	17,000	9,460
2.....	22,600	4,650	4,440	3,730	5,820	12,100	6,720	22,700	74,100	54,800	17,400	13,200
3.....	17,000	4,380	5,460	4,270	4,890	13,300	7,900	28,500	73,500	55,700	18,400	14,900
4.....	11,400	3,730	8,170	4,070	5,260	14,600	8,950	29,900	70,000	61,700	19,300	13,600
5.....	8,600	4,130	6,970	3,760	5,590	14,200	10,200	31,300	63,800	66,400	17,900	13,700
6.....	7,450	4,480	7,960	2,940	4,760	13,300	11,800	34,800	58,100	69,800	16,800	13,900
7.....	5,900	4,020	8,040	3,160	4,760	14,800	12,400	39,000	54,100	72,700	16,500	12,200
8.....	5,930	4,290	8,460	3,060	4,450	16,000	13,900	42,800	50,200	75,500	15,800	10,600
9.....	5,650	4,020	9,460	2,620	4,650	15,700	15,100	45,800	48,300	77,200	14,500	9,560
10.....	4,940	3,920	11,600	2,800	3,920	13,600	16,000	49,200	47,500	74,700	13,700	8,550
11.....	5,140	3,420	10,200	2,920	4,480	12,900	18,000	52,700	47,500	67,500	14,700	7,960
12.....	5,570	3,790	9,460	3,010	4,650	13,200	20,400	53,800	45,000	59,800	18,400	10,100
13.....	7,370	3,870	8,510	2,620	3,940	13,600	23,400	56,800	44,600	52,000	23,700	15,200
14.....	6,550	3,790	8,460	3,410	4,380	13,600	23,900	58,000	45,100	45,100	20,000	18,000
15.....	6,330	3,660	8,910	4,350	5,700	11,900	24,400	58,700	47,100	43,200	16,500	43,200
16.....	6,720	3,940	11,100	3,970	12,000	13,100	25,100	57,100	49,200	40,900	15,000	53,100
17.....	6,140	4,360	11,200	4,710	35,500	12,500	24,200	54,100	51,000	41,900	17,000	60,300
18.....	6,330	3,700	10,500	4,600	55,300	12,200	22,200	47,000	54,700	38,600	17,100	65,800
19.....	6,080	4,310	9,660	5,490	63,800	13,000	20,900	41,300	57,100	34,200	16,100	71,200
20.....	6,260	4,670	8,340	6,900	81,200	12,300	19,300	40,400	58,000	32,100	15,600	72,800
21.....	5,960	4,160	7,370	5,310	78,900	11,300	18,400	43,000	59,600	28,700	14,500	70,100
22.....	6,360	4,780	7,150	6,230	29,700	10,200	17,300	47,500	62,500	26,300	12,700	60,800
23.....	6,390	4,640	6,230	5,460	24,100	9,560	17,100	49,100	63,200	24,000	11,600	44,700
24.....	5,700	4,400	6,230	5,900	21,900	9,510	15,900	52,400	63,300	22,100	11,000	36,400
25.....	5,820	3,860	6,050	5,520	20,300	9,370	14,000	55,500	65,100	20,800	10,200	35,400
26.....	5,410	4,740	5,100	5,490	18,600	9,320	12,600	57,200	64,600	19,000	9,750	30,700
27.....	5,310	5,360	4,820	6,420	16,700	8,080	12,700	62,300	63,500	17,800	10,400	25,800
28.....	4,650	5,400	4,590	6,230	14,900	8,000	12,700	64,800	62,100	16,400	10,900	22,600
29.....	4,960	4,460	4,500	5,790	-----	7,760	14,400	69,100	62,100	16,500	9,510	20,300
30.....	5,100	4,560	3,680	5,990	-----	8,080	16,500	71,900	61,200	16,000	8,380	21,000
31.....	4,610	-----	4,130	5,930	-----	6,930	-----	73,200	-----	16,800	9,950	-----

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	22,600	4,610	7,120	438,000
November.....	5,460	3,420	4,280	255,000
December.....	11,600	3,680	7,470	459,000
January.....	6,900	2,620	4,560	280,000
February.....	81,200	3,920	19,500	1,080,000
March.....	16,000	6,930	11,800	726,000
April.....	25,100	6,720	16,100	958,000
May.....	73,200	18,400	48,600	2,990,000
June.....	74,100	44,600	58,000	3,450,000
July.....	77,200	16,000	43,400	2,670,000
August.....	23,700	8,380	14,800	810,000
September.....	72,800	7,960	30,200	1,800,000
The year.....	81,200	2,620	22,100	16,000,000

COLORADO RIVER AND TRIBUTARIES ABOVE GREEN RIVER 19

FRASER RIVER NEAR WEST PORTAL, COLO.

LOCATION.—Water-stage recorder in NE. $\frac{1}{4}$ sec. 4, T. 2 S., R. 75 W., $1\frac{1}{2}$ miles northwest of West Portal and 7 miles below mouth of Buck Creek.

DRAINAGE AREA.—28 square miles.

RECORDS AVAILABLE.—September, 1910, to September, 1927.

EXTREMES.—Maximum discharge during year, 235 second-feet June 28 (gage height, 1.83 feet); minimum, 7 second-feet many days in January, February, and March.

1910-1927: Maximum discharge recorded, 820 second-feet June 13, 1918 (gage height, 2.9 feet); minimum, 2 second-feet March 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, 1926-27

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	22	16	10	8	7	7	9	64	146	128	66	26
2.....	23	16	10	7	7	7	10	77	142	114	59	33
3.....	22	14	9	8	7	7	10	84	140	119	58	31
4.....	20	14	9	7	7	7	10	86	138	114	60	32
5.....	22	14	11	7	7	7	10	77	138	111	59	34
6.....	22	14	11	7	7	7	11	77	138	108	59	34
7.....	22	16	11	7	7	7	11	84	140	100	58	36
8.....	23	22	11	7	7	7	12	56	142	90	60	38
9.....	23	17	11	7	7	8	14	54	154	92	71	39
10.....	22	16	11	7	7	8	13	53	170	94	66	40
11.....	21	15	11	7	7	7	13	56	182	90	64	40
12.....	19	14	11	7	8	7	13	75	180	86	62	43
13.....	19	11	10	7	7	8	12	77	172	83	58	51
14.....	18	11	10	7	7	8	11	79	168	79	51	53
15.....	18	12	10	7	7	8	11	92	170	75	46	49
16.....	17	11	10	7	7	9	11	110	156	71	42	48
17.....	17	11	10	7	8	8	11	148	162	68	38	49
18.....	18	12	9	7	7	8	12	154	158	64	35	39
19.....	18	12	9	7	7	7	11	168	158	60	32	38
20.....	17	11	8	7	7	8	11	170	148	56	29	37
21.....	18	11	8	7	7	9	10	164	152	56	29	36
22.....	18	11	8	7	7	10	10	168	156	58	29	35
23.....	18	10	8	7	7	9	11	174	162	62	29	35
24.....	17	10	9	7	7	8	12	176	178	63	32	34
25.....	16	10	8	7	7	8	41	172	178	55	31	34
26.....	16	10	8	7	7	9	43	172	184	51	30	33
27.....	13	10	8	7	7	9	40	166	170	53	35	30
28.....	13	10	8	7	7	9	35	154	176	69	36	28
29.....	15	10	8	8	-----	10	41	158	166	70	36	28
30.....	16	10	8	8	-----	9	43	154	148	63	36	28
31.....	16	-----	8	7	-----	9	-----	150	-----	66	36	-----

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	23	13	18.7	1,150
November.....	22	10	12.7	756
December.....	11	8	9.39	577
January.....	8	7	7.13	438
February.....	8	7	7.07	393
March.....	10	7	8.03	494
April.....	43	9	17.1	1,020
May.....	176	53	118	7,260
June.....	184	138	159	9,460
July.....	128	51	79.6	4,890
August.....	71	29	46.2	2,840
September.....	53	28	37.4	2,230
The year.....	184	7	43.5	31,500

BLUE RIVER AT DILLON, COLO.

LOCATION.—Water-stage recorder in sec. 18, T. 5 S., R. 77 W., at 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, 1927.

EXTREMES.—Maximum discharge during year, 660 second-feet June 29 (gage height, 3.04 feet); minimum occurred during winter.

1910-1927: Maximum discharge, 1,180 second-feet June 14, 1924 (gage height, 3.6 feet); minimum, 14 second-feet January 30 and February 9, 1915 (gage height, 1.10 feet).

REMARKS.—Practically no diversions above station. Mean discharge for December, January, and February estimated. Complete records furnished by State engineer of Colorado.

Daily and monthly discharge, in second-feet, 1926-27

Day	Oct.	Nov.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	53	41				28	151	405	410	176	91
2	53	39				28	178	421	332	165	89
3	54	38		21		28	204	421	341	187	87
4	56	34				28	214	389	341	190	83
5	54	35	32			28	212	346	337	165	82
6	54	36				28	217	346	350	157	78
7	56	39				28	259	350	324	155	74
8	57	34				30	305	389	301	163	72
9	60	38				30	262	421	305	204	72
10	61	39			27	30	209	438	312	214	72
11	58	39				32	202	474	309	187	71
12	58	39				32	202	462	273	172	71
13	57	40				32	207	421	259	157	71
14	54	42				32	222	416	253	148	75
15	53	42				32	269	416	233	140	75
16	53	43				36	332	416	214	137	72
17	53	44				36	438	389	209	132	67
18	52	42				36	571	410	199	126	67
19	51	42				38	586	450	197	120	66
20	51	40				38	579	438	192	117	65
21	51	39				40	600	405	192	113	63
22	50	39				38	615	383	214	109	65
23	48	39				38	607	369	225	104	63
24	46	39				44	538	373	207	101	62
25	46	37				52	480	427	194	96	62
26	44	37				70	480	505	180	95	65
27	43	37				86	492	579	178	95	69
28	43	37				102	486	538	199	96	72
29	43	37				120	480	600	212	98	72
30	42	37				132	444	505	209	95	71
31	42						410		202	92	

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October	61	42	51.5	3,170
November	44	34	38.8	2,310
December			35	2,150
January			28	1,720
February			24	1,330
March			27	1,660
April	132	28	45.1	2,680
May	615	151	369	22,700
June	600	346	430	25,600
July	410	178	255	15,700
August	214	92	139	8,550
September	91	62	72.1	4,290
The year	615		127	91,900

COLORADO RIVER AND TRIBUTARIES ABOVE GREEN RIVER 21

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, 1927.

EXTREMES.—Maximum discharge during year, 9,230 second-feet June 28 (gage height, 6.07 feet); minimum, 336 second-feet February 10 (gage height, 0.80 foot).

1906-1909, 1910-1927: Maximum discharge, 17,600 second-feet June 14, 1918, and June 14, 1921; minimum, 225 second-feet December 16, 1906 (gage height, 1.15 feet).

REMARKS.—Record good except during periods October 7 to March 31 and June 7-30, for which they are fair. Discharge estimated October 1-23 and November 12 and 13. Diversions for irrigation above station.

Daily and monthly discharge, in second-feet, 1926-27

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	535	569	536	505	406	389	485	2,700	5,090	4,030	1,600	1,040
2.....	595	574	525	490	389	389	475	2,900	5,510	3,890	1,900	977
3.....	680	580	536	500	402	414	480	3,110	5,090	3,820	2,180	942
4.....	690	580	536	490	402	406	552	3,140	4,510	3,680	1,800	924
5.....	710	574	525	485	402	398	536	2,930	4,700	4,010	1,590	933
6.....	714	586	542	485	402	402	542	2,740	5,160	3,740	1,590	916
7.....	718	592	552	485	406	398	580	3,250	5,610	3,460	1,880	890
8.....	780	586	542	446	406	398	622	3,410	6,820	3,270	1,930	899
9.....	841	564	525	437	381	419	592	2,680	6,960	3,210	2,220	1,000
10.....	875	564	480	410	355	419	634	2,180	7,650	3,990	1,880	1,410
11.....	895	569	456	432	398	414	654	1,960	6,540	3,670	1,690	1,540
12.....	850	562	530	451	410	381	628	1,880	6,820	3,090	1,850	1,390
13.....	795	554	461	437	402	389	569	2,030	5,680	2,950	1,640	1,680
14.....	735	547	437	432	402	406	530	2,620	5,490	2,740	1,510	1,780
15.....	730	536	406	423	402	410	520	3,160	7,260	2,460	1,480	1,540
16.....	703	552	451	432	398	398	505	4,050	5,940	2,330	1,530	1,370
17.....	740	515	480	419	393	359	490	5,390	5,740	2,220	1,360	1,280
18.....	735	510	505	414	393	410	495	6,820	6,320	2,130	1,240	1,240
19.....	715	558	542	419	393	402	552	6,680	6,960	2,000	1,150	1,180
20.....	690	547	515	423	389	381	586	6,430	6,140	2,030	1,110	1,100
21.....	655	547	451	437	398	363	574	6,600	5,580	2,120	1,080	1,040
22.....	620	542	500	432	410	406	592	7,050	5,250	2,040	1,040	1,020
23.....	580	542	505	414	398	381	654	6,060	5,440	2,100	1,000	1,040
24.....	530	530	456	385	398	389	793	4,900	6,010	1,880	959	1,030
25.....	569	552	414	385	402	406	1,000	4,810	6,090	1,740	950	1,280
26.....	569	536	432	402	414	427	1,360	5,660	6,170	1,630	995	1,340
27.....	564	558	456	441	427	456	1,750	5,270	6,990	1,640	1,190	1,260
28.....	564	569	456	419	432	485	2,020	5,370	8,280	1,680	1,290	1,200
29.....	569	525	414	419	-----	485	2,100	5,090	6,760	1,950	1,280	1,160
30.....	574	542	423	398	-----	505	2,300	4,380	5,370	2,080	1,180	1,190
31.....	574	-----	500	406	-----	536	-----	4,550	-----	1,740	1,100	-----

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	895	530	680	41,800
November.....	592	510	555	33,000
December.....	552	406	487	29,900
January.....	505	385	437	26,900
February.....	432	355	400	22,200
March.....	536	359	413	25,400
April.....	2,300	475	806	48,000
May.....	7,050	1,880	4,190	258,000
June.....	8,280	4,510	6,050	360,000
July.....	4,030	1,630	2,690	165,000
August.....	2,220	950	1,460	89,800
September.....	1,780	890	1,190	70,800
The year.....	8,280	355	1,620	1,170,000

SURFACE WATER SUPPLY, 1927, PART IX

PARACHUTE CREEK AT GRAND VALLEY, COLO.

LOCATION.—Staff gage in NW. $\frac{1}{4}$ sec. 12, T. 7 S., R. 96 W., half a mile northwest of Grand Valley and 1 mile above mouth.

DRAINAGE AREA.—196 square miles.

RECORDS AVAILABLE.—April, 1921, to September, 1927 (discontinued).

EXTREMES.—Maximum discharge during year, 360 second-feet May 2 and 3 (gage height, 2.6 feet); no flow August 2-5.

1921-1927: Maximum discharge, 790 second-feet May 9, 1922 (gage height 3.0 feet); no flow for short periods in 1926 and 1927.

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

Daily and monthly discharge, in second-feet, 1926-27

Day	Oct.	Nov.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	6	14	41	24	302	77	29	1	20
2	6	14	41	22	340	70	29	0	20
3	9	14	41	22	351	63	29	0	20
4	9	14	41	39	313	56	27	0	20
5	9	14	41	35	284	53	24	0	20
6	56	14	35	41	284	48	24	2	20
7	56	13	29	41	284	44	24	3	20
8	41	14	29	41	284	41	12	3	20
9	29	14	29	41	262	39	5	3	20
10	29	14	29	42	242	35	5	4	20
11	29	14	29	56	222	31	5	4	108
12	20	14	29	56	204	29	5	4	86
13	20	14	29	59	182	29	2	4	29
14	20	14	29	59	160	31	1	6	25
15	20	14	20	70	155	56	1	14	24
16	14	14	20	70	150	56	1	17	24
17	14	14	20	70	144	54	1	22	24
18	14	14	20	77	139	47	1	3	24
19	14	14	20	77	134	41	1	5	22
20	14	14	14	77	130	41	1	5	22
21	14	14	14	77	125	41	1	5	22
22	14	14	14	82	121	39	1	5	22
23	14	14	14	77	116	37	1	5	22
24	14	14	14	88	116	36	2	5	22
25	14	14	14	116	112	35	6	5	20
26	14	14	17	155	108	35	1	5	20
27	14	14	17	192	104	33	1	6	20
28	14	14	17	242	102	31	1	20	20
29	14	14	17	277	96	30	1	20	20
30	14	14	22	302	88	29	1	20	20
31	14	-----	22	-----	82	-----	1	20	-----

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October	56	6	18.8	1,160
November	14	13	14.0	833
March	41	14	24.8	1,520
April	302	22	87.6	5,210
May	351	82	185	11,400
June	77	29	42.9	2,550
July	29	1	7.87	484
August	22	0	6.97	429
September	108	20	26.5	1,580

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, 1927.

EXTREMES.—Maximum discharge during year, 2,080 second-feet May 22 (gage height, 3.84 feet); minimum, 74 second-feet December 15 (gage height, 1.50 feet).

1910-1927: Maximum discharge, 3,760 second-feet June 9, 1920 (gage height, 5.0 feet); minimum, 50 second-feet several days during August, 1913 (gage height, 1.2 feet).

REMARKS.—Records good except for periods affected by ice, December 1-4, 17-31, and January 1 to February 21, for which they are fair. Discharge estimated because of missing record, April 10-12 and August 30 to September 4. Diversions for irrigation above station.

Daily and monthly discharge, in second-feet, 1926-27

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	187	136	123	115	115	139	124	732	1,350	990	390	370
2.....	200	130	122			113	118	790	1,410	924	514	380
3.....	200	130	127			124	124	892	1,290	913	462	380
4.....	200	130	140			130	130	978	1,260	840	410	380
5.....	196	130	155			124	127	1,010	1,290	850	441	381
6.....	187	130	155	115	115	118	136	902	1,410	770	452	381
7.....	183	124	152			118	152	1,140	1,560	678	420	381
8.....	176	124	133			121	155	1,100	1,790	638	420	319
9.....	176	124	118			124	142	732	1,810	660	585	356
10.....	169	124	113			130	139	630	1,790	902	474	371
11.....	162	118	118	115	115	121	136	622	1,610	732	371	361
12.....	155	118	148			113	133	660	1,540	622	371	314
13.....	148	118	111			113	130	760	1,380	585	381	446
14.....	148	118	118			113	124	1,010	1,350	546	347	395
15.....	148	118	74			118	127	1,120	1,620	614	361	333
16.....	148	118	92	110	120	118	130	1,190	1,320	491	356	296
17.....	148	118	98			96	121	1,120	1,300	462	309	300
18.....	148	118	102			94	130	1,260	1,450	457	282	309
19.....	148	118	110			94	148	1,290	1,530	452	277	277
20.....	148	130	118			106	155	1,410	1,300	485	300	264
21.....	148	136	110	120	130	181	86	1,810	1,200	485	286	255
22.....	148	136				142	99	1,420	1,910	546	296	251
23.....	142	130				155	118	1,180	1,720	533	296	268
24.....	142	130				169	116	217	1,490	1,160	282	268
25.....	142	130				145	118	282	1,460	1,200	497	282
26.....	142	124	110	120	130	116	347	1,610	1,200	446	352	420
27.....	142	124				118	431	1,530	1,350	474	410	356
28.....	136	124				142	118	503	1,560	1,620	508	376
29.....	136	124				118	526	1,480	1,820	468	328	314
30.....	136	124				133	638	1,260	1,380	479	340	314
31.....	136	-----	-----	-----	-----	136	-----	1,290	-----	410	360	-----

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	200	136	159	9,780
November.....	136	118	125	7,440
December.....	155	74	117	7,190
January.....	-----	-----	117	7,190
February.....	169	-----	123	6,830
March.....	139	86	116	7,130
April.....	638	118	203	12,100
May.....	1,910	622	1,180	72,600
June.....	1,820	1,080	1,420	84,500
July.....	990	410	611	37,600
August.....	585	277	372	22,900
September.....	446	251	338	20,100
The year.....	1,910	-----	407	295,000

GUNNISON RIVER NEAR GUNNISON, COLO.

LOCATION.—Chain gage in sec. 3, T. 49 N., R. 1 W., at highway bridge 2 miles southwest of Gunnison and 1 mile above mouth of Tomichi Creek.

DRAINAGE AREA.—1,010 square miles.

RECORDS AVAILABLE.—November, 1910, to November, 1914; April, 1916, to September, 1927.

EXTREMES.—Maximum discharge during year, 5,090 second-feet May 19 (gage height, 4.2 feet); minimum probably occurred during winter.

1910-1914, 1916-1927: Maximum discharge, 11,400 second-feet June 13, 1918; minimum, 126 second-feet January 8, 1919.

REMARKS.—Records good except for periods affected by ice, November 26, 28-30, December 1, 22-31, and January 1 to March 14, for which they are fair. Diversions for irrigation above station.

Daily and monthly discharge, in second-feet, 1926-27

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	296	315	265	227	219	185	335	2,510	2,800	2,780	839	539
2.....	306	306	265				371	2,720	2,800	2,400	839	487
3.....	325	308	257				382	2,900	2,780	2,190	1,020	455
4.....	330	283	315				487	2,900	2,720	2,170	954	487
5.....	335	292	310				455	2,780	2,840	2,200	850	494
6.....	325	298	310	220	198	203	455	2,550	2,960	2,060	884	487
7.....	345	296	320				466	3,080	3,400	1,910	1,160	466
8.....	325	257	306				466	2,920	3,620	1,850	1,100	472
9.....	345	249	270				460	2,380	3,770	1,880	1,460	650
10.....	382	229	265				466	1,830	3,840	2,090	1,020	884
11.....	330	241	249	221	213	241	455	1,620	3,550	1,980	930	862
12.....	335	335	245				420	1,600	3,330	1,740	1,020	873
13.....	310	325	245				382	1,610	3,290	1,670	930	1,160
14.....	315	283	221				387	2,740	3,180	1,620	930	990
15.....	315	315	214				376	3,030	3,550	1,450	919	795
16.....	310	310	225	200	221	237	365	3,510	3,330	1,270	908	740
17.....	310	261	214				221	3,760	4,060	3,010	1,140	795
18.....	315	237	218				229	387	4,500	3,050	1,160	730
19.....	325	325	218				233	414	4,740	3,470	1,120	680
20.....	310	310	208				229	455	4,500	3,200	1,140	641
21.....	306	306	221	200	221	237	203	426	4,800	2,780	1,220	640
22.....	301	301					195	466	4,800	2,860	1,260	631
23.....	301	315					229	555	3,950	2,780	1,280	640
24.....	296	301					210	700	3,290	2,740	1,320	593
25.....	301	301					241	730	3,180	2,860	1,220	621
26.....	292	300	200	200	221	237	1,080	3,510	2,900	1,160	751	817
27.....	296	296					233	1,180	3,310	3,330	1,140	839
28.....	292	290					237	1,500	3,290	3,640	1,130	740
29.....	274	280					278	1,660	3,290	3,980	1,090	680
30.....	257	270					296	2,020	2,740	3,290	1,130	612
31.....	283						320		2,800		930	555

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	382	257	313	19,200
November.....	335	229	291	17,300
December.....	320		237	14,000
January.....			223	13,700
February.....			210	11,700
March.....	320		213	13,100
April.....	2,020	335	621	37,000
May.....	4,800	1,600	3,140	188,000
June.....	3,990	2,720	3,200	190,000
July.....	2,780	930	2,570	96,500
August.....	1,460	555	836	51,400
September.....	1,160	455	664	39,500
The year.....	4,800		963	697,000

GUNNISON RIVER NEAR GRAND JUNCTION, COLO.

LOCATION.—Staff gage in NW. $\frac{1}{4}$ sec. 35, T. 1 S., R. 1 W., in Grand Junction, half a mile below Redlands Co.'s canal and 2 miles above mouth.

DRAINAGE AREA.—8,020 square miles.

RECORDS AVAILABLE.—April, 1917, to September, 1927. From October, 1894, to December, 1895, and May, 1897, to September, 1899, at station near mouth.

EXTREMES.—Combined flow: Maximum discharge during year, 18,200 second-feet May 18 (gage height, 10.17 feet); minimum, 734 second-feet December 16. 1917-1927: Maximum discharge, 35,700 second-feet May 23, 1920 (gage height, 14.95 feet); minimum, 155 second-feet September 6, 1924.

REMARKS.—Records good. Discharge estimated because of ice effect December 26 to January 17, January 23-26, 28-31, February 1-4. Diversions for irrigation above stations. Combined flow of river and Redlands canal represents flow of river that enters Colorado River less about 25 second-feet diverted for irrigation. Gage-height record furnished by Redlands Irrigation Co.

Daily and monthly discharge, in second-feet, of Gunnison River and Redlands power canal near Grand Junction, Colo., 1926-27

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	1,430	1,280	1,210	}	944	1,220	2,440	12,100	7,560	10,300	1,910	1,540
2.....	1,440	1,280	1,280			946	2,080	12,700	7,720	9,700	2,020	1,300
3.....	1,460	1,340	1,180			994	2,340	13,100	7,980	9,120	2,070	1,230
4.....	1,510	1,210	1,210			1,180	2,460	13,000	7,440	8,600	2,120	1,100
5.....	1,390	1,250	1,210			1,180	3,020	12,500	7,020	8,150	2,230	1,010
6.....	1,290	1,240	1,280	}	898	1,210	1,160	3,030	11,300	7,100	2,290	1,030
7.....	1,280	1,200	1,280			1,160	1,110	3,380	12,000	7,720	6,370	2,550
8.....	1,320	1,210	1,350			1,080	1,070	3,670	12,500	8,420	5,180	2,470
9.....	1,430	1,180	1,300			1,020	1,030	3,560	11,700	9,620	4,490	2,350
10.....	1,540	1,150	1,180			984	1,170	3,270	8,760	10,300	3,760	2,230
11.....	1,760	1,080	1,180	}	908	1,240	3,080	7,340	10,400	2,940	2,180	5,050
12.....	1,680	1,130	1,190			946	1,180	7,240	10,200	2,940	1,920	5,260
13.....	1,590	1,250	1,150			984	1,090	2,530	7,880	10,300	2,580	1,820
14.....	1,490	1,360	1,090			1,020	1,060	2,050	9,320	9,750	2,320	1,710
15.....	1,430	1,270	1,030			1,000	1,080	1,840	11,500	10,100	2,320	1,630
16.....	1,420	1,210	858	}	1,050	1,050	1,130	1,670	13,100	12,100	2,200	1,610
17.....	1,350	1,150	878			1,160	1,150	1,580	15,600	10,600	2,090	1,630
18.....	1,360	1,150	878			1,030	1,490	17,400	10,300	1,950	1,570	3,500
19.....	1,340	1,180	878			1,120	1,000	1,150	14,700	10,700	1,850	1,410
20.....	1,280	1,250	878			1,050	2,000	16,700	10,400	2,210	1,410	3,000
21.....	1,280	1,340	954	}	1,020	1,080	2,200	15,600	9,610	2,280	1,370	2,690
22.....	1,180	1,280	954			968	2,300	14,700	8,600	2,130	1,300	2,450
23.....	1,200	1,360	1,110			1,100	2,880	13,700	8,260	2,250	1,340	2,430
24.....	1,250	1,280	1,030			1,080	1,170	3,790	11,700	7,710	2,130	2,530
25.....	1,180	1,250	954			1,200	5,020	10,100	7,290	1,910	1,430	3,050
26.....	1,160	1,360	}	}	992	1,080	1,300	6,800	10,300	7,190	1,760	1,540
27.....	1,150	1,320				1,100	1,560	8,410	10,700	6,870	1,760	1,560
28.....	939	1,270				1,150	1,760	9,410	10,500	7,930	1,910	1,580
29.....	1,150	1,320				1,840	10,300	9,940	14,300	2,190	1,600	3,110
30.....	1,180	1,270				2,000	10,800	9,240	12,400	2,220	2,520	3,050
31.....	1,280	-----	-----	-----	-----	2,280	-----	7,880	-----	1,900	1,740	-----

Month

Discharge in second-feet

Run-off in acre-feet

	Discharge in second-feet			
	Maximum	Minimum	Mean	
October.....	1,760	939	1,350	83,000
November.....	1,360	1,080	1,250	74,400
December.....	1,350	-----	1,050	64,600
January.....	1,140	-----	961	59,100
February.....	1,210	-----	1,040	57,800
March.....	2,280	946	1,240	76,200
April.....	10,800	1,470	3,730	222,000
May.....	17,700	7,240	11,900	732,000
June.....	14,300	6,870	9,200	547,000
July.....	10,300	1,760	3,830	236,000
August.....	2,520	1,300	1,820	112,000
September.....	5,430	1,010	2,900	173,000
The year.....	17,700	-----	3,360	2,440,000

SURFACE WATER SUPPLY, 1927, PART IX

SURFACE CREEK AT CEDAREDGE, COLO.

LOCATION.—Water-stage recorder about sec. 29, T. 13 S., R. 94 W., at Cedaredge, 4 miles below mouth of Mill Creek.

DRAINAGE AREA.—43 square miles.

RECORDS AVAILABLE.—May, 1917, to September, 1927.

EXTREMES.—Maximum discharge during year, 535 second-feet May 2 (gage height, 1.76 feet); minimum, 2 second-feet October 15–22, April 1 and 2 (gage height, 0.12 foot).

1917–1927: Maximum discharge, 715 second-feet May 24, 1920; practically no flow during winter.

REMARKS.—Diversions for irrigation above station. Flow regulated by about 8,140 acre-feet of storage. Complete records furnished by State engineer of Colorado.

Daily and monthly discharge, in second-feet, 1926–27

Day	Oct.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	11	-----	2	409	76	48	26	14
2	19	-----	2	409	108	29	53	20
3	20	-----	3	382	86	16	48	16
4	19	-----	3	304	80	18	35	12
5	12	-----	3	176	62	23	26	11
6	-----	-----	-----	-----	-----	-----	-----	-----
7	8	-----	5	209	74	22	25	15
8	8	-----	9	233	83	28	39	18
9	8	-----	8	135	88	36	39	11
10	8	-----	5	56	112	36	36	32
11	6	-----	6	41	109	48	24	39
12	-----	-----	-----	-----	-----	-----	-----	-----
13	5	-----	6	34	106	34	16	24
14	5	-----	5	32	100	38	14	29
15	3	-----	4	62	115	35	15	56
16	3	-----	4	138	88	38	9	55
17	2	-----	4	233	126	31	12	29
18	-----	-----	-----	-----	-----	-----	-----	-----
19	2	-----	4	252	68	27	13	17
20	2	-----	4	258	62	24	12	20
21	2	-----	5	242	48	39	17	10
22	2	-----	9	214	41	38	17	6
23	2	-----	8	176	18	45	21	5
24	-----	-----	-----	-----	-----	-----	-----	-----
25	2	-----	8	138	15	53	20	5
26	2	-----	15	129	13	47	31	5
27	3	-----	41	62	10	38	34	5
28	3	-----	88	47	15	31	47	6
29	3	-----	132	118	45	31	45	11
30	-----	-----	-----	-----	-----	-----	-----	-----
31	3	-----	184	168	64	38	62	6
1	3	-----	218	118	78	42	66	5
2	3	3	200	92	223	34	42	4
3	3	3	306	60	132	28	56	4
4	3	3	318	93	83	20	52	4
5	3	3	-----	72	-----	31	39	-----

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October	20	2	5.71	351
April	318	2	53.6	3,190
May	409	32	164	10,100
June	223	10	77.4	4,610
July	53	16	34.0	2,090
August	66	9	32.0	1,970
September	56	4	16.5	982

UNCOMPAGRE RIVER BELOW OURAY, COLO.

LOCATION.—Water-stage recorder in sec. 30, T. 44 N., R. 7 W. New Mexico principal meridian, below all tributaries in Ouray.

DRAINAGE AREA.—76 square miles.

RECORDS AVAILABLE.—May, 1913, to September, 1927.

EXTREMES.—Maximum discharge, 2,150 second-feet June 28; maximum stage, 13.3 feet July 28; minimum discharge, 15 second-feet February 19 (gage height, 0.55 foot).

1913-1927: Maximum discharge, 2,530 second-feet June 14, 1918 (gage height, 5.5 feet); minimum, 10 second-feet February 5 and 6, 1915, March 18, 1922, and January 21, 1923.

REMARKS.—Records good to July 28, after which they are poor. Discharge estimated November 28 to December 3, July 10-15, 17-21, July 28 to August 8, and August 10-12, 21-26. Practically all diversions returned to river above station.

Daily and monthly discharge, in second-feet, 1926-27

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	60	49	44	31	25	26	57	394	500	500	200	135
2	85	48	44	30	26	27	63	391	492	453	230	124
3	98	46	44	30	26	26	69	400	450	425	300	115
4	117	44	44	30	26	26	86	410	446	391	250	115
5	114	41	40	31	26	26	105	403	446	368	220	115
6	112	37	41	31	25	28	126	382	468	357	220	197
7	102	34	38	30	24	29	131	382	548	337	340	193
8	103	36	36	29	25	31	108	326	620	332	520	308
9	185	34	30	29	22	32	85	267	645	310	422	1,130
10	127	36	24	28	24	30	78	244	528	400	340	790
11	110	36	32	28	24	27	76	255	439	430	280	605
12	103	36	34	28	24	27	63	276	403	400	340	770
13	96	39	26	28	24	34	58	326	348	340	210	595
14	93	37	27	28	24	36	53	400	315	300	216	428
15	85	37	26	28	23	32	48	442	374	260	212	324
16	79	37	30	28	22	29	47	568	329	240	183	262
17	74	29	32	27	20	28	48	670	374	220	162	242
18	73	36	34	26	22	29	69	675	442	210	149	222
19	69	40	34	27	18	27	78	610	460	200	151	255
20	65	46	33	28	30	26	72	590	397	200	169	238
21	64	52	31	26	30	26	78	580	410	200	140	222
22	63	51	32	27	26	28	110	580	413	201	130	218
23	59	47	32	26	24	30	144	520	432	225	120	199
24	55	43	27	24	26	40	187	508	456	269	120	208
25	53	42	30	26	27	52	238	568	468	225	120	222
26	51	41	29	26	29	54	267	630	476	208	160	201
27	48	41	28	26	29	56	298	548	660	203	222	199
28	49	41	28	26	26	66	337	512	1,620	600	205	185
29	49	42	28	25	-----	78	371	460	920	360	185	171
30	52	42	28	24	-----	69	382	453	620	240	160	183
31	51	-----	30	26	-----	54	-----	472	-----	210	144	-----

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October	185	48	82.1	5,060
November	52	29	40.7	2,420
December	44	24	32.8	2,020
January	31	24	27.6	1,700
February	30	18	24.9	1,380
March	78	26	36.4	2,240
April	382	47	131	7,800
May	675	244	459	28,200
June	1,620	315	517	30,800
July	600	200	310	19,100
August	520	120	220	13,500
September	1,130	115	306	18,200
The year	1,820	18	183	132,000

SURFACE WATER SUPPLY, 1927, PART IX

UNCOMPAGNE RIVER NEAR COLONA, COLO.

LOCATION.—Water-stage recorder in NE. $\frac{1}{4}$ 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, 1927.

EXTREMES.—Maximum discharge during year, 3,400 second-feet June 28 (gage height, 5.45 feet); minimum probably occurred during winter.

1917-1927: Maximum discharge, 4,080 second-feet June 13 and 14, 1921; minimum, 16 second-feet September 3, 1918.

REMARKS.—A few small diversions above station. Records of daily discharge furnished by Bureau of Reclamation.

Daily and monthly discharge, in second-feet, 1926-27

Day	Oct.	Nov.	Dec.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	113	126	115		143	735	815	1,060	350	306
2	113	120	115		156	730	855	935	425	295
3	190	120	115		170	755	740	865	498	270
4	223	118	112		230	735	735	810	415	265
5	211	117	112		207	670	715	725	370	200
6	223	117	110		235	605	785	615	371	280
7	227	118	107		277	714	895	560	590	465
8	227	113	100		258	545	1,040	535	825	505
9	353	100	81		225	455	1,120	535	690	960
10	290	102			230	415	1,100	625	560	1,190
11	222	107			253	455	900	700	460	890
12	207	112			195	515	835	625	544	970
13	195	116			185	665	775	540	482	960
14	175	115			172	845	575	495	435	780
15	180	105			156	865	885	445	457	580
16	171	115			150	970	760	415	405	500
17	165	94			148	1,110	745	400	348	536
18	163	102			152	1,240	1,000	370	330	510
19	161	117			210	1,170	1,120	360	328	487
20	150	112			202	1,100	980	340	349	430
21	148	112			202	1,000	900	340	301	377
22	145	112			243	925	870	350	294	352
23	140	112			325	835	910	365	283	370
24	134	115			430	740	990	405	270	340
25	122	115			545	855	970	385	270	440
26	117	110		170	615	985	935	360	327	425
27	124	117		151	580	885	1,100	365	505	415
28	124	100		152	640	795	2,680	705	495	377
29	124	107		165	675	755	1,900	595	438	358
30	137	112		170	713	707	1,320	460	380	397
31	124			137		730		395	345	

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October	353	113	174	10,700
November	126	94	112	6,660
December 1-9	115	81	107	1,910
December 10-31	170	151	161	1,920
January	713	143	297	17,700
February	1,240	415	791	48,600
March	2,680	575	1,000	59,500
April	1,060	340	538	33,100
May	825	270	424	26,100
June	1,190	200	509	30,300

COLORADO RIVER AND TRIBUTARIES ABOVE GREEN RIVER 29

UNCOMPAHGRE RIVER AT DELTA, COLO.

LOCATION.—Water-stage recorder in NW. $\frac{1}{4}$ sec. 24, T. 15 S., R. 96 W., at railroad bridge half a mile west of Delta and $1\frac{1}{2}$ miles above mouth.

DRAINAGE AREA.—1,110 square miles.

RECORDS AVAILABLE.—April, 1924, to September, 1927. From April, 1903, to October, 1923, at station $3\frac{1}{2}$ miles upstream.

EXTREMES.—Maximum discharge during year, 2,880 second-feet June 29 (gage height, 5.9 feet); minimum, 40 second-feet April 21 (gage height, 1.41 feet). 1903–1927 Maximum discharge, that of June 29, 1927; minimum, 7 second-feet several days during July, 1910.

REMARKS. Records good except those for period June 29 to July 31, which are fair. Practically entire natural flow of river diverted above station. Field data furnished by United States Bureau of Reclamation.

Daily and monthly discharge, in second-feet, 1926–27

Day	Oct.	Nov.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	181	390		108	459	202	770	284	357
2	215	373		71	401	293	493	336	372
3	384			66	313	273	463	603	382
4	646			79	263	229	560	656	350
5	573			164	335	273	537	623	324
6		593		148	283	309	339	584	338
7		560		164	309	436	183	1,280	574
8		471		197	687	653	157	1,310	550
9		496		164	864	703	198	1,260	805
10		540		101	573	606	608	882	1,540
11		546		181	447	384	524	521	1,110
12		540		181	546	687	299	603	705
13		514		126	653	1,330	200	628	1,380
14		483		118	694	1,030	196	412	1,160
15		465		148	586	1,220	160	463	938
16		430		133	680	1,280	147	509	747
17		384		91	707	775	141	360	550
18		413		87	728	939	135	275	669
19		384		81	586	1,050	109	209	588
20		356		68	530	1,020	95	282	498
21		335		68	470	891	98	306	491
22		314		115	400	653	133	252	453
23		335		156	335	502	170	231	623
24		309		206	283	490	202	215	484
25		293		303	234	442	219	205	742
26		273		843	356	345	202	225	747
27		268		395	436	436	183	308	700
28		278		197	367	243	1,280	501	638
29		303		197	553	234	2,530	515	428
30		345		164	390	229	1,690	378	398
31		390		129	234	234	325	374	684

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October	646	181	407	25,000
April	843	66	196	11,700
May	864	229	455	28,000
June	2,530	202	765	45,500
July	770	95	298	18,300
August	1,310	205	497	30,600
September	1,540	324	670	39,900

SAN MIGUEL RIVER AT NATURITA, COLO.

LOCATION.—Water-stage recorder in T. 46 N., on line between Rs. 15 and 16 W., in Naturita, half a mile above mouth of Basin Creek.

DRAINAGE AREA.—1,080 square miles.

RECORDS AVAILABLE.—April, 1918, to September, 1927.

EXTREMES.—Maximum discharge during year, 1,980 second-feet June 28 (gage height, 6.44 feet); minimum, 49 second-feet November 23 (gage height, 0.29 foot).

1918-1927: Maximum discharge, 6,000 second-feet May 4, 1921 (gage height, 7.5 feet); minimum, 38 second-feet August 31, 1918 (gage height, 0.05 foot).

REMARKS.—Diversions for irrigation above station. Mean discharge for December, January, and February estimated. Complete records furnished by State engineer of Colorado.

Daily and monthly discharge, in second-feet, 1926-27

Day	Oct.	Nov.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	84	123	101	316	1,290	936	1,130	289	377
2	89	126	121	524	1,300	856	909	306	355
3	120	123	134	708	1,300	778	830	420	330
4	136	125	141	737	1,310	742	783	449	334
5	149	120	136	830	1,360	693	732	355	348
6	151	114	121	958	1,190	768	636	428	370
7	151	116	116	866	1,250	804	586	515	510
8	168	111	114	851	1,140	882	655	627	793
9	192	102	123	814	952	947	664	546	1,600
10	202	99	114	757	888	952	550	471	1,870
11	170	106	101	773	1,010	804	600	416	1,420
12	166	109	99	742	1,000	882	632	433	1,230
13	175	113	108	441	915	877	493	462	1,630
14	162	109	114	359	1,100	762	445	408	1,420
15	155	104	116	355	1,140	830	385	416	1,110
16	143	109	109	320	1,300	888	359	404	866
17	139	102	96	309	1,370	737	316	359	775
18	143	96	109	366	1,550	893	289	320	824
19	141	123	104	595	1,540	989	267	334	898
20	139	102	92	595	1,450	936	289	348	752
21	134	76	89	669	1,310	893	344	312	674
22	134	66	108	872	1,250	835	351	286	609
23	130	62	113	1,080	1,110	840	420	283	609
24	128	81	125	1,220	1,000	851	397	276	669
25	123	101	145	1,280	1,010	866	351	261	778
26	120	118	170	1,320	1,130	866	344	355	773
27	118	123	205	1,280	1,070	1,060	351	618	688
28	120	121	238	1,260	995	2,610	420	679	650
29	125	113	302	1,220	909	2,220	366	618	623
30	126	121	309	1,230	840	1,450	320	484	632
31	118	-----	246	-----	814	-----	309	433	-----

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October	202	84	140	8,610
November	126	62	107	6,370
December	-----	-----	105	6,460
January	-----	-----	100	6,150
February	-----	-----	105	5,830
March	309	89	139	8,550
April	1,320	309	788	46,900
May	1,550	314	1,150	70,700
June	2,610	693	982	58,400
July	1,130	267	501	30,800
August	679	261	416	25,600
September	1,870	330	817	48,600
The year	2,610	-----	447	323,000

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, 1927.

EXTREMES.—Maximum discharge during year, 5,480 second-feet June 30 (gage height, 5.66 feet); minimum occurred during winter.

1915-1927: Maximum discharge, 8,750 second-feet June 16, 1918 (gage height, 7.0 feet); minimum occurred during winter.

REMARKS.—Records good except those for periods of missing gage heights, April 1-16, May 14-18, and 25-27, which are fair. Discharge estimated November 19-24 because of ice effect. Diversions for irrigation above station. Flow regulated by natural lakes in Green River Basin.

Daily and monthly discharge, in second-feet, 1926-27

Day	Oct.	Nov.	Apr.	May	June	July	Aug.	Sept.
1	309	239	330	1,080	1,340	4,310	1,040	509
2	309	236		1,210	1,030	3,870	1,040	509
3	309	236		1,550	1,100	3,250	1,000	509
4	309	236		1,610	1,270	2,260	890	489
5	296	242		1,570	1,580	1,700	796	453
6	287	249		1,410	1,580	1,140	780	405
7	287	236		1,260	1,960	1,520	754	415
8	287	246		1,230	2,440	1,850	737	425
9	287	274		1,320	2,700	1,850	728	1,030
10	287	282		1,260	2,940	1,880	754	1,180
11	287	287	320	1,230	3,470	1,850	771	1,380
12	287	287	280	1,120	3,610	1,850	796	1,250
13	249	249	270	1,160	3,960	1,850	737	1,210
14	249	246	240	1,320	4,310	1,780	780	1,050
15	264	242	200	1,500	4,400	1,620	737	920
16	264	236	210	1,760	4,570	1,440	712	796
17	264	236	242	2,040	4,180	1,340	632	648
18	256	233	242	2,420	3,530	1,230	580	632
19	264	230	215	3,060	3,490	1,170	523	618
20	264	230	207	3,040	3,290	1,170	509	565
21	249	230	175	2,750	3,000	1,170	530	509
22	249	232	230	3,430	2,440	1,170	625	509
23	246	235	233	2,940	2,870	1,170	648	558
24	256	240	256	2,660	3,530	1,170	632	688
25	246	242	313	2,120	3,740	1,200	618	910
26	249	236	380	1,800	3,490	1,230	610	900
27	253	236	434	1,560	2,620	1,160	580	824
28	264	236	612	1,440	3,130	1,100	565	780
29	249	239	754	1,400	4,570	1,070	544	771
30	242	242	940	1,400	5,060	1,030	509	771
31	236	-----	-----	1,400	-----	1,030	509	-----

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October	309	236	269	16,500
November	287	230	244	14,500
April	940	175	335	19,900
May	3,430	1,080	1,780	109,000
June	5,060	1,030	3,040	181,000
July	4,310	1,030	1,660	102,000
August	1,040	509	699	43,000
September	1,380	405	740	44,000

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, 1927.

EXTREMES.—Maximum discharge during year, 16,700 second-feet July 1 (gage height, 7 feet); minimum occurred during winter.

1895-1906, 1915-1927: Maximum discharge, 22,200 second-feet June 19, 1918 (gage height, 12.3 feet); minimum, 160 second-feet November 17, 1898.

REMARKS.—Records good except those for periods affected by ice, March 1-13 and 16-26, which are fair. Diversions for irrigation above station.

Daily and monthly discharge, in second-feet, 1926-27

Day	Oct.	Nov.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	774	624	700	1,540	2,660	2,990	16,200	2,510	1,260
2	784	615		1,850	2,910	2,700	15,200	2,420	1,260
3	812	615		1,540	3,330	2,630	11,100	2,340	1,200
4	840	588		1,330	3,370	2,610	8,200	2,290	1,200
5	802	606		1,260	2,990	2,700	7,050	2,220	1,080
6	746	588	700	1,080	2,990	3,110	7,800	2,160	1,080
7	726	606		1,020	2,970	3,330	7,800	2,110	1,020
8	688	588		1,020	2,890	3,890	6,680	2,040	1,080
9	670	606		1,080	2,930	4,930	5,590	1,990	1,020
10	670	606		1,260	2,650	7,050	5,250	1,950	3,050
11	670	588	725	1,260	2,290	8,280	4,930	1,950	2,660
12	679	624	750	1,200	2,110	9,350	4,630	1,920	2,110
13	670	679	766	920	1,950	10,300	4,350	1,950	2,200
14	660	642	748	920	2,150	11,600	4,350	1,940	2,480
15	660	606	775	890	2,650	12,900	4,090	1,940	2,480
16	660	579	730	820	3,110	13,700	3,840	1,850	2,380
17	651	562	784	775	3,720	13,600	3,600	1,850	2,290
18	660	553	730	802	4,780	12,900	3,370	1,770	2,110
19	642	462	820	840	6,020	12,200	3,150	1,690	2,200
20	642	462	900	870	6,980	11,100	3,050	1,610	2,020
21	633	536	730	890	6,680	11,200	2,950	1,470	1,850
22	633	746	658	920	5,950	11,800	2,860	1,400	1,690
23	642	764	624	802	4,780	11,500	2,860	1,400	1,620
24	624	802	676	860	4,300	10,700	2,760	1,470	1,690
25	624	784	730	970	3,840	10,200	2,860	1,470	2,200
26	606	774	730	1,260	3,370	10,400	2,760	1,620	2,020
27	606	755	890	1,770	2,990	10,700	2,760	1,620	2,570
28	624	774	1,110	2,110	2,990	10,900	2,660	1,540	2,290
29	615	726	1,080	2,110	3,190	12,800	2,660	1,400	2,110
30	615	688	1,200	2,380	3,370	14,500	2,570	1,400	1,940
31	633	-----	1,400	-----	3,190	-----	2,480	1,400	-----

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October	840	606	676	41,600
November	802	462	638	38,000
March	1,400	624	792	48,700
April	2,380	775	1,210	72,000
May	6,980	1,950	3,550	218,000
June	14,500	2,610	8,890	529,000
July	16,200	2,480	5,170	318,000
August	2,510	1,400	1,830	113,000
September	3,050	1,020	1,870	111,000

GREEN RIVER AT GREEN RIVER, UTAH

LOCATION.—Water-stage recorder in NW. $\frac{1}{4}$ SW. $\frac{1}{4}$ 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, 1927; December, 1910, to June, 1924, at Little Valley, 7 miles downstream.

EXTREMES.—Maximum discharge during year, 46,300 second-feet June 28 (gage height, 13.2 feet); minimum mean daily discharge (estimated), 875 second-feet December 18.

1894-1899, 1905-1927: Maximum discharge, 68,800 second-feet May 29, 1897; minimum, 510 second-feet December 1, 1919 (gage height, -0.95 foot).

REMARKS.—Records fair. Discharge estimated because of ice effect December 19 to February 6, and because of missing gage-height record November 13, December 16-18, February 9, 13, 15, 16, April 3, September 2, 3, and 5. Diversions for irrigation above station. Some discharge measurements furnished by Utah Power & Light Co.

Daily and monthly discharge, in second-feet, 1926-27

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1-----	1,570	1,550	2,230		1,800	2,330	5,290	13,900	16,200	24,800	5,150	3,310
2-----	1,800	1,550	2,230		1,850	2,420	5,740	16,800	14,900	24,200	4,890	3,090
3-----	2,370	1,560	2,220		1,900	2,520	5,940	18,000	13,700	24,000	4,890	2,880
4-----	2,320	1,570	2,220		1,860	2,840	6,130	19,500	13,000	24,300	4,720	2,660
5-----	2,840	1,590	2,200	1,400	1,830	3,520	6,620	21,600	12,500	26,300	5,020	2,560
6-----	2,440	1,630	2,230		1,900	3,260	6,810	22,600	12,400	24,400	5,080	2,460
7-----	2,560	1,640	2,330		2,080	3,440	6,780	21,900	12,200	18,800	4,660	3,110
8-----	2,440	1,630	2,300		2,150	4,020	7,410	21,500	12,500	16,000	4,530	10,500
9-----	2,260	1,600	2,350	1,550	2,380	4,500	7,490	20,300	13,900	16,100	4,340	8,630
10-----	2,120	1,590	2,440	1,600	2,620	4,130	6,740	21,300	15,600	15,600	4,020	8,630
11-----	2,030	1,620	2,460	1,650	1,940	4,600	6,500	23,000	17,100	14,500	3,820	6,780
12-----	2,000	1,640	2,370	1,690	1,730	4,470	7,130	19,500	19,800	13,400	3,870	12,500
13-----	1,940	1,650	2,320	1,700	2,050	4,130	7,620	15,300	22,900	12,200	3,960	26,400
14-----	1,930	1,660	1,970	1,700	2,370	3,570	7,950	13,000	25,400	11,100	3,820	27,500
15-----	1,890	1,700	1,650	1,750	2,180	3,090	8,370	11,400	26,300	10,400	3,730	18,900
16-----	1,830	1,730	1,400	1,750	1,980	3,180	7,990	12,000	27,000	9,430	3,340	10,200
17-----	1,800	1,730	1,150	1,800	1,780	3,140	6,660	13,900	29,400	8,590	3,210	7,980
18-----	1,800	1,740	875	1,800	1,750	3,620	5,600	19,200	30,700	7,860	3,090	7,720
19-----	1,820	1,710	900	1,850	1,760	3,840	5,180	24,500	32,700	7,290	3,020	7,670
20-----	1,800	1,750		1,850	1,790	3,460	4,820	29,200	30,900	6,890	2,970	7,500
21-----	1,750	1,820		1,800	1,800	3,360	4,440	31,400	29,800	6,540	2,790	6,990
22-----	1,710	1,800		1,700	1,820	3,140	4,690	31,000	29,000	7,050	2,750	6,580
23-----	1,690	1,760		1,650	1,820	2,840	6,130	29,500	27,000	6,700	2,770	7,630
24-----	1,660	1,740		1,750	1,890	2,790	6,130	28,100	25,100	5,770	2,770	6,580
25-----	1,640	1,790	1,200	1,850	2,000	2,860	5,560	27,300	24,000	5,600	2,750	6,380
26-----	1,650	1,900		1,800	2,180	3,280	4,980	25,200	22,300	5,700	2,750	7,630
27-----	1,630	1,900		1,800	2,330	3,620	4,950	21,300	21,000	5,980	2,930	10,200
28-----	1,620	2,040		1,750	2,350	3,990	6,020	18,600	25,900	6,500	3,160	8,530
29-----	1,580	2,120		1,750		4,410	7,820	17,900	30,500	5,420	3,760	8,870
30-----	1,580	2,150		1,800		4,720	10,500	17,700	28,300	5,520	4,190	7,070
31-----	1,570			1,800		4,820		16,800		5,390	3,620	

Month	Discharge in second-feet -			Run-off in acre-feet
	Maximum	Minimum	Mean	
October-----	2,840	1,570	1,920	118,000
November-----	2,150	1,550	1,730	103,000
December-----	2,460	875	1,690	104,000
January-----	1,850		1,660	102,000
February-----	2,620	1,730	2,000	111,000
March-----	4,820	2,330	3,550	218,000
April-----	10,500	4,440	6,470	385,000
May-----	31,400	11,400	20,700	1,270,000
June-----	32,700	12,200	22,100	1,320,000
July-----	26,300	5,390	12,300	756,000
August-----	5,150	2,750	3,750	231,000
September-----	27,500	2,460	8,510	506,000
The year-----	32,700	875	7,220	5,220,000

NEW FORK NEAR BOULDER, WYO.

LOCATION.—Staff gage about sec. 8, T. 32 N., R. 108 W., 1 mile west of Boulder and one-eighth mile above Boulder Creek.

DRAINAGE AREA.—578 square miles.

RECORDS AVAILABLE.—May, 1915, to September, 1927.

EXTREMES.—Maximum discharge during year, 5,320 second-feet June 30 (gage height, 7.35 feet); minimum probably occurred during winter.

1915-1927: Maximum discharge, 12,300 second-feet June 17, 1918 (gage height, 8.7 feet); minimum, 42 second-feet December 15-17, 1915.

REMARKS.—Records good. Discharge estimated because of missing gage-height record April 1, 2, and June 29, 30. Diversions for irrigation above station.

Daily and monthly discharge, in second-feet, 1926-27

Day	Oct.	Nov.	Apr.	May	June	July	Aug.	Sept.
1.....	190	112	160	284	484	3,950	720	344
2.....	197	121	155	309	460	2,930	720	326
3.....	164	121	148	301	460	2,560	720	309
4.....	150	121	137	322	460	2,210	660	297
5.....	141	118	132	344	484	2,440	660	288
6.....	147	125	117	367	484	2,320	605	276
7.....	141	123	154	413	531	2,100	605	261
8.....	141	118	154	413	752	1,900	605	257
9.....	141	109	154	390	1,130	1,800	580	367
10.....	136	107	117	367	1,450	1,800	580	390
11.....	130	105	132	344	1,800	1,710	555	413
12.....	130	103	122	344	2,100	1,620	531	460
13.....	130	99	122	322	2,440	1,530	507	580
14.....	130	99	122	309	2,930	1,530	507	660
15.....	130	116	117	344	3,340	1,450	507	660
16.....	128	121	117	322	3,060	1,370	484	660
17.....	125	125	122	300	3,060	1,290	484	660
18.....	128	130	132	555	2,800	1,210	460	632
19.....	125	144	127	752	2,800	1,130	413	580
20.....	125	130	117	850	3,060	1,060	390	555
21.....	125	130	102	885	3,060	1,020	367	531
22.....	125	130	113	850	3,060	990	390	531
23.....	121	141	151	752	2,930	955	390	507
24.....	121	141	205	660	2,800	955	367	507
25.....	121	141	344	605	3,060	955	367	605
26.....	121	141	418	531	3,060	920	367	605
27.....	125	141	349	507	3,060	850	367	555
28.....	130	136	297	507	3,640	818	344	507
29.....	125	130	261	507	4,290	785	344	507
30.....	121	141	257	507	5,030	785	344	555
31.....	109	-----	-----	507	-----	752	367	-----

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	197	109	135	8,300
November.....	144	99	124	7,380
April.....	418	102	174	10,400
May.....	885	284	479	29,500
June.....	5,030	460	2,270	135,000
July.....	3,950	752	1,640	94,700
August.....	720	344	494	30,400
September.....	660	257	480	28,600

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, 1927.

EXTREMES.—Maximum discharge during year, 2,010 second-feet June 28 (gage height, 4.57 feet); minimum occurred during winter.

1915-1927: Maximum discharge, 2,310 second-feet June 17, 1918 (gage height, 5.0 feet); minimum, 4 second-feet November 14-17, 1921.

REMARKS.—Records good between 30 and 800 second-feet, beyond which they are fair. Discharge interpolated because of missing gage-height record November 23-25, 27-30, and April 1-3. Diversions for irrigation above station.

Daily and monthly discharge, in second-feet, 1926-27

Day	Oct.	Nov.	Apr.	May	June	July	Aug.	Sept.
1	30	18	26	31	137	1,680	224	85
2	30	18	26	39	133	1,490	216	80
3	28	17	26	49	129	1,280	197	74
4	26	16	25	56	131	1,190	197	74
5	24	16	25	64	125	1,170	200	66
6	23	16	26	63	131	1,110	194	59
7	24	16	24	63	143	1,020	181	50
8	24	16	25	70	172	953	181	53
9	24	15	26	71	244	936	169	71
10	24	15	25	73	325	919	160	90
11	24	16	22	76	417	902	154	131
12	23	17	22	70	596	885	145	158
13	23	19	22	67	776	851	143	178
14	23	17	22	73	1,010	826	135	191
15	24	17	22	76	1,140	784	123	200
16	24	17	22	88	1,200	720	121	200
17	24	16	22	101	1,220	648	116	197
18	24	17	22	112	1,220	588	112	184
19	23	17	23	133	1,260	553	108	172
20	23	18	22	154	1,330	526	104	167
21	22	17	20	165	1,370	507	99	169
22	22	17	19	175	1,350	482	97	151
23	22	18	20	172	1,340	458	97	139
24	21	19	22	172	1,400	440	96	143
25	21	20	21	160	1,470	423	94	149
26	21	21	19	151	1,540	399	94	147
27	21	21	20	181	1,680	361	94	139
28	21	21	21	191	1,890	330	90	135
29	21	21	22	165	1,970	311	90	133
30	20	21	25	151	1,890	279	90	137
31	19			141		244	88	

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October	30	19	23.3	1,430
November	21	15	17.7	1,050
April	26	19	22.8	1,360
May	191	31	108	6,640
June	1,970	125	925	55,000
July	1,680	244	750	46,100
August	224	88	136	8,360
September	200	50	131	7,800

SURFACE WATER SUPPLY, 1927, PART IX

BIG SANDY CREEK NEAR FARSON, WYO.

LOCATION.—Water-stage recorder in sec. 18, T. 27 N., R. 106 W., half a mile above headgate 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 to September, 1927.

EXTREMES.—Maximum discharge during year, 1,080 second-feet June 29 (gage height, 5.45 feet); minimum probably occurred during winter.

1915-1917, 1921-1924, 1927: Maximum discharge, 1,160 second-feet June 26, 1917 (gage height, 5.65 feet); minimum, 4 second-feet September 1, 1924 (gage height, 1.31 feet).

REMARKS.—Records good. Discharge estimated because of missing gage-height record May 1-9. Diversions for irrigation above station.

Daily and monthly discharge, in second-feet, 1927

Day	May	June	July	Aug.	Sept.	Day	May	June	July	Aug.	Sept.
1-----	100	227	533	97	40	16-----	197	687	197	43	136
2-----	110	217	437	90	36	17-----	320	670	183	42	125
3-----	120	212	378	82	32	18-----	483	624	167	43	115
4-----	140	232	351	78	29	19-----	568	564	155	40	106
5-----	150	265	385	75	27	20-----	496	631	145	37	96
6-----	160	306	437	71	26	21-----	388	648	138	33	88
7-----	180	381	363	66	25	22-----	320	568	132	37	82
8-----	180	473	311	63	27	23-----	281	533	127	38	79
9-----	160	631	289	60	34	24-----	251	523	129	36	73
10-----	153	670	276	59	161	25-----	232	558	129	36	85
11-----	153	670	259	57	97	26-----	214	554	129	46	108
12-----	139	684	248	53	94	27-----	227	513	129	48	120
13-----	112	825	246	51	86	28-----	270	568	114	46	117
14-----	115	845	235	48	102	29-----	295	829	108	43	114
15-----	145	778	214	47	141	30-----	278	712	103	43	117
						31-----	243	-----	100	46	-----

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
May-----	568	100	232	14,300
June-----	845	212	553	32,900
July-----	533	100	231	14,200
August-----	97	33	53.4	3,280
September-----	161	25	83.9	4,990
The period-----	-----	-----	-----	69,700

HAMS FORK AT DIAMONDVILLE, WYO.

LOCATION.—Staff gage in SW. $\frac{1}{4}$ sec. 24, T. 21 N., R. 116 W., at Diamondville.

DRAINAGE AREA.—386 square miles.

RECORDS AVAILABLE.—May, 1918, to September, 1927.

EXTREMES.—Maximum discharge during year, 1,380 second-feet May 19 (gage height, 3.16 feet); minimum, 9 second-feet November 10 (gage height, 0.86 foot).

1918-1927: Maximum discharge, 3,250 second-feet May 11, 1923 (gage height, 4.55 feet); no flow August 29-31, 1919.

REMARKS.—Records good except those for periods of missing gage heights, April 1-9 and August 14 to September 4, which are fair. Discharge estimated because of ice effect November 15-17. Diversions for irrigation above station.

Daily and monthly discharge, in second-feet, 1926-27

Day	Oct.	Nov.	Apr.	May	June	July	Aug.	Sept.
1.....	20	22	100	1,090	538	354	57	23
2.....	19	22	110	1,120	530	348	54	24
3.....	25	18	120	887	554	330	51	23
4.....	25	19	115	770	530	319	53	21
5.....	27	17	110	750	530	297	54	18
6.....	30	16	100	629	546	275	54	18
7.....	28	17	100	612	620	243	62	18
8.....	30	15	95	620	710	213	54	24
9.....	28	17	90	554	800	191	56	37
10.....	29	9	82	507	832	150	56	39
11.....	30	16	74	483	821	140	51	36
12.....	26	22	60	439	821	117	50	36
13.....	27	26	57	522	810	107	50	37
14.....	25	31	53	629	865	92	45	37
15.....	30	28	54	898	832	80	45	37
16.....	27	27	51	692	750	70	40	37
17.....	26	28	65	1,210	740	68	40	36
18.....	24	28	68	1,290	740	65	35	35
19.....	25	27	84	1,370	710	65	30	34
20.....	25	27	84	1,130	683	57	25	31
21.....	25	30	65	932	595	56	28	27
22.....	26	27	90	865	515	57	30	31
23.....	24	32	150	821	460	56	32	39
24.....	25	34	264	710	453	56	35	44
25.....	25	35	314	692	439	51	34	46
26.....	23	31	546	701	432	56	33	43
27.....	22	35	647	579	426	57	32	47
28.....	26	27	909	563	426	57	30	50
29.....	26	32	992	587	379	57	28	48
30.....	27	36	1,00	563	348	60	27	51
31.....	24	-----	-----	571	-----	59	26	-----

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	30	19	25.8	1,590
November.....	36	9	25.0	1,490
April.....	1,000	51	222	13,200
May.....	1,370	439	777	47,800
June.....	865	348	614	36,500
July.....	354	51	136	8,360
August.....	62	25	41.8	2,570
September.....	51	18	34.3	2,040

SURFACE WATER SUPPLY, 1927, PART IX

LITTLE SNAKE RIVER NEAR LILY, COLO.

LOCATION.—Water-stage recorder in sec. 20, T. 7 N., R. 98 W., near mouth of canyon and 6 miles above mouth of river at Lily.

DRAINAGE AREA.—3,730 square miles.

RECORDS AVAILABLE.—June to August, 1904; May, 1922, to September, 1927.

EXTREMES.—Maximum discharge during year, 7,200 second-feet May 18 (gage height, 8.05 feet); minimum, 23 second-feet September 10 and 11 (gage height, 0.07 foot).

1904, 1922-1927: Maximum discharge, 14,200 second-feet May 27, 1926 (gage height, 10.5 feet); no flow August 7 to September 11, 1924.

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

Daily and monthly discharge, in second-feet, 1926-27

Day	Oct.	Apr.	May	June	July	Aug.	Sept.
1	270	1,600	3,200	2,390	447	80	48
2	430	1,550	3,580	2,290	499	98	38
3	210	1,550	3,990	1,900	586	64	36
4	146	1,500	4,050	2,140	650	80	28
5	174	1,500	3,470	2,140	716	80	26
6	178	1,440	3,030	2,090	750	98	26
7	136	1,380	2,810	2,140	920	67	25
8	152	1,440	3,250	2,140	990	44	25
9	126	1,460	3,580	2,290	1,060	36	25
10	132	1,500	2,810	2,540	990	38	23
11	144	1,540	2,590	2,700	886	36	23
12	156	1,590	2,440	2,860	852	36	24
13	191	1,630	2,590	2,540	886	36	25
14	136	1,680	3,580	2,920	818	36	64
15	126	1,720	3,930	2,700	818	38	44
16	112	1,750	4,710	2,810	818	40	28
17	156	1,810	5,490	2,590	886	44	26
18	106	1,860	5,850	1,860	920	44	26
19	112	1,900	4,770	1,990	1,020	50	38
20	126	1,960	5,730	1,810	1,060	50	40
21	116	1,990	5,130	1,680	650	61	26
22	178	2,040	5,430	1,500	214	80	25
23	92	2,090	5,490	1,300	142	32	25
24	110	2,090	5,130	1,180	142	32	25
25	106	2,090	4,050	818	118	33	25
26	87	2,140	3,360	683	108	36	44
27	78	2,190	3,810	618	98	44	422
28	74	2,240	3,690	526	118	50	499
29	78	2,700	3,810	556	118	57	338
30	91	3,140	3,030	556	142	64	230
31	78	2,490	2,490	2,490	98	60	-----

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October	430	74	142	8,730
April	3,140	1,380	1,840	109,000
May	5,850	2,440	3,900	240,000
June	2,920	526	1,880	112,000
July	1,060	98	597	36,700
August	98	32	53.0	3,260
September	499	23	76.6	4,560

ASHLEY CREEK NEAR VERNAL, UTAH

LOCATION.—Water-stage recorder in sec. 1, T. 3 S., R. 20 E., three-quarters of a 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, 1927. Fragmentary records October, 1911, to June, 1914, at power plant; March, 1900, to December, 1904, at station below mouth of Dry Fork.

EXTREMES.—Maximum discharge during year, 1,250 second-feet September 10 (gage height, 8.70 feet); minimum, 25 second-feet March 11 (gage height, 5.81 feet).

1911–1927: Maximum discharge, 2,050 second-feet May 29, 1921; minimum, that of March 11, 1927.

REMARKS.—Records good except those for estimated periods, December 7 to April 17, July 29–31, September 1–5, 7–12, 14, and 15, which are fair. No diversions above station.

Daily and monthly discharge, in second-feet, 1926–27

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	50	41	34	28	27	26	26	318	295	225	118	90
2.....	50	41	34	28	27	26	26	330	299	198	118	89
3.....	52	41	34	28	27	26	26	306	314	182	138	88
4.....	52	40	34	28	27	26	26	299	314	201	124	87
5.....	50	40	34	28	27	26	27	346	314	221	113	86
6.....	48	38	34	28	27	26	28	407	359	179	104	86
7.....	47	38	34	28	27	26	29	389	380	169	106	
8.....	47	38	34	28	27	25	30	269	371	160	106	
9.....	46	36	34	28	27	25	31	221	346	157	102	
10.....	44	36	34	28	27	25	30	198	314	153	104	500
11.....	44	36	34	28	27	25	30	186	283	142	117	
12.....	44	36	34	28	27	25	29	195	287	146	108	
13.....	46	36	34	28	27	25	29	310	273	140	104	306
14.....	46	35	33	27	27	25	28	528	251	138	100	280
15.....	46	34	32	27	27	25	28	653	291	128	100	250
16.....	44	34	32	27	27	26	28	852	326	122	100	218
17.....	42	34	31	27	27	26	28	954	291	117	99	201
18.....	42	34	31	27	27	26	28	877	248	115	97	184
19.....	42	34	31	27	27	26	28	729	248	111	99	172
20.....	42	34	31	27	27	26	30	554	221	113	100	160
21.....	42	34	30	27	27	26	28	430	198	113	99	151
22.....	41	34	30	27	27	26	30	371	184	113	97	151
23.....	40	34	30	27	27	26	30	310	174	117	102	153
24.....	41	34	30	27	26	26	32	306	166	120	100	155
25.....	41	34	30	27	26	26	34	402	160	128	99	184
26.....	41	33	30	27	26	26	41	528	155	144	95	172
27.....	41	33	29	27	26	26	50	533	192	149	95	157
28.....	41	33	29	27	26	26	95	449	533	151	93	164
29.....	40	33	29	27	26	26	136	322	449	175	93	151
30.....	40	33	28	27	26	26	228	295	276	150	92	153
31.....	40	28	27	26	26	26	283	283	125	91	153	

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	52	40	44.3	2,720
November.....	41	33	35.7	2,120
December.....	34	28	31.8	1,950
January.....	28	27	27.4	1,630
February.....	27	26	26.8	1,430
March.....	26	25	25.7	1,530
April.....	228	26	42.3	2,520
May.....	954	186	424	26,100
June.....	533	155	284	16,900
July.....	225	111	148	9,100
August.....	138	91	104	6,400
September.....	86	86	280	13,700
The year.....		25	119	86,300

SURFACE WATER SUPPLY, 1927, PART IX

UTAH POWER & LIGHT CO.'S TAILRACE¹ NEAR VERNAL, UTAH

LOCATION.—Indicating gage in NW. $\frac{1}{4}$ 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, 1927.

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

Daily and monthly discharge, in second-feet, 1926-27

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

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October-----	20	13	16.0	984
November-----	20	14	17.3	1,030
December-----	20	14	16.7	1,030
January-----	19	14	17.1	1,050
February-----	19	13	17.0	974
March-----	18	12	15.7	935
April-----	19	11	15.9	946
May-----	17	12	14.1	837
June-----	18	10	14.1	839
July-----	16	10	13.6	836
August-----	18	13	15.4	977
September-----	20	9	17.1	1,079
The year-----	20	9	15.8	11,570

¹ Published prior to 1926 as Vernal Milling & Light Co.'s tailrace.

DUCHESNE RIVER NEAR TABIONA, UTAH

LOCATION.—Tape gage in SW. $\frac{1}{4}$ sec. 17, T. 2 S., R. 6 W., Uinta base and meridian, $5\frac{1}{2}$ miles above Rock Creek and 8 miles southeast of Tabiona.

DRAINAGE AREA.—352 square miles.

RECORDS AVAILABLE.—January, 1919, to September, 1927.

EXTREMES.—Maximum discharge during year, 1,530 second-feet June 9 (gage height, 13.07 feet); minimum not recorded.

1919-1927: Maximum discharge, about 2,500 second-feet June 13, 1921; minimum, 40 second-feet August 29-31, 1926.

REMARKS.—Records fair. Discharge estimated because of ice December 13 to February 13. Small diversions for irrigation above station.

Daily and monthly discharge, in second-feet, 1926-27

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1-----	88	114	108	}	80	80	135	487	564	430	185	116
2-----	81	116	114			79	131	462	609	358	181	114
3-----	92	111	114			84	138	484	645	325	164	114
4-----	94	116	112			90	140	491	654	458	157	117
5-----	91	114	112			87	135	534	695	440	153	119
6-----	95	117	112	}	82	90	131	480	845	373	149	121
7-----	94	116	114			91	136	543	1,200	348	136	124
8-----	94	111	116			91	129	495	1,470	328	133	138
9-----	92	106	114			94	128	440	1,530	325	135	1,270
10-----	88	114	116			91	121	336	1,520	296	129	119
11-----	98	111	111	}	85	90	116	328	1,490	220	131	122
12-----	94	112	110			92	114	440	1,420	220	123	232
13-----	97	116				91	117	380	1,240	222	126	232
14-----	100	117				85	95	121	462	1,130	118	227
15-----	104	119				87	97	114	681	1,070	129	220
16-----	97	122	}	80	90	94	112	1,100	955	227	123	207
17-----	108	119			88	91	117	1,230	925	211	122	200
18-----	104	114			92	87	116	1,450	905	196	111	202
19-----	108	114			90	78	114	1,460	920	187	119	198
20-----	104	109			92	72	121	1,100	765	181	118	209
21-----	101	116	}	80	92	91	117	875	775	178	114	198
22-----	112	111			90	106	131	681	710	222	111	213
23-----	106	112			87	114	153	654	578	211	111	272
24-----	103	111			92	128	170	663	469	193	119	305
25-----	104	114			94	133	213	672	462	196	121	277
26-----	106	119	}		91	129	259	695	495	200	124	269
27-----	104	116			90	131	358	780	458	204	122	264
28-----	101	114			94	126	380	835	462	222	122	262
29-----	114	111				133	396	622	458	216	149	254
30-----	114	112				129	423	539	440	178	142	264
31-----	112					131		514		183	119	

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October-----	114	81	100	6,150
November-----	122	106	114	6,780
December-----	116		92.7	5,700-
January-----			80.0	4,920
February-----	94		86.8	4,820
March-----	133	72	100	6,150
April-----	423	112	170	10,100
May-----	1,460	328	675	41,500
June-----	1,530	440	862	51,300
July-----	458	178	258	15,900
August-----	185	111	133	8,180
September-----	1,270	114	233	13,900
The year-----	1,530		242	175,000

DUCHESNE RIVER AT DUCHESNE, UTAH

LOCATION.—Staff gage in NE. $\frac{1}{4}$ NW. $\frac{1}{4}$ sec. 1, T. 4 S., R. 5 W., Uinta base and meridian, in Duchesne, 1 mile above mouth of Strawberry River.

DRAINAGE AREA.—660 square miles.

RECORDS AVAILABLE.—December, 1917, to September, 1927.

EXTREMES.—Maximum discharge during year, 2,910 second-feet June 10 (gage height, 3.08 feet); minimum, 106 second-feet several days during October and November.

1917-1927: Maximum discharge, 4,420 second-feet June 10, 1922 (gage height, 8.65 feet); minimum, 50 second-feet August 4, 5, 7-14, 27-31, and September 1-4, 1924 (gage height, 0.6 foot).

REMARKS.—Records fair. Discharge estimated because of ice effect December 13 to March 6. Diversions for irrigation above and below station.

Daily and monthly discharge, in second-feet, 1926-27

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	114	114	162				167	774	887	1,060	263	201
2.....	114	114	178				178	814	887	931	212	184
3.....	158	106	178				206	843	960	858	212	167
4.....	135	114	189			160	206	843	1,040	931	201	158
5.....	130	121	178				178	843	1,200	1,410	184	158
6.....	130	130	178		140		206	774	1,650	931	184	158
7.....	135	130	189			167	206	843	2,190	788	201	158
8.....	135	139	189			178	206	774	2,500	722	178	658
9.....	130	139	178			178	206	708	2,700	722	167	722
10.....	130	139	162			178	189	647	2,870	658	184	1,250
11.....	130	139	149		143	167	178	564	2,740	658	206	682
12.....	130	149	149			153	178	533	2,310	599	184	258
13.....	117	149				153	178	588	2,480	543	184	1,170
14.....	117	139				153	178	872	2,530	491	184	704
15.....	117	139				167	178	1,200	2,260	442	167	682
16.....	117	162		140		149	178	1,650	2,310	424	158	940
17.....	106	149				139	167	1,940	2,060	396	149	682
18.....	106	162				130	167	2,260	2,400	396	135	682
19.....	114	162				130	167	2,180	2,310	353	135	626
20.....	114	162			150	139	167	1,840	2,060	353	149	573
21.....	114	149				153	167	1,840	1,730	396	149	524
22.....	106	149	140			167	178	1,280	1,570	543	135	478
23.....	106	149				153	178	1,040	1,490	442	158	478
24.....	106	139				167	236	887	1,440	396	135	573
25.....	114	139				178	270	887	1,330	442	135	682
26.....	114	139				178	345	1,200	1,250	396	158	626
27.....	106	178				178	533	1,440	1,410	353	167	478
28.....	106	162				178	533	1,520	1,730	491	158	478
29.....	106	178				178	708	1,200	1,250	442	277	435
30.....	114	162				178	774	1,120	1,170	353	243	435
31.....	114					167		1,040		353	212	

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	158	106	119	7,320
November.....	178	106	143	8,510
December.....	189		153	9,410
January.....			140	8,610
February.....			146	8,110
March.....		130	162	9,960
April.....	774	167	254	15,100
May.....	2,260	533	1,130	69,500
June.....	2,870	887	1,820	108,000
July.....	1,410	353	590	36,300
August.....	277	135	178	11,000
September.....	1,250	158	533	31,700
The year.....	2,870	106	447	324,000

DUCHESNE RIVER AT MYTON, UTAH

LOCATION.—Chain gage in NW. $\frac{1}{4}$ sec. 25, T. 3 S., R. 2 W., Uinta base and 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, 1927.

EXTREMES.—Maximum discharge during year, 8,420 second-feet September 10 (gage height, 7.22 feet); minimum, 90 second-feet October 19 and 20 (gage height, 1.55 feet).

1899–1927: Maximum discharge, 12,800 second-feet June 10, 1922 (gage height, 7.94 feet); minimum, 6 second-feet September 4–9, 1924.

REMARKS.—Records fair. Discharge estimated or interpolated for days of missing gage heights, April 10–20, July 4, and August 12, 13, and for ice-affected period, December 15 to March 12. Diversions for irrigation above station. Flow regulated by United States Bureau of Reclamation reservoir on Strawberry River.

Daily and monthly discharge, in second-feet, 1926–27

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	120	130	252	250	250	325	412	1,070	1,200	1,420	247	390
2.....	126	143	252				395	1,120	1,110	1,210	238	299
3.....	120	143	243				454	1,160	1,110	1,010	196	247
4.....	120	136	252				430	1,260	1,100	2,000	184	238
5.....	117	126	256				384	1,220	1,210	2,350	158	230
6.....	123	133	256	257	275	356	373	1,190	1,310	1,380	172	238
7.....	133	130	280				373	1,180	2,470	1,150	168	238
8.....	136	126	280				356	1,310	2,990	1,040	161	2,470
9.....	133	136	280				356	1,310	3,360	1,010	150	3,210
10.....	130	136	234				1,090	3,490	979	140	5,700	
11.....	123	154	252	250	300	442	856	3,060	874	230	3,010	
12.....	120	153	243				726	2,770	803	220	2,390	
13.....	117	165	243				796	2,950	712	215	2,350	
14.....	120	172	234				384	874	3,080	574	204	2,350
15.....	117	172	136				280	1,520	3,050	497	225	2,050
16.....	110	172	192	220	300	504	373	1,790	2,710	436	168	1,870
17.....	104	172	192				330	2,720	2,390	378	158	2,110
18.....	96	172					330	3,640	2,650	325	153	1,870
19.....	90	172					304	3,640	2,770	238	140	1,580
20.....	90	184					304	3,320	2,410	238	140	1,440
21.....	93	184		300	448	504	285	2,360	2,080	261	140	1,310
22.....	120	192					340	2,340	2,120	1,750	362	1,260
23.....	130	192					354	2,430	1,690	1,520	448	1,210
24.....	123	200					478	304	1,290	1,310	448	1,170
25.....	126	234					491	356	1,160	1,160	448	1,900
26.....	126	234		448	504	504	485	1,230	1,110	436	196	1,640
27.....	130	225					535	1,660	1,270	448	309	1,420
28.....	120	234					600	1,690	2,900	460	390	1,310
29.....	114	234					504	882	1,690	2,450	522	497
30.....	117	234					472	914	1,360	1,730	418	448
31.....	120						448	1,290		285	478	

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	136	90	118	7,260
November.....	234	126	173	10,300
December.....	280		231	14,200
January.....			250	15,400
February.....			273	15,200
March.....	504		375	23,100
April.....	914		380	22,600
May.....	3,640	726	1,590	97,800
June.....	3,490	1,100	2,150	128,000
July.....	2,350	238	747	45,900
August.....	497	140	218	13,400
September.....	5,700	230	1,600	95,200
The year.....	5,700	90	674	488,000

STRAWBERRY RIVER AT DUCHESNE, UTAH

LOCATION.—Staff gage in SW. $\frac{1}{4}$ NE. $\frac{1}{4}$ sec. 2, T. 4 S., R. 5 W., Uinta base and meridian, three-quarters of a mile west of Duchesne and $1\frac{1}{2}$ miles above mouth.

DRAINAGE AREA.—1,040 square miles.

RECORDS AVAILABLE.—June, 1908, to November, 1910; March, 1914, to September, 1927.

EXTREMES.—Maximum discharge during year, 2,600 second-feet September 10 (gage height, 9.3 feet); minimum occurred during winter.

1908-1910, 1914-1927: Maximum discharge, 3,230 second-feet May 27, 1922 (gage height, 7.7 feet); minimum, 30 second-feet November 20, 1914.

REMARKS.—Records fair below and poor above 400 second-feet. Discharge estimated because of ice effect December 13 to March 18. Diversions for irrigation above station. Flow regulated by storage in Strawberry Valley Reservoir.

Daily and monthly discharge, in second-feet, 1926-27

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	47	45	68		35		96	559	342	214	84	77
2.....	47	45	68				86	663	350	198	80	64
3.....	47	46	60				108	745	334	198	80	64
4.....	47	47	63				96	789	334	223	80	64
5.....	47	43	60				86	756	334	738	77	64
6.....	47	43	60		35		76	800	316	255	77	64
7.....	47	42	60				86	866	316	201	80	67
8.....	47	42	73				96	910	316	184	72	555
9.....	47	47	68				108	844	316	192	67	630
10.....	47	54	50				50 108	647	304	175	72	1,690
11.....	47	54	45		38		96	524	297	175	290	141
12.....	47	57	45				96	477	304	148	77	226
13.....	47	54	54				96	534	316	143	72	934
14.....	47	54	54				96	800	342	124	67	276
15.....	47	54	54				86	982	354	119	64	129
16.....	47	60		35			86	1,060	334	108	64	129
17.....	47	60					76	1,160	327	98	64	117
18.....	47	63					76	1,220	297	94	64	117
19.....	47	73					60 76	1,140	280	89	64	117
20.....	47	80					60 76	970	262	214	64	100
21.....	47	63		35	40		60 76	832	246	115	64	96
22.....	47	60					86 86	699	226	102	64	117
23.....	47	60					119 96	615	204	108	80	136
24.....	45	54					132 119	545	192	115	67	402
25.....	45	54					144 172	460	169	156	64	330
26.....	45	54					119 203	451	169	630	198	232
27.....	45	73					132 294	438	192	156	482	117
28.....	45	73					108 354	460	365	482	143	117
29.....	45	63					96 440	424	373	354	505	117
30.....	45	57					119 559	407	255	124	169	117
31.....	45						103	373		102	94	

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	47	45	46.5	2,860
November.....	80	42	55.8	3,320
December.....	73		44.7	2,750
January.....			35	2,150
February.....			38.1	2,120
March.....	144		72.2	4,440
April.....	559	76	140	8,330
May.....	1,160	373	715	44,000
June.....	373	169	292	17,400
July.....	738	89	204	12,500
August.....	505	64	116	7,130
September.....	1,690	64	247	14,700
The year.....	1,690		168	122,000

WEST FORK OF LAKE FORK NEAR MOUNTAIN HOME, UTAH

LOCATION.—Water-stage recorder in NE. $\frac{1}{4}$ sec. 19, T. 2 N., R. 5 W., Uinta base and meridian, half a mile below Moon Lake and 13 miles northwest of Mountain Home.

DRAINAGE AREA.—108 square miles.

RECORDS AVAILABLE.—September, 1921, to September, 1927; fragmentary.

EXTREMES.—Maximum discharge during year, 2,000 second-feet September 9 (gage height, 3.85 feet); minimum not determined.

1921-1927: Maximum discharge, that of September 9, 1927; minimum not determined.

REMARKS.—Records good. No diversions above station. Flow regulated by storage in Brown Duck Lake Reservoir.

Daily and monthly discharge, in second-feet, 1926-27

Day	Oct.	Nov.	May	June	July	Aug.	Sept.
1		32		315	346	128	106
2		32		307	307	116	98
3		31		318	284	114	91
4		31	206	346	318	130	88
5		30	206	385	371	140	86
6		30	215	557	311	145	88
7		31	231	781	270	153	114
8		32	218	922	256	158	155
9		32	194	922	250	160	425
10		32	171	873	256	160	670
11		31	155	724	243	166	-----
12		27	147	677	224	166	-----
13		25	166	744	206	160	-----
14		26	137	697	191	155	-----
15		27	376	620	177	150	-----
16		27	603	540	166	137	-----
17		28	881	562	158	132	-----
18		29	999	697	147	128	-----
19			939	652	142	126	-----
20	38		751	579	142	126	-----
21	38		597	493	169	121	-----
22	38		483	449	185	119	-----
23	37		407	444	185	116	-----
24	35		351	473	180	110	-----
25	35		359	430	174	106	-----
26	34		453	416	171	110	-----
27	34		535	483	166	114	-----
28	33		551	664	169	112	-----
29	34		463	540	169	112	-----
30	34		389	420	155	112	-----
31	33		342	-----	140	112	-----

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October 20-31	38	33	35.2	838
November 1-18	32	25	29.6	1,060
May 4-31	999	147	412	22,900
June	922	307	568	33,800
July	371	140	214	13,200
August	166	106	132	8,120

LAKE FORK NEAR MYTON, UTAH

LOCATION.—Water-stage recorder in sec. 21, T. 3 S., R. 2 W., Uinta base and meridian, half a mile above mouth and $3\frac{1}{2}$ 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, 1927.

EXTREMES.—Maximum discharge during year, 4,600 second-feet September 10 (gage height, 9.7 feet); minimum, 6 second-feet November 11 and 12.

1900–1903, 1907–1927: Maximum discharge, that of September 10, 1927; probably no flow July 24, 1916.

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

Daily and monthly discharge, in second-feet, 1926–27

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	25	19	56				203	24	56	* 225	23	* 40
2	14	18	50				177	20	44	208	22	* 40
3	14	14	43				152	19	43	124	21	39
4	14	12	50					19	44	203	26	35
5		14	57		* 75			19	55	484	28	36
6		14	54				* 100	34	180	346	32	38
7		13	70					57	476	* 240	34	47
8		11	87					38	760	* 230	35	557
9		8	78		* 77			50	875	221	30	* 60
10	* 15	8	60				61	61	895	208	26	2,700
11		6					62	50	652	187	28	2,500
12		6					76	45	562		33	1,650
13		7					70	39	706	* 75	37	1,810
14		10					64	49	706		47	1,280
15		8					60	85	730	38	57	* 1,000
16	16	9		* 70		* 150	64	210	620	26	50	* 1,000
17	16	9					53	501	527	24	42	1,200
18	18	9						870	696	27	37	* 1,100
19	* 16	9			* 80			845	755	24	36	* 1,000
20	* 14	18					* 25	540	611	26	42	* 900
21	12	28	* 50					277	435	46	39	* 800
22	21	30						131	* 200	96	37	* 750
23	20	30					11	120	104	104	36	* 700
24	16	28					15		60	72	35	665
25	18	46					12		48	59	34	710
26	16	44					9		38	47	36	683
27	17	51					10		64	38	56	602
28	18	56					9	143	1,470	30	50	* 52.5
29	21	47					14	109	* 400	27	* 50	* 500
30	20	48					26	80	* 300	23	* 45	* 475
31	21							89		24	* 60	

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October	25		16.5	1,010
November	56	6	21.0	1,250
December			53.4	3,280
January			70.0	4,300
February			78.5	4,360
March			150	9,220
April	203	9	61.3	3,650
May	870	19	156	9,590
June	1,470	38	437	26,000
July	484	23	117	7,190
August	60	21	37.5	2,310
September	2,700	35	799	47,500
The year	2,700	6	165	120,000

* Estimated.

GREEN RIVER BASIN

47

UINTA RIVER NEAR NEOLA, UTAH

LOCATION.—Chain gage in SE. $\frac{1}{4}$ sec. 26, T. 2 N., R. 2 W., Uinta base and meridian, 800 feet above tailrace of Pole Creek power plant and 9 miles north of Neola.

DRAINAGE AREA.—181 square miles.

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

REMARKS.—Records fair. Discharge estimated March 23-31 and June 13-16. No diversions above station.

Daily and monthly discharge, in second-feet, 1926-27

Day	Oct.	Nov.	Dec.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	106	81	78	78	71	215	332	461	285	191
2	96	77	78	65	76	242	332	422	254	170
3	117	84	80	66	84	263	339	414	260	160
4	106	78	81	71	71	298	398	515	279	170
5	103	81	81	66	76	312	414	615	260	170
6	103	78	81	66	81	346	433	449	248	170
7	99	81	81	60	90	325	678	395	242	242
8	94	73	80	66	93	305	678	437	242	714
9	93	78	78	62	81	266	597	410	292	1,240
10	99	80	76	58	66	219	714	406	272	-----
11	99	81	71	56	71	224	589	398	395	-----
12	93	81	68	59	67	207	589	339	339	-----
13	88	80	56	62	60	227	-----	325	318	-----
14	84	76	-----	64	62	402	-----	305	269	-----
15	86	78	-----	60	64	682	550	285	254	-----
16	84	80	-----	63	66	980	-----	265	228	-----
17	84	78	-----	58	71	1,090	470	245	196	-----
18	82	78	-----	58	76	1,090	606	236	185	-----
19	81	78	-----	52	76	860	589	232	207	-----
20	80	78	-----	46	76	687	535	236	254	-----
21	82	78	-----	68	68	511	461	308	224	-----
22	81	78	-----	62	78	412	429	325	242	-----
23	78	78	-----	-----	90	312	376	445	214	-----
24	87	78	-----	-----	103	315	478	461	185	-----
25	87	81	-----	-----	121	368	429	368	170	-----
26	86	72	-----	-----	146	545	437	410	196	-----
27	86	76	-----	65	142	520	562	398	196	-----
28	84	78	-----	-----	165	494	1,060	437	191	-----
29	82	81	-----	-----	165	445	746	376	196	-----
30	81	81	-----	-----	180	391	550	325	196	-----
31	78	-----	-----	-----	-----	391	-----	305	202	-----

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October	117	78	90.0	5,530
November	84	72	78.7	4,680
March	78	46	62.9	3,870
April	180	60	91.2	5,430
May	1,090	207	450	27,700
June	1,060	332	534	31,800
July	615	232	373	22,900
August	395	170	242	14,900

WHITEROCKS RIVER NEAR WHITEROCKS, UTAH

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

DRAINAGE AREA.—118 square miles.

RECORDS AVAILABLE.—August, 1921, to September, 1927; fragmentary. November, 1917, to June, 1921, below diversion of United States Whiterocks Canal and above Farm Creek Canal. 1899 to 1904 and 1907 to 1910 near present site. All records comparable.

EXTREMES.—1917-1927: Maximum discharge, 2,750 second-feet June 21, 1922 (gage height, 5.40 feet); minimum, less than 14 second-feet during winter of 1920-21.

REMARKS.—Records fair. Discharge estimated October 10-21, August, 4-12, August 30 to September 7, and September 30. No diversions above station.

Daily and monthly discharge, in second-feet, 1926-27

Day	Oct.	Nov.	May	June	July	Aug.	Sept.
1	78	35	-----	377	331	182	120
2	75	34	-----	353	308	163	
3	75	35	-----	371	300	202	
4	69	34	-----	377	336	220	
5	66	34	-----	371	347		
6	66	34	-----	446	300	180	308
7	61	35	-----	516	285		
8	57	32	-----	516	267		
9	53		-----	495	267		
10			-----	474	245		
11	45		-----	432	229		425
12			-----	502	211		347
13			-----	439	192	138	530
14			-----	397	182	119	495
15			-----	474	163	114	460
16			-----	383	154	109	495
17			-----	353	138	105	586
18			-----	359	131	101	546
19			-----	353	125	109	460
20			-----	326	125	119	404
21			-----	295	172	105	371
22	39		-----	279	172	119	353
23	38		-----	267	172	109	347
24	35		331	260	182	97	336
25	35		460	253	146	94	377
26		35	710	245	192	114	359
27		35	691	316	163	114	336
28		34	586	800	182	138	331
29		34	460	610	202	131	331
30		31	439	425	192	130	330
31		34	411	-----	192	130	-----

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October	78	31	48.1	2,960
June	800	245	402	23,900
July	347	125	213	13,100
August		94	142	8,730
September	700	-----	359	21,400

FISH CREEK NEAR SCOFIELD, UTAH

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

DRAINAGE AREA.—163 square miles.

RECORDS AVAILABLE.—November, 1917, to September, 1921; June, 1925, to September, 1927, fragmentary.

REMARKS.—Records good. Discharge estimated December 1 to May 18 and September 8-30. Small diversions for irrigation above station. Flow completely regulated by Horsley Dam. Gage-height record and two discharge measurements furnished by Price River Water Conservation District.

Daily and monthly discharge, in second-feet, 1926-27

Day	Oct.	Nov.	May	June	July	Aug.	Sept.
1.....	13	14		107	9	142	85
2.....	13	14		107	9	165	85
3.....	13	14		116	9	170	85
4.....	13	14		116	9	170	85
5.....	13	14		116	9	170	85
6.....	13	14		116	9	170	85
7.....	13	14		116	9	170	46
8.....	14	14		116	9	142	
9.....	14	14		124	9	142	
10.....	14	14	7	133	9	142	
11.....	14	14		152	9	142	
12.....	14	14		152	9	161	
13.....	14	7		100	9	142	
14.....	14			100	9	142	
15.....	14			85	38	142	
16.....	14			85	50	142	
17.....	14			100	200	142	
18.....	14			66	200	161	
19.....	14		7	92	200	161	2
20.....	14		16	107	200	161	
21.....	14			124	180	161	
22.....	14	0	25	146	161	161	
23.....	14		50	142	161	161	
24.....	14		72	142	161	161	
25.....	14		85	170	161	142	
26.....	14		100	170	116	142	
27.....	14		100	78	116	100	
28.....	14		100	9	116	100	
29.....	14		100	9	116	100	
30.....	14		100	9	116	85	
31.....	14		104		142	85	

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	14	13	13.8	848
November.....	14	0	5.8	347
December.....			1	61
January.....			2	123
February.....			2	111
March.....			4	246
April.....			6	357
May.....	104		33.0	2,030
June.....	170	9	107	6,370
July.....	200	9	82.6	5,080
August.....	170	85	144	8,850
September.....	85		20.1	1,200
The year.....	200	0	35.4	25,600

PRICE RIVER NEAR HELPER, UTAH

LOCATION.—Chain gage in SE. $\frac{1}{4}$ sec. 36, T. 13 S., R. 9 E., three-quarters of a 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, 1927.

EXTREMES.—Maximum discharge during year, probably between 9,000 and 10,000 second-feet during floods early in September (gage height, about 10.3 feet); minimum, 8 second-feet November 18 and December 10–12.

1904–1927: Maximum discharge, that of 1927; minimum, 4 second-feet during December, 1905, January, 1906, and August 8, 1925.

REMARKS.—Records fair. Discharge estimated December 13 to January 31. Discharge indeterminate June 27 to September 13 because of extreme floods. Main irrigation diversions are below station. Flow regulated by storage in reservoir on Fish Creek.

Daily and monthly discharge, in second-feet, 1926–27

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Sept.
1.....	14	14	12		13	9	60	288	171	-----
2.....	15	15	12		15	22	64	288	171	-----
3.....	22	15	14		15	25	72	288	171	-----
4.....	22	15	15		15	31	68	281	166	-----
5.....	22	15	11		15	22	64	288	166	-----
6.....	15	14	11		15	22	79	288	194	-----
7.....	13	14	11		10	22	83	296	166	-----
8.....	12	14	11		11	24	90	296	160	-----
9.....	13	9	7		15	31	83	277	144	-----
10.....	15	15	8		12	24	72	259	194	-----
11.....	14	15	8		22	16	59	224	194	-----
12.....	10	15	8		15	22	64	191	227	-----
13.....	11	15			15	29	56	174	262	-----
14.....	11	17			15	33	56	155	139	98
15.....	11	10			15	37	56	180	124	50
16.....	11	10		12	15	31	64	204	184	50
17.....	11	10			15	29	72	198	134	35
18.....	11	8			15	22	65	204	127	35
19.....	15	10			15	18	60	224	126	31
20.....	15	11			15	15	68	217	124	28
21.....	15	11			18	10	68	191	138	26
22.....	13	10	10		20	22	86	164	152	24
23.....	12	10			27	37	112	142	224	59
24.....	13	11			21	37	137	137	180	38
25.....	15	11			24	75	163	129	155	39
26.....	16	11			26	83	191	155	166	44
27.....	15	11			30	86	217	191	-----	42
28.....	15	11			20	90	288	191	-----	38
29.....	14	10			-----	90	277	188	-----	38
30.....	13	11			-----	90	296	185	-----	38
31.....	13	-----			-----	90	-----	174	-----	-----

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	22	10	14.1	867
November.....	17	8	12.3	732
December.....	-----	-----	10.3	633
January.....	-----	-----	12	738
February.....	30	10	17.1	950
March.....	90	9	38.5	2,370
April.....	296	56	106	6,310
May.....	296	129	215	13,200
June 1–26.....	262	124	166	8,560

HUNTINGTON CREEK NEAR HUNTINGTON, UTAH

LOCATION.—Water-stage recorder in SE. $\frac{1}{4}$ sec. 6, T. 17 S., R. 8 E., 7 miles northwest of Huntington and above mouth of Fish Creek.

DRAINAGE AREA.—188 square miles.

RECORDS AVAILABLE.—May, 1909, to September, 1927; fragmentary.

EXTREMES.—Maximum discharge during year, about 2,000 second-feet September 10 (gauge height, 6.9 feet); minimum not determined.

1909–1927: Maximum discharge, that of September 10, 1927; probably no flow November 5, 1925 (gauge height, 1.24 feet).

REMARKS.—Records good except those for estimated periods, which are fair. Diversions for irrigation above station. Flow slightly regulated by storage reservoir above station.

Daily and monthly discharge, in second-feet, 1926–27

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	38	28	29			* 34	* 45	306	230	132	108	* 56
2	42	28	29				* 48	356	239	124	108	
3	39	28	34				52	430	230	121	108	
4	38	28	33				411	253	124	108		
5	36	27	32				460	312	111	106	54	
6	36	28	33			* 34	* 40	450	349	102	115	* 50
7	37	29	33				356	353	95	110		
8	37	25	32				290	370	101	111		
9	36	25	23				230	349	110	111		
10	35	28	22				27	203	319	102	106	* 500
11	36	30	34		* 34		30	203	296	87	108	* 250
12	35	30					259	296	81	106	* 100	
13	34	28					339	312	74	102	* 300	
14	33	29					411	329	87	77	* 50	
15	33	26					574	367	108	74	* 40	
16	32	33		* 32		* 34		730	300	104	67	38
17	32	26					34	780	306	102	64	41
18	31	32					43	685	281	111	62	36
19	31	33					38	553	259	121	* 64	34
20	31	30					34	450	244	124	67	33
21	31	31	* 30			34	38	381	219	132		34
22	31	30					54	332	200	119		55
23	31	30					67	278	190	117		45
24	30	30					* 75	244	180	119	* 75	47
25	29	29					89	271	164	123		46
26	29	28			* 36	124	322	166	126	* 100	53	
27	29	36				155	363	176	132	* 150	51	
28	29	31				190	356	183	126	* 70	42	
29	27	29				244	265	169	126		42	
30	25	31				39	259	250	155	113	* 60	43
31	27					* 42	244		110			

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October-----	42	25	32.9	2,020
November-----	36	25	29.2	1,740
December-----			30.1	1,850
January-----			32	1,970
February-----			34	1,890
March-----			34.6	2,130
April-----	259		68.6	4,080
May-----	780	203	380	23,400
June-----	370	155	260	15,500
July-----	132	74	112	6,890
August-----			88.9	5,470
September-----			33	4,680
The year-----			98.8	71,600

* Estimated.

COTTONWOOD CREEK NEAR ORANGEVILLE, UTAH

LOCATION.—Water-stage recorder in SW. $\frac{1}{4}$ sec. 10, T. 18 S., R. 7 E., 2 miles upstream from Grimes Wash and 5 miles northwest of Orangeville.

DRAINAGE AREA.—200 square miles.

RECORDS AVAILABLE.—May, 1909, to September, 1927 (discontinued); fragmentary.

EXTREMES.—Maximum discharge during year, 2,500 second-feet September 9 (gage height, 9.2 feet); minimum, less than 8 second-feet during winter. 1909-1927: Maximum discharge, about 2,500 second-feet August 22, 1922, and September 9, 1927; maximum gage height, that of September 9, 1927; minimum discharge, 5 second-feet September 21, 1910.

REMARKS.—Records poor. Discharge interpolated or estimated October 1-5, 20-26, December 3-7, and December 10 to March 23. Small diversions for irrigation above station.

Daily and monthly discharge, in second-feet, 1926-27

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....		14	18		10		32	246	324	170	77	37
2.....		14	20		10		44	258	321	160	75	36
3.....	27	14					49	276	308	158	72	33
4.....		14					42	282	334	155	81	33
5.....		14	16				34	301	389	153	72	33
6.....	24	15					43	327	433	146	90	33
7.....	23	13					54	321	452	141	81	63
8.....	21	12	13			15	55	288	476	153	81	54
9.....	20	13	8				42	252	452	190	72	364
10.....	17	21					36	224	422	153	73	79
11.....	16	16					34	210	393	141	99	42
12.....	14	15					28	238	396	135	99	52
13.....	13	14					29	324	396	128	68	241
14.....	13	15					29	437	386	120	65	97
15.....	14	25					32	503	375	113	63	43
16.....	15	23		9	10		34	583	347	109	62	33
17.....	16	25					29	800	330	103	62	34
18.....	17	25					37	750	324	103	63	24
19.....	17	27					44	600	304	107	63	22
20.....		21	9			30	38	475	292	116	62	22
21.....		21					36	418	279	118	90	22
22.....		15					52	378	264	148	60	44
23.....	17	15					63	334	252	190	55	33
24.....		15				60	84	324	249	113	52	40
25.....		15				70	111	350	235	111	62	38
26.....		17				82	133	411	224	120	99	46
27.....	17	21				70	172	429	232	141	109	32
28.....	17	18				62	197	426	249	190	81	21
29.....	15	14				54	219	372	205	109	81	18
30.....	12	17				44	232	350	190	88	48	18
31.....	14					32		344		81	40	-----

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....		12	18.4	1,130
November.....	27	12	17.3	1,030
December.....			10.9	670
January.....			9	553
February.....			10	555
March.....	82		30.3	1,860
April.....	232	28	68.8	4,090
May.....	800	210	382	23,500
June.....	476	190	328	19,500
July.....	190	81	134	8,240
August.....	109	40	72.8	4,480
September.....	364	18	56.2	3,340
The year.....	800	-----	95.2	68,900

SAN JUAN RIVER BASIN

SAN JUAN RIVER NEAR BLUFF, UTAH

LOCATION.—Water-stage recorder in SE. $\frac{1}{4}$ 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 to September, 1927.

EXTREMES.—Maximum discharge during year, about 70,000 second-feet September 10 (gage height, 32 feet); minimum not recorded.

1914-1917, 1927: Maximum discharge, that of September 10, 1927; minimum, 199 second-feet December 10, 1916.

REMARKS.—Records for discharge between 1,000 and 15,000 second-feet good; others fair. Diversions for irrigation above station.

Daily and monthly discharge, in second-feet, 1927

Day	Mar.	Apr.	May	June	July	Aug.	Sept.
1		5,120	11,700	7,540	36,400	1,850	1,500
2		4,690	12,100	7,520	20,400	1,670	1,440
3		4,400	12,600	7,820	14,300	1,530	1,230
4		5,410	12,900	7,860	11,400	1,840	1,110
5		6,800	13,200	7,350	9,530	1,790	1,110
6		8,670	13,200	7,120	9,150	1,980	1,040
7		8,550	12,600	7,080	7,980	3,310	4,850
8		8,950	11,500	7,270	6,650	2,530	7,500
9		9,080	11,700	7,690	6,170	2,540	15,800
10		7,690	9,880	8,930	6,310	2,010	32,900
11		6,170	7,350	9,270	7,880	2,140	28,900
12		5,580	5,920	9,050	8,070	3,210	29,400
13		5,210	5,240	8,470	5,960	2,320	25,500
14		4,310	5,190	8,610	5,620	2,020	36,400
15		3,600	6,830	7,840	4,370	1,880	26,000
16	1,190	3,030	9,820	7,200	3,780	1,580	17,400
17	1,820	2,730	11,600	8,650	3,280	1,530	14,400
18	1,590	2,500	13,800	7,670	2,840	1,390	10,300
19	1,340	2,710	15,200	7,180	2,550	1,190	11,600
20	1,210	2,710	16,000	8,210	2,280	1,100	14,600
21	1,250	3,110	14,900	8,670	2,110	1,000	8,670
22	1,290	3,630	13,200	7,500	1,910	1,110	6,620
23	1,050	4,530	12,700	6,740	1,840	1,270	5,780
24	1,000	5,190	12,400	6,310	2,000	900	5,530
25	1,120	6,580	11,000	5,970	2,080	870	6,580
26	1,620	8,470	10,100	5,990	2,820	1,720	9,980
27	2,660	10,300	10,400	6,130	2,800	3,820	9,980
28	3,250	11,000	10,800	20,500	4,690	3,380	7,400
29	3,680	10,900	10,100	24,000	2,960	3,750	6,490
30	4,040	11,200	9,310	52,000	2,790	2,500	6,040
31	4,500		8,290		2,380	2,000	

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
March 16-31	4,500	1,000	2,040	64,700
April	11,200	2,500	6,090	362,000
May	16,000	5,190	11,000	676,000
June	52,000	5,970	10,100	601,000
July	36,400	1,840	6,560	403,000
August	3,820	870	2,000	123,000
September	32,900	1,040	11,900	708,000
The period				2,940,000

PARIA RIVER BASIN

PARIA RIVER AT LEES FERRY, ARIZ.

LOCATION.—Staff gage half a mile above mouth and 1 mile northwest of Lees Ferry, Coconino County.

DRAINAGE AREA.—1,520 square miles.

RECORDS AVAILABLE.—November, 1923, to September, 1927.

EXTREMES.—Maximum discharge during year, 13,800 second-feet September 13 (gage height, 16.0 feet); no flow during night from December 16 to January 10.

1923-1927: Maximum discharge, 16,100 second-feet October 5, 1925 (gage height, 17.5 feet); no flow on several nights in December and January of most years.

REMARKS.—Records good. Discharge interpolated or estimated because of ice or missing gage-height record December 16 to January 10, January 19, 20, March 24, 26, 27, and July 1 and 15-25. Diversions for irrigation above station.

Daily and monthly discharge, in second-feet, 1926-27

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	39	21	19	11	16	103	12	3	2	19	34	16
2.....	14	23	19	11	15	64	12	2	2	14	38	12
3.....	14	22	20	9	21	59	13	2	2	10	410	10
4.....	14	20	18	9	22	192	15	2	2	8	209	19
5.....	13	22	19	10	20	114	16	2	2	6	38	19
6.....	12	20	21	11	19	75	10	2	2	6	145	19
7.....	12	16	23	10	16	75	9	1	2	4	680	256
8.....	12	15	34	9	16	73	7	2	2	4	163	24
9.....	12	15	28	10	15	80	5	2	2	3	176	12
10.....	12	15	26	10	14	71	5	2	3	55	38	10
11.....	12	14	27	25	15	71	5	2	3	8	27	8
12.....	14	15	19	30	14	67	5	2	4	6	25	2,490
13.....	14	236	26	36	13	66	4	2	5	310	20	6,750
14.....	14	114	24	34	12	59	5	2	25	11	18	1,590
15.....	15	24	25	32	27	62	4	2	6	2	13	420
16.....	14	21	25	30	247	54	5	2	4	1	10	44
17.....	14	20	26	33	406	50	5	2	4	1	10	272
18.....	16	14	13	32	89	45	6	2	4	1	9	157
19.....	16	15	17	31	32	28	5	2	5	1	11	55
20.....	14	14	12	31	25	20	5	3	3	1	6	12
21.....	15	14	14	30	17	32	5	2	3	1	8	6
22.....	15	14	12	27	20	26	5	2	2	1	9	1
23.....	16	14	1	30	89	26	5	2	2	1	8	272
24.....	16	13	9	18	44	26	4	2	2	1	8	54
25.....	16	12	11	15	44	26	4	2	1	1	7	40
26.....	16	12	12	22	66	24	4	2	2	490	2	40
27.....	17	12	14	21	69	21	4	2	189	247	1	38
28.....	17	195	14	21	119	19	3	2	26	114	1	25
29.....	18	73	12	21	-----	18	3	2	201	48	15	23
30.....	18	33	12	18	-----	18	3	2	24	38	80	19
31.....	19	-----	10	17	-----	13	-----	2	-----	39	19	-----

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	39	12	15.5	953
November.....	236	12	35.6	2,120
December.....	34	1	18.1	1,110
January.....	36	9	21.1	1,300
February.....	406	12	54.4	3,020
March.....	192	13	54.1	3,330
April.....	16	3	6.4	381
May.....	3	1	2.0	123
June.....	201	1	17.9	1,070
July.....	490	1	46.8	2,880
August.....	680	1	72.2	4,440
September.....	6,750	1	424	25,200
The year.....	6,750	1	63.4	45,900

LITTLE COLORADO RIVER BASIN

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, 1927.

EXTREMES.—Maximum discharge during year, 28,800 second-feet June 28 (gage height, 22.9 feet); no flow several days during January, May, and June.

1925-1927: Maximum discharge, that of June 28, 1927; no flow during periods of each year.

REMARKS.—Records good. Discharge estimated November 28-30, March 7-16, April 9-13, 27-30, May 1, 7-19, and August 25-26. Diversions for irrigation above station.

Daily and monthly discharge, in second-feet, 1926-27

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	210	10	17	3	20	2,560	1,890	450	0	868	135	355
2	135	13	18	2	19	2,410	1,290	391	0	545	125	743
3	100	18	17	1	20	1,700	1,110	314	0	355	125	235
4	85	28	19	0	19	1,410	1,040	256	0	270	380	75
5	80	38	20	0	18	1,290	1,250	194	0	678	355	60
6	80	31	20	0	21	1,350	1,810	170	0	655	185	1,600
7	63	28	18	0	28	1,300	1,800	155	0	420	207	2,960
8	47	23	18	7	28	1,200	1,550	145	0	310	320	1,120
9	41	20	23	34	25	1,100	1,370	135	0	250	179	1,730
10	34	18	23	319	23	1,000	1,190	125	0	220	150	1,330
11	26	17	22	242	38	1,100	1,010	115	0	766	113	1,370
12	23	16	18	150	46	1,100	840	105	0	655	96	4,670
13	22	16	18	102	42	1,000	670	95	0	330	1,360	8,190
14	22	18	21	80	38	900	495	85	35	210	270	4,870
15	21	20	14	65	35	900	355	75	12	179	185	2,620
16	21	18	9	56	31	900	249	65	0	168	256	1,390
17	20	17	11	55	35	1,450	210	55	0	150	115	3,220
18	17	18	13	44	5,400	1,230	145	45	0	145	226	5,540
19	15	18	18	35	5,480	880	170	35	0	143	200	5,680
20	15	18	20	28	3,280	715	270	26	0	137	150	4,030
21	13	17	24	26	2,340	630	414	15	0	137	93	1,910
22	12	17	42	22	1,910	655	674	0	0	139	70	1,220
23	12	17	16	22	1,930	545	775	0	0	137	55	830
24	12	16	12	20	2,020	515	775	0	0	134	50	650
25	12	16	7	25	1,980	495	805	0	0	124	50	490
26	11	15	9	28	1,970	733	805	0	0	126	75	400
27	10	14	10	32	1,720	1,430	730	0	0	220	1,190	310
28	10	15	9	33	2,230	1,840	660	0	3,730	751	1,120	230
29	9	16	8	32	---	1,860	590	0	12,700	400	956	170
30	8	17	6	28	---	1,840	520	0	2,170	545	565	120
31	9	---	4	22	---	1,750	---	0	---	250	1,150	---

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October	210	8	38.5	2,370
November	38	10	18.8	1,120
December	42	4	16.3	1,000
January	319	0	48.8	3,000
February	5,480	18	1,100	61,000
March	2,560	495	1,220	75,000
April	1,890	145	849	50,500
May	450	0	98.4	6,050
June	12,700	0	622	37,000
July	868	124	336	20,700
August	1,360	50	339	20,800
September	8,190	60	1,940	115,000
The year	12,700	0	544	394,000

ZUNI RIVER AT BLACKROCK, N. MEX.

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

DRAINAGE AREA.—660 square miles.

RECORDS AVAILABLE.—Yearly discharge July, 1903, to June, 1905; July, 1908, to June, 1910. Monthly discharge October, 1910, to September, 1927.

REMARKS.—No flow during part of year, but river is subject to sudden floods of considerable volume and usually of short duration. Diversions for irrigation above station. Record furnished by United States Indian Service.

Monthly run-off, 1926-27

Acre-feet		Acre-feet		Acre-feet	
October.....	0	March.....	7,310	August.....	950
November.....	0	April.....	0	September.....	4,200
December.....	60	May.....	410		
January.....	524	June.....	0	The year.....	16,100
February.....	1,840	July.....	788		

MOENKOPI WASH NEAR TUBA CITY, ARIZ.

LOCATION.—Staff gage 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.—2,280 square miles.

RECORDS AVAILABLE.—July, 1926, to September, 1927.

EXTREMES.—Maximum discharge during period of record, 12,900 second-feet September 17, 1927 (gage height, 24.0 feet); no flow several days.

REMARKS.—Records fair. Diversions for irrigation above station, none below.

Daily and monthly discharge, in second-feet, of Moenkopi Wash near Tuba City, Ariz., 1926-27

Day	July	Aug.	Sept.	Day	July	Aug.	Sept.	Day	July	Aug.	Sept.
1926				1926				1926			
1.....	*0	*8	*0	11.....	*0	7	6	21.....	*0	*0	5
2.....	*0	7	*0	12.....	*0	7	62	22.....	*0	*2	*6
3.....	*0	5	1	13.....	0	5	5	23.....	*0	4	*6
4.....	*0	20	1	14.....	*0	6	5	24.....	*0	5	7
5.....	*0	20	*3	15.....	*0	*3	5	25.....	*0	*4	7
6.....	*10	62	5	16.....	*0	0	5	26.....	*0	*2	760
7.....	*0	40	5	17.....	*0	0	3	27.....	7	1	13
8.....	*0	13	5	18.....	*0	*0	5	28.....	13	1	10
9.....	*0	10	5	19.....	*0	*0	*5	29.....	13	*1	*7
10.....	*0	7	5	20.....	*0	*0	5	30.....	10	1	*6
								31.....	10	1	----

* Interpolated or estimated.

Daily and monthly discharge, in second-feet, of Moenkopi Wash near Tuba City, Ariz., 1926-27—Continued

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1926-27												
1.....	5	5	*6	5	5	7	1	*0	*0	10	0	*10
2.....	5	5	5	*5	*5	*7	1	0	*0	5	20	10
3.....	*5	*5	7	5	*5	*7	*0	0	0	*8	*15	10
4.....	5	*5	7	5	5	7	0	*0	0	10	*10	*10
5.....	5	5	13	*6	5	7	0	*0	*0	16	10	10
6.....	*5	5	10	*6	*5	*6	*0	*0	0	*10	27	10
7.....	*5	*6	10	7	5	5	*0	*0	0	*5	*10	248
8.....	5	7	5	10	5	5	0	*0	*0	1	10	10
9.....	*5	7	5	*8	*5	*5	0	0	*0	1	27	27
10.....	*5	*6	5	7	*5	*5	*0	0	0	*5	*7	20
11.....	5	*6	5	7	5	5	0	*0	0	10	*7	*10
12.....	5	5	*6	*7	5	5	0	*0	13	10	62	155
13.....	*4	5	7	*7	5	*5	*0	0	10	4	36	98
14.....	4	*6	7	7	5	5	*0	0	0	*2	*10	*20
15.....	5	7	*6	7	5	5	0	*0	*0	0	10	*10
16.....	5	7	*6	*7	*5	*5	0	0	*0	0	16	10
17.....	*5	*7	5	7	*10	*5	*0	0	0	*0	*10	1,770
18.....	5	*7	5	10	13	5	0	*0	0	0	0	35
19.....	5	7	*5	*8	10	5	0	*0	*0	0	0	10
20.....	5	7	5	*7	*8	*4	*0	0	0	*0	0	10
21.....	5	*7	5	6	5	3	*0	0	0	*0	*0	7
22.....	5	7	*5	7	5	*3	0	*0	0	0	0	*7
23.....	5	7	*5	*7	5	*3	0	0	*0	0	0	7
24.....	*5	*7	5	7	5	*3	*0	0	0	*0	*0	*7
25.....	5	*7	5	6	5	*3	0	*0	0	0	52	*7
26.....	5	7	*5	*6	5	*3	0	*0	*0	0	1	7
27.....	*5	7	5	*5	*6	3	*0	0	0	*0	20	7
28.....	*5	*7	5	5	7	5	*0	0	760	*0	*10	*7
29.....	5	7	*5	5	5	5	0	*0	*20	10	10	*7
30.....	5	7	*5	5	5	*4	0	0	*10	7	10	7
31.....	*5	7	5	5	5	*2	0	0	0	*5	*10	0

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
1926				
July.....	13	0	2.0	123
August.....	62	0	7.8	480
September.....	760	0	32.1	1,910
The period.....				2,510
1926-27				
October.....	5	4	4.9	301
November.....	7	5	6.3	375
December.....	13	5	6.0	369
January.....	10	5	6.5	400
February.....	13	5	5.9	328
March.....	7	2	4.7	289
April.....	1	0	.1	4
May.....	0	0	0	0
June.....	760	0	27.1	1,610
July.....	16	0	3.8	234
August.....	62	0	12.3	756
September.....	1,770	7	85.4	5,080
The year.....	1,770	0	13.5	9,750

* Interpolated or estimated.

BRIGHT ANGEL CREEK BASIN

BRIGHT ANGEL CREEK NEAR GRAND CANYON, ARIZ.

LOCATION.—Staff gage in Grand Canyon of Arizona, 11 miles by trail from Grand Canyon, Coconino County, and a quarter of a mile above mouth.

DRAINAGE AREA.—102 square miles.

RECORDS AVAILABLE.—October, 1923, to September, 1927.

EXTREMES.—Maximum discharge during year, about 1,000 second-feet September 16 (gage height, 6.0 feet); minimum, 19 second-feet October 24 and 25 (gage height, 0.69 foot).

1923-1927: Maximum discharge, about 1,000 second-feet July 27, 1926, and September 16, 1927; minimum discharge, 16 second-feet October 26, 1925.

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

Daily and monthly discharge, in second-feet, 1926-27

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	23	22	23	22	23	37	35	341	53	32	30	23
2.....	24	22	24	22	23	43	39	311	51	29	26	24
3.....	22	22	25	22	23	28	37	309	50	29	23	23
4.....	22	21	25	22	23	30	45	327	46	33	68	24
5.....	22	21	27	22	23	29	53	295	43	29	22	24
6.....	21	21	26	22	23	31	57	297	40	29	21	25
7.....	22	21	26	22	23	34	63	285	41	28	20	24
8.....	29	21	29	23	23	31	76	243	38	28	21	24
9.....	26	21	26	23	23	27	85	193	37	28	20	24
10.....	22	20	25	22	23	32	80	153	36	29	20	24
11.....	22	22	25	23	24	36	70	132	37	27	20	23
12.....	22	23	26	24	24	29	54	125	38	28	21	34
13.....	22	29	25	24	23	26	45	131	37	28	20	32
14.....	21	23	25	23	24	26	43	159	50	27	22	28
15.....	22	23	24	22	29	25	41	173	36	27	22	25
16.....	21	22	24	23	254	26	38	173	35	26	22	127
17.....	21	22	25	23	90	24	39	172	33	25	22	35
18.....	20	21	24	22	45	24	37	169	33	25	22	29
19.....	22	20	23	22	29	23	38	164	33	25	22	29
20.....	21	21	25	21	23	23	50	156	32	25	22	27
21.....	20	20	25	21	27	23	71	128	30	25	22	26
22.....	21	21	25	21	28	24	100	117	31	25	23	25
23.....	21	22	26	21	34	23	143	101	31	25	23	25
24.....	20	23	25	20	30	28	183	87	31	25	23	26
25.....	20	23	26	21	27	30	183	81	31	26	25	26
26.....	20	23	25	21	33	31	203	77	31	25	24	26
27.....	20	29	24	23	90	36	254	74	32	25	72	26
28.....	22	24	23	23	121	33	270	72	39	25	25	26
29.....	21	23	22	22	-----	34	417	67	33	25	26	26
30.....	22	23	22	23	-----	37	389	63	33	23	23	26
31.....	22	-----	22	23	-----	37	-----	56	-----	23	-----	-----

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	29	20	21.8	1,340
November.....	29	20	22.3	1,330
December.....	29	22	24.7	1,520
January.....	24	20	22.2	1,360
February.....	254	23	42.3	2,350
March.....	43	23	29.7	1,830
April.....	417	35	108	6,430
May.....	341	56	169	10,400
June.....	53	30	37.4	2,230
July.....	33	23	26.7	1,640
August.....	72	20	25.6	1,570
September.....	127	23	29.5	1,760
The year.....	417	20	46.6	33,800

VIRGIN RIVER BASIN

VIRGIN RIVER AT VIRGIN, UTAH

LOCATION.—Chain gage in NW. $\frac{1}{4}$ sec. 27 or NE. $\frac{1}{4}$ sec. 28, T. 41 S., R. 12 W., three-quarters of a mile west of Virgin.

DRAINAGE AREA.—1,010 square miles.

RECORDS AVAILABLE.—April, 1909, to September, 1927; fragmentary.

EXTREMES.—1909–1927: Maximum discharge (estimated), 12,000 second-feet October 27, 1912 (gage height, 11.6 feet); minimum, 24 second-feet July 1, 2, 4, and 5, 1909.

REMARKS.—Records poor. Mean discharge estimated November, December, February, and March. Diversions for irrigation above station.

Daily and monthly discharge, in second-feet, 1926–27.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1		102						433	184	73	95	109
2	109		125		165		330	406	165	68	184	102
3	116					293		572	165	73	95	130
4		84	130	148	174			601	174	95	95	123
5						247	446	419	123	73	84	116
6	102	79		156			515	616	109	55	293	205
7			380					380	102	73	165	148
8		84	123	148	165	225		558	95	73	259	165
9	90						473	406	109	156	116	130
10		90		130	156	174		529	84	148	109	123
11	84		148				342	368	116	116	109	139
12					215	165		342	165	84	174	1,000
13		669		156				480	215	90	102	3,500
14			148		236		281	419	174	68	60	406
15	95	123		165	342	225		406	236	79	95	368
16	73						305	473	130	73	102	400
17			156		754	194		400	109	73	123	270
18	95	116	156				259	355	102	79	90	259
19			156	156	236	184	270	368	90	79	95	184
20		130						342	84	79	79	174
21	90			259	205	184	305	259	79	84	84	225
22		116		194			393	247	79	90	79	355
23	79					194	558	259	79	68	90	473
24				156	165		387	225	73	90	84	305
25	90	318	148				1,000	194	79	281	95	236
26			205		236	330	646	165	79	305	393	194
27		1,560		225			515	184	79	393	616	225
28	84				225		529	215	84	95	1,200	236
29		123	130	156		355	677	194	79	84	616	247
30	84			165			419	194	68	73	205	236
31	84		165			342		184		68	139	

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October			92.2	5,670
November			200	11,900
December			155	9,530
January			165	10,100
February			240	13,300
March			240	14,800
April	1,000	259	421	25,100
May	616	165	362	22,300
June	236	68	117	6,960
July	393	55	108	6,640
August	1,200	60	198	12,200
September	3,500	102	359	21,400
The year	3,500	55	220	160,000

SURFACE WATER SUPPLY, 1927, PART IX

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, 1927.

REMARKS.—Records fair. Daily discharge April 27 and July 9 and mean discharge for November, December, February, March, May, and September estimated. About 4 second-feet diverted above station.

Daily and monthly discharge, in second-feet, 1926-27

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	52								109	62	67	
2	52	49						421	108	60	51	
3	52			74					108	60	50	
4		48	186				174		108	58	48	46
5	51				67				106	57	47	44
6			211						101	56	92	43
7	51							384	98	55	100	42
8				67	63		224		93	56	63	42
9		50						284	88	200	55	41
10			163	65					92	70	52	41
11	52						224		93	63	191	
12		211			70				106	61	57	
13			136					255	103	57	49	
14					142				120	51	48	
15		68		62					114	49	46	
16		68		62	650		198	214	103	46	43	
17		66	114						90	46	41	
18		67					211		87	46	40	
19	50	63			497	123			80	47	42	
20		62							76	48	42	
21			90			111	198	177	72	47	42	
22		61		62	98		272		70	47	41	
23		60						165	66	48	41	
24		60		62					63	50	41	
25	52	216	62			142			61	460	41	98
26		152			90		510		66	57	49	92
27		302	67				700	144	72	70	52	88
28	49				82	114	680		70	63	155	88
29				62			801	121	66	61	70	87
30		68				186	543		62	58	60	86
31			72	62						55	50	

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October			50.9	3,130
November			85	5,060
December			110	6,760
January			64.7	3,980
February			175	9,720
March			130	7,990
April	700		280	16,700
May			245	15,000
June	120	61	88.4	5,280
July	460	46	73.0	4,490
August	191	40	60.2	3,700
September			115	6,840
The year			125	88,600

VIRGIN RIVER BASIN

61

SANTA CLARA CREEK NEAR CENTRAL, UTAH

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

DRAINAGE AREA.—84 square miles.

RECORDS AVAILABLE.—April, 1909, to September, 1927.

EXTREMES.—Maximum discharge during year, 65 second-feet February 26 (gage height, 1.78 feet); minimum, 6 second-feet August 22 (gage height, 1.02 feet).

1909–1927: Maximum discharge, 1, 450 second-feet October 6, 1916 (gage height, 5.00 feet); minimum, 4 second-feet January 8, 1920, and January 6–11 and 19, 1926.

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

Daily and monthly discharge, in second-feet, 1926–27

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	8	10	11	8	9	20	13	21	20	11	8	8
2	8	10	11	8	9	14	13	14	21	11	7	8
3	8	9	11	9	9	17	18	27	19	11	7	8
4	8	9	11	9	9	27	24	29	17	11	7	7
5	8	9	10	11	9	24	23	32	15	11	7	7
6	8	9	10	9	9	20	23	34	13	11	7	7
7	8	9	10	9	9	13	24	32	15	11	7	7
8	8	9	11	9	9	13	25	24	15	11	7	7
9	8	9	11	9	9	12	26	21	17	11	7	7
10	8	10	10	9	9	12	21	17	17	11	7	7
11	9	10	10	9	8	11	19	14	17	11	7	7
12	9	10	10	9	9	11	17	11	18	11	7	7
13	9	9	9	9	9	11	17	18	23	11	7	10
14	10	9	9	9	10	12	17	22	17	11	6	8
15	10	9	9	9	10	14	16	25	24	11	6	8
16	10	9	9	9	28	11	16	29	18	11	6	7
17	10	9	9	9	29	11	15	32	17	10	6	7
18	10	10	9	9	23	11	14	33	16	8	6	7
19	10	11	9	9	19	11	14	34	16	7	7	7
20	9	11	8	9	17	10	14	32	16	7	6	7
21	9	11	8	9	16	11	15	26	15	7	6	7
22	10	11	8	9	28	12	16	21	14	7	6	7
23	11	11	8	9	41	13	18	16	14	8	6	7
24	12	11	9	9	41	17	24	15	14	8	6	7
25	12	11	9	9	29	18	32	13	13	9	6	7
26	12	11	9	9	65	22	32	21	12	8	6	7
27	11	11	9	9	45	26	32	21	11	8	6	7
28	11	11	9	9	30	20	32	21	11	8	7	7
29	10	11	9	9	15	15	21	20	11	8	7	7
30	10	11	9	9	14	15	20	11	8	7	7	7
31	10	9	9	9	13	13	20	20	8	8	8	7

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October	12	8	9.5	584
November	11	8	10.0	595
December	11	8	9.5	584
January	11	8	9.0	553
February	65	8	19.5	1,080
March	27	10	15.0	922
April	32	13	20.2	1,200
May	34	11	23.1	1,420
June	24	11	15.9	946
July	11	7	9.5	584
August	8	6	6.6	466
September	10	7	7.3	434
The year	65	6	12.9	9,310

• Estimated.

GILA RIVER BASIN

GILA RIVER AT VIRDEN BRIDGE, NEAR DUNCAN, ARIZ.

LOCATION.—Water-stage recorder in SE. $\frac{1}{4}$ NE. $\frac{1}{4}$ sec. 13, T. 19 S., R. 21 W., at Virden Bridge, N. Mex., 12 miles east of Duncan, Ariz.

DRAINAGE AREA.—3,280 square miles.

RECORDS AVAILABLE.—October, 1926, to September, 1927, at present site; January, 1923, to September, 1926, at a point 2 miles upstream, published as "Gila River near Duncan, Ariz." May, 1914, to September, 1915, at station 4 miles upstream and one-fourth mile above intake of Sunset Canal

EXTREMES.—Maximum discharge during year, 1,800 second-feet July 4 (gage height, 5.9 feet); no flow June 19 to July 3.

REMARKS.—Records good. Discharge estimated June 25 to July 9. Diversions for irrigation above station. Station is above all diversions for Duncan Valley except Sunset Canal.

Daily and monthly discharge, in second-feet, 1926-27

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1									26	0	195	26
2		207								0	132	33
3						476				0	115	24
4											128	18
5											172	13
6										280	141	22
7					112						111	13
8											93	55
9											70	60
10								125		115	164	66
11										126	111	54
12										115	71	233
13	98									191	56	581
14				217						133	38	678
15									1	73	32	573
16			250						2	58	123	466
17									1	47	141	359
18									1	38	70	365
19									0	28	585	687
20							164		0	16	346	765
21									0	5	304	642
22									0	2	339	499
23									0	1	192	393
24									0	3	166	278
25									0	32	159	264
26		66							0	59	109	207
27									0	74	73	162
28						196			0	191	53	128
29									0	359	43	113
30									0	482	35	101
31										297	28	

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
June 15-30	2	0	0.3	10
July		0	133	8,180
August	585	28	142	8,730
September	765	13	263	15,600
The period				32,500

GILA RIVER BELOW DUNCAN, ARIZ.

LOCATION.—In NE. $\frac{1}{4}$ sec. 14, T. 8 S., R. 31 E., half a mile upstream from heading of Colmonero Canal and $2\frac{1}{2}$ miles northwest of Duncan.

RECORDS AVAILABLE.—September, 1926, to September, 1927; discharge measurements only.

REMARKS.—Below all diversions in Duncan Valley except Colmonero Canal.

Discharge measurements of Gila River below Duncan, Ariz., 1926-27

	Sec.-ft.		Sec.-ft.		Sec.-ft.
Sept. 23.....	19.4	Feb. 7.....	124	June 16.....	16.5
Oct. 12.....	89	Mar. 29.....	155	July 22.....	10.7
Nov. 3.....	200	Apr. 19.....	165	Aug. 9.....	60
Nov. 27.....	73	May 9.....	132	Sept. 1.....	14.8
Dec. 17.....	269	May 31.....	42.1	Sept. 29.....	137
Jan. 13.....	202				

GILA RIVER AT YORK, ARIZ.

LOCATION.—In SE. $\frac{1}{4}$ sec. 19, T. 6 S., R. 31 E., at York, below all diversions from Gila River above San Francisco River.

DRAINAGE AREA.—3,920 square miles.

RECORDS AVAILABLE.—May, 1923, to September, 1927; discharge measurements only.

REMARKS.—Diversion for irrigation above station.

Discharge measurements of Gila River at York, Ariz., 1926-27

	Sec.-ft.		Sec.-ft.		Sec.-ft.
Oct. 12.....	87	Mar. 4.....	444	June 17.....	10.8
Nov. 3.....	222	Mar. 29.....	113	July 22.....	13.8
Nov. 26.....	55	Apr. 19.....	159	Aug. 9.....	66
Dec. 17.....	242	May 9.....	73	Sept. 1.....	16.6
Jan. 13.....	184	May 31.....	12.5	Sept. 30.....	112
Feb. 8.....	99				

* Made 300 feet above York Canal intake.

GILA RIVER NEAR SOLOMONSVILLE, ARIZ.

LOCATION.—Water-stage recorder in NE. $\frac{1}{4}$ sec. 31, T. 6 S., R. 28 E., 10 miles east of Solomonville and 11 miles below mouth of San Francisco River.

DRAINAGE AREA.—7,910 square miles.

RECORDS AVAILABLE.—April, 1914, to September, 1927.

EXTREMES.—Maximum discharge during year, 10,700 second-feet September 13 (gage height, 6.08 feet); minimum, 43 second-feet June 26 (gage height, 0.99 foot).

1914-1927: Maximum discharge, about 100,000 second-feet January 19, 1916 (gage height, 14.0 feet); minimum, 26 second-feet July 4, 1923.

REMARKS.—Records good. Diversions for irrigation above station. Above all diversions for Safford Valley except Brown Canal. Brown Canal waterway returns water to river below station. Discharge interpolated October 11-24 and July 15-21.

Daily and monthly discharge, in second-feet, of Gila River near Solomonsville, Ariz., 1926-27

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	233	549	172	190	228	1,140	412	420	82	64	367	125
2.....	403	540	164	200	233	1,020	469	390	78	57	314	126
3.....	328	420	164	204	238	1,090	503	375	74	54	289	98
4.....	347	360	172	214	255	1,040	512	340	73	56	431	93
5.....	308	314	204	224	249	958	520	308	71	259	555	87
6.....	238	284	347	233	233	847	486	289	71	474	550	91
7.....	195	272	302	238	233	769	444	278	67	417	402	87
8.....	252	266	382	255	238	653	428	284	65	375	566	133
9.....	249	249	570	238	238	570	420	295	60	368	401	184
10.....	244	244	590	302	233	600	420	295	58	244	618	270
11.....	237	224	503	321	219	834	452	284	65	183	398	254
12.....	231	219	444	321	228	697	478	255	100	312	238	2,160
13.....	224	219	405	314	255	610	469	244	112	735	168	5,320
14.....	218	219	452	321	295	620	420	224	98	255	125	1,840
15.....	211	214	560	295	308	730	390	195	85	224	110	1,370
16.....	204	204	469	302	665	902	347	190	76	200	207	916
17.....	198	200	375	302	1,870	1,030	314	179	71	176	906	1,070
18.....	191	195	302	295	2,840	972	314	175	65	152	804	1,040
19.....	185	200	284	284	2,050	874	405	164	60	129	849	1,580
20.....	178	195	289	278	1,380	782	375	160	57	105	1,230	1,610
21.....	171	190	340	261	1,150	697	412	153	54	81	1,580	1,090
22.....	165	183	340	249	1,080	631	428	145	52	57	660	930
23.....	158	175	354	238	1,040	580	444	131	51	54	470	675
24.....	152	168	368	224	1,030	520	428	128	48	67	940	512
25.....	145	164	340	238	1,120	469	444	122	46	85	330	428
26.....	139	164	302	244	1,140	460	460	115	44	150	295	412
27.....	133	157	255	219	1,190	428	452	105	56	305	322	334
28.....	131	164	249	219	1,180	428	452	100	57	570	343	278
29.....	128	164	228	219	-----	412	435	93	58	417	183	249
30.....	189	172	214	214	-----	390	452	91	71	1,100	153	224
31.....	328	-----	190	219	-----	390	-----	89	-----	614	131	-----

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	403	128	217	13,300
November.....	549	157	243	14,500
December.....	590	164	333	20,590
January.....	321	190	254	15,610
February.....	2,840	219	765	42,501
March.....	1,140	390	714	43,900
April.....	520	314	433	25,800
May.....	420	89	213	13,100
June.....	112	44	67.5	4,020
July.....	1,100	54	269	16,500
August.....	1,580	110	482	29,600
September.....	5,320	87	786	46,800
The year.....	5,320	44	395	286,000

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, 1927; discharge measurements only.

REMARKS.—Below all diversions in Safford Valley.

Discharge measurements of Gila River near Ashurst, Ariz., 1926-27

	Sec.-ft.		Sec.-ft.		Sec.-ft.
Oct. 14.....	76	Feb. 4.....	98	June 9.....	6.1
Oct. 29.....	9.7	Mar. 23.....	238	June 29.....	4.9
Nov. 20.....	84	Apr. 14.....	35.1	July 26.....	44.6
Dec. 11.....	414	May 4.....	22.0	Aug. 24.....	49.5
Jan. 11.....	178	May 23.....	10.9	Sept. 27.....	270

GILA RIVER AT COOLIDGE DAM, ARIZ.*

LOCATION.—Water-stage recorder in SW. $\frac{1}{4}$ sec. 17, T. 3. S., R. 18 E., unsurveyed, 600 feet below Coolidge Dam and $8\frac{1}{2}$ miles below San Carlos River. Zero of gage is 2,309.5 feet above mean sea level.

DRAINAGE AREA.—12,900 square miles.

RECORDS AVAILABLE.—April, 1914, to September, 1927. July, 1899, to November, 1905, at point 8 miles upstream. August, 1910, to February, 1911, at point 9 miles upstream.

EXTREMES.—Maximum discharge during year, 9,100 second-feet February 17 (gage height, 11.9 feet); minimum, 0.4 second-foot June 24 and 25.

1914-1927: Maximum discharge (estimated), 130,000 second-feet January 20, 1916 (gage height, 25.5 feet); no flow June 28 to July 1, 1919, and July 8-10, August 31, and September 3-10, 1926.

REMARKS.—Records good. Discharge estimated or partly estimated February 2-11 and September 29, 30. Diversions for irrigation above station. Flow not yet regulated at Coolidge Dam.

Daily and monthly discharge, in second-feet, 1926-27

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	185	311	118	287	150	952	112	118	7	3	223	112
2.....	162	400	126	275	150	890	103	113	6	4	112	75
3.....	164	389	139	293	150	815	98	102	5	4	79	53
4.....	278	332	158	293	155	746	92	100	5	3	71	95
5.....	217	319	191	278	155	655	91	89	4	4	205	57
6.....	195	306	207	296	155	595	97	79	4	61	73	180
7.....	161	290	241	293	160	557	87	68	3	90	69	109
8.....	156	283	319	281	160	503	82	62	3	478	79	36
9.....	151	261	298	278	160	417	67	68	2	306	77	26
10.....	134	239	383	287	160	907	64	61	2	95	88	52
11.....	139	234	454	270	160	1,520	60	65	30	83	81	127
12.....	144	222	442	278	172	1,480	66	63	101	65	376	2,300
13.....	124	217	763	284	191	1,030	76	56	52	40	112	3,010
14.....	109	201	816	265	896	884	88	48	27	172	152	2,450
15.....	105	176	398	250	5,520	724	102	43	18	112	102	1,260
16.....	99	170	409	223	3,290	580	98	33	12	44	112	1,010
17.....	90	154	374	227	4,910	562	97	30	8	14	73	930
18.....	76	146	335	202	3,270	590	117	28	6	9	271	1,030
19.....	69	147	314	180	3,360	539	127	22	4	8	432	1,120
20.....	68	151	293	167	2,290	485	140	18	3	5	720	1,330
21.....	57	159	305	162	1,600	437	140	17	2	2	570	1,330
22.....	54	154	320	147	1,430	388	147	16	1	1	376	990
23.....	55	149	349	132	1,250	326	145	16	1	8	570	850
24.....	50	140	388	124	1,090	270	158	15	1	2	340	714
25.....	51	135	346	132	1,030	243	178	14	1	4	260	558
26.....	50	132	332	134	1,020	196	196	12	1	6	226	460
27.....	56	129	329	132	959	170	173	10	1	27	235	412
28.....	55	121	311	126	1,020	152	162	8	2	500	288	364
29.....	56	118	308	124	-----	141	138	8	2	302	360	300
30.....	81	120	299	118	-----	128	134	7	1	140	211	255
31.....	280	-----	287	115	-----	122	-----	7	-----	316	158	-----

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	280	50	118	7,260
November.....	400	118	210	12,500
December.....	816	118	334	20,500
January.....	296	115	215	13,200
February.....	5,520	150	1,250	69,400
March.....	1,520	122	581	35,700
April.....	196	60	114	6,780
May.....	118	7	45.0	2,770
June.....	101	1	10.5	625
July.....	500	1	93.8	5,770
August.....	720	69	229	14,100
September.....	3,010	26	720	42,800
The year.....	5,520	1	320	231,000

* Previously published as "Gila River near San Carlos, Ariz."

SURFACE WATER SUPPLY, 1927, PART IX

GILA RIVER AT KELVIN, ARIZ.

LOCATION.—Water-stage recorder in sec. 12, T. 4 S., R. 13 E., at Kelvin, 15 miles downstream from mouth of San Pedro River.

DRAINAGE AREA.—18,100 square miles.

RECORDS AVAILABLE.—January, 1911, to September, 1927.

EXTREMES.—Maximum discharge during year, 8,350 second-feet February 18 (gage height, 6.09 feet); minimum, 5 second-feet July 5 (gage height, 2.18 feet).

1911-1927: Maximum discharge, about 132,000 second-feet January 20, 1916 (gage height, 19.5 feet); flow less than 1 second-foot during summers of several years.

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

Daily and monthly discharge, in second-feet, 1926-27

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,220	315	201	311	154	1,350	183	144	16	7	392	232
2	824	325	201	297	207	1,090	160	123	17	6	264	177
3	470	476	195	311	251	1,060	149	112	15	6	304	133
4	521	408	225	360	304	1,020	144	95	15	6	213	99
5	512	384	290	360	304	938	133	95	15	33	756	123
6	424	376	353	339	270	873	123	87	12	170	244	173
7	368	368	384	325	284	812	138	83	10	708	91	408
8	384	346	503	318	264	764	144	78	10	893	463	571
9	360	332	416	346	270	696	133	78	9	1,250	446	408
10	1,660	339	376	332	232	1,440	128	70	9	600	260	384
11	641	284	424	353	219	3,030	123	67	20	408	200	424
12	416	277	449	368	264	1,380	128	60	133	213	360	3,350
13	332	258	824	332	800	873	117	62	112	112	368	3,960
14	325	264	1,090	339	1,400	977	112	60	78	70	332	3,930
15	304	251	467	311	4,590	1,000	123	52	65	144	677	1,350
16	284	225	353	304	4,600	912	133	49	60	123	366	951
17	264	219	332	304	4,770	740	144	47	47	78	280	860
18	238	183	311	325	4,600	740	201	44	37	49	596	1,180
19	213	165	290	290	3,810	740	213	42	30	37	705	1,160
20	183	189	304	290	2,770	685	189	37	26	57	422	1,120
21	165	195	332	258	1,960	641	207	27	22	26	672	1,190
22	154	207	392	238	1,720	600	183	22	18	16	353	990
23	144	207	560	213	1,700	521	201	19	15	12	357	729
24	144	213	512	177	1,570	440	177	19	15	28	512	718
25	138	201	292	177	1,610	416	183	20	15	75	332	641
26	133	171	346	189	1,550	368	201	16	17	177	325	503
27	133	189	332	195	1,530	332	219	15	18	83	339	503
28	144	189	297	177	1,400	284	207	13	30	83	508	408
29	149	177	297	171	-----	258	189	14	11	376	1,020	408
30	592	177	290	171	-----	213	154	15	8	189	346	360
31	265	-----	311	154	-----	195	-----	16	-----	201	297	-----

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October	1,660	133	394	24,200
November	476	165	264	15,700
December	1,090	195	389	23,900
January	368	154	279	17,200
February	4,770	154	1,550	86,100
March	3,030	195	819	50,400
April	219	112	161	9,580
May	144	13	54.2	3,330
June	133	8	30.2	1,800
July	1,250	6	201	12,400
August	1,020	91	413	25,400
September	3,960	99	915	54,400
The year	4,770	6	448	324,000

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.—18,400 square miles.

RECORDS AVAILABLE.—July, 1923, to September, 1927.

EXTREMES.—Maximum stage during year, 2.4 feet September 12; no flow over dam several days.

1923-1927: Maximum stage, 8.0 feet September 28, 1926; no flow over dam several days each year.

REMARKS.—Diversions for irrigation above station. Gage-height record furnished by United States Indian Service.

Daily height, in feet, 1926-27

Day	Oct.	Nov.	Dec.	Feb.	Mar.	June	July	Aug.	Sept.
1.....	0.67	0.15	-----	-----	0.86	-----	-----	0.15	-----
2.....	.00	.33	-----	-----	.86	-----	-----	-----	-----
3.....	-----	.44	-----	-----	.80	-----	-----	-----	-----
4.....	-----	.52	-----	-----	.77	-----	-----	-----	-----
5.....	-----	.59	-----	-----	.69	-----	-----	1.08	-----
6.....	-----	.56	a 0.00	-----	.61	-----	a 0.00	a. 20	-----
7.....	.35	.53	-----	-----	.57	-----	-----	-----	0.30
8.....	.35	.52	a. 00	-----	.54	-----	.95	a. 70	.30
9.....	.10	.50	.21	-----	.45	-----	1.25	.33	.28
10.....	.23	.50	.00	-----	.93	-----	.50	-----	a. 20
11.....	.65	.47	.15	-----	1.70	-----	.10	-----	a. 30
12.....	.37	.00	.30	a 0.00	1.50	a 0.00	-----	-----	2.00
13.....	.28	.00	.80	.58	1.00	-----	-----	a. 10	2.05
14.....	.18	.00	.99	1.05	.87	-----	-----	-----	1.80
15.....	-----	.00	.67	1.50	.89	-----	-----	a 1.00	1.15
16.....	a. 00	a. 00	.47	1.75	.86	-----	-----	a. 30	.90
17.....	-----	-----	.38	1.60	.76	-----	-----	a. 00	.80
18.....	-----	-----	.34	1.80	.68	-----	-----	.45	.95
19.....	-----	-----	.30	1.55	.69	-----	-----	.85	1.10
20.....	-----	-----	.10	1.30	.64	-----	-----	.65	.82
21.....	-----	-----	.00	.98	.57	-----	-----	.80	.95
22.....	-----	-----	.25	.85	.52	-----	-----	.50	.86
23.....	-----	-----	.32	.83	.46	-----	-----	.20	.73
24.....	-----	-----	.32	.85	.33	-----	-----	.45	.71
25.....	-----	-----	.25	.89	.10	-----	-----	.25	.70
26.....	-----	-----	.15	.89	.10	-----	-----	.10	.60
27.....	-----	-----	.00	.88	a. 10	-----	-----	.10	.54
28.....	-----	-----	.00	.90	-----	-----	-----	a. 20	.50
29.....	-----	-----	a. 00	-----	-----	-----	.22	1.18	.28
30.....	a. 90	-----	-----	-----	-----	-----	-----	.42	.20
31.....	.38	-----	-----	-----	-----	-----	a. 00	.10	-----

a Water over crest for part of day only.

NOTE.—Figures show height of water on crest of dam. Water below crest on days for which no gage 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 mouth of Hassayampa River. Zero of gage is at crest of dam and is 753.8 feet above mean sea level.

DRAINAGE AREA.—48,100 square miles.

RECORDS AVAILABLE.—August, 1921, to September, 1927.

EXTREMES.—Maximum discharge during year, 67,300 second-feet February 18 (gage height, 5.45 feet); no flow several days during year.
1921-1927: Maximum discharge, 70,000 second-feet December 28, 1923 (gage height, 6.0 feet); no flow several days 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. Flow partly regulated by storage reservoirs.

Daily and monthly discharge, in second-feet, 1926-27

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	3,970	0	90	1,550	60	4,490	0	0	0	0	0	210
2.....	2,920	70	90	1,500	40	4,430	0	0	0	0	0	2
3.....	2,580	90	90	1,400	30	2,900	0	0	0	0	0	0
4.....	1,740	110	130	1,080	30	2,290	0	0	0	0	0	0
5.....	1,220	130	285	1,000	30	2,000	0	0	0	28	0	0
6.....	920	110	440	960	66	2,000	0	0	0	16	0	0
7.....	880	150	3,240	1,000	126	1,700	0	0	0	0	0	0
8.....	765	210	5,060	960	20	1,320	0	0	0	0	0	0
9.....	660	190	1,650	840	3	1,000	0	0	0	0	0	4
10.....	560	150	1,240	840	4	840	0	0	0	0	0	0
11.....	635	190	1,200	765	49	695	0	0	0	122	0	0
12.....	1,280	210	1,000	765	170	2,780	0	0	0	51	0	0
13.....	765	190	960	590	285	3,700	0	0	0	0	0	22,100
14.....	695	210	1,260	500	730	2,950	0	0	0	0	0	11,500
15.....	440	235	2,350	440	7,410	2,250	0	0	0	0	0	6,120
16.....	385	130	2,200	410	23,700	2,350	9	0	0	0	0	3,010
17.....	310	110	1,850	360	51,200	2,700	170	0	0	0	0	1,620
18.....	285	110	1,550	260	60,000	1,550	282	0	0	0	0	1,750
19.....	170	90	1,360	260	38,700	1,040	360	0	0	0	0	1,450
20.....	150	110	1,360	235	20,200	695	310	0	0	0	0	1,200
21.....	90	90	1,400	235	10,900	560	260	0	0	0	6	1,000
22.....	90	90	1,360	210	7,780	500	92	0	0	0	45	840
23.....	75	90	1,280	235	6,440	410	28	0	0	0	46	920
24.....	110	75	1,500	210	5,970	335	0	0	0	0	49	880
25.....	175	75	1,800	170	5,460	260	0	0	0	0	0	625
26.....	75	75	1,550	110	5,060	210	0	0	0	0	0	440
27.....	45	75	1,500	75	4,200	206	0	0	0	0	0	293
28.....	30	90	1,360	60	4,770	274	0	0	0	0	0	190
29.....	4	150	1,550	60	-----	75	0	0	0	0	0	130
30.....	0	110	1,650	60	-----	45	0	0	0	0	0	75
31.....	0	-----	1,600	75	-----	30	-----	0	-----	0	71	-----

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	3,970	0	710	43,700
November.....	235	0	124	7,380
December.....	5,060	90	1,420	87,300
January.....	1,550	60	555	34,100
February.....	60,000	3	9,050	503,000
March.....	4,490	30	1,500	92,200
April.....	360	0	50.4	3,000
July.....	122	0	7.0	430
August.....	71	0	7.0	430
September.....	22,100	0	1,810	108,000
The year.....	60,000	0	1,210	880,000

GILA RIVER BASIN

69

SUNSET CANAL NEAR DUNCAN, ARIZ.

LOCATION.—Staff gage in NE. $\frac{1}{4}$ sec. 18, T. 19 S., R. 20 W., in New Mexico, 2 miles below intake and 14 miles east of Duncan, Ariz.

RECORDS AVAILABLE.—October, 1914, to September, 1915; July, 1922, to September, 1927.

REMARKS.—Records good. Discharge interpolated March 31, April 1 and 28. Intake on right side of Gila River in NW. $\frac{1}{4}$ sec. 21, T. 19 S., R. 20 W., New Mexico, on Gila River. Water used for irrigation near Virden. Diversions from canal above station.

Daily and monthly discharge, in second-feet, 1926-27

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

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	41	0	16.3	1,000
November.....	39	10	28.2	1,680
December.....	36	7	23.4	1,440
January.....	35	11	25.6	1,570
February.....	35	18	30.0	1,670
March.....	42	0	28.5	1,750
April.....	46	40	42.8	2,550
May.....	50	37	44.1	2,710
June.....	51	17	29.3	1,740
July.....	52	15	40.2	2,470
August.....	47	11	35.3	2,170
September.....	45	0	30.3	1,800
The year.....	52	0	31.2	22,600

COSPER-WINDHAM CANAL NEAR DUNCAN, ARIZ.

LOCATION.—Staff gage in NW. $\frac{1}{4}$ sec. 11, T. 19 S., R. 21 W., in New Mexico, three-quarters of a mile below intake and 9 miles east of Duncan, Ariz.

RECORDS AVAILABLE.—October, 1914, to September, 1915; July, 1922, to September, 1927 (discontinued).

REMARKS.—Records good. Discharge interpolated April 4-6 and July 17. Intake on right side of Gila River in SW. $\frac{1}{4}$ sec. 11, T. 19 S., R. 21 W., New Mexico. Water used for irrigation near Virden. Diversions from canal above station.

Daily and monthly discharge, in second-feet, 1926-27

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	14	0	12	5.2	17	13	24	0	7.6	0	0	3.6
2.....	17	0	12	5.2	17	11	23	12	7.0	0	0	4.3
3.....	17	0	12	5.1	16	10	18	26	2.4	0	7.4	4.7
4.....	17	0	11	4.8	18	9.1	19	26	2.4	4.0	6.1	11
5.....	16	0	11	4.8	18	4.2	20	27	4.2	12	7.1	4.9
6.....	16	0	11	5.1	20	0	20	28	3.0	14	6.2	5.1
7.....	16	0	12	5.5	18	0	21	28	3.8	8.2	4.7	1
8.....	16	0	11	5.2	9.6	0	18	28	2.1	14	2.4	17
9.....	14	0	11	4.8	0	0	20	29	1.8	12	4.0	19
10.....	11	0	9.9	6.2	0	0	7.7	26	1.8	12	8.1	13
11.....	11	0	9.5	9.3	0	0	.9	22	.8	13	10	12
12.....	11	0	9.0	9.3	0	0	0	23	.9	11	6.6	0
13.....	10	0	4.4	9.5	0	0	0	21	0	11	4.3	0
14.....	10	0	0	9.5	3.2	3.0	1.6	23	0	19	3.7	0
15.....	10	7.2	3.6	9.5	9.0	14	3.1	26	0	17	3.6	0
16.....	10	15	8.1	9.5	8.8	19	7.6	22	2.0	17	16	0
17.....	10	15	8.6	9.1	20	18	13	23	3.5	14	17	0
18.....	10	15	9.0	9.0	14	20	18	22	4.4	11	5.6	0
19.....	10	14	9.5	8.2	2.3	19	20	24	1.0	9.1	0	C
20.....	7.9	14	9.3	8.4	2.5	18	17	23	.4	5.8	0	0
21.....	5.9	15	7.2	12	1.2	18	15	23	0	.9	0	0
22.....	5.8	14	5.8	18	6.5	18	16	22	0	0	0	0
23.....	5.8	13	5.9	17	16	18	18	21	0	0	.3	0
24.....	5.6	13	6.2	12	14	24	18	19	0	0	6.8	0
25.....	8.8	13	6.1	9.5	12	22	20	23	0	20	6.8	0
26.....	13	13	5.6	11	12	25	20	23	2.6	11	4.8	0
27.....	12	13	5.5	11	12	27	23	18	.9	12	.8	0
28.....	11	13	5.8	12	11	26	24	20	.4	16	1.7	3.5
29.....	11	12	5.1	13	-----	1.0	13	17	4.6	8.1	5.5	4.4
30.....	12	12	5.1	15	-----	14	0	17	.4	0	9.3	1.6
31.....	6.4	-----	5.5	15	-----	22	-----	9.7	-----	0	4.1	-----

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	17	5.6	11.3	695
November.....	15	0	7.04	419
December.....	12	0	7.99	491
January.....	18	4.8	9.31	572
February.....	20	0	9.93	551
March.....	27	0	12.0	738
April.....	24	0	14.6	869
May.....	29	0	21.7	1,330
June.....	7.6	0	1.93	115
July.....	20	0	8.78	540
August.....	17	0	4.93	303
September.....	19	0	3.47	206
The year.....	29	0	9.45	6,830

MODDLE CANAL NEAR DUNCAN, ARIZ.

LOCATION.—Water-stage recorder in NW. $\frac{1}{4}$ sec. 10, T. 19 S., R. 21 W., New Mexico, half a mile below intake and 9 miles east of Duncan, Ariz.

RECORDS AVAILABLE.—October, 1914, to September, 1915; July, 1922, to September, 1927.

REMARKS.—Records good. Discharge interpolated or estimated October 1-31, November 2-23, January 12-14, June 29, July 23, 30, 31, and September 22-28. Intake in NW. $\frac{1}{4}$ sec. 11, T. 19 S., R. 21 W., New Mexico, on left side of Gila River. Water used for irrigation near Franklin.

Daily and monthly discharge, in second-feet, 1926-27

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....		30	22	17	33	63	69	50	20	2.1	18	28
2.....			19	17	24	55	62	55	20	1.7	39	32
3.....			20	17	3.0	54	60	55	18	1.5	48	24
4.....			21	17	8.2	53	41	51	17	11	50	15
5.....			24	18	24	33	50	47	15	57	38	14
6.....			33	20	40	0	52	38	13	49	36	18
7.....			50	22	42	0	58	34	13	17	30	17
8.....			53	22	40	0	54	34	10	46	36	25
9.....			48	24	39	0	52	47	7.7	43	42	37
10.....			27	28	39	0	48	36	6.8	40	46	36
11.....			18	31	42	2.6	44	34	7.3	40	37	31
12.....		20	11	31	36	3.3	36	32	7.9	41	31	24
13.....			8	33	47	0	39	30	8.2	62	26	0
14.....			12	34	41	0	32	26	8.6	39	19	0
15.....			18	34	21	5.0	28	25	8.4	23	16	5
16.....	12		22	33	26	23	26	24	6.8	21	43	29
17.....			27	31	44	52	23	24	5.6	17	31	22
18.....			24	29	38	54	28	25	4.1	15	25	32
19.....			23	28	34	54	31	20	3.3	11	45	52
20.....			22	18	24	53	29	27	2.9	7.5	24	0
21.....			22	11	3.8	53	30	27	3.1	4.0	20	15
22.....			23	15	0	44	39	27	2.7	3.6	37	
23.....			24	16	16	30	50	28	2.3	2.8	38	
24.....		0	25	15	54	40	54	28	2.0	1.9	51	
25.....		5	24	8	53	29	58	29	1.7	11	49	20
26.....		19	22	11	65	48	61	28	1.6	13	58	
27.....		24	20	10	66	64	58	26	2.4	43	55	
28.....		26	20	17	68	68	47	24	2.9	55	53	
29.....		26	19	32	-----	64	49	24	3.0	40	43	22
30.....		25	18	32	-----	64	48	24	3.0	15	33	22
31.....			18	34	-----	66	-----	22	-----	20	32	-----

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....			12	738
November.....		0	19.8	1,180
December.....	53	8	23.6	1,450
January.....	34	8	22.7	1,400
February.....	66	0	34.9	1,940
March.....	66	0	34.5	2,120
April.....	69	23	45.2	2,690
May.....	55	20	32.3	1,990
June.....	20	1.6	7.61	453
July.....	57	1.5	24.3	1,490
August.....	53	16	37.1	2,280
September.....		0	21.3	1,270
The year.....	69	0	26.2	19,000

VALLEY CANAL NEAR DUNCAN, ARIZ.

LOCATION.—Staff gage in SW. $\frac{1}{4}$ sec. 32, T. 18 S., R. 21 W., New Mexico, half a mile below intake and 6 miles east of Duncan.

RECORDS AVAILABLE.—October, 1914, to September, 1915; July, 1923, to September, 1927.

REMARKS.—Records good. Intake on right side of Gila River in NW. $\frac{1}{4}$ sec. 4, T. 19 S., R. 21 W., New Mexico. Water used for irrigation near Duncan.

Daily and monthly discharge, in second-feet, 1926-27

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	22	36	19	10	0.3	0	34	31	11	3.6	32	18
2.....	24	34	20	10	0	6.5	28	31	10	3.9	31	20
3.....	28	34	20	10	0	6.5	28	32	10	3.6	30	14
4.....	29	33	21	10	.3	17	13	32	10	3.2	27	13
5.....	29	33	21	4.9	.7	29	17	31	9.8	19	36	10
6.....	28	32	22	0	1.9	28	34	31	10	26	31	9.2
7.....	27	32	28	0	1.9	28	34	32	10	9.5	27	25
8.....	24	22	25	0	.5	25	34	31	10	19	28	37
9.....	23	24	27	10	.3	28	34	30	10	19	28	36
10.....	22	21	26	24	0	29	34	30	9.2	15	19	36
11.....	22	20	20	26	11	26	34	30	11	19	29	36
12.....	16	21	18	25	23	26	34	30	12	21	28	21
13.....	25	22	18	25	23	25	34	28	12	25	26	0
14.....	20	22	18	30	24	26	33	27	7.0	9.2	23	0
15.....	16	21	17	38	20	26	34	26	5.8	7.8	19	0
16.....	24	22	17	28	18	27	33	24	5.8	8.0	28	0
17.....	22	23	16	25	24	26	33	26	5.6	11	28	0
18.....	22	22	14	23	16	26	32	33	6.1	8.0	40	10
19.....	23	22	14	21	12	26	33	35	6.5	7.2	22	20
20.....	25	24	12	18	19	26	33	34	6.1	7.2	21	20
21.....	26	24	12	17	18	25	32	31	5.6	9.8	24	19
22.....	26	23	10	14	18	24	32	28	5.8	6.8	24	15
23.....	26	23	11	13	16	25	32	24	5.6	3.4	28	11
24.....	25	23	11	11	15	27	32	21	4.1	9.2	26	8.8
25.....	23	23	10	8.8	19	25	30	22	3.4	8.5	27	7.8
26.....	21	22	10	7.8	16	23	29	21	3.9	31	28	6.3
27.....	18	22	10	6.3	0	21	30	16	3.6	16	30	9.8
28.....	14	22	11	4.1	0	24	34	15	3.6	16	28	16
29.....	10	22	10	1.1	-----	34	30	14	3.2	41	26	18
30.....	13	21	10	.5	-----	38	31	14	3.2	35	20	16
31.....	36	-----	10	.4	-----	39	-----	12	-----	32	19	-----

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	36	10	22.9	1,410
November.....	36	20	24.8	1,480
December.....	28	10	16.4	1,010
January.....	38	0	13.6	836
February.....	24	0	10.6	588
March.....	39	0	24.6	1,510
April.....	34	13	31.2	1,860
May.....	35	12	26.5	1,660
June.....	12	3.2	7.33	436
July.....	41	3.2	14.6	898
August.....	40	19	26.9	1,650
September.....	37	0	15.1	898
The year.....	41	0	19.6	14,200

DUNCAN CANAL NEAR DUNCAN, ARIZ.

LOCATION.—Staff gage in NE. $\frac{1}{4}$ sec. 29, T. 8 S., R. 32 E., 1 mile below intake and 2 miles east of Duncan.

RECORDS AVAILABLE.—July, 1923, to September, 1927.

REMARKS.—Records good. Diversions from canal for irrigation above station. Intake on left side of Gila River in SW. $\frac{1}{4}$ sec. 28, T. 8 S., R. 32 E. Water used for irrigation near Duncan.

Daily and monthly discharge, in second-feet, 1926-27

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	0.3	0	0.7	0.1	0	6.6	3.2	6.4	4.7	0	0.2
2	0	.3	0	.7	0	0	7.4	3.4	5.5	4.8	0.2	1.5
3	0	0	0	.5	0	0	6.8	4.2	5.6	5.0	0	.9
4	0	0	0	.5	0	0	6.1	4.6	5.2	4.4	0	.5
5	0	0	0	.3	0	0	5.6	4.6	4.1	3.3	1.9	.4
6	0	0	0	.4	0	0	3.1	3.3	4.0	5.6	6.4	.8
7	0	0	0	.2	0	0	5.5	5.2	3.8	.3	6.2	6.4
8	0	0	0	0	0	0	3.9	9.8	4.1	1.6	4.3	3.6
9	0	0	0	.2	0	0	2.1	9.1	3.4	1.4	5.9	2.4
10	0	0	0	.2	0	0	2.3	9.1	3.5	1.1	1.4	1.8
11	0	0	0	0	0	0	1.4	8.6	4.5	1.3	.3	3.3
12	0	0	0	0	0	0	0	7.7	3.5	1.9	1.4	4.6
13	0	0	0	.4	0	0	0	7.2	2.9	2.3	4.0	0
14	0	0	0	.4	0	0	.8	5.1	3.1	2.6	4.3	0
15	0	0	0	.3	0	0	2.8	3.4	4.0	3.4	4.4	0
16	0	0	0	.2	0	0	4.4	6.0	3.6	1.7	8.9	0
17	0	0	0	.2	.6	1.8	5.3	7.5	3.3	1.1	0	.3
18	0	0	0	.2	.5	3.5	3.7	4.0	3.9	2.5	.1	.3
19	0	0	0	.1	.2	3.6	1.4	4.5	3.3	4.2	.3	.6
20	0	1.5	0	.1	0	3.6	1.2	3.7	3.9	4.7	0	.6
21	0	.3	0	.1	0	3.8	1.4	4.1	4.4	4.0	0	.1
22	0	0	0	0	0	4.1	2.6	4.9	4.7	3.3	0	0
23	0	0	0	.2	0	2.9	4.2	8.4	3.7	5.2	0	0
24	0.4	0	0	.1	0	4.1	4.6	12	6.5	8.2	0	0
25	.7	0	0	0	.7	2.9	4.3	12	6.3	8.2	0	0
26	.6	0	0	.7	2.2	5.4	4.2	13	6.3	7.0	.1	.1
27	.2	0	0	.7	.3	6.2	2.7	13	6.8	5.0	6.8	.1
28	0	0	0	0	0	6.2	2.4	14	6.0	6.6	5.4	0
29	0	0	.8	0	0	6.5	2.7	15	3.6	6.6	1.7	1.3
30	0	0	0	0	0	5.6	3.4	8.7	4.9	0	2.1	.2
31	0	0	0	.2	0	5.3	0	4.0	0	0	.9	0

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October	0.7	0	0.06	3.69
November	1.5	0	.08	4.76
December	.8	0	.03	1.84
January	.7	0	.25	15.4
February	2.2	0	.16	8.89
March	6.5	0	2.11	130
April	7.4	0	3.43	204
May	15	3.3	7.21	443
June	6.8	2.9	4.49	267
July	8.2	0	3.61	222
August	8.9	0	2.16	133
September	6.4	0	1.02	60.7
The year	15	0	2.06	1,490

SURFACE WATER SUPPLY, 1927, PART IX

BLACK-McCLESKY CANAL AT DUNCAN. ARIZ.

LOCATION.—Staff gage in SE. $\frac{1}{4}$ 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, 1927.

REMARKS.—Records fair. Intake on left side of Gila River in SE. $\frac{1}{4}$ sec. 19, T. 8 S., R. 32 E. Water used for irrigation near Duncan.

Daily and monthly discharge, in second-feet, 1926-27

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	11	25	6.9	6.2	5.8	6.3	24	25	13	7.1	0	0.8
2.....	11	20	8.7	5.5	5.3	2.8	25	25	13	7.5	0	0
3.....	14	19	9.1	6.3	5.7	0	23	23	11	7.6	0	5.7
4.....	17	18	9.5	6.2	4.9	0	22	22	13	10	5.7	5.9
5.....	13	18	14	6.4	4.2	6.9	20	24	11	19	25	8.1
6.....	13	18	13	8.9	4.7	20	21	25	19	13	22	19
7.....	16	19	21	9.5	4.5	26	21	18	8.7	13	22	8.4
8.....	13	18	22	9.0	4.4	28	21	20	13	9.0	22	9.2
9.....	10	18	25	9.1	4.5	27	19	26	8.5	7.6	18	14
10.....	11	16	17	9.7	3.7	26	19	29	3.7	0	16	9.2
11.....	10	15	18	12	3.6	26	19	31	12	0	16	8.3
12.....	10	15	18	12	4.3	26	18	30	9.8	0	16	31
13.....	13	14	18	11	5.1	26	18	29	10	0	11	19
14.....	12	14	21	11	5.5	26	18	27	9.0	0	14	0
15.....	13	13	20	11	6.0	24	16	26	3.5	0	15	0
16.....	11	13	17	10	6.2	24	16	20	9.3	0	12	0
17.....	4.9	10	14	9.9	8.1	25	14	17	8.5	0	27	0
18.....	3.9	10	13	9.9	23	25	16	17	6.3	0	32	0
19.....	3.1	11	11	9.5	9.8	25	16	17	6.3	5.9	32	0
20.....	2.7	11	11	9.0	7.2	24	16	17	6.3	3.8	25	0
21.....	2.1	10	13	7.8	6.0	24	18	15	7.1	3.3	21	0
22.....	2.3	9.3	14	7.4	4.9	24	17	13	4.8	2.2	22	0
23.....	3.5	10	15	9.2	4.3	23	15	14	3.4	3.3	15	8.7
24.....	3.5	11	14	8.6	4.1	21	16	11	4.5	4.3	13	6.4
25.....	10	8.1	12	8.1	4.2	22	15	10	4.5	3.0	10	5.8
26.....	12	6.7	9.6	6.4	5.3	19	13	18	3.8	16	7.9	7.2
27.....	11	7.5	9.3	5.6	6.9	20	13	20	8.8	17	4.8	3.8
28.....	11	8.5	8.9	6.4	6.7	19	18	16	5.7	18	3.4	5.7
29.....	12	10	8.0	6.3	-----	18	24	15	21	26	2.5	4.5
30.....	16	9.1	5.7	6.3	-----	19	25	12	2.1	15	5	2.5
31.....	28	-----	5.2	5.7	-----	20	-----	19	-----	2.3	0	-----

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	28	2.1	10.5	646
November.....	25	6.7	13.5	803
December.....	25	5.2	13.6	836
January.....	12	5.5	8.38	515
February.....	23	3.6	6.03	335
March.....	28	0	20.1	1,240
April.....	25	13	18.5	1,100
May.....	31	10	20.4	1,250
June.....	21	2.1	8.69	517
July.....	26	0	6.90	424
August.....	32	0	13.9	855
September.....	31	0	5.54	330
The year.....	32	0	12.2	8,850

COLMONERO CANAL NEAR DUNCAN, ARIZ.

LOCATION.—Staff gage in SE. $\frac{1}{4}$ 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, 1927.

REMARKS.—Records good. Diversions from canal for irrigation above station. Intake on right side of Gila River in SE. $\frac{1}{4}$ sec. 11, T. 8 S., R. 31 E. Water used for irrigation near Sheldon.

Daily and monthly discharge, in second-feet, 1926-27

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	5.4	2.6	1.1	0.9	2.5	4.5	0	7.6	2.4	4.2	0	4.3
2.....	5.4	2.6	1.1	.9	2.2	3.9	3.2	7.2	3.4	2.7	2.6	4.2
3.....	2.5	2.3	1.1	.7	1.3	3.5	8.1	6.7	5.8	1.7	2.9	3.2
4.....	1.5	2.4	1.1	.6	1.9	3.2	7.7	6.1	6.0	1.1	2.5	3.4
5.....	4.1	2.3	2.2	.6	1.8	3.6	7.6	6.4	5.5	5.6	2.0	3.5
6.....	3.5	2.3	0	.8	2.0	3.0	7.5	6.6	6.3	2.8	2.5	2.4
7.....	3.5	2.3	0	.8	1.3	3.3	6.8	5.1	2.1	0	5.4	1.5
8.....	3.5	2.3	0	1.3	1.5	1.4	7.7	7.0	5.1	0	5.0	4.2
9.....	3.5	2.2	0	1.7	1.4	.8	7.1	7.9	5.0	0	5.6	3.1
10.....	3.4	2.0	.4	1.9	2.5	2.4	5.2	7.5	2.6	0	4.0	4.8
11.....	3.5	2.0	1.2	2.1	2.9	1.2	0	7.5	3.3	0	4.4	4.5
12.....	4.0	1.8	3.2	1.9	3.5	3	1.0	7.0	5.0	3.1	1.6	2.5
13.....	0	1.6	3.6	1.8	4.6	.5	2.4	7.0	3.8	1.4	1.7	0
14.....	2.1	1.7	3.6	1.1	3.4	1.4	4.3	5.2	5.4	2.5	4.9	0
15.....	4.4	1.7	3.5	2.0	3.2	1.4	5.2	5.6	5.1	3.3	4.6	0
16.....	4.4	2.2	1.8	1.3	2.0	3.1	3.0	5.2	5.0	1.5	1.4	.9
17.....	3.0	1.7	1.7	1.7	3.0	1.7	2.8	6.1	5.4	.2	0	1.0
18.....	2.6	1.6	1.7	1.2	4.2	.5	6.1	5.7	3.9	.1	0	1.6
19.....	2.7	1.6	1.0	.7	2.3	.3	7.1	5.2	3.2	1.6	0	4.8
20.....	2.7	1.5	.8	.6	0	.8	7.1	5.4	5.4	2.2	0	4.7
21.....	3.1	1.5	.7	.5	1.2	0	7.1	4.8	4.7	4.1	1.6	3.8
22.....	2.7	1.5	1.1	.2	5.0	0	6.5	1.2	5.3	4.6	0	4.4
23.....	3.0	1.4	3.0	0	4.3	0	6.0	5.3	0	4.6	0	3.9
24.....	3.0	1.4	2.9	0	4.3	0	7.5	6.1	.9	0	1.0	3.4
25.....	3.0	1.3	2.8	1.3	4.3	0	7.3	6.2	.9	.6	2.5	3.3
26.....	3.0	1.2	1.8	2.2	2.0	0	7.3	7.2	.8	1.5	3.3	3.3
27.....	3.1	1.2	1.3	2.5	1.2	0	7.3	7.3	4.2	0	4.1	3.0
28.....	3.0	1.2	1.3	2.6	4.6	0	7.3	7.8	5.2	0	3.7	3.1
29.....	2.9	1.3	1.3	2.6	-----	0	7.8	7.3	5.3	3.1	3.4	3.2
30.....	3.0	1.1	1.1	2.6	-----	0	7.8	7.3	4.1	.4	3.0	1.9
31.....	3.0	-----	1.1	2.7	-----	0	-----	7.6	-----	0	1.6	-----

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	5.4	0	3.18	196
November.....	2.6	1.1	1.79	107
December.....	3.6	0	1.53	84.1
January.....	2.7	0	1.35	83.0
February.....	5.0	0	2.66	148
March.....	4.5	0	1.32	81.2
April.....	8.1	0	5.73	341
May.....	7.9	1.2	6.33	339
June.....	6.3	0	4.04	240
July.....	5.6	0	1.71	105
August.....	5.6	0	2.43	149
September.....	4.8	0	2.93	174
The year.....	8.1	0	2.91	2,110

SURFACE WATER SUPPLY, 1927, PART IX

YORK CANAL AT YORK, ARIZ.

LOCATION.—In SE. $\frac{1}{4}$ 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, 1927, discharge measurements only.

REMARKS.—Intake on right side of Gila River in SW. $\frac{1}{4}$ sec. 29, T. 6 S., R. 31 E. Water used for irrigation near York.

Discharge measurements, 1926-27

	Second-feet		Second-feet		Second-feet
Oct. 12.....	3.8	Feb. 8.....	2.3	June 17.....	5.0
Nov. 3.....	1.6	Mar. 29.....	3.9	July 22.....	3.0
Nov. 26.....	2.9	Apr. 19.....	4.3	Aug. 9.....	3.3
Dec. 17.....	2.5	May 9.....	6.4	Sept. 1.....	2.3
Jan. 13.....	2.4	May 31.....	5.6	Sept. 30.....	1.2

SAN FRANCISCO RIVER AT CLIFTON, ARIZ.

LOCATION.—Water-stage recorder in SW. $\frac{1}{4}$ SE. $\frac{1}{4}$ sec. 30, T. 4 S., R. 30 E., at Clifton. Zero of gage is 3,432.3 feet above mean sea level.

DRAINAGE AREA.—2,750 square miles.

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

EXTREMES.—Maximum discharge during period, 5,760 second-feet September 12 (gage height, 9.4 feet); minimum, 33 second-feet July 22 (gage height, 3.10 feet).

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

REMARKS.—Records good. Discharge estimated September 11-30. Diversions for irrigation and municipal supply above station.

Daily and monthly discharge, in second-feet, 1927

Day	July	Aug.	Sept.	Day	July	Aug.	Sept.	Day	July	Aug.	Sept.
1.....		96	91	11.....		171	950	21.....	38	144	950
2.....		79	74	12.....		130		22.....	38	118	
3.....		63	66	13.....		104		23.....	39	114	
4.....		222	59	14.....		91		24.....	44	342	160
5.....		367	56	15.....		84		25.....	74	160	
6.....		263	62	16.....		107	950	26.....	112	118	
7.....		234	80	17.....		118		27.....	254	114	
8.....		361	95	18.....		150		28.....	356	110	
9.....		252	215	19.....		199		29.....	174	95	
10.....		420	166	20.....	40	219		30.....	207	87	
								31.....	116	76	

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
July 20-31.....	356	38	124	2,950
August.....	420	63	168	10,300
September.....		56	455	27,100
The period.....				40,400

BROWN CANAL NEAR SOLOMONSVILLE, ARIZ.

LOCATION.—Water-stage recorder in SE. $\frac{1}{4}$ SE. $\frac{1}{4}$ sec. 30, T. 6 S., R. 28 E., a quarter of a mile below intake and 10 miles east of Solomonville.

RECORDS AVAILABLE.—June, 1914, to September, 1915; December, 1920, to September, 1927.

REMARKS.—Records good. Discharge estimated July 17–26. Intake on right side of Gila River in SE. $\frac{1}{4}$ sec. 30, T. 6 S., R. 28 E. Water used for irrigation east of Solomonville. Water is frequently returned to river below gage through Brown Canal wasteway, records for which are published in this report.

Daily and monthly discharge, in second-feet, 1926–27

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	11	8.9	11	5.8	8.2	0	36	20	20	16	14	21
2.....	10	11	11	4.7	7.8	11	34	23	19	13	14	21
3.....	8.3	8.9	11	4.5	7.8	23	34	24	19	12	20	16
4.....	7.6	8.7	11	3.5	8.7	23	36	24	18	14	25	13
5.....	5.8	9.1	11	2.6	6.7	23	36	22	18	25	28	12
6.....	5.6	8.3	10	2.8	7.3	22	34	20	18	22	28	13
7.....	10	17	12	3.1	7.1	23	35	17	17	10	25	13
8.....	9.5	23	12	4.3	3.4	23	35	7.6	17	14	12	22
9.....	11	12	12	5.5	0	23	35	18	17	14	19	26
10.....	11	16	14	6.6	0	23	34	23	15	8.9	27	36
11.....	13	15	14	7.4	0	11	34	26	18	7.3	26	29
12.....	14	15	11	8.0	0	20	33	18	23	13	25	18
13.....	13	16	12	7.1	0	20	35	9.3	24	9.2	15	1.8
14.....	11	17	14	8.7	3.8	20	23	13	23	6.4	19	.7
15.....	13	16	14	9.5	6.6	21	23	24	22	14	17	0
16.....	12	15	13	7.6	3.1	20	23	25	20	17	17	0
17.....	10	16	11	8.0	0	21	23	25	19	16	28	0
18.....	9.5	17	9.9	7.1	0	21	23	25	17	15	23	0
19.....	9.3	16	10	6.7	0	23	24	25	17	14	22	0
20.....	9.7	17	9.7	6.7	0	23	23	25	16	13	7.3	0
21.....	6.1	17	9.9	6.6	0	23	23	25	14	12	6.9	0
22.....	4.3	12	11	7.1	0	18	23	25	14	11	5.6	1.9
23.....	5.9	13	12	6.1	0	14	24	24	12	10	15	4.8
24.....	5.2	11	12	6.6	0	14	24	24	12	14	23	2.8
25.....	5.2	15	10	6.5	0	22	23	24	11	19	19	1.8
26.....	5.2	14	12	7.8	0	21	23	23	10	23	13	1.5
27.....	5.5	14	12	7.3	0	23	22	22	12	27	14	1.0
28.....	5.0	14	12	6.3	0	28	22	22	14	38	14	.9
29.....	5.0	9.1	12	8.0	-----	34	21	21	14	29	16	.8
30.....	6.4	12	10	6.7	-----	33	21	21	17	29	25	.8
31.....	9.9	-----	8.0	7.1	-----	34	-----	21	-----	20	22	-----

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	14	4.3	8.65	532
November.....	23	8.3	13.8	821
December.....	14	8.0	11.4	701
January.....	9.5	2.6	6.33	389
February.....	8.7	0	2.52	140
March.....	34	0	21.2	1,300
April.....	36	21	28.0	1,670
May.....	26	7.6	21.5	1,320
June.....	24	10	16.9	1,010
July.....	38	6.4	16.3	1,000
August.....	28	5.6	18.9	1,160
September.....	36	0	8.63	514
The year.....	38	0	14.6	10,600

SURFACE WATER SUPPLY, 1927, PART IX

BROWN CANAL WASTEWAY NEAR SOLOMONSVILLE, ARIZ.

LOCATION.—Staff gage in SE. $\frac{1}{4}$ NE. $\frac{1}{4}$ sec. 31, T. 6 S., R. 28 E., 10 miles east of Solomonville.

RECORDS AVAILABLE.—December, 1920, to September, 1927.

REMARKS.—Records good. Wasteway returns water from Brown Canal to Gila River half a mile below gaging station of "Gila River near Solomonville, Ariz."

Daily and monthly discharge, in second-feet, 1926-27

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	3.4	6.9	6.2	2.3	3.4	0	6.4	18	11	6.2	9.3	3.3
2.....	5.3	7.7	6.1	2.9	2.7	3.7	3.8	16	11	7.2	9.9	7.2
3.....	5.9	8.0	6.2	2.8	3.0	7.4	4.0	14	11	8.0	13	7.2
4.....	6.0	8.3	6.2	3.0	2.8	7.2	6.3	15	13	8.3	9.5	10
5.....	5.8	8.0	6.1	1.2	2.8	7.5	9.2	14	12	13	12	5.7
6.....	5.6	8.2	5.9	1.2	2.8	7.0	15	2.2	12	7.1	13	3.6
7.....	6.2	7.8	6.0	2.7	2.8	7.4	16	1.8	11	6.5	5.5	3.0
8.....	8.3	7.7	6.9	2.8	1.3	7.4	15	1.2	12	8.7	0	3.7
9.....	8.9	7.8	6.9	2.6	0	7.0	15	2.5	8.6	5.0	5.8	7.2
10.....	9.3	8.1	6.9	3.4	0	7.4	16	4	9.8	2.5	11	9.3
11.....	8.6	6.7	6.7	3.4	0	7.1	15	4	10	0	13	9.5
12.....	7.8	6.6	7.8	3.4	0	7.5	16	1.0	15	2.6	5.0	2.0
13.....	9.0	6.7	7.8	3.5	0	7.2	16	1.3	15	2.4	9	0
14.....	7.5	6.6	8.1	2.8	1.4	7.5	12	6.4	14	0	5.6	0
15.....	8.1	7.2	7.8	3.3	2.6	7.2	12	13	14	8	11	0
16.....	4.3	6.6	7.1	2.7	1.3	7.4	13	13	14	7	4	0
17.....	3.7	6.8	6.7	2.8	0	7.2	14	13	14	6	5.0	0
18.....	6.8	6.8	6.9	2.6	0	7.2	13	12	13	1.1	5.2	0
19.....	6.0	6.6	6.7	2.4	0	7.4	13	12	12	1.4	5.4	0
20.....	6.0	6.8	7.2	2.5	0	7.1	12	13	11	1.4	0	0
21.....	5.6	6.6	8.0	2.5	0	7.2	12	13	11	1.5	0	0
22.....	4.3	6.8	8.0	2.8	0	3.8	12	13	9.8	2.0	2.9	0
23.....	4.9	6.7	7.7	2.8	0	1.0	13	13	11	2.7	2.1	1.0
24.....	4.9	6.4	8.0	2.7	0	3.6	13	13	8.1	1.9	1.8	2.0
25.....	4.9	6.9	7.7	2.6	0	8.2	14	13	7.4	1.3	4.0	1.8
26.....	4.5	6.6	7.7	2.8	0	6.2	14	12	7.0	1.3	2	1.1
27.....	4.3	6.4	7.7	2.9	0	5.7	16	12	7.1	11	1.0	0
28.....	4.2	6.4	7.8	2.8	0	4.3	16	12	7.2	10	8.7	0
29.....	4.3	6.2	7.6	2.8	-----	4.4	17	11	8.2	13	11	0
30.....	3.9	6.4	7.6	2.5	-----	5.7	17	11	6.4	12	6.1	0
31.....	7.5	-----	3.7	2.7	-----	6.4	-----	11	-----	11	4.6	-----

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	9.3	3.4	5.99	368
November.....	8.3	6.2	7.04	419
December.....	8.1	3.7	7.02	432
January.....	3.5	1.2	2.72	167
February.....	3.4	0	.96	53.3
March.....	8.2	0	6.17	379
April.....	17	3.8	12.9	768
May.....	18	4	9.81	603
June.....	15	6.4	10.9	649
July.....	13	0	4.88	300
August.....	13	0	5.90	365
September.....	10	0	2.59	154
The year.....	18	0	6.43	4,660

MICHELANA CANAL NEAR SOLOMONSVILLE, ARIZ.

LOCATION.—Staff gage in NE. $\frac{1}{4}$ SW. $\frac{1}{4}$ sec. 3, T. 7 S., R. 27 E., a quarter of a mile below head gate, 4 miles below intake, and 4 miles northeast of Solomonsville.

RECORDS AVAILABLE.—October, 1914, to September, 1915; December, 1920, to September, 1927.

REMARKS.—Records good. Discharge estimated September 4–10. Intake on right side of Gila River in SW. $\frac{1}{4}$ sec. 31, T. 6 S., R. 28 E. Water used for irrigation near Solomonsville.

Daily and monthly discharge, in second-feet, 1926–27

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.6	5.9	0	0	5.0	5.5	12	10	4.5	3.7	8.1	10
2	.4	5.1	0	0	2.5	5.0	13	10	4.1	2.4	6.5	10
3	5.8	4.7	0	0	0	4.2	13	10	4.1	3.3	6.8	10
4	5.9	3.9	0	0	0	4.2	12	10	4.0	8.5	7.8	
5	5.5	5.5	0	0	0	4.3	11	12	3.3	14	10	
6	3.6	6.0	0	0	0	4.8	11	10	3.1	16	11	12
7	.6	5.5	0	0	0	5.4	11	10	3.0	0	8.1	
8	0	5.0	0	0	0	4.0	11	9.0	3.0	3.6	7.6	
9	0	5.0	0	0	0	3.1	11	8.2	2.9	3.7	6.9	
10	0	4.6	0	.2	0	3.2	12	7.6	2.7	13	6.6	
11	0	4.1	0	0	0	2.8	12	6.6	5.9	8.5	6.3	12
12	.2	3.9	0	0	0	2.6	12	5.3	9.4	9.5	5.9	9.0
13	0	4.6	0	0	0	2.6	12	4.7	8.8	8.6	5.3	12
14	1.8	4.6	0	0	0	3.0	12	4.7	10	5.4	4.5	10
15	3.1	4.3	0	0	0	3.0	12	4.9	7.3	3.1	7.3	9.5
16	3.1	4.3	0	0	0	3.1	11	5.2	5.4	3.2	6.8	8.6
17	3.0	4.2	0	0	0	3.6	9.8	5.5	3.6	3.6	6.7	8.1
18	2.7	4.2	0	0	0	3.8	9.1	4.9	2.2	2.3	10	0
19	2.5	4.0	0	0	0	4.0	12	5.1	1.8	.6	9.6	0
20	2.2	4.2	0	0	0	3.6	13	4.9	1.8	.6	8.1	0
21	1.2	4.7	0	0	0	3.0	12	5.0	3.0	3.5	6.9	0
22	.6	4.4	0	0	0	5.7	12	5.5	2.1	8.1	13	0
23	.2	4.6	0	3.0	0	7.5	12	9.1	.4	8.5	13	0
24	0	4.7	0	6.1	0	8.6	14	7.3	.1	9.2	13	0
25	0	4.7	0	6.2	0	9.2	13	6.9	0	11	11	0
26	0	5.0	0	5.0	0	10	12	7.5	2.2	12	11	0
27	0	5.2	0	4.8	4.5	11	12	6.8	6.1	10	11	0
28	0	5.2	0	4.9	3.6	12	11	6.0	3.7	10	10	3.4
29	0	2.6	0	4.6		12	11	5.9	2.8	10	10	6.8
30	3.7	0	0	4.6		12	11	8.5	4.4	10	9.8	7.3
31	4.5		0	4.8		12		5.3		7.6	9.8	

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October	5.9	0	1.65	101
November	6.0	0	4.49	267
December	0	0	0	0
January	6.2	0	1.43	87.9
February	5.0	0	.56	31.1
March	12	2.6	5.77	355
April	14	9.1	11.7	696
May	12	4.7	7.17	441
June	10	0	3.86	230
July	16	0	6.89	424
August	13	4.5	8.66	532
September		0	6.99	398
The year	16	0	4.92	3,560

SURFACE WATER SUPPLY, 1927; PART IX

FOURNESS CANAL NEAR SOLOMONSVILLE, ARIZ.

LOCATION.—Staff gage in SE. $\frac{1}{4}$ SE. $\frac{1}{4}$ sec. 35, T. 6 S., R. 27 E., three-quarters of a mile below intake and 8 miles east of Solomonville.

RECORDS AVAILABLE.—October, 1914, to September, 1915; December, 1920, to September, 1927.

REMARKS.—Records good. Intake on left side of Gila River in NE. $\frac{1}{4}$ sec. 1, T. 7 S., R. 27 E. Water used for irrigation near Solomonville.

Daily and monthly discharge, in second-feet, 1926-27

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1-----	1.2	1.9	1.0	0	0	5.4	7.2	1.5	0.5	0	0	0
2-----	.3	1.9	1.5	0	0	6.2	.2	.2	1.1	.2	0	0
3-----	0	0	1.1	0	0	7.3	.2	.5	1.0	.3	2.4	0
4-----	0	0	6.6	0	0	6.3	10	1.1	.6	.2	9.2	8.2
5-----	0	0	3.8	0	0	6.3	11	.7	.7	1.6	6.7	3.9
6-----	0	2.1	6.1	0	0	8.6	12	.7	.7	8.4	5.2	8.9
7-----	0	3.3	3.5	0	0	9.4	11	1.6	.7	0	.1	3.9
8-----	0	3.8	3.5	0	.3	8.4	11	6.3	.2	0	0	3.2
9-----	0	3.3	6.9	0	3.5	11	11	7.2	.1	0	0	0
10-----	0	4.2	7.2	0	8.0	10	3.1	7.9	.2	0	4.0	0
11-----	0	3.6	0	0	8.0	6.9	7.5	6.2	.2	0	3.0	6.4
12-----	0	3.6	0	0	2.0	5.2	3.2	5.4	.2	0	4.3	6.3
13-----	0	4.5	0	0	0	4.8	2.8	4.8	6.0	0	2.8	1.3
14-----	0	4.0	0	0	0	6.6	2.2	5.0	4.6	0	.1	0
15-----	0	2.6	0	0	0	9.4	6.8	5.0	5.1	0	2.6	0
16-----	0	4.1	0	0	0	10	3.2	4.8	6.2	0	15	0
17-----	0	1.0	0	0	0	6.6	0	7.2	2.0	0	1.8	0
18-----	4.5	1.0	0	0	3.3	1.0	0	9.6	.9	0	8.2	0
19-----	5.2	1.5	0	0	3.1	1.9	0	9.5	.5	0	0	0
20-----	3.9	1.7	0	0	2.8	6.1	0	5.6	.1	0	0	0
21-----	5.6	1.7	0	0	2.1	7.5	0	4.7	.2	3.1	0	0
22-----	4.2	1.1	0	0	2.1	8.6	0	3.1	0	.6	0	0
23-----	4.2	1.0	0	0	4.9	2.5	0	2.1	.6	.3	0	0
24-----	4.5	1.5	0	0	3.8	3.2	0	4.8	.6	0	0	1.1
25-----	3.9	1.1	0	0	4.0	5.5	1.0	1.4	0	1.1	0	1.1
26-----	5.0	1.6	0	0	2.6	7.2	3.2	.6	0	6.7	0	1.0
27-----	4.5	.7	0	0	2.3	8.4	4.6	.5	0	7.6	0	.4
28-----	5.4	1.0	0	.8	6.9	7.2	2.5	.5	0	13	0	0
29-----	7.5	1.1	0	2.0	-----	7.2	3.4	.6	0	9.5	0	0
30-----	4.6	.6	0	0	-----	7.0	.1	.2	0	6.8	0	0
31-----	1.5	-----	0	0	-----	6.6	-----	.2	-----	4.2	0	-----

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October-----	7.5	0	2.13	131
November-----	4.5	0	1.98	118
December-----	7.2	0	1.33	81.8
January-----	2.0	0	.09	5.5
February-----	8.0	0	2.13	118
March-----	11	1.0	6.86	422
April-----	12	0	3.91	233
May-----	9.6	.2	3.53	217
June-----	6.2	0	1.10	65.5
July-----	13	0	2.05	126
August-----	15	0	2.11	130
September-----	8.9	0	1.52	90.4
The year-----	15	0	2.40	1,740

GILA RIVER BASIN

81

SAN JOSE CANAL NEAR SOLOMONSVILLE, ARIZ.

LOCATION.—Water-stage recorder in NW. $\frac{1}{4}$ NE. $\frac{1}{4}$ 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, 1927.

REMARKS.—Records good. Diversions from canal above station. Intake on left side of Gila River in SW. $\frac{1}{4}$ sec. 36, T. 6 S., R. 27 E. Water used for irrigation near Solomonsville and Safford.

Daily and monthly discharge, in second-feet, 1926-27

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	22	36	28	0	70	91	90	24	28	90	51
2	8.5	12	33	30	0	64	91	91	26	25	82	40
3	16	28	33	31	0	63	96	91	26	22	87	31
4	25	42	37	31	25	57	96	87	24	27	76	36
5	37	40	38	31	40	61	104	78	23	48	65	32
6	39	34	28	32	35	62	101	79	24	49	91	33
7	39	32	16	41	44	61	104	82	25	16	82	33
8	45	28	20	48	52	67	103	85	25	71	72	39
9	45	24	30	51	58	75	98	85	24	78	81	37
10	44	23	34	52	62	66	101	76	27	79	68	48
11	36	22	31	48	59	51	95	67	26	72	70	48
12	38	21	26	45	62	42	95	68	34	66	76	33
13	41	20	28	46	66	47	99	55	28	12	76	0
14	41	19	24	46	64	51	93	50	29	13	62	0
15	36	19	31	52	62	53	90	52	31	53	52	20
16	33	17	29	53	61	62	88	52	29	58	56	36
17	33	17	24	52	55	78	85	49	27	51	71	39
18	31	16	21	58	55	81	91	47	27	45	79	29
19	30	15	19	61	55	88	95	46	24	34	54	40
20	27	15	18	71	49	88	82	45	27	30	0	38
21	26	14	19	78	49	88	84	39	27	27	0	40
22	25	12	18	76	50	85	78	36	19	27	0	46
23	24	12	19	62	50	88	76	36	29	32	0	42
24	25	11	19	61	49	90	71	34	27	32	19	42
25	25	18	17	78	57	91	75	33	26	40	81	45
26	22	29	16	84	56	91	78	28	27	51	84	46
27	20	28	14	74	50	90	88	23	27	62	69	51
28	20	33	18	64	63	88	88	24	24	88	44	62
29	27	34	12	48	48	91	90	24	27	96	64	55
30	36	35	10	0	0	82	91	24	31	96	72	48
31	31	0	17	0	0	88	0	25	0	85	66	0

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October	45	0	29.9	1,840
November	42	11	23.1	1,370
December	38	10	25.4	1,440
January	84	0	49.4	3,040
February	66	0	47.4	2,630
March	91	42	72.9	4,480
April	104	71	90.6	5,390
May	91	23	54.5	3,350
June	34	19	26.5	1,580
July	96	12	48.8	3,000
August	91	0	60.9	3,740
September	62	0	38.0	2,260
The year	104	0	47.1	34,100

SURFACE WATER SUPPLY, 1927, PART IX

MONTEZUMA CANAL NEAR SOLOMONSVILLE, ARIZ.

LOCATION.—Water-stage recorder in SE. $\frac{1}{4}$ NW. $\frac{1}{4}$ sec. 17, T. 7 S., R. 27 E., 1 mile below intake and 2 miles east of Solomonville.

RECORDS AVAILABLE.—April, 1914, to September, 1915; December, 1920, to September, 1927.

REMARKS.—Records good. Intake on left side of Gila River in NE. $\frac{1}{4}$ sec. 17, T. 7 S., R. 27 E. Water used for irrigation near Solomonville and Safford.

Daily and monthly discharge, in second-feet, 1926-27

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	46	46	37	52	30	94	101	115	33	28	110	50
2.....	47	44	37	52	71	92	106	117	33	29	100	43
3.....	50	41	36	52	83	84	117	119	35	26	87	40
4.....	47	40	36	52	83	80	120	114	31	26	77	34
5.....	46	40	38	52	80	81	119	109	31	56	105	36
6.....	45	40	42	52	79	79	118	110	33	67	108	30
7.....	43	40	42	54	78	76	116	118	33	74	90	25
8.....	43	40	51	55	76	71	118	124	31	84	98	28
9.....	44	39	60	54	75	64	119	122	30	92	109	40
10.....	43	39	61	53	74	63	115	120	31	81	114	66
11.....	41	39	59	53	73	77	114	110	34	71	109	61
12.....	53	40	58	53	74	84	113	87	40	75	119	60
13.....	64	38	56	53	77	85	115	74	40	42	98	40
14.....	65	38	56	52	84	83	111	68	42	0	67	95
15.....	63	38	59	52	87	90	110	67	37	40	58	77
16.....	63	37	59	51	102	99	111	69	34	71	61	43
17.....	63	37	57	50	101	107	114	63	30	56	90	115
18.....	63	37	55	68	49	109	118	64	31	38	70	136
19.....	63	37	55	78	72	107	127	59	32	37	88	113
20.....	55	39	55	78	77	102	121	55	28	32	103	113
21.....	48	41	58	77	77	97	117	50	26	24	96	74
22.....	48	40	57	76	71	97	118	45	24	14	108	16
23.....	47	40	57	32	67	100	116	41	22	17	88	13
24.....	49	40	57	0	80	92	116	41	23	28	88	74
25.....	56	40	55	0	94	90	115	38	21	52	113	114
26.....	55	38	55	0	95	106	115	37	23	59	83	115
27.....	54	37	54	0	96	116	114	36	35	97	74	101
28.....	43	37	54	0	96	120	115	33	30	127	82	80
29.....	33	37	53	0	-----	98	118	30	25	115	65	59
30.....	37	37	53	0	-----	104	118	30	27	117	60	50
31.....	41	-----	53	0	-----	96	-----	30	-----	109	57	-----

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	65	33	50.3	3,090
November.....	46	37	39.2	2,330
December.....	61	36	52.1	3,200
January.....	78	0	42.0	2,580
February.....	102	30	78.6	4,370
March.....	120	63	91.7	5,640
April.....	127	101	116	6,900
May.....	124	30	74.0	4,550
June.....	42	21	30.8	1,830
July.....	127	0	57.5	3,540
August.....	119	57	89.5	5,500
September.....	136	13	64.7	3,850
The year.....	136	0	65.4	47,400

UNION CANAL NEAR SOLOMONSVILLE, ARIZ.

LOCATION.—Water-stage recorder in SE. $\frac{1}{4}$ NE. $\frac{1}{4}$ sec. 14, T. 7 S., R. 26 E., $\frac{1}{4}$ miles below intake and $\frac{1}{4}$ miles northwest of Solomonville.

RECORDS AVAILABLE.—April, 1914, to September, 1915; January, 1921, to September, 1927.

REMARKS.—Records good. Discharge interpolated or estimated October 1-4, 7, December 7, January 27-29, May 2, 3, June 27, July 7-9, 22, August 14, 15, 30, 31, and September 1, 8-17. Intake on left side of Gila River in NW. $\frac{1}{4}$ sec. 18, T. 7 S., R. 27 E. Water used for irrigation near Safford and Thatcher.

Daily and monthly discharge, in second-feet, 1926-27

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....		73	57	48	0	73	167	136	28	18	128	55
2.....	50	70	56	47	0	73	169	137	20	4.8	117	59
3.....		68	55	48	14	77	174	148	18	1.6	74	38
4.....		65	59	50	61	88	172	146	21	1.4	87	33
5.....	78	61	64	50	93	104	169	137	22	47	128	27
6.....		75	61	64	52	105	108	158	123	19	132	25
7.....		68	61	37	55	102	127	154	125	16	124	33
8.....		85	61	39	55	100	133	152	124	13	115	35
9.....		74	61	42	58	102	127	149	122	12	107	50
10.....	75	63	43	60	95	128	152	114	9.6	98	126	50
11.....		66	61	41	65	86	122	154	97	18	69	50
12.....		52	60	31	68	91	132	154	92	40	68	0
13.....		53	62	19	69	98	134	159	94	66	126	0
14.....		75	75	50	70	108	138	160	95	56	124	0
15.....	61	78	53	69	99	142	150	84	42	122	35	0
16.....		54	73	51	68	102	135	145	75	33	72	0
17.....		57	73	48	78	89	138	145	73	28	42	0
18.....		60	70	52	85	82	132	151	69	20	35	0
19.....		75	70	56	88	98	129	158	65	15	29	0
20.....	77	69	57	95	66	135	142	66	11	28	121	25
21.....		81	68	57	101	48	132	137	70	11	19	36
22.....		80	66	55	100	42	150	135	63	7.1	15	5
23.....		73	66	53	97	41	156	135	55	3.0	11	0
24.....		61	61	53	96	48	146	137	49	.7	11	17
25.....	62	57	50	91	57	146	132	48	1.4	31	80	53
26.....		65	51	47	90	61	158	137	48	.3	29	39
27.....		62	50	47	94	67	148	141	44	4.0	66	33
28.....		66	55	40	98	74	145	137	40	9.3	120	52
29.....		65	55	39	102	-----	157	135	35	12	122	66
30.....		85	57	44	40	-----	160	136	31	14	148	78
31.....	70	-----	51	0	-----	162	-----	34	-----	140	50	-----

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	85	-----	66.3	4,080
November.....	78	50	64.0	3,810
December.....	64	19	48.7	2,990
January.....	102	0	70.5	4,330
February.....	108	0	72.5	4,030
March.....	162	73	130	7,990
April.....	174	132	150	8,930
May.....	148	31	85.1	5,230
June.....	66	.3	19.0	1,130
July.....	148	1.4	67.0	4,120
August.....	128	35	94.6	5,820
September.....	78	0	28.6	1,700
The year.....	174	0	76.6	54,200

SURFACE WATER SUPPLY, 1927, PART IX

GRAHAM CANAL NEAR SAFFORD, ARIZ.

LOCATION.—Staff gage in NE. $\frac{1}{4}$ SW. $\frac{1}{4}$ sec. 5, T. 7 S., R. 26 E., 1 mile below intake and 2 miles north of Safford.

RECORDS AVAILABLE.—October, 1914, to September, 1915; December, 1920, to September, 1927.

REMARKS.—Records good. One diversion from canal above gage. Intake on right side of Gila River in NW. $\frac{1}{4}$ sec. 9, T. 7 S., R. 26 E. Water used for irrigation near Safford.

Daily and monthly discharge, in second-feet, 1926-27

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	20	31	46	31	53	58	67	60	16	13	18	35
2.....	20	26	46	31	24	53	74	57	14	10	18	35
3.....	0	35	44	31	0	42	69	55	11	9.5	19	35
4.....	0	43	45	32	0	33	63	55	8.2	10	33	33
5.....	11	46	47	32	42	21	60	51	9.0	11	43	32
6.....	43	44	48	32	56	22	61	48	9.0	41	64	32
7.....	39	45	43	32	49	34	61	43	9.5	53	65	32
8.....	28	45	42	32	49	61	55	42	9.8	60	67	31
9.....	30	45	40	32	52	58	58	38	9.8	52	55	43
10.....	52	45	37	31	45	46	60	32	11	16	68	98
11.....	46	44	37	30	43	48	60	30	20	11	56	66
12.....	37	44	37	29	45	48	62	27	17	10	54	65
13.....	26	37	39	31	51	45	62	25	14	54	44	84
14.....	31	30	38	32	69	50	63	23	12	51	34	0
15.....	30	32	38	33	76	68	63	18	11	41	29	16
16.....	41	33	34	33	74	66	53	17	12	17	0	43
17.....	43	36	32	33	61	59	53	16	13	14	0	36
18.....	44	42	30	33	53	58	56	8.3	12	17	0	28
19.....	27	41	32	33	49	57	61	0	9.3	13	0	40
20.....	25	42	35	33	40	57	65	18	8.8	10	30	32
21.....	25	42	35	33	45	57	63	18	6.7	8.0	45	23
22.....	23	42	34	33	61	51	64	18	6.2	11	65	8.4
23.....	25	41	33	39	61	36	67	16	8.0	11	30	0
24.....	26	40	33	45	59	50	70	16	9.5	8.5	94	0
25.....	23	43	34	48	42	62	69	16	4.6	13	73	0
26.....	18	42	32	51	55	57	67	16	11	18	45	21
27.....	16	44	31	49	58	56	63	17	12	49	70	43
28.....	18	46	30	48	62	53	63	15	12	35	42	41
29.....	22	44	30	52	-----	49	63	23	12	17	33	40
30.....	53	45	30	55	-----	48	63	22	13	48	39	39
31.....	32	-----	30	55	-----	63	-----	18	-----	48	36	-----

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	53	0	28.2	1,730
November.....	46	26	40.5	2,410
December.....	48	30	36.8	2,260
January.....	55	29	36.9	2,270
February.....	76	0	19.1	2,730
March.....	68	21	50.5	3,110
April.....	74	53	62.6	3,720
May.....	60	0	27.7	1,700
June.....	20	4.6	11.0	655
July.....	60	8.0	25.2	1,550
August.....	94	0	40.9	2,510
September.....	98	0	34.4	2,050
The year.....	98	0	36.9	26,700

SMITHVILLE CANAL NEAR THATCHER, ARIZ.

LOCATION.—Staff gage in NW. $\frac{1}{4}$ sec. 35, T. 6 S., R. 25 E., three-quarters of a mile below intake and $1\frac{1}{2}$ miles north of Thatcher.

RECORDS AVAILABLE.—October, 1914, to September, 1915; December, 1920, to September, 1927.

REMARKS.—Records good. Intake on left side of Gila River in NE. $\frac{1}{4}$ sec. 35, T. 6 S., R. 25 E. Water used for irrigation near Pima.

Daily and monthly discharge, in second-feet, 1926-27

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	0	42	25	20	47	35	45	46	15	8.1	26	2.8
2.....	4.5	44	22	21	48	34	52	46	16	7.7	19	9.5
3.....	14	42	22	27	47	34	54	46	13	8.5	12	5.3
4.....	0	40	24	34	47	32	55	47	13	10	10	11
5.....	0	39	33	35	46	33	56	42	6.0	38	20	11
6.....	0	43	34	34	44	34	55	27	5.5	37	18	12
7.....	2.7	49	34	33	45	31	61	27	5.5	38	22	12
8.....	3.0	48	34	35	39	32	54	39	12	26	22	9.7
9.....	1.1	47	37	36	40	31	52	48	5.9	10	26	17
10.....	1.5	48	42	36	33	25	55	49	5.5	2.7	22	17
11.....	2	49	28	38	35	28	56	41	28	13	25	31
12.....	1.0	47	27	41	37	20	53	27	19	23	21	0
13.....	11	49	26	27	43	20	51	32	19	44	12	0
14.....	41	46	26	46	44	21	45	39	20	26	11	0
15.....	44	43	30	27	44	22	46	41	18	27	13	0
16.....	30	41	29	38	50	33	32	34	13	21	25	0
17.....	28	39	34	39	41	36	41	35	14	17	26	0
18.....	26	36	32	36	27	31	28	33	5.1	15	26	0
19.....	22	36	30	31	22	31	28	24	15	17	20	0
20.....	36	35	29	32	21	31	29	24	13	0	20	0
21.....	36	35	23	19	21	31	34	25	13	2.5	21	27
22.....	40	35	23	16	27	28	34	27	5.4	10	23	22
23.....	34	33	23	32	38	24	36	27	3.8	10	16	20
24.....	35	33	23	33	35	26	39	24	5.0	11	3.0	20
25.....	35	31	23	24	36	31	41	21	3.9	9.5	1.8	15
26.....	34	31	23	41	40	30	41	21	7.3	19	2.3	11
27.....	36	25	24	43	55	27	39	24	7.7	39	2.3	6.5
28.....	36	19	22	44	39	28	43	22	8.5	41	2.5	2.2
29.....	33	25	22	41	-----	27	45	17	11	19	4.3	3.0
30.....	54	24	22	46	-----	32	44	16	9.7	34	4.8	.7
31.....	46	-----	20	18	-----	32	-----	15	-----	33	3.4	-----

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	54	0	22.1	1,360
November.....	49	19	38.5	2,290
December.....	42	20	27.3	1,680
January.....	48	16	33.8	2,080
February.....	55	21	39.0	2,170
March.....	36	20	29.4	1,810
April.....	61	28	44.8	2,670
May.....	49	15	31.8	1,960
June.....	28	3.8	11.2	666
July.....	44	0	20.2	1,240
August.....	26	1.8	15.5	953
September.....	31	0	8.86	527
The year.....	61	0	26.8	19,400

DODGE-NEVADA CANAL NEAR PIMA, ARIZ.

LOCATION.—Staff gage in NW. $\frac{1}{4}$ SE. $\frac{1}{4}$ sec. 18, T. 6 S., R. 25 E., 1 mile below intake and $1\frac{1}{2}$ miles north of Pima.

RECORDS AVAILABLE.—December, 1920, to September, 1927.

REMARKS.—Records good. One diversion from canal above gage. Intake on left side of Gila River in NW. $\frac{1}{4}$ sec. 20, T. 6 S., R. 25 E. Water used for irrigation near Pima.

Daily and monthly discharge, in second-feet, 1926-27

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	2.1	27	22	20	29	26	47	32	15	9.3	29	27
2.....	17	24	23	17	28	29	55	30	15	7.7	23	23
3.....	12	16	25	18	29	26	32	30	16	8.6	30	23
4.....	1.6	16	26	18	32	24	0	27	16	11	27	19
5.....	.8	9.3	22	19	33	24	13	28	15	21	42	19
6.....	.6	7.1	19	18	30	21	36	31	13	44	50	17
7.....	2.0	5.9	23	20	26	20	47	35	13	52	39	17
8.....	9.9	3.6	32	19	20	23	36	46	14	17	38	17
9.....	5.6	3.3	34	19	17	17	34	28	14	1.2	42	17
10.....	7.7	2.4	35	20	17	15	39	24	14	.6	47	30
11.....	8.3	2.6	34	20	15	20	35	23	16	.2	36	31
12.....	12	3.3	34	20	17	15	38	30	15	0	40	12
13.....	0	17	34	23	20	17	22	24	14	.9	30	3.8
14.....	11	28	33	21	12	16	24	24	17	15	0	.7
15.....	18	18	32	20	0	18	41	34	14	20	0	.1
16.....	17	25	33	22	.8	33	43	25	11	9.3	17	0
17.....	16	29	32	22	0	46	46	31	12	9.3	48	3.0
18.....	14	30	29	22	2.8	45	35	25	11	9.9	63	6.8
19.....	14	29	26	20	1.2	37	23	22	8.3	5.6	32	25
20.....	17	29	24	21	0	35	30	20	11	5.3	14	21
21.....	16	29	26	20	7.7	20	32	19	9.9	4.8	13	16
22.....	15	29	29	21	15	24	35	19	11	5.0	16	11
23.....	12	29	24	22	17	23	34	19	9.3	5.0	14	12
24.....	11	28	22	21	24	12	36	21	9.3	5.9	5.0	6.2
25.....	10	26	22	22	35	12	39	17	10	7.4	3.3	0
26.....	10	25	27	21	29	11	45	20	9.3	9.0	39	0
27.....	9.6	23	26	21	25	8.6	39	18	9.6	71	32	.5
28.....	8.6	22	22	20	22	5.0	41	19	11	57	27	0
29.....	7.7	21	19	21	-----	1.0	27	21	10	30	18	0
30.....	21	22	19	28	-----	4.3	13	15	7.7	33	17	0
31.....	21	-----	17	26	-----	42	-----	15	-----	30	23	-----

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	21	0	10.6	652
November.....	30	2.4	19.3	1,150
December.....	35	17	26.6	1,640
January.....	28	17	20.7	1,270
February.....	35	0	18.0	1,000
March.....	46	0	21.6	1,330
April.....	55	1.0	33.9	2,020
May.....	46	15	24.9	1,530
June.....	17	7.7	12.4	738
July.....	71	0	17.6	1,080
August.....	63	0	27.6	1,700
September.....	31	0	11.9	708
The year.....	71	0	20.5	14,800

CURTIS-KEMPTON CANAL NEAR EDEN, ARIZ.

LOCATION.—Staff gage in SE. $\frac{1}{4}$ NE. $\frac{1}{4}$ sec. 4, T. 6 S., R. 24 E., 2 miles below intake and $1\frac{1}{2}$ miles southeast of Eden.

RECORDS AVAILABLE.—December, 1920, to September, 1927.

REMARKS.—Records good. Diversions from canal above gage. Intake on right side of Gila River in NW. $\frac{1}{4}$ sec. 12, T. 6 S., R. 24 E. Water used for irrigation near Eden.

Daily and monthly discharge, in second-feet, 1926-27

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	0	19	30	3.4	34	0	35	52	16	6.6	1.8	0
2.....	0	17	28	0	35	5.4	34	53	13	7.7	0	0
3.....	18	16	33	22	34	0	39	53	12	7.8	0	0
4.....	11	19	24	19	30	0	44	51	14	7.1	16	0
5.....	15	22	13	22	14	7.2	29	53	13	9.0	32	2.0
6.....	8.3	14	27	23	0	11	0	43	13	36	33	2.7
7.....	0	24	21	14	0	6.4	38	44	15	36	33	2.8
8.....	0	24	26	17	0	7.8	47	53	9.1	31	36	4.4
9.....	0	25	24	19	0	7.4	47	55	13	14	36	6.6
10.....	0	16	36	22	0	33	48	49	15	18	36	5.8
11.....	.5	16	27	26	0	42	49	30	17	13	31	0
12.....	7.6	15	27	22	0	0	47	29	27	6.3	33	0
13.....	27	18	23	22	0	0	47	33	16	22	38	0
14.....	24	25	23	20	0	0	49	32	22	0	16	0
15.....	22	24	23	21	0	2.3	45	30	17	13	15	0
16.....	19	30	25	22	0	46	39	26	15	14	9.4	0
17.....	21	33	19	14	0	45	38	24	14	8.4	18	0
18.....	18	39	20	2.4	0	43	39	22	21	7.8	0	0
19.....	18	39	32	0	0	38	34	22	7.7	8.0	0	0
20.....	18	37	25	30	0	41	35	20	8.0	10	0	0
21.....	22	37	23	27	0	41	39	18	3.5	9.0	0	0
22.....	21	38	24	30	0	36	36	19	0	8.9	11	0
23.....	22	33	22	31	0	28	36	17	6.2	8.6	6.6	0
24.....	19	33	23	37	0	36	37	15	8.7	7.7	.3	0
25.....	22	32	23	37	0	42	40	13	6.8	8.3	0	0
26.....	18	34	23	35	0	41	43	11	8.7	17	0	0
27.....	21	33	22	34	0	44	44	14	10	36	0	0
28.....	22	39	21	35	0	40	52	16	10	30	4.8	0
29.....	28	35	20	38	-----	35	53	18	10	2.1	4.5	0
30.....	35	29	20	41	-----	40	52	19	9.7	22	2.3	0
31.....	23	-----	12	37	-----	25	-----	18	-----	17	0	-----

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	35	0	15.5	953
November.....	39	14	27.2	1,620
December.....	36	12	23.8	1,460
January.....	41	0	23.3	1,430
February.....	35	0	5.2	289
March.....	46	0	24.0	1,480
April.....	53	0	40.5	2,410
May.....	55	11	30.7	1,890
June.....	27	0	12.4	738
July.....	36	0	14.3	879
August.....	38	0	13.3	818
September.....	6.6	0	.81	48.2
The year.....	55	0	19.4	14,000

SURFACE WATER SUPPLY, 1927, PART IX

FORT THOMAS CONSOLIDATED CANAL AT ASHURST, ARIZ.

LOCATION.—Staff gage in NE. $\frac{1}{4}$ SE. $\frac{1}{4}$ sec. 30, T. 5 S., R. 24 E., 2 miles below intake and 1 mile southeast of Ashurst.

RECORDS AVAILABLE.—December, 1920, to September, 1927.

REMARKS.—Records good. Discharge estimated April 27–29. Intake on left side of Gila River in NW. $\frac{1}{4}$ sec. 4, T. 6 S., R. 24 E. Water used for irrigation near Fort Thomas.

Daily and monthly discharge, in second-feet, 1926–27

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	30	4.0	36	65	51	59	35	92	8.0	3.2	67	19
2	39	0	41	63	60	57	39	87	7.6	5.8	51	22
3	43	0	47	64	66	57	41	74	7.8	6.6	34	22
4	34	0	50	64	68	73	39	65	7.8	18	29	23
5	22	0	58	65	71	68	37	43	8.0	10	48	21
6	19	0	73	62	72	63	35	26	8.0	73	69	18
7	8.4	0	69	61	72	51	27	29	8.2	69	74	16
8	13	0	57	62	70	28	24	42	8.0	0	77	13
9	12	0	47	62	68	32	24	49	8.7	0	77	60
10	12	0	46	61	65	36	24	42	9.1	0	90	75
11	12	36	46	61	65	44	24	27	14	20	83	60
12	14	38	47	62	60	46	39	22	21	29	88	92
13	51	28	49	60	73	43	72	19	10	47	64	0
14	64	24	53	58	36	53	83	18	9.8	50	40	0
15	68	17	55	60	0	72	84	17	8.4	20	35	0
16	68	17	66	66	0	74	79	16	7.8	14	47	0
17	49	17	70	54	0	76	72	15	7.2	16	84	0
18	46	54	71	64	0	78	77	15	7.2	12	77	0
19	40	63	71	64	0	69	85	14	7.4	9.5	80	0
20	47	66	60	58	0	67	87	7.8	7.0	6.2	109	0
21	58	56	71	38	0	65	89	7.8	10	5.4	84	25
22	53	51	80	25	23	67	88	7.8	16	4.1	65	33
23	51	52	78	39	47	68	90	9.3	4.3	44	65	25
24	51	45	77	42	51	71	90	8.0	3.9	0	56	0
25	51	41	76	52	62	70	90	8.0	2.5	0	56	0
26	51	41	69	46	66	58	88	8.0	2.3	0	70	0
27	50	40	70	41	66	50		8.2	6.6	0	71	0
28	36	36	69	41	62	56	90	8.2	3.5	0	74	0
29	47	34	72	42		51		8.0	6.6	0	77	0
30	64	37	66	45		41	93	8.0	2.9	68	23	0
31	64		66	43		34		8.0		73	16	

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October	68	8.4	40.9	2,510
November	66	0	26.6	1,580
December	80	36	61.5	3,780
January	66	25	54.7	3,360
February	73	0	45.6	2,530
March	78	28	57.3	3,520
April	93	24	64.2	3,820
May	92	7.8	26.1	1,600
June	21	2.3	7.99	475
July	73	0	19.5	1,200
August	109	16	63.9	3,930
September	92	0	17.5	1,040
The year	109	0	40.6	29,300

SAN PEDRO RIVER AT FAIRBANK, ARIZ.

LOCATION.—Staff gage in NW. $\frac{1}{4}$ sec. 3, T. 20 S., R. 21 E., unsurveyed, half a mile west of Fairbank and immediately below mouth of Babocomari River.

DRAINAGE AREA.—1,500 square miles.

RECORDS AVAILABLE.—October, 1926, to September, 1927. Numerous stations have been maintained in the past at various locations upstream.

EXTREMES.—Maximum discharge during year, 5,120 second-feet October 9 (gage height, 8.5 feet); minimum, 10 second-feet June 22 (gage height, 0.96 foot).

REMARKS.—Records fair. Discharge estimated or interpolated October 1-8 and 13-16. Diversions for irrigation above station.

Daily and monthly discharge, in second-feet, 1926-27

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	275	55	37	38	30	24	28	22	14	13	865	50
2.....	200	60	39	37	30	25	25	20	14	12	191	35
3.....	160	55	38	39	32	25	26	23	13	10	85	33
4.....	135	54	37	37	32	26	24	19	13	11	315	25
5.....	110	52	46	36	30	24	26	19	12	98	100	24
6.....	100	51	48	37	31	26	27	19	12	98	62	24
7.....	90	51	47	35	31	26	26	18	12	248	2,050	67
8.....	149	51	47	34	31	24	26	18	13	1,540	668	409
9.....	2,100	49	46	34	30	24	26	19	12	354	95	65
10.....	629	47	47	34	30	24	26	18	12	211	55	77
11.....	302	51	45	33	30	26	26	18	12	109	85	37
12.....	207	49	44	33	31	27	27	17	12	72	76	42
13.....	190	46	44	33	30	28	28	17	12	76	121	44
14.....	160	45	43	33	30	28	28	16	11	65	220	91
15.....	140	44	42	33	30	26	29	16	12	69	116	44
16.....	110	44	41	34	30	26	29	17	11	60	613	37
17.....	87	39	42	31	28	24	27	15	11	41	233	69
18.....	85	44	40	34	30	26	27	16	11	42	168	41
19.....	83	42	40	33	30	24	28	16	11	59	93	76
20.....	77	42	41	33	27	24	27	16	10	60	83	53
21.....	72	42	40	33	28	27	26	15	10	65	48	38
22.....	69	41	40	32	28	27	26	14	10	68	59	34
23.....	67	40	41	32	28	26	27	14	11	67	80	31
24.....	64	41	39	32	26	26	26	15	11	55	46	41
25.....	64	35	39	32	28	24	26	14	10	55	42	29
26.....	64	38	40	31	28	27	24	13	11	54	59	28
27.....	62	37	39	33	26	27	23	13	14	80	165	27
28.....	58	36	40	32	26	27	24	14	14	220	49	25
29.....	57	36	37	31	-----	26	23	14	18	87	42	24
30.....	58	37	38	30	-----	28	22	14	14	241	35	24
31.....	56	-----	37	30	-----	27	-----	14	-----	79	37	-----

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	2,100	56	196	12,100
November.....	60	35	45.1	2,680
December.....	48	37	41.4	2,550
January.....	39	30	33.5	2,060
February.....	32	26	29.3	1,630
March.....	28	24	25.8	1,590
April.....	29	22	26.1	1,550
May.....	23	13	16.5	1,010
June.....	18	10	12.1	720
July.....	1,540	10	143	8,790
August.....	2,050	35	224	13,800
September.....	409	24	54.8	3,260
The year.....	2,100	10	71.4	51,700

SURFACE WATER SUPPLY, 1927, PART IX

SANTA CRUZ RIVER AT TUCSON, ARIZ.

LOCATION.—Staff gage in sec. 14, T. 14 S., R. 13 E., at Congress Street Bridge at Tucson, 7 miles above mouth of Rillito Creek.

DRAINAGE AREA.—2,260 square miles.

RECORDS AVAILABLE.—October, 1905, to September, 1927.

EXTREMES.—Maximum discharge during year, 1,950 second-feet September 7 (gage height, 15.5 feet); no flow during greater part of year.

1905-1927: Maximum discharge, 11,400 second-feet September 28, 1926 (gage height, 19.5 feet); no flow during greater part of each year.

REMARKS.—Records good. Discharge estimated or interpolated December 4-7, 12, 19, 25, 26, 31, January 1, 2, February 13, July 10, 11, 24-26, August 21, 28, 29, and September 11, 15, and 17. Diversions for irrigation above station.

Daily and monthly discharge, in second-feet, 1926-27

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	55	0	2	0	0	0	0	0	0	31	0
2	0	0	0	2	0	0	0	0	0	0	0	0
3	0	0	0	2	0	0	0	0	0	0	0	0
4	0	0	5	2	0	0	0	0	0	0	0	0
5	0	0	5	0	0	0	0	0	0	0	177	0
6	0	0	2	0	0	0	0	0	0	0	0	0
7	59	0	3	0	0	0	0	0	0	30	0	378
8	53	0	4	0	0	0	0	0	0	4	0	26
9	0	0	4	0	0	0	0	0	0	56	0	0
10	0	0	4	0	0	0	0	0	0	25	0	0
11	0	0	4	0	0	0	0	0	0	4	0	2
12	0	0	3	0	0	0	0	0	0	0	0	67
13	0	0	3	0	5	0	0	0	0	0	135	44
14	0	0	4	0	0	0	0	0	0	0	0	9
15	0	0	4	0	0	0	0	0	0	0	0	1
16	0	0	4	0	0	0	0	0	0	0	15	0
17	0	0	3	0	0	0	0	0	0	0	0	4
18	0	0	3	0	0	0	0	0	0	0	9	0
19	0	0	4	0	0	0	0	0	0	0	35	26
20	0	0	4	0	0	0	0	0	0	0	6	10
21	0	0	4	0	0	0	0	0	0	0	1	0
22	0	0	4	0	0	0	0	0	0	0	46	0
23	0	0	4	0	0	0	0	0	0	5	0	0
24	0	0	5	0	0	0	0	0	0	6	0	0
25	0	0	5	0	0	0	0	0	0	6	66	0
26	0	0	4	0	0	0	0	0	0	2	36	0
27	0	0	4	0	0	0	0	0	0	0	25	0
28	0	0	3	0	0	0	0	0	0	0	10	0
29	0	0	2	0	0	0	0	0	0	0	1	0
30	0	0	2	0	0	0	0	0	0	0	5	0
31	0	0	2	0	0	0	0	0	0	0	0	0

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October	59	0	3.6	221
November	55	0	1.8	107
December	5	0	3.3	203
January	2	0	.3	16
February	5	0	.2	10
July	56	0	4.5	274
August	177	0	19.3	1,190
September	378	0	18.9	1,120
The year	378	0	4.3	3,140

RILLITO CREEK NEAR TUCSON, ARIZ.

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

DRAINAGE AREA.—897 square miles.

RECORDS AVAILABLE.—January, 1911, to September, 1927.

EXTREMES.—Maximum discharge during year, 2,200 second-feet September 12 (gage height, 18.2 feet); no flow during greater part of year.

1911–1927: Maximum discharge, greater than 16,000 second-feet December 23, 1914; no flow during greater part of each year.

REMARKS.—Records fair. Discharge estimated December 16 and 25. Diversions for irrigation above station.

Daily and monthly discharge, in second-feet, 1926–27

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	14	0	0	0	0	0	0	0	0
5	0	0	0	33	0	0	0	0	0	0	0	8
6	0	0	0	21	0	0	0	0	0	0	0	0
7	0	0	0	10	0	0	0	0	0	0	0	46
8	5	0	0	10	0	0	0	0	0	0	0	15
9	0	0	0	6	0	0	0	0	0	0	0	0
10	0	0	0	4	0	0	0	0	0	19	5	0
11	0	0	0	0	0	158	0	0	0	0	0	78
12	0	0	6	0	0	46	0	0	0	0	0	487
13	0	0	1	0	0	38	0	0	0	0	0	4
14	0	0	12	0	0	55	0	0	0	0	0	0
15	0	0	6	0	33	90	0	0	0	0	0	0
16	0	0	1	0	138	77	0	0	0	0	0	0
17	0	0	0	0	212	55	0	0	0	0	23	0
18	0	0	0	0	101	46	0	0	0	0	4	15
19	0	0	0	0	70	46	0	0	0	0	0	0
20	0	0	0	0	36	24	0	0	0	0	0	0
21	0	0	0	0	31	0	0	0	0	0	8	0
22	0	0	0	0	27	0	0	0	0	0	0	0
23	0	0	7	0	38	0	0	0	0	0	0	0
24	0	0	2	0	33	0	0	0	0	0	0	0
25	0	0	1	0	14	0	0	0	0	0	0	0
26	0	0	0	0	10	0	0	0	0	0	0	0
27	0	0	0	0	6	0	0	0	0	0	36	0
28	0	0	0	0	3	0	0	0	0	0	0	0
29	0	0	0	0	0	0	0	0	0	0	24	0
30	6	0	0	0	0	0	0	0	0	0	0	0
31	5	0	0	0	0	0	0	0	0	0	0	0

Month	Discharge in second-feet			R un-off in acre-feet
	Maximum	Minimum	Mean	
October	6	0	0.5	31
December	12	0	1.2	71
January	33	0	3.2	194
February	212	0	26.9	1,490
March	158	0	20.5	1,269
July	19	0	.6	37
August	36	0	3.2	137
September	487	0	21.8	1,390
The year	487	0	6.3	4,580

SALT RIVER NEAR CHRYSOTILE, ARIZ.

LOCATION.—Water-stage recorder in SE. $\frac{1}{4}$ sec. 5, T. 5 N., R. 18 E., on San Carlos Indian Reservation, near Chrysotile and 8 miles above Cibecue Creek. Zero of gage about 3,250 feet above mean sea level.

DRAINAGE AREA.—3,050 square miles.

RECORDS AVAILABLE.—September, 1924, to September, 1927.

EXTREMES.—Maximum discharge during year, 14,600 second-feet February 17 (gage height, 9.9 feet); minimum, 114 second-feet December 26 (gage height, 1.52 feet.)

1924-1927: Maximum discharge, that of February 17, 1927. Minimum, that of December 26, 1926.

REMARKS.—Records good. Only minor diversions above station.

Daily and monthly discharge, in second-feet, 1926-27

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	260	198	178	175	219	2,220	1,770	2,360	540	382	314	286
2.....	250	198	178	182	223	1,800	1,640	2,170	504	340	290	272
3.....	230	194	178	202	223	1,560	1,740	2,080	486	309	272	267
4.....	220	182	178	227	254	1,440	2,090	1,940	462	290	300	254
5.....	205	178	198	281	281	1,390	2,480	1,770	438	286	387	249
6.....	195	178	198	309	324	1,310	2,580	1,630	426	319	426	263
7.....	182	171	215	345	309	1,250	2,400	1,500	409	345	376	324
8.....	175	171	245	340	295	1,200	2,300	1,410	398	392	350	309
9.....	175	171	236	340	281	1,170	2,170	1,390	398	492	329	290
10.....	175	168	223	340	272	1,520	2,020	1,370	398	370	305	309
11.....	175	168	215	334	258	1,870	1,750	1,380	420	329	281	360
12.....	175	168	223	324	267	1,740	1,540	1,310	510	305	272	504
13.....	175	175	627	345	305	1,730	1,380	1,240	522	286	272	682
14.....	219	178	592	345	409	2,600	1,340	1,210	498	267	254	862
15.....	190	190	426	319	3,800	3,260	1,220	1,220	450	236	268	750
16.....	175	186	305	305	7,960	2,850	1,180	1,250	409	223	475	612
17.....	171	186	227	295	12,700	2,290	1,290	1,220	376	202	309	1,820
18.....	168	186	211	296	6,530	1,870	1,360	1,190	355	194	263	742
19.....	164	178	202	272	2,670	1,730	1,400	1,200	345	190	295	566
20.....	164	178	219	258	2,020	1,630	1,810	1,180	329	186	324	492
21.....	164	178	223	254	1,990	1,390	2,220	1,090	319	182	345	426
22.....	164	178	241	249	1,960	1,280	2,660	999	309	178	324	392
23.....	160	178	258	245	1,940	1,210	2,900	934	300	178	329	38 7
24.....	160	178	223	236	1,910	1,220	2,860	854	281	219	263	376
25.....	160	182	175	227	1,880	1,370	2,740	790	272	267	398	370
26.....	160	182	171	219	1,850	1,590	2,800	735	272	456	329	334
27.....	157	182	164	215	2,080	1,790	2,840	690	276	488	370	319
28.....	157	182	175	215	2,240	1,800	2,760	654	489	504	535	300
29.....	157	182	164	215	-----	1,760	2,680	633	742	462	498	281
30.....	168	178	160	215	-----	1,890	2,580	586	456	432	387	267
31.....	198	-----	168	215	-----	1,850	-----	566	-----	355	319	-----

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	260	157	182	11,200
November.....	198	168	180	10,700
December.....	627	160	239	14,700
January.....	345	175	269	16,500
February.....	12,700	219	1,980	110,000
March.....	3,260	1,170	1,730	106,000
April.....	2,900	1,180	2,080	124,000
May.....	2,360	566	1,240	76,200
June.....	742	272	413	24,600
July.....	504	178	312	19,200
August.....	535	254	337	20,700
September.....	1,820	249	466	27,100
The year.....	12,700	157	775	561,000

GILA RIVER BASIN

93

SALT RIVER NEAR ROOSEVELT, ARIZ.

LOCATION.—Staff gage near diversion dam for power canal, 10 miles above upper end of Roosevelt Reservoir and 20 miles east of Roosevelt, Gila County.

DRAINAGE AREA.—4,222 square miles.

RECORDS AVAILABLE.—October, 1913, to September, 1927.

EXTREMES.—Maximum mean daily discharge during year, 31,600 second-feet February 18; minimum, 165 second-feet July 23.

1913-1927: Maximum mean daily discharge, 79,200 second-feet January 19, 1916; minimum, 135 second-feet July 12, 1926.

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

Daily and monthly discharge, in second-feet, 1926-27

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1-----	409	248	239	239	280	3,380	2,540	2,340	583	630	335	315
2-----	234	273	235	244	280	3,050	2,220	2,120	542	480	305	295
3-----	322	266	232	270	284	2,520	2,170	1,910	518	398	253	278
4-----	295	266	238	293	303	2,100	2,040	1,810	504	347	330	250
5-----	285	257	250	315	313	2,000	2,500	1,810	485	310	595	242
6-----	279	248	294	365	339	1,960	2,710	1,740	468	420	688	235
7-----	271	244	294	389	377	1,890	2,980	1,620	447	355	518	375
8-----	252	242	395	448	387	1,790	2,560	1,570	438	398	387	385
9-----	250	239	390	436	376	1,700	2,380	1,530	425	400	340	338
10-----	246	230	353	475	352	1,550	2,380	1,520	413	568	435	345
11-----	244	227	320	436	350	2,750	2,100	1,500	530	393	408	307
12-----	234	226	313	432	350	3,000	2,080	1,520	496	335	398	850
13-----	234	226	636	436	396	2,550	1,860	1,490	575	277	278	1,590
14-----	246	227	1,080	431	691	2,450	1,590	1,260	600	258	405	988
15-----	260	230	875	433	3,010	3,450	1,310	1,240	565	250	287	1,030
16-----	267	277	680	432	19,300	3,880	1,260	1,260	492	195	355	990
17-----	240	277	441	397	28,300	3,120	1,420	1,260	435	184	648	730
18-----	233	277	372	377	31,600	2,460	1,320	1,240	390	175	360	2,320
19-----	226	278	291	359	9,650	2,060	1,340	1,210	347	173	320	1,070
20-----	225	272	280	350	4,950	1,800	1,440	1,230	322	178	365	768
21-----	224	268	293	336	3,520	1,850	1,810	1,160	300	169	370	740
22-----	223	270	306	314	3,250	1,790	2,100	1,100	280	171	490	550
23-----	220	275	482	320	3,050	1,720	2,550	1,050	268	165	375	588
24-----	220	257	436	313	3,000	1,640	2,690	975	262	166	370	520
25-----	220	260	373	312	3,080	1,690	2,660	888	247	196	498	453
26-----	219	270	296	302	3,050	1,860	2,550	787	239	215	395	445
27-----	218	265	240	289	3,150	2,250	2,620	723	237	527	435	402
28-----	218	265	250	280	3,320	2,300	2,620	690	370	618	440	385
29-----	218	236	275	278	-----	2,300	2,550	665	2,990	605	963	350
30-----	219	240	252	280	-----	2,220	2,410	648	1,080	500	695	335
31-----	227	-----	237	280	-----	2,220	-----	625	-----	422	450	-----

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October-----	409	218	251	15,400
November-----	278	226	255	15,200
December-----	1,080	232	376	23,100
January-----	475	239	350	21,500
February-----	31,600	280	4,550	253,000
March-----	3,880	1,550	2,300	141,000
April-----	2,980	1,260	2,160	129,000
May-----	2,340	625	1,310	80,600
June-----	2,990	237	528	31,400
July-----	630	165	338	20,800
August-----	963	253	435	26,700
September-----	2,320	235	616	36,700
The year-----	31,600	165	1,100	794,000

SURFACE WATER SUPPLY, 1927, PART IX

TONTON 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.—1,004 square miles.

RECORDS AVAILABLE.—October, 1913, to September, 1927.

EXTREMES.—Maximum mean daily discharge during year, 12,600 second-feet February 17; minimum, 2 second-feet October 25–28.

1913–1927: Maximum mean daily discharge, 20,000 second-feet December 28, 1923; no flow September 4–10, 1924.

REMARKS.—No diversions of importance above station. Daily-discharge record furnished by Salt River Valley Water Users' Association.

Daily and monthly discharge, in second-feet, 1926–27

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	75	7	4	15	3	90	10	170	30	315	15	10
2.....	50	5	4	18	3	90	8	165	30	110	15	10
3.....	160	5	4	15	3	90	8	165	30	50	10	10
4.....	70	5	6	15	5	85	6	165	15	50	10	10
5.....	50	4	15	15	5	85	6	56	15	50	10	5
6.....	15	4	100	15	10	350	6	56	15	10	25	5
7.....	10	3	125	15	3	125	15	56	15	10	15	25
8.....	10	3	300	50	3	100	15	56	15	500	15	25
9.....	145	3	250	45	3	90	175	56	15	115	15	25
10.....	100	3	150	45	5	200	175	56	15	100	10	15
11.....	15	3	100	45	5	700	175	56	150	75	7	15
12.....	5	3	90	40	40	650	175	56	100	25	7	725
13.....	6	4	1,250	40	300	640	175	56	75	15	30	3,500
14.....	6	7	1,000	40	575	640	195	56	70	15	25	900
15.....	6	4	500	25	5,200	640	195	56	70	10	25	300
16.....	4	5	250	25	9,910	500	195	56	45	10	850	275
17.....	4	4	200	18	12,600	500	195	45	45	10	250	400
18.....	4	4	125	12	7,500	480	200	45	45	10	125	2,000
19.....	4	4	115	12	4,000	480	350	40	45	5	25	150
20.....	4	4	100	18	900	450	360	40	45	5	25	200
21.....	3	4	75	18	425	350	350	40	25	5	25	200
22.....	3	4	70	12	325	300	350	40	25	5	25	90
23.....	3	4	400	12	325	75	350	40	25	5	25	50
24.....	3	4	300	12	200	35	175	40	25	5	10	50
25.....	2	4	250	10	100	25	175	40	15	5	35	25
26.....	2	4	175	10	95	20	175	40	15	7	28	10
27.....	2	4	60	10	90	18	170	30	15	25	350	10
28.....	2	4	50	10	90	15	170	30	1,000	25	250	10
29.....	3	5	25	5	-----	15	170	30	2,400	15	250	10
30.....	5	5	20	5	-----	15	170	30	475	15	200	10
31.....	7	-----	20	5	-----	10	-----	30	-----	15	50	-----

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	160	2	25.1	1,540
November.....	7	3	4.2	250
December.....	1,250	4	198	12,200
January.....	50	5	20.4	1,250
February.....	12,600	3	1,530	85,000
March.....	700	10	254	15,600
April.....	360	6	163	9,700
May.....	170	30	61.2	3,760
June.....	2,400	15	164	9,700
July.....	500	5	52.2	3,210
August.....	850	7	88.9	5,470
September.....	3,500	5	302	18,000
The year.....	12,600	2	228	166,000

VERDE RIVER ABOVE CAMP CREEK, NEAR McDOWELL, ARIZ.

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

DRAINAGE AREA.—5,550 square miles.

RECORDS AVAILABLE.—February, 1925, to September, 1927. August to September, 1889; April, 1897, to November, 1899; January, 1901, to February, 1925, at a point three-quarters of a mile above mouth.

EXTREMES.—Maximum mean daily discharge during year, 48,200 second-feet February 17; minimum, 108 second-feet July 19.

1897–1899, 1901–1927: Maximum mean daily discharge, 61,500 second-feet November 27, 1905; minimum, 32 second-feet July 19 and 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, 1926–27

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1-----	438	230	271	308	375	5,410	1,380	278	169	1,250	174	980
2-----	385	217	275	311	361	3,590	1,260	267	163	770	153	589
3-----	396	228	285	304	333	2,200	1,020	223	148	435	150	410
4-----	435	225	268	351	328	1,980	1,140	215	140	323	270	417
5-----	320	220	284	357	323	2,020	1,220	208	152	255	495	511
6-----	326	243	308	367	309	2,060	1,300	212	155	235	270	343
7-----	311	215	316	366	308	1,690	1,280	202	147	208	249	255
8-----	288	214	624	353	309	1,720	1,040	193	140	318	227	715
9-----	410	206	716	359	341	1,900	887	193	152	317	223	815
10-----	317	209	730	361	355	1,680	765	205	155	277	202	510
11-----	339	228	495	375	350	2,220	703	217	239	280	195	375
12-----	320	226	409	378	363	2,400	601	223	188	244	193	3,650
13-----	305	230	524	357	394	2,320	573	202	194	195	260	18,200
14-----	270	227	1,380	370	573	2,260	525	214	177	180	345	5,350
15-----	254	222	967	372	6,420	3,150	542	193	200	163	410	2,980
16-----	254	217	505	358	30,700	4,340	581	192	222	152	2,050	1,690
17-----	245	222	447	360	48,200	2,880	707	187	230	139	525	2,000
18-----	238	239	366	346	43,200	2,140	1,300	189	220	122	287	2,250
19-----	217	229	358	341	18,800	1,740	1,180	199	217	108	277	3,020
20-----	254	246	346	325	9,150	1,550	995	189	179	109	257	2,360
21-----	213	242	315	312	5,200	1,460	870	183	168	116	239	1,380
22-----	205	245	329	308	4,220	1,160	663	180	172	131	216	960
23-----	214	225	497	324	5,330	949	625	174	183	230	200	667
24-----	217	246	443	318	4,710	851	565	158	185	185	318	518
25-----	217	246	384	297	4,540	826	545	166	176	152	228	770
26-----	195	238	352	386	4,120	1,340	488	159	165	136	208	925
27-----	207	234	353	342	4,170	1,980	468	165	157	181	763	698
28-----	222	237	330	334	4,400	2,060	448	174	142	190	682	610
29-----	218	240	338	318	-----	1,840	308	166	216	202	845	482
30-----	248	244	328	308	-----	1,550	284	163	910	220	2,040	435
31-----	228	-----	315	390	-----	1,270	-----	151	-----	221	1,740	-----

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October-----	438	195	281	17,300
November-----	246	206	230	13,700
December-----	1,380	268	447	27,500
January-----	390	304	344	21,200
February-----	48,200	308	7,080	393,000
March-----	5,410	826	2,080	128,000
April-----	1,380	281	809	48,100
May-----	278	151	195	12,000
June-----	910	140	202	12,000
July-----	1,250	108	259	15,900
August-----	2,050	150	474	29,100
September-----	18,200	255	1,880	109,000
The year-----	48,200	108	1,140	827,000

MISCELLANEOUS DISCHARGE MEASUREMENTS

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

Miscellaneous discharge measurements in Colorado River drainage basin during the year ending September 30, 1927

Date	Stream	Tributary to or diverting from—	Locality	Gage height	Dis-charge
				Feet	Sec.-ft.
Oct. 18	North Fork of Duchesne River.	Duchesne River	SE. $\frac{1}{4}$ sec. 19, T. 1 N., R. 8 W., Uinta base and meridian, 25 feet upstream from confluence with West Fork of Duchesne River and 6 miles northwest of Hanna, Utah.	-----	28.4
18	West Fork of Duchesne River.	do.	NE. $\frac{1}{4}$ sec. 25, T. 1 N., R. 9 W., Uinta base and meridian, $1\frac{1}{4}$ miles upstream from confluence with North Fork of Duchesne River and 7 miles northwest of Hanna, Utah.	-----	20.2
Aug. 10	Brown Duck Creek.	West Fork of Lake Fork.	NE. $\frac{1}{4}$ sec. 13, T. 2 N., R. 6 W., Uinta base and meridian, at water commissioner's gage about 600 feet upstream from confluence with Moon Lake and 14 miles northwest of Mountain Home, Utah.	1.12	57.2
4	Uinta River	Duchesne River	SE. $\frac{1}{4}$ sec. 7, T. 3 S., R. 2 E., Uinta base and meridian, at Randlett, Utah, $1\frac{1}{2}$ miles upstream from from confluence with Duchesne River.	-----	42.9
Feb. 10	Utah Power & Light Co.'s tail-race.	Uinta River	SW. $\frac{1}{4}$ sec. 25, T. 2 N., R. 2 W., Uinta base and meridian, at plant 9 miles northwest of Neola, Utah.	-----	2.9
Oct. 28	Fish Creek.	Price River	NW. $\frac{1}{4}$ sec. 26, T. 11 S., R. 8 E., 100 feet above confluence with White River and $\frac{1}{2}$ mile southeast of Colton, Utah.	-----	14.6
Feb. 5	Price River	Green River	SE. $\frac{1}{4}$ sec. 9, T. 18 S., R. 14 E., at highway bridge at Woodside, Utah.	-----	25.2
May 30	Gooseberry Creek.	Fish Creek	NW. $\frac{1}{4}$ sec. 19, T. 13 S., at proposed dam site 8 miles southwest of Scofield, Utah.	-----	59.6
June 8	do.	do.	do.	-----	39.6
July 28	do.	do.	do.	-----	6.2
Oct. 28	White River	Price River	NW. $\frac{1}{4}$ sec. 26, T. 11 S., R. 8 E., 100 feet above confluence with Fish Creek and $\frac{1}{2}$ mile southeast of Colton, Utah.	-----	2.6
May 30	Boulger Creek	Huntington Creek	SE. $\frac{1}{4}$ sec. 33, T. 13 S., R. 6 E., 8 miles southwest of Scofield, Utah.	-----	22.0
June 8	do.	do.	do.	-----	32.7
July 28	do.	do.	do.	-----	2.5
May 30	Flat Canyon Creek	Boulger Creek	NE. $\frac{1}{4}$ sec. 33, T. 1 S., R. 6 E., 8 miles southwest of Scofield, Utah.	-----	3
June 8	do.	do.	do.	-----	5
July 28	do.	do.	do.	-----	1.2
Sept. 22	North Montezuma Creek.	Montezuma Creek	SE. $\frac{1}{4}$ sec. 36, T. 33 S., R. 23 E., at highway bridge $\frac{1}{2}$ mile south of Monticello, Utah.	-----	8.2
22	North Fork of North Montezuma Creek.	North Montezuma Creek.	NE. $\frac{1}{4}$ sec. 35, T. 33 S., R. 23 E., at forest-ranger station 1 mile west of Monticello, Utah.	-----	4.8
June 13	East Fork of Virgin River.	Virgin River	SW. $\frac{1}{4}$ sec. 5, T. 42 S., R. 10 W., $\frac{1}{2}$ mile above confluence with Mukuntuweap River and 2 miles east of Rockville, Utah.	-----	41.6
14	St. George & Washington Canal.	do.	SE. $\frac{1}{4}$ sec. 20, T. 42 S., R. 14 W., a quarter of a mile from head of canal and 4 miles east of Washington, Utah.	-----	106
Feb. 18	Mineral Creek	Gila River	Kelvin, Ariz.	-----	179

INDEX

A

	Page
Accuracy of data and results, degrees of.....	4-5
Acre-foot, definition of.....	2
Almont, Colo., Taylor River at.....	23
Appropriations, record of.....	1
Ashley Creek near Vernal, Utah.....	39
Ashurst, Ariz., Fort Thomas Consolidated Canal at.....	88
Gila River near.....	64

B

Big Sandy Creek near Farson, Wyo.....	36
Black-McClesky Canal at Duncan, Ariz.....	74
Blackrock, N. Mex., Zuni River at.....	56
Blue River at Dillon, Colo.....	20
Bluff, Utah, San Juan River near.....	53
Boulder, Wyo., New Fork near.....	34
Boulger Creek, Utah, discharge measurements of.....	96
Bright Angel Creek near Grand Canyon, Ariz.....	58
Brown Canal near Solomonville, Ariz.....	77
Brown Canal wasteway near Solomonville, Ariz.....	78
Brown Duck Creek, Utah, discharge measurement of.....	96

C

Cedaredge, Colo., Surface Creek at.....	26
Central, Utah, Santa Clara Creek near.....	61
Chrysotile, Ariz., Salt River near.....	92
Cisco, Utah, Colorado River near.....	14
Clifton, Ariz., San Francisco River at.....	76
Colmonero Canal near Duncan, Ariz.....	75
Colona, Colo., Uncompahgre River near.....	28
Colorado River and tributaries above Green River, gaging-station records on.....	10-30
Colorado River at Bright Angel Creek, near Grand Canyon, Ariz.....	16
at Glenwood Springs, Colo.....	11-12
at Hot Sulphur Springs, Colo.....	10-11
at Lees Ferry, Ariz.....	15
at Yuma, Ariz.....	18
near Cisco, Utah.....	14
near Palisade, Colo.....	12-13
near Topock, Ariz.....	17
Computations, results of, accuracy of.....	4-5
Control, definition of.....	2
Coolidge Dam, Ariz., Gila River at.....	65
Cooperation, record of.....	9
Cosper-Windham Canal near Duncan, Ariz.....	70
Cottonwood Creek near Orangeville, Utah.....	52
Curtis-Kempton Canal near Eden, Ariz.....	87

D

	Page
Daniel, Wyo., Green River near.....	31
Data, accuracy of.....	4-5
explanation of.....	2-4
Delta, Colo., Uncompahgre River at.....	29
Diamondville, Wyo., Hams Fork at.....	37
Dillon, Colo., Blue River at.....	20
Dodge-Nevada Canal near Pima, Ariz.....	86
Duchesne, Utah, Strawberry River at.....	44
Duchesne River at Duchesne, Utah.....	42
at Myton, Utah.....	43
near Tabiona, Utah.....	41
North Fork of, Utah, discharge measurement of.....	96
West Fork of, Utah, discharge measurement of.....	96
Duncan, Ariz., Black-McClesky Canal at.....	74
Colmonero Canal near.....	75
Cosper-Windham Canal near.....	70
Gila River below.....	63
Gila River near.....	62
Moddle Canal near.....	71
Sunset Canal near.....	69
Valley Canal near.....	72
Duncan Canal near Duncan, Ariz.....	73

E

Eden, Ariz., Curtis-Kempton Canal near...	87
---	----

F

Fairbank, Ariz., San Pedro River at.....	89
Farson, Wyo., Big Sandy Creek near.....	36
Fish Creek, Utah, discharge measurement of.....	96
near Scofield, Utah.....	
Flat Canyon Creek, Utah, discharge measurements of.....	96
Fort Thomas Consolidated Canal at Ashurst, Ariz.....	88
Florence, Ariz., Gila River near.....	67
Fourness Canal near Solomonville, Ariz.....	80
Fraser River near West Portal, Colo.....	19

G

Gila River at Ashurst-Hayden Dam, near Florence, Ariz.....	67
at Coolidge Dam, Ariz.....	65
at Gillespie Dam, Ariz.....	68
at Kelvin, Ariz.....	66
at Virden Bridge near Duncan, Ariz.....	62
at York, Ariz.....	63
below Duncan, Ariz.....	63
near Ashurst, Ariz.....	64
near Solomonville, Ariz.....	63-64
Gila River Basin, Ariz., gaging-station records in.....	62-95

	Page		Page
Gillespie Dam, Ariz., Gila River at.....	68	O	
Glenwood Springs, Colo., Colorado River at.....	11-12	Orangeville, Utah, Cottonwood Creek near.....	52
Roaring Fork at.....	21	Ouray, Colo., Uncompahgre River below.....	27
Gooseberry Creek, Utah, discharge measurements of.....	96	P	
Graham Canal near Safford, Ariz.....	84	Palisade, Colo., Colorado River near.....	12-13
Grand Canyon, Ariz., Bright Angel Creek near.....	58	Parachute Creek at Grand Valley, Colo.....	22
Colorado River near.....	16	Paria River at Lees Ferry, Ariz.....	54
Grand Falls, Ariz., Little Colorado River at.....	55	Pima, Ariz., Dodge-Nevada Canal near.....	86
Grand Junction, Colo., Gunnison River near.....	25	Pine Creek at Pinedale, Wyo.....	35
Grand Valley, Colo., Parachute Creek at.....	22	Pinedale, Wyo., Pine Creek at.....	35
Green River at Green River, Utah.....	33	Price River, Utah, discharge measurement of.....	96
at Green River, Wyo.....	32	near Helper, Utah.....	50
near Daniel, Wyo.....	31	Publications, information concerning.....	5-8
Green River Basin, Utah-Wyo.-Colo., gaging-station records in.....	31-52	obtaining or consulting of.....	5-6
Gunnison River near Grand Junction, Colo.....	25	on stream flow, lists of.....	6-7, 8
near Gunnison, Colo.....	24	R	
H		Rillito Creek near Tucson, Ariz.....	91
Hams Fork at Diamondville, Wyo.....	37	Roaring Fork at Glenwood Springs, Colo.....	21
Helper, Utah, Price River near.....	50	Roosevelt, Ariz., Salt River near.....	93
Hot Sulphur Springs, Colo., Colorado River at.....	10-11	Tonto Creek near.....	94
Huntington Creek near Huntington, Utah.....	51	Run-off in inches, definition of.....	2
K		S	
Kelvin, Ariz., Gila River at.....	66	Safford, Ariz., Graham Canal near.....	84
L		St. George & Washington Canal, Utah, discharge measurement of.....	96
Lake Fork near Myton, Utah.....	46	Salt River near Chrysolite, Ariz.....	92
West Fork of, near Mountain Home, Utah.....	45	near Roosevelt, Ariz.....	93
Lees Ferry, Ariz., Colorado River at.....	15	San Francisco River at Clifton, Ariz.....	76
Paria River at.....	54	San Jose Canal near Solomonsville, Ariz.....	81
Lily, Colo., Little Snake River near.....	38	San Juan River near Bluff, Utah.....	53
Little Colorado River at Grand Falls, Ariz.....	55	San Miguel River at Naturita, Colo.....	30
Little Colorado River Basin, Ariz.-N. Mex., gaging-station records in.....	55-57	San Pedro River at Fairbank, Ariz.....	89
Little Snake River near Lily, Colo.....	38	Santa Clara Creek near Central, Utah.....	61
M		Santa Cruz River at Tucson, Ariz.....	90
McDowell, Ariz., Verde River near.....	95	Scofield, Utah, Fish Creek near.....	49
Michelana Canal near Solomonsville, Ariz.....	79	Second-feet per square mile, definition of.....	2
Mineral Creek, Ariz., discharge measurement of.....	96	Second-foot, definition of.....	2
Middle Canal near Duncan, Ariz.....	71	Smithville Canal near Thatcher, Ariz.....	85
Moenkopi Wash near Tuba City, Ariz.....	56-57	Solomonsville, Ariz., Brown Canal near.....	77
Montezuma Canal near Solomonsville, Ariz.....	82	Brown Canal wasteway near.....	78
Mountain Home, Utah, West Fork of Lake Fork near.....	45	Fourness Canal near.....	80
Mukuntuweap River near Springdale, Utah.....	60	Gila River near.....	63-64
Myton, Utah, Duchesne River at.....	43	Michelana Canal near.....	79
Lake Fork near.....	46	Montezuma Canal near.....	82
N		San Jose Canal near.....	81
Naturita, Colo., San Miguel River at.....	30	Union Canal near.....	83
Neola, Utah, Uinta River near.....	47	Springdale, Utah, Mukuntuweap River near.....	60
New Fork near Boulder, Wyo.....	34	Stage-discharge relation, definition of.....	2
North Montezuma Creek, Utah, discharge measurement of.....	96	Strawberry River at Duchesne, Utah.....	44
North Fork of, Utah, discharge measurement of.....	96	Sunset Canal near Duncan, Ariz.....	69
		Surface Creek at Cedaredge, Colo.....	26
		T	
		Tabiona, Utah, Duchesne River near.....	41
		Taylor River at Almont, Colo.....	23
		Terms, definition of.....	2
		Thatcher, Ariz., Smithville Canal near.....	85
		Tonto Creek near Roosevelt, Ariz.....	94
		Topock, Ariz., Colorado River near.....	17
		Tuba City, Ariz., Moenkopi Wash near.....	56-57
		Tucson, Ariz., Rillito Creek near.....	91
		Santa Cruz River at.....	90

