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SURFACE WATER SUPPLY *of the* UNITED STATES 1937

PART 9
COLORADO RIVER BASIN

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CONTENTS

	Page
Scope of work.....	1
Definition of terms.....	1
Explanation of data.....	1
Accuracy of field data and computed results.....	2
Publications.....	3
Records of discharge collected by agencies other than the Geological Survey.....	8
Cooperation.....	8
Division of work.....	8
Gaging-station records.....	9
Colorado River Basin.....	9
Colorado River and tributaries above Green River.....	9
Colorado River near Grand Lake, Colo.....	9
Colorado River near Granby, Colo.....	10
Colorado River at Hot Sulphur Springs, Colo.....	11
Colorado River at Glenwood Springs, Colo.....	12
Colorado River near Cameo, Colo.....	13
Colorado River near Cisco, Utah.....	14
Colorado River at Lees Ferry, Ariz.....	15
Colorado River at Bright Angel Creek, near Grand Canyon, Ariz.....	16
Lake Mead at Boulder Dam, Ariz-Nev.....	17
Colorado River near Willow Beach, Ariz.....	18
Colorado River near Topock, Ariz.....	19
Colorado River near Parker, Ariz.....	20
Colorado River near Picacho, Calif.....	21
Colorado River at Yuma, Ariz.....	22
Arapaho Creek below Monarch Lake, Colo.....	24
Willow Creek near Granby, Colo.....	25
Fraser River above West Portal, Colo.....	26
Fraser River near West Portal, Colo.....	27
Vasquez Creek near West Portal, Colo.....	28
St. Louis Creek near Fraser, Colo.....	29
Ranch Creek above forks, near Fraser, Colo.....	30
Ranch Creek near Fraser, Colo.....	31
Ranch Creek near Tabernash, Colo.....	32
North Fork of Ranch Creek near Fraser, Colo.....	33
Middle Fork of Ranch Creek near Fraser, Colo.....	34
South Fork of Ranch Creek near West Portal, Colo.....	35
Meadow Creek near Tabernash, Colo.....	36
Strawberry Creek near Granby, Colo.....	37
Williams River below Steelman Creek, Colo.....	38
Williams River near Leal, Colo.....	39
Williams River near Parshall, Colo.....	40
Blue River at Dillon, Colo.....	41
Snake River at Dillon, Colo.....	42
Tenmile Creek at Dillon, Colo.....	43
Roaring Fork at Aspen, Colo.....	44
Roaring Fork at Glenwood Springs, Colo.....	45
Crystal River near Redstone, Colo.....	46
Willow Creek near Raven, Colo.....	48
Roan Creek at Simmons ranch, near Highmore, Colo.....	51
Carr Creek at Altenbern ranch, near Highmore, Colo.....	52
Plateau Creek near Collbran, Colo.....	53
Plateau Creek near Cameo, Colo.....	54
Buzzard Creek near Heiberger, Colo.....	55
Buzzard Creek near Collbran, Colo.....	56
Taylor River at Almont, Colo.....	57
Gunnison River near Grand Junction, Colo.....	58
East River at Almont, Colo.....	59
Lake Fork at Lake City, Colo.....	60
Henson Creek at Lake City, Colo.....	61
North Fork of Gunnison River near Somerset, Colo.....	62
East Muddy Creek near Bardine, Colo.....	63
Leroux Creek near Cedaredge, Colo.....	64
Surface Creek at Cedaredge, Colo.....	65
Uncompahgre River at Colonia, Colo.....	66
Kahnah Creek near Whitewater, Colo.....	67
Dolores River at Dolores, Colo.....	68
Dolores River at Gateway, Colo.....	69
Green River Basin.....	70
Green River at Warren Bridge, near Daniel, Wyo.....	70
Green River at Green River, Wyo.....	71
Green River near Linwood, Utah.....	72
Green River at Green River, Utah.....	73
Horse Creek near Daniel, Wyo.....	74
New Fork near Boulder, Wyo.....	75
Pine Creek at Pinedale, Wyo.....	76
North Piney Creek near Mason, Wyo.....	77
Labarge Creek near Labarge, Wyo.....	78

Gaging-station records--Continued.

Colorado River Basin--Continued.

Green River Basin--Continued.

Fontenelle Creek near Fontenelle, Wyo.....	79
Henrys Fork at Linwood, Utah.....	80
Burnt Fork at Burntfork, Wyo.....	81
Yampa River at Steamboat Springs, Colo.....	82
Yampa River near Maybell, Colo.....	83
Elk River at Clark, Colo.....	84
Little Snake River near Lily, Colo.....	85
Slaters Fork near Slater, Colo.....	86
Ashley Creek near Vernal, Utah.....	87
Duchesne River at Provo Trail, near Hanna, Utah.....	88
Duchesne River near Tabiona, Utah.....	89
Duchesne River at Duchesne, Utah.....	90
Duchesne River at Myton, Utah.....	91
Strawberry River at Duchesne, Utah.....	92
Current Creek near Fruitland, Utah.....	93
Uinta River near Neola, Utah.....	96
Whiterocks River near Whiterocks, Utah.....	97
White River near Meeker, Colo.....	98
White River near Watson, Utah.....	99
Price River near Heiner, Utah.....	100
Huntington Creek near Huntington, Utah.....	101
Cottonwood Creek near Orangeville, Utah.....	102
San Juan River Basin.....	103
San Juan River near Pagosa Springs, Colo.....	103
San Juan River at Pagosa Springs, Colo.....	104
San Juan River at Rosa, N. Mex.....	105
San Juan River near Blanco, N. Mex.....	106
San Juan River at Farmington, N. Mex.....	107
San Juan River at Shiprock, N. Mex.....	108
San Juan River near Bluff, Utah.....	109
West Fork of San Juan River above Borns Lake, near Pagosa Springs, Colo.....	110
West Fork of San Juan River near Pagosa Springs, Colo.....	111
Turkey Creek near Pagosa Springs, Colo.....	112
Rio Blanco near Pagosa Springs, Colo.....	113
Rito Blanco near Pagosa Springs, Colo.....	114
Navajo River at Banded Peak ranch, near Chromo, Colo.....	115
Navajo River near Chromo, Colo.....	116
Navajo River at Edith, Colo.....	117
Little Navajo River at Chromo, Colo.....	118
Piedra River at Bridge ranger station, near Pagosa Springs, Colo.....	119
Williams Creek near Bridge ranger station, near Pagosa Springs, Colo.....	120
Weminuche Creek near Bridge ranger station, near Pagosa Springs, Colo.....	121
Los Pinos River near Weminuche Pass, Colo.....	122
Los Pinos River near Bayfield, Colo.....	123
Los Pinos River at Ignacio, Colo.....	124
Animas River at Howardsville, Colo.....	125
Animas River at Durango, Colo.....	126
Animas River near Cedar Hill, N. Mex.....	127
Animas River at Farmington, N. Mex.....	128
Cement Creek near Silverton, Colo.....	129
Mineral Creek near Silverton, Colo.....	130
Cascade Creek near Tacoma, Colo.....	131
Lightner Creek near Durango, Colo.....	132
Florida River near Durango, Colo.....	133
La Plata River at Hesperus, Colo.....	134
La Plata River at Colorado-New Mexico State line.....	135
La Plata River at La Plata, N. Mex.....	136
Cherry Creek near Red Mesa, Colo.....	137
Mancos River near Mancos, Colo.....	138
Mancos River near Towaoc, Colo.....	139
Paria River Basin.....	140
Paria River at Lees Ferry, Ariz.....	140
Little Colorado River Basin.....	141
Little Colorado River at St. Johns, Ariz.....	141
Little Colorado River near Woodruff, Ariz.....	142
Little Colorado River at Grand Falls, Ariz.....	143
Silver Creek near Woodruff, Ariz.....	144
Chevelon Fork near Winslow, Ariz.....	145
Clear Creek near Winslow, Ariz.....	146
Moenkopi Wash near Tuba, Ariz.....	147
Bright Angel Creek Basin.....	148
Bright Angel Creek near Grand Canyon, Ariz.....	148
Virgin River Basin.....	149
Virgin River at Virgin, Utah.....	149
Virgin River at Littlefield, Ariz.....	150
North Fork of Virgin River near Springdale, Utah.....	151
Williams River Basin.....	152
Williams River at Planet, Ariz.....	152
Gila River Basin.....	153
Gila River near Gila, N. Mex.....	153
Gila River near Red Rock, N. Mex.....	154
Gila River at Fuller ranch, near Duncan, Ariz.....	155
Gila River near Clifton, Ariz.....	156
Gila River below Bonita Creek, near Solomonsville, Ariz.....	157
Gila River at Calva, Ariz.....	158
San Carlos Reservoir at Coolidge Dam, Ariz.....	159
Gila River at Coolidge Dam, Ariz.....	160

Gaging-station records--Continued.

Colorado River Basin--Continued.

Gila River Basin--Continued.	Page
Gila River at Kelvin, Ariz.....	161
Gila River at Ashurst-Hayden Dam, near Florence, Ariz.....	162
Gila River at Gillespie Dam, Ariz.....	163
Gila River near Dome, Ariz.....	164
San Francisco River near Glenwood, N. Mex.....	165
San Francisco River at Clifton, Ariz.....	166
San Simon Creek near San Simon, Ariz.....	167
San Simon Creek near Solomonsville, Ariz.....	168
San Carlos River near Peridot, Ariz.....	169
San Pedro River at Palominas, Ariz.....	170
San Pedro River at Charleston, Ariz.....	171
San Pedro River near Mammoth, Ariz.....	172
San Pedro River at Winkelman, Ariz.....	173
Aravaipa Creek near Feldman, Ariz.....	174
Santa Cruz River near Nogales, Ariz.....	175
Santa Cruz River at Tucson, Ariz.....	176
Sonoita Creek near Patagonia, Ariz.....	177
Rillito Creek near Tucson, Ariz.....	178
Sabino Creek near Tucson, Ariz.....	179
Salt River near Chrysotile, Ariz.....	180
Salt River near Roosevelt, Ariz.....	181
Reservoir system on Salt River at and below Roosevelt Dam, Ariz.....	182
Salt River at Stewart Mountain Dam, Ariz.....	183
Tonto Creek near Roosevelt, Ariz.....	184
Verde River near Camp Verde, Ariz.....	185
Verde River below East Verde River, near Pine, Ariz.....	186
Verde River above Camp Creek, near McDowell, Ariz.....	187
Granite Creek near Prescott, Ariz.....	188
Willow Creek near Prescott, Ariz.....	189
Gillespie Canal at Gillespie Dam, Ariz.....	190
Enterprise Canal at Gillespie Dam, Ariz.....	191
Whitewater Draw Basin.....	192
Whitewater Draw near Douglas, Ariz.....	192
Miscellaneous discharge measurements.....	193
Index.....	195

 ILLUSTRATION

Plate 1. Typical river-measurement stations.....	Page
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SURFACE WATER SUPPLY OF THE COLORADO RIVER BASIN, 1937

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 water year ending September 30, 1937. The work was begun in 1888 in connection with special studies relating to irrigation. Measurements of stream flow have been made at about 7,200 points in the United States and also at many points in Alaska and the Hawaiian Islands. In July 1937, 3,380 gaging stations were being maintained by the Geological Survey and the cooperating organizations. Many miscellaneous discharge measurements were made at other points.

In the execution of the work many State and private organizations have cooperated, either by furnishing data or by assisting in collecting data. 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 8.

DEFINITION OF TERMS

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

"Second-feet" is an abbreviation for "cubic feet per second." A second-foot is a rate of flow of 1 cubic foot per second, or the rate of discharge of water flowing in a channel when the cross-sectional area is 1 square foot and the average velocity is 1 foot per second.

"Second-feet per square mile" is the average number of cubic feet of water flowing per second from each square mile of area drained, on the assumption that the 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 its 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.

"Second-foot-day" is the volume of water represented by a flow of 1 second-foot for 24 hours.

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

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

EXPLANATION OF DATA

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

from direct readings on a nonrecording gage or from a water-stage recorder that gives a continuous record of the fluctuations. Measurements of discharge are made with a current meter by the general methods outlined in standard textbooks on the measurement of river discharge. Typical gaging stations, equipped with water-stage recorder and measuring cable and car, are shown on plate 1.

Rating tables giving the discharge for any stage are prepared from the discharge measurements. The application of the daily gage height to these rating tables gives the daily discharge from which the monthly and yearly mean discharge is computed.

The data presented for each gaging station in the area covered by this report usually 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. Skeleton rating tables are published except for those stations whose daily discharge for the greater part of the year was determined by shifting-control method or by use of slope or other special methods.

The description of the station gives the type of gage, its latitude and longitude determined from the best available maps, and information in regard to diversions that decrease the flow at the gage, artificial regulation from pondage or storage, and the accuracy of the records. Under "Average discharge" is given the average discharge for the number of years indicated. It is given only for stations for which there are 10 or more complete years of record. Information under "Extremes" gives the maximum discharge and gage height; the minimum discharge if there is little or no regulation; the minimum daily discharge if there is extensive regulation, and also the minimum discharge if useful; and the minimum gage height except when it is of no importance. Unless otherwise qualified, the maximum discharge corresponds to the crest stage obtained by use of a water-stage recorder or a nonrecording gage read at the time of the crest. Likewise the minimum represents the lowest discharge unless otherwise qualified.

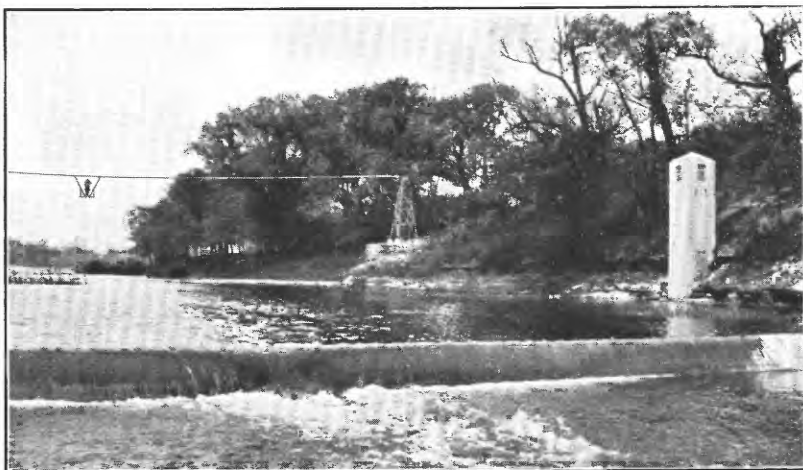
The table of daily discharge gives, for stations equipped with nonrecording gages, the discharge in second-feet corresponding to once-daily or the mean of twice-daily readings of the gage. For stations equipped with water-stage recorders the table gives the discharge corresponding to the mean daily gage height except for stations on streams subject to sudden or rapid fluctuation. For stations subject to such fluctuation the mean daily gage height may not indicate the true mean daily discharge, which must be obtained by averaging the discharge for intervals of the day or by using the discharge integrator, an instrument for obtaining the 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 "Second-foot-days" gives the sum for each month of the discharge given in the table of daily 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.

ACCURACY OF FIELD DATA AND COMPUTED RESULTS

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

The station description gives a statement under Remarks in regard to the general accuracy of the records. "Excellent" indicates that, in general, the daily records are



A. ARTIFICIAL CONTROL, RECORDER HOUSE, AND MEASURING CABLE ON OLENTANGY RIVER, DELAWARE, OHIO.



B. RECORDER HOUSE AND MEASURING CABLE ON KAWEAH RIVER, THREE RIVERS, CALIF.

TYPICAL RIVER-MEASUREMENT STATIONS.

in error not more than 5 percent; "good", not more than 10 percent; "fair", not more than 15 percent; and "poor", over 15 percent.

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 depth 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.

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

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, and that greater degrees of refinement in computations and records may be warranted with increased data and use of improved equipment.

PUBLICATIONS

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

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

Water-supply papers and other publications of the Geological Survey containing data 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, Maine, Statehouse.
Boston, Mass., 945 Post Office Building.
Hartford, Conn., 203 Federal Building.
Albany, N. Y., 526 Federal Building.
Trenton, N. J., 228 Federal Building.

Harrisburg, Pa., 490 Education Building.
 Charlottesville, Va., University of Virginia.
 South Charleston, W. Va., Naval Ordnance Plant.
 Asheville, N. C., 220 Post Office Building.
 Columbia, S. C., 119 United States Courthouse.
 Atlanta, Ga., Georgia School of Technology.
 Ocala, Fla., Post Office Building.
 Montgomery, Ala., Post Office Building.
 Chattanooga, Tenn., 442 Post Office Building.
 Louisville, Ky., Federal Building.
 Louisville, Ky., Federal Building.
 Columbus, Ohio, Engineering Experiment Station, Ohio State University.
 Indianapolis, Ind., 319 Federal Building.
 Urbana, Ill., 14 Post Office Annex.
 Madison, Wis., 337N State Capitol.
 St. Paul, Minn., 808 New Post Office Building.
 Iowa City, Iowa, 402 Hydraulic Laboratory, University of Iowa.
 St. Louis, Mo., 906 Customhouse, 1114 Market Street.
 Rolla, Mo., Missouri Geological Survey Building, Missouri School of Mines and Metallurgy.
 Topeka, Kans., 305 Federal Building.
 Fort Smith, Ark., Post Office Building.
 Austin, Tex., State Highway Building.
 Santa Fe, N. Mex., 3 United States Courthouse.
 Tucson, Ariz., 210 Post Office Building.
 Denver, Colo., 230 Customhouse.
 Salt Lake City, Utah, 303 Federal Building.
 Idaho Falls, Idaho, 228 Federal Building.
 Boise, Idaho, 429 Federal Building.
 Helena, Mont., 412 Federal Building.
 Tacoma, Wash., 406 Federal Building.
 Portland, Oreg., 606 Post Office Building.
 San Francisco, Calif., 208 Federal Office Building.
 Los Angeles, Calif., 512 Eighth and Figueroa Building.
 Honolulu, Hawaii, 225 Federal Building.

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

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

Stream-flow data in reports of the Geological Survey
 (A = Annual Report; B = Bulletin; W = Water-Supply Paper)

Report	Character of data	Year
10th A, pt. 2	Descriptive information only.....	1884 to Sept. 1890.
11th A, pt. 2	Monthly discharge and descriptive information.....	1884 to June 30, 1891.
12th A, pt. 2	....do.....	1884 to Dec. 31, 1892.
13th A, pt. 3	....do.....	1888 to Dec. 31, 1893.
14th A, pt. 2	Monthly discharge (long-time records, 1871-93).....	1888 to Dec. 31, 1893.
B 131.....	Descriptions, measurements, gage heights, and ratings.	1893-94.
16th A, pt. 2	Descriptive information only.....	1895.
B 140.....	Descriptions, measurements, gage heights, ratings, and monthly discharge (also many data covering earlier years).	1895.
W 11.....	Gage heights (also gage heights for earlier years)	1896.
18th A, pt. 4	Descriptions, measurements, ratings, and monthly discharge (also similar data for some earlier years).	1895-96.
W 15.....	Descriptions, measurements, and gage heights, eastern United States, eastern Mississippi River, and Missouri River above junction with Kansas River.	1897.
W 16.....	Descriptions, measurements, and gage heights, western Mississippi River below junction of Missouri and Platte Rivers, 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.

Note.— The reports which contain records after 1901 are given in the table on page 5.

Numbers of water-supply papers containing results of stream measurements, 1899-1937
(For basins included, see p. 3.)

Year	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1899 a...	35	b 35, 36	36	36	o 36, 37	37	37	37	d 37, 38	38, e 39	38, f 39	38	38	38
1900 g...	47, h 48	48, i 49	49	49	49, j 50	50	50	50	50	51	51	51	51	51
1901 o...	65, 76	65, 76	65, 76	65, 76	k 65, 66, 76	66	66	66	66, 76	66, 86	66, 86	66, 86	66, 86	66, 86
1902 o...	67	b 67, 68	68	68	68	68	68	68	68	69	69	69	69	69
1903 o...	69	c 69, 70	70	70	k 69, 70, 71	71	71	71	71	72	72	72	72	72
1904 o...	o 124, p 125, q 126	q 126, 127	128	129	130	130, r 131	k 128, 131	132	133	133, s 134	134	135	135	135
1905 o...	o 165, p 166, q 167	q 167, 168	169	170	171	172	k 169, 173	174	175, t 177	176, s 177	177	178	178	178
1906 o...	o 203, p 202, q 203	q 203, 204	205	206	207	208	k 206, 209	210	211, t 212	213, s 213	214	214	214	214
1907-8...	241	242	243	244	245	246	247	248	249	250, s 261	261	262	262	262
1909 o...	261	262	263	264	265	266	267	268	269	270, s 271	271	272	272	272
1910 o...	281	282	283	284	285	286	287	288	289	290	291	292	292	292
1911 o...	301	302	303	304	305	306	307	308	309	310	311	312	312	312
1912 o...	321	322	323	324	325	326	327	328	329	330	331	332	332-E	332-E
1913 o...	341	342	343	344	345	346	347	348	349	350	351	352	352-E	352-E
1914 o...	361	362	363	364	365	366	367	368	369	370	371	372	372-E	372-E
1915 o...	381	382	383	384	385	386	387	388	389	390	391	392	393	394
1916 o...	401	402	403	404	405	406	407	408	409	410	411	412	413	414
1917 o...	431	432	433	434	435	436	437	438	439	440	441	442	443	444
1918 o...	451	452	453	454	455	456	457	458	459	460	461	462	463	464
1919-20...	471	472	473	474	475	476	477	478	479	480	481	482	483	484
1921 o...	501	502	503	504	505	506	507	508	509	510	511	512	513	514
1922 o...	521	522	523	524	525	526	527	528	529	530	531	532	533	534
1923 o...	541	542	543	544	545	546	547	548	549	550	551	552	553	554
1924 o...	561	562	563	564	565	566	567	568	569	570	571	572	573	574
1925 o...	581	582	583	584	585	586	587	588	589	590	591	592	593	594
1926 o...	601	602	603	604	605	606	607	608	609	610	611	612	613	614
1927 o...	621	622	623	624	625	626	627	628	629	630	631	632	633	634
1928 o...	641	642	643	644	645	646	647	648	649	650	651	652	653	654
1929 o...	661	662	663	664	665	666	667	668	669	670	671	672	673	674
1930 o...	681	682	683	684	685	686	687	688	689	690	691	692	693	694
1931 o...	696	697	698	699	700	701	702	703	704	705	706	707	708	709
1932 o...	716	717	718	719	720	721	722	723	724	725	726	727	728	729
1933 o...	731	732	733	734	735	736	737	738	739	740	741	742	743	744
1934 o...	751	752	753	754	755	756	757	758	759	760	761	762	763	764
1935 o...	766	767	768	769	770	771	772	773	774	775	776	777	778	779
1936 o...	781	782	783	784	785	786	787	788	789	790	791	792	793	794
1937 o...	801	802	803	804	805	806	807	808	809	810	811	812	813	814
1938 o...	821	822	823	824	825	826	827	828	829	830	831	832	833	834

a Rating tables and index to Water-Supply Papers 35-39 contained in Water-Supply Paper 38. Rates of monthly discharge for 1899 in 21st Annual Report, part 4.

b Rating tables only.

c Rating tables only.

d Rating tables only.

e Rating tables only.

f Rating tables and index to Water-Supply Papers 47-52.

g Rating tables and index to Water-Supply Papers 53-58.

h Rating tables and index to Water-Supply Papers 59-64.

i Rating tables and index to Water-Supply Papers 65-70.

j Rating tables and index to Water-Supply Papers 71-76.

k Rating tables and index to Water-Supply Papers 77-82.

l Rating tables and index to Water-Supply Papers 83-88.

m Rating tables and index to Water-Supply Papers 89-94.

n Rating tables and index to Water-Supply Papers 95-100.

o Rating tables and index to Water-Supply Papers 101-106.

p Rating tables and index to Water-Supply Papers 107-112.

q Rating tables and index to Water-Supply Papers 113-118.

r Rating tables and index to Water-Supply Papers 119-124.

s Rating tables and index to Water-Supply Papers 125-130.

t Rating tables and index to Water-Supply Papers 131-136.

u Rating tables and index to Water-Supply Papers 137-142.

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

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

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

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

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

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

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

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

The foregoing table gives, by years and drainage basins, the numbers of the papers on surface water supply published from 1899 to 1937. The data for any particular station will, in general, be found in the reports covering the years during which the station was maintained. For example, the data from 1910 to 1920 for any station in the area covered by part 3 are published in Water-Supply Papers 283, 303, 323, 353, 383, 403, 433, 453, 473, and 503, which contain records for the Ohio River Basin for those years.

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

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

Reports containing compilation of discharge by States and drainage basins

Water-Supply Paper	Year ending	State or drainage basin and title
STATE		
107	1903	Alabama, Water powers of, with an appendix on stream measurements in Mississippi.
298	1912	California, Water resources of, part 1, Stream measurements in Sacramento River Basin.
299	1912	California, Water resources of, part 2, Stream measurements in San Joaquin River Basin.
300	1912	California, Water resources of, part 3, Stream measurements in the Great Basin and Pacific coast river basins.
447	1918	California, Surface water supply of the southern Pacific slope of.
597e	1927	California, Surface water supply of Sacramento River Basin.
636d	1927	California, Surface water supply of San Joaquin River Basin.
636e	1927	California, Surface water supply of Pacific slope basins in.
637a	1927	California, Surface water supply of minor San Francisco Bay, northern Pacific, and Great basins in.
74	1900	Colorado, Water resources of.
197	1905	Georgia, Water resources of.
415	1915	Massachusetts, Surface waters of.
230	1906	Nebraska, Surface water supply of.
370	1910	Oregon, Surface water supply of.
424	1916	Vermont, Surface waters of.
492	1919	Washington, Summary of hydrometric data in.
469	1921	Wyoming, Surface waters of, and their utilization.
DRAINAGE BASIN		
395	1914	Colorado River (Colo., Utah, etc.) and its utilization, 1916.
617	1927	Colorado River, upper (Colo., Utah), and its utilization, 1929.
517	1920	Great Salt Lake Basin, Water powers of, 1924.
618	1926	Green River (Wyo., Utah) and its utilization, 1930.
198	1906	Kennebec River Basin (Maine), Water resources of, 1907.
536	1920	Milk River. (See St. Mary and Milk Rivers.)
279	1909	New-Kanawha River Basin (W. Va., Va., N. C.), Surface water supply of, 1925.
192	1906	Penobscot River Basin (Maine), Water resources of, 1912.
358	1913	Potomac River Basin (W. Va., Va., Md., etc.), 1907.
491	1917	Rio Grande Basin (N. Mex., Tex., etc.), Water resources of, 1888-1913.
109	1904	St. Mary and Milk Rivers (Mont. and Canada), Water supply of, 1920.
		Susquehanna River Basin (Pa., Md.), Hydrography of, 1905.

In addition to the records noted above, records of discharge have been published in State reports. Some of these are not contained in the publications of the Geological Survey or are revisions of records previously published in its water-supply papers.

The following table contains a list of these reports.

State reports containing compilation of records of discharge

State	Year ending	Report	Issued by
Alabama....	1915	Bull. 17, Water powers of Alabama.....	Geological Survey of Alabama.
Arkansas....	1928	Stream gaging report 1	Arkansas Geological Survey.
Georgia....	1920	Bull. 38, Water powers of Georgia.....	Geological Survey of Georgia.
Illinois....	1937	Stream flow data of Illinois.....	Division of Waterways.
Do.....	1911	Water resources of Illinois.....	Rivers and Lakes Commission.
Indiana....	1927	Pub. 72, Surface water supply of Indiana.	Department of Conservation.
Do.....	^a 1930	Pub. 112, Surface water supply of Indiana.	Do.
Iowa.....	1932	Stream-flow records of Iowa.....	Iowa State Planning Board.
Kansas....	^b 1919	Surface waters of Kansas.....	Kansas Water Commission.
Do.....	^c 1924	....do.....	Do.
Do.....	^d 1928	....do.....	Do.
Kentucky....	1920	Surface waters of Kentucky.....	Kentucky Geological Survey.
Minnesota...	1912	Water resources investigation of Minnesota.	State Drainage Commission.
Missouri...	1926	Reports of Bureau of Geology and Mines, Vol. 20, 2d series, Water Resources of Missouri.	Missouri Bureau of Geology and Mines.
Nebraska...	1914	1st hydrographic report.....	Bureau of Water Power, Irrigation and Drainage.
Do.....	^e 1928	2d hydrographic report.....	Do.
New Jersey.	1928	Bull. 33, Surface water supply of New Jersey.	Department of Conservation and Development.
Do.....	^f 1934	Special Report 5, Surface water supply of New Jersey.	State Water Policy Commission.
New Mexico.	1925	Surface water supply of New Mexico....	Office of the State Engineer.
North Carolina.	1923	Bull. 34, Discharge records of North Carolina streams.	Department of Conservation and Development.
Oregon.....	1914	Bull. 4, Water resources of the State of Oregon.	Office of the State Engineer.
Do.....	^g 1924	Bull. 7, Water resources of the State of Oregon.	Do.
Do.....	^h 1930	Bull. 8, Water resources of the State of Oregon.	Do.
Do.....	ⁱ 1936	Bull. 9, Water resources of the State of Oregon.	Do.
Pennsylvania	1911	Report of Water Supply Commission of Pennsylvania.	Water Supply Commission of Pennsylvania.
Do.....	^j 1932	Stream-flow records of Pennsylvania..	Department of Forests and Waters.
Tennessee..	1924	Bull. 34, Water resources of Tennessee.	Department of Education.
Do.....	^k 1930	Bull. 40, Surface waters of Tennessee.	Do.
Utah.....	1905	5th Biennial Report, State Engineer.	Office of the State Engineer.
Virginia....	1927	Bull. 31, Water resources of Virginia.	Conservation and Development Commission.
Washington.	1933	Bull. 5, Monthly and yearly summaries of hydrometric data.	Department of Conservation and Development.
Wisconsin..	1914	1st report of Railroad Commission of Wisconsin to Legislature on water powers.	Railroad Commission of Wisconsin.
Do.....	^l 1923	2d report of Railroad Commission of Wisconsin to Legislature on water powers.	Do.

^a Includes records for the years 1927-30. ^g Includes records for the years 1914-24.
^b Includes records for the years 1895-1919. ^h Includes records for the years 1924-30.
^c Includes records for the years 1919-24. ⁱ Includes records for the years 1930-36.
^d Includes records for the years 1924-28. ^j Includes records for the years 1928-32.
^e Includes records for the years 1914-28. ^k Includes average weekly discharge for the years 1920-30.
^f Includes records for the years 1928-34. ^l Includes records for the years 1914-23.

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

DIVISION OF WORK

RECORDS OF DISCHARGE COLLECTED BY AGENCIES OTHER THAN THE GEOLOGICAL SURVEY

The following table contains a list of gaging stations for the area covered by this report at which records of daily discharge were collected during the water year October 1936 to September 1937 by agencies other than the Geological Survey. The records for these stations are not contained in publications of the Geological Survey.

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

Stream	Location	Period	Collected by	Remarks
Colorado River..	2½ miles above Palisade, Colo.	*1934-37	Bureau of Reclamation.....	(†)
Gunnison River..	East Portal, Colo..	*1912-37	Bureau of Reclamation and Uncompahgre Water Users' Association.	(‡)

*Records for some earlier years published in water-supply papers of Geological Survey.

†Records not published. Gage is read only once a day and there is considerable diurnal fluctuation owing to operation of the Shoshone power plant near Glenwood Springs.

‡Records not published; their accuracy is doubtful owing to variable control on account of diversion to Gunnison Tunnel below station.

COOPERATION

The work in the several States was done under cooperative agreements as follows: In Arizona, with the office of the State water commissioner, Jesse C. Wanslee, the Salt River Valley Water Users' Association (for certain stations in Salt River Basin), and the Metropolitan Water District of Southern California (for stations on Colorado River near Topock and near Parker); in Colorado, with the office of the State engineer, M. C. Hinderlider; in New Mexico, with the office of the State engineer, Thomas W. McClure; in Utah, with the office of the State engineer, T. H. Humpherys; in Wyoming, with the office of the State engineer, John D. Quinn.

Assistance in collecting the records was rendered by the following organizations and corporations: In Arizona, by the Indian Service and the Gila River water commissioner, Charles A. Firth; in Colorado, by the Denver Board of Water Commissioners, the Bureau of Reclamation, and Uncompahgre Valley Water Users' Association; in New Mexico, by the Indian Service; in Utah, by the National Park Service, the Indian Service, and the Utah Power & Light Co.; in Wyoming, by the United States Weather Bureau.

DIVISION OF WORK

Data for the stations in the several States were collected and prepared for publication under the supervision of the district engineers as follows: In Arizona, except for Virgin River at Littlefield and Colorado River near Picacho, Calif., W. E. Dickinson; in Colorado, except for Los Pinos River at Ignacio, Robert Follansbee, in collaboration with M. C. Hinderlider, State engineer, and L. T. Burgess, State chief hydrographer; in New Mexico and for Los Pinos River at Ignacio, Colo., Berkeley Johnson; in Utah, with the exception of the three stations named below, and for Virgin River at Littlefield, Ariz., A. B. Purton; in Wyoming and for three stations in Utah, namely, Green River near Linwood, Henrys Fork at Linwood, and White River near Watson, Robert Follansbee.

COLORADO RIVER BASIN

COLORADO RIVER AND TRIBUTARIES ABOVE GREEN RIVER

Colorado River near Grand Lake, Colo.

Location.- Water-stage recorder, lat. 40°14', long. 105°51', in sec. 13, T. 3 N., R. 76 W., half a mile above confluence with Grand Lake outlet and 3 miles south of Grand Lake.

Drainage area.- 101 square miles.

Records available.- July 1904 to September 1909, September 1910 to September 1918, May 1934 to September 1937.

Average discharge.- 18 years, 133 second-feet.

Extremes.- Maximum discharge during year, 405 second-feet May 18 (gage height, 3.80 feet); minimum daily discharge, 18 second-feet Jan. 22.

1904-9, 1910-18, 1934-37: Maximum discharge, 1,840 second-feet June 15, 16, 1918 (gage height, 7.0 feet, former site and datum); minimum, 1.6 second-feet July 17, 1934 (gage height, 1.32 feet).

Remarks.- Records excellent except those for periods of ice effect, Nov. 3-5, Nov. 8 to Apr. 12, which were computed on basis of four discharge measurements, weather records, and records for station near Granby and station at Hot Sulphur Springs and are good. Diversions for irrigation above station.

Rating table, water year 1936-37 except periods of ice effect (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Oct. 1, 2)

0.5	3.0	2.8	140
.6	5.2	3.0	187
.8	12.5	3.2	236
2.0	24	3.4	286
2.2	41	3.5	340
2.4	65	3.8	405
2.6	99		

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	31	28	23	22	21	22	23	60	302	145	41	39
2	30	27	23	22	21	22	23	57	284	156	38	39
3	31	23	23	21	21	22	23	62	284	122	36	41
4	32	25	23	21	21	22	23	88	274	107	35	41
5	34	27	23	21	21	22	23	129	236	95	36	40
6	36	26	22	21	21	22	23	133	204	90	57	43
7	33	26	22	21	22	22	23	147	185	94	44	38
8	32	24	22	21	21	22	22	156	177	95	36	37
9	32	24	22	20	21	22	21	214	161	81	35	32
10	31	24	22	21	21	22	20	256	152	85	32	32
11	31	24	22	20	22	22	20	256	168	76	30	48
12	30	25	22	20	22	22	19	241	211	85	27	44
13	32	25	22	20	22	23	19	244	180	145	26	39
14	27	26	23	20	22	23	19	291	182	161	26	41
15	26	27	24	21	23	23	22	332	206	133	50	36
16	26	28	23	21	22	23	30	358	206	105	34	33
17	26	25	23	20	21	23	44	352	224	86	41	33
18	26	24	22	20	21	23	62	315	236	90	133	31
19	26	25	22	19	22	23	92	329	238	76	101	31
20	30	24	22	19	21	23	90	320	218	65	75	30
21	33	24	22	19	21	23	114	302	216	58	65	29
22	31	24	22	18	22	23	136	276	234	55	57	30
23	27	23	22	19	22	23	114	312	226	52	49	37
24	26	23	22	20	22	22	88	289	185	51	46	46
25	26	23	22	21	22	22	73	286	170	50	55	39
26	27	23	22	20	22	22	95	264	246	45	45	36
27	26	23	22	19	22	22	129	266	201	44	42	34
28	27	23	22	20	22	22	112	315	166	44	39	32
29	25	24	22	20	-	22	85	334	145	45	48	30
30	25	24	22	21	-	23	64	326	133	44	49	30
31	27	-	22	22	-	23	-	294	-	52	43	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	905	56	25	29.1	1,790
November.....	741	28	23	24.7	1,470
December.....	692	24	22	22.3	1,370
Calendar year 1936.....	45,110	626	14	123.	89,480
January.....	630	22	18	20.3	1,250
February.....	604	23	21	21.6	1,200
March.....	695	23	22	22.4	1,380
April.....	1,651	136	19	55.0	3,270
May.....	7,533	358	57	245	15,140
June.....	6,240	302	133	208	12,380
July.....	2,632	161	44	84.9	5,220
August.....	1,451	133	26	46.8	2,880
September.....	1,221	88	29	40.7	2,420
Water year 1936-37.....	25,093	358	18	68.7	49,770

Colorado River near Granby, Colo.

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

Drainage area.- 322 square miles.

Records available.- June 1908 to September 1911, May 1934 to September 1937.

Extremes.- Maximum discharge during year, 1,590 second-feet June 26 (gage height, 3.47 feet); minimum daily discharge, 30 second-feet Feb. 10, 11.
1908-11, 1934-37: Maximum discharge, 4,100 second-feet June 20, 1909 (gage height, 5.5 feet, former datum); minimum occurred during period of incomplete records in winter.

Remarks.- Records excellent except those for period of ice effect, Nov. 26 to Apr. 19, which were computed on basis of five discharge measurements, weather records, and records for station near Grand Lake and station at Hot Sulphur Springs and are fair. Diversions for irrigation above station.

Rating table, water year 1936-37 except periods of ice effect (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Oct. 1-4, Nov. 3-26, and Apr. 20 to May 16)

1.0	45	2.4	645
1.2	84	2.6	780
1.4	140	2.8	925
1.6	220	3.0	1,100
1.8	315	3.2	1,300
2.0	415	3.4	1,510
2.2	525		

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	76	80	60	36	32	33	42	184	1,290	815	275	148
2	76	82	54	36	31	32	46	164	1,280	308	242	144
3	76	80	58	42	33	32	50	156	1,330	684	229	148
4	78	87	62	46	33	33	56	168	1,310	597	208	140
5	87	80	56	45	33	33	54	242	1,060	597	188	140
6	89	82	52	45	34	33	52	275	843	543	212	137
7	87	80	48	40	35	35	51	340	710	615	212	188
8	84	76	48	43	33	34	50	470	633	658	188	176
9	84	89	46	37	32	34	49	609	609	585	168	152
10	82	76	43	38	30	34	90	858	609	537	152	134
11	82	76	51	37	30	34	105	902	678	508	140	125
12	82	78	49	36	31	35	110	766	925	503	134	119
13	82	80	47	35	33	36	110	731	941	745	131	110
14	82	80	50	35	31	36	160	888	880	997	128	105
15	82	82	49	36	34	36	200	1,160	902	949	125	100
16	82	84	48	36	33	36	260	1,420	957	801	128	94
17	80	82	52	35	32	36	320	1,440	1,110	652	144	89
18	78	84	46	35	33	37	270	1,290	1,220	597	256	87
19	76	80	46	34	34	38	285	1,310	1,240	520	275	82
20	87	68	48	34	31	39	247	1,250	1,130	459	224	78
21	100	78	50	33	32	40	260	1,150	1,150	400	196	72
22	94	64	43	31	32	40	285	949	1,390	365	180	72
23	87	66	43	33	33	40	285	1,090	1,390	345	156	80
24	82	56	42	35	33	39	252	1,110	1,170	320	144	94
25	80	60	45	35	33	38	224	1,200	1,060	300	160	89
26	82	59	46	34	33	38	247	1,060	1,490	285	144	80
27	80	58	43	32	33	38	285	989	1,360	275	134	76
28	80	58	45	33	33	38	275	1,190	1,040	290	125	72
29	78	60	39	33	-	39	247	1,470	888	280	137	72
30	76	62	40	33	-	39	204	1,490	815	285	148	74
31	78	-	37	34	-	39	-	1,310	-	320	152	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						2,551	100	76	82.3	5,060		
November.....						2,227	89	56	74.2	4,420		
December.....						1,491	62	37	48.1	2,960		
Calendar year 1936.....						146,542	2,540	20	400	290,700		
January.....						1,127	46	31	36.4	2,240		
February.....						910	35	30	32.5	1,800		
March.....						1,122	40	32	36.2	2,230		
April.....						5,171	320	42	172	10,260		
May.....						27,631	1,490	156	891	54,810		
June.....						31,410	1,490	609	1,047	62,300		
July.....						16,635	997	275	537	33,000		
August.....						5,435	275	125	175	10,780		
September.....						3,277	188	72	109	6,500		
Water year 1936-37.....						98,987	1,490	30	271	196,400		

Colorado River at Hot Sulphur Springs, Colo.

Location.- Water-stage recorder, lat. 40°05', long. 106°05', in sec. 1, T. 1 N., R. 78 W., 1 mile east of Hot Sulphur Springs and 3 miles above mouth of Beaver Creek.

Drainage area.- 782 square miles.

Records available.- July 1904 to September 1909, September 1910 to September 1924, October 1925 to September 1928, and October 1933 to September 1937 in reports of Geological Survey; July 1904 to September 1909, September 1910 to September 1924, and October 1925 to September 1937 in reports of State engineer.

Average discharge.- 30 years (1904-9, 1910-23, 1925-37), 739 second-feet.

Extremes.- Maximum discharge during year, 2,540 second-feet May 17 (gauge height, 3.13 feet); minimum daily discharge, 77 second-feet Jan. 21, 22.

1904-9, 1910-24, 1925-37: Maximum discharge, 10,300 second-feet June 15, 1921 (gauge height, 8.7 feet, former site and datum); minimum occurred during period of no records in winter.

Remarks.- Records excellent except those for periods of ice effect, Nov. 3-13, Nov. 30 to Apr. 17, which were computed on basis of four discharge measurements, gauge heights, and weather records and are good. Diversions for irrigation above station.

Rating table, water year 1936-37 except periods of ice effect (gauge height, in feet, and discharge, in second-feet)
(Shifting-control method used Oct. 1 to Nov. 2)

0.2	70	1.8	890
.4	128	2.0	1,100
.6	194	2.2	1,320
.8	268	2.4	1,560
1.0	352	2.6	1,810
1.2	454	2.8	2,070
1.4	574	3.0	2,350
1.6	716	3.2	2,650

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	238	212	144	81	90	90	113	411	1,860	1,090	386	249
2	238	212	128	81	87	90	141	381	1,850	1,080	348	249
3	241	131	134	92	90	91	187	376	1,890	910	334	237
4	241	131	141	107	90	92	157	386	1,890	750	308	276
5	249	157	128	104	90	92	147	543	1,660	741	288	264
6	260	166	122	104	92	92	131	622	1,360	686	304	257
7	241	157	113	91	95	93	125	733	1,200	775	308	288
8	245	147	110	98	92	93	125	930	1,080	863	284	292
9	245	147	104	84	87	94	122	1,200	970	758	268	264
10	249	134	116	87	81	94	208	1,560	980	686	253	245
11	264	150	119	83	84	96	230	1,650	990	642	258	230
12	260	154	113	82	90	98	241	1,440	1,250	615	230	216
13	234	160	110	82	95	98	249	1,400	1,290	890	230	208
14	212	157	113	82	84	98	362	1,630	1,200	1,280	241	201
15	212	167	113	84	98	100	449	2,000	1,220	1,250	253	198
16	205	180	110	82	92	100	524	2,380	1,240	1,020	257	191
17	208	150	119	81	90	100	716	2,420	1,390	818	288	187
18	205	167	107	81	92	100	642	2,200	1,510	765	396	194
19	198	163	104	79	95	106	649	2,170	1,540	664	427	180
20	212	154	107	80	87	105	549	2,080	1,420	574	352	174
21	250	177	113	77	87	105	537	2,000	1,400	500	312	167
22	238	141	98	77	90	105	716	1,680	1,610	454	288	163
23	230	163	98	82	92	103	701	1,860	1,660	422	272	184
24	212	138	95	79	90	103	506	1,770	1,420	400	257	201
25	230	163	104	80	92	103	416	1,950	1,500	395	280	198
26	234	147	107	79	91	102	500	1,800	2,080	376	264	180
27	230	147	101	80	92	102	615	1,600	1,770	386	246	174
28	249	150	104	84	92	102	601	1,760	1,400	390	241	167
29	241	157	87	87	-	102	524	2,040	1,130	376	253	163
30	216	160	90	87	-	105	449	2,170	1,060	386	288	167
31	223	-	87	95	-	107	-	1,980	-	443	264	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	7,190	264	198	232	14,260
November.....	4,759	212	151	159	9,440
December.....	3,439	144	87	111	6,820
Calendar year 1936.....	279,879	4,180	87	765	555,100
January.....	2,652	107	77	85.5	5,280
February.....	2,527	98	81	90.2	5,010
March.....	3,060	107	90	98.7	6,070
April.....	11,612	716	113	387	23,030
May.....	47,102	2,420	376	1,520	93,430
June.....	42,600	2,060	970	1,420	84,500
July.....	21,386	1,280	376	690	42,420
August.....	8,956	427	250	289	17,760
September.....	6,384	292	163	213	12,660
Water year 1936-37.....	161,667	2,420	77	443	320,700

Colorado River at Glenwood Springs, Colo.

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

Drainage area.— 4,560 square miles.

Records available.— January 1900 to September 1937. May to July 1899 at point just above Roaring Fork.

Average discharge.— 38 years, 3,022 second-feet.

Extremes.— Maximum discharge during year, 11,400 second-feet May 17 (gage height, 8.10 feet); minimum daily discharge, 418 second-feet Mar. 7.

1900-37: Maximum discharge, 30,100 second-feet June 14, 15, 1918 (gage height, 12.55 feet); minimum daily discharge, 286 second-feet Jan. 22, 1935.

Remarks.— Records good. Discharge for period of missing gage heights, June 1-11, computed on basis of difference in discharge for station near Cameo and discharge for Roaring Fork at Glenwood Springs. Diversions for irrigation above station. During low-water period flow is regulated by Shoshone power plant, 6 miles upstream.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,170	996	634	706	612	726	909	2,040	9,000	4,080	1,800	1,310
2	1,140	1,140	612	652	537	732	640	1,920	8,600	4,060	1,740	1,300
3	1,240	1,070	548	537	558	787	815	2,030	8,150	3,910	1,590	1,240
4	1,190	961	732	456	590	706	772	2,420	7,600	3,560	1,490	1,320
5	1,110	853	664	574	585	700	1,020	2,920	6,400	3,280	1,440	1,330
6	1,090	1,050	590	634	652	726	794	3,600	5,800	3,120	1,350	1,330
7	1,120	1,220	658	676	682	418	845	4,120	5,350	2,940	1,580	1,420
8	1,140	909	602	706	713	670	768	4,380	5,150	2,920	1,360	1,370
9	1,110	1,190	580	569	537	794	732	4,990	5,000	3,080	1,270	1,400
10	1,190	952	629	471	580	861	794	6,000	4,980	3,180	1,210	1,340
11	1,130	726	634	517	634	837	830	6,640	4,850	2,940	1,270	1,320
12	1,020	877	618	527	607	877	970	6,500	4,720	3,220	1,090	1,310
13	1,070	935	456	501	682	885	1,010	6,530	5,150	3,150	987	1,080
14	845	935	607	522	706	909	1,110	6,900	5,040	3,750	970	1,010
15	1,090	917	506	618	694	859	1,240	8,030	4,980	4,310	970	1,050
16	1,090	979	607	558	694	885	2,150	9,300	4,910	3,930	970	979
17	987	935	765	569	746	935	2,840	10,200	5,230	3,330	1,080	917
18	1,030	987	758	461	762	893	2,760	10,500	5,750	3,010	1,220	996
19	987	987	801	595	746	869	2,040	10,100	5,940	2,890	1,190	893
20	909	943	640	634	612	808	1,980	9,610	5,640	2,650	1,420	901
21	1,000	853	713	607	461	815	2,210	9,340	5,450	2,410	1,410	853
22	1,030	837	700	569	732	1,110	2,270	9,270	5,610	2,130	1,290	917
23	1,070	901	694	456	732	765	2,770	9,210	5,910	1,960	1,030	885
24	1,140	845	558	532	739	720	2,870	9,150	5,660	1,810	1,020	917
25	837	664	569	548	746	801	2,270	8,660	5,040	1,720	979	885
26	1,060	595	758	522	652	885	2,000	8,540	5,230	1,730	970	1,100
27	1,030	779	859	537	732	618	2,080	8,240	5,750	1,720	1,000	901
28	1,020	706	752	569	580	624	2,600	8,150	5,690	1,700	1,060	901
29	1,030	658	706	585	-	713	2,670	8,510	4,780	1,730	1,190	935
30	996	624	682	580	-	670	2,360	9,340	4,310	1,740	1,110	901
31	979	-	522	580	-	652	-	9,710	-	1,720	1,220	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						32,850	1,240	837	1,060	65,160		
November.....						27,014	1,220	585	900	53,580		
December.....						20,164	869	456	650	39,990		
Calendar year 1936.....						1,158,889	16,600	422	3,166	2,299,000		
January.....						17,569	706	456	567	34,850		
February.....						18,293	752	461	653	36,280		
March.....						24,260	1,110	418	783	49,120		
April.....						49,119	2,870	640	1,537	97,430		
May.....						215,450	10,300	1,920	5,982	429,420		
June.....						172,770	9,000	4,310	5,759	342,700		
July.....						87,680	4,310	1,700	2,828	173,900		
August.....						38,276	1,800	970	1,235	75,920		
September.....						35,011	1,420	853	1,100	65,490		
Water year 1936-37.....						737,456	10,300	418	2,020	1,465,000		

Colorado River near Cameo, Colo.

Location.— Water-stage recorder, lat. $39^{\circ}13'$, long. $108^{\circ}15'$, in sec. 6, T. 10 S., R. 97 W., 3.4 miles above mouth of Plateau Creek and 6.7 miles northeast of Cameo.

Drainage area.— 8,055 square miles.

Records available.— October 1933 to September 1937.

Extremes.— Maximum discharge during year, 20,200 second-feet May 18 (gage height, 8.49 feet); minimum daily discharge, 960 second-feet Jan. 5.
1933-37: Maximum discharge, 36,000 second-feet June 16, 1935 (gage height, 10.91 feet); minimum daily discharge, 738 second-feet Feb. 26, 1935.

Remarks.— Records excellent for discharges above 2,500 second-feet, and good for those below. Discharge for periods of missing gage heights, Oct. 1, Oct. 26 to Nov. 19, and for periods of ice effect, Dec. 8-21, Jan. 3 to Mar. 13, computed on basis of combined flow of Colorado River and Roaring Fork at Glenwood Springs. Numerous diversions for irrigation above station.

Racing table, water year 1936-37 except periods of ice effect (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Oct. 2-25, Mar. 14 to Apr. 22, Aug. 15 to Sept. 30)

1.0	530	2.5	2,280	5.5	8,420
1.2	720	3.0	3,000	6.0	9,820
1.4	954	3.5	3,800	7.0	15,240
1.6	1,150	4.0	4,770	8.0	17,750
1.8	1,380	4.5	5,910	9.0	22,800
2.0	1,620	5.0	7,150	10	28,000

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,730	1,600	1,180	1,200	1,150	1,200	1,270	3,530	15,000	7,400	2,800	2,270
2	1,800	1,850	1,250	1,390	1,150	1,400	1,450	3,210	13,000	7,050	2,800	2,320
3	1,840	1,750	1,200	1,250	1,050	1,400	1,310	3,250	12,500	6,650	2,630	2,200
4	1,900	1,650	1,120	1,000	1,100	1,450	1,600	3,800	12,400	6,380	2,480	2,200
5	1,920	1,500	1,300	960	1,150	1,350	1,400	5,110	11,700	5,840	2,320	2,240
6	1,920	1,500	1,270	1,100	1,200	1,350	1,550	6,400	10,600	5,650	2,380	2,210
7	1,940	1,650	1,160	1,200	1,300	1,350	1,460	7,380	9,270	5,180	2,450	2,210
8	1,940	1,850	1,200	1,300	1,300	1,050	1,420	8,210	8,320	5,070	2,420	2,270
9	1,940	1,650	1,150	1,300	1,300	1,350	1,540	9,240	7,750	5,770	2,140	2,200
10	1,950	1,800	1,150	1,150	1,100	1,500	1,560	11,100	7,620	5,430	1,970	2,170
11	1,940	1,600	1,200	1,100	1,150	1,600	1,460	12,600	7,550	5,130	1,870	2,070
12	1,920	1,450	1,250	1,050	1,200	1,600	1,630	12,400	8,320	5,480	1,770	1,970
13	1,870	1,450	1,200	1,050	1,200	1,650	1,730	12,000	9,160	6,130	1,680	1,950
14	1,720	1,400	1,000	1,050	1,300	1,740	1,830	15,200	9,100	6,450	1,570	1,790
15	1,630	1,550	1,200	1,100	1,400	1,690	2,070	14,800	8,850	6,880	1,480	1,740
16	1,330	1,550	1,150	1,150	1,350	1,680	2,590	17,400	8,710	6,800	2,180	1,750
17	1,620	1,600	1,300	1,150	1,350	1,780	3,500	18,300	9,410	5,770	1,860	1,750
18	1,670	1,550	1,400	1,150	1,400	1,690	4,040	19,400	9,300	5,430	1,860	1,750
19	1,700	1,600	1,400	1,050	1,400	1,680	3,610	19,100	10,700	5,020	2,070	1,720
20	1,800	1,610	1,400	1,150	1,450	1,520	3,200	17,600	10,400	4,730	2,000	1,750
21	2,000	1,420	1,250	1,300	1,300	1,390	3,260	16,500	10,200	3,980	2,150	1,700
22	1,950	1,540	1,430	1,200	1,050	1,450	3,580	16,500	10,400	3,580	2,030	1,700
23	1,920	1,440	1,320	1,150	1,400	1,740	3,910	16,400	10,600	3,260	1,920	1,840
24	1,740	1,370	1,250	1,000	1,350	1,400	4,280	14,700	10,300	3,030	1,740	1,830
25	1,780	1,400	1,120	1,100	1,350	1,330	3,980	13,700	9,350	2,800	1,730	1,840
26	1,550	1,280	1,150	1,100	1,400	1,450	3,410	12,800	8,930	2,790	1,670	1,840
27	1,700	1,190	1,390	1,050	1,300	1,550	3,360	11,900	10,000	2,700	1,680	1,830
28	1,650	1,360	1,380	1,100	1,350	1,270	3,750	12,000	9,850	2,880	1,730	1,830
29	1,650	1,260	1,310	1,150	-	1,190	4,080	12,900	8,580	2,800	2,030	1,840
30	1,600	1,240	1,230	1,300	-	1,260	3,870	15,200	8,000	3,060	2,200	1,870
31	1,600	-	1,240	1,200	-	1,530	-	16,500	-	3,230	2,200	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	55,020	2,000	1,330	1,775	109,100
November	45,360	1,850	1,190	1,512	89,970
December	38,530	1,430	1,000	1,243	76,420
Calendar year 1936	1,833,897	26,000	847	5,011	3,638,000
January	35,500	1,390	960	1,145	70,410
February	35,500	1,450	1,050	1,268	70,410
March	45,390	1,780	1,200	1,464	90,030
April	77,210	4,280	1,270	2,574	153,100
May	375,160	19,400	3,210	12,100	744,100
June	296,870	15,000	8,000	9,896	588,800
July	152,350	7,400	2,700	4,915	302,200
August	53,810	2,800	1,450	2,058	126,600
September	58,580	2,320	1,700	1,953	116,200
Water year 1936-37	1,279,280	19,400	960	3,505	2,537,000

Colorado River near Cisco, Utah

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

Drainage area.- 24,100 square miles.

Records available.- November 1914 to September 1917, October 1922 to September 1937. October 1913 to November 1914 at Moab, 30 miles downstream; flow about same at both places.

Average discharge.- 19 years, 8,431 second-feet.

Extremes.- Maximum discharge during year, 40,100 second-feet May 17 (gage height, 13.00 feet); minimum observed, 1,140 second-feet Aug. 28 (gage height, 1.15 feet).

1914-17, 1922-37: Maximum discharge, 76,800 second-feet June 19, 1917 (gage height, 19.7 feet); minimum observed, 558 second-feet July 21, 1934 (gage height, 0.44 foot).

Remarks.- Records excellent except those for Dec. 6-11, Jan. 3, 4, Mar. 22, 23, 25, 26, Apr. 26, 30, May 1, 2, 4-11, and July 18, 19 (computed on basis of records for other stations on Colorado River, which are good, and those for period of ice effect Jan. 6 to Feb. 28 (computed on basis of six discharge measurements, weather records, and records for other stations on Colorado River, which are fair. Diversions for irrigation and power above station.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2,160	3,030	2,340	2,200	-	3,400	2,500	13,500	26,200	9,960	3,680	3,580
2	2,340	3,120	2,300	2,340	-	3,400	2,500	12,000	22,500	9,360	3,210	5,320
3	2,420	3,300	2,350	2,000	-	3,210	2,760	12,900	20,500	9,070	3,030	3,680
4	2,420	3,300	2,270	1,600	-	3,400	2,940	15,500	20,100	8,780	2,760	3,400
5	2,500	3,120	2,230	1,300	*1,680	3,210	3,400	17,500	19,300	7,690	2,500	3,210
6	2,420	2,760	2,400	*1,210	-	3,210	3,030	20,000	17,300	7,180	2,270	3,120
7	2,420	2,940	2,350	-	-	3,120	3,120	21,500	15,400	6,930	2,590	3,120
8	2,500	3,210	2,250	-	-	3,030	3,300	23,000	13,300	6,450	2,940	2,940
9	2,500	3,300	2,300	-	-	2,940	3,030	24,500	11,900	8,220	2,760	2,940
10	2,500	3,120	2,250	-	-	2,940	2,850	27,600	11,200	7,950	2,300	2,850
11	2,420	3,030	2,250	-	*2,720	3,120	3,400	30,000	10,900	7,690	1,960	2,500
12	2,500	2,940	2,200	-	*1,540	3,120	4,370	33,900	10,900	10,360	1,750	2,320
13	2,400	2,760	2,150	-	-	3,210	6,340	31,300	12,600	12,900	1,670	2,230
14	2,280	2,850	2,140	-	-	3,580	7,430	31,300	14,300	9,960	1,460	2,220
15	2,300	2,940	2,200	-	-	3,580	9,360	33,000	13,300	9,660	1,280	1,870
16	2,300	3,030	2,220	-	-	3,400	12,900	36,700	12,600	9,360	1,190	1,700
17	2,230	2,940	2,500	-	-	3,490	16,200	39,200	12,800	8,500	1,540	1,650
18	2,270	3,030	2,940	1,350	-	3,680	17,700	38,500	13,300	7,700	2,070	1,610
19	2,300	3,030	3,120	-	-	3,680	16,800	39,300	14,300	6,900	1,800	1,560
20	2,760	2,940	2,940	-	-	3,680	15,400	36,700	15,100	6,100	1,720	1,560
21	3,300	2,940	2,590	-	-	3,300	15,400	30,900	14,300	5,320	1,700	1,480
22	2,850	2,850	2,390	-	-	3,250	16,600	28,500	14,300	4,470	1,740	1,590
23	2,760	2,760	2,390	-	*2,240	3,300	18,900	27,100	14,700	3,870	1,590	1,700
24	2,680	2,760	2,500	-	-	3,120	17,700	27,100	14,700	3,400	1,510	2,140
25	2,680	2,760	2,500	-	-	3,050	14,300	26,000	13,600	3,030	1,390	1,900
26	2,760	2,590	2,140	-	*3,250	3,000	12,900	22,100	12,200	2,760	1,230	1,860
27	2,680	2,400	2,500	-	-	2,940	12,900	19,700	12,200	2,590	1,180	1,840
28	2,590	2,340	2,590	-	-	3,030	15,400	18,100	13,600	2,500	1,170	2,030
29	2,590	2,500	2,590	-	-	2,590	14,700	22,900	12,600	3,030	1,920	1,960
30	2,650	2,400	2,680	-	-	2,400	15,000	21,700	10,900	3,300	5,210	2,010
31	3,300	-	2,320	-	-	2,590	-	27,500	-	3,580	4,580	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						78,970	3,300	2,150	2,547	156,600		
November.....						86,990	3,300	2,340	2,900	172,500		
December.....						74,890	2,120	2,140	2,416	148,600		
Calendar year 1936.....						2,888,870	38,300	1,700	7,893	5,730,000		
January.....						43,150	2,340	-	1,392	85,590		
February.....						61,600	-	-	2,200	122,200		
March.....						98,970	5,680	2,400	3,135	195,500		
April.....						292,130	18,900	2,600	9,738	579,400		
May.....						805,000	39,200	12,000	25,970	1,597,000		
June.....						440,300	26,200	10,900	14,680	873,500		
July.....						208,510	12,900	2,500	6,726	413,600		
August.....						67,730	5,210	1,170	2,185	134,500		
September.....						71,710	5,320	1,390	2,390	142,800		
Water year 1936-37.....						2,329,950	39,200	-	6,323	4,621,000		

*Discharge measurement.

Colorado River at Lees Ferry, Ariz.

Location.- Water-stage recorder, lat. $36^{\circ}51'30''$, long. $111^{\circ}35'45''$, in NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 13, T. 40 N., R. 7 E., at head of Marble Gorge, at Lees Ferry, a short distance above mouth of Paria River. Zero of gage is 3,106.35 feet above mean sea level.

Drainage area.- 107,900 square miles.

Records available.- June 1921 to September 1937.

Average discharge.- 15 years (1922-37), 17,240 second-feet.

Extremes.- Maximum discharge during year, 84,800 second-feet May 20 (gage height, 16.88 feet); minimum, 1,380 second-feet Jan. 12 (gage height, 5.07 feet).
1921-37: Maximum discharge, about 190,000 second-feet June 18, 1921 (gage height, 26.5 feet); minimum, 750 second-feet Dec. 27, 1924 (gage height, 4.2 feet). Flood of 1884 was 3,137.1 feet above mean sea level at mouth of Paria River.

Remarks.- Records excellent. Stage-discharge relation slightly affected by ice Jan. 13 to Feb. 5, discharge computed from partial gage-height record and comparison with records for station at Grand Canyon. Diversions for irrigation above station.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4,870	9,450	6,190	5,670	4,340	7,180	10,860	34,200	55,400	29,500	11,900	9,710
2	4,650	9,710	6,070	5,420	4,460	7,340	10,100	29,400	55,700	27,800	11,200	12,200
3	4,720	9,390	5,950	5,050	4,550	7,340	9,910	26,200	60,900	26,000	10,600	13,200
4	4,820	9,240	5,720	4,740	4,580	7,250	12,000	25,700	56,800	24,100	9,870	13,300
5	4,740	8,810	5,530	4,220	4,670	7,150	13,000	28,100	54,500	22,200	9,990	12,500
6	4,900	8,520	5,470	3,460	4,970	7,180	12,400	33,800	54,500	20,800	9,390	10,600
7	5,150	8,050	5,280	3,180	6,350	7,180	11,700	39,200	53,200	19,600	9,240	9,010
8	5,260	7,710	5,130	3,160	9,940	7,210	11,900	43,200	49,100	17,600	8,190	8,120
9	5,200	7,310	4,940	2,660	8,260	7,380	12,700	43,100	44,500	17,800	7,670	7,640
10	5,340	6,900	4,620	2,540	8,700	7,540	12,900	46,300	40,500	17,700	7,120	7,280
11	5,560	6,900	4,650	2,350	7,310	7,950	14,500	52,100	37,500	18,300	6,870	6,770
12	5,420	7,120	4,380	1,560	7,020	8,220	16,700	60,900	35,000	23,700	7,150	6,770
13	5,390	7,280	4,170	2,000	7,210	8,780	17,800	66,900	32,800	26,200	7,050	6,990
14	5,390	7,120	3,990	3,000	7,710	9,470	19,500	70,900	32,200	28,100	6,340	6,650
15	5,390	7,090	3,630	2,790	7,090	10,200	21,200	69,400	31,900	31,500	5,610	5,900
16	5,360	6,930	3,750	2,340	10,000	11,400	23,600	71,100	33,900	31,800	5,260	5,420
17	5,340	6,930	3,610	2,590	9,550	11,800	28,200	73,400	33,700	31,800	4,900	5,130
18	5,130	6,930	4,170	3,060	10,800	12,600	37,700	77,500	32,300	32,800	4,620	4,800
19	5,070	6,840	4,670	3,600	10,600	14,400	44,600	81,000	30,300	30,300	4,620	4,460
20	5,280	6,650	4,970	3,600	9,120	19,200	41,200	82,000	30,900	26,600	4,360	4,120
21	5,530	6,710	5,180	3,500	9,280	17,900	41,700	81,300	32,400	23,000	4,030	4,030
22	5,530	7,020	5,280	3,220	8,260	17,800	43,000	75,700	33,200	19,700	4,060	3,850
23	6,280	7,020	5,110	2,750	7,440	17,300	40,500	71,800	33,700	17,600	4,840	4,030
24	6,840	6,960	5,500	2,590	7,150	16,500	39,500	69,500	33,300	15,400	4,460	3,700
25	7,150	6,870	5,530	2,250	6,900	16,600	42,700	68,300	32,900	13,900	4,190	4,030
26	7,020	6,800	5,360	2,250	6,650	16,000	39,200	64,800	32,500	12,300	4,170	3,830
27	6,770	6,710	5,310	2,600	6,900	14,200	33,200	61,700	32,800	11,600	4,150	3,590
28	6,770	6,710	5,720	2,770	7,090	13,400	31,100	57,000	29,300	11,100	4,240	3,790
29	6,520	6,620	6,400	2,960	-	12,400	32,600	51,400	29,200	11,100	3,920	4,620
30	6,430	6,310	5,610	3,360	-	11,600	36,200	47,400	30,900	12,000	4,010	7,390
31	6,960	-	5,580	4,240	-	11,500	-	48,700	-	15,200	7,750	-
Month												
	Second-foot-days					Maximum		Minimum		Mean		Run-off in acre-feet
October.....	174,780					7,150		4,650		5,638		346,700
November.....	222,610					9,710		6,310		7,420		441,500
December.....	156,470					6,400		3,750		5,112		314,800
Calendar year 1936.....	6,104,340					74,600		3,410		16,680		12,108,000
January.....	99,460					5,670		1,560		3,206		197,300
February.....	206,880					10,800		4,340		7,389		410,300
March.....	351,970					19,200		7,150		11,350		698,100
April.....	762,510					44,800		9,910		25,420		1,512,400
May.....	1,752,000					82,000		25,700		59,520		3,475,000
June.....	1,185,600					65,700		29,200		39,530		2,352,000
July.....	665,100					32,600		11,100		21,450		1,319,200
August.....	201,770					11,900		3,920		6,509		400,200
September.....	203,410					13,300		3,590		6,780		405,600
Water year 1936-37.....	5,984,760					82,000		1,560		16,400		11,870,600

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

Location.— Water-stage recorder, lat. $36^{\circ}05'55''$, long. $112^{\circ}05'30''$, at Kaibab Bridge, a quarter of a mile above Bright Angel Creek and 11 miles by trail northeast of Grand Canyon, Coconino County. Zero of gage is 2,420.3 feet above mean sea level.

Drainage area.— 138,700 square miles.

Records available.— October 1922 to September 1937.

Average discharge.— 15 years, 17,860 second-feet.

Extremes.— Maximum discharge during year, 85,300 second-feet May 21 (gage height, 23.90 feet); minimum, 1,720 second-feet Jan. 14 (gage height, 0.44 foot).
1922-37: Maximum discharge, 127,000 second-feet July 2, 1927 (gage height, 29.25 feet); minimum, 700 second-feet Dec. 28, 1924 (gage height, -0.70 foot).

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

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5,180	7,250	6,600	5,970	4,130	8,550	12,200	36,000	51,500	30,800	13,300	9,760
2	5,500	10,700	6,480	6,010	4,590	8,270	11,600	32,700	60,300	28,800	12,100	12,200
3	5,120	9,560	6,270	5,760	4,740	8,200	10,800	28,500	64,900	27,400	11,100	14,700
4	5,150	9,670	6,200	5,270	4,800	8,090	11,200	25,600	60,100	25,600	10,300	15,100
5	5,240	9,100	5,960	4,960	4,950	8,030	13,800	25,800	55,900	24,700	10,100	15,600
6	5,240	9,130	5,800	4,430	5,110	8,000	15,300	30,200	55,500	22,500	10,300	12,800
7	5,390	8,710	5,740	3,810	5,820	8,310	13,900	35,700	54,700	20,900	9,420	11,100
8	5,580	6,310	5,560	3,560	8,910	8,320	13,100	41,400	51,300	19,500	9,340	10,100
9	5,540	7,940	5,420	3,460	10,000	8,340	13,900	43,600	47,200	18,700	8,400	8,660
10	5,520	7,570	5,230	2,960	17,100	8,640	15,000	43,200	43,300	18,800	7,620	8,200
11	5,700	7,260	5,110	2,860	12,100	9,190	15,000	50,400	39,100	19,100	7,300	7,600
12	5,780	7,310	4,880	2,750	9,670	10,200	17,300	57,200	35,300	21,600	7,300	7,180
13	5,740	7,480	4,620	2,020	8,720	10,800	19,200	65,400	34,800	27,100	7,540	7,110
14	5,680	7,510	4,370	2,200	9,090	11,900	20,400	71,400	35,100	27,200	7,040	7,340
15	5,690	7,290	4,210	3,270	9,140	12,900	22,700	67,900	35,000	30,200	6,350	6,690
16	5,660	7,220	4,130	3,010	8,930	14,600	24,900	69,400	33,800	31,200	5,820	5,980
17	5,650	7,120	4,110	2,520	18,200	17,700	28,800	72,100	34,900	30,900	5,460	5,580
18	5,560	7,050	4,220	2,610	17,000	16,100	34,200	78,500	32,800	32,000	5,180	5,300
19	5,430	7,090	4,580	3,450	16,800	19,600	43,700	82,100	31,600	31,300	4,950	5,050
20	5,380	7,160	5,160	3,840	13,400	22,000	44,600	81,500	30,400	28,200	4,670	4,800
21	5,870	7,070	5,390	3,840	12,000	22,300	42,100	83,600	31,400	25,000	4,510	4,470
22	5,790	7,100	5,700	3,810	11,500	19,700	43,700	77,000	34,000	21,900	4,220	4,580
23	5,900	7,200	5,820	3,690	9,890	20,100	42,700	72,500	34,100	19,200	4,110	4,290
24	6,520	7,180	5,860	2,980	8,820	18,000	40,500	70,800	35,600	16,900	5,180	4,630
25	7,050	7,200	6,030	2,820	8,240	17,300	42,500	69,100	35,500	14,900	4,830	4,200
26	7,410	7,170	6,020	2,560	7,930	18,000	41,800	66,600	34,200	13,600	4,510	4,370
27	7,120	7,040	5,820	2,520	7,890	16,300	36,500	63,100	32,600	12,400	4,490	4,200
28	6,980	6,990	5,900	2,880	8,280	14,900	32,000	58,400	32,400	11,300	4,450	3,960
29	6,960	6,960	6,410	3,050	-	14,000	31,300	53,600	29,300	11,200	4,310	4,220
30	6,820	6,830	6,830	3,150	-	13,100	34,500	48,500	31,100	11,600	4,690	10,400
31	6,830	-	6,070	3,580	-	12,700	-	48,100	-	14,500	4,290	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						192,780	7,410	5,120	5,896	362,500		
November.....						231,170	10,700	6,830	7,706	458,500		
December.....						170,500	6,830	4,110	5,500	338,200		
Calendar year 1936.....						6,287,070	75,100	3,750	17,180	12,470,000		
January.....						109,700	6,010	2,020	3,539	217,600		
February.....						267,750	16,200	4,130	9,562	531,100		
March.....						414,140	22,300	8,000	15,360	821,400		
April.....						789,200	44,600	10,800	26,310	1,565,400		
May.....						1,749,900	85,600	25,600	56,450	3,470,900		
June.....						1,810,800	64,900	29,300	40,560	2,401,600		
July.....						689,200	32,000	11,200	22,230	1,367,000		
August.....						213,180	13,500	4,110	6,877	422,800		
September.....						228,150	15,100	3,960	7,605	452,500		
Water year 1936-37.....						6,256,470	83,600	2,020	17,140	12,410,000		

Lake Mead at Boulder Dam, Ariz.-Nev.

Location.- Water-stage recorder, lat. 36°00'50", long. 114°44'30", on Boulder Dam, in Colorado River. Datum of gage is mean sea level.

Drainage area.- 169,800 square miles.

Records available.- February 1935 to September 1937.

Extremes.- Maximum contents during year, 15,701,000 acre-feet July 28 (elevation of water surface, 1,102.86 feet); minimum, 9,384,000 acre-feet Feb. 5 (elevation, 1021.90 feet). 1935-37: Maximum contents, that of July 28, 1937; no storage prior to 8:40 a.m. Feb. 1, 1935.

Remarks.- Storage capacity, 29,406,000 acre-feet at spillway elevation 1,221.4 feet, at top of automatic gates. Unavailable storage, included in contents here shown, 3,325,000 acre-feet below elevation 895.0 feet, at gate sills in outlet towers. Gage usually read to nearest half-tenth and contents determined accordingly. Elevation of water surface here shown to nearest tenth of a foot. Records of daily elevation and contents furnished by Bureau of Reclamation.

Contents, in thousands of acre-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	9,552	9,432	9,491	9,491	9,403	9,664	9,994	10,975	13,652	15,153	15,689	15,379
2	9,545	9,432	9,491	9,494	9,400	9,667	10,001	11,022	13,719	15,184	15,689	15,370
3	9,536	9,432	9,491	9,494	9,393	9,664	10,011	11,070	13,603	15,215	15,689	15,365
4	9,530	9,436	9,494	9,497	9,387	9,664	10,018	11,110	13,896	15,247	15,689	15,370
5	9,523	9,442	9,494	9,497	9,364	9,667	10,028	11,143	13,990	15,274	15,689	15,374
6	9,517	9,449	9,494	9,494	9,390	9,671	10,038	11,175	14,071	15,288	15,684	15,379
7	9,507	9,452	9,494	9,494	9,395	9,674	10,059	11,208	14,147	15,306	15,675	15,383
8	9,500	9,455	9,494	9,494	9,403	9,677	10,069	11,256	14,225	15,324	15,671	15,388
9	9,494	9,458	9,494	9,491	9,410	9,677	10,076	11,314	14,298	15,338	15,666	15,388
10	9,488	9,458	9,494	9,491	9,419	9,681	10,086	11,364	14,363	15,352	15,661	15,388
11	9,484	9,461	9,494	9,488	9,436	9,677	10,093	11,455	14,420	15,361	15,652	15,383
12	9,481	9,461	9,494	9,484	9,452	9,677	10,100	11,518	14,472	15,370	15,643	15,374
13	9,478	9,465	9,491	9,478	9,465	9,677	10,123	11,601	14,520	15,383	15,634	15,370
14	9,471	9,465	9,488	9,468	9,478	9,684	10,144	11,691	14,564	15,402	15,625	15,365
15	9,465	9,465	9,491	9,465	9,491	9,694	10,168	11,808	14,699	15,429	15,611	15,360
16	9,458	9,465	9,488	9,465	9,510	9,701	10,188	11,922	14,634	15,452	15,602	15,352
17	9,455	9,468	9,488	9,461	9,523	9,710	10,222	12,030	14,669	15,488	15,588	15,347
18	9,452	9,468	9,484	9,461	9,530	9,730	10,257	12,149	14,708	15,520	15,579	15,338
19	9,455	9,465	9,481	9,455	9,552	9,750	10,285	12,269	14,748	15,552	15,565	15,329
20	9,452	9,468	9,491	9,449	9,582	9,763	10,347	12,395	14,779	15,588	15,552	15,320
21	9,452	9,468	9,481	9,439	9,601	9,793	10,416	12,528	14,814	15,620	15,536	15,311
22	9,449	9,471	9,478	9,436	9,618	9,817	10,475	12,660	14,846	15,643	15,524	15,302
23	9,442	9,475	9,478	9,432	9,628	9,840	10,541	12,791	14,880	15,666	15,511	15,292
24	9,439	9,475	9,478	9,432	9,641	9,867	10,605	12,912	14,916	15,680	15,493	15,283
25	9,436	9,475	9,461	9,429	9,648	9,890	10,675	13,021	14,951	15,689	15,479	15,274
26	9,432	9,479	9,461	9,426	9,651	9,910	10,732	13,131	14,987	15,694	15,465	15,265
27	9,429	9,481	9,461	9,423	9,651	9,930	10,785	13,233	15,023	15,693	15,452	15,256
28	9,426	9,484	9,461	9,419	9,661	9,947	10,842	13,336	15,059	15,701	15,438	15,247
29	9,426	9,488	9,464	9,413	-	9,964	10,889	13,425	15,095	15,698	15,424	15,234
30	9,432	9,491	9,468	9,410	-	9,977	10,929	13,510	15,126	15,698	15,411	15,225
31	9,426	-	9,488	9,406	-	9,984	-	13,561	-	15,694	15,397	-

Elevation, in feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,024.5	1,022.6	1,023.6	1,023.6	1,022.2	1,026.2	1,031.2	1,045.2	1,079.6	1,096.8	1,102.8	1,099.4
2	1,024.4	1,022.6	1,023.6	1,023.6	1,022.2	1,026.2	1,031.2	1,045.8	1,080.4	1,097.2	1,102.8	1,099.2
3	1,024.2	1,022.6	1,023.6	1,023.6	1,022.0	1,026.2	1,031.4	1,046.6	1,081.4	1,097.6	1,102.8	1,099.2
4	1,024.2	1,022.7	1,023.6	1,023.6	1,022.0	1,026.2	1,031.5	1,047.0	1,082.4	1,097.9	1,102.8	1,099.2
5	1,024.0	1,022.8	1,023.6	1,023.6	1,021.9	1,026.2	1,031.6	1,047.5	1,083.6	1,098.2	1,102.8	1,099.3
6	1,024.0	1,022.9	1,023.6	1,023.6	1,022.0	1,026.3	1,031.8	1,048.0	1,084.5	1,098.4	1,102.7	1,099.4
7	1,023.8	1,023.0	1,023.6	1,023.6	1,022.1	1,026.4	1,032.1	1,048.4	1,085.4	1,098.6	1,102.6	1,099.4
8	1,023.7	1,023.0	1,023.6	1,023.6	1,022.2	1,026.4	1,032.2	1,049.0	1,086.3	1,098.8	1,102.6	1,099.4
9	1,023.6	1,023.0	1,023.6	1,023.6	1,022.3	1,026.4	1,032.4	1,049.8	1,087.2	1,099.0	1,102.5	1,099.4
10	1,023.5	1,023.0	1,023.6	1,023.6	1,022.4	1,026.4	1,032.5	1,050.8	1,087.9	1,099.0	1,102.4	1,099.4
11	1,023.4	1,023.1	1,023.6	1,023.5	1,022.7	1,026.4	1,032.6	1,051.8	1,088.6	1,099.2	1,102.4	1,099.4
12	1,023.4	1,023.1	1,023.6	1,023.4	1,023.0	1,026.4	1,032.7	1,052.6	1,089.2	1,099.2	1,102.2	1,099.3
13	1,023.4	1,023.2	1,023.6	1,023.4	1,023.2	1,026.4	1,033.0	1,053.7	1,089.7	1,099.4	1,102.2	1,099.2
14	1,023.2	1,023.2	1,023.6	1,023.2	1,023.4	1,026.5	1,033.4	1,054.0	1,090.2	1,099.6	1,102.0	1,099.2
15	1,023.2	1,023.2	1,023.6	1,023.2	1,023.6	1,026.6	1,033.7	1,054.4	1,090.6	1,099.9	1,101.9	1,099.2
16	1,023.0	1,023.2	1,023.5	1,023.2	1,023.8	1,026.8	1,034.0	1,058.0	1,091.0	1,100.2	1,101.8	1,099.0
17	1,023.0	1,023.2	1,023.5	1,023.1	1,024.0	1,026.9	1,034.5	1,059.4	1,091.4	1,100.6	1,101.6	1,099.0
18	1,023.0	1,023.2	1,023.4	1,023.1	1,024.2	1,027.2	1,035.0	1,060.9	1,091.8	1,100.9	1,101.6	1,098.9
19	1,023.0	1,023.2	1,023.4	1,023.0	1,024.6	1,027.5	1,035.4	1,062.4	1,092.5	1,101.2	1,101.4	1,098.8
20	1,023.0	1,023.2	1,023.4	1,022.9	1,025.0	1,027.7	1,036.3	1,064.0	1,092.6	1,101.6	1,101.2	1,098.7
21	1,023.0	1,023.2	1,023.4	1,022.8	1,025.2	1,028.2	1,037.3	1,065.8	1,093.0	1,102.0	1,101.2	1,098.6
22	1,022.9	1,023.2	1,023.4	1,022.7	1,025.5	1,028.5	1,038.2	1,067.4	1,093.4	1,102.2	1,101.0	1,098.5
23	1,022.8	1,023.3	1,023.4	1,022.6	1,025.6	1,028.8	1,039.1	1,069.0	1,093.8	1,102.5	1,100.8	1,098.4
24	1,022.8	1,023.3	1,023.4	1,022.6	1,025.8	1,029.2	1,040.0	1,070.6	1,094.2	1,102.6	1,100.6	1,098.3
25	1,022.7	1,023.3	1,023.4	1,022.6	1,026.0	1,029.6	1,041.0	1,071.9	1,094.6	1,102.8	1,100.4	1,098.2
26	1,022.6	1,023.4	1,023.4	1,022.6	1,026.0	1,029.9	1,041.8	1,073.2	1,095.0	1,102.8	1,100.3	1,098.1
27	1,022.6	1,023.4	1,023.4	1,022.4	1,026.0	1,030.2	1,042.6	1,074.5	1,095.8	1,102.8	1,100.2	1,098.0
28	1,022.6	1,023.4	1,023.4	1,022.4	1,026.2	1,030.4	1,043.4	1,075.8	1,096.5	1,102.8	1,100.1	1,097.9
29	1,022.6	1,023.5	1,023.4	1,022.4	-	1,030.7	1,044.0	1,076.8	1,096.2	1,102.8	1,099.8	1,097.8
30	1,022.6	1,023.6	1,023.5	1,022.3	-	1,030.9	1,044.6	1,077.8	1,096.6	1,102.8	1,099.7	1,097.6
31	1,022.6	-	1,023.5	1,022.2	-	1,031.0	-	1,078.7	-	1,102.8	1,099.6	-

Colorado River near Willow Beach, Ariz.

Location.-- Water-stage recorder, lat. 35°53'30", long. 114°41'15", in sec. 18, T. 29 N., R. 22 W., 2 miles above Willow Beach and 10 miles below Boulder Dam. Zero of gage is 594.83 feet above mean sea level (from levels by Bureau of Reclamation).

Drainage area.-- 169,900 square miles.

Records available.-- April 1934 to September 1937.

Extremes.-- Maximum discharge during year, 16,000 second-feet Sept. 2; minimum, 2,950 second-feet Jan. 2; minimum daily discharge, 3,910 second-feet Jan. 1.

1935-37: Maximum discharge, 19,400 second-feet June 23, 1935; minimum, 33 second-feet Feb. 11, 1935; minimum daily discharge, 152 second-feet Feb. 10, 1935.

Remarks.-- Records excellent. Diversions for irrigation above station. Discharge regulated at Boulder Dam since Feb. 1, 1935.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	8,380	6,470	5,380	3,910	5,290	7,060	9,270	9,650	8,440	10,900	10,800	10,400
2	8,240	6,470	5,080	4,840	5,170	7,050	9,120	9,810	8,420	10,800	10,700	10,800
3	8,300	6,250	5,080	4,560	5,090	7,150	8,960	9,670	8,500	10,800	10,700	10,400
4	8,340	6,430	5,080	5,030	5,090	7,060	8,960	9,580	8,580	10,800	10,700	10,300
5	8,240	6,500	4,840	5,240	5,110	7,040	9,140	9,670	9,110	10,900	10,800	10,300
6	8,030	6,280	4,920	5,010	5,030	6,830	9,140	9,840	9,020	10,900	10,800	10,400
7	7,460	6,360	4,900	4,950	5,140	7,240	9,100	9,690	8,920	11,000	10,800	10,200
8	7,410	6,130	5,140	4,970	5,090	7,480	9,000	9,330	8,880	11,000	10,800	9,900
9	7,600	6,230	5,130	4,680	5,110	7,960	9,080	9,390	9,180	11,000	10,700	9,940
10	7,440	6,210	5,030	3,940	5,270	9,000	9,000	9,310	9,580	11,000	10,700	9,940
11	6,490	6,280	5,140	5,130	5,550	9,620	8,820	9,520	9,580	10,900	10,800	9,980
12	7,350	6,110	5,140	4,970	5,480	9,420	9,160	9,390	9,520	10,900	10,800	10,000
13	7,350	6,560	4,810	4,790	5,620	9,200	8,960	9,330	9,560	11,000	10,700	9,860
14	7,280	6,250	5,080	4,900	5,410	9,060	9,370	8,820	9,620	11,000	10,800	9,350
15	7,370	6,420	5,240	4,810	5,580	9,520	9,480	8,890	9,600	11,000	11,200	9,120
16	7,280	6,630	5,170	4,650	5,800	9,440	9,500	8,840	9,590	10,900	10,900	8,840
17	7,310	6,180	5,330	4,320	5,700	9,500	9,120	8,680	9,980	10,900	11,000	8,820
18	7,210	6,140	5,290	4,740	5,820	9,250	9,370	8,300	10,700	10,900	11,100	8,800
19	7,310	5,970	5,140	4,870	5,770	8,900	9,440	8,220	10,700	10,900	11,300	8,780
20	7,130	5,870	5,030	4,970	5,580	8,840	9,390	8,320	10,400	10,800	11,000	8,780
21	7,260	5,820	5,050	4,890	5,480	8,740	9,460	8,360	10,400	10,800	11,100	8,800
22	7,080	5,890	5,110	4,920	5,480	9,100	9,440	8,400	10,400	10,800	11,200	8,780
23	7,170	6,090	5,160	4,500	5,630	9,100	9,520	8,380	10,600	10,800	11,000	8,580
24	7,170	6,050	5,090	3,940	5,870	8,440	9,580	8,320	11,000	10,800	10,700	8,420
25	7,410	5,550	5,210	4,820	6,130	7,350	9,770	8,260	11,000	10,900	10,800	8,480
26	6,700	5,220	4,810	4,970	6,770	7,370	9,770	8,190	11,000	10,800	10,800	8,420
27	7,080	5,300	5,000	4,980	7,120	7,730	9,650	8,280	11,000	10,800	10,600	8,480
28	7,390	5,300	5,250	5,080	7,150	8,020	9,270	8,320	11,000	10,800	10,400	8,580
29	6,860	5,250	5,480	4,950	-	8,680	9,770	8,340	11,000	10,800	10,400	8,520
30	6,560	5,430	5,430	5,000	-	9,080	9,810	8,360	10,900	10,900	10,300	8,520
31	6,430	-	5,460	4,200	-	9,040	-	8,400	-	10,800	10,400	-
Month	Second-foot-days					Maximum	Minimum	Mean	Run-off in acre-feet			
October.....	228,730					8,380	6,430	7,378	453,700			
November.....	181,680					8,560	5,220	6,056	360,400			
December.....	168,980					5,480	4,810	5,128	315,300			
Calendar year 1936.....	2,992,000					11,700	4,750	8,175	5,934,000			
January.....	147,530					5,240	3,910	4,759	292,600			
February.....	157,330					7,150	5,030	5,619	312,100			
March.....	259,250					9,620	6,830	8,363	514,200			
April.....	279,420					9,810	8,820	9,314	554,200			
May.....	275,850					9,840	8,190	8,898	547,100			
June.....	296,170					11,000	8,420	9,872	587,400			
July.....	337,300					11,000	10,800	10,880	669,000			
August.....	334,800					11,300	10,300	10,800	664,100			
September.....	280,490					10,800	8,420	9,350	556,300			
Water year 1936-37.....	2,937,530					11,300	3,910	8,048	5,826,000			

Colorado River near Topock, Ariz.

Location.— Water-stage recorder, lat. $34^{\circ}41'30''$, long. $114^{\circ}27'45''$, in NW $\frac{1}{4}$ sec. 13, T. 15 N., R. 21 W., in Mohave Canyon, 3 miles below Topock. Zero of gage is 423.2 feet above mean sea level (from levels by Metropolitan Water District of Southern California).

Drainage area.— 174,300 square miles.

Records available.— February 1917 to September 1937.

Extremes.— Maximum discharge during year, 11,300 second-feet Aug. 24; minimum, 3,410 second-feet Jan. 12; minimum daily discharge, 3,630 second-feet Jan. 12.
1917-34, (unregulated): Maximum discharge, 174,000 second-feet June 22, 1921; minimum, 1,480 second-feet Aug. 17, 1934.
1935-37, (regulated): Maximum discharge, 18,600 second-feet June 24, 1935; minimum, 375 second-feet Feb. 14, 1935; minimum daily discharge, 422 second-feet Feb. 14, 1935.

Remarks.— Records excellent. Diversions for irrigation above station. Discharge regulated at Boulder Dam since Feb. 1, 1935. No regulation between Boulder Dam and this station.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	7,780	6,210	5,110	5,820	4,590	6,910	8,760	9,320	8,250	10,700	10,200	9,560
2	7,590	6,100	5,110	5,080	4,010	6,840	9,000	9,600	8,090	10,300	10,300	9,890
3	7,670	6,070	4,940	3,880	4,830	6,840	9,240	9,640	7,900	10,400	10,600	10,100
4	7,780	5,960	4,830	4,760	4,940	6,650	8,940	9,680	7,940	10,300	10,600	10,500
5	7,940	6,070	5,040	4,260	4,830	6,690	8,640	9,280	8,170	10,500	10,500	9,680
6	7,980	6,140	4,800	4,870	4,870	6,650	8,680	8,880	8,440	10,500	10,400	9,640
7	7,670	6,100	4,660	5,260	4,970	6,730	8,920	9,480	8,920	10,500	10,200	9,520
8	7,290	6,030	4,590	4,970	4,900	6,730	8,600	9,300	8,480	10,400	10,400	9,840
9	7,060	5,640	4,830	4,750	4,940	7,250	8,720	9,200	8,370	10,400	10,400	9,680
10	7,290	5,920	4,970	4,660	4,870	7,480	8,620	9,040	8,480	10,700	10,400	9,600
11	7,360	5,890	4,660	4,490	4,830	8,210	8,760	9,200	9,200	11,000	10,300	9,400
12	6,910	5,920	4,730	3,630	5,080	9,080	8,760	9,320	9,360	10,700	10,300	9,240
13	6,760	5,820	4,870	4,900	5,080	9,320	8,480	9,240	9,320	10,500	10,200	9,280
14	7,260	6,180	4,630	4,940	5,180	9,440	8,960	9,080	8,920	10,500	10,300	9,200
15	6,960	6,250	4,660	4,800	5,320	9,120	8,760	8,660	8,840	10,500	10,300	9,960
16	7,440	5,850	4,970	4,560	5,110	9,280	9,200	8,290	8,840	10,300	10,500	9,920
17	6,960	6,800	5,110	4,560	5,220	9,360	9,040	8,330	8,760	10,500	10,700	8,620
18	6,990	6,030	5,040	4,300	5,530	9,320	8,760	8,530	9,080	10,500	10,600	8,520
19	7,550	6,030	4,870	4,170	5,630	9,120	8,760	8,060	9,760	10,300	10,500	8,370
20	7,170	5,740	4,700	4,830	5,500	8,600	9,120	7,820	10,700	10,300	10,500	8,250
21	6,980	5,710	4,830	4,730	5,320	8,680	8,920	7,780	10,200	10,300	10,800	8,330
22	6,840	5,740	4,590	5,000	5,110	8,490	9,080	7,660	9,880	10,100	10,800	8,330
23	6,910	5,820	4,750	4,660	5,140	8,750	8,960	7,900	10,000	10,400	10,700	8,370
24	6,180	5,740	4,760	4,700	5,110	8,680	8,960	7,670	9,880	10,400	11,000	8,400
25	6,470	5,710	4,760	4,300	5,220	8,960	9,000	7,690	10,500	10,300	10,600	7,980
26	7,140	5,420	4,760	3,970	5,600	7,400	9,320	7,690	10,600	10,300	10,500	7,980
27	6,470	5,110	4,940	4,800	5,960	7,060	9,000	7,780	10,700	10,400	10,300	7,860
28	6,360	4,900	5,220	4,700	6,470	7,210	9,280	7,630	10,700	10,600	10,200	7,820
29	7,100	5,110	4,900	4,660	-	7,660	8,880	7,660	10,800	10,600	9,920	8,090
30	6,840	5,180	4,870	4,730	-	7,860	8,960	8,060	10,700	10,600	9,880	7,980
31	6,280	-	5,460	4,800	-	8,620	-	8,330	-	10,100	9,600	-
Month	Second-foot-days					Maximum		Minimum		Mean		Run-off in acre-feet
October.....	220,810					7,980		6,180		7,123		438,000
November.....	175,190					6,800		4,900		5,840		347,600
December.....	150,970					5,460		4,590		4,870		299,400
Calendar year 1936.....	2,861,110					11,100		4,490		7,817		5,675,000
January.....	144,610					5,820		3,630		4,662		286,600
February.....	144,060					6,470		4,010		5,145		285,700
March.....	249,090					9,440		6,650		8,040		494,400
April.....	266,980					9,320		8,480		8,899		529,500
May.....	265,980					9,680		7,590		8,580		527,600
June.....	279,780					10,900		7,900		9,326		564,900
July.....	323,800					11,000		10,100		10,445		642,200
August.....	322,500					11,000		9,600		10,403		639,700
September.....	267,800					10,500		7,820		8,927		531,200
Water year 1936-37.....	2,811,470					11,000		3,630		7,703		5,577,000

Colorado River near Parker, Ariz.

Location.- Water-stage recorder, lat. 34°15'30", long. 114°08'45", in NE¼ sec. 32, T. 11 N., R. 18 W., 4.2 miles below Parker Dam, 4.4 miles below Williams River, and 11 miles northeast of Parker. Zero of gage is 345.61 feet above mean sea level.

Drainage area.- 180,000 square miles.

Records available.- February 1934 to September 1937.

Extremes.- Maximum discharge during year, 42,400 second-feet Feb. 8; minimum, 3,590 second-feet Jan. 12; minimum daily discharge, 3,560 second-feet Jan. 12.
1935-37: Maximum discharge, that of Feb. 8, 1937; minimum, 1,160 second-feet Feb. 16, 1935; minimum daily discharge, 1,440 second-feet Feb. 15, 1935.

Remarks.- Records excellent. Diversions for irrigation above station. Discharge regulated at Boulder Dam since Feb. 1, 1935. No regulation on Colorado River between Boulder Dam and this station except that on Feb. 7 flood flow from Williams River was temporarily regulated at Parker Dam by storage behind cofferdam and by diversion tunnels reducing the peak discharge from about 98,000 second-feet to 42,400 second-feet.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.					
1	7,610	6,280	5,130	5,850	4,730	7,160	9,030	9,110	8,060	10,600	10,200	9,590					
2	7,540	6,180	5,000	5,560	4,150	7,190	9,100	9,420	7,830	10,400	10,400	9,820					
3	7,720	6,020	5,100	4,160	4,440	7,160	9,290	9,390	7,980	10,400	10,300	9,980					
4	7,750	5,850	4,880	4,260	5,060	6,890	9,230	9,560	7,830	10,500	10,300	10,600					
5	7,720	5,720	4,910	4,380	5,000	6,890	8,810	9,520	8,080	10,200	10,300	9,750					
6	7,720	5,920	4,940	4,550	4,940	6,920	8,810	9,230	8,010	10,500	10,200	9,590					
7	7,680	6,150	4,760	5,130	19,000	6,950	8,880	9,260	8,550	10,500	10,100	9,620					
8	7,360	6,080	4,640	5,250	39,700	7,010	8,720	9,690	8,460	10,700	10,200	9,920					
9	7,050	5,660	4,580	4,820	18,100	7,190	8,810	9,390	8,560	10,600	10,200	9,560					
10	6,950	5,590	4,850	4,820	6,950	7,580	8,590	9,130	8,420	10,400	10,300	9,560					
11	7,090	6,050	4,670	4,580	6,040	7,980	8,590	9,100	8,580	10,900	10,300	9,360					
12	6,920	5,920	4,820	3,960	5,670	8,780	8,720	9,360	9,030	10,800	10,100	9,420					
13	6,080	5,950	4,700	4,210	5,780	9,360	8,570	9,290	9,060	10,800	10,200	9,420					
14	6,920	5,590	4,910	4,940	5,900	9,620	8,950	9,100	8,970	10,500	10,300	9,420					
15	6,880	6,080	4,620	4,730	20,000	9,290	8,850	9,060	8,940	10,400	10,100	9,130					
16	6,880	5,920	4,820	4,670	9,940	9,130	9,070	8,210	8,970	10,700	10,400	8,740					
17	7,120	5,950	4,940	4,460	7,310	11,100	9,130	8,260	9,000	10,500	10,700	8,580					
18	6,780	6,480	4,970	4,580	6,860	11,800	8,880	8,210	9,130	10,500	10,700	8,200					
19	7,220	5,690	4,820	4,290	6,430	10,600	8,650	8,080	9,390	10,500	10,400	8,390					
20	7,330	5,720	4,750	4,120	6,260	10,600	9,160	7,920	10,100	10,500	10,400	8,010					
21	6,880	5,560	4,850	4,850	6,040	9,620	8,910	7,740	10,200	10,400	10,400	8,390					
22	6,920	5,590	4,820	4,550	5,810	8,710	8,980	7,980	9,790	10,300	10,400	8,420					
23	6,990	5,500	4,700	4,700	5,560	8,650	9,080	7,830	9,920	10,500	10,600	8,900					
24	6,610	5,530	4,760	4,610	5,480	9,260	9,010	7,800	9,750	10,200	10,500	8,520					
25	6,310	5,720	4,760	4,580	5,340	9,130	8,950	7,670	10,100	10,300	10,600	8,170					
26	6,610	5,630	4,820	4,010	5,480	8,360	9,140	7,580	10,600	10,400	10,400	7,860					
27	7,190	5,160	4,730	4,040	5,810	7,400	9,010	7,830	10,500	10,500	10,300	7,860					
28	6,380	4,880	5,030	4,700	6,430	7,670	8,910	7,580	10,400	10,600	10,200	7,860					
29	6,480	4,850	5,440	4,880	-	8,040	9,040	7,640	10,700	10,500	10,000	7,860					
30	7,160	5,160	5,160	4,820	-	8,110	6,910	7,640	10,500	10,500	9,660	8,010					
31	6,510	-	5,160	4,790	-	8,460	-	7,980	-	10,300	9,560	-					
Month													Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....													218,360	7,750	6,080	7,044	435,100
November.....													172,380	6,480	4,850	5,746	341,900
December.....													151,220	5,440	4,580	4,878	299,900
Calendar year 1936.....													2,838,090	11,600	4,620	7,754	5,629,000
January.....													143,870	5,850	3,960	4,641	285,400
February.....													238,210	39,700	4,150	8,508	472,500
March.....													262,510	11,800	6,890	8,468	520,700
April.....													267,780	9,290	8,570	8,926	531,100
May.....													268,560	9,690	7,580	8,566	526,700
June.....													275,420	10,700	7,830	9,181	546,300
July.....													324,600	10,900	10,200	10,470	643,800
August.....													318,920	10,800	9,560	10,290	632,600
September.....													268,510	10,600	7,860	8,950	532,600
Water year 1936-37.....													2,907,340	39,700	3,960	7,965	5,767,000

Colorado River near Picacho, Calif.

Location.— Water-stage recorder, lat. 33°02'00", long. 114°33'00", in NW¼ sec. 22, T. 13 S., R. 23 E. San Bernardino base line and meridian, 4 miles below Picacho and 1¼ miles above Imperial Dam for All-American Canal. Zero of gage is 187.38 feet above mean sea level (from bench marks of Metropolitan Water District of Southern California).

Drainage area.— 188,100 square miles.

Records available.— July 1934 to September 1937.

Extremes.— Maximum discharge during year, 26,900 second-feet Feb. 10; minimum, 3,370 second-feet Jan. 14; minimum daily discharge, 3,480 second-feet Jan. 14.
1935-37: Maximum discharge, that of Feb. 10, 1937; minimum, 1,290 second-feet Feb. 17, 1935; minimum daily discharge, 1,450 second-feet Feb. 17, 1935.

Remarks.— Records excellent. Diversions for irrigation above station. Discharge regulated at Boulder Dam since Feb. 1, 1935. No regulation in the basin between Boulder Dam and this station except for temporary partial flood regulation at Parker Dam on Feb. 7, 1937 (discussed in connection with Parker gaging station).

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	6,850	6,230	4,660	4,890	4,350	5,710	7,430	8,290	6,970	9,140	8,850	8,320
2	6,630	5,810	4,600	5,040	4,380	6,450	7,820	8,490	7,060	9,060	8,810	8,280
3	6,450	5,480	4,570	5,320	4,330	6,590	8,210	8,750	6,930	9,100	8,930	8,770
4	6,590	5,160	4,600	4,860	3,750	6,270	8,530	8,610	6,820	9,140	8,970	8,810
5	6,850	5,220	4,460	3,680	4,140	6,120	8,650	8,550	6,670	9,380	8,770	8,730
6	6,740	5,100	4,410	4,330	4,460	6,230	8,010	8,410	6,630	9,100	6,730	8,980
7	5,700	5,260	4,540	4,140	4,300	6,380	7,970	8,090	7,380	9,180	8,770	8,600
8	6,690	5,420	4,600	4,600	6,470	6,090	7,930	8,410	7,080	9,420	8,770	8,440
9	6,410	5,510	4,120	4,890	22,600	6,340	8,130	8,450	7,310	9,460	8,810	8,520
10	6,270	5,290	4,200	4,800	23,800	6,230	7,740	8,530	7,120	9,550	8,850	8,440
11	5,920	5,040	4,350	4,570	10,500	6,480	7,740	8,450	7,040	9,340	8,730	8,200
12	6,120	5,190	4,490	4,440	7,350	6,630	7,820	7,970	7,160	9,590	8,570	8,030
13	6,090	5,190	4,140	3,990	6,300	7,580	7,860	7,970	7,580	9,670	8,570	8,200
14	5,510	5,160	4,220	3,480	5,920	8,650	7,740	8,250	8,010	9,420	8,770	8,150
15	5,350	5,040	4,390	4,200	5,710	8,970	7,820	8,130	8,010	9,180	8,770	8,110
16	5,840	5,130	4,300	4,570	15,000	9,220	8,010	7,820	7,540	9,140	8,810	8,010
17	5,660	5,680	4,170	4,460	12,500	9,420	8,130	7,660	7,350	9,100	8,970	7,910
18	5,950	5,190	4,250	4,440	7,740	9,670	8,410	7,460	7,460	9,930	9,060	7,390
19	6,200	5,780	4,350	4,300	6,890	11,900	8,530	7,510	7,660	8,810	8,970	7,350
20	6,160	5,260	4,460	3,990	6,300	10,300	7,930	7,120	7,970	8,770	8,930	7,550
21	6,970	5,190	4,520	3,640	6,090	10,300	7,780	6,930	8,650	8,970	6,930	7,510
22	6,340	5,100	4,250	4,020	5,880	9,260	7,970	6,670	9,140	8,850	8,730	7,750
23	6,230	5,040	4,350	4,250	5,680	8,650	7,860	6,890	8,370	8,370	8,970	7,790
24	6,200	5,010	4,270	4,300	5,190	8,450	8,010	7,000	8,050	8,650	9,010	7,710
25	6,090	4,920	4,350	4,410	4,980	8,650	8,330	6,890	8,370	8,770	9,180	7,790
26	5,680	4,950	4,520	4,350	5,010	8,650	8,330	6,480	8,290	8,810	9,300	7,750
27	5,640	5,220	4,300	4,090	5,040	8,370	8,090	6,450	8,730	8,770	8,890	7,270
28	6,090	5,160	4,540	3,730	5,510	7,120	8,050	6,670	8,970	8,930	8,770	7,070
29	6,200	4,600	4,660	3,940	-	6,890	8,290	6,820	9,010	8,810	9,100	6,960
30	5,510	4,540	4,890	4,220	-	7,040	8,370	6,630	9,180	8,690	8,770	7,110
31	6,160	-	5,040	4,200	-	7,430	-	6,930	-	8,810	8,410	-
Month						Second-foot-days	Maximum	Minimum	Mean		Run-off in acre-feet	
October.....						192,010	6,970	5,350	6,194		380,800	
November.....						157,070	6,230	4,540	5,236		311,500	
December.....						137,570	5,040	4,120	4,438		272,900	
Calendar year 1936.....						2,478,380	10,500	3,970	6,772		4,916,000	
January.....						134,140	5,320	3,480	4,327		266,100	
February.....						210,170	23,800	3,760	7,506		416,900	
March.....						242,040	11,900	5,710	7,808		480,100	
April.....						241,490	8,660	7,430	8,050		479,000	
May.....						237,040	8,730	6,450	7,646		470,200	
June.....						232,230	9,180	6,630	7,741		460,600	
July.....						281,270	9,670	8,650	9,073		557,900	
August.....						274,470	9,300	8,410	8,854		544,400	
September.....						259,500	8,980	6,960	7,983		475,000	
Water year 1936-37.....						2,579,000	23,800	3,480	7,066		5,115,000	

Colorado River at Yuma, Ariz.

Location.— Water-stage recorder, lat. 32°43'45", long. 114°37'15", 1,800 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.— 244,800 square miles.

Records available.— April 1878 to September 1937 (prior to January 1902, gage heights only).

Extremes.— Maximum discharge during year, 23,200 second-feet Feb. 10 (gage height, 24.22 feet); minimum discharge, 1,440 second-feet Feb. 7 (gage height, 18.11 feet); minimum daily discharge, 2,000 second-feet Feb. 5.

1902-37: Maximum daily discharge, 240,000 second-feet Jan. 22, 1916; minimum daily discharge 18 second-feet Aug. 25-27, 1934.

Remarks.— Records for river station excellent; those for wasteway fair. Many diversions for irrigation from Colorado River and tributaries. Considerable water diverted around river station on account of power development on main canal of Yuma reclamation project. Water in that canal not required for irrigation is returned to river below river station. Records of discharge of Yuma Main Canal Wasteway, which returns water from canal to river half a mile downstream, supplement records of discharge at river station. Colorado River regulated at Boulder Dam since Feb. 1, 1935. No regulation below Boulder Dam on Colorado River except temporarily at Parker Dam on Feb. 7, 1937, and none below Gillespie Dam on Gila River. Daily-discharge records for wasteway furnished by Bureau of Reclamation.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4,690	4,400	2,640	2,980	2,380	4,400	6,120	6,520	4,720	6,820	6,440	6,080
2	4,620	3,980	2,690	3,080	2,600	4,620	6,040	6,190	4,720	6,710	6,550	6,190
3	4,590	3,600	2,720	3,440	2,380	5,080	6,710	6,440	4,620	7,240	6,580	6,300
4	4,590	3,330	2,810	5,210	2,190	4,690	6,630	6,560	4,440	6,740	6,670	6,740
5	4,750	3,270	2,910	3,630	2,000	4,500	6,590	6,190	4,660	7,130	6,520	6,580
6	4,440	3,460	2,610	2,740	2,620	4,590	6,410	6,220	4,370	6,710	6,480	6,780
7	4,470	3,520	2,640	3,240	2,580	4,280	6,080	6,080	4,720	6,740	6,820	6,330
8	4,620	3,440	2,760	3,300	2,720	4,280	6,040	6,190	4,650	7,090	6,590	6,080
9	4,560	3,380	2,490	3,620	13,000	4,400	6,120	6,190	5,110	7,170	6,440	6,260
10	4,720	3,410	2,400	3,860	22,400	4,340	6,080	6,260	4,980	7,240	6,520	6,370
11	4,100	3,220	2,580	3,440	13,400	4,340	5,860	6,370	4,880	6,970	6,620	6,190
12	4,160	3,160	2,720	3,410	6,070	4,400	5,860	5,860	5,240	7,130	6,370	5,860
13	4,190	3,380	2,580	3,220	4,800	5,280	5,900	5,760	5,310	7,090	6,240	5,860
14	3,920	3,410	2,420	2,630	4,280	6,120	5,860	5,860	5,660	6,900	6,620	6,040
15	3,360	3,350	2,440	2,980	6,940	6,780	5,900	6,010	5,830	6,780	6,370	6,010
16	3,800	3,160	2,630	2,750	13,000	7,520	5,940	5,620	5,550	6,740	6,630	5,940
17	4,070	3,490	2,420	2,670	15,500	9,350	6,120	5,480	5,350	6,930	6,690	5,760
18	4,010	3,490	2,360	2,440	7,970	9,340	6,370	5,280	5,380	6,440	6,530	5,550
19	4,160	3,440	2,670	2,440	5,550	11,400	6,330	5,110	5,660	6,120	6,930	5,080
20	4,190	3,750	2,620	2,340	4,980	10,600	6,010	5,080	5,720	6,010	6,970	5,040
21	4,850	3,330	2,550	2,210	4,310	10,600	5,690	4,950	6,040	6,370	6,710	5,140
22	4,690	3,190	2,470	2,300	6,600	10,400	5,940	5,010	5,560	6,440	6,740	5,360
23	4,220	3,140	2,320	2,440	8,850	11,700	5,970	4,950	6,260	6,590	6,710	5,720
24	4,530	3,220	2,400	2,440	7,680	14,600	6,330	4,880	5,600	6,480	6,900	5,380
25	4,100	3,160	2,470	2,470	5,720	13,200	6,260	4,780	6,080	6,300	6,970	5,830
26	3,800	3,140	2,490	2,470	4,750	11,300	6,220	4,560	6,370	6,370	7,200	5,350
27	3,720	3,330	2,490	2,350	4,400	9,680	5,900	4,310	6,300	6,330	7,010	5,110
28	4,070	3,580	2,620	2,230	4,440	7,100	5,760	4,400	6,710	6,590	7,170	4,820
29	4,220	2,790	3,980	2,040	-	6,190	6,080	4,950	6,710	6,930	8,170	4,820
30	3,780	2,720	3,090	2,530	-	6,080	6,520	4,400	6,710	6,710	6,520	4,950
31	4,130	-	3,080	2,470	-	6,260	-	4,780	-	6,780	6,120	-
Month	Second-foot-days				Maximum		Minimum		Mean		Run-off in acre-feet	
October.....	132,140				4,850		3,380		4,263		262,100	
November.....	101,240				4,400		2,720		3,375		200,800	
December.....	81,690				3,980		2,320		2,635		162,000	
Calendar year 1936.....	1,746,860				8,500		2,100		4,773		3,465,000	
January.....	89,280				5,210		2,040		2,880		177,100	
February.....	185,010				22,400		2,000		6,608		367,000	
March.....	228,020				14,600		4,280		7,355		462,300	
April.....	183,640				6,710		5,690		6,121		364,200	
May.....	171,240				6,560		4,310		5,524		359,600	
June.....	165,510				6,710		4,370		5,510		327,900	
July.....	208,590				7,240		6,010		6,729		413,700	
August.....	207,580				8,170		6,120		6,686		411,700	
September.....	173,620				6,780		4,820		5,784		344,200	
Water year 1936-37.....	1,927,260				22,400		2,000		5,280		3,823,000	

Discharge, in second-feet, of Yuma Main Canal Wasteway at Yuma, Ariz.,
for water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,140	1,320	1,300	1,380	1,380	1,220	1,340	1,300	1,210	1,110	1,420	1,070
2	1,190	1,270	1,350	1,500	1,390	1,170	1,360	1,580	1,170	1,150	1,080	1,090
3	1,230	1,220	1,400	1,410	1,380	1,160	1,490	1,210	1,220	1,080	984	1,190
4	1,290	1,230	1,460	40	1,320	1,190	1,530	1,190	1,330	1,240	996	1,260
5	1,260	1,270	1,360	55	1,370	1,330	1,270	1,220	1,270	1,110	1,000	1,360
6	1,140	1,350	1,370	593	1,290	1,260	1,170	1,300	1,400	1,040	1,140	1,210
7	1,200	1,340	1,320	564	1,370	1,390	1,190	1,340	1,180	1,040	1,150	1,130
8	1,230	1,340	1,290	577	1,340	1,210	1,200	1,260	1,110	1,060	1,540	1,100
9	1,290	1,230	1,320	657	1,270	1,130	1,200	1,370	1,160	1,170	1,100	1,110
10	1,230	1,180	1,370	717	1,260	1,180	1,210	1,210	1,180	1,070	1,020	1,130
11	1,330	1,250	1,420	562	1,140	1,250	1,440	1,150	1,200	1,210	1,030	1,100
12	1,200	1,340	1,420	592	1,170	1,360	1,220	1,180	1,180	1,080	1,080	1,170
13	1,160	1,400	1,390	736	1,400	1,320	1,170	1,260	1,350	1,020	1,200	1,140
14	1,180	1,390	1,510	758	1,430	1,510	1,150	1,290	1,150	1,030	1,180	1,060
15	1,230	1,540	1,510	669	1,530	1,270	1,160	1,220	1,080	1,060	1,270	1,120
16	1,380	1,310	1,340	1,360	1,310	1,230	1,240	1,300	1,110	1,250	1,060	1,180
17	1,320	1,250	1,350	1,540	1,270	0	1,160	1,180	1,100	1,280	1,020	1,230
18	1,430	1,300	1,430	1,400	1,120	0	1,350	1,120	1,140	1,320	1,040	1,160
19	1,310	1,340	1,360	1,350	1,240	0	1,180	1,180	1,070	1,090	1,100	1,280
20	1,270	1,390	1,390	1,400	1,440	0	1,120	1,190	1,220	1,020	1,130	1,170
21	1,350	1,300	1,280	1,410	1,570	0	1,160	1,210	1,140	993	1,070	1,200
22	1,280	1,340	1,240	1,480	1,280	299	1,230	1,200	1,060	1,030	1,240	1,180
23	1,290	1,250	1,290	1,510	1,160	653	1,300	1,380	1,050	1,130	1,070	1,140
24	1,290	1,230	1,410	1,550	945	874	1,130	1,200	1,070	1,060	1,010	1,240
25	1,420	1,290	1,420	1,410	1,020	1,040	1,430	1,130	1,150	1,260	1,040	1,180
26	1,270	1,350	1,420	1,410	1,300	1,160	1,230	1,160	1,080	1,060	1,110	1,200
27	1,220	1,440	1,390	1,440	1,440	1,310	1,120	1,200	1,220	1,010	1,250	1,140
28	1,270	1,240	1,380	1,440	1,490	1,420	1,190	1,250	1,130	1,050	1,170	1,120
29	1,320	1,500	639	1,480	-	1,250	1,240	1,250	1,070	1,140	369	1,160
30	1,350	1,500	1,160	1,560	-	1,210	1,310	1,340	1,090	1,210	1,080	1,210
31	1,310	-	1,340	1,600	-	1,280	-	1,280	-	1,190	1,040	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						39,370	1,430	1,140	1,270	78,090		
November.....						39,500	1,540	1,180	1,317	78,560		
December.....						41,229	1,460	639	1,330	81,780		
Calendar year 1936.....						456,343	1,600	639	1,247	906,100		
January.....						34,150	1,600	40	1,102	67,740		
February.....						36,425	1,570	945	1,301	72,250		
March.....						30,876	1,510	0	996	61,240		
April.....						37,490	1,530	1,120	1,250	74,560		
May.....						38,650	1,680	1,120	1,247	76,560		
June.....						34,890	1,400	1,050	1,163	69,200		
July.....						34,573	1,320	993	1,115	68,570		
August.....						33,999	1,540	369	1,097	67,440		
September.....						35,030	1,360	1,060	1,168	69,480		
Water year 1936-37.....						436,182	1,600	0	1,195	865,200		

Arapaho Creek below Monarch Lake, Colo.

Location.- Water-stage recorder, lat. 40°18', long. 105°46', in SE $\frac{1}{4}$ sec. 15, T. 2 N., R. 75 W., 700 feet below mouth of Roaring Fork and 10 miles east of Granby (revised).
Zero of gage is 8,244.30 feet above mean sea level (general adjustment of 1929).

Drainage area.- 59 square miles.

Records available.- June 1935 to September 1937.

Extremes.- Maximum discharge during year, 567 second-feet June 28 (gage height, 2.53 feet); minimum not determined.
1934-37: Maximum discharge, 1,310 second-feet June 18, 1935 (gage height, 4.13 feet); minimum not determined.

Remarks.- Records excellent except those for period of ice effect, Nov. 3-13, Nov. 23 to Apr. 23 (computed on basis of four discharge measurements and weather records), and those for Aug. 11 to Sept. 30, which are fair. Flow partially regulated by storage in Monarch Lake. Small diversions for irrigation above station. Several second-feet diverted around station by power canal during summer months.

Rating table, water year 1936-37 except periods of ice effect (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Oct. 1-3, Aug. 11 to Sept. 30)

0.6	9	1.4	142
.7	15	1.6	208
.8	22	1.8	276
.9	33	2.0	346
1.0	48	2.2	424
1.2	59	2.4	510

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	9.0	16					5	45	466	300	67	52
2	11	18					5	33	441	279	58	50
3	13	16					5	30	361	205	58	46
4	15	19					5	26	339	198	67	39
5	16	17					5	36	273	201	69	36
6	18	16					5	63	228	184	65	36
7	17	16		*7.7			5	112	201	232	63	40
8	16	16					5	168	177	213	63	38
9	15	17					5	222	171	184	61	34
10	15	17					5	342	181	164	59	34
11	15	16					5	279	228	136	44	30
12	15	15					5	288	300	142	42	26
13	16	15					5	213	300	232	38	23
14	20	14					5	279	296	307	31	21
15	20	14					6	365	293	279	31	21
16	19	13					10	437	332	235	45	18
17	19	13					15	420	368	188	48	17
18	19	13			*4.5		25	400	392	174	56	16
19	13	13					48	416	380	155	52	15
20	20	14					52	396	350	134	50	14
21	19	14				*4.5	60	380	364	114	48	13
22	18	14					68	342	497	106	45	12
23	13	13					62	346	416	96	39	13
24	17	13					58	350	361	87	36	14
25	17	12					46	369	348	85	34	12
26	16	12					46	332	501	78	31	10
27	15	12					52	339	408	76	30	10
28	15	12					65	408	346	82	29	11
29	16	12					65	488	310	76	32	11
30	16	11					52	484	296	74	42	13
31	16	-					-	479	-	71	54	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	509.0	20	9.0	16.4	1,010
November.....	433	19	11	14.4	859
December.....	272.3	-	-	8.8	541
Calendar year 1936.....	44,097.9	852	-	120	87,450
January.....	198.4	-	-	6.4	394
February.....	126	-	-	4.5	250
March.....	142.6	-	-	4.6	283
April.....	799	68	5	26.6	1,580
May.....	8,832	488	26	285	17,520
June.....	9,962	501	171	332	19,760
July.....	5,092	307	71	164	10,100
August.....	1,487	69	29	48.0	2,950
September.....	725	52	10	24.2	1,440
Water year 1936-37.....	28,578.8	501	-	78.3	56,690

*Discharge measurement.

Willow Creek near Granby, Colo.

Location.— Water-stage recorder, lat. 40°11', long. 106°00', in NW¼ sec. 34, T. 3 N., R. 77 W., 100 feet below mouth of Gold Run Creek and 7 miles northwest of Granby. Zero of gage is 8,240.99 feet above mean sea level (general adjustment of 1929).

Drainage area.— 105 square miles.

Records available.— April 1935 to September 1937.

Extremes.— Maximum discharge during year, 415 second-feet May 16 (gage height, 2.62 feet); minimum occurred during period of ice effect.
1935-37: Maximum discharge, 880 second-feet May 16, 1936 (gage height, 3.70 feet); minimum occurred during period of ice effect.

Remarks.— Records excellent except those for period of ice effect, Nov. 3 to Apr. 25, which were computed on basis of four discharge measurements and weather records and are fair. Water diverted for irrigation of hay meadows above station.

Rating tables, water year 1936-37 except periods of ice effect (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Nov. 2

Apr. 26 to Sept. 30

-0.1 17.5
0 21.3
.1 25.5

-0.2 7.5 1.0 52
-0.1 10.4 1.2 106
0 15.5 1.4 138
.2 22 1.6 182
.4 33 1.8 226
.6 46 2.0 272
.8 62 2.5 387

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	21	24					15	53	251	75	28	18
2	21	23					15	49	231	68	26	18
3	21	11					14	48	231	59	26	18
4	20	11					13	57	224	55	26	18
5	20	12					14	98	208	52	24	17
6	20	12					14	119	184	53	24	18
7	20	12		*11			14	147	189	58	24	28
8	20	12					15	184	156	63	22	20
9	20	12					18	247	149	48	21	18
10	20	12					22	293	142	46	21	18
11	20	12					26	300	133	47	21	16
12	20	13					30	284	133	51	20	16
13	20	14					34	288	127	72	20	16
14	20	15					33	313	125	72	19	15
15	20	17					41	357	127	76	19	14
16	20	16					45	385	117	61	24	14
17	20	15					50	385	113	54	22	14
18	20	13					53	371	110	53	36	14
19	20	15			*13		57	373	106	50	32	13
20	21	14					61	355	99	45	22	13
21	22	14				*15	65	330	94	40	20	13
22	21	13					69	302	96	34	18	13
23	20	13					73	290	84	35	19	17
24	20	13					76	286	79	35	19	18
25	21	12					80	279	78	36	21	16
26	23	14					84	274	112	35	20	15
27	23	13					93	256	102	37	18	16
28	23	12					98	263	79	36	18	16
29	23	13					78	265	70	34	18	16
30	23	12					62	270	69	32	19	16
31	24	-					-	260	-	29	18	-
Month							Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet	
October.....							647	24	20	20.9	1,280	
November.....							414	24	11	13.8	821	
December.....							356.5	-	-	11.5	707	
Calendar year 1936.....							32,714.0	655	-	89.4	64,880	
January.....							294.5	-	-	9.5	584	
February.....							356	-	-	12	666	
March.....							403	-	-	13	799	
April.....							1,367	98	13	45.6	2,710	
May.....							7,781	385	48	251	15,430	
June.....							3,998	251	69	133	7,930	
July.....							1,541	76	29	49.7	3,060	
August.....							685	36	18	221	1,360	
September.....							490	28	13	16.3	972	
Water year 1936-37.....							18,313.0	385	-	50.2	36,320	

*Discharge measurement.

Fraser River above West Portal, Colo.

Location.— Water-stage recorder, lat. $39^{\circ}32'50''$, long. $105^{\circ}45'25''$, in NE $\frac{1}{4}$ sec. 15, T. 2 S., R. 75 W., 100 yards below mouth of Jim Creek and 1 mile above West Portal.

Drainage area.— 22.1 square miles.

Records available.— August 1934 to September 1937 (discontinued). June 1907 to October 1909, at site 1,000 feet downstream.

Extremes.— Maximum discharge during year, 125 second-feet May 22 (gage height, 1.47 feet); minimum daily discharge, 1.4 second-feet Aug. 8, 9.
1934-37: Maximum discharge, 333 second-feet June 15, 1935 (gage height, 2.27 feet); minimum daily discharge, 1.4 second-feet Sept. 17-23, 1936, and Aug. 8, 9, 1937.

Remarks.— Records excellent for Apr. 15 to Sept. 30 and good for Oct. 1 to Apr. 14, except those for period of ice effect, Nov. 3-15, 20, Nov. 24 to Apr. 14, (computed on basis of four discharge measurements, weather records, and records for station near West Portal), and those for period of missing gage heights, Sept. 11-30, (computed on basis of records for Fraser River near West Portal), all of which are fair. The Pioneer Bore of the Moffat Tunnel has diverted water above this station since June 9, 1933. The combined flow of this diversion and Fraser River is equivalent to that prior to June 9, 1933.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	25	17	10	8.8	6.2	5.0	4.8	11	6.4	4.2	1.9	18
2	24	16	9.4	8.2	5.8	5.0	5.0	11	6.1	3.7	1.7	20
3	23	9.6	10	8.2	6.2	5.2	4.8	12	6.1	3.5	1.7	23
4	22	13	10	8.8	6.0	5.0	4.8	16	7.0	3.3	1.6	24
5	22	15	9.0	9.0	7.0	4.8	4.8	20	6.4	3.3	1.5	22
6	20	15	9.0	8.0	7.8	5.2	4.8	30	6.1	3.3	1.5	22
7	20	13	10	8.0	7.6	5.2	4.8	32	6.1	3.7	1.5	22
8	20	10	10	8.0	7.0	5.2	4.8	40	5.8	3.3	1.4	20
9	20	11	8.8	7.8	6.2	5.2	5.2	57	5.4	3.3	1.4	20
10	19	11	8.6	6.0	5.4	5.2	5.0	61	5.1	3.3	1.6	20
11	19	12	8.2	6.1	6.2	5.2	6.0	61	4.8	3.3	4.8	19
12	19	13	8.0	6.2	6.4	5.4	7.0	66	4.5	3.3	4.8	19
13	18	14	8.0	6.0	6.0	5.4	10	72	4.2	3.3	7.3	18
14	18	14	8.0	6.8	6.0	5.6	14	87	4.5	3.0	19	17
15	18	14	9.0	7.0	6.1	5.4	19	100	4.2	2.6	19	17
16	17	14	9.0	7.2	6.1	5.0	16	103	4.2	2.4	21	17
17	17	14	9.5	7.4	6.8	5.0	12	100	4.2	2.1	25	24
18	18	12	9.0	7.4	7.0	4.8	9.5	35	4.0	2.4	27	19
19	17	14	9.0	7.0	7.0	4.8	9.9	11	4.0	2.1	21	17
20	18	13	8.4	6.6	6.2	5.2	9.9	104	4.0	1.8	20	16
21	18	12	8.4	6.0	5.8	5.8	11	100	4.0	1.7	19	16
22	17	13	8.4	5.6	6.2	5.8	15	101	4.0	1.7	19	16
23	17	12	8.4	5.8	6.0	5.8	13	106	4.0	1.7	18	18
24	18	11	8.0	6.6	5.6	4.8	9.9	9.9	4.0	1.7	19	18
25	17	12	8.6	6.8	5.4	5.2	11	7.7	9.5	1.7	19	17
26	17	13	8.8	6.0	5.8	5.0	15	7.0	6.7	1.7	18	16
27	17	12	9.4	6.8	5.8	4.8	17	6.7	4.5	2.4	18	16
28	16	12	9.4	7.2	5.6	4.8	15	6.7	4.5	1.9	18	16
29	17	13	9.0	7.4	-	4.8	13	6.7	4.2	1.8	20	15
30	17	9.6	9.0	7.0	-	4.8	12	7.0	4.0	1.8	19	18
31	17	-	9.2	7.0	-	4.8	-	6.7	-	2.1	18	-

Month	Observed					Run-off in acre-feet	Diversion by Moffat Tunnel (acre-feet)	Adjusted for diversion	
	Second- foot-days	Discharge in second-feet			Run-off in acre-feet			Run-off in acre-feet	Mean (second- feet)
		Maximum	Minimum	Mean					
October.....	582	25	16	18.8	1,150	0	1,150	18.8	
November.....	384.2	17	9.6	12.8	762	0	762	12.8	
December.....	277.5	10	8.0	8.95	550	0	550	8.95	
Calendar year 1936	8,227.2	207	1.4	22.5	16,310	12,150	28,470	39.2	
January.....	220.7	9.0	5.6	7.12	438	0	438	7.12	
February.....	175.2	7.8	5.4	6.26	348	0	348	6.26	
March.....	159.2	5.8	4.8	5.14	316	0	316	5.14	
April.....	294.0	19	4.8	9.80	583	0	583	9.80	
May.....	1,394.4	106	6.7	45.0	2,770	1,780	4,550	74.0	
June.....	152.5	9.5	4.0	5.08	302	5,620	5,920	99.5	
July.....	81.4	4.2	1.7	2.63	161	3,250	3,410	55.5	
August.....	389.7	27	1.4	12.6	773	635	1,410	22.9	
September.....	560	24	15	18.7	1,110	0	1,110	18.7	
Water year 1936-37	4,670.8	106	1.4	12.8	9,260	11,280	20,550	28.4	

Fraser River near West Portal, Colo.

Location.— Water-stage recorder, lat. 39°54'00", long. 105°46'35", in NE¼ sec. 4, T. 2 S., R. 75 W., 1½ miles northwest of West Portal.

Drainage area.— 28 square miles.

Records available.— September 1910 to September 1930, October 1933 to September 1937 in reports of Geological Survey; September 1910 to September 1937 in reports of State engineer.

Average discharge.— 27 years, 43.3 second-feet (including diversion by Moffat Tunnel).

Extremes.— Maximum discharge during year, 150 second-feet May 20 (gage height, 1.38 feet); minimum daily discharge, 5.2 second-feet Aug. 8-10.
1910-37: Maximum discharge, 820 second-feet June 13, 1918 (gage height, 2.9 feet); minimum, 2 second-feet Mar. 30, 1912.

Remarks.— Records excellent except those for periods of ice effect, Nov. 3, 4, 8-13, 24, Nov. 26 to Mar. 30, which were computed on basis of four discharge measurements and weather records and are good. The Pioneer Bore of the Moffat Tunnel has diverted water above this station since June 9, 1936. The combined flow of this diversion and Fraser River is equivalent to that prior to June 9, 1936.

Rating tables, water year 1936-37 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Sept. 17-30)

Oct. 1 to Nov. 2,
Nov. 5-7, 14-23, 25

Mar. 31 to Sept. 30

0.4	14	0.2	4.6	.8	46
.5	19.5	.3	7.8	1.0	76
.6	27	.4	12	1.2	112
.7	38	.6	25	1.4	154

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.																																																																																																																																																			
1	28	20	12	11	8.4	6.8	5.9	21	18	9.5	7.2	20																																																																																																																																																			
2	27	18	11	10	7.8	6.4	7.2	20	18	9.1	6.8	21																																																																																																																																																			
3	26	10	12	10	8.2	7.0	6.8	22	18	8.2	6.2	21																																																																																																																																																			
4	25	16	12	11	8.0	6.0	6.2	30	20	7.8	5.9	24																																																																																																																																																			
5	25	18	11	11	10	6.2	6.2	36	19	7.8	5.6	24																																																																																																																																																			
6	24	18	11	10	11	6.4	6.5	46	19	7.8	5.6	24																																																																																																																																																			
7	23	17	12	10	10	6.6	6.5	52	20	8.6	5.6	24																																																																																																																																																			
8	23	12	12	10	9.8	6.6	6.5	54	18	7.5	5.2	23																																																																																																																																																			
9	22	13	11	10	8.0	6.6	10	74	17	7.5	5.2	23																																																																																																																																																			
10	23	14	11	8.2	6.8	6.4	7.8	80	14	7.5	5.2	22																																																																																																																																																			
11	22	15	11	8.6	8.0	6.6	8.2	80	13	7.5	8.6	21																																																																																																																																																			
12	22	15	10	9.0	8.2	6.8	9.9	83	12	9.9	8.6	20																																																																																																																																																			
13	22	16	10	8.4	8.0	7.2	12	92	12	9.9	11	19																																																																																																																																																			
14	21	16	10	9.0	8.6	7.6	17	105	12	9.1	24	19																																																																																																																																																			
15	20	16	12	9.6	9.0	7.4	25	122	12	8.2	24	19																																																																																																																																																			
16	20	16	12	10	8.0	7.2	32	122	11	7.2	26	19																																																																																																																																																			
17	27	15	13	10	8.0	6.6	24	116	11	6.8	31	26																																																																																																																																																			
18	19	18	12	9.6	9.0	5.6	21	57	11	7.2	32	20																																																																																																																																																			
19	19	19	12	9.4	9.2	6.2	19	101	11	6.8	32	18																																																																																																																																																			
20	20	16	11	9.2	8.4	7.2	17	132	10	6.2	29	17																																																																																																																																																			
21	20	15	11	7.8	7.4	7.4	21	108	9.9	5.9	26	17																																																																																																																																																			
22	19	16	11	7.0	8.6	7.6	28	112	9.9	5.6	24	17																																																																																																																																																			
23	18	16	11	8.0	8.0	7.8	25	114	9.5	5.6	24	19																																																																																																																																																			
24	18	13	11	9.0	6.8	7.8	18	98	9.5	5.6	22	19																																																																																																																																																			
25	19	14	10	9.0	6.4	5.6	22	24	17	5.9	22	18																																																																																																																																																			
26	19	15	11	8.6	7.4	6.4	26	22	18	5.9	22	17																																																																																																																																																			
27	19	14	11	9.0	7.2	6.4	32	19	11	7.2	22	17																																																																																																																																																			
28	20	14	12	9.4	7.0	5.6	29	19	9.9	6.5	21	17																																																																																																																																																			
29	18	15	12	10	-	6.0	24	19	9.5	5.9	21	16																																																																																																																																																			
30	18	11	11	9.2	-	5.8	20	22	9.1	6.2	22	19																																																																																																																																																			
31	20	-	11	9.4	-	5.6	-	19	-	7.2	22	-																																																																																																																																																			
<table><tr><th rowspan="3">Month</th><th colspan="5">Observed</th><th colspan="2">Diversion by Moffat Tunnel</th><th colspan="2">Adjusted for diversion</th></tr><tr><th rowspan="2">Second-foot-days</th><th colspan="3">Discharge in second-feet</th><th rowspan="2">Run-off in acre-feet</th><th rowspan="2">Run-off by Moffat Tunnel (acre-feet)</th><th rowspan="2">Run-off in acre-feet</th><th rowspan="2">Mean (second-feet).</th></tr><tr><th>Maximum</th><th>Minimum</th><th>Mean</th></tr><tr><td>October.....</td><td>666</td><td>28</td><td>18</td><td>21.5</td><td>1,320</td><td>0</td><td>1,320</td><td>21.5</td></tr><tr><td>November.....</td><td>461</td><td>20</td><td>10</td><td>15.4</td><td>914</td><td>0</td><td>914</td><td>15.4</td></tr><tr><td>December.....</td><td>350</td><td>13</td><td>10</td><td>11.3</td><td>694</td><td>0</td><td>694</td><td>11.3</td></tr><tr><td>Calendar year 1936</td><td>10,804.2</td><td>256</td><td>3.8</td><td>29.5</td><td>21,440</td><td>12,150</td><td>33,590</td><td>46.3</td></tr><tr><td>January.....</td><td>290.4</td><td>11</td><td>7.0</td><td>9.37</td><td>576</td><td>0</td><td>576</td><td>9.37</td></tr><tr><td>February.....</td><td>231.2</td><td>11</td><td>6.4</td><td>8.26</td><td>459</td><td>0</td><td>459</td><td>8.26</td></tr><tr><td>March.....</td><td>205.4</td><td>7.8</td><td>5.6</td><td>6.63</td><td>407</td><td>0</td><td>407</td><td>6.63</td></tr><tr><td>April.....</td><td>499.7</td><td>32</td><td>5.9</td><td>16.7</td><td>991</td><td>0</td><td>991</td><td>16.7</td></tr><tr><td>May.....</td><td>2,021</td><td>132</td><td>19</td><td>65.2</td><td>4,010</td><td>1,780</td><td>5,790</td><td>94.2</td></tr><tr><td>June.....</td><td>409.3</td><td>20</td><td>9.1</td><td>13.6</td><td>812</td><td>5,620</td><td>6,430</td><td>108</td></tr><tr><td>July.....</td><td>227.6</td><td>9.9</td><td>5.6</td><td>7.34</td><td>451</td><td>3,250</td><td>3,700</td><td>60.2</td></tr><tr><td>August.....</td><td>532.7</td><td>32</td><td>5.2</td><td>17.2</td><td>1,060</td><td>633</td><td>1,690</td><td>27.5</td></tr><tr><td>September.....</td><td>600</td><td>26</td><td>16</td><td>20.0</td><td>1,190</td><td>0</td><td>1,190</td><td>20.0</td></tr><tr><td>Water year 1936-37</td><td>6,494.3</td><td>132</td><td>5.2</td><td>17.8</td><td>12,880</td><td>11,280</td><td>24,160</td><td>33.4</td></tr></table>													Month	Observed					Diversion by Moffat Tunnel		Adjusted for diversion		Second-foot-days	Discharge in second-feet			Run-off in acre-feet	Run-off by Moffat Tunnel (acre-feet)	Run-off in acre-feet	Mean (second-feet).	Maximum	Minimum	Mean	October.....	666	28	18	21.5	1,320	0	1,320	21.5	November.....	461	20	10	15.4	914	0	914	15.4	December.....	350	13	10	11.3	694	0	694	11.3	Calendar year 1936	10,804.2	256	3.8	29.5	21,440	12,150	33,590	46.3	January.....	290.4	11	7.0	9.37	576	0	576	9.37	February.....	231.2	11	6.4	8.26	459	0	459	8.26	March.....	205.4	7.8	5.6	6.63	407	0	407	6.63	April.....	499.7	32	5.9	16.7	991	0	991	16.7	May.....	2,021	132	19	65.2	4,010	1,780	5,790	94.2	June.....	409.3	20	9.1	13.6	812	5,620	6,430	108	July.....	227.6	9.9	5.6	7.34	451	3,250	3,700	60.2	August.....	532.7	32	5.2	17.2	1,060	633	1,690	27.5	September.....	600	26	16	20.0	1,190	0	1,190	20.0	Water year 1936-37	6,494.3	132	5.2	17.8	12,880	11,280	24,160	33.4
Month	Observed					Diversion by Moffat Tunnel		Adjusted for diversion																																																																																																																																																							
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April.....	499.7	32	5.9	16.7	991	0	991	16.7																																																																																																																																																							
May.....	2,021	132	19	65.2	4,010	1,780	5,790	94.2																																																																																																																																																							
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September.....	600	26	16	20.0	1,190	0	1,190	20.0																																																																																																																																																							
Water year 1936-37	6,494.3	132	5.2	17.8	12,880	11,280	24,160	33.4																																																																																																																																																							

Vasquez Creek near West Portal, Colo.

Location.— Water-stage recorder, lat. 39°55'15", long. 105°47'05", in NW $\frac{1}{4}$ sec. 33, T. 1 S., R. 75 W., a quarter of a mile above mouth and 2 $\frac{1}{2}$ miles northwest of West Portal.

Drainage area.— 27.8 square miles.

Records available.— June 1907 to October 1909, August 1934 to September 1937.

Extremes.— Maximum discharge during year, 155 second-feet May 18 (gage height, 1.91 feet); minimum daily discharge, 0.2 second-feet July 12.
1934-37: Maximum discharge, 396 second-feet June 15, 1935 (gage height, 2.64 feet); minimum daily discharge, that of July 12, 1937.

Remarks.— Records good except those for period of ice effect, Nov. 3 to Apr. 18, which were computed on basis of four discharge measurements, weather records, and records for Fraser River near West Portal and are fair. The Pioneer Bore of Moffat Tunnel started diverting water above this station May 26, 1937. Records of combined flow of this diversion and of Vasquez Creek are equivalent to records of flow of creek prior to May 26, 1937.

Rating tables, water year 1936-37 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Aug. 2-31, Sept. 26-30)

Oct. 1 to Nov. 2

Apr. 19 to Sept. 30

1.0	13.4	0.3	0.1	.9	7.0	1.5	58
1.1	20	.4	.3	1.0	11.5	1.7	98
1.2	27	.5	.8	1.2	27	1.9	152
		.7	2.3	1.4	46	2.0	182

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	24	15	11	9.8	7.2	6.0	5.4	8.8	2.2	1.9	1.2	20
2	23	15	10	9.4	7.0	6.0	6.0	8.8	2.2	1.7	2.5	21
3	21	7.4	11	9.0	7.2	6.0	6.0	8.8	2.1	1.7	2.5	31
4	21	12	11	9.5	7.0	5.8	5.4	10	2.5	1.7	2.2	31
5	21	13	10	9.8	8.0	5.6	5.4	22	2.1	1.7	2.2	22
6	21	13	10	9.2	9.0	6.0	5.4	27	1.7	1.7	2.1	22
7	19	12	11	8.8	8.8	6.0	5.6	29	1.4	2.1	2.0	22
8	20	11	11	8.8	8.0	6.0	6.0	31	1.1	1.1	1.9	21
9	20	12	10	8.6	7.0	6.0	7.0	41	.9	1.7	1.9	19
10	20	12	10	7.5	6.4	6.0	6.6	47	.8	1.7	1.7	18
11	19	13	10	7.5	6.8	6.0	8.0	44	.5	.7	1.7	18
12	19	14	9.4	7.6	7.2	6.2	9.0	45	.4	.2	1.7	17
13	19	15	9.2	7.8	7.0	6.6	11	56	.4	.4	2.1	17
14	18	15	9.4	8.0	6.8	6.8	13	70	.7	.5	18	17
15	17	15	10	8.2	6.2	7.0	16	93	.7	.4	17	16
16	17	15	10	8.2	6.6	6.8	23	96	.5	.6	18	16
17	17	14	11	8.2	7.4	6.0	18	86	.4	.3	21	17
18	17	15	10	8.2	7.8	5.4	14	98	.4	.7	27	15
19	17	16	10	8.0	8.0	5.6	12	106	.4	1.2	21	14
20	18	14	9.5	7.8	7.0	6.0	11	98	.5	.9	18	14
21	17	13	9.5	7.0	6.8	6.5	13	82	.8	.8	17	14
22	17	14	9.5	6.6	7.5	6.5	18	89	.8	.7	17	14
23	16	13	9.5	7.0	6.8	6.2	16	93	.8	.6	16	18
24	21	12	9.0	7.5	6.0	5.2	10	72	.8	.6	17	17
25	20	13	9.4	7.5	6.0	5.4	14	80	1.1	.6	21	16
26	16	13	9.4	7.8	6.4	5.6	17	44	1.7	.7	18	14
27	17	13	10	8.0	6.4	5.2	17	51	2.1	.8	17	13
28	16	13	10	8.2	6.2	5.0	17	11	3.7	.8	19	12
29	17	13	9.8	8.2	-	5.0	11	3.0	2.0	.7	24	12
30	21	11	9.8	7.8	-	5.0	9.2	3.0	1.7	.8	25	15
31	16	-	9.8	7.6	-	5.2	-	2.5	-	.8	20	-
Observed												
Month	Second-foot-days	Discharge in second-feet			Run-off in acre-feet	Diversion by Moffat Tunnel (acre-feet)	Adjusted for diversion					
		Maximum	Minimum	Mean			Run-off in acre-feet	Mean (second-feet)				
October.....	582	24	16	18.8	1,150	0	1,150	18.8				
November.....	386.4	16	7.4	13.2	786	0	786	13.2				
December.....	309.2	11	9.0	9.97	613	0	613	9.97				
Calendar year 1936	14,781.7	241	4.2	40.4	29,310	0	29,310	40.4				
January.....	253.1	9.8	6.6	8.16	502	0	502	8.16				
February.....	198.5	9.0	6.0	7.09	394	0	394	7.09				
March.....	182.6	7.0	5.0	5.89	362	0	362	5.89				
April.....	336.0	23	5.4	11.2	666	0	666	11.2				
May.....	1,555.9	106	2.5	50.2	3,090	891	3,980	64.7				
June.....	37.3	3.7	.4	1.24	74	5,620	5,690	95.6				
July.....	31.0	2.1	.2	1.00	61	3,250	3,310	53.8				
August.....	376.7	27	1.2	12.2	747	634	1,380	22.4				
September.....	533	31	12	17.8	1,060	0	1,060	17.8				
Water year 1936-37	4,791.7	106	.2	13.1	9,500	10,400	19,890	27.5				

St. Louis Creek near Fraser, Colo.

Location.- Water-stage recorder, lat. 39°54'45", long. 105°52'35", in sec. 34, T. 1 S., R. 78 W., a third of a mile below junction of East and West Branches and $4\frac{1}{2}$ miles southwest of Fraser.

Drainage area.- 32.8 square miles.

Records available.- August 1934 to September 1937. June 1908 to September 1909, at site 2 miles upstream; records not equivalent.

Extremes.- Maximum discharge during year, 214 second-feet June 25 (gage height, 2.12 feet); minimum daily discharge, 7.4 second-feet Mar. 2-6.
1934-37: Maximum discharge, 353 second-feet June 15, 1935 (gage height, 2.58 feet); minimum, 3.2 second-feet Apr. 9, 1935 (gage height, 0.75 foot).

Remarks.- Records good except those for periods of ice effect, Nov. 3-5, Nov. 8 to Apr. 22, which were computed on basis of four discharge measurements, gage heights, and weather records and are fair. No regulation or diversions.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	27	18	12	11	9.4	7.6	8.0	11	107	94	38	18
2	25	18	12	10	9.0	7.4	8.2	11	107	86	38	18
3	25	20	12	10	9.4	7.4	8.0	11	112	79	36	26
4	24	19	12	11	9.0	7.4	8.0	12	102	77	34	26
5	25	18	11	12	9.8	7.4	8.0	22	86	76	32	21
6	25	19	11	11	11	7.4	8.0	27	76	77	31	21
7	23	16	12	11	10	7.6	8.2	34	74	88	31	23
8	24	13	12	11	9.4	7.6	8.4	46	72	79	29	20
9	24	14	10	11	9.0	7.6	8.6	51	71	71	28	19
10	24	14	10	9.6	8.4	7.6	8.8	51	72	66	27	18
11	23	15	9.6	9.6	8.2	7.8	10	48	86	85	27	18
12	23	16	9.6	9.6	8.6	8.0	12	53	90	68	25	17
13	22	17	9.6	9.6	8.2	8.0	14	51	86	24	24	17
14	21	17	10	9.8	8.4	8.4	17	61	86	69	23	16
15	20	17	10	10	8.4	9.4	22	72	86	66	21	16
16	21	17	10	10	8.6	10	19	82	96	60	21	16
17	20	17	11	11	9.2	10	16	84	107	59	27	16
18	20	15	11	11	9.8	8.6	12	84	109	61	27	15
19	20	17	10	10	9.8	8.2	12	94	107	56	22	14
20	22	16	9.8	9.2	8.6	8.6	12	90	104	52	19	14
21	20	15	9.6	8.4	8.2	8.8	14	88	112	51	19	14
22	19	16	9.6	8.0	8.6	8.8	16	80	119	48	18	15
23	16	15	9.6	8.4	8.6	8.4	14	102	112	47	17	20
24	18	14	9.8	9.4	8.4	7.8	12	90	104	46	18	20
25	18	15	9.8	9.8	7.6	8.2	12	98	121	45	20	17
26	15	17	10	9.0	7.8	8.0	13	90	136	45	18	16
27	16	16	11	9.8	8.0	7.8	16	82	109	46	19	16
28	15	16	11	10	7.8	7.6	16	88	98	45	20	15
29	18	17	11	11	-	7.8	14	114	98	41	25	15
30	19	12	11	10	-	7.8	13	109	98	41	24	20
31	18	-	11	10	-	7.8	-	107	-	40	19	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						650	27	15	21.0	1,290		
November.....						486	20	12	16.2	964		
December.....						328.0	12	9.6	10.6	651		
Calendar year 1936.....						16,173.5	235	7	44.2	32,090		
January.....						311.2	12	8.0	10.0	617		
February.....						247.2	11	7.6	8.85	490		
March.....						251.0	10	7.4	8.10	498		
April.....						365.2	22	8.0	12.3	730		
May.....						2,043	114	11	65.9	4,050		
June.....						2,943	136	71	98.1	5,840		
July.....						1,912	94	40	61.7	3,790		
August.....						777	38	17	25.1	1,540		
September.....						537	26	14	17.9	1,070		
Water year 1936-37.....						10,853.6	136	7.4	29.7	21,530		

Ranch Creek above forks, near Fraser, Colo.

Location.— Water-stage recorder, lat. $39^{\circ}56'30''$, long. $105^{\circ}44'00''$, in SW $\frac{1}{4}$ sec. 24, T. 1 S., R. 75 W., 0.8 mile above mouth of North Fork and 4 miles east of Fraser.

Drainage area.— 3.8 square miles.

Records available.— April to September 1937.

Extremes.— Maximum discharge during period, 41 second-feet June 26 (gage height, 2.06 feet); minimum daily discharge, 1.2 second-feet Apr. 18–21, 24, 25, Apr. 28 to May 1.

Remarks.— Records good except those for Apr. 18 to May 3 (computed on basis of two discharge measurements and records for station on Ranch Creek near Fraser), and those for May 4 to June 6, which are fair. No diversions or regulation.

Rating table, period May 4 to Sept. 30, 1937 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used May 9 to June 11)

0.7	1.0
.8	1.4
1.0	2.7
1.2	8.0
1.4	14
1.6	21
1.8	29.5
2.0	38.5
2.1	43

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1							-	1.2	20	12	4.5	2.5
2							-	1.4	23	11	4.1	2.5
3							-	2.0	23	10	3.8	2.5
4							-	2.9	20	9.8	3.6	2.5
5							-	4.1	17	9.2	3.4	2.5
6							-	6.8	15	8.6	3.2	2.5
7							-	9.2	14	8.0	2.9	2.5
8							-	11	13	7.7	2.7	2.4
9							-	11	13	8.6	2.5	2.3
10							-	13	13	7.7	2.5	2.3
11							-	12	16	7.7	2.5	2.2
12							-	11	15	8.0	2.4	2.2
13							-	13	14	8.3	2.4	2.2
14							-	18	14	8.0	2.3	2.2
15							-	20	14	7.1	2.2	2.1
16							-	18	15	6.2	2.5	2.2
17							-	14	15	6.5	2.6	2.1
18							1.2	18	15	5.9	3.2	2.1
19							1.2	16	14	5.6	2.9	2.1
20							1.2	14	14	5.3	2.6	2.1
21							1.2	12	15	4.8	2.5	2.1
22							1.4	14	15	4.5	2.5	2.1
23							1.3	13	15	4.5	2.5	2.1
24							1.2	14	14	4.5	2.5	2.1
25							1.2	15	20	4.3	2.5	2.1
26							1.3	15	21	4.5	2.5	2.1
27							1.4	15	16	4.3	2.5	2.1
28							1.2	20	14	4.3	2.5	2.1
29							1.2	20	13	4.1	2.6	2.1
30							1.2	23	12	4.3	2.5	2.3
31							-	20	-	4.5	2.5	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....												
November.....												
December.....												
Calendar year												
January.....						-	-	-	-	-		
February.....						-	-	-	-	-		
March.....						-	-	-	-	-		
April 18-30.....						16.2	1.4	1.2	1.25	32		
May.....						397.6	23	1.2	12.8	789		
June.....						472	23	12	15.7	936		
July.....						209.8	12	4.1	6.77	416		
August.....						86.4	4.5	2.2	2.79	171		
September.....						67.2	2.5	2.1	2.24	133		
The period.....										2,460		

Ranch Creek near Fraser, Colo.

Location.- Water-stage recorder, lat. 39°55'15", long. 105°47'05", in NE¼ sec. 22, T. 1 S., R. 75 W., 150 yards below junction of South Fork and Ranch Creeks and 3 miles east of Fraser.

Drainage area.- 19.9 square miles.

Records available.- August 1934 to September 1937.

Extremes.- Maximum discharge during year, 103 second-feet June 25 (gage height, 2.12 feet); minimum daily discharge, 3.4 second-feet Mar. 19, 24.
1934-37: Maximum discharge, 239 second-feet June 15, 1935 (gage height, 3.37 feet); minimum daily discharge (estimated), 1.5 second-feet Feb. 3-7, Mar. 18-21, 1935.

Remarks.- Records excellent except those for periods of ice effect, Nov. 3-5, 8-13, Nov. 25 to Apr. 20 (computed on basis of four discharge measurements, gage heights, and weather records), and those for Sept. 5-30, which are good. No diversions above station.

Rating table, water year 1936-37 except periods of ice effect (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Oct. 1-5, Sept. 5-30)

0.5	2.8	1.0	15	1.8	78
.6	4.2	1.2	25	2.0	98
.7	6.2	1.4	40	2.1	109
.9	11.2	1.6	58		

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	12	8.8	6.0	5.0	3.8	3.6	3.6	8.6	75	39	15	9.2
2	12	9.2	5.8	4.6	3.7	3.5	3.7	8.6	78	35	14	9.8
3	11	6.7	5.8	4.6	3.8	3.5	3.5	9.2	76	32	13	9.8
4	11	7.8	6.0	4.7	3.8	3.6	3.5	12	72	31	12	11
5	11	8.4	5.4	4.9	4.3	3.5	3.5	16	62	29	12	9.4
6	10	9.0	5.8	4.4	4.9	3.6	3.6	19	55	27	12	9.4
7	9.8	8.0	6.0	4.4	4.7	3.6	3.6	21	52	26	12	9.4
8	10	6.0	5.8	4.4	4.4	3.6	3.6	25	50	25	11	8.8
9	10	6.2	5.4	4.4	3.8	3.6	3.7	35	47	25	11	8.6
10	10	6.4	5.2	3.6	3.6	3.6	3.8	42	48	22	11	8.2
11	9.8	6.8	5.0	3.6	3.9	3.6	4.1	39	53	22	10	8.2
12	9.8	7.4	5.0	3.7	4.0	3.7	5.0	38	55	25	9.8	7.8
13	9.6	8.0	5.0	3.6	3.7	3.8	7.0	45	51	26	9.8	7.6
14	9.6	8.0	5.0	3.9	3.7	3.9	10	56	51	25	9.4	7.6
15	9.4	8.0	5.6	4.0	3.7	3.7	12	71	51	22	9.4	7.4
16	9.4	7.8	5.6	4.4	3.7	3.6	10	73	51	20	10	7.4
17	9.2	7.6	6.0	4.4	3.7	3.5	8.6	69	51	20	12	7.4
18	9.2	7.8	5.6	4.4	4.2	3.5	8.2	74	51	20	13	7.2
19	9.2	7.2	5.6	4.4	4.5	3.4	8.6	74	51	17	12	7.0
20	9.8	7.4	5.2	4.2	3.9	3.6	8.8	68	48	17	10	7.0
21	9.6	7.4	5.2	3.8	3.7	3.9	10	61	47	16	9.6	7.0
22	9.4	7.4	5.2	3.8	3.9	3.9	11	65	47	15	9.4	7.2
23	9.2	7.2	5.2	3.8	3.8	3.7	10	66	43	16	9.2	8.0
24	12	7.0	5.0	4.0	3.7	3.4	9.4	68	41	16	9.4	7.6
25	9.8	7.4	5.2	4.1	3.7	3.5	11	74	55	15	9.8	7.2
26	9.2	7.6	5.4	3.8	3.9	3.5	11	66	61	15	9.2	6.6
27	9.4	7.2	5.4	4.0	3.9	3.5	12	65	47	16	9.0	6.6
28	9.0	7.2	5.4	4.2	3.9	3.5	11	75	42	15	9.2	6.4
29	10	7.4	5.2	4.2	-	3.5	9.8	78	39	14	10	6.3
30	12	5.7	5.2	4.2	-	3.5	9.0	83	38	14	10	7.2
31	9.0	-	5.2	4.1	-	3.5	-	75	-	15	9.4	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						310.4	12	9.0	10.0	616		
November.....						224.0	9.2	5.7	7.47	444		
December.....						168.4	6.0	5.0	6.43	334		
Calendar year 1936.....						9,644.1	179	3.5	26.4	19,140		
January.....						129.3	5.0	3.5	4.17	256		
February.....						110.2	4.9	3.5	3.94	219		
March.....						111.4	3.9	3.4	3.69	221		
April.....						222.5	12	3.5	7.42	441		
May.....						1,578.4	83	8.6	50.9	3,130		
June.....						1,568	78	38	52.9	3,150		
July.....						87.4	39	14	21.7	1,340		
August.....						332.6	15	9.0	10.7	660		
September.....						238.3	11	6.3	7.94	473		
Water year 1936-37.....						5,687.5	83	3.4	15.6	11,280		

COLORADO RIVER AND TRIBUTARIES ABOVE GREEN RIVER

Ranch Creek near Tabernash, Colo.

Location.- Water-stage recorder, lat. 39°59'55", long. 105°49'10", in sec. 8, T. 1 S., R. 75 W., a quarter of a mile above mouth of Meadow Creek and $\frac{1}{2}$ miles east of Tabernash.

Drainage area.- 50.7 square miles.

Records available.- September 1934 to September 1937.

Extremes.- Maximum discharge during year, 254 second-feet May 25 (gage height, 3.35 feet); no flow Feb. 15 to Mar. 13, 1934-37: Maximum discharge, 506 second-feet June 15, 1935 (gage height, 4.40 feet); no flow Feb. 15 to Mar. 13, 1937.

Remarks.- Records excellent except those for periods of ice effect, Nov. 4-7, Nov. 9 to Apr. 20, and of missing gage heights, Apr. 25-27, which were computed on basis of four discharge measurements, weather records, and records for station near Fraser and are good. Several small diversions for irrigation above station.

Rating table, water year 1936-37 except periods of ice effect (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Oct. 1 to Nov. 3, Nov. 5, and Apr. 21-24)

1.5	6.5	2.4	92
1.6	10.1	2.6	115
1.7	15	2.8	148
1.8	21	3.0	184
2.0	36	3.2	224
2.2	55		

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	22	15	9.4	8.0	1.2	0	2.5	24	143	78	27	17
2	21	13	9.2	7.6	1.1	0	3.0	24	144	67	25	19
3	19	10	9.4	7.6	1.1	0	2.6	24	150	58	23	19
4	18	13	9.4	8.2	1.1	0	2.5	28	152	49	21	22
5	18	14	8.6	8.0	1.3	0	2.8	43	127	48	20	18
6	18	14	9.0	7.8	1.5	0	3.4	47	108	49	22	17
7	16	14	9.2	7.4	1.3	0	4.5	59	105	60	20	17
8	16	11	8.6	7.4	1.1	0	6.0	64	100	47	17	15
9	16	11	8.4	6.4	1.0	0	15	39	96	43	17	15
10	16	11	8.0	5.6	1.0	0	20	103	92	46	16	14
11	16	11	7.6	5.8	.8	0	23	97	96	41	15	13
12	15	12	7.8	5.7	.6	0	28	91	97	51	14	12
13	15	13	7.8	5.6	.4	0	38	105	94	59	15	11
14	14	13	7.8	6.2	.2	.1	54	128	92	58	14	11
15	14	13	7.8	6.2	0	.1	74	164	91	50	14	11
16	13	13	8.2	6.0	0	.1	62	173	91	42	16	11
17	13	13	8.2	6.0	0	.1	52	161	94	42	30	12
18	13	12	8.6	5.8	0	.1	41	157	92	46	27	11
19	13	13	8.2	4.8	0	.1	44	166	91	38	26	11
20	17	12	8.0	3.6	0	.1	50	143	86	34	22	10
21	17	12	7.8	2.4	0	.1	56	134	86	30	20	10
22	16	12	7.8	1.6	0	.1	56	132	88	25	16	11
23	15	11	7.8	1.2	0	.1	44	141	81	27	17	14
24	14	11	7.6	1.2	0	.1	34	143	74	27	17	13
25	15	11	8.0	1.2	0	.1	40	188	91	27	20	12
26	15	12	8.2	1.2	0	.1	40	157	152	29	18	11
27	14	11	8.6	1.2	0	.2	42	141	94	30	17	11
28	15	11	8.6	1.3	0	.4	38	148	78	27	18	11
29	13	11	8.4	1.3	-	.6	29	161	69	25	23	10
30	14	10	8.4	1.3	-	1.0	24	175	65	24	27	14
31	15	-	8.4	1.3	-	2.0	-	152	-	27	19	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						486	22	13	15.7	964		
November.....						363	15	10	12.1	720		
December.....						259.0	9.4	7.6	8.35	514		
Calendar year 1936.....						17,869.0	368	-	48.8	35,440		
January.....						144.9	8.2	1.2	4.67	287		
February.....						13.7	1.5	0	.49	27		
March.....						5.5	2.0	0	.18	11		
April.....						935.3	74	2.5	31.2	1,860		
May.....						3,561	188	24	115	7,060		
June.....						3,019	152	65	101	5,990		
July.....						1,307	78	24	42.2	2,590		
August.....						615	30	14	19.8	1,220		
September.....						403	22	10	13.4	799		
Water year 1936-37.....						11,112.4	188	0	30.4	22,040		

North Fork of Ranch Creek near Fraser, Colo.

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

Drainage area.- 3.4 square miles.

Records available.- April to September 1937.

Extremes.- Maximum discharge during period, 21 second-feet June 2 (gage height, 1.63 feet); minimum, 1.4 second-feet Apr. 18 (gage height, 0.50 foot).

Remarks.- Records good above 10 second feet and fair below. No diversions or regulation.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1							-	2.2	18	7.6	2.6	3.1
2							-	2.2	20	7.1	2.6	3.2
3							-	2.2	20	6.7	2.4	3.2
4							-	2.4	18	6.2	2.2	3.3
5							-	2.4	16	5.9	2.4	3.1
6							-	2.8	15	6.1	2.4	3.1
7							-	3.1	13	5.4	2.2	3.0
8							-	3.3	13	4.8	2.2	2.8
9							-	4.6	12	4.8	2.1	2.8
10							-	5.8	12	4.6	2.0	2.7
11							-	5.5	13	4.6	2.0	2.7
12							-	5.5	13	4.7	2.0	2.7
13							-	6.7	13	4.7	2.0	2.7
14							-	8.4	13	4.2	1.8	2.7
15							-	10	13	3.7	1.8	2.7
16							-	12	14	3.5	2.6	2.7
17							-	12	14	4.0	2.8	2.7
18							1.6	12	14	3.6	3.1	2.6
19							1.6	12	13	3.2	2.9	2.6
20							1.6	12	12	3.2	2.8	2.6
21							1.7	12	12	3.0	2.6	2.6
22							2.1	13	12	2.8	2.6	2.6
23							2.2	13	11	2.7	2.6	2.8
24							2.2	14	11	2.7	2.8	2.7
25							2.2	16	12	2.8	2.9	2.6
26							2.2	15	12	3.0	2.7	2.6
27							2.3	14	8.8	2.9	2.8	2.5
28							2.2	16	8.0	2.6	3.0	2.4
29							2.2	18	7.3	2.6	3.4	2.4
30							2.2	18	7.3	2.7	3.3	2.7
31							-	18	-	2.6	3.2	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....												
November.....												
December.....												
Calendar year												
January.....						-	-	-	-			
February.....						-	-	-	-			
March.....						-	-	-	-			
April 18-30.....						26.3	2.3	1.6	2.02	52		
May.....						294.1	18	2.2	9.49	583		
June.....						390.4	20	7.3	13.0	774		
July.....						129.0	7.6	2.6	4.16	256		
August.....						78.8	3.4	1.8	2.54	156		
September.....						82.9	3.3	2.4	2.76	164		
The period.....										1,980		

Middle Fork of Ranch Creek near Fraser, Colo.

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

Drainage area.- 4.4 square miles.

Records available.- April to September 1937.

Extremes.- Maximum discharge during period, 44 second-feet May 24 (gage height, 1.56 feet); minimum, 1.3 second-feet Sept. 27-30 (gage height, 0.65 foot).

Remarks.- Records good except those for Apr. 18 to June 22, June 25-27, which were computed on basis of one discharge measurement and records for Ranch Creek near Fraser and are fair. No diversions or regulation.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1							-	2.5	22	14	4.1	1.8
2							-	2.4	19	12	3.7	2.0
3							-	3.5	20	10	3.2	2.0
4							-	3.7	21	10	3.0	2.2
5							-	4.5	19	8.9	3.0	1.8
6							-	5.0	15	8.2	3.0	2.0
7							-	4.6	15	7.8	2.9	2.0
8							-	6.7	14	6.8	2.6	1.7
9							-	8.6	10	6.8	2.6	1.6
10							-	13	11	6.0	2.5	1.6
11							-	12	14	6.0	2.4	1.5
12							-	5.7	17	6.0	2.4	1.5
13							-	10	14	6.2	2.4	1.4
14							-	13	14	5.7	2.2	1.4
15							-	16	14	5.2	2.2	1.4
16							-	19	12	4.8	2.5	1.4
17							-	22	12	5.0	2.8	1.4
18							-	2.6	19	12	3.2	1.4
19							-	2.6	21	15	4.3	2.8
20							-	2.6	18	16	3.9	2.5
21							-	3.2	18	13	3.9	2.2
22							-	2.7	19	13	3.7	2.0
23							-	2.6	23	16	4.1	1.9
24							-	2.5	24	16	3.9	2.0
25							-	3.3	23	19	3.4	2.2
26							-	3.8	19	23	3.9	1.8
27							-	3.3	18	18	3.9	1.8
28							-	3.0	19	16	3.4	1.8
29							-	2.6	22	15	3.2	2.4
30							-	2.4	22	15	3.9	2.2
31							-	-	23	-	4.3	1.8
Month							Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet	
October.....												
November.....												
December.....												
Calendar year												
January.....							-	-	-	-		
February.....							-	-	-	-		
March.....							-	-	-	-		
April 18-30.....							37.2	3.8	2.4	2.86	74	
May.....							443.0	24	2.3	143	879	
June.....							470	23	10	15.7	932	
July.....							184.0	14	3.2	5.94	365	
August.....							77.9	4.1	1.8	2.51	165	
September.....							47.3	2.2	1.3	1.58	94	
The period.....											2,500	

South Fork of Ranch Creek near West Portal, Colo.

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

Drainage area.— 2.4 square miles.

Records available.— November 1936 to September 1937.

Extremes.— Maximum discharge during period, 26 second-feet May 15 (gage height, 1.23 feet); minimum occurred during period of ice effect.

Remarks.— Records good except those for periods of ice effect, Nov. 3-5, 23-30, which were computed on basis of record for station on Ranch Creek near Fraser and are fair. No records Dec. 1 to Apr. 18. No diversions or regulation.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1		1.3					-	1.3	15	6.4	2.4	1.5
2		1.2					-	1.2	14	6.0	2.2	1.6
3		.8					-	1.3	13	5.4	1.9	1.6
4		1.1					-	2.0	13	5.4	1.8	1.6
5		1.2					-	3.0	12	5.0	1.8	1.4
6		1.2					-	3.4	12	5.0	1.7	1.6
7		1.2					-	4.1	12	4.3	1.6	1.4
8		1.2					-	5.0	12	4.3	1.6	1.2
9		1.1					-	7.8	10	4.1	1.6	1.2
10		1.1					-	8.4	10	3.9	1.5	1.2
11		1.1					-	8.9	10	3.5	1.5	1.2
12		1.1					-	9.8	9.8	3.7	1.5	1.2
13		1.1					-	12	9.4	3.9	1.5	1.2
14		1.1					-	14	9.4	3.4	1.4	1.2
15		1.1					-	17	9.4	3.0	1.4	1.1
16		1.0					-	18	9.1	2.8	1.6	1.1
17		1.0					-	17	8.9	2.8	1.8	1.1
18		1.0					-	18	8.9	2.6	2.2	1.0
19		1.0					1.0	18	8.4	2.4	1.6	1.0
20		1.1					1.0	18	8.1	2.3	1.4	1.0
21		1.0					1.1	16	7.9	2.3	1.3	1.0
22		1.0					1.6	16	7.6	2.2	1.3	1.1
23		1.0					1.5	15	7.3	2.0	1.2	1.1
24		1.0					1.2	16	7.3	2.0	1.3	1.2
25		1.0					1.2	16	10	2.0	1.3	1.0
26		1.0					1.6	15	9.1	2.0	1.3	1.0
27		1.0					2.0	15	7.6	2.2	1.3	1.0
28		1.0					1.8	15	6.6	2.0	1.3	1.0
29		.9					1.6	15	8.4	2.0	1.6	1.0
30		.8					1.4	15	6.4	2.2	1.4	1.1
31		-					-	14	-	2.5	1.3	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						31.7	1.3	0.8	1.06	63		
November.....						-	-	-	-	-		
December.....						-	-	-	-	-		
Calendar year												
January.....						-	-	-	-	-		
February.....						-	-	-	-	-		
March.....						-	-	-	-	-		
April 19-30						17.0	2.0	1.0	1.42	34		
May.....						356.2	18	1.2	11.5	707		
June.....						290.5	15	6.4	9.68	576		
July.....						103.9	6.4	2.0	3.35	206		
August.....						48.6	2.4	1.2	1.57	96		
September.....						35.9	1.6	1.0	1.20	71		
Water year												

Meadow Creek near Tabernash, Colo.

Location.- Water-stage recorder, lat. 40°02'55", long. 105°46'20", in sec. 15, T. 1 N., R. 75 W., 5 miles northeast of Tabernash.

Drainage area.- 7.0 square miles.

Records available.- May 1936 to September 1937.

Extremes.- Maximum discharge during year, 141 second-feet May 22 (gage height, 3.05 feet); minimum discharge, 1.1 second-feet Sept. 30 (gage height, 0.73 foot) or probably less during period of no record.
1936-37: Maximum discharge, 177 second-feet May 31, 1936 (gage height, 3.37 feet); probably no flow at times during ice periods.

Remarks.- Records good except those for periods of ice effect, Oct. 31, Apr. 22 to May 2, May 5-9, which were computed on basis of one discharge measurement and flow of Ranch Creek near Tabernash and are fair. No records Nov. 1 to Apr. 21. No diversions above station.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	7.5						-	6.5	72	17	4.2	3.1
2	7.1						-	7.5	66	14	3.8	3.2
3	7.5						-	9.0	68	12	3.5	3.4
4	6.2						-	12	66	10	3.1	3.8
5	6.6						-	16	50	9.9	3.1	3.1
6	6.2						-	23	39	11	3.1	2.8
7	4.1						-	34	32	15	2.9	2.7
8	3.6						-	46	30	9.6	2.7	2.2
9	2.9						-	60	25	9.0	2.5	2.1
10	2.2						-	66	25	12	2.4	2.0
11	1.6						-	60	31	8.3	2.2	1.7
12	1.6						-	52	36	11	2.4	1.6
13	1.9						-	65	34	22	2.5	1.4
14	1.6						-	73	34	25	2.2	1.4
15	1.3						-	91	34	21	2.0	1.4
16	1.3						-	104	35	14	4.2	1.4
17	1.3						-	91	35	11	12	1.6
18	1.3						-	95	29	13	6.6	1.4
19	1.6						-	82	29	8.8	4.4	1.4
20	2.9						-	92	27	6.8	3.4	1.4
21	3.2						-	91	30	5.9	3.1	1.6
22	2.9						7.7	89	32	5.2	2.7	1.6
23	2.9						7.0	95	26	5.0	2.4	2.9
24	1.9						6.0	96	22	4.8	2.2	2.4
25	2.2						6.5	107	34	4.7	2.5	2.0
26	2.5						6.5	94	71	5.0	2.1	1.7
27	2.2						7.0	95	50	6.1	2.0	1.6
28	2.9						6.5	102	36	5.4	2.1	1.4
29	1.9						6.0	110	25	4.4	4.7	1.3
30	1.3						5.5	95	20	4.4	5.9	2.5
31	1.4						-	78	-	4.7	3.6	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						95.6	7.5	1.3	3.08	190		
November.....						-	-	-	-	-		
December.....						-	-	-	-	-		
Calendar year												
January.....						-	-	-	-	-		
February.....						-	-	-	-	-		
March.....						-	-	-	-	-		
April 22-30						58.7	7.7	5.5	6.52	116		
May.....						2,142	110	6.5	69.1	4,250		
June.....						1,143	72	20	38.1	2,270		
July.....						316.0	25	4.4	10.2	627		
August.....						106.5	12	2.0	3.44	211		
September.....						62.1	3.8	1.3	2.07	123		
Water year												

Strawberry Creek near Granby, Colo.

Location.- Water-stage recorder, lat. 40°05'10", long. 105°49'30", in SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 32, T. 2 N., R. 75 W., 0.6 mile below Little Strawberry Creek and 6 miles east of Granby.

Drainage area.- 12.6 square miles.

Records available.- May 1936 to September 1937.

Extremes.- Maximum discharge during year, 52 second-feet May 16 (gage height, 1.65 feet); probably no flow during extremely cold weather.

1936-37: Maximum discharge, that of May 16, 1937; probably no flow during extremely cold weather.

Remarks.- Records fair. No records Dec. 4 to Apr. 26. Two diversions for irrigation above station.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5.3	0.6	0.3				-	8.5	11	10	12	0.5
2	5.3	.5	.4				-	10	10	9.7	11	.5
3	4.9	.4	.3				-	10	9.1	9.4	11	.5
4	4.5	.5	.3				-	17	11	9.7	9.1	1.3
5	4.9	.5	-				-	20	9.7	9.1	8.8	.5
6	5.3	.6	-				-	16	8.2	8.8	8.8	.5
7	3.2	.6	-				-	18	8.2	11	8.8	.6
8	3.6	.6	-				-	22	6.8	10	9.1	.8
9	3.2	.6	-				-	26	5.2	9.7	9.1	1.0
10	3.2	.9	-				-	32	5.7	11	8.5	1.0
11	2.8	.9	-				-	31	5.2	10	7.7	1.6
12	1.9	.9	-				-	30	4.5	11	8.0	1.0
13	1.9	.9	-				-	30	4.6	12	9.1	.8
14	1.9	.9	-				-	32	4.9	13	4.9	1.0
15	1.6	.9	-				-	36	4.9	12	3.9	1.5
16	1.6	.9	-				-	37	4.9	9.1	4.4	1.3
17	1.1	.9	-				-	38	5.2	8.8	6.0	1.7
18	.9	.6	-				-	36	6.0	10	4.9	1.5
19	.6	.5	-				-	30	6.3	9.1	4.1	1.3
20	.6	.5	-				-	27	5.4	9.4	2.7	1.7
21	.5	.5	-				-	23	7.4	11	2.4	1.6
22	.5	.5	-				-	21	9.1	11	1.3	1.7
23	.5	.4	-				-	20	9.4	11	0	2.2
24	.4	.3	-				-	21	8.5	11	.4	2.7
25	.4	.3	-				-	21	12	11	1.7	2.4
26	.5	.4	-				-	20	16	11	.6	2.7
27	.4	.5	-				-	18	15	14	.4	2.9
28	.5	.5	-				-	20	12	11	.4	2.7
29	.3	.4	-				-	14	12	9.7	.6	2.7
30	.4	.2	-				-	11	14	9.1	2.2	3.1
31	.5	-	-				-	12	-	12	.5	-
Month				Second-foot-days		Maximum		Minimum		Mean		Run-off in acre-feet
October.....				63.2		5.3		.3		2.04		125
November.....				17.6		.9		.2		.59		35
December.....				-		-		-		-		-
Calendar year												
January.....												
February.....												
March.....												
April.....												
May.....				697.5		38		8.5		22.5		1,380
June.....				243.1		16		4.6		8.10		482
July.....				328.8		13		8.8		10.6		652
August.....				162.5		12		0		5.24		322
September.....				44.9		3.1		.5		1.50		89
Water year												

Williams River below Steelman Creek, Colo.

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

Drainage area.- 16.3 square miles.

Records available.- October 1933 to September 1937 in reports of Geological Survey; July 1933 to September 1937 in reports of State engineer.

Extremes.- Maximum discharge during year, 203 second-feet June 30 (gage height, 1.99 feet); minimum daily discharge (computed), 2.8 second-feet Mar. 24 and Apr. 9, 1933-37; Maximum discharge, 332 second-feet June 15, 1935 (gage height, 2.45 feet); minimum, occurred during period of ice effect, 1934-35.

Remarks.- Records good. Discharge for periods of ice effect, Oct. 24, Nov. 3 to May 10, computed on basis of records of station at Leal, which are good. No diversions above station.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	12	8.0	4.1	3.8	3.2	3.2	2.9	7	81	100	25	14
2	11	8.4	3.8	3.7	3.1	3.1	2.9	7	87	83	24	16
3	11	7.0	3.9	3.5	3.1	3.0	2.9	8	89	72	23	43
4	11	7.2	4.3	3.5	3.2	3.0	2.9	9	78	73	20	34
5	12	7.3	4.1	3.7	3.3	3.0	2.9	10	63	68	20	25
6	12	7.0	4.0	3.6	3.4	3.1	2.9	12	58	72	20	24
7	12	6.5	4.0	3.5	3.3	3.2	2.9	13	56	75	18	25
8	11	6.0	4.0	3.5	3.1	3.4	2.9	15	59	61	16	21
9	10	6.2	4.0	3.5	3.1	3.4	2.6	19	55	56	16	21
10	10	6.1	4.1	3.4	3.1	3.4	2.7	30	60	51	15	20
11	9.4	5.9	4.1	3.2	3.3	3.4	2.9	32	75	49	14	18
12	9.4	5.8	4.0	3.2	3.3	3.3	3.1	32	83	47	13	18
13	9.4	5.9	4.0	3.2	3.2	3.2	3.4	46	81	46	13	18
14	9.4	6.0	3.9	3.2	3.3	3.1	3.9	60	87	46	12	18
15	8.3	6.2	3.9	3.2	3.4	3.2	4.5	81	81	41	12	16
16	8.8	6.4	4.2	3.2	3.2	3.2	5.1	79	96	37	13	16
17	8.4	6.1	4.1	3.2	3.1	3.2	4.7	72	111	34	17	15
18	8.4	5.4	4.1	3.2	3.1	3.2	4.4	75	113	35	21	14
19	8.4	5.4	4.1	3.2	3.1	3.1	4.6	79	103	32	16	14
20	8.8	5.3	4.1	3.2	2.9	3.1	4.5	76	111	30	13	13
21	8.4	5.2	4.1	3.3	2.9	3.0	5.0	69	120	29	12	13
22	9.1	5.2	4.0	3.3	2.9	3.1	6.5	81	122	27	11	13
23	8.8	5.1	3.9	3.3	3.0	3.1	5.8	78	115	27	11	17
24	8.0	4.7	4.0	3.3	3.0	2.6	5.4	78	107	27	12	16
25	9.1	4.8	3.9	3.3	2.9	2.8	5.1	68	140	26	15	14
26	10	4.7	3.9	3.2	2.9	2.9	6.4	61	147	26	14	13
27	10	4.5	4.0	3.1	2.9	2.9	7.3	66	120	34	12	13
28	8.8	4.3	4.0	3.1	3.2	2.9	6.8	86	107	28	13	12
29	12	4.2	3.7	3.1	-	2.9	6.4	89	103	26	18	12
30	14	4.1	3.8	3.3	-	2.9	6.4	91	122	27	16	13
31	8.8	-	3.8	3.4	-	2.9	-	86	-	27	14	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						308.2	14	8.0	9.94	611		
November.....						174.8	8.4	4.1	5.83	347		
December.....						123.9	4.3	3.7	4.00	246		
Calendar year 1936.....						11,137.8	192	2.2	30.4	22,090		
January.....						103.4	3.8	3.1	3.34	205		
February.....						97.5	3.4	2.9	3.12	174		
March.....						95.7	3.4	2.6	3.09	190		
April.....						130.7	7.3	2.6	4.56	259		
May.....						1,615	91	7	52.1	3,200		
June.....						2,830	147	55	94.3	5,610		
July.....						1,415	100	26	45.6	2,810		
August.....						499	25	11	15.8	970		
September.....						539	43	12	18.0	1,070		
Water year 1936-37.....						7,912.3	147	2.6	21.7	15,690		

Williams River near Leal, Colo.

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

Drainage area.- 84 square miles.

Records available.- October 1933 to September 1937 in reports of Geological Survey; July 1933 to September 1937 in reports of State engineer.

Extremes.- Maximum discharge during year, 686 second-feet June 26 (gage height, 2.31 feet); minimum daily discharge, 16 second-feet Mar. 24 and Apr. 9.
1933-37: Maximum discharge, 1,330 second-feet June 15, 1935 (gage height, 3.49 feet); minimum daily discharge, 14 second-feet Mar. 22, 1936.

Remarks.- Records excellent except those for periods of ice effect, Jan. 24 to Mar. 18, Mar. 24-27, which were computed on basis of one discharge measurement and weather records and are good. Small diversion for irrigation above station.

Rating table, water year 1936-37 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Mar. 19-23, Mar. 28 to May 10, Sept. 3-30)

0.2	13	1.2	176
.4	27	1.4	248
.6	52	1.6	330
.8	84	1.8	420
1.0	123	2.0	518

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	57	42	23	22	20	20	18	36	322	301	79	42
2	54	38	21	20	19	19	18	38	348	256	78	46
3	52	29	23	21	20	19	18	39	343	229	73	51
4	52	32	25	22	21	19	18	52	330	214	70	79
5	55	41	23	21	21	19	18	71	264	214	66	63
6	58	38	23	21	22	20	18	84	225	214	68	62
7	52	36	23	21	21	21	18	88	221	252	65	66
8	54	29	23	21	19	21	18	86	218	203	55	55
9	52	34	23	20	19	21	16	112	203	173	54	52
10	49	34	25	20	19	21	17	136	196	170	52	48
11	48	31	27	20	20	22	17	138	237	165	51	46
12	48	32	26	20	20	21	18	130	272	168	48	45
13	48	32	24	20	19	20	19	168	272	168	45	45
14	44	35	23	20	20	19	25	221	272	165	45	45
15	42	34	22	20	22	20	42	268	268	154	48	42
16	42	37	26	20	20	20	55	305	305	130	49	42
17	42	35	25	20	20	20	51	292	339	128	51	41
18	41	31	24	20	19	20	39	284	348	133	68	39
19	41	29	24	20	20	19	46	301	330	119	51	39
20	44	29	24	20	19	19	41	288	330	108	44	37
21	44	29	24	21	18	18	45	280	343	102	42	35
22	42	28	24	21	18	20	62	288	339	100	39	35
23	42	27	23	21	19	20	58	322	322	95	38	44
24	32	24	24	21	19	16	42	322	296	93	41	45
25	41	26	23	21	18	17	35	317	343	91	46	42
26	41	25	23	20	18	19	48	252	444	86	45	38
27	39	24	24	19	19	19	63	256	339	95	41	35
28	39	23	22	19	20	18	52	313	284	93	44	34
29	35	22	21	19	-	18	42	348	276	88	52	34
30	38	22	22	20	-	18	36	348	301	84	60	39
31	44	-	22	21	-	18	-	352	-	82	48	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						1,412	58	32	45.5	2,800		
November.....						928	42	22	30.9	1,840		
December.....						728	27	21	23.5	1,440		
Calendar year 1936.....						45,664	798	14	125	90,580		
January.....						632	22	19	20.4	1,250		
February.....						549	22	18	19.6	1,090		
March.....						601	22	16	19.4	1,190		
April.....						1,016	35	16	33.9	2,020		
May.....						6,535	352	36	211	12,960		
June.....						8,930	444	196	298	17,710		
July.....						4,673	301	82	151	9,270		
August.....						1,656	79	38	53.4	3,280		
September.....						1,399	81	34	46.6	2,770		
Water year 1936-37.....						29,059	444	16	79.6	57,620		

Williams River near Parshall, Colo.

Location.- Water-stage recorder, lat. 40°00', long. 106°11', in sec. 1, T. 1 S., R. 79 W., $2\frac{3}{4}$ miles above mouth of Battle Creek and 4 miles south of Parshall.

Drainage area.- 184 square miles.

Records available.- July 1904 to September 1924 and October 1933 to September 1937 in reports of Geological Survey; July 1904 to September 1924 and June 1933 to September 1937 in reports of State engineer.

Average discharge.- 24 years (1904-24, 1933-37), 186 second-feet.

Extremes.- Maximum discharge during year, 818 second-feet June 26 (gage height, 2.94 feet); minimum daily discharge, 31 second-feet Apr. 9.
1904-24, 1933-37: Maximum discharge (estimated), 2,750 second-feet June 16, 1918; minimum daily discharge, 10 second-feet Sept. 15-17, 1934.

Remarks.- Records good. Discharge for period of ice effect, Nov. 3 to Apr. 13, computed on basis of four discharge measurements and records for station at Leal. Diversions for irrigation above station.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	79	68	44	42	39	40	34	32	377	308	75	67
2	73	67	41	39	38	40	34	32	391	264	68	70
3	70	58	44	42	40	37	34	90	418	244	68	104
4	68	62	48	41	41	37	34	110	409	212	62	130
5	70	68	44	40	41	37	34	166	346	216	60	104
6	79	68	44	40	42	39	34	166	300	209	61	104
7	70	67	44	40	40	41	34	172	280	252	49	127
8	70	66	44	39	37	41	34	169	288	220	40	102
9	70	62	45	39	37	41	31	193	272	186	38	94
10	68	58	48	39	37	41	33	232	260	169	36	86
11	66	64	50	39	38	42	33	232	276	166	56	79
12	66	60	49	38	38	41	36	193	342	159	42	75
13	66	60	47	38	37	39	40	240	334	156	46	72
14	66	66	45	39	39	37	42	296	317	172	46	68
15	64	66	44	39	41	40	67	368	325	162	47	66
16	66	68	49	39	38	40	104	432	354	156	51	60
17	67	67	47	39	37	40	94	418	423	133	45	60
18	66	60	47	39	33	40	72	377	423	136	56	60
19	64	56	47	39	35	39	81	437	418	130	47	60
20	72	56	47	39	35	38	79	386	395	107	42	60
21	72	56	47	40	34	36	84	377	418	94	47	60
22	70	54	47	41	34	40	123	317	432	86	49	60
23	68	51	45	41	36	40	112	377	414	81	48	67
24	58	49	46	41	36	32	77	325	373	81	51	75
25	70	51	45	40	35	34	67	395	391	82	58	67
26	70	49	44	38	35	36	100	300	618	73	57	64
27	67	47	45	38	36	36	152	276	377	75	55	61
28	67	45	42	38	38	35	136	334	296	75	60	60
29	58	43	40	38	-	34	107	386	276	67	73	58
30	66	43	42	39	-	34	86	423	300	64	88	60
31	75	-	42	40	-	34	-	409	-	72	72	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						2,121	79	58	68.4	4,210		
November.....						1,755	68	43	58.5	3,480		
December.....						1,403	50	40	45.3	2,780		
Calendar year 1936.....						63,284	1,020	23	173	125,500		
January.....						1,223	42	38	39.5	2,450		
February.....						1,047	42	33	37.4	2,080		
March.....						1,151	42	32	38.1	2,340		
April.....						2,028	152	31	67.5	4,020		
May.....						3,750	437	82	282	17,360		
June.....						10,823	618	260	361	21,470		
July.....						4,587	308	64	148	9,100		
August.....						1,673	88	36	54.0	3,320		
September.....						2,280	130	58	76.0	4,520		
Water year 1936-37.....						38,871	618	31	106	77,110		

Blue River at Dillon, Colo.

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

Drainage area.- 129 square miles.

Records available.- October 1910 to September 1937.

Average discharge.- 27 years, 123 second-feet.

Extremes.- Maximum discharge during year, 588 second-feet June 28 (gage height, 2.98 feet); minimum daily discharge, 7.6 second-feet Jan. 22.

1910-37: Maximum discharge observed, 1,180 second-feet June 2, 1914, June 14, 1924; maximum gage height observed, 4.35 feet June 2, 1914; minimum discharge, 7.4 second-feet Mar. 22, 1933 (discharge measurement).

Remarks.- Records good except those for period of ice effect, Nov. 23 to Apr. 17, which were computed on basis of two discharge measurements and weather records and are fair. Practically all diversions returned to river above station.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	68	41	22	12	12	16	38	54	240	298	105	68
2	68	41	21	11	11	15	42	52	268	272	100	67
3	68	39	23	11	13	19	39	52	268	236	96	70
4	68	39	24	11	13	17	38	59	260	210	94	70
5	68	39	21	11	17	16	36	71	248	199	90	72
6	68	39	20	10	17	18	38	98	221	184	87	72
7	68	35	21	11	16	19	39	105	206	181	89	71
8	65	36	21	11	16	20	40	107	199	184	87	70
9	65	38	21	9.2	16	20	37	108	199	188	83	70
10	63	38	21	8.4	15	21	42	119	188	170	79	66
11	60	38	19	8.6	15	22	45	134	181	162	73	62
12	56	39	17	8.4	16	23	48	132	210	162	70	60
13	56	40	15	8.6	16	26	50	128	221	170	70	59
14	56	34	16	8.8	16	30	55	142	221	174	64	58
15	55	30	16	9.0	16	28	59	177	221	170	63	56
16	54	30.	16	8.6	16	31	60	225	217	162	63	58
17	54	30	17	9.8	16	18	57	240	236	138	63	56
18	54	30	17	9.6	17	21	56	233	264	130	70	55
19	54	30	16	9.4	17	23	53	229	289	132	77	55
20	54	28	15	9.0	16	25	56	236	276	128	83	55
21	54	28	15	8.8	15	27	61	221	272	119	77	56
22	54	27	14	7.6	17	30	62	206	340	114	71	55
23	54	24	14	8.6	17	27	72	217	325	105	68	53
24	48	23	13	9.4	16	26	68	217	272	100	64	53
25	44	24	13	9.0	15	30	58	202	268	99	63	52
26	43	24	13	9.0	18	31	53	192	552	98	63	50
27	43	24	14	10	17	29	59	167	456	99	64	48
28	43	23	14	11	17	31	67	167	349	98	64	47
29	42	22	13	11	-	29	66	206	302	100	64	46
30	42	20	13	12	-	33	61	214	298	105	67	46
31	42	-	12	13	-	36	-	217	-	107	67	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						1,731	68	42	55.8	3,430		
November.....						953	41	20	31.8	1,390		
December.....						527	24	12	17.0	1,050		
Calendar year 1936.....						54,667	761	-	149	108,400		
January.....						304.8	13	7.6	9.83	605		
February.....						439	18	11	15.7	871		
March.....						757	36	15	24.4	1,500		
April.....						1,557	72	37	51.9	3,090		
May.....						4,927	240	52	159	9,770		
June.....						8,067	552	181	269	16,000		
July.....						4,794	298	98	155	9,510		
August.....						2,338	105	63	75.4	4,640		
September.....						1,776	72	46	59.2	3,520		
Water year 1936-37.....						28,170.8	552	7.6	77.2	55,980		

Snake River at Dillon, Colo.

Location.— Water-stage recorder, lat. $39^{\circ}36'50''$, long. $106^{\circ}03'05''$, in sec. 18, T. 5 S., R. 77 W., at private bridge at Dillon, 100 yards above mouth of river. Zero of gage is 8,820.54 feet above mean sea level.

Drainage area.— 92 square miles.

Records available.— October 1910 to September 1919, December 1929 to September 1937.

Average discharge.— 17 years, 71.7 second-feet.

Extremes.— Maximum discharge during year, 556 second-feet June 25 (gage height, 3.35 feet); minimum daily discharge, 8.8 second-feet Sept. 27-29.
1910-19, 1929-37: Maximum discharge, 1,200 second-feet June 13, 1935 (gage height, 4.25 feet); minimum daily discharge, 3 second-feet Nov. 9, 1912.

Remarks.— Records good except those for periods of ice effect, Nov. 3 to Feb. 5, Feb. 9-12, 16, 17, 21, 25-28, which were computed on basis of two discharge measurements, gage heights, and weather records and are fair. One diversion for power around station.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	15	12	12	12	15	16	14	14	137	172	45	14
2	14	11	12	12	15	18	14	14	134	154	42	16
3	14	10	12	13	16	19	13	15	132	150	37	15
4	13	10	12	14	17	19	14	18	130	118	32	14
5	12	11	12	15	17	19	12	27	112	114	30	14
6	13	10	12	15	18	18	12	30	103	110	28	14
7	13	10	12	15	16	18	11	32	93	130	26	14
8	14	10	13	14	16	18	12	32	93	123	25	13
9	14	10	12	14	16	19	11	48	85	110	24	13
10	14	10	11	14	16	20	12	66	83	99	23	12
11	14	10	12	14	16	20	12	59	103	99	22	12
12	13	10	13	14	16	19	12	58	118	110	22	12
13	13	10	12	15	16	16	14	86	116	106	21	11
14	13	11	12	15	16	17	22	126	149	92	21	11
15	13	12	13	15	16	16	45	162	172	81	21	11
16	12	11	13	16	17	16	63	186	181	68	20	11
17	13	11	13	16	18	16	30	178	216	61	22	11
18	12	11	13	15	18	16	24	175	209	62	19	10
19	12	11	12	15	19	16	27	162	167	55	16	9.5
20	12	11	11	15	16	21	24	139	149	47	16	9.2
21	12	11	12	15	18	10	27	130	178	40	15	9.5
22	12	11	12	13	18	15	30	149	178	36	14	9.8
23	12	11	13	14	18	15	20	134	156	35	15	10
24	13	11	12	15	18	16	14	116	142	36	16	9.8
25	12	11	12	15	18	14	18	116	223	35	16	9.2
26	12	11	12	14	18	15	21	92	232	32	16	9.2
27	12	11	11	15	18	15	22	95	202	39	16	8.8
28	12	11	12	16	19	15	16	134	156	42	16	8.8
29	12	12	13	16	-	14	14	139	149	44	17	8.8
30	12	12	13	16	-	13	14	139	167	41	16	9.5
31	13	-	12	16	-	15	-	156	-	55	15	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						397	15	12	12.8	787		
November.....						324	12	10	10.8	643		
December.....						378	13	11	12.2	750		
Calendar year 1936						37,607.9	650	75	102	74,390		
January.....						453	16	12	14.6	899		
February.....						474	19	15	16.9	940		
March.....						514	21	13	16.6	1,020		
April.....						594	23	11	19.3	1,180		
May.....						3,029	186	14	97.7	6,010		
June.....						4,525	292	83	151	8,980		
July.....						2,476	172	32	79.9	4,910		
August.....						684	45	14	22.1	1,360		
September.....						340.1	16	8.8	11.3	675		
Water year 1936-37.....						14,188.1	292	8.8	38.9	28,150		

Tenmile Creek at Dillon, Colo.

Location.— Water-stage recorder, lat. 39°36'45", long. 106°03'15", in sec. 18, T. 5 S., R. 77 W., at highway bridge at Dillon, 300 yards above mouth. Zero of gage is 8,819.97 feet above mean sea level.

Drainage area.— 113 square miles.

Records available.— October 1910 to September 1919, April 1930 to September 1937.

Average discharge.— 17 years (1910-19, 1929-37), 129 second-feet.

Extremes.— Maximum discharge during year, 699 second-feet May 15 (gage height, 4.68 feet); minimum daily discharge, 5.6 second-feet Oct. 9.

1910-19, 1930-37: Maximum discharge, 2,010 second-feet June 1, 1933 (gage height, 5.82 feet); minimum, 2 second-feet Feb. 15-17, 20, 1918.

Remarks.— Records excellent except those for period of ice effect, Oct. 25 to Apr. 16, which were computed on basis of three discharge measurements and weather records and are fair. Diversions for irrigation and mining above station. Robinson reservoir (capacity, 2,520 acre-feet) constructed above station November 1936.

Rating table, water year 1936-37 except periods of ice effect (gage height, in feet, and discharge, in second-feet,
(Shifting-control method used Oct. 1-24, Apr. 17 to May 14)

2.3	4	3.3	114	4.3	500
2.5	13	3.5	164	4.5	600
2.7	29	3.7	230	4.7	710
2.9	48	3.9	312		
3.1	76	4.1	400		

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	45	32	23	22	26	27	43	54	308	223	70	46
2	43	32	23	23	27	27	43	73	299	186	67	56
3	42	32	24	24	27	27	42	96	283	159	68	52
4	30	33	25	25	27	27	42	135	270	145	58	58
5	19	32	25	26	27	27	42	170	236	135	57	52
6	12	31	24	27	26	28	43	180	220	128	58	47
7	6.8	31	23	28	26	28	45	176	202	140	56	47
8	6.0	30	23	29	26	29	45	223	202	145	52	45
9	5.6	29	23	27	26	29	44	258	234	128	49	43
10	6.0	30	23	26	26	30	47	295	223	121	47	41
11	11	30	23	26	26	31	49	266	254	119	46	39
12	14	30	22	26	27	32	52	250	278	135	44	37
13	17	30	21	27	27	32	55	316	268	142	44	36
14	19	23	22	27	28	32	57	355	268	145	44	35
15	27	24	22	28	28	32	57	480	254	135	43	34
16	34	25	23	28	28	31	56	450	259	112	49	34
17	38	25	24	28	28	30	56	410	291	98	49	34
18	38	26	24	28	28	29	53	455	287	108	68	34
19	38	26	24	28	27	30	62	460	262	94	62	34
20	39	26	25	26	28	31	64	396	264	87	53	34
21	41	26	24	25	28	33	66	368	278	83	46	34
22	39	25	23	25	29	34	94	386	334	74	46	34
23	39	25	23	26	29	35	78	373	266	67	45	36
24	33	24	23	26	29	35	56	334	230	66	45	40
25	32	25	22	26	28	35	53	325	266	67	49	35
26	32	25	23	25	28	36	56	254	420	72	48	34
27	32	25	23	25	28	37	78	262	283	80	48	34
28	32	24	24	25	28	38	67	329	223	83	52	31
29	33	23	23	25	-	39	54	346	220	96	56	33
30	33	23	22	25	-	41	51	400	246	81	58	34
31	32	-	22	26	-	42	-	364	-	80	51	-
Month				Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet				
October.....				869.4	45	5.6	28.0	1,720				
November.....				822	33	23	27.4	1,630				
December.....				718	25	21	23.2	1,420				
Calendar year 1936.....				56,217.4	916	5.6	154	111,500				
January.....				808	29	22	26.1	1,600				
February.....				766	29	26	27.4	1,520				
March.....				994	42	27	32.1	1,970				
April.....				1,680	94	42	55.0	3,270				
May.....				9,239	430	54	298	18,350				
June.....				7,899	420	202	123	15,670				
July.....				3,534	223	66	114	7,010				
August.....				1,630	70	43	52.6	3,230				
September.....				1,183	58	31	39.4	2,350				
Water year 1936-37.....				30,111.4	480	5.6	82.5	59,720				

Roaring Fork at Aspen, Colo.

Location.— Water-stage recorder, lat. 39°11'20", long. 106°48'55", in sec. 7, T. 10 S., R. 84 W., at Aspen, three-quarters of a mile above mouth of Hunter Creek.

Drainage area.— 109 square miles.

Records available.— January 1911 to September 1921 and January 1934 to September 1937 in reports of Geological Survey; January 1911 to September 1921 and April 1932 to September 1937 in reports of State engineer. Prior to Feb. 24, 1915, at site half a mile upstream; Feb. 24, 1915, to Oct. 5, 1935, at site a quarter of a mile downstream; records equivalent.

Average discharge.— 15 years, 188 second-feet (including flow through Twin Lakes Tunnel).

Extremes.— Maximum discharge during year, 586 second-feet May 18 (gage height, 3.49 feet); minimum daily discharge, 5.8 second-feet Sept. 21, 22.

1911-21, 1933-37: Maximum discharge, 3,170 second-feet June 18, 1917 (gage height, 7.2 feet, former site and datum, from high-water marks); minimum daily discharge, 15 second-feet July 15, 16, 1934; minimum since Twin Lakes diversion started, that of Sept. 21, 22, 1937.

Remarks.— Records excellent for Mar. 21 to Sept. 30; good for Oct. 1 to Mar. 20. Discharge for periods of ice effect, Nov. 4, 5, Nov. 24 to Jan. 10, Jan. 16 to Mar. 20, computed on basis of three discharge measurements, weather records, and records for station at Glenwood Springs. Twin Lakes Transmountain Tunnel diverts water 15 miles above station to Lake Creek, a tributary of Arkansas River. Combined flow of this diversion and Roaring Fork is equivalent to records at this station prior to May 24, 1935.

Rating table, water year 1936-37 except periods of ice effect (gage height, in feet, and discharge, in second-feet)

(Shifting-control method used Oct. 1 to Nov. 3, and Aug. 19 to Sept. 27)

0.9	4.0	1.2	15.5	1.6	37	2.0	82	2.4	165	2.8	295	3.2	455
1.0	7.5	1.4	24.5	1.8	55	2.2	120	2.6	225	3.0	375	3.4	545

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	45	44	31	28	21	20	21	43	274	145	40	12
2	44	43	30	25	20	21	21	45	270	134	39	11
3	44	39	30	23	21	21	23	65	256	122	37	14
4	45	40	31	24	22	20	22	87	228	108	32	15
5	47	40	31	26	22	20	22	130	198	106	29	14
6	55	37	28	27	23	21	22	162	177	108	30	13
7	51	37	29	27	22	21	22	213	160	100	28	15
8	56	38	29	26	21	21	22	198	160	96	25	12
9	57	36	28	25	20	21	22	236	160	87	23	11
10	55	39	27	25	20	22	23	281	152	78	22	9.9
11	52	37	28	27	20	22	24	274	210	78	20	12
12	50	38	26	24	21	22	24	246	250	112	19	13
13	47	36	25	24	21	23	24	303	239	106	17	12
14	46	34	26	24	23	19	29	391	239	112	17	9.9
15	46	33	28	24	22	20	37	443	225	95	16	9.1
16	45	34	28	24	21	21	47	464	267	70	15	9.5
17	45	34	27	25	21	21	34	491	319	59	17	9.1
18	45	35	26	25	21	21	40	518	319	65	19	8.7
19	43	31	25	24	22	19	47	464	299	59	17	7.7
20	46	31	26	25	21	20	49	375	260	52	16	6.1
21	44	31	26	24	19	20	49	375	281	47	14	5.8
22	43	30	27	21	21	20	65	415	288	43	13	5.8
23	43	30	25	22	20	21	61	407	253	39	12	7.9
24	36	31	25	23	20	20	49	335	204	39	11	9.5
25	43	32	26	22	21	20	43	327	201	39	11	8.3
26	44	31	27	22	20	20	48	256	267	36	9.9	7.9
27	41	31	25	23	20	21	62	295	201	38	9.9	16
28	43	31	28	23	20	21	56	375	171	47	11	24
29	40	30	28	23	-	21	52	375	158	62	14	24
30	43	30	28	22	-	21	43	376	155	47	22	27
31	47	-	27	21	-	22	-	343	-	43	14	-

Month	Observed				Run-off in Twin Lakes Tunnel (acre-feet)	Diversion by Twin Lakes Tunnel (acre-feet)	Adjusted for diversion	
	Second- foot-days	Maximum	Minimum	Mean			Run-off in (second- feet)	Mean (second- feet)
October.....	1,431	57	36	46.2	2,840	0	2,840	46.2
November.....	1,041	44	30	34.7	2,060	0	2,060	34.7
December.....	851	31	25	27.5	1,690	0	1,690	27.5
Calendar year 1936	48,633	914	17	133	96,460	23,408	119,860	165
January.....	748	28	21	24.1	1,480	48	1,530	24.9
February.....	586	23	19	20.9	1,160	141	1,300	23.4
March.....	643	23	19	20.7	1,280	141	1,420	23.1
April.....	1,105	65	21	36.8	2,190	213	2,400	40.3
May.....	9,511	518	43	300	18,470	11,890	30,460	495
June.....	6,834	319	152	228	13,560	12,520	26,080	436
July.....	2,372	145	36	76.5	4,700	5,100	9,800	159
August.....	619.8	40	9.9	20.0	1,230	1,140	2,370	38.5
September.....	360.0	27	5.8	12.0	714	626	1,340	22.5
Water year 1936-37	25,899.8	518	5.8	71.0	51,370	31,920	83,290	115

Roaring Fork at Glenwood Springs, Colo.

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

Drainage area.-- 1,460 square miles.

Records available.-- April 1906 to September 1909, September 1910 to September 1931, and October 1933 to September 1937 in reports of Geological Survey; April 1906 to September 1909 and September 1910 to October 1937 in reports of State engineer.

Average discharge.-- 30 years, 1,526 second-feet.

Extremes.-- Maximum discharge during year, 6,800 second-feet May 18 (gage height, 5.29 feet); minimum discharge, 254 second-feet Jan. 4 (gage height, 0.88 foot); minimum daily discharge, 286 second-feet Jan. 4.

1906-9, 1910-37: Maximum discharge, 17,600 second-feet June 14, 1918 and June 14, 1921; minimum, 145 second-feet Jan. 21, 1935 (gage height, 0.65 foot); minimum daily discharge, 179 second-feet Jan. 21, 1935.

Remarks.-- Records excellent except those for Oct. 1 to Feb. 13 and May 19 to June 21, which are good. Discharge for period of ice effect, Jan. 5 to Feb. 13, computed on basis of one discharge measurement and weather records. Diversions for irrigation above station. See records for Roaring Fork at Aspen, Colo.

Rating table, water year 1936-37 except periods of ice effect (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Oct. 1 to Jan. 4, May 19 to June 21)

0.8	250	1.8	940	2.8	2,050
1.0	345	2.0	1,160	3.0	2,800
1.2	460	2.2	1,350	3.5	3,080
1.4	595	2.4	1,600	4.0	4,000
1.6	750	2.6	1,820	4.5	5,020
				5.0	6,110

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	648	525	424	394	320	335	335	813	4,400	2,470	795	777
2	640	539	384	378	320	345	362	890	3,510	2,410	759	734
3	640	473	389	295	330	350	394	1,230	3,670	2,210	734	777
4	648	442	412	286	345	325	367	1,640	3,220	2,070	694	768
5	670	525	412	320	360	335	345	2,120	2,770	1,950	655	726
6	702	532	345	355	390	350	362	2,370	2,440	1,930	686	726
7	686	539	394	360	365	356	356	2,540	2,370	1,660	632	754
8	648	499	394	345	340	367	340	2,830	2,220	1,760	588	710
9	640	486	412	320	320	375	356	3,600	2,130	1,640	581	678
10	625	506	367	310	315	389	367	4,180	2,110	1,560	574	655
11	610	492	394	320	320	400	412	4,240	2,540	1,600	560	625
12	595	490	372	355	350	394	442	3,600	3,190	1,940	512	602
13	574	490	345	344	350	406	473	4,100	3,100	2,100	473	567
14	560	506	367	340	378	400	539	4,850	2,960	2,240	448	546
15	546	512	424	335	367	367	678	5,400	2,830	2,050	430	532
16	546	512	430	350	335	367	680	6,000	3,130	1,780	436	525
17	539	499	418	380	345	384	900	5,570	3,850	1,630	426	525
18	532	492	394	385	335	378	768	6,110	4,160	1,660	588	486
19	518	466	360	370	372	378	631	5,810	4,160	1,560	655	466
20	560	460	362	360	350	330	640	4,970	3,720	1,540	546	442
21	560	454	378	355	310	345	910	4,750	4,180	1,180	499	436
22	563	454	400	315	356	350	1,130	5,000	4,360	1,050	473	448
23	546	436	345	335	350	372	1,140	5,250	4,160	962	454	506
24	532	400	345	350	345	350	920	4,360	3,620	880	442	610
25	518	406	378	335	350	330	813	4,180	3,330	831	436	574
26	518	412	399	330	356	340	850	3,390	3,510	813	436	539
27	518	394	330	340	350	340	1,120	3,350	3,120	777	448	539
28	518	400	384	355	340	315	1,090	4,300	2,780	759	581	546
29	506	394	378	360	-	330	962	4,920	2,670	1,050	742	560
30	499	389	372	355	-	315	850	5,310	2,590	962	660	618
31	546	-	345	345	-	335	-	4,400	-	840	870	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	17,941	702	499	579	35,590
November.....	14,104	539	389	470	27,970
December.....	11,833	430	330	362	23,470
Calendar year 1936.....	525,555	7,740	310	1,436	1,042,000
January.....	10,677	394	286	344	21,180
February.....	9,654	380	310	344	19,110
March.....	11,065	406	315	357	21,930
April.....	20,132	1,140	535	671	39,930
May.....	121,973	6,110	813	3,935	241,900
June.....	96,720	4,400	2,110	3,224	191,800
July.....	47,744	2,470	759	1,540	94,700
August.....	18,073	870	430	583	35,860
September.....	17,977	777	436	599	35,660
Water year 1936-37.....	397,864	6,110	286	1,090	789,106

Crystal River near Redstone, Colo.

Location.- Water-stage recorder, lat. 39°18', long. 107°13', in NE¼ sec. 9, T. 9 S., R. 88 W., 75 feet below mouth of Nettle Creek and 7 miles below Redstone. Prior to Oct. 1, 1935, datum 1 foot higher.

Drainage area.- 197 square miles.

Records available.- May 1935 to September 1937. 1908-9, at site 3 miles downstream; records not equivalent.

Extremes.- Maximum discharge during water year 1936, 2,390 second-feet May 27 (gage height, 4.22 feet, present datum); minimum daily discharge, 55 second-feet Feb. 26. Maximum discharge during water year 1937, 2,090 second-feet May 13 (gage height 4.14 feet, present datum); minimum daily discharge, 58 second-feet Jan. 4, 10, 11. 1935-37: Maximum discharge, 2,980 second-feet June 15, 1935 (gage height, 5.80 feet, present datum); minimum daily discharge, that of Feb. 28, 1936.

Remarks.- Records good except those for Nov. 4-10, 1935, Jan. 19-21, 1936 (estimated), and those for period of ice effect, Dec. 7, 1936, to Mar. 13, 1937 (computed on basis of two discharge measurements, weather records, and comparison with records for Roaring Fork at Glenwood Springs), all of which are fair. Diversions for irrigation above station.

Discharge, in second-feet, 1935-37

1935-36

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	174	103	98	69	70	75	86	502	1,910	708	278	176
2	162	104	92	69	70	74	79	498	1,610	650	315	160
3	154	103	94	69	64	74	82	650	1,280	670	395	160
4	148	105	96	68	59	76	78	745	1,150	644	315	154
5	144	100	98	68	65	73	78	1,490	1,000	608	275	148
6	132	97	98	69	69	73	74	1,540	890	602	315	142
7	127	98	95	66	70	76	78	1,090	1,140	558	281	138
8	127	95	95	66	70	78	84	826	1,610	558	255	128
9	123	94	96	68	70	80	83	676	1,820	526	247	125
10	119	95	89	66	70	92	94	650	1,890	498	256	119
11	118	90	90	66	74	92	116	745	1,950	702	269	187
12	116	90	88	70	73	92	168	1,030	1,930	522	250	168
13	112	94	86	70	70	92	239	1,410	2,040	397	269	194
14	109	96	79	71	69	94	290	1,520	2,020	412	247	187
15	106	96	63	73	69	94	344	1,760	1,990	432	254	164
16	103	96	60	73	69	82	393	1,860	1,890	470	234	154
17	103	100	69	70	65	82	412	1,740	1,840	470	228	138
18	106	100	71	65	60	82	444	1,740	1,830	444	216	130
19	109	101	79	62	64	80	457	1,740	1,740	428	269	127
20	111	95	82	74	63	78	466	1,890	1,740	412	328	121
21	114	96	83	75	62	82	498	1,910	1,730	382	278	116
22	109	96	80	75	62	83	602	1,880	1,530	348	251	111
23	106	98	75	71	70	86	626	1,900	1,530	321	221	108
24	101	101	78	70	65	86	644	1,980	1,520	315	208	104
25	101	106	75	73	57	83	638	2,030	1,350	299	192	103
26	100	106	71	73	55	82	626	2,030	1,480	348	181	108
27	101	106	70	69	58	82	656	2,040	1,260	305	172	121
28	101	104	70	70	68	82	638	1,780	1,210	321	168	121
29	101	101	69	70	69	83	644	1,850	1,150	296	158	116
30	101	100	69	63	-	83	558	1,950	940	361	150	114
31	101	-	69	60	-	89	-	2,080	-	302	170	-

Crystal River near Redstone, Colo., 1935-37--Continued

1936-37

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	112	102	78	76	70	72	76	274	1,290	1,000	255	201
2	110	99	74	74	70	74	80	328	1,320	910	249	188
3	109	80	73	70	70	74	86	444	1,330	903	244	181
4	109	80	76	58	74	76	87	584	1,180	720	227	260
5	110	96	77	60	76	72	80	820	883	654	221	299
6	121	94	61	68	78	78	81	960	705	634	238	238
7	114	94	70	70	78	80	86	970	640	602	219	216
8	110	86	74	68	74	82	78	1,030	647	640	191	172
9	109	87	78	62	72	84	80	1,390	752	621	179	148
10	106	94	67	58	72	86	87	1,710	856	488	181	136
11	104	92	74	58	76	88	99	1,510	1,230	502	180	128
12	104	88	77	60	80	90	109	1,360	1,346	614	149	128
13	102	88	62	62	82	90	121	1,570	1,360	856	146	123
14	104	87	64	62	86	81	162	1,500	1,310	803	142	121
15	102	90	68	60	86	81	224	1,470	1,280	675	146	125
16	99	92	78	64	86	82	292	1,500	1,430	556	179	132
17	96	92	76	68	83	87	277	1,470	1,590	492	203	128
18	94	92	72	68	80	86	252	1,770	1,610	474	235	121
19	98	88	66	66	84	84	265	1,600	1,500	401	201	121
20	123	82	70	68	82	76	263	1,480	1,480	366	169	121
21	116	82	74	66	76	77	319	1,630	1,540	334	148	121
22	107	81	76	64	80	77	372	1,570	1,630	313	138	119
23	102	78	66	66	84	87	331	1,660	1,500	292	128	148
24	99	73	66	70	84	82	277	1,380	1,400	277	117	179
25	94	72	74	68	80	77	252	1,330	1,320	286	110	146
26	93	73	76	66	78	77	307	1,160	1,250	304	107	156
27	94	87	64	66	74	76	397	1,180	1,170	277	132	128
28	93	66	72	72	72	71	350	1,350	1,090	298	227	125
29	88	69	74	74	-	78	249	1,600	1,070	334	235	126
30	90	73	70	74	-	74	224	1,530	1,010	301	255	130
31	102	-	68	72	-	76	-	1,350	-	272	224	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October 1935						3,639	174	100	117	7,220		
November						2,966	106	90	98.9	5,880		
December						2,527	98	60	81.5	5,010		
Calendar year												
January 1936						2,141	75	60	69.1	4,250		
February						1,919	74	55	66.2	3,810		
March						2,560	94	73	82.6	5,080		
April						10,275	656	74	342	20,380		
May						45,532	2,080	498	1,469	90,310		
June						46,970	2,040	890	1,566	93,160		
July						14,309	708	296	462	28,380		
August						7,583	393	150	245	15,040		
September						4,142	194	103	138	8,220		
Water year 1935-36						144,563	2,080	55	395	286,700		
October						3,214	123	88	104	6,370		
November						2,537	102	66	84.6	5,030		
December						2,205	78	61	71.1	4,370		
Calendar year 1936						143,387	2,080	55	392	284,400		
January						2,058	76	58	66.4	4,080		
February						2,187	86	70	78.1	4,340		
March						2,476	90	71	79.3	4,910		
April						5,951	397	75	198	11,800		
May						39,460	1,770	274	1,273	78,270		
June						38,683	1,630	640	1,223	72,760		
July						16,899	1,000	272	513	31,540		
August						5,754	255	107	186	11,410		
September						4,644	298	119	155	9,210		
Water year 1936-37						123,067	1,770	58	337	244,100		

Willow Creek near Raven, Colo.

Location.— Water-stage recorder, lat. $39^{\circ}16'$, long. $107^{\circ}31'$, in sec. 13, T. 9 S., R. 91 W., 350 yards above mouth and 15 miles south of Raven.

Drainage area.— 12 square miles.

Records available.— May 1935 to September 1937.

Extremes.— Maximum discharge during May to September 1935, 140 second-feet (revised) May 26 (gage height, 3.06 feet); no flow July 26, 29, Aug. 7, 14, 15, Sept. 5, 6, 18-25.

Maximum discharge during water year 1935-36, 142 second-feet (revised) May 4 (gage height, 3.10 feet); no flow Aug. 17 to Sept. 30.

Maximum discharge during water year 1936-37, 154 second-feet May 15 (gage height, 3.25 feet); no flow Oct. 1 to Nov. 7, Aug. 22-24, 26, 27, Sept. 13-28.

Remarks.— Records good for May to September 1935 except those for June 4-9 (computed on basis of records for Buzzard Creek near Collbran) and those for July to September, which are fair. Discharge for Sept. 10-17, 1935, estimated. Records excellent for October 1935 to September 1936 except those for Apr. 1-16 (estimated) and those for Oct. 1 to Nov. 11, which are fair. Records excellent for October 1936 to September 1937 except those for May 1, July 26-28, Aug. 2-7, 9-14, which were estimated and are fair. No records for Nov. 12, 1935, to Mar. 31, 1936, and Nov. 7, 1936, to Apr. 30, 1937. No diversions above station.

Rating table for period 1935-1937 (gage height, in feet, and discharge, in second-feet) (Shifting-control method used May 20-26, June 21 to Nov. 11, 1935)

0.1	0
.2	.1
.4	1.2
.6	4.2
.8	8.8
1.0	14
1.2	21
1.4	32
1.6	44
1.8	56
2.0	68
2.2	80
2.4	93
2.6	107
2.8	121

Discharge, in second-feet, 1935-37

1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1								-	67	3.7	0.1	0.1
2								-	76	3.6	.1	.1
3								-	83	3.7	.1	.1
4								-	90	3.4	.1	.1
5								-	87	3.2	.1	0
6								-	76	2.9	.1	0
7								-	71	3.1	0	.1
8								-	67	2.9	.1	1.3
9								-	62	2.2	.2	.8
10								-	57	2.0	.2	.6
11								-	46	1.8	.1	.6
12								-	42	1.6	.1	.4
13								-	38	1.5	.1	.3
14								-	34	1.1	0	.3
15								-	28	1.0	0	.2
16								-	22	.8	.2	.2
17								-	19	.7	.2	.1
18								-	17	.5	.1	0
19								-	15	.5	.1	0
20								50	15	.9	.1	0
21								52	13	1.1	.1	0
22								63	12	.8	.1	0
23								81	10	.2	.9	0
24								94	8.8	.2	.8	0
25								103	8.6	.1	.8	0
26								104	7.6	0	.6	.3
27								108	7.4	.1	.3	1.9
28								97	6.9	.1	.2	1.9
29								90	6.9	0	.1	1.2
30								87	5.1	.1	.1	.7
31								78	-	.2	.1	-

Discharge, in second-feet, of Willow Creek near Raven, Colo., 1935-37--Continued

1935-36

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.6	1.0						52	13	3.1	0.4	
2	.7	1.2						63	15	1.9	1.0	
3	.6	1.2					1	84	14	1.3	.5	
4	.5	1.1						98	13	1.3	.4	
5	.7	1.5						100	12	1.2	.3	
6	.6	1.8						77	12	.8	.4	
7	.5	1.2						58	11	.6	.4	
8	.6	1.1					1	49	8.8	.6	.3	
9	.4	1.2						46	8.6	.4	.2	
10	.3	1.9						49	8.1	.5	.2	
11	.3	1.0					6	56	6.9	2.3	.2	
12	.5	-					11	60	6.4	2.6	.2	
13	.4	-					15	58	6.2	1.6	.3	
14	.3	-					18	54	5.1	1.1	.2	
15	.3	-					26	52	4.4	.8	.2	
16	.6	-					29	54	4.9	.5	.1	
17	.8	-					31	49	4.0	.8	0	
18	.9	-					28	43	3.6	2.0	0	
19	.9	-					24	41	2.9	.8	0	
20	1.0	-					33	37	2.8	.3	0	
21	.9	-					43	33	2.6	.2	0	
22	.9	-					51	28	2.3	.2	0	
23	.9	-					52	26	2.6	.1	0	
24	.8	-					52	18	2.6	.1	0	
25	1.0	-					58	21	2.3	.2	0	
26	1.5	-					61	20	2.2	.1	0	
27	1.6	-					60	19	2.2	.1	0	
28	1.2	-					62	17	2.2	.2	0	
29	1.0	-					64	15	2.3	.2	0	
30	1.0	-					56	14	2.8	.1	0	
31	1.0	-					-	14	-	.1	0	

1936-37

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1								18	27	3.2	0.3	0.5
2								30	22	3.1	.3	.3
3								31	24	2.9	.3	.3
4								42	27	2.3	.3	.3
5								45	25	1.8	.2	.2
6								50	21	1.3	.2	.2
7								63	18	2.3	.2	.2
8								79	16	2.6	.2	.2
9								88	15	5.3	.2	.1
10								100	13	7.1	.2	.1
11								90	12	5.7	.2	.1
12								89	12	4.6	.1	.1
13								87	11	8.1	.1	0
14								90	11	5.3	.1	0
15								106	10	2.9	.1	0
16								90	9.3	2.5	.1	0
17								79	8.3	2.2	.2	0
18								71	7.4	2.0	.7	0
19								60	7.1	1.6	.1	0
20								53	6.4	1.5	.1	0
21								49	6.2	1.0	.1	0
22								45	5.5	.8	0	0
23								40	4.9	.8	0	0
24								37	4.4	.8	0	0
25								37	4.9	.5	.1	0
26								34	6.0	.5	0	0
27								30	5.1	.5	0	0
28								28	3.9	.6	.1	0
29								34	3.6	.9	.2	.1
30								36	4.2	2.3	.5	.2
31								31	-	1.8	.4	-

COLORADO RIVER BASIN

Discharge, in second-feet, of Willow near Raven, Colo., 1935-37--Continued

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
May 20-31, 1935	1,007	108	50	83.9	2,000
June.....	1,098.3	90	5.1	36.6	2,180
July.....	44.0	3.7	0	1.42	87
August.....	6.2	.9	0	.20	12
September.....	11.3	1.9	0	.38	22
The period	2,166.8				4,301
October 1935	23.3	1.6	.3	.75	46
November 1-11.....	14.2	1.9	1.0	1.29	28
December.....	-	-	-	-	-
Calendar year					
January	-	-	-	-	-
February.....	-	-	-	-	-
March.....	-	-	-	-	-
April 1936.....	790	64	-	26.3	1,570
May.....	1,405	100	14	45.3	2,790
June.....	186.8	15	2.2	6.23	371
July.....	26.1	3.1	.1	.84	52
August.....	5.3	1.0	0	.17	11
September.....	0	0	0	0	0
Water year					
October 1936	0	0	0	0	0
November 1-7	0	0	0	0	0
December.....	-	-	-	-	-
Calendar year					
January	-	-	-	-	-
February.....	-	-	-	-	-
March.....	-	-	-	-	-
April.....	-	-	-	-	-
May 1937.....	1,782	106	18	56.8	3,480
June.....	351.2	27	3.6	11.7	637
July.....	78.4	8.1	.5	2.53	156
August.....	5.6	.7	0	0.18	11
September.....	2.9	.6	0	.10	5.8
Water year					

Note.- Records for water years 1934-35 and 1935-36 supersede those published in Water-Supply Papers 789 and 809.

Roan Creek at Simmons ranch, near Highmore, Colo.

Location.- Water-stage recorder, lat. 39°31', long. 108°32', in sec. 26, T. 6 S., R. 100 W., 4 miles above mouth of Carr Creek and 4 miles west of Highmore (Carr Creek school).

Records available.- May 1935 to September 1937.

Extremes.- Maximum discharge during year, 142 second-feet May 10 (gage height, 2.54 feet); no flow during first part of October.

1935-37: Maximum discharge, that of May 10, 1937; no flow Aug. 17, 24, 27-29, Sept. 7, 8, 10-30 and part of October 1938.

Remarks.- Records fair; those for Oct. 1-31 estimated on basis of one discharge measurement. No records Nov. 1 to Mar. 13. Diversions for irrigation above station.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0					-	7.3	45	34	4.6	1.6	1.2
2						-	8.4	47	36	4.1	1.6	2.3
3						-	9.3	55	41	3.6	1.6	1.6
4						-	8.7	61	34	2.9	1.4	1.5
5						-	9.6	71	37	2.7	1.0	1.4
6						-	10	77	34	2.3	1.0	1.4
7						-	11	78	27	8.7	1.4	1.5
8						-	12	88	25	7.0	1.5	1.6
9						-	11	99	23	7.0	1.5	1.2
10						-	13	127	19	7.3	1.8	1.0
11						-	17	129	16	7.0	1.4	1.0
12						-	18	115	15	9.0	1.4	1.0
13						-	20	110	14	11	1.3	.8
14						3.4	25	109	11	16	1.4	.8
15						3.4	34	106	10	11	1.1	.8
16						4.6	43	109	9.6	9.6	2.7	.6
17						5.9	44	109	9.0	10	1.3	.6
18						5.4	42	113	9.0	5.9	.9	.7
19						4.6	42	104	8.4	5.1	.4	.7
20						4.6	41	93	8.7	4.8	.3	.7
21						4.8	44	84	8.4	4.8	.3	.8
22						5.4	48	78	8.1	5.1	.3	.9
23						5.9	47	70	7.3	6.7	.2	1.1
24	*.1					5.6	46	62	7.0	9.6	.3	.9
25						5.4	45	55	7.0	12	.3	.7
26						5.4	46	49	7.3	11	.2	.7
27						5.9	47	44	6.1	13	.2	.8
28						6.1	46	41	5.4	9.6	.4	.7
29						6.7	46	41	4.6	4.8	1.0	.6
30						6.7	45	42	5.9	4.3	.9	.7
31						7.0	-	39	-	4.6	.9	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						1.6	-	-	0.05	3.2		
November.....						-	-	-	-	-		
December.....						-	-	-	-	-		
Calendar year												
January.....						-	-	-	-	-		
February.....						-	-	-	-	-		
March 14-31.....						96.8	7.0	3.4	5.38	192		
April.....						886.3	48	7.3	29.5	1,760		
May.....						2,448	129	39	79.0	4,860		
June.....						487.8	41	4.6	16.3	968		
July.....						224.1	15	2.3	7.23	444		
August.....						31.4	2.7	.2	1.01	62		
September.....						30.2	2.3	.6	1.01	60		
Water year												

*Discharge measurement.

Carr Creek at Altenbern ranch, near Highmore, Colo.

Location.- Water-stage recorder, lat. $39^{\circ}35'$, long. $108^{\circ}32'$, in sec. 30, T. 5 S., R. 99 W., 8 miles above mouth and $7\frac{1}{2}$ miles northwest of Highmore (Carr Creek school).

Records available.- May 1935 to September 1937.

Extremes.- Maximum discharge during year, 140 second-feet May 10 (gage height, 1.93 feet); minimum daily discharge, 0.1 second-foot Nov. 24 to Dec. 1, probably no flow for periods during December and January.
1935-37: Maximum discharge, 143 second-feet May 26, 1935 (gage height, 1.90 feet); no flow Aug. 27-29, 1936.

Remarks.- Records fair except those for May and June, which are poor. Discharge for Nov. 18-23 estimated. No records Dec. 2 to Mar. 7. Diversions for irrigation above station.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.7	1.1	0.1			-	0.8	8.4	38	7.2	2.8	0.6
2	.6	1.0				-	.8	12	34	6.6	2.5	.9
3	.8	1.1				-	.7	24	36	6.6	2.0	.9
4	.9	1.3				-	.4	40	39	6.5	1.8	.9
5	.8	1.1				-	.6	62	39	6.3	1.6	.6
6	.8	1.1				-	.6	75	32	13	1.6	.6
7	.9	1.4				-	.8	95	27	34	2.0	.6
8	.8	1.3				1.0	.8	102	25	32	2.0	.6
9	.8	1.2				1.9	.8	120	22	42	1.4	1.3
10	.8	1.3				3.1	1.1	132	19	73	1.4	1.0
11	.8	1.3				4.1	1.1	118	17	20	1.3	.9
12	.6	1.3				4.4	1.2	98	17	17	1.2	.9
13	.6	.8				4.8	1.1	95	15	17	1.2	.8
14	.6	.3				5.2	1.2	84	13	17	1.3	.8
15	.5	.3				3.4	1.5	86	12	16	1.0	.8
16	.4	.3				4.1	2.0	86	11	14	.8	.9
17	.3	.3				6.2	2.9	99	9.3	13	1.4	.9
18	.4	.3				6.9	2.7	126	8.6	13	1.6	.8
19	.4	.3				7.4	2.7	104	7.9	7.6	1.3	.8
20	.6	.2				6.9	2.4	103	7.9	7.6	1.0	.7
21	.7	.2				5.8	2.9	107	6.9	6.3	1.0	.7
22	.6	.2				4.8	4.1	100	6.9	5.6	.9	.9
23	.4	.2				4.1	4.4	94	7.2	5.0	.9	1.4
24	.4	.1				3.1	4.4	83	6.6	5.0	.9	1.4
25	.4	.1				2.4	4.8	82	6.6	4.5	1.0	1.0
26	.4	.1				1.6	5.8	75	8.6	4.0	1.0	.9
27	.4	.1				1.1	6.2	68	7.6	3.8	1.3	.9
28	.5	.1				.9	8.4	44	6.3	4.0	1.3	.9
29	.6	.1				.8	9.4	46	6.6	3.8	1.0	.9
30	.8	.1				.8	8.4	39	7.2	3.5	.7	1.2
31	1.1	-				.7	-	39	-	3.5	.8	-
Month	Second-foot-days			Maximum		Minimum		Mean		Run-off in acre-feet		
October.....	19.4			1.1		0.3		0.63		38		
November.....	18.6			1.4		.1		.62		37		
December.....	-			-		-		-		-		
Calendar year												
January.....	-			-		-		-		-		
February.....	-			-		-		-		-		
March 8-31.....	85.5			7.4		.7		3.56		170		
April.....	85.0			9.4		.4		2.83		169		
May.....	2,446.4			132		8.4		78.9		4,850		
June.....	500.2			39		6.3		16.7		992		
July.....	418.2			73		3.5		13.5		829		
August.....	42.0			2.8		.7		1.35		83		
September.....	26.5			1.4		.6		.88		53		
Water year												

Plateau Creek near Collbran, Colo.

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

Drainage area.— 88 square miles.

Records available.— August 1921 to September 1927 (monthly discharge) and October 1933 to September 1937 in reports of Geological Survey; August 1921 to September 1937 in reports of State engineer.

Average discharge.— 16 years, 106 second-feet.

Extremes.— Maximum discharge during year, 1,370 second-feet May 17 (gage height, 4.01 feet); minimum daily discharge, 5.9 second-feet Oct. 24.
1921-37: Maximum discharge, 2,800 second-feet May 28, 1922 (gage height, 6.72 feet, former datum); minimum daily discharge, 3 second-feet Sept. 21, 1926.

Remarks. Records good except those for Nov. 4-10, Mar. 30, 31, Aug. 23-27 (estimated) and those for periods of ice effect, Nov. 25-29, Dec. 1 to Feb. 21 (computed on basis of one discharge measurement and weather records), which are fair. Five small diversions above station.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	8.9	13			6.4	7.8	10	62	438	106	18	15
2	8.6	13			6.2	7.8	12	73	420	72	18	14
3	8.2	14			6.4	8.2	11	126	420	57	17	15
4	7.8	13			6.6	8.2	10	187	322	52	15	17
5	8.6	13			6.8	8.2	10	277	258	58	17	17
6	11	14			7.2	8.6	10	298	184	42	23	13
7	8.9	15			7.4	8.9	10	310	178	38	25	13
8	7.6	13			7.0	8.9	12	398	187	38	22	10
9	7.3	14			6.8	9.3	14	552	181	106	21	10
10	6.8	14			7.2	9.3	16	684	175	62	19	8.9
11	6.4	14			7.2	9.7	19	684	202	84	18	8.9
12	6.6	15			7.4	9.7	23	707	212	154	17	8.6
13	6.8	14			7.4	9.7	25	821	181	181	17	7.3
14	6.4	12			7.6	9.7	33	860	170	110	16	7.6
15	7.1	12			7.8	9.7	55	1,000	165	67	15	8.6
16	7.1	12		*12	8.0	9.7	70	1,000	167	48	19	8.6
17	6.8	12			7.8	10	67	1,260	187	52	42	8.2
18	6.8	9.7			7.6	10	55	1,100	196	82	29	7.8
19	7.6	13			7.6	10	61	1,050	178	51	18	7.6
20	15	15			7.8	16	72	898	167	38	14	7.3
21	13	14			7.6	14	100	898	178	34	9.6	7.1
22	11	14			7.8	9.7	131	874	167	30	9.3	7.3
23	9.3	15			7.8	10	114	730	159	26	9.0	15
24	5.9	8.6			7.8	12	93	594	144	24	9.0	18
25	12	8.6			8.2	12	84	501	152	24	8.5	12
26	11	8.6			8.6	9.7	100	483	152	23	8.0	9.7
27	8.6	8.6			8.2	9.3	115	638	135	22	9.0	9.3
28	8.6	8.6			7.8	12	108	615	110	21	33	8.9
29	7.8	8.6			-	12	95	604	91	36	22	12
30	11	8.6			-	11	72	730	118	24	30	25
31	14	-			-	11	-	552	-	21	21	-
Month					Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet			
October.....					272.5	15	5.9	8.79	540			
November.....					367.9	15	8.6	12.3	730			
December.....					279	-	-	9.0	553			
Calendar year 1936.....					24,628.5	866	5.9	67.3	48,840			
January.....					248	-	-	8.0	492			
February.....					208.0	8.6	6.2	7.45	413			
March.....					312.1	16	7.3	10.1	619			
April.....					1,610	131	10	53.7	3,190			
May.....					19,546	1,260	62	631	38,770			
June.....					5,994	438	91	200	11,890			
July.....					1,781	181	21	57.5	3,530			
August.....					567.4	42	8.0	18.3	1,130			
September.....					337.7	25	7.1	11.3	670			
Water year 1936-37.....					31,523.6	1,260	5.9	86.4	62,530			

*Discharge measurement.

Plateau Creek near Cameo, Colo.

Location.- Water-stage recorder, lat. $39^{\circ}11'$, long. $108^{\circ}16'$, in SW $\frac{1}{4}$ sec. 18, T. 10 S., R. 97 W., 1.1 miles above mouth and 4 miles northeast of Cameo.

Drainage area.- 604 square miles.

Records available.- April 1936 to September 1937.

Extremes.- Maximum discharge during year, 1,850 second-feet May 16 (gage height, 5.08 feet); minimum daily discharge, 23 second-feet Aug. 14, 15.

1936-37: Maximum discharge, that of May 16, 1937; minimum daily discharge, 19 second-feet July 24, 1936.

Remarks.- Records good except those for period of ice effect, Dec. 8 to Mar. 1, which were computed on basis of two discharge measurements and weather records and are fair. Numerous diversions for irrigation above station.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	39	68	54	68	41	69	62	184	513	166	39	49
2	39	92	57	62	36	68	71	226	519	118	36	66
3	40	66	54	53	36	81	75	328	458	95	34	52
4	41	61	43	57	36	52	73	448	408	82	33	49
5	43	73	36	61	37	59	66	600	362	80	32	46
6	49	77	31	64	40	68	73	696	300	71	32	50
7	52	77	31	61	61	78	71	684	262	61	36	61
8	52	73	36	58	47	78	59	804	251	99	33	54
9	49	71	40	53	40	80	69	972	248	186	31	50
10	49	71	44	51	40	71	75	1,140	230	176	27	47
11	47	71	48	54	40	84	97	1,190	255	138	26	41
12	49	75	51	56	46	84	116	1,110	268	262	26	45
13	47	62	53	58	41	109	120	1,180	233	496	26	40
14	47	66	56	59	40	92	143	1,220	220	304	23	44
15	47	66	54	52	48	71	200	1,330	207	176	23	47
16	47	64	57	48	47	80	332	1,500	207	136	64	46
17	46	62	65	54	52	86	262	1,430	216	120	49	44
18	43	62	68	52	50	86	159	1,410	237	145	40	41
19	47	57	69	58	59	82	220	1,290	223	127	33	37
20	57	56	76	60	55	57	197	1,030	210	88	29	37
21	62	57	72	44	50	80	230	1,030	216	75	28	37
22	59	57	74	34	55	77	394	996	204	61	27	40
23	57	56	75	32	60	77	353	852	186	49	26	36
24	56	50	77	32	65	59	240	755	184	41	27	37
25	56	54	79	40	72	64	189	624	168	37	28	37
26	57	57	80	52	67	69	216	513	194	33	31	37
27	57	57	81	44	62	78	344	606	176	34	33	49
28	57	56	82	41	64	59	300	696	143	43	66	43
29	57	56	79	47	-	66	255	606	124	57	129	44
30	59	56	76	54	-	57	207	864	116	47	82	49
31	66	-	72	54	-	69	-	648	-	46	56	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						1,573	66	39	50.7	3,120		
November.....						1,924	92	50	64.1	3,820		
December.....						1,869	82	31	60.3	3,710		
Calendar year												
January.....						1,613	68	32	52.0	3,200		
February.....						1,387	72	36	48.5	2,750		
March.....						2,270	109	52	73.2	4,500		
April.....						5,268	394	59	176	10,450		
May.....						26,963	1,500	184	870	53,480		
June.....						7,528	519	116	251	14,930		
July.....						3,649	496	33	118	7,240		
August.....						1,204	129	23	38.8	2,390		
September.....						1,353	66	36	45.1	2,680		
Water year 1936-37						56,601	1,500	23	155	112,300		

Buzzard Creek near Heiberger, Colo.

Location.— Water-stage recorder, lat. $39^{\circ}17'$, long. $107^{\circ}43'$, in NE $\frac{1}{4}$ sec. 11, T. 9 S., R. 93 W., 1.1 miles below Hightower ranger station and .3 miles east of Heiberger. Datum lowered 1 foot July 23, 1937.

Drainage area.— 76.5 square miles.

Records available.— April 1936 to September 1937.

Extremes.— Maximum discharge during year, 588 second-feet May 9 (gage height, 4.20 feet, present datum); no flow Oct. 1, Aug. 3-5, 12-16, 23-27, Sept. 13-21. 1936-37: Maximum discharge, that of 1937; no flow at times during 1936-37.

Remarks.— Records poor except those for Apr. 22 to July 23, which are good. Those for Oct. 1 to Nov. 30, Apr. 1-21 computed on basis of two discharge measurements and records for station near Collbran; those for Aug. 28 to Sept. 3, Sept. 7, 8, 11-14, 24, 26-30 estimated. One diversion above station to West Divide Creek for irrigation.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0						6	66	84	32	1.0	1.0
2	.2						7	104	75	16	.1	.7
3	.3						8	169	75	11	0	.8
4	.3						7	217	76	8.1	0	3.6
5	.7						6	277	67	9.2	0	4.2
6	.7						8	304	59	7.5	.2	2.3
7	.7						8	322	50	16	.8	1.5
8	.9						9	373	44	15	.9	1.0
9	.5						8	402	37	28	.5	.8
10	.						12	360	36	36	.1	.4
11	.5						14	322	34	32	.1	.2
12	.7						22	289	32	29	0	.1
13	.5						26	280	30	43	0	0
14	.5						36	280	29	34	0	0
15	.9						50	310	26	15	0	0
16	.9						65	292	20	13	0	0
17	.9						95	256	21	9.2	.2	0
18	.9						95	241	21	13	1.4	0
19	.9	*1.2					80	208	19	11	1.8	0
20	2.0						85	151	18	9.2	.8	0
21	2.8						120	140	17	4.5	.4	0
22	2.6						151	134	17	3.1	.2	.1
23	2.6						92	125	15	2.5	0	.1
24	2.5						59	119	13	2.0	0	.1
25	2.0						51	108	12	1.8	0	.1
26	2.0						78	90	16	1.6	0	.1
27	1.9						111	83	18	1.4	0	.1
28	1.8						84	82	13	.9	.1	.1
29	1.8						61	95	9.8	1.2	5	.1
30	2.4						51	136	33	2.5	8.5	.1
31	3.5						-	104	-	2.5	4.5	-
Month							Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet	
October.....							39.4	3.5	0	1.27	78	
November.....							42.0	-	-	1.4	83	
December.....							-	-	-	-	-	
Calendar year												
January.....							-	-	-	-	-	
February.....							-	-	-	-	-	
March.....							-	-	-	-	-	
April.....							1,505	151	6	50.2	2,990	
May.....							6,439	402	66	208	12,770	
June.....							1,016.8	94	9.8	33.9	2,020	
July.....							410.2	43	.9	13.2	814	
August.....							26.6	8.5	0	.86	53	
September.....							17.5	4.2	0	.58	35	
Water year												

*Discharge measurement.

COLORADO RIVER AND TRIBUTARIES ABOVE GREEN RIVER

Buzzard Creek near Collbran, Colo.

Location.- Water-stage recorder, lat. $39^{\circ}16'$, long. $107^{\circ}52'$, in sec. 14, T. 9 S., R. 34 W., half a mile above mouth of Brush Creek and 7 miles east of Collbran.

Drainage area.- 139 square miles.

Records available.- August 1921 to September 1927 (monthly discharge) and October 1933 to September 1937 in reports of Geological Survey; August 1921 to September 1937 in reports of State engineer.

Average discharge.- 18 years, 54.8 second-feet.

Extremes.- Maximum discharge during year, 831 second-feet May 9 (estimated from records for station near Heiberger); minimum daily discharge, 0.3 second-foot Aug. 25-27. 1921-37: Maximum discharge, 1,270 second-feet May 8, 1922 (gage height, 7.8 feet); minimum, 0.1 second-foot Aug. 27, 1934 (gage height, 0.78 foot).

Remarks.- Records fair. Those for period of ice effect, Nov. 8 to Mar. 12, computed on basis of three discharge measurements and weather records; those for May 7-15 and June 1-5 computed on basis of records of station near Heiberger. Diversions for irrigation above station.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.0	4.5				4.0	8.7	92	110	34	2.7	1.0
2	2.2	4.9				3.8	9.0	127	98	21	1.6	1.1
3	2.3	4.9				3.8	11	170	92	16	1.5	.8
4	2.3	4.7				3.6	9.8	219	90	12	1.0	.8
5	2.7	4.7				4.0	8.2	267	86	11	.6	2.5
6	2.7	4.7				4.4	11	296	68	11	1.0	4.5
7	2.7	4.5				4.8	12	355	56	13	1.0	2.9
8	2.9	4.8				4.8	11	405	49	19	.7	2.0
9	2.5	4.4				5.4	14	450	43	26	.7	1.0
10	2.5	4.2				5.8	17	395	41	41	.6	.7
11	2.5	4.0				6.2	27	365	37	42	.6	.8
12	2.7	3.8				6.8	29	315	35	36	.5	.6
13	2.5	3.6				7.0	35	280	34	67	.4	.6
14	2.5	3.7				6.7	45	305	32	44	.4	.5
15	2.9	3.8				6.3	72	340	29	26	.4	.5
16	2.9	3.7		*1.8		6.0	90	298	26	22	.5	.4
17	2.9	3.5				5.6	101	276	24	18	2.5	.4
18	2.9	3.4				6.0	101	296	24	20	1.3	.4
19	2.9	3.3				8.2	92	271	23	17	.8	.4
20	3.3	3.2				8.4	104	213	22	13	.7	.5
21	3.7	3.2				8.4	146	196	20	10	.6	.6
22	3.5	3.0			*2.5	6.5	186	183	18	7.7	.4	.6
23	3.5	3.0				7.0	140	170	16	8.2	.4	1.1
24	3.3	2.8				4.3	61	154	15	4.9	.4	.8
25	3.1	2.6				4.6	38	132	15	3.5	.3	.7
26	2.9	2.6				5.2	76	113	16	3.3	.3	.7
27	2.5	2.4				7.0	161	123	18	2.5	.3	.7
28	2.7	2.4				5.6	150	126	18	2.6	.4	.7
29	2.7	2.2				6.3	104	126	14	2.6	7.0	1.0
30	3.3	2.2				5.2	74	200	25	2.9	10	.8
31	4.5	-				6.0	-	150	-	4.7	2.5	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						88.5	4.5	2.0	2.85	176		
November.....						108.7	4.9	2.2	3.62	216		
December.....						62.0	-	-	2.0	123		
Calendar year 1936.....						12,045.1	372	.6	32.9	23,890		
January.....						49.6	-	-	1.6	96		
February.....						67.2	-	-	2.4	133		
March.....						177.6	8.4	3.6	5.73	352		
April.....						1,923.7	186	8.2	64.1	3,820		
May.....						7,403	450	82	239	14,680		
June.....						1,194	110	14	39.8	2,370		
July.....						561.7	67	2.5	18.1	1,110		
August.....						42.1	10	.3	1.36	84		
September.....						30.3	4.5	.4	1.01	60		
Water year 1936-37.....						11,708.4	450	.3	32.1	23,220		

*Discharge measurement.

Taylor River at Almont, Colo.

Location.- Water-stage recorder, lat. $38^{\circ}40'$, long. $106^{\circ}51'$, in sec. 22, T. 51 N., R. 1 E., in Almont, 800 feet above junction with East River. Zero of gage is 8,011.98 feet above mean sea level.

Drainage area.- 440 square miles.

Records available.- July 1910 to September 1931, October 1933 to September 1937 in reports of Geological Survey; July 1910 to September 1937 in reports of State engineer.

Average discharge.- 27 years, 366 second-feet.

Extremes.- Maximum discharge during year, 1,530 second-feet May 16 (gage height, 3.86 feet); minimum daily discharge, 52 second-feet Sept. 17, 1910-37: 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 for Oct. 1 to Mar. 24 and excellent for Mar. 25 to Sept. 30. Those for period of ice effect, Dec. 1 to Mar. 24, computed on basis of three discharge measurements and temperature records. Taylor Park Reservoir, 24 miles above station (capacity, 106,000 acre-feet), completed and storage started in September 1937. Diversions from tributaries above station for irrigation.

Rating table, water year 1936-37 except periods of ice effect (gage height, in feet, and discharge, in second-feet)

(Shifting-control method used Oct. 20 to Nov. 30)

1.3	50	2.5	470
1.5	92	2.7	588
1.7	142	2.9	720
1.9	208	3.1	880
2.1	286	3.3	1,050
2.3	374	3.5	1,250
		4.0	1,700

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	190	204	102	96	105	105	114	388	816	534	254	208
2	197	190	99	96	105	105	119	470	816	505	235	190
3	212	124	94	98	100	105	124	756	864	465	262	186
4	216	132	94	98	98	105	119	872	744	427	227	204
5	208	166	94	98	96	105	116	969	678	412	216	194
6	219	157	90	98	98	105	121	996	619	393	258	172
7	212	160	68	98	100	105	116	1,060	564	388	238	92
8	208	119	66	98	105	105	111	1,010	546	388	223	79
9	204	139	84	98	100	110	116	987	588	365	208	79
10	197	137	78	98	96	110	114	1,000	546	361	194	74
11	190	145	84	98	95	110	124	960	588	352	183	70
12	186	129	84	98	95	110	121	888	650	465	179	64
13	186	142	82	98	98	115	132	1,020	613	432	183	54
14	183	151	86	98	100	115	154	1,160	607	417	183	54
15	179	142	90	98	100	115	197	1,370	582	370	179	56
16	179	137	94	98	105	115	235	1,430	594	339	204	56
17	169	134	96	100	105	115	235	1,390	650	304	219	52
18	166	142	98	100	105	115	208	1,390	657	295	219	74
19	163	119	98	100	105	115	258	1,360	650	282	204	72
20	194	124	94	103	105	115	290	1,120	588	266	176	72
21	197	134	90	103	105	115	330	1,140	625	246	169	70
22	183	121	90	98	105	115	451	1,160	685	235	169	70
23	194	111	94	98	105	115	393	1,210	613	231	166	68
24	179	106	94	98	105	113	286	969	552	219	163	68
25	179	106	100	96	105	109	250	896	546	219	160	66
26	194	116	98	96	105	114	412	800	856	235	169	60
27	176	109	94	98	105	116	576	792	685	235	160	60
28	186	109	94	100	105	116	422	952	588	274	179	58
29	172	104	96	105	-	116	330	1,040	499	356	186	54
30	183	106	96	105	-	116	295	1,220	499	304	231	72
31	204	-	96	105	-	116	-	1,040	-	274	238	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						5,905	219	163	190	11,710		
November.....						4,015	204	104	134	7,960		
December.....						2,857	102	78	92.2	5,670		
Calendar year 1936.....						145,618	1,940	78	398	289,200		
January.....						3,069	105	96	99.0	6,090		
February.....						2,856	105	95	102	5,660		
March.....						3,461	116	105	112	6,860		
April.....						6,869	576	111	229	13,620		
May.....						31,795	1,430	338	1,026	63,060		
June.....						19,048	864	499	635	37,780		
July.....						10,588	534	219	342	21,000		
August.....						6,234	262	160	201	12,360		
September.....						2,748	208	52	91.6	5,450		
Water year 1936-37.....						99,445	1,430	52	272	197,200		

Gunnison River near Grand Junction, Colo.

Location.— Water-stage recorder, lat. 39°02', long. 108°34', in NW¼ sec. 35, T. 1 S., R. 1 W. Ute meridian, half a mile below Redlands Power Canal and 2 miles above mouth.

Drainage area.— 8,020 square miles.

Records available.— April 1917 to September 1923 and January 1934 to September 1937, also October 1894 to December 1895 and May 1897 to September 1899 at site near mouth, in reports of Geological Survey; April 1917 to September 1930 and January 1934 to September 1937 in reports of State engineer.

Average discharge (river and power canal).— 17 years (1917-30, 1933-37), 2,856 second-feet.

Extremes.— Combined flow (river and power canal): Maximum discharge, 15,700 second-feet

May 16; minimum daily discharge, 211 second-feet Aug. 28.

1917-30, 1933-37: Maximum discharge, 35,700 second-feet May 23, 1920 (gage height, 14.95 feet); minimum daily discharge, 106 second-feet July 20, 1934.

Remarks.— Records excellent above 1,000 second-feet; good below, those of river for Jan. 6 to Mar. 2 computed on basis of gage heights, two discharge measurements, and weather records. Diversions for irrigation above station. Combined flow of river and Redlands Power Canal minus about 25 second-feet diverted for irrigation during irrigation season represents flow that enters Colorado River. Discharge tables include flow of the power canal.

Rating table, water year 1936-37 except periods of ice effect (gage height, in feet, and discharge, in second-feet)
(For high water only)

5.5	4,690	8.0	10,400
6.0	5,730	8.5	11,680
6.5	6,800	9.0	12,980
7.0	7,980	9.5	14,330
7.5	9,180	9.8	15,140

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	696	942	859	894	732	1,000	890	3,350	8,110	2,510	677	863
2	729	1,100	863	874	692	1,050	902	4,230	6,850	2,290	663	972
3	719	1,200	863	827	692	1,110	1,060	6,270	6,460	2,740	627	760
4	703	1,140	833	746	722	1,270	1,190	8,090	6,570	1,930	497	688
5	672	955	863	791	752	1,300	1,110	9,660	5,850	1,710	463	702
6	695	1,050	863	830	792	1,340	977	10,600	4,990	1,530	492	735
7	735	1,170	836	783	802	1,120	1,130	11,000	4,230	1,350	616	728
8	755	1,180	886	773	772	984	1,020	11,200	3,610	1,480	655	711
9	800	1,150	900	784	732	977	876	12,000	3,300	2,200	645	771
10	760	1,060	875	698	722	1,020	862	13,100	3,200	1,650	533	638
11	739	1,040	835	658	722	1,080	917	13,800	3,080	1,430	420	584
12	754	1,030	798	641	752	1,090	1,280	13,200	3,460	2,080	355	544
13	742	1,020	774	653	792	1,120	1,680	12,700	3,820	2,160	328	516
14	758	1,080	761	653	822	1,150	1,900	13,200	4,780	2,250	305	491
15	785	1,070	750	663	832	1,110	2,560	13,700	3,750	2,110	271	432
16	761	1,080	842	693	822	1,070	2,600	15,000	3,340	1,860	260	380
17	769	1,100	920	683	812	1,060	5,260	15,100	3,440	1,510	323	359
18	757	1,050	1,090	682	802	1,140	4,540	15,500	3,860	1,280	351	363
19	748	1,100	1,060	710	822	1,150	4,010	13,500	4,100	1,090	320	352
20	879	1,080	946	720	782	1,100	4,240	11,500	3,980	860	305	332
21	1,000	993	913	678	762	994	4,140	9,840	3,760	668	287	340
22	1,070	989	891	656	782	944	3,170	9,360	3,960	562	266	417
23	1,040	987	885	655	832	959	2,320	9,240	3,990	468	243	536
24	1,020	974	861	664	872	1,060	2,960	9,140	3,700	409	223	491
25	1,040	898	820	692	852	1,030	4,420	7,940	3,250	406	220	495
26	1,020	849	787	660	892	996	4,650	6,800	3,030	373	211	450
27	924	866	798	670	912	955	5,370	5,790	3,330	339	220	478
28	924	878	800	690	872	946	6,870	5,660	3,420	421	338	512
29	915	860	809	718	-	851	5,410	6,500	2,860	673	886	530
30	924	854	818	745	-	870	3,970	8,910	2,420	522	969	599
31	1,070	-	836	763	-	848	-	9,770	-	658	1,050	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	25,903	1,070	672	836	51,380
November.....	30,775	1,200	849	1,026	61,040
December.....	26,635	1,090	750	859	52,830
Calendar year 1936	873,114	14,700	420	2,402	1,744,000
January.....	22,347	894	641	721	44,320
February.....	22,176	912	692	792	43,990
March.....	32,695	1,340	848	1,055	64,850
April.....	82,284	6,870	862	2,743	163,200
May.....	314,590	15,100	3,350	10,150	624,000
June.....	124,480	8,110	2,420	4,149	246,900
July.....	41,519	2,740	339	1,339	82,350
August.....	14,025	1,050	211	452	27,820
September.....	16,759	972	532	559	33,240
Water year 1936-37	754,188	15,100	211	2,066	1,496,000

East River at Almont, Colo.

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

Drainage area.- 295 square miles.

Records available.- April to October 1905, July 1910 to April 1922, October 1934 to September 1937.

Average discharge.- 10 years (1910-13, 1916-20, 1934-37) 392 second-feet.

Extremes.- Maximum discharge during year, 2,190 second-feet May 18 (gage height, 4.70 feet); minimum daily discharge, 48 second-feet Dec. 2.

1905, 1910-22, 1934-37: Maximum discharge, about 6,500 second-feet June 15, 1921 (gage height, 6.6 feet, former site and datum); minimum, 19 second-feet Aug. 13, 1913.

Remarks.- Records excellent for Oct. 1-31, Mar. 4 to Sept. 30, and good for Nov. 1 to Mar. 3. Those for period of missing gage heights, Nov. 17-24, computed on basis of records for Taylor River at Almont and those for period of ice effect, Dec. 7 to Mar. 3, on basis of two discharge measurements, gage heights, and weather records. Diversions for irrigation above station.

Rating table, water year 1935-37 except periods of ice effect (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Nov. 1 to Dec. 6 and July 29 to Sept. 30)

1.1	50	2.6	490
1.2	64	2.8	598
1.4	95	3.0	710
1.6	135	3.3	900
1.8	188	3.7	1,200
2.0	250	4.0	1,470
2.2	323	4.3	1,770
2.4	403	4.6	2,060

Discharge, in second-feet, water year October 1936 to September 1937

# Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	85	106	58	64	61	58	56	454	1,110	568	188	133
2	85	89	48	60	58	60	63	578	1,100	562	203	127
3	87	72	57	56	60	62	64	790	1,030	490	212	120
4	89	81	57	57	60	61	65	1,000	900	458	200	110
5	87	90	57	60	64	58	70	1,220	809	420	234	106
6	95	89	57	62	67	64	81	1,350	698	403	264	110
7	92	89	54	63	69	61	70	1,420	622	375	209	116
8	93	78	55	64	63	54	66	1,380	595	347	203	106
9	93	81	54	62	60	57	63	1,620	634	315	194	104
10	93	84	53	59	59	56	67	1,670	639	315	180	101
11	93	82	54	58	59	58	76	1,600	795	327	171	99
12	92	84	54	59	60	57	78	1,420	861	347	160	93
13	92	87	55	65	62	57	87	1,590	835	379	158	76
14	95	89	58	64	64	56	106	1,730	802	391	166	57
15	95	85	60	62	67	53	150	1,880	764	363	158	49
16	97	82	66	56	63	58	188	2,010	809	308	158	49
17	97	80	62	61	63	57	200	1,990	900	278	163	51
18	95	82	57	64	63	57	206	2,060	914	264	162	65
19	92	73	62	63	63	56	274	1,850	894	244	177	81
20	95	77	56	61	67	50	308	1,530	828	212	162	82
21	97	78	56	58	66	53	383	1,550	900	200	148	85
22	93	72	58	56	67	56	505	1,570	935	182	148	92
23	92	65	56	57	66	57	490	1,600	880	166	142	97
24	87	68	56	59	65	50	407	1,330	796	148	142	103
25	89	64	62	60	65	53	359	1,220	768	138	138	90
26	90	63	59	57	66	58	472	1,010	746	150	133	89
27	87	61	60	57	64	56	668	1,000	698	150	127	87
28	90	61	66	59	60	50	562	1,240	628	180	124	84
29	89	58	64	62	-	58	445	1,590	600	224	148	89
30	99	56	60	63	-	51	391	1,640	584	205	177	106
31	110	-	60	64	-	60	-	1,290	-	194	168	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	2,865	110	85	92.4	5,680
November.....	2,326	106	56	77.5	4,610
December.....	1,785	66	48	57.6	3,540
Calendar year 1936.....	148,494	2,440	36	406	294,500
January.....	1,871	65	56	60.4	3,710
February.....	1,778	69	58	63.4	3,520
March.....	1,752	64	50	56.5	3,480
April.....	7,018	668	56	234	13,920
May.....	44,162	2,060	454	1,425	87,590
June.....	24,065	1,110	584	802	47,730
July.....	9,301	568	138	300	18,450
August.....	5,317	264	124	172	10,550
September.....	2,757	133	49	91.9	5,470
Water year 1936-37.....	104,995	2,060	48	288	208,200

Lake Fork at Lake City, Colo.

Location.- Water-stage recorder, lat. 38°01', long. 107°19', in sec. 34, T. 44 N., R. 4 W., at Lake City, just above Wade Gulch.

Drainage area.- 123 square miles.

Records available.- October 1931 to September 1937 (discontinued). April 1918 to September 1924 and December 1928 to July 1930 at site 600 feet downstream and below Wade Gulch.

Average discharge.- 12 years (1918-24, 1931-37), 114 second-feet.

Extremes.- Maximum discharge during year, 764 second-feet May 18 (gage height, 3.08 feet); minimum daily discharge, 10 second-feet Jan. 22-28, Feb. 2, 3, 10, 11, 16-18, 20-22, 24, 25.

1918-24, 1928-30, 1931-37: Maximum discharge, 1,560 second-feet June 12, 15, 1921; minimum, 5.7 second-feet Mar. 10, 1932 (discharge measurement).

Remarks.- Records good. Those for period of ice effect, Nov. 6 to May 1, computed on basis on eight discharge measurements and weather records. Natural regulation by Lake San Cristobal, 4 miles upstream.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	36	28	16	12	11	11	13	80	193	193	54	37
2	35	28	15	12	10	11	14	72	184	188	51	39
3	35	26	14	12	10	12	17	115	204	175	51	40
4	34	24	13	12	11	11	17	182	201	155	49	42
5	34	24	13	13	12	11	17	255	184	149	47	45
6	36	25	13	13	12	11	15	291	173	138	51	42
7	36	23	14	13	12	11	15	235	162	162	55	44
8	36	23	13	13	11	12	17	291	182	153	55	45
9	35	23	13	13	11	12	20	362	188	140	51	44
10	34	24	13	11	10	12	23	424	173	129	48	43
11	34	24	13	11	10	12	23	351	210	129	45	41
12	34	25	13	11	10	13	24	340	237	127	42	39
13	33	25	13	11	11	13	25	416	230	119	40	37
14	32	25	13	12	11	13	30	499	245	108	38	34
15	32	25	13	12	11	12	39	515	220	100	37	33
16	31	25	13	11	10	13	48	546	237	92	39	32
17	31	20	14	12	10	13	56	569	282	86	40	30
18	31	20	13	12	10	12	70	573	305	80	39	29
19	31	20	13	12	11	12	68	456	308	76	40	28
20	31	19	12	12	10	11	64	392	285	73	37	28
21	31	20	13	11	10	11	84	392	298	68	35	28
22	31	19	12	10	10	12	82	396	295	63	34	27
23	29	18	12	10	11	13	78	400	295	59	33	26
24	28	18	13	10	10	12	70	347	264	57	33	26
25	28	18	13	10	10	12	78	267	240	57	34	26
26	28	18	12	10	11	13	86	208	225	58	33	25
27	28	18	12	10	11	12	100	195	218	60	33	25
28	28	18	13	10	11	11	98	245	195	62	33	24
29	27	17	13	11	-	12	96	291	186	64	34	25
30	27	16	12	12	-	11	93	264	197	63	34	31
31	28	-	12	12	-	12	-	225	-	57	34	-
Month				Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet				
October.....				984	36	27	31.7	1,950				
November.....				656	28	16	21.9	1,300				
December.....				404	16	12	13.0	801				
Calendar year 1936.....				35,566	573	8	97.2	70,540				
January.....				356	13	10	11.5	706				
February.....				299	12	10	10.7	593				
March.....				369	13	11	11.9	732				
April.....				1,480	100	13	49.3	2,940				
May.....				10,184	573	13	329	20,200				
June.....				6,816	308	162	227	13,520				
July.....				3,240	193	57	105	6,430				
August.....				1,279	55	33	41.3	2,540				
September.....				1,013	45	24	33.8	2,010				
Water year 1936-37.....				27,080	573	10	74.2	53,720				

Henson Creek at Lake City, Colo.

Location.— Water-stage recorder, lat. $38^{\circ}01'$, long. $107^{\circ}20'$, in sec. 33, T. 44 N., R. 4 W., 1 mile southwest of Lake City.

Drainage area.— 82 Square miles.

Records available.— April 1918 to September 1919, December 1928 to July 1930, October 1931 to September 1937 (discontinued).

Extremes.— Maximum discharge during year, 694 second-feet May 15 (gage height, 3.01 feet); minimum daily discharge, 12 second-feet Jan. 22, 26.

1918-19, 1929-30, 1931-37: Maximum discharge, 2,510 second-feet July 25, 1929; minimum, 9.6 second-feet Dec. 22, 1928.

Remarks.— Records excellent except those for periods of ice effect, Nov. 3, Nov. 6 to May 1, which were computed on basis of eight discharge measurements and weather records and are fair. No diversions above station.

Rating tables, water year 1936-37 except periods of ice effect (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Nov. 5			May 2 to Sept. 30		
0.5	20		0.4	18	1.6 170
.6	28		.6	28	1.8 230
.7	37		.8	45	2.0 300
			1.0	69	2.5 484
			1.2	99	3.0 690
			1.4	131	

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	34	25	15	14	14	14	14	115	190	178	69	52
2	34	25	14	13	13	15	16	129	227	166	74	54
3	33	24	13	13	13	16	18	159	247	152	70	61
4	33	26	14	13	14	15	18	198	204	145	55	59
5	33	26	14	14	15	15	18	250	163	140	68	57
6	35	26	14	14	16	14	18	217	145	145	75	48
7	35	22	14	14	16	14	17	208	187	159	78	66
8	34	22	14	14	15	14	20	311	190	134	72	65
9	34	22	14	14	14	15	22	425	184	128	65	61
10	33	22	13	14	14	16	23	401	204	123	61	59
11	32	23	14	13	14	16	25	343	289	129	35	47
12	32	23	14	13	15	17	27	376	278	120	47	47
13	31	23	14	13	15	18	35	454	293	115	59	45
14	31	23	14	13	16	17	50	496	264	110	50	43
15	31	23	14	13	16	16	85	532	247	102	53	38
16	31	20	15	13	15	17	79	556	300	96	49	33
17	30	19	15	13	15	18	77	532	336	92	52	33
18	29	19	15	14	15	18	85	476	329	87	60	39
19	30	18	14	13	16	16	90	416	314	84	49	41
20	30	18	14	13	16	14	88	401	311	81	41	41
21	31	18	14	13	15	14	100	416	307	78	44	39
22	29	18	14	12	16	15	95	438	311	75	40	34
23	29	18	13	13	15	14	90	419	286	53	34	28
24	27	18	14	13	15	14	86	343	244	68	40	21
25	26	17	14	13	15	13	98	230	237	68	39	22
26	27	17	14	12	16	14	100	201	220	66	38	24
27	26	16	14	13	15	13	110	289	187	76	32	32
28	22	16	14	14	14	13	112	343	181	76	32	30
29	22	17	14	14	-	14	108	325	181	93	40	32
30	23	17	14	15	-	13	100	261	184	76	42	42
31	24	-	14	15	-	13	-	217	-	69	43	-
Month	Second-foot-days					Maximum	Minimum	Mean	Run-off in acre-feet			
October.....	929					35	22	30.0	1,840			
November.....	621					26	16	20.7	1,230			
December.....	456					15	13	14.0	863			
Calendar year 1936.....	36,911					596	11	101	73,200			
January.....	415					15	12	13.4	823			
February.....	418					16	13	14.9	829			
March.....	464					18	13	15.0	920			
April.....	1,824					112	14	60.8	3,620			
May.....	10,475					556	115	338	20,780			
June.....	7,240					336	145	241	14,360			
July.....	3,283					178	53	106	6,510			
August.....	1,606					78	32	51.8	3,190			
September.....	1,283					66	21	43.1	2,560			
Water year 1936-37.....	29,003					556	12	79.5	57,520			

North Fork of Gunnison River near Somerset, Colo.

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

Drainage area.- 521 square miles.

Records available.- March 1934 to September 1937.

Extremes.- Maximum discharge during year, 4,720 second-feet May 15 (gage height, 5.29 feet); minimum daily discharge, 34 second-feet Nov. 24.

1934-37: Maximum discharge, that of May 15, 1937; minimum daily discharge, 28 second-feet Sept. 19, 1934.

Remarks.- Records excellent except those for periods of ice effect, Dec. 11-15, Jan. 2 to Feb. 11, which were computed on basis of one discharge measurement, gage heights, and weather records and are good. Diversions for irrigation above station.

Rating table, water year 1936-37 except periods of ice effect (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Oct. 5 to Dec. 10 and Dec. 16 to Jan. 1)

0.6	32	2.0	420
.8	58	2.5	730
1.0	95	3.0	1,110
1.2	136	3.5	1,550
1.4	186	4.0	2,200
1.6	246	4.5	3,060
1.8	328	5.0	4,080

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	84	103	65	55	56	57	111	935	1,460	447	158	117
2	80	99	58	55	54	58	155	1,290	1,400	406	153	111
3	80	47	54	52	53	58	170	1,780	1,350	363	153	103
4	76	54	65	50	55	60	146	2,250	1,170	341	136	128
5	76	93	62	50	58	67	146	2,680	1,040	320	136	115
6	76	91	58	53	60	80	178	2,700	875	328	141	113
7	72	87	71	57	69	91	143	2,680	772	337	126	126
8	71	62	67	54	60	103	123	2,920	737	294	119	103
9	65	60	69	51	59	111	143	3,240	765	278	115	93
10	65	71	65	50	57	123	163	3,700	793	286	113	86
11	63	69	62	52	55	132	290	3,340	942	290	105	78
12	63	67	56	53	60	141	324	2,930	1,010	346	99	76
13	63	71	58	56	65	143	359	3,240	935	619	95	72
14	63	75	60	60	64	136	491	3,450	875	496	89	62
15	60	74	70	59	47	132	716	3,800	800	410	64	67
16	60	75	82	57	57	128	882	3,640	852	337	105	63
17	60	74	71	60	58	136	838	3,300	935	294	111	63
18	58	75	65	56	74	136	737	3,060	942	282	141	62
19	60	65	62	62	58	119	860	2,570	912	250	115	62
20	91	62	65	59	62	99	875	2,160	860	220	101	60
21	84	69	62	53	74	107	1,140	2,080	905	200	91	57
22	82	57	62	49	57	126	1,360	2,060	920	186	84	58
23	76	43	62	48	58	146	1,250	1,900	822	178	99	84
24	69	34	63	50	58	119	890	1,540	723	168	97	89
25	67	57	57	54	63	107	800	1,420	688	155	91	76
26	69	55	60	49	58	107	1,080	1,250	846	153	78	72
27	69	52	63	46	52	95	1,430	1,310	590	150	74	72
28	67	54	60	50	51	84	1,200	1,520	524	168	86	71
29	62	55	57	55	-	91	1,010	1,840	502	211	123	82
30	74	62	58	59	-	89	845	2,010	485	173	160	115
31	97	-	57	60	-	103	-	1,630	-	168	138	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						2,202	97	58	71.0	4,370		
November.....						2,015	103	34	67.2	4,000		
December.....						1,946	82	54	62.8	3,860		
Calendar year 1936.....						166,859	3,300	34	456	331,000		
January.....						1,674	62	46	54.0	3,320		
February.....						1,822	74	47	57.9	3,220		
March.....						3,284	145	57	105	6,510		
April.....						12,877	1,430	111	629	37,440		
May.....						74,235	3,800	935	2,395	147,200		
June.....						26,210	1,450	485	874	51,990		
July.....						8,754	519	150	282	17,360		
August.....						3,516	160	74	113	6,970		
September.....						2,543	128	57	84.8	5,040		
Water year 1936-37.....						146,878	3,800	34	402	291,300		

East Muddy Creek near Bardine, Colo.

Location.— Water-stage recorder, lat. $39^{\circ}01'$, long. $107^{\circ}22'$, in sec. 17, T. 12 S., R. 89 W., a quarter of a mile below mouth of Spring Creek and $6\frac{1}{4}$ miles above Bardine. Prior to Oct. 1, 1936, datum 0.5 foot higher.

Drainage area.— 136 square miles.

Recorder available.— May 1935 to September 1937.

Extremes.— Maximum discharge during year, 744 second-feet May 15 (gage height, 2.49 feet); minimum daily discharge, 9.5 second-feet Oct. 3, 4, 18, Nov. 18, perhaps less during period of no record.
1935-37: Maximum discharge, 824 second-feet May 5, 1936 (gage height, 2.62 feet, present datum); minimum daily discharge, 6 second-feet Aug. 28, 1936.

Remarks.— Records excellent. Discharge for Nov. 30 estimated, no records Dec. 1 to Mar. 16. Diversions for irrigation above station.

Rating table, water year 1936-37 (gage height, in feet, and discharge, in second-feet)

0.6	5
.8	29
1.0	70
1.2	123
1.4	186
1.6	262
1.8	354
2.0	460
2.2	572
2.4	690
2.6	812

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	10	18				-	23	155	222	48	35	24
2	10	18				-	35	190	204	43	33	24
3	9.5	20				-	40	293	204	48	33	28
4	9.5	20				-	33	359	193	48	33	28
5	10	20				-	28	385	180	42	35	22
6	11	23				-	31	385	148	40	33	23
7	11	14				-	29	390	152	40	31	29
8	11	24				-	28	471	115	40	29	22
9	16	26				-	35	516	112	43	28	20
10	11	26				-	44	550	110	52	26	18
11	11	24				-	61	544	120	48	23	17
12	10	29				-	68	505	118	63	20	16
13	11	33				-	80	533	115	96	17	14
14	12	26				-	118	516	99	80	17	14
15	10	23				-	180	584	91	61	17	14
16	9.5	14				-	222	584	88	55	22	14
17	12	12				42	211	510	88	52	29	16
18	12	9.5				35	167	488	95	57	31	16
19	12	11				35	193	433	91	52	23	14
20	20	18				44	180	370	91	50	20	14
21	22	26				40	238	349	91	48	20	13
22	18	22				42	275	340	91	42	20	14
23	17	26				26	253	302	88	33	20	23
24	14	42				33	180	258	75	35	18	22
25	16	22				29	157	234	70	35	18	16
26	14	14				28	200	218	68	33	14	14
27	13	17				28	293	197	66	31	13	14
28	13	15				29	238	211	61	44	28	14
29	14	16				28	170	260	57	38	33	17
30	17	17				24	129	320	50	37	31	26
31	18	-				23	-	266	-	37	26	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						404.5	22	9.5	13.0	802		
November.....						628.5	42	9.5	21.0	1,250		
December.....						-	-	-	-	-		
Calendar year												
January.....						-	-	-	-	-		
February.....						-	-	-	-	-		
March 17-31.....						488	44	23	32.5	968		
April.....						3,949	293	28	132	7,830		
May.....						11,696	584	135	377	23,180		
June.....						3,331	222	60	111	6,610		
July.....						1,486	96	31	47.9	2,950		
August.....						776	35	13	25.0	1,540		
September.....						560	29	13	18.7	1,110		
Water year												

Leroux Creek near Cedaredge, Colo.

Location.— Water-stage recorder, lat. $38^{\circ}55'$, long. $107^{\circ}48'$, in sec. 16, T. 13 S., R. 93 W., 200 feet above head gate of Overland ditch and 7.2 miles northeast of Cedaredge.

Drainage area.— 43.0 square miles.

Records available.— October 1936 to September 1937.

Extremes.— Maximum discharge during year, 632 second-feet May 10 (gage height, 5.10 feet); minimum daily discharge, 4.5 second-feet Nov. 24, probably lower during period of no record.

Remarks.— Records excellent above 50 second-feet and good below except for Oct. 1-3, 18-23 (estimated) and for periods of ice effect, Nov. 3-5, 8-12, 19-30 (computed on basis of one discharge measurement and weather records), which are fair. One small diversion and several small irrigation reservoirs above station.

Rating table, water year 1936-37 except periods of ice effect (gage height, in feet, and discharge, in second-feet)

(Shifting-control method used Oct. 4 to Nov. 18, July 14-24, Aug. 16 to Sept. 30)

1.0	3.8	2.4	116
1.2	7.0	2.6	152
1.4	12.7	3.0	224
1.6	23	3.5	315
1.8	38	4.0	432
2.0	58	4.5	512
2.2	82		

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	8.0	8.2				-	8.2	84	195	47	20	21
2	8.2	8.5				-	9.8	183	130	44	23	18
3	8.6	5.4				-	9.0	206	192	44	29	16
4	8.8	6.2				-	8.2	231	165	42	25	16
5	9.0	7.4				-	8.0	242	138	41	23	15
6	9.5	9.8				-	9.0	235	121	36	22	14
7	8.5	9.8				-	9.2	240	109	37	22	14
8	8.2	7.6				-	9.8	269	111	35	22	15
9	7.5	7.4				-	10	342	112	36	17	20
10	7.5	8.0				-	13	496	105	37	16	18
11	6.8	8.5				-	18	496	107	41	26	12
12	6.5	9.0				-	18	444	107	56	19	11
13	6.5	9.5				-	21	432	96	61	20	11
14	6.3	9.8				-	35	456	88	54	16	11
15	5.9	9.8				-	55	444	81	41	13	11
16	5.9	9.0				7.0	66	440	81	32	21	11
17	6.1	9.2				7.5	60	458	82	28	36	13
18	5.9	8.8				7.0	66	442	84	33	40	10
19	5.7	9.5				7.5	72	382	72	32	29	9.0
20	5.7	6.2				7.0	76	344	77	32	24	8.2
21	5.9	6.8				7.0	120	368	72	35	19	8.5
22	8.5	6.0				7.2	145	396	70	34	16	6.3
23	9.5	5.9				7.5	125	315	69	32	19	11
24	11	4.5				9.0	90	274	66	34	21	10
25	8.5	6.0				7.5	102	247	67	34	22	8.0
26	8.2	5.8				6.8	156	231	68	26	21	7.0
27	7.2	5.6				7.8	170	235	67	24	17	6.5
28	6.3	5.7				7.8	130	246	60	22	19	6.3
29	6.3	5.8				7.2	98	262	52	19	26	8.0
30	8.0	6.0				7.2	79	267	47	19	26	16
31	9.0	-				7.8	-	233	-	19	25	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	234.0	11	5.7	7.55	464
November.....	223.7	9.8	4.5	7.46	444
December.....	-	-	-	-	-
Calendar year					
January.....	-	-	-	-	-
February.....	-	-	-	-	-
March 16-31.....	118.8	9.0	6.8	7.42	236
April.....	1,796.2	170	8.0	59.9	3,660
May.....	9,920	496	84	320	19,680
June.....	2,951	195	47	98.4	5,850
July.....	1,109	61	19	35.8	2,800
August.....	694	40	13	22.4	1,580
September.....	361.8	21	6.3	12.1	718
Water year					

Surface Creek at Cedaredge, Colo.

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

Drainage area.- 43 square miles.

Records available.- May 1917 to September 1927 and October 1933 to September 1937 in reports of Geological Survey; May 1917 to September 1937 in reports of State Engineer.

Average discharge.- 20 years, 28.7 second-feet.

Extremes.- Maximum discharge during year, 650 second-feet May 10 (gage height, 1.90 feet); practically no flow at times during winter.

1917-37: Maximum discharge, 715 second-feet May 24, 1920 (gage height, 1.95 feet); practically no flow at times during winters.

Remarks.- Records good except those for period of ice effect, Oct. 27 to Feb. 28, which are estimated on basis of three discharge measurements and weather records and are fair. Flow regulated by numerous reservoirs. Water is brought into this drainage basin from adjacent streams. Diversions for irrigation above station.

Rating table, water year 1936-37 except period of ice effect (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Nov. 22 and July 24 to Sept. 30)

0	0	1.0	104
.2	5.6	1.2	160
.4	17	1.4	262
.6	38	1.6	400
.8	68	1.8	585

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5.6					2.2	2.5	54	85	44	11	26
2	5.6					2.2	2.5	83	80	36	11	19
3	5.2					1.8	1.8	89	35	33	13	18
4	5.2					2.9	1.3	102	87	31	14	12
5	4.8					3.6	1.8	85	82	28	15	12
6	6.6					2.9	3.2	75	65	34	16	11
7	9.6					2.9	3.6	76	52	44	16	11
8	9.6					3.2	4.4	85	44	58	14	15
9	8.6					2.9	4.8	216	60	65	13	16
10	8.6					2.2	5.2	456	75	46	16	14
11	7.6					1.8	6.6	365	73	48	17	14
12	6.6					1.8	6.1	379	75	64	14	13
13	5.6					1.8	9.1	416	75	56	11	13
14	5.6					1.8	14	303	71	42	18	15
15	5.6					2.2	32	303	71	37	20	16
16	6.6					2.2	50	310	65	37	19	19
17	7.1			*.9		2.2	34	303	65	36	28	19
18	6.1					2.2	30	191	70	33	31	16
19	5.2					2.2	42	147	70	31	30	14
20	5.2					2.2	48	126	66	44	36	13
21	6.1					1.8	66	121	70	53	34	12
22	8.1	*2.9				2.2	70	109	60	64	32	13
23	7.6					2.2	52	98	53	66	28	17
24	5.6					2.2	46	85	58	27	28	14
25	6.6				*3.0	1.8	48	71	64	19	32	13
26	6.6					1.8	68	75	66	14	37	11
27	5.6					1.8	75	89	60	11	33	8.6
28	5.6					1.8	64	102	53	16	28	8.6
29	6.6					1.8	50	114	53	24	22	10
30	6.8					3.2	40	106	54	24	28	11
31	7.0					3.2	-	94	-	23	34	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	202.8	9.6	4.8	6.54	402
November.....	105.0	-	-	3.5	208
December.....	40.3	-	-	1.3	80
Calendar year 1936.....	7,667.6	143	-	20.9	15,210
January.....	46.5	-	-	1.5	92
February.....	61.6	-	-	2.2	122
March.....	71.0	3.6	1.8	2.29	141
April.....	881.9	75	1.3	29.4	1,750
May.....	5,228	456	54	169	10,370
June.....	2,007	87	44	66.9	3,980
July.....	1,188	66	11	38.3	2,560
August.....	699	37	11	22.5	1,390
September.....	424.2	26	8.6	14.1	841
Water year 1936-37.....	10,955.3	456	-	30.0	21,740

*Discharge measurement.

Uncompangre River at Colona, Colo.

Location.- Water-stage recorder, lat. 38°19'50", long. 107°46'40", in NW¼ sec. 17, T. 47 N., R. 8 W., a quarter of a mile east of Colona. Prior to Aug. 28, 1937, at site 600 feet upstream.

Drainage area.→ 437 square miles.

Records available.- March 1935 to September 1937. April 1903 to June 1906 and April 1917 to November 1934 at site 3 miles upstream; records practically equivalent.

Extremes.- Maximum discharge during year, 2,240 second-feet Aug. 28 (gage height, 4.50 feet); minimum daily discharge, 50 second-feet Sept. 28.
1917-37: Maximum discharge, 4,080 second-feet June 13, 14, 1921; minimum, 16 second-feet Sept. 3, 1918.

Remarks.- Records good except those for period of ice effect, Dec. 3 to Feb. 28, which were computed on basis of two discharge measurements and weather records and are fair. Gage heights and results of most of discharge measurements furnished by Uncompangre Valley Water Users' Association. Diversions for irrigation above station.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	62	113	68	80	68	97	102	419	519	424	91	219
2	82	106	87	77	64	95	120	466	529	415	86	115
3	61	95	66	73	65	93	111	544	574	394	93	236
4	60	91	67	70	68	82	109	549	500	343	95	232
5	62	113	68	73	70	91	98	708	410	298	124	174
6	86	115	69	76	72	109	111	654	328	298	261	166
7	79	109	70	74	74	134	113	638	305	331	202	186
8	84	98	70	72	72	156	115	737	359	313	153	170
9	84	98	71	74	68	158	124	1,100	343	298	129	164
10	81	95	71	62	66	158	134	908	343	284	122	154
11	78	89	71	62	68	161	158	850	500	457	98	146
12	79	86	71	62	70	151	162	856	524	453	84	136
13	78	86	72	62	72	126	202	987	524	397	73	129
14	78	88	72	63	75	120	281	1,090	539	367	84	118
15	78	89	72	65	76	106	371	1,160	428	324	82	115
16	78	89	76	67	76	104	465	1,130	495	284	88	118
17	76	84	84	70	74	109	438	1,080	638	254	129	96
18	76	84	92	72	74	102	359	1,090	681	226	141	78
19	76	78	87	72	76	93	442	928	616	205	95	70
20	102	78	84	67	73	76	442	818	554	174	95	78
21	115	76	83	64	72	89	559	837	621	129	89	75
22	113	76	83	60	74	109	692	895	595	104	79	78
23	111	66	82	61	76	109	549	804	590	79	74	87
24	111	67	78	62	80	88	442	676	529	68	76	84
25	109	68	76	64	80	91	397	461	534	88	81	78
26	109	70	73	62	81	91	519	424	564	88	82	70
27	104	70	74	63	82	91	574	500	476	98	79	53
28	102	70	75	64	80	88	476	627	442	115	462	50
29	100	68	76	66	-	95	384	811	476	153	215	90
30	109	67	76	68	-	88	355	725	466	117	258	390
31	113	-	78	70	-	91	-	580	-	106	182	-
Month												
	Second-foot-days					Maximum		Minimum		Mean		Run-off in acre-feet
October.....	2,716					115		60		87.6		5,390
November.....	2,577					115		56		86.9		5,110
December.....	2,522					92		66		74.9		4,610
Calendar year 1936.....	70,537					873		-		193		159,900
January.....	2,097					80		60		67.6		4,160
February.....	2,046					82		64		73.1		4,060
March.....	3,349					161		76		108		6,640
April.....	9,442					692		98		315		18,730
May.....	24,052					1,160		419		776		47,710
June.....	15,002					681		305		500		29,760
July.....	7,654					457		68		247		15,180
August.....	4,002					462		73		129		7,940
September.....	3,957					390		50		132		7,850
Water year 1936-37.....	79,216					1,160		50		217		157,100

Kahnah Creek near Whitewater, Colo.

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

Drainage area.- 55.0 square miles.

Records available.- October 1917 to September 1921 and October 1933 to September 1937 in reports of Geological Survey; October 1917 to September 1921 and August 1922 to September 1937 in reports of State engineer.

Average discharge (combined flow).- 19 years, 41.1 second-feet.

Extremes (combined flow).- Maximum discharge during year, 734 second-feet; minimum not determined, occurred during winter.

1917-21, 1922-37: Maximum discharge, 1,630 second-feet June 6, 1921; minimum not determined, occurred during winter.

Remarks.- Records excellent except those for period of ice effect, Nov. 26 to Mar. 13, which were computed on basis of two discharge measurements and weather records and are fair. Diversion by Grand Junction pipe line added to monthly discharge table to give total flow of stream. Combined-flow records excellent. Regulation by a few small reservoirs above station.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.9	2.3				0.7	5.1	13	92	26	36	6.5
2	1.4	2.3				.7	6.1	24	85	22	31	6.5
3	1.2	2.1				.7	2.1	34	83	19	22	4.6
4	1.4	2.8				1.1	1.9	50	78	28	21	4.2
5	1.6	3.7				1.2	1.9	71	67	29	15	2.8
6	1.4	3.7				1.2	2.8	92	69	24	15	3.2
7	1.2	3.2				1.4	2.1	97	58	24	29	5.6
8	1.2	2.3				.8	1.2	127	50	24	28	6.1
9	1.0	3.2				.9	1.4	165	48	36	34	7.0
10	1.0	5.6				.9	3.2	217	46	38	31	6.5
11	1.0	3.7				1.3	5.1	221	42	44	29	6.1
12	1.2	4.6				1.3	4.6	276	40	65	24	5.1
13	1.2	4.2				1.4	9.4	304	38	52	24	3.7
14	1.0	3.2				1.4	12	340	36	29	21	4.2
15	.8	3.2				1.4	22	425	33	22	18	4.2
16	.8	4.2				2.6	24	270	31	18	21	4.6
17	.8	4.2		*0.5		3.7	13	322	29	15	31	3.7
18	.5	4.2				2.8	7.0	281	29	17	34	2.3
19	1.4	4.2				3.7	13	245	29	15	31	2.3
20	3.7	3.7				1.6	14	201	26	11	26	3.7
21	3.2	4.6				1.4	24	197	22	6.5	22	1.4
22	2.1	4.2				2.1	29	177	21	8.2	19	1.4
23	1.9	4.2				1.6	22	158	19	15	17	2.8
24	1.6	4.6				1.0	15	140	26	17	15	2.8
25	1.9	4.2			*0.7	1.2	14	119	31	19	22	1.9
26	1.9	4.0				1.2	22	113	31	21	21	5.6
27	1.6	4.2				.8	33	122	26	22	14	4.6
28	1.6	4.4				.5	22	124	21	29	14	4.2
29	1.6	4.0				1.2	17	137	19	33	22	5.1
30	2.1	3.9				1.2	13	137	26	42	21	4.6
31	2.3	-				1.2	-	108	-	38	17	-

Month	Observed				Run-off in acre-feet	Diverted by Grand Junction pipe line (acre-feet)	Adjusted for diversion		
	Second- foot days	Discharge in second-feet					Run-off in acre-feet	Run-off in acre-feet	Mean (second- foot)
		Maximum	Minimum	Mean					
October.....	47.5	3.7	0.5	1.53	94	468	562	9.15	
November.....	112.9	5.6	2.1	3.76	224	305	529	8.89	
December.....	71.3	-	-	2.3	141	308	449	7.31	
Calendar year 1936	8,565.2	296	-	23.4	16,980	5,040	22,010	30.3	
January.....	31.0	-	-	1.0	61	350	411	6.70	
February.....	22.4	-	-	.8	44	347	391	7.04	
March.....	44.4	3.7	.5	1.43	88	342	430	6.99	
April.....	362.9	33	1.2	12.1	720	401	1,120	18.8	
May.....	5,407	425	13	174	10,720	471	11,190	162	
June.....	1,251	92	12	41.7	2,459	456	2,940	49.4	
July.....	806.7	63	6.5	26.0	1,600	491	2,090	34.0	
August.....	725	36	14	23.4	1,440	527	1,970	32.0	
September.....	127.3	7.0	1.4	4.24	252	465	717	12.1	
Water year 1936-37	9,009.4	425	-	24.7	17,860	4,930	22,800	31.5	

*Discharge measurement.

Dolores River at Dolores, Colo.

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

Drainage area.- 508 square miles.

Records available.- June 1895 to October 1903, August 1910 to December 1912, May 1922 to September 1927 (monthly discharge), and October 1933 to September 1937 in reports of Geological Survey; June 1895 to October 1903, August 1910 to December 1912, and April 1922 to September 1937 in reports of State engineer. Records prior to December 1912 were obtained at site just below mouth of Lost Canyon Creek and are not strictly equivalent.

Average discharge.- 16 years (1921-37), 481 second-feet.

Extremes.- Maximum discharge during year, 3,880 second-feet May 13 (gage height, 6.35 feet); minimum, 35 second-feet Feb. 25.

1895-1903, 1910-12, 1922-37: Maximum discharge, 10,000 second-feet Oct. 5, 1911 (gage height, 10.2 feet, former site and datum); minimum daily discharge, 8 second-feet Aug. 16, 1896.

Remarks.- Records excellent except those for period of ice effect, Dec. 3 to Mar. 30, which were computed on basis of three discharge measurements and records for Animas River at Durango and are good. Diversions for irrigation above station.

Rating table, water year 1936-37 except periods of ice effect (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Oct. 1-29, July 29 to Sept. 30)

1.6	43	2.6	193	4.5	1,410
1.8	58	2.8	251	5.0	2,010
2.0	80	3.0	322	5.5	2,670
2.2	106	3.5	561	6.0	3,370
2.4	145	4.0	915	6.5	4,100

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	88	120	76	54	44	38	130	1,660	2,110	636	215	229
2	85	110	61	52	46	40	186	2,230	2,040	611	193	188
3	81	75	58	56	43	43	198	2,770	2,000	505	209	193
4	80	73	63	62	43	42	180	3,170	1,910	440	173	150
5	78	108	70	62	44	43	190	3,240	1,690	485	186	119
6	85	95	56	64	45	47	238	1,730	1,500	416	236	115
7	81	93	58	64	40	51	217	2,610	1,410	430	201	134
8	76	84	60	64	40	56	239	3,080	1,490	505	156	122
9	72	78	54	64	41	62	350	3,410	1,510	435	137	108
10	70	80	48	58	42	68	490	3,450	1,440	544	120	93
11	67	79	46	60	42	74	676	3,550	1,540	724	110	79
12	53	75	48	55	42	82	875	3,410	1,600	932	95	76
13	50	80	49	62	40	88	1,060	3,430	1,490	812	80	72
14	59	86	53	56	41	80	1,330	3,520	1,430	636	81	68
15	60	86	57	56	43	86	1,870	3,520	1,260	505	86	66
16	60	88	62	60	42	92	2,310	3,400	1,260	430	90	61
17	60	90	68	57	40	100	2,170	3,440	1,330	388	110	59
18	60	90	64	57	39	105	1,960	3,450	1,370	342	102	57
19	63	85	60	60	38	105	2,010	3,150	1,290	300	95	58
20	99	80	60	47	37	105	1,930	2,840	1,210	261	84	54
21	102	80	62	54	37	110	2,460	2,820	1,200	232	78	52
22	93	79	64	60	38	120	2,850	2,840	1,180	206	75	52
23	82	73	61	60	37	130	2,370	2,740	1,060	193	78	56
24	81	60	59	54	36	130	1,710	2,590	932	188	74	62
25	75	70	62	52	35	130	1,620	2,230	859	188	70	59
26	74	75	64	49	36	125	2,100	1,930	932	201	72	54
27	75	78	59	55	38	120	2,540	1,840	851	215	88	49
28	67	73	56	49	38	120	1,940	2,050	732	311	91	49
29	67	82	64	50	-	115	1,500	2,500	676	315	91	63
30	93	61	58	47	-	115	1,330	2,780	649	275	87	223
31	120	-	60	48	-	120	-	2,390	-	232	137	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						2,376	120	59	76.6	4,710		
November.....						2,498	120	61	82.9	4,930		
December.....						1,639	76	46	59.3	3,650		
Calendar year 1936.....						147,303	2,470	-	402	292,200		
January.....						1,749	64	47	56.4	3,470		
February.....						1,127	46	35	40.2	2,240		
March.....						2,742	130	38	88.5	5,440		
April.....						39,027	2,850	130	1,301	77,410		
May.....						98,770	3,550	1,660	2,864	176,100		
June.....						39,951	2,110	649	1,532	79,240		
July.....						12,893	932	188	416	25,570		
August.....						3,705	236	70	120	7,350		
September.....						2,820	229	49	94.0	5,590		
Water year 1936-37.....						199,485	3,550	35	547	395,700		

Dolores River at Gateway, Colo.

Location.- Water-stage recorder, lat. 38°41', long. 108°58', in SW¼ sec. 15, T. 51 N., R. 19 W., 0.3 mile southwest of Gateway, 0.3 miles below mouth of West Creek, and 8 miles above Colorado-Utah State line. Zero of gage is 4,547.44 feet above mean sea level.

Drainage area.- 4,350 square miles.

Records available.- March to September 1937.

Extremes.- Maximum discharge during period, 8,180 second-feet Apr. 17 (gage height, 10.28 feet), from rating curve extended above 5,000 second-feet; minimum daily discharge, 96 second-feet Sept. 18, 28.

Remarks.- Records good for Mar. 1 to Apr. 30 and excellent for May 1 to Sept. 30; those for Mar. 1 and 2 estimated. Diversions for irrigation above and below station. Montezuma Irrigation District diverts water from basin for irrigation and storage for irrigation just below station at Dolores.

Rating table, Mar. 1 to Sept. 30, 1937 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Mar. 3 to Apr. 15)

0.8	95	2.2	390	4.0	1,140	7.5	4,680
1.0	114	2.4	450	4.5	1,520	8.0	5,280
1.2	144	2.6	515	5.0	1,960	8.5	5,880
1.4	186	2.8	585	5.5	2,450	9.0	6,520
1.6	230	3.0	660	6.0	2,970	9.5	7,170
1.8	280	3.3	790	6.5	3,520	10.0	7,820
2.0	330	3.6	925	7.0	4,080	10.3	8,210

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1						280	366	3,730	2,390	588	408	508
2						270	369	3,860	1,880	490	366	613
3						275	414	4,520	1,680	468	318	494
4						252	536	5,050	1,720	438	285	363
5						260	571	5,620	1,750	414	252	360
6						242	498	5,760	1,580	396	322	342
7						260	536	5,200	1,390	387	582	310
8						285	592	5,000	1,280	375	532	260
9						298	622	5,210	1,220	1,110	342	206
10						295	624	5,520	1,220	754	232	177
11						298	1,100	5,510	1,210	732	184	158
12						282	2,010	5,480	1,240	1,500	179	148
13						328	2,510	5,360	1,290	1,960	188	138
14						372	3,340	5,300	1,300	1,040	168	121
15						402	4,390	5,240	1,170	756	160	112
16						405	6,400	5,200	1,060	644	193	106
17						450	7,740	5,090	1,050	574	201	98
18						477	7,550	4,870	1,080	501	322	96
19						564	6,940	4,730	1,130	429	354	103
20						546	7,340	4,330	1,120	366	282	100
21						465	7,500	3,820	1,070	302	206	99
22						438	7,780	3,440	1,050	252	173	99
23						429	7,790	3,320	990	219	156	158
24						450	6,650	3,190	950	195	152	204
25						484	5,460	3,040	848	173	139	117
26						450	5,080	2,690	822	162	133	104
27						447	5,560	2,200	763	158	141	99
28						417	5,740	2,170	648	290	171	96
29						384	5,050	2,160	628	226	390	148
30						360	4,240	2,330	592	414	1,050	285
31						357	-	2,820	-	494	975	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....												
November.....												
December.....												
Calendar year												
January.....						-	-	-	-	-		
February.....						-	-	-	-	-		
March.....						11,522	564	242	372	22,850		
April.....						115,178	7,790	366	3,839	228,500		
May.....						131,760	5,760	2,160	4,250	261,300		
June.....						36,101	2,390	592	1,203	71,610		
July.....						16,797	1,960	158	542	33,300		
August.....						9,536	1,030	133	308	18,910		
September.....						6,224	613	96	207	12,350		
The period										648,800		

GREEN RIVER BASIN

Green River at Warren Bridge, near Daniel, Wyo.

Location.- Water-stage recorder, lat. 43°00', long. 110°07', in sec. 8, T. 35 N., R. 111 W., at Warren Bridge, 12 miles north of Daniel. Zero of gage is 7,468.09 feet above mean sea level.

Drainage area.- 468 square miles.

Records available.- October 1931 to September 1937.

Extremes.- Maximum discharge during year, 2,650 second-feet June 24 (gage height, 4.52 feet); minimum occurred during winter.
1931-37: Maximum discharge, 3,260 second-feet June 26, 1932 (gage height, 5.08 feet); minimum occurred during winter.

Remarks.- Records good except those for period of missing gage heights, Aug. 21-28, which were computed on basis of records for New Fork near Boulder and are fair. No records Oct. 1 to May 10. Natural regulation by lakes in Green River Basin.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1								-	1,380	1,430	755	248
2								-	1,180	1,460	779	238
3								-	1,100	1,430	739	241
4								-	1,210	1,360	627	256
5								-	1,210	1,280	523	260
6								-	1,060	1,260	483	264
7								-	892	1,420	452	256
8								-	811	1,530	422	248
9								-	827	1,570	400	248
10		*183						-	827	1,710	381	264
11								819	779	1,480	374	264
12								819	859	1,350	355	248
13								875	918	1,310	349	234
14								918	952	1,200	355	221
15						*90		1,180	1,000	1,100	374	211
16								1,240	1,050	1,040	394	209
17								1,260	1,310	892	400	209
18								1,370	1,550	819	381	206
19								1,520	1,610	747	342	206
20								1,480	1,510	699	326	206
21								1,300	1,680	667	310	211
22								1,130	1,960	651	298	217
23								1,230	2,320	643	296	221
24								1,420	2,580	627	285	224
25								1,580	2,460	603	270	211
26								1,690	1,890	595	258	204
27								1,760	1,530	587	248	196
28								1,840	1,360	603	256	188
29								1,970	1,350	611	248	183
30								1,950	1,380	603	264	181
31								1,700	-	675	260	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....												
November.....												
December.....												
Calendar year												
January.....												
February.....												
March.....												
April.....												
May 11-31.....												
June.....						29,051	1,970	819	1,383	57,620		
July.....						40,545	2,580	779	1,352	80,420		
August.....						31,952	1,710	587	1,031	63,380		
September.....						12,184	779	256	393	24,170		
The period.....						6,773	264	181	226	13,430		
										239,000		

*Discharge measurement.

Green River at Green River, Wyo.

Location.- Chain gage, lat. $41^{\circ}32'$, long. $109^{\circ}29'$, in sec. 22, T. 18 N., R. 107 W., 100 feet below railroad bridge at Green River. Zero of gage is 6,071.07 feet above mean sea level (general adjustment of 1929).

Drainage area.- 7,870 square miles.

Records available.- May 1895 to October 1906 and March 1915 to September 1937.

Average discharge.- 32 years (1895-99, 1900-1906, 1915-37), 1,893 second-feet.

Extremes.- Maximum discharge during year, 10,600 second-feet July 13 (gage height, 4.50 feet); minimum daily discharge, 325 second-feet Feb. 18.

1895-1906, 1915-37: Maximum discharge observed, 22,200 second-feet June 19, 1918 (gage height, 12.3 feet); minimum discharge observed, 160 second-feet Nov. 17, 1899.

Remarks.- Records good except those for periods of ice effect, Nov. 4-8, 9-13, Nov. 23 to Mar. 20, Mar. 30 to Apr. 8 (computed on basis of records for station near Linwood, Utah, and two discharge measurements), and those for period of backwater effect, July 14 to Aug. 4 (computed on basis of records for station near Linwood, Utah), all of which are fair. Diversions for irrigation above station. Gage-height records collected in cooperation with U. S. Weather Bureau.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	676	687	440	430	350	400	1,100	1,600	6,750	3,720	1,730	710
2	665	687	450	410	350	405	1,420	1,730	5,770	2,950	1,830	690
3	665	654	450	390	350	410	1,980	1,880	4,810	2,480	1,800	690
4	665	620	450	375	350	405	2,250	2,180	4,120	2,400	1,780	730
5	665	600	450	360	355	400	2,650	2,450	3,800	2,400	1,730	690
6	665	605	460	345	360	410	2,300	2,520	3,850	2,280	1,610	652
7	654	619	490	340	350	410	2,240	2,750	3,820	2,900	1,530	652
8	659	717	500	350	345	415	2,160	3,000	3,480	2,760	1,430	614
9	659	650	495	380	355	445	1,970	2,800	3,050	4,120	1,320	576
10	665	600	465	390	350	460	2,260	2,680	2,800	6,420	1,280	538
11	643	600	435	390	330	480	4,020	2,800	3,020	6,020	1,190	614
12	643	650	430	360	335	540	5,380	2,690	3,000	7,230	1,140	576
13	634	660	440	360	350	590	4,100	2,720	2,980	9,950	1,100	614
14	643	670	440	360	355	620	3,400	2,550	3,280	8,080	1,040	652
15	634	693	440	360	335	670	4,580	2,650	3,300	5,850	1,020	614
16	624	659	450	362	325	700	6,420	2,920	3,600	4,710	1,020	614
17	643	698	450	345	330	720	6,860	3,500	3,750	4,050	995	576
18	634	682	435	335	345	770	3,900	4,000	3,400	3,800	1,020	576
19	643	634	430	345	360	790	3,050	4,450	3,550	2,950	1,100	557
20	654	624	430	355	355	810	2,680	5,280	4,050	2,550	1,060	538
21	770	624	430	345	355	830	2,450	6,020	4,100	2,360	1,020	538
22	966	564	430	335	360	690	2,500	5,540	4,050	2,280	932	538
23	825	570	445	330	360	464	2,900	4,600	4,550	2,040	932	538
24	757	560	450	340	380	911	2,750	4,350	4,990	1,880	890	538
25	724	520	450	345	390	995	2,260	4,730	6,020	1,800	830	500
26	711	505	450	350	395	850	1,970	5,590	7,530	1,780	770	576
27	698	480	450	350	395	710	1,860	6,020	7,030	1,800	730	557
28	698	470	445	350	400	557	2,040	5,860	5,970	1,780	690	576
29	698	465	430	350	-	770	2,210	5,700	4,810	1,760	730	538
30	687	460	430	345	-	810	2,020	5,830	4,000	1,660	690	538
31	687	-	430	355	-	820	-	6,640	-	1,680	690	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	21,254	966	684	686	42,160
November.....	18,227	717	460	608	36,150
December.....	13,870	500	430	447	27,510
Calendar year 1936.....	2,042,011	28,800	430	5,579	4,050,000
January.....	11,157	430	330	360	22,130
February.....	9,930	400	325	355	19,700
March.....	19,257	995	400	621	36,200
April.....	87,720	6,860	1,100	2,924	174,000
May.....	118,400	6,640	1,730	3,819	234,800
June.....	129,330	7,530	2,900	4,311	256,500
July.....	103,240	9,950	1,560	3,492	214,700
August.....	35,599	1,830	690	1,148	70,610
September.....	17,910	730	500	597	35,520
Water year 1936-37.....	590,894	9,950	325	1,619	1,172,000

GREEN RIVER BASIN

Green River near Linwood, Utah

Location.— Water-stage recorder, lat. 40°58', long. 109°35', in SW¼ sec. 29, T. 3 N., R. 21 E., 2 miles south of Wyoming-Utah State line and 5 miles southeast of Linwood. Henrys Fork enters a quarter of a mile downstream. Zero of gage is 5,844.64 feet above mean sea level.

Drainage area.— 14,300 square miles.

Records available.— October 1928 to September 1937.

Extremes.— Maximum discharge during year, 10,300 second-feet July 13 (gage height, 8.30 feet); minimum daily discharge, 330 second-feet Feb. 10, 16.
1928-37: Maximum discharge, 15,200 second-feet June 4, 1936 (gage height, 10.11 feet); minimum, 196 second-feet Nov. 27, 1934 (gage height, -0.10 foot).

Remarks.— Records good except those for period of ice effect, Nov. 28 to Mar. 18, which were computed on basis of two discharge measurements, gage heights, and weather records and are fair. Diversions for irrigation above station.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	636	828	460	440	350	410	1,730	3,180	7,420	3,720	1,840	629
2	629	854	480	430	350	420	2,120	2,790	7,600	3,410	1,830	636
3	636	874	470	400	360	420	2,350	2,580	6,820	3,100	1,830	629
4	629	752	480	380	360	410	2,760	2,660	5,860	2,800	1,820	629
5	636	608	460	360	360	410	3,050	3,300	5,280	2,650	1,820	643
6	643	636	500	350	370	420	2,650	3,900	4,940	2,550	1,800	636
7	629	700	550	340	370	420	2,480	4,370	4,670	2,460	1,780	622
8	629	760	550	350	360	430	2,120	4,830	4,750	3,240	1,720	650
9	622	820	525	390	350	460	1,900	4,900	4,480	4,190	1,580	629
10	615	820	500	400	350	480	1,970	4,880	4,190	4,700	1,470	602
11	615	738	460	400	340	540	2,140	5,300	4,100	5,140	1,380	596
12	602	722	430	390	350	640	3,360	5,240	4,140	5,920	1,290	582
13	589	745	450	370	360	890	4,370	4,960	4,030	9,800	1,220	589
14	582	745	450	360	370	830	4,380	4,770	3,950	8,270	1,130	582
15	596	738	450	360	350	800	4,210	4,560	4,160	6,430	1,050	570
16	608	752	460	350	330	1,050	5,410	4,780	4,180	5,300	970	570
17	608	794	460	340	340	1,400	8,160	5,140	4,450	4,530	892	563
18	608	802	450	350	360	1,450	7,470	5,660	4,530	3,770	820	544
19	608	802	430	360	370	1,750	5,010	6,010	4,240	3,460	820	544
20	678	752	430	360	360	1,480	3,780	6,380	4,380	3,080	828	532
21	902	738	430	350	360	1,590	3,410	6,910	4,740	2,860	828	526
22	1,020	708	450	350	370	1,570	3,350	7,160	4,720	2,630	811	520
23	1,180	664	450	340	390	1,590	3,440	6,480	4,700	2,370	794	520
24	1,140	671	460	350	390	1,330	3,940	5,790	5,180	2,180	768	508
25	1,030	657	460	350	390	1,130	4,000	5,580	5,410	1,990	752	502
26	950	602	460	360	390	980	3,350	5,890	5,910	1,880	730	496
27	902	570	450	360	400	1,150	2,930	6,640	6,040	1,840	708	502
28	864	525	470	360	400	1,170	2,700	6,060	5,360	1,830	685	508
29	845	525	430	350	-	1,310	2,830	6,640	4,770	1,880	664	502
30	828	460	430	350	-	1,340	3,500	6,430	4,180	1,830	678	508
31	828	-	430	370	-	1,370	-	6,770	-	1,840	650	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						22,887	1,180	582	748	45,400		
November.....						21,362	874	460	712	42,370		
December.....						14,365	550	430	463	28,490		
Calendar year 1936.....						884,292	14,700	227	2,416	1,754,000		
January.....						11,380	440	340	367	22,570		
February.....						10,180	400	330	364	20,190		
March.....						29,640	1,750	410	956	58,790		
April.....						104,870	8,160	1,730	3,489	207,600		
May.....						161,330	7,160	2,580	5,204	320,000		
June.....						149,180	7,600	3,950	4,973	295,900		
July.....						111,620	9,800	1,830	3,601	221,400		
August.....						35,968	1,840	650	1,160	71,320		
September.....						17,069	650	496	569	33,860		
Water year 1936-37.....						689,641	9,800	330	1,889	1,368,000		

Green River at Green River, Utah

Location.- Water-stage recorder, lat. 39°00', long. 110°09', 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 1937. December 1910 to June 1924 at Little Valley, 7 miles downstream; records practically equivalent.

Average discharge.- 37 years (1894-99, 1905-37), 7,212 second-feet.

Extremes.- Maximum discharge during year, 27,500 second-feet May 20 (gage height, 11.30 feet); minimum observed, 790 second-feet Dec. 10 (gage height, 5.16 feet).
1894-99, 1905-37: Maximum discharge, 88,800 second-feet May 29, 1897 (gage height, about 16.5 feet, present datum); minimum, 255 second-feet Nov. 28, 1931 (gage height, 4.17 feet); minimum gage height, 4.08 feet Aug. 1 and Dec. 5, 1934.

Remarks.- Records excellent except those for periods of ice effect, Dec. 11-15, Jan. 1 to Mar. 5, which were computed on basis of 10 discharge measurements, weather records, and records for stations on Colorado River and are fair. Diversions for irrigation above station.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,560	2,800	1,720	-	-	2,100	4,010	8,160	25,000	10,700	4,560	5,700
2	1,560	2,690	1,700	-	-	2,200	4,010	8,600	23,800	9,970	4,710	4,560
3	1,560	2,580	1,680	-	*1,420	2,220	4,140	8,600	24,400	8,600	3,750	4,420
4	1,550	2,480	1,560	-	*1,330	2,300	4,280	9,160	25,000	7,720	3,380	4,560
5	1,550	2,290	1,370	-	-	2,200	4,560	7,720	23,800	7,080	3,260	3,500
6	1,560	2,220	1,230	-	-	2,160	4,860	7,500	22,000	6,260	3,140	3,140
7	1,580	2,180	1,140	*1,140	-	2,040	5,350	8,380	20,800	6,070	3,140	2,920
8	1,660	2,160	992	-	-	2,110	6,070	10,400	19,600	6,070	3,260	2,800
9	1,690	2,190	914	-	-	2,140	6,240	14,300	17,200	6,070	3,260	3,380
10	1,700	2,130	970	-	*1,650	2,240	5,890	17,200	16,000	7,390	2,920	2,690
11	1,720	2,110	1,000	-	-	2,390	5,350	19,600	14,300	8,600	2,690	2,330
12	1,720	2,140	1,040	-	-	2,520	5,020	22,000	13,200	9,280	2,580	2,260
13	1,690	2,130	1,050	-	*1,780	2,800	5,020	23,200	12,400	12,000	2,370	2,130
14	1,660	2,130	1,080	-	-	3,380	5,020	23,800	12,000	16,600	2,290	1,970
15	1,660	2,110	1,060	-	-	3,620	5,180	22,600	12,000	18,400	2,180	1,850
16	1,670	2,070	1,050	-	-	4,280	7,940	23,200	12,900	20,200	2,070	1,730
17	1,660	2,050	1,030	-	-	5,520	9,060	24,400	11,400	17,800	2,040	1,690
18	1,640	2,050	1,200	-	*1,710	6,870	9,740	25,000	11,200	14,800	2,000	1,670
19	1,850	2,140	1,380	-	-	7,940	14,300	25,600	11,200	12,200	2,050	1,600
20	1,850	2,260	1,580	-	-	11,700	16,000	26,200	11,400	10,200	1,900	1,520
21	2,040	2,280	1,580	-	-	10,200	13,000	26,800	11,700	8,830	2,040	1,460
22	2,140	2,280	1,800	-	*1,700	9,060	9,970	26,200	11,700	8,160	1,960	1,420
23	2,500	2,280	1,640	-	-	8,160	9,060	25,600	11,490	7,080	1,750	1,590
24	2,390	2,280	1,480	-	-	7,290	8,830	24,400	11,700	6,070	1,680	2,050
25	2,200	2,220	1,460	-	*1,760	6,070	8,830	23,200	11,700	5,520	1,730	2,180
26	2,280	2,140	1,360	-	-	5,700	9,510	22,000	11,400	5,020	1,730	2,240
27	2,430	2,040	1,330	-	-	5,350	9,740	20,200	11,000	4,710	1,720	1,880
28	2,520	1,880	1,430	-	-	4,710	9,510	19,000	11,200	4,420	1,770	1,700
29	2,580	1,780	1,460	-	-	4,420	8,830	19,000	11,200	4,260	2,200	1,690
30	2,580	1,800	1,370	-	-	4,140	8,160	19,600	11,200	4,560	2,110	1,620
31	2,800	-	1,300	-	-	4,010	-	22,600	-	4,280	4,280	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						59,570	2,800	1,550	1,922	118,200		
November.....						65,820	2,800	1,780	2,194	130,600		
December.....						40,836	1,800	914	1,517	81,000		
Calendar year 1936.....						2,154,886	28,800	900	5,888	4,274,000		
January.....						31,000	-	-	1,000	61,490		
February.....						47,600	-	-	1,700	94,410		
March.....						141,840	11,700	2,040	4,575	281,300		
April.....						227,490	16,000	4,010	7,583	451,200		
May.....						583,220	26,800	7,500	16,810	1,157,000		
June.....						453,100	25,000	11,000	15,100	898,700		
July.....						278,640	20,700	4,280	8,995	553,100		
August.....						80,410	4,710	1,690	2,594	156,500		
September.....						74,240	5,700	1,420	2,475	147,500		
Water year 1936-37.....						2,083,966	26,800	-	5,709	4,134,000		

*Discharge measurement.

GREEN RIVER BASIN

Horse Creek near Daniel, Wyo.

Location.— Water-stage recorder, lat. 42°56', long. 110°12', in sec. 10, T. 34 N., R. 112 W., 12 miles northwest of Daniel. Zero of gage is 7,349.88 feet above mean sea level (general adjustment of 1929).

Drainage area.— 124 square miles.

Records available.— October 1931 to September 1937.

Extremes.— Maximum discharge during year, 635 second-feet May 28; maximum gage height, 2.72 feet May 19 (tie jam); minimum daily discharge, 9.8 second-feet Sept. 10-21, possibly less during winter.

1931-37: Maximum discharge, 1,670 second-feet May 31, 1936 (gage height, 3.53 feet); minimum daily discharge, 1.7 second-feet July 16, 19, 1934.

Remarks.— Records excellent for Oct. 1 to Nov. 11 and June 1 to Sept. 30; good for Apr. 23 to May 31; those for Nov. 2 estimated. No records Nov. 12 to Apr. 22. Diversions for irrigation above station.

Rating tables, water year 1936-37 except periods of ice effect (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Nov. 11				May 21 to Sept. 30			
1.0	9	1.4	88	0.2	7.0	0.8	44
1.1	18	1.5	126	.3	10.5	1.0	70
1.2	34	1.6	166	.4	15	1.2	110
1.3	56	1.7	208	.5	20	1.4	166
				.6	27	2.1	588

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	14	20					-	170	249	32	31	11
2	14	19					-	158	200	24	21	11
3	14	18					-	174	204	17	17	12
4	14	18					-	187	183	16	16	10
5	16	18					-	183	166	16	13	10
6	17	18					-	204	145	18	12	10
7	17	18					-	200	128	35	12	10
8	17	18					-	204	139	40	10	10
9	16	18					-	243	151	46	10	10
10	15	20					-	257	148	66	13	9.8
11	17	20					-	280	151	39	16	9.8
12	17	-					-	239	176	30	16	9.8
13	17	-					-	270	169	25	16	9.8
14	17	-					-	256	193	24	15	9.8
15	17	-					-	333	260	29	16	9.8
16	17	-					-	343	226	20	16	9.8
17	18	-					-	354	249	16	16	9.8
18	18	-					-	400	193	16	15	9.8
19	21	-					-	377	169	16	14	9.8
20	31	-					-	212	154	14	13	9.8
21	28	-					-	276	176	13	12	9.8
22	24	-					-	266	180	13	12	10
23	21	-					-	96	349	154	13	10
24	21	-					-	96	421	118	13	10
25	20	-					-	146	429	97	13	10
26	21	-					-	179	466	83	15	10
27	21	-					-	150	482	69	18	10
28	20	-					-	107	535	57	15	10
29	18	-					-	107	520	41	18	10
30	18	-					-	126	349	39	18	10
31	18	-					-	304	-	43	10	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						574	31	14	18.5	1,140		
November 1-11.....						205	20	18	18.6	407		
December.....						-	-	-	-	-		
Calendar year												
January.....						-	-	-	-	-		
February.....						-	-	-	-	-		
March.....						-	-	-	-	-		
April 23-30.....						1,007	179	96	126	2,000		
May.....						9,451	535	158	305	18,750		
June.....						4,637	260	39	156	9,260		
July.....						731	66	13	23.6	1,450		
August.....						431	31	10	13.9	855		
September.....						301.6	12	9.8	10.1	598		
Water year												

New Fork near Boulder, Wyo.

Location.— Water-stage recorder, lat. 42°45', long. 109°44', in sec. 9, T. 32 N., R. 108 W., an eighth of a mile above Boulder Creek and half a mile southwest of Boulder.

Drainage area.— 578 square miles.

Records available.— May 1915 to September 1937.

Average discharge.— 22 years, 399 second-feet.

Extremes.— Maximum discharge during year, 2,100 second-feet May 30 (gage height, 4.96 feet); minimum probably occurred during winter.
1915-37: Maximum discharge observed, 12,300 second-feet June 17, 1918 (gage height, 8.7 feet); minimum, 42 second-feet Dec. 15-17, 1915.

Remarks.— Records excellent except those for periods of ice effect, Nov. 3-6, 8, 9, and Nov. 22 to Apr. 13, which were computed on basis of two discharge measurements and weather records and are fair. Diversions for irrigation above station.

Rating table, water year 1936-37 except periods of ice effect (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Oct. 1 to Nov. 2, Nov. 7, 10-21)

1.9	102	3.0	440
2.0	119	3.3	595
2.2	157	3.7	850
2.4	208	4.0	1,070
2.6	268	4.5	1,525
2.8	350	5.0	2,150

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	124	109					116	180	1,790	556	431	139
2	121	105					118	183	1,610	612	325	139
3	117	95					112	180	1,800	639	272	132
4	119	98					118	171	1,190	634	255	130
5	116	118					126	168	1,220	590	242	124
6	114	123					119	173	1,170	474	236	135
7	110	121					125	191	1,060	656	233	135
8	109	112					135	202	942	1,140	219	130
9	109	114					145	211	928	1,460	222	130
10	109	121					160	249	935	1,360	211	116
11	117	116					158	290	822	1,200	200	116
12	109	117					170	325	871	1,120	197	117
13	105	112					190	363	950	1,040	191	117
14	104	116					211	390	1,000	1,020	188	119
15	104	117				*100	280	426	1,080	1,040	197	135
16	101	119					372	519	1,020	899	228	119
17	101	119					249	650	995	731	256	116
18	99	114					242	684	1,070	844	215	119
19	102	107					239	1,170	1,120	850	205	119
20	141	109					268	1,420	1,210	568	200	117
21	132	105					312	1,380	1,260	519	197	119
22	121	104					354	1,170	1,420	464	191	119
23	114	102					268	1,080	1,690	431	178	132
24	110	102					194	1,200	1,890	445	171	124
25	107	100					168	1,590	1,930	454	166	117
26	107	104					216	1,790	1,790	556	159	114
27	107	105					258	1,760	1,560	504	153	112
28	104	103					222	1,700	1,350	450	151	110
29	104	102					183	1,790	1,200	431	164	109
30	104	98					171	2,030	1,020	403	159	107
31	107	-					-	1,970	-	445	143	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	3,448	141	99	111	6,840
November.....	3,287	123	95	110	6,520
December.....	2,976	-	-	96	5,900
Calendar year 1936.....	166,543	4,110	-	455	330,300
January.....	2,728	-	-	88	5,410
February.....	2,660	-	-	95	5,280
March.....	3,556	-	-	105	6,460
April.....	5,999	372	112	200	11,900
May.....	25,775	2,030	168	831	51,120
June.....	37,303	1,930	822	1,343	73,990
July.....	22,135	1,460	403	714	43,900
August.....	6,536	431	143	211	12,960
September.....	3,667	139	107	122	7,270
Water year 1936-37.....	119,769	2,030	-	328	237,600

*Discharge measurement.

Pine Creek at Pinedale, Wyo.

Location.- Water-stage recorder, lat. 42°52', long. 109°52', in sec. 33, T. 34 N., R. 109 W., at Pinedale, 3 miles above mouth. Zero of gage is 7,184.3 feet above mean sea level.

Drainage area.- 128 square miles.

Records available.- April to October 1904, May 1915 to September 1937.

Average discharge.- 22 years, 137 second-feet.

Extremes.- Maximum discharge during year, 775 second-feet June 24 (gage height, 3.19 feet); minimum daily discharge, 7.6 second-feet Oct. 30.
1904, 1915-37: Maximum discharge, 2,310 second-feet June 17, 1918 (gage height, 5.0 feet); minimum, 2 second-feet Apr. 1-26, May 6-8, 1931.

Remarks.- Records excellent except those for periods of ice effect, Nov. 3, Nov. 29 to Dec. 6, 9-21, Dec. 23 to Apr. 9 (computed on basis of one discharge measurement and weather records), and those for Sept. 22-25, 27-30 (estimated), which are fair. Diversions for irrigation above station. Flow regulated by storage in Fremont Lake.

Rating tables, water year 1936-37 except periods of ice effect (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Jan. 7

Apr. 10 to Sept. 30

1.0	1	0.7	13	1.5	114	2.3	292
1.1	6	.9	29	1.7	152	2.5	358
1.2	14	1.1	52	1.9	192	3.0	642
1.3	24	1.3	81	2.1	238	3.5	1,025
1.4	37						

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	32	11	20	23	31	24	17	20	616	129	124	50
2	27	13	25	23	32	25	17	28	544	241	58	39
3	32	20	25	24	33	25	16	24	481	243	56	30
4	33	30	24	24	33	22	15	25	462	241	53	26
5	32	28	21	26	34	21	13	28	450	122	52	31
6	29	27	25	24	35	21	14	30	420	74	52	52
7	28	25	27	22	33	20	13	33	387	129	51	45
8	27	28	20	23	33	20	13	37	358	298	50	39
9	24	23	23	23	32	20	15	45	338	445	47	25
10	28	22	24	24	31	20	13	56	318	512	45	22
11	21	21	22	25	32	20	13	63	298	462	44	27
12	20	20	21	26	34	21	16	72	302	400	41	26
13	18	21	22	27	35	21	14	83	305	355	40	25
14	17	23	22	29	37	21	17	72	314	321	41	48
15	16	25	22	31	38	20	23	83	311	302	65	36
16	13	29	22	30	33	21	21	109	308	275	109	23
17	14	28	23	29	31	22	19	135	321	236	102	29
18	15	17	23	27	30	20	19	180	348	196	97	27
19	17	20	26	27	26	19	20	238	379	176	92	26
20	21	21	25	27	27	18	20	267	400	156	89	25
21	17	21	26	27	28	17	21	292	450	139	87	25
22	14	25	27	27	28	17	19	305	557	104	84	25
23	12	22	26	28	29	19	19	308	669	80	78	25
24	11	22	24	30	27	17	18	405	768	91	76	25
25	10	25	23	32	25	17	18	518	760	137	74	24
26	10	27	23	33	23	16	19	563	710	182	70	24
27	9.2	30	23	34	23	15	18	589	649	158	69	24
28	8.4	32	24	32	24	15	18	596	596	137	66	24
29	8.4	28	25	33	-	15	18	676	544	166	65	24
30	7.6	24	25	34	-	15	18	739	228	154	59	23
31	8.4	-	24	31	-	16	-	696	-	150	52	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	580.0	33	7.6	18.7	1,150
November.....	713	32	11	23.8	1,410
December.....	727	27	20	23.5	1,440
Calendar year 1936.....	51,702.0	1,100	7.6	141	102,800
January.....	855	34	22	27.6	1,700
February.....	855	37	23	30.5	1,700
March.....	596	24	15	19.2	1,180
April.....	512	23	13	17.1	1,020
May.....	7,315	739	20	236	14,510
June.....	13,591	768	228	453	26,960
July.....	6,801	512	74	219	13,490
August.....	2,085	124	40	67.4	4,140
September.....	594	52	22	29.8	1,770
Water year 1936-37.....	35,527.0	768	7.6	97.3	70,470

North Piney Creek near Mason, Wyo.

Location.- Water-stage recorder, lat. $32^{\circ}40'$, long. $110^{\circ}21'$, in sec. 19, T. 31 N., R. 113 W., 4 miles northwest of Mason.

Drainage area.- 58 square miles.

Records available.- May 1915 to October 1916, October 1931 to September 1937.

Extremes.- Maximum discharge during year, 288 second-feet June 23 (gage height, 3.02 feet); minimum occurred during winter.
1915-16, 1931-37: Maximum discharge, 613 second-feet June 19, 1916 (gage height, 3.93 feet); minimum probably occurred during winter.

Remarks.- Records excellent. No records Nov. 1 to May 12. Small diversions above station.

Rating tables, water year 1936-37 (gage height, in feet, and discharge, in second-feet)

Oct. 1-31		May 13 to Sept. 30		
1.1	18	1.0	14	2.2 130
1.2	23	1.2	24	2.4 164
1.3	29	1.4	39	2.6 200
		1.6	57	2.8 240
		1.8	76	3.0 284
		2.0	101	

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	24							-	141	146	51	26
2	24							-	121	132	46	26
3	24							-	111	120	43	25
4	24							-	132	111	51	28
5	23							-	120	104	59	30
6	23							-	111	120	56	27
7	23							-	107	116	54	25
8	22							-	112	115	52	25
9	22	*22						-	124	97	50	27
10	22							-	116	114	47	26
11	22							-	138	97	42	25
12	22							-	157	93	40	25
13	21							74	135	87	40	23
14	22							80	143	89	39	23
15	24							94	151	101	39	22
16	23							100	175	74	38	22
17	22							104	214	66	38	22
18	22							122	198	66	37	21
19	23							144	187	61	35	20
20	23							135	184	54	34	21
21	26							114	228	52	33	22
22	22							118	260	51	32	22
23	20							136	266	49	32	23
24	20							141	232	49	30	23
25	20							150	202	47	29	22
26	20							144	180	41	28	21
27	20							157	162	37	28	20
28	21							182	153	44	27	20
29	19							204	146	44	27	20
30	20							197	159	44	28	20
31	20							175	-	52	27	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						688	28	19	22.2	1,360		
November.....						-	-	-	-	-		
December.....						-	-	-	-	-		
Calendar year												
January.....												
February.....												
March.....												
April.....												
May 13-31.....						2,561	204	74	135	5,080		
June.....						4,865	266	107	162	9,650		
July.....						2,473	146	37	79.8	4,910		
August.....						1,212	59	27	39.1	2,400		
September.....						702	30	20	25.4	1,390		
Water year												

*Discharge measurement.

Labarge Creek near Labarge, Wyo.

Location.- Water-stage recorder, lat. $42^{\circ}14'$, long. $110^{\circ}12'$, in sec. 18, T. 26 N., R. 112 W., 2 miles south of Labarge.

Drainage area.- 193 square miles.

Records available.- April 1932 to September 1937.

Extremes.- Maximum discharge during year, 243 second-feet May 31 (gage height, 2.87 feet); minimum daily discharge, 4.0 second-feet Aug. 4, 1932-37; Maximum discharge, 442 second-feet May 16, 1936 (gage height, 3.57 feet, present datum); no flow July 6-17, 1934.

Remarks.- Records excellent except those for periods of ice effect, Nov. 5-10 and Nov. 23 to Apr. 16, which were computed on basis of two discharge measurements and weather records and are fair. Diversions for irrigation above station.

Rating table, water year 1936-37 except periods of ice effect (gage height, in feet, and discharge, in second-feet)

0.8	2.6
1.0	7.0
1.2	13.5
1.4	22
1.6	34
1.8	52
2.0	77
2.2	110
2.4	145
2.6	185
2.8	227

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	52	77					56	85	179	16	4.4	21
2	52	67					57	103	124	15	4.2	19
3	53	56					56	132	105	15	4.2	20
4	57	56					57	151	107	11	4.0	21
5	59	58					59	167	113	8.2	5.1	22
6	59	75					60	163	96	9.1	24	21
7	59	67					61	165	87	16	24	21
8	59	60					59	181	82	11	24	22
9	59	75					60	199	82	11	24	23
10	59	68					65	183	73	9.7	24	24
11	59	65					60	161	69	12	22	24
12	58	73					60	155	69	18	22	24
13	59	76					65	153	68	17	23	25
14	60	73			*52		85	157	55	13	25	25
15	68	69					120	173	41	12	22	25
16	63	72					100	181	34	12	22	28
17	64	70					90	181	31	11	22	30
18	65	70					80	189	28	12	22	30
19	65	65					83	193	24	11	20	32
20	107	65					93	175	21	11	19	34
21	91	67					102	145	21	11	18	36
22	80	57					122	134	20	11	17	32
23	73	56					105	134	18	11	16	30
24	72	57					90	143	18	11	16	30
25	74	60					87	143	18	11	16	28
26	74	62					90	163	18	11	16	28
27	73	62					105	145	17	11	16	28
28	70	61					107	140	16	12	18	31
29	68	59					85	136	16	9.1	21	32
30	70	57					79	140	16	4.8	22	36
31	74	-					-	218	-	4.6	21	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						2,055	107	52	66.3	4,080		
November.....						1,955	77	56	65.2	3,980		
December.....						1,705	-	-	55	3,380		
Calendar year 1936.....						34,561.1	427	8.0	94.4	68,580		
January.....						1,395	-	-	45	2,770		
February.....						1,344	-	-	48	2,670		
March.....						1,705	-	-	55	3,380		
April.....						2,394	122	56	79.8	4,750		
May.....						4,888	218	85	158	9,700		
June.....						1,664	179	16	55.5	3,300		
July.....						358.5	18	4.6	11.6	711		
August.....						555.9	24	4.0	17.9	1,100		
September.....						802	36	19	26.7	1,590		
Water year 1936-37.....						20,821.4	218	4.0	57.0	41,310		

*Discharge measurement.

Fontenelle Creek near Fontenelle, Wyo.

Location.- Staff gage, lat. 42°06', long. 110°13', in sec. 3, T. 24 N., R. 113 W., 6 miles west of Fontenelle.

Drainage area.- 224 square miles.

Records available.- May 1915 to September 1919, October 1931 to September 1937.

Extremes.- Maximum discharge observed during year, 367 second-feet Apr. 16 (gage height, 2.30 feet); minimum daily discharge, 24 second-feet Aug. 20.

1915-19, 1931-37: Maximum discharge observed, 900 second-feet May 22, 1917 (gage height, 2.7 feet, former datum); no flow Aug. 1-5, Aug. 23 to Sept. 15, 1934.

Remarks.- Records good except those for periods of ice effect, Nov. 3, 4, 7-12, 15, 19-27, Nov. 29 to Apr. 10, which were computed on basis of two discharge measurements and weather records and are fair. Diversions for irrigation above station.

Rating table, water year 1936-37 except periods of ice effect (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Oct. 1-7)

0.6	21	1.4	144
.7	29	1.6	188
.8	38	1.8	234
.9	50	2.0	283
1.0	64	2.2	338
1.2	102	2.3	367

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	36	43	36	32	30	34	39	110	273	35	37	29
2	36	39	36	32	31	34	42	170	195	33	34	30
3	37	39	35	32	30	33	40	177	166	31	33	33
4	37	38	34	33	34	34	40	192	179	29	31	31
5	37	44	33	33	35	32	43	199	206	29	31	31
6	37	45	34	30	33	32	42	206	179	137	31	30
7	37	39	35	28	31	33	41	190	159	144	29	29
8	36	39	38	27	28	34	43	192	148	53	28	29
9	34	39	38	26	29	34	42	224	144	50	27	29
10	34	41	37	27	28	35	56	181	146	50	27	29
11	34	42	34	27	28	36	53	175	131	108	27	29
12	34	42	33	28	29	35	44	168	133	102	27	29
13	34	44	38	28	30	32	53	164	131	76	26	29
14	34	45	38	29	31	34	126	168	124	58	26	28
15	35	46	37	29	32	35	341	184	124	51	27	27
16	38	37	36	29	29	36	335	192	114	43	27	26
17	38	34	36	29	31	36	153	186	104	33	28	26
18	36	37	37	29	33	36	110	192	102	31	29	27
19	36	37	39	29	32	36	112	206	100	38	26	26
20	60	36	38	29	30	34	118	210	102	43	24	27
21	53	39	36	29	32	35	159	192	96	42	27	26
22	43	40	39	28	33	38	241	164	94	39	29	27
23	40	38	35	27	32	37	115	199	90	37	28	29
24	38	39	33	30	32	36	78	203	71	38	27	28
25	38	40	33	29	32	34	78	208	68	39	27	29
26	38	41	34	30	33	35	112	210	66	37	28	29
27	38	39	33	33	33	36	186	188	61	33	27	29
28	38	38	36	32	33	37	131	188	50	31	28	29
29	37	37	35	31	-	36	90	186	45	33	28	28
30	37	37	33	32	-	37	92	192	40	33	29	29
31	42	-	32	34	-	36	-	278	-	56	28	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	1,182	60	34	38.1	2,340
November.....	1,194	46	34	39.8	2,370
December.....	1,101	39	32	35.5	2,180
Calendar year 1936.....	33,234	503	11	90.8	65,910
January.....	921	34	26	29.7	1,830
February.....	876	35	28	31.3	1,740
March.....	1,080	37	32	34.8	2,140
April.....	3,158	341	39	105	6,280
May.....	5,916	278	110	191	11,730
June.....	3,641	273	40	121	7,220
July.....	1,574	144	29	50.8	3,120
August.....	881	37	24	28.4	1,750
September.....	857	33	26	28.6	1,700
Water year 1936-37.....	22,581	341	24	61.3	44,380

Henrys Fork at Linwood, Utah

Location.-- Staff gage, lat. 41°00', long. 109°39', in sec. 23, T. 12 N., R. 109 W., 200 feet north of Wyoming-Utah State line at Linwood. Zero of gage is 5,992.57 feet above mean sea level.

Drainage area.-- 531 square miles.

Records available.-- October 1928 to September 1937.

Extremes.-- Maximum discharge observed during year, 837 second-feet July 18 (gage height, 4.89 feet); minimum daily discharge, 5.8 second-feet Aug. 28, 27.
1928-37: Maximum discharge observed, 8,750 second-feet Aug. 3, 1936, by slope-area method (gage height, 7.19 feet, from floodmarks); no flow several days during 1934 and 1935.

Remarks.-- Records good except those for period of ice effect and missing gage heights, Dec. 13 to Apr. 24, which were computed on basis of one discharge measurement and weather records and are fair. Diversions for irrigation above station.

Rating table, water year 1936-37 (gage height, in feet, and discharges, in second-feet)
(Shifting-control method used Oct. 1-20, June 6-18)

Oct. 1 to Dec. 12 (Temporary gage)		Apr. 25 to Sept. 30					
1.8	56	1.0	2	2.0	64	3.0	262
2.0	68	1.2	6	2.2	94	3.2	314
2.2	80	1.4	11	2.4	126	3.4	370
2.4	93	1.6	20	2.6	164	3.6	430
		1.8	38	2.8	210	3.8	490

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	67	66	71				88	113	412	115	67	38
2	65	68	70				92	112	298	105	57	65
3	66	66	69				94	140	226	102	49	78
4	66	66	67				92	198	239	80	45	108
5	66	64	61				97	233	306	65	42	113
6	67	64	58				99	226	254	51	35	110
7	69	67	60				96	249	200	42	32	112
8	67	67	58				96	244	175	100	29	94
9	66	72	63				101	306	182	205	26	86
10	64	67	66				103	367	231	164	26	83
11	63	63	64				100	391	213	208	20	71
12	60	67	61				103	267	208	254	16	60
13	58	65	53				108	262	196	339	11	56
14	59	65	56				110	252	182	322	9.2	49
15	58	64	57	*23			112	463	182	241	8.3	44
16	66	64	59				104	457	173	193	8.0	37
17	72	64	60				97	376	162	184	8.3	29
18	64	65	56				103	356	233	448	8.3	32
19	64	64	58				105	339	196	322	8.0	44
20	85	63	50				106	262	188	171	7.6	43
21	86	62	57				107	231	198	120	7.4	48
22	81	61	58				103	205	203	92	7.6	51
23	75	60	54				96	215	196	76	8.0	53
24	73	60	48				98	210	186	67	8.0	50
25	72	57	43				99	200	177	71	7.0	51
26	68	61	43				104	186	162	126	5.8	51
27	66	71	45				142	162	158	97	5.8	49
28	65	77	44				160	139	142	74	16	44
29	66	73	48				171	130	131	63	50	50
30	65	72	38				140	177	124	61	42	48
31	64	-	36				-	353	-	72	28	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						2,153	86	58	68.8	4,230		
November.....						1,965	77	57	65.5	3,900		
December.....						1,731	71	36	55.8	3,430		
Calendar year 1936.....						27,569.6	3,550	2.6	75.3	54,680		
January.....						837	-	-	27	1,660		
February.....						1,148	-	-	41	2,280		
March.....						2,232	-	-	72	4,430		
April.....						3,228	171	88	108	6,400		
May.....						7,821	463	112	252	15,510		
June.....						8,133	412	124	204	12,160		
July.....						4,612	448	46	149	9,150		
August.....						698.3	67	5.8	22.5	1,890		
September.....						1,847	113	29	61.6	3,660		
Water year 1936-37.....						34,385.3	463	5.8	94.2	68,200		

*Discharge measurement.

Burnt Fork at Burntfork, Wyo.

Location.- Chain gage, lat. $41^{\circ}02'$, long. $110^{\circ}01'$, in sec. 11, T. 12 N., R. 112 W., a quarter of a mile west of Burntfork and 1 mile above mouth. Zero of gage is 7,098.70 feet above mean sea level.

Drainage area.- 73 square miles.

Records available.- July 1929 to September 1937.

Extremes.- Maximum discharge observed during year, 82 second-feet May 15 (gage height, 3.30 feet); minimum daily discharge, 0.8 second-feet July 6.

1929-37: Maximum discharge, 4,360 second-feet Aug. 2, 1936, by slope-area method (gage height, 9.60 feet, from floodmarks); no flow June 27, 30, July 2, 5-7, 17, 18, 25, 1934.

Remarks.- Records good except those for periods of ice effect, Nov. 30 to Dec. 7, Dec. 13 to Mar. 13, which were computed on basis of one discharge measurement and weather records and are fair. Diversions for irrigation above station.

Rating table, water year 1936-37 except periods of ice effect (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used July 13 to Sept. 5)

1.5	0.3	2.4	20
1.6	1.0	2.6	27
1.8	3.6	2.8	40
2.0	8.4	3.0	56
2.2	14	3.3	82

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	24	11	9			4.3	3.8	18	15	3.0	10	39
2	25	10	10			5.3	8.9	22	9.4	2.5	8.2	39
3	25	10	9			4.0	8.9	33	17	1.9	7.7	52
4	24	10	10			3.4	3.6	52	27	1.3	7.4	51
5	24	8.7	10			3.2	2.5	52	20	.9	7.2	42
6	23	8.7	10			3.0	1.6	51	12	.8	6.7	28
7	21	8.4	11			2.8	1.5	42	12	1.0	6.5	20
8	24	8.9	11			2.6	2.0	51	16	1.5	5.8	26
9	23	8.2	10			2.5	2.5	64	17	1.6	5.3	27
10	18	8.4	10		*9.1	2.4	2.3	62	20	2.8	5.0	22
11	13	8.4	10			2.5	2.3	57	20	3.4	4.6	21
12	13	7.9	10			2.5	2.6	47	21	17	4.3	20
13	12	8.4	10			2.6	4.8	55	14	26	3.8	20
14	10	13	10			2.6	8.9	59	13	25	3.4	19
15	10	13	11			2.8	8.2	78	13	26	3.4	16
16	18	13	11			2.8	8.9	40	15	25	3.6	14
17	22	13	10			2.8	10	39	25	24	3.4	14
18	22	13	10			2.5	11	33	25	36	3.4	17
19	23	13	10			2.3	8.9	32	23	34	3.3	17
20	26	12	10			2.5	7.4	21	28	30	3.1	17
21	23	10	10			2.3	13	18	31	27	3.0	17
22	21	10	10			2.3	18	14	34	26	2.8	17
23	22	10	9			2.3	8.4	10	34	22	3.1	18
24	21	10	9			2.3	6.5	8.7	27	20	3.1	17
25	19	10	9			2.3	7.2	8.9	19	20	2.8	17
26	18	10	9			2.6	12	5.5	17	18	2.6	16
27	17	10	10			2.5	22	3.8	11	17	2.5	16
28	16	10	10			2.0	8.7	1.8	7.7	11	2.5	17
29	14	10	9			1.2	7.7	2.6	5.0	10	4.1	17
30	13	10	9			2.3	6.7	11	4.5	10	10	17
31	12	-	9			3.3	-	12	-	8.7	39	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						606	31	10	19.5	1,200		
November.....						308.0	13	7.9	10.3	611		
December.....						305	11	9	9.84	605		
Calendar year 1936.....						4,143.6	420	.1	11.3	8,220		
January.....						263.5	-	-	8.5	523		
February.....						182	-	-	6.5	361		
March.....						85.3	5.3	1.2	2.75	169		
April.....						220.8	22	1.5	7.36	438		
May.....						1,004.3	78	1.8	32.4	1,990		
June.....						552.4	34	4.3	18.4	1,100		
July.....						453.4	35	8	14.6	899		
August.....						181.6	39	2.5	5.86	360		
September.....						690	52	14	23.0	1,370		
Water year 1936-37.....						4,852.3	78	.8	13.3	9,630		

*Discharge measurement.

GREEN RIVER BASIN

Yampa River at Steamboat Springs, Colo.

Location.- Water-stage recorder, lat. 40°29', long. 106°50', in sec. 17, T. 6 N., R. 84 W., at Steamboat Springs, a quarter of a mile above Soda Creek.

Drainage area.- 804 square miles.

Records available.- May 1904 to October 1906, March 1910 to December 1913, January 1914 to September 1936 (monthly discharge), and October 1933 to September 1937 in reports of Geological Survey; May 1904 to October 1906 and March 1910 to September 1937 in reports of State engineer.

Average discharge.- 29 years, 496 second-feet.

Extremes.- Maximum discharge during year, 2,980 second-feet May 30 (gage height, 4.77 feet); minimum daily discharge, 45 second-feet Sept. 23, 1904-6, 1910-37; Maximum discharge, 6,620 second-feet June 14, 1921 (gage height, 7.06 feet); minimum daily discharge, 4 second-feet Sept. 8, 1934.

Remarks.- Records excellent except those for period of ice effect, Dec. 2 to Mar. 24 (computed on basis of two discharge measurements and weather records), and those for June 30 to July 3 (estimated), which are fair. Diversions for irrigation above station.

Rating table, water year 1936-37 except periods of ice effect (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Oct. 1-17, Aug. 11-30)

0.5	9	1.0	94	1.6	275	2.5	749	4.0	2,010
.6	21	1.2	143	1.8	360	3.0	1,120	4.5	2,610
.8	56	1.4	204	2.0	452	3.5	1,530		

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	101	116	69			125	138	382	2,010	220	152	81
2	111	113				132	170	325	1,870	200	138	79
3	104	84				136	185	404	1,960	175	143	79
4	108	84				148	173	549	1,770	167	128	83
5	120	101				156	164	742	1,460	149	118	104
6	118	106				142	167	858	1,260	138	143	101
7	113	106				140	161	952	1,210	133	152	86
8	111	94				144	168	1,100	1,200	161	133	83
9	113	101				146	155	1,300	1,090	161	118	84
10	106	96				148	228	1,460	1,060	146	106	79
11	101	86				132	271	1,420	1,210	208	88	77
12	101	88				125	261	1,330	1,090	584	83	75
13	101	88				128	325	1,450	984	1,340	75	69
14	106	104				132	418	1,610	968	736	71	67
15	104	90				142	590	1,830	1,010	596	67	67
16	101	94				150	722	2,010	1,010	442	69	60
17	99	94				146	572	2,010	960	329	84	54
18	99	106				150	423	1,850	871	351	94	51
19	92	83				138	463	2,000	797	271	88	47
20	94	88				128	484	1,790	749	228	84	49
21	94	94				125	578	1,710	695	198	81	47
22	94	94				130	572	1,740	657	176	75	47
23	96	83				130	467	1,700	572	167	66	45
24	99	66				120	395	1,580	489	140	66	66
25	99	64				111	395	1,480	468	149	73	71
26	96	67				120	494	1,700	527	143	67	66
27	94	73				128	572	1,610	433	130	62	60
28	99	75				120	516	1,700	356	118	73	56
29	92	67				128	423	1,640	295	133	108	54
30	99	69				136	378	2,580	250	133	113	54
31	113	-				136	-	2,220	-	179	96	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						3,171	120	92	102	6,290		
November.....						2,674	116	64	89.1	5,300		
December.....						2,418	-	-	78	4,800		
Calendar year												
January.....						2,170	-	-	70	4,300		
February.....						3,080	-	-	110	6,110		
March.....						4,170	155	111	135	8,270		
April.....						11,015	722	138	367	21,850		
May.....						45,112	2,580	325	1,455	89,480		
June.....						29,282	2,010	250	976	58,080		
July.....						8,401	1,340	118	271	16,660		
August.....						3,014	152	62	97.2	6,960		
September.....						2,041	104	45	65.0	4,050		
Water year 1936-37.....						116,548	2,580	45	319	231,200		

*Discharge measurement.

Yampa River near Maybell, Colo.

Location.- Water-stage recorder, lat. 40°30', long. 108°02', in sec. 2, T. 8 N., R. 95 W., 3 miles east of Maybell. Prior to Mar. 9, 1937, at site 700 feet downstream at same datum.

Drainage area.- 3,410 square miles.

Records available.- April 1904 to October 1905, June 1910 to November 1912, April 1916 to September 1917, October 1917 to September 1926 (monthly discharge), and October 1933 to September 1937 in reports of Geological Survey; April 1916 to September 1937 in reports of State engineer.

Average discharge.- 21 years, 1,664 second-feet.

Extremes.- Maximum discharge during year, 10,000 second-feet May 17 (gage height, 7.34 feet); minimum daily discharge, 106 second-feet Sept. 21, 22, 1916-37; Maximum discharge observed, 17,900 second-feet May 19, 1917 (gage height, about 10.4 feet, former site); minimum daily discharge, 2 second-feet July 17-19, 1934.

Remarks.- Records good except those for period of ice effect or missing gage heights, Nov. 14 to Apr. 9, which were computed on basis of two discharge measurements, two open-water gage heights, and weather records and are fair. Diversions for irrigation above station.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	146	255					700	2,480	7,970	1,570	524	296
2	149	270					680	2,250	7,440	1,560	485	328
3	156	290					710	2,200	6,560	1,510	446	252
4	163	290					690	2,430	7,140	1,510	418	204
5	174	295					650	2,940	7,020	1,150	405	190
6	186	232					640	3,770	6,090	1,050	382	208
7	186	237					670	4,490	4,860	992	354	208
8	194	265					660	4,880	4,110	944	382	224
9	206	275				546	700	5,910	3,820	1,150	387	212
10	214	260					712	6,790	3,570	1,380	356	196
11	214	206					1,030	7,520	3,350	1,190	328	186
12	210	186		*166	*202		1,120	7,860	3,480	1,140	308	182
13	206	194					1,040	7,540	3,860	1,780	280	166
14	194	195					1,280	8,200	3,500	3,200	264	162
15	190	195					1,680	8,620	3,400	3,180	256	162
16	190	205					2,240	9,310	3,330	2,250	248	154
17	190	190					2,790	9,830	3,880	1,700	220	151
18	186	170					2,730	9,940	3,770	1,350	240	137
19	190	160					2,280	10,000	3,770	1,200	256	137
20	198	150					2,040	9,880	3,550	1,080	244	124
21	219	140					2,140	8,720	3,910	928	232	106
22	232	130					2,340	7,640	3,550	800	208	106
23	260	120					2,930	6,940	3,970	712	193	140
24	285	115					2,670	7,060	3,380	656	200	162
25	280	150					2,520	6,220	2,860	584	196	130
26	265	170										
27	250	210				644	2,100	5,980	2,610	506	193	140
28	242	170					2,160	5,320	2,490	500	190	154
29	242	160					2,700	5,120	2,160	490	166	168
30	242	160					3,020	5,850	1,880	506	179	168
31	250	-					2,780	6,220	1,660	506	162	168
							-	7,820	-	572	216	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						6,509	285	146	210	12,910		
November.....						6,025	295	115	201	11,660		
December.....						5,580	-	-	180	11,070		
Calendar year												
January.....						5,425	-	-	175	10,760		
February.....						7,280	-	-	260	14,440		
March.....						15,600	-	-	600	36,600		
April.....						50,202	3,020	640	1,673	99,570		
May.....						199,510	10,000	2,200	6,436	395,700		
June.....						122,940	7,970	1,660	4,098	243,800		
July.....						37,446	3,200	490	1,208	74,270		
August.....						8,927	524	162	288	17,710		
September.....						5,520	328	106	177	10,550		
Water year 1936-37.....						473,764	10,000	-	1,298	939,600		

*Discharge measurement.

GREEN RIVER BASIN

Elk River at Clark, Colo.

Location.- Water-stage recorder, lat. 40°43', long. 106°55', in sec. 28, T. 9 N., R. 85 W., at Clark.

Drainage area.- 206 square miles.

Records available.- May 1910 to November 1913, December 1913 to September 1922 (monthly discharge), and October 1933 to September 1937 in reports of Geological Survey; May 1910 to September 1922 and April 1930 to September 1937 in reports of State engineer.

Average discharge.- 19 years, 381 second-feet.

Extremes.- Maximum discharge during year, 3,200 second-feet May 18 (gage height, 4.85 feet); minimum discharge observed, 24 second-feet (discharge measurement) Feb. 24, probably lower during period of ice effect.
1910-22, 1930-37: Maximum daily discharge, 4,470 second-feet June 6, 9, 1912; minimum discharge observed, 22 second-feet Apr. 7, 1935 (gage height, 0.62 foot).

Remarks.- Records good except those for period of ice effect, Nov. 24 to Mar. 31 (computed on basis of two discharge measurements and weather records), and those for period of missing gage heights, Apr. 1-26 (computed on basis of records for Yampa River at Steamboat Springs), which are fair. Practically no diversions or regulation.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	49	72					72	173	2,230	768	162	80
2	48	61					85	227	2,040	652	151	80
3	47	40					92	286	2,370	588	153	76
4	53	82					96	416	2,330	540	140	96
5	61	64		*34			94	660	1,670	511	127	82
6	72	62					92	880	1,480	462	138	74
7	70	56					92	1,210	1,110	452	142	71
8	70	35					91	1,690	1,060	467	127	68
9	70	56					90	1,990	1,070	436	117	68
10	68	58					104	2,220	1,130	426	108	68
11	58	60					130	2,000	1,350	467	98	61
12	51	58					160	1,520	1,540	570	96	57
13	45	60					190	1,690	1,370	1,000	93	56
14	45	61					250	1,840	1,360	639	87	56
15	45	60					300	2,090	1,430	442	82	55
16	49	64					340	2,260	1,580	362	84	52
17	50	61					310	2,410	1,750	324	113	50
18	49	60					240	2,650	1,750	370	94	49
19	47	52					250	2,620	1,620	301	84	49
20	72	53					280	2,310	1,680	276	76	50
21	77	56					320	2,080	1,780	252	71	50
22	60	53					320	2,050	1,810	227	68	50
23	58	50					270	2,220	1,610	208	66	76
24	52	49			*24		260	2,040	1,410	202	66	106
25	56	51					260	2,090	1,200	202	68	77
26	56	53					280	1,930	1,020	199	64	70
27	52	54					324	2,000	910	202	60	66
28	52	55					290	2,280	816	196	65	64
29	48	56					234	2,240	768	199	113	60
30	53	52					190	2,540	776	179	102	57
31	68	-					-	2,490	-	182	85	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						1,751	77	45	56.5	3,470		
November.....						1,703	82	35	56.8	3,380		
December.....						1,550	-	-	50	3,070		
Calendar year												
January.....						1,085	-	-	35	2,150		
February.....						784	-	-	28	1,560		
March.....						2,170	-	-	70	4,300		
April.....						6,106	340	72	204	12,110		
May.....						55,202	2,650	173	1,781	109,500		
June.....						44,000	2,370	768	1,467	87,270		
July.....						12,301	1,000	179	397	24,400		
August.....						3,100	162	60	100	6,150		
September.....						1,974	106	49	65.8	3,920		
Water year 1936-37						131,726	2,650	-	361	261,300		

*Discharge measurement

Little Snake River near Lily, Colo.

Location.- Water-stage recorder, lat. 40°32', long. 108°25', in sec. 20, T. 7 N., R. 98 W., 8 miles north of Lily and 6 miles above mouth.

Drainage area.- 3,730 square miles.

Records available.- June to August 1904, May 1922 to September 1927, and October 1933 to September 1937 in reports of Geological Survey; June to August 1904 and May 1922 to September 1937 in reports of State engineer.

Extremes.- Maximum discharge during year, 5,820 second-feet May 20 (gage height, 5.65 feet); minimum daily discharge, 8.6 feet Oct. 1. 1904, 1922-37: Maximum discharge, 14,200 second-feet May 27, 1926 (gage height, 10.5 feet); no flow at times during 1924, 1930, 1931, 1934-36.

Remarks.- Records excellent except those for period of ice effect, Nov. 9-30 (computed on basis of one discharge measurement, gage heights, and weather records), those for period of missing gage heights, Apr. 3 to May 5 (computed on basis of records for Yampa River near Maybell), and those for July 10-31, all of which are fair. Diversions for irrigation above station.

Rating table, water year 1936-37 except period of ice effect (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Oct. 1-8, May 6-10, July 14-28, and Sept. 24-30)

0.0	0	1.2	120	3.0	1,510
.2	4	1.4	190	3.5	2,120
.4	8	1.6	280	4.0	2,850
.6	15	1.8	398	4.5	3,650
.8	38	2.0	534	5.0	4,500
1.0	70	2.5	1,070	5.5	5,500

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	8.6	85				-	464	1,900	3,380	746	85	565
2	44	87				-	444	1,800	3,850	654	87	379
3	32	89				-	470	1,700	3,210	581	158	210
4	22	353				-	460	1,900	2,880	527	150	174
5	16	256				-	450	2,100	3,360	492	114	210
6	19	190				-	470	2,250	3,410	405	100	158
7	22	210				-	510	2,560	2,700	379	85	162
8	24	158				-	500	2,800	2,250	637	56	150
9	30	135				-	500	3,720	2,000	307	51	117
10	44	120				-	510	4,260	1,870	478	42	80
11	44	103				-	700	4,400	1,840	950	38	63
12	54	89				-	850	4,740	1,890	1,850	32	56
13	56	78				-	820	3,890	1,900	2,740	32	46
14	51	85				-	940	3,680	2,040	2,900	30	42
15	48	85				-	1,050	4,110	2,020	2,370	24	38
16	48	89				-	1,200	4,980	1,950	1,480	22	35
17	49	78				-	1,500	4,210	1,910	1,010	49	33
18	49	70				-	1,700	4,420	1,860	695	57	32
19	61	88				-	1,600	4,540	1,890	527	97	29
20	108	63				-	1,600	4,860	1,890	478	51	23
21	111	61				-	1,700	5,080	1,750	398	45	22
22	108	56				-	1,800	3,770	1,660	323	34	22
23	100	41				-	1,900	3,290	1,610	280	25	106
24	89	41				-	1,800	3,180	1,550	251	22	72
25	85	54				-	1,800	3,120	1,470	223	19	34
26	85	68				235	1,700	2,970	1,330	194	16	33
27	85	111				366	1,800	2,910	1,180	174	14	42
28	85	70				398	1,900	2,880	1,100	194	19	49
29	83	76				451	2,100	2,860	970	190	135	48
30	83	85				431	2,000	3,100	854	144	205	51
31	83	-				485	-	3,120	-	100	637	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	1,825.6	111	8.6	58.9	3,620
November.....	3,154	353	41	105	6,260
December.....	-	-	-	-	-
Calendar year					
January.....	-	-	-	-	-
February.....	-	-	-	-	-
March 28-31.....	2,366	465	235	394	4,690
April.....	35,248	2,100	444	1,175	69,910
May.....	106,200	5,080	1,700	3,394	208,700
June.....	61,574	3,850	854	2,052	122,100
July.....	22,687	2,900	100	732	45,000
August.....	2,532	637	14	81.7	5,020
September.....	3,081	565	22	103	6,110
Water year					

Slater Fork near Slater, Colo.

Location.- Water-stage recorder, lat. 40°59', long. 107°23', in SW $\frac{1}{4}$ sec. 21, T. 12 N., R. 89 W., about 1 mile above mouth and $1\frac{1}{2}$ miles south of Slater.

Drainage area.- 161 square miles.

Records available.- May 1910 to May 1912 and October 1933 to September 1937 in reports of Geological Survey; May 1910 to May 1912, June 1931 to September 1937 in reports of State engineer.

Extremes.- Maximum discharge during year, 768 second-feet May 19 (gage height, 7.94 feet); from rating curve extended above 450 second-feet; maximum discharge of 689 second-feet, formerly published for May 6, 1936, revised to 579 second-feet; minimum daily discharge, 4.2 second-feet Aug. 15, 1910-12, 1931-37. Maximum daily discharge, 1,700 second-feet May 19, 1912; no flow Aug. 2-10, 1934, Aug. 18, 25-27, 1936.

Remarks.- Records good. No records Dec. 10 to Mar. 31. Diversions for irrigation above station.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	10	26	14				32	99	471	76	16	7.6
2	9.6	21	13				36	122	408	66	16	7.8
3	9.4	13	13				29	154	401	51	17	8.8
4	9.6	20	16				28	212	466	44	16	8.4
5	11	28	17				26	265	389	34	16	7.6
6	15	27	18				28	302	327	34	16	6.6
7	14	23	20				27	566	277	28	16	7.4
8	12	14	20				27	433	255	25	15	6.2
9	11	21	19				28	514	285	30	14	6.8
10	11	19	-				39	540	302	37	9.2	6.8
11	11	21	-				45	540	314	56	5.0	6.0
12	11	19	-				40	469	352	162	5.8	5.6
13	10	18	-				46	534	311	185	6.2	4.8
14	10	18	-				65	561	285	216	7.2	4.8
15	11	18	-				91	570	304	128	4.2	4.4
16	14	20	-				111	594	283	96	5.2	4.6
17	14	20	-				91	601	296	86	18	5.2
18	14	22	-				71	612	297	93	17	5.2
19	13	16	-				80	639	259	76	12	5.4
20	18	18	-				91	512	254	63	9.4	6.6
21	23	17	-				116	444	252	52	9.2	7.2
22	19	17	-				134	434	248	36	7.2	8.8
23	16	12	-				95	428	230	32	5.4	15
24	13	13	-				79	396	193	28	5.4	14
25	16	15	-				78	374	153	25	8.4	11
26	16	16	-				110	387	153	20	8.8	9.8
27	15	15	-				158	388	126	17	10	9.6
28	16	14	-				143	404	107	14	8.6	9.0
29	14	13	-				107	592	94	15	28	9.6
30	17	14	-				90	430	86	15	18	8.8
31	24	-	-				-	506	-	21	10	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						427.6	24	9.4	13.8	848		
November.....						548	23	12	13.3	1,080		
December 1-9.....						150	20	15	16.7	298		
Calendar year												
January.....						-	-	-	-	-		
February.....						-	-	-	-	-		
March.....						-	-	-	-	-		
April.....						2,139	158	26	71.3	4,240		
May.....						13,272	639	99	428	26,320		
June.....						8,158	471	86	272	16,180		
July.....						1,861	216	14	60.0	3,690		
August.....						360.2	28	4.2	11.6	714		
September.....						229.4	15	4.4	7.65	456		
Water year												

Ashley Creek near Vernal, Utah

Location.- Water-stage recorder, lat. 40°35', long. 109°37', in sec. 1, T. 3 S., R. 20 E., three-quarters of a mile 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 1937. March 1900 to December 1904, fragmentary records at site below mouth of Dry Fork, October 1911 to June 1914 fragmentary records at power plant $1\frac{1}{2}$ miles below present gage.

Average discharge.- 21 years (1914-18, 1918-37), 105 second-feet.

Extremes.- Maximum discharge during year, 1,210 second-feet May 14 (gage height, 8.39 feet); minimum, 16 second-feet Mar. 21.

1911-37: Maximum discharge, 2,050 second-feet May 29, 1921; minimum recorded, 16 second-feet Mar. 21, 1937.

Remarks.- Records good. Discharge for Dec. 7 to Mar. 18, Aug. 15-18, Aug. 29 to Sept. 9 interpolated between weekly gage readings. No diversions above station.

Rating table, water year 1936-37 (gage height, in feet, and discharge, in second-feet)

5.7	15	6.8	267
5.8	24	7.0	340
6.0	51	7.3	475
6.2	91	7.6	650
6.4	143	8.0	920
6.6	202	8.5	1,300

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	56	50	31	24	19	18	18	76	348	146	127	80
2	55	44	30	24	19	18	18	87	394	143	119	80
3	51	40	29	24	18	18	18	135	455	135	118	80
4	51	38	28	24	18	18	18	215	407	132	114	79
5	50	48	28	24	18	18	17	310	332	124	111	78
6	50	48	28	24	18	18	18	412	292	121	111	77
7	55	50	28	24	18	18	17	460	270	124	108	76
8	55	44	28	24	18	18	17	560	298	135	108	75
9	55	44	29	24	18	18	18	692	302	162	105	74
10	53	42	29	24	18	18	19	836	295	132	101	73
11	51	42	29	24	18	18	21	738	310	130	73	71
12	50	42	29	24	18	18	20	724	295	190	69	69
13	50	42	29	24	18	18	21	815	254	190	69	69
14	48	44	28	24	18	18	23	864	244	158	91	65
15	48	44	28	24	18	18	29	920	237	135	91	62
16	50	45	28	24	18	18	38	850	237	121	91	58
17	58	45	28	24	18	18	39	801	254	119	91	56
18	65	44	27	23	18	19	40	790	241	140	91	55
19	73	44	27	23	18	19	40	780	224	178	91	53
20	82	42	26	22	18	18	42	519	221	146	87	51
21	64	40	26	22	18	17	45	475	234	124	87	55
22	58	39	25	21	18	17	55	475	264	121	84	56
23	56	38	24	21	18	17	55	435	212	119	84	60
24	46	38	24	21	18	18	60	425	193	158	84	60
25	51	35	24	21	18	19	64	376	190	149	84	58
26	51	36	24	21	18	19	67	352	205	149	84	56
27	48	35	24	20	18	18	80	340	193	149	82	58
28	48	34	24	20	18	19	73	356	166	132	80	56
29	48	32	24	20	-	19	71	360	155	143	80	56
30	51	31	24	20	-	18	71	364	152	165	80	56
31	-	-	24	19	-	18	-	340	-	143	80	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	1,680	82	48	54.2	3,330
November.....	1,240	50	31	41.5	2,460
December.....	834	31	24	26.9	1,650
Calendar year 1936.....	22,258	1,090	17	60.8	44,150
January.....	702	24	19	22.6	1,390
February.....	508	19	18	18.1	1,000
March.....	561	19	17	18.1	1,110
April.....	1,132	80	17	37.7	2,250
May.....	15,872	920	76	512	31,480
June.....	7,874	455	152	262	15,620
July.....	4,404	190	119	142	8,740
August.....	2,874	127	69	92.7	5,700
September.....	1,952	80	51	65.1	3,870
Water year 1936-37.....	39,631	920	17	109	78,600

Duchesne River at Provo River Trail, near Hanna, Utah

Location.- Water-stage recorder, lat. 40°37', long. 110°54', in SE¼ sec. 27, T. 3 N., R. 9 W. Uinta meridian, 400 feet below Provo River trail bridge, 7 miles above Hades Creek, and 12 miles northwest of Hanna. Altitude, about 8,120 feet.

Drainage area.- 39 square miles.

Records available.- July 1929 to September 1933, October 1935 to September 1937.

Extremes.- Maximum discharge during year, 708 second-feet May 17 (gage height, 3.38 feet); minimum not determined.
1929-33, 1935-37: Maximum discharge, 888 second-feet June 24, 1932; minimum (estimated), 1 second-foot Aug. 30, 31, 1931.

Remarks.- Records good except those for Oct. 1-4, 7, Nov. 18 to May 7, which were computed on basis of weather records and records for other stations on Duchesne River and are fair. Records show flow of water at proposed diversion tunnel to Provo River.

Rating table, water year 1936-37 (gage height, in feet, and discharge, in second-feet)

0.6	9	1.4	57	2.3	238
.8	15	1.6	83	2.5	339
1.0	25	1.8	117	3.0	510
1.2	38	2.0	159	3.5	780

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	13	11						20	209	61	24	16
2	13	10						30	196	54	22	14
3	12	10						50	218	50	20	13
4	12	10						80	229	46	19	11
5	12	10						105	186	43	19	11
6	12	10						140	150	49	18	11
7	11	10						180	133	50	18	11
8	11	10						238	129	54	16	11
9	11	10						296	129	52	16	10
10	11	10						328	141	47	14	9
11	10	11						317	164	44	14	9
12	10	11						310	155	42	13	8
13	10	10						378	155	44	14	8
14	10	9						468	171	57	13	8
15	10	9						575	183	40	14	8
16	10	9						575	226	35	13	8
17	10	9						600	238	36	13	7
18	9	9						590	206	38	13	7
19	10	9						515	206	32	11	7
20	14	9						477	209	30	10	8
21	11	9						496	199	28	10	8
22	10	9						520	226	26	10	8
23	10	9						472	169	25	10	16
24	10	9						398	137	24	10	12
25	10	9						325	125	27	9	9
26	10	9						300	113	30	9	9
27	9	9						332	91	25	9	9
28	9	9						370	79	29	10	8
29	9	9						351	76	30	12	8
30	10	9						347	70	30	13	9
31	10	-						260	-	27	14	-
Month							Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet	
October.....							329	14	9	10.6	653	
November.....							286	11	9	9.5	567	
December.....							248	-	-	8	492	
Calendar year 1936.....							25,215	630	-	68.9	50,020	
January.....							217	-	-	7	430	
February.....							168	-	-	6	333	
March.....							186	-	-	6	369	
April.....							450	-	-	15	893	
May.....							10,443	600	20	387	20,710	
June.....							4,913	238	70	164	9,750	
July.....							1,205	61	24	38.9	2,390	
August.....							434	24	9	14.0	861	
September.....							290	16	7	9.7	575	
Water year 1936-37.....							19,174	600	-	52.5	38,020	

Duchesne River near Tabiona, Utah

Location.- Water-stage recorder, lat. $40^{\circ}18'$, long. $110^{\circ}36'$, in SW $\frac{1}{4}$ sec. 17, T. 2 S., R. 6 W. Uinta 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 1937.

Average discharge.- 18 years, 211 second-feet.

Extremes.- Maximum discharge during year, 1,750 second-feet May 18 (gage height, 7.01 feet); minimum, 47 second-feet Aug. 27.

1919-37: Maximum discharge observed, about 2,500 second-feet June 13, 1921; minimum recorded, 27 second-feet Oct. 17, 1934.

Remarks.- Records fair. Discharge for periods of ice effect, Jan. 1 to Feb. 27, Mar. 1-8, 8-9 computed on basis of weather records. Discharge for June 27 to July 5, July 7-10, 13-17, 19-21, Sept. 18 computed on basis of records for other stations on Duchesne River. Small diversions for irrigation above station.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	109	118	94			82	118	193	685	260	118	102
2	103	112	93			85	120	239	643	240	112	100
3	103	104	97			90	102	306	655	220	108	96
4	97	110	94			95	103	387	734	200	104	99
5	97	117	99			85	104	484	673	205	97	109
6	103	118	108			85	106	592	692	186	102	103
7	102	114	97			82	97	649	544	240	93	100
8	93	104	96			82	97	819	523	300	89	100
9	93	108	96			82	109	1,020	499	380	85	97
10	93	106	96			85	117	1,140	480	340	81	97
11	96	106	106			96	128	1,130	489	315	73	103
12	85	109	106			96	112	996	494	427	67	100
13	85	108	106			94	126	1,120	487	475	63	100
14	82	106	115			94	140	1,270	457	525	60	103
15	85	108	99			94	167	1,470	452	410	57	106
16	85	109	102			100	188	1,470	466	335	54	94
17	82	109	100			103	173	1,480	499	265	62	82
18	83	108	99			102	154	1,600	457	315	62	81
19	85	103	99			92	163	1,440	439	285	81	61
20	89	104	99			89	163	1,270	431	245	58	89
21	92	102	97			92	190	1,210	431	220	57	99
22	99	102	99			96	224	1,280	452	186	58	103
23	103	103	100			93	188	1,180	402	171	63	115
24	102	96	110			90	171	1,030	346	168	63	120
25	108	97	108			97	173	900	325	152	58	114
26	109	100	96			93	206	792	315	150	54	112
27	108	96	99			92	260	745	305	143	51	110
28	108	96	100		96	94	241	799	300	140	76	108
29	104	97	104			102	206	745	330	148	120	108
30	108	96	102			106	190	1,020	285	133	85	110
31	118	-	103			114	-	880	-	121	87	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						3,019	118	82	97.4	5,990		
November.....						3,166	118	96	106	6,280		
December.....						3,119	115	93	101	6,190		
Calendar year 1936.....						86,874	1,510	52	237	171,900		
January.....						2,945	-	-	96	5,840		
February.....						2,520	-	-	90	5,000		
March.....						2,682	114	82	93.0	5,720		
April.....						4,636	280	97	154	9,200		
May.....						29,638	1,600	193	966	58,790		
June.....						14,260	734	285	475	28,280		
July.....						7,890	525	121	255	15,650		
August.....						2,378	120	51	76.7	4,720		
September.....						3,041	120	81	101	6,030		
Water year 1936-37.....						79,494	1,600	51	218	157,700		

Duchesne River at Duchesne, Utah

Location.- Water-stage recorder, lat. 40°09'55", long. 110°23'50", in SW¼ sec. 1, T. 4 S., R. 5 W. Uinta meridian, in Duchesne, half a mile above mouth of Strawberry River.

Drainage area.- 660 square miles.

Records available.- December 1917 to September 1937.

Average discharge.- 20 years, 384 second-feet.

Extremes.- Maximum discharge during year, 3,040 second-feet May 18 (gage height, 5.05 feet); minimum, 79 second-feet Aug. 18.

1917-37: Maximum discharge observed, 4,420 second-feet June 10, 1922 (gage height, 8.65 feet, former site and datum); minimum observed, 15 second-feet July 11, 1931.

Remarks.- Records good except those for period of ice effect Dec. 28 to Apr. 2, and for Dec. 13-18, which were computed on basis of weather records and records for station near Tabiona and are fair. Diversions for irrigation above station.

Rating table, water year 1936-37 except period of ice effect (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Oct. 1 to Apr. 30)

1.7	69	2.4	258	3.6	1,070
1.8	86	2.6	342	4.0	1,510
1.9	106	2.8	443	4.5	2,170
2.0	130	3.0	565	5.0	2,960
2.2	187	3.3	790	5.5	3,870

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	154	166	160	187		-	166	286	1,270	472	175	236
2	149	160	154			-	175	329	1,130	422	166	258
3	149	141	146			-	166	443	1,180	385	166	218
4	149	157	157			-	154	607	1,300	366	146	194
5	149	175	154			-	154	799	1,210	371	123	197
6	152	175	157			-	157	952	1,050	352	125	190
7	157	172	178			-	146	1,020	952	371	130	187
8	154	172	187			-	144	1,120	880	489	125	187
9	152	157	181			-	152	1,370	898	514	116	184
10	144	160	169			-	175	1,590	817	472	102	175
11	144	154	163			-	197	1,640	862	427	96	163
12	146	154	166			-	181	1,490	862	443	88	154
13	144	154	173			-	184	1,630	799	514	90	152
14	133	154	182			-	207	1,890	790	579	84	144
15	136	154	172			-	262	2,340	782	514	83	138
16	144	157	179			-	311	2,520	826	416	83	128
17	133	157	175			-	316	2,530	952	371	198	116
18	130	154	175			-	274	2,730	880	478	128	106
19	153	152	175			-	282	2,320	844	401	102	106
20	146	149	175			-	278	2,040	835	338	94	106
21	146	152	175			-	307	1,970	853	290	90	133
22	146	152	181			-	361	2,060	961	262	86	135
23	152	154	181			-	316	1,960	889	232	98	154
24	152	149	184			175	279	1,680	742	221	120	169
25	154	152	184			-	266	1,490	650	218	104	163
26	154	154	184			-	298	1,290	635	228	88	166
27	154	157	184			169	385	1,190	572	214	86	163
28	154	166	184			-	411	1,290	520	204	102	157
29	152	160	184			-	356	1,250	607	221	456	154
30	149	157	184			-	311	1,750	546	207	254	157
31	157	-	184			187	-	1,680	-	190	214	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						4,567	157	130	147	9,060		
November.....						4,727	175	141	158	9,380		
December.....						5,387	187	146	174	10,680		
Calendar year 1936						150,316	2,950	91	411	296,200		
January.....						4,960	-	-	160	9,840		
February.....						4,200	-	-	150	8,350		
March.....						4,805	-	-	155	9,530		
April.....						7,370	411	144	246	14,620		
May.....						47,256	2,730	286	1,524	93,730		
June.....						26,094	1,300	520	870	51,760		
July.....						11,182	579	190	361	22,180		
August.....						4,118	456	83	133	8,170		
September.....						4,890	258	106	163	9,700		
Water year 1936-37						129,556	2,730	83	355	257,000		

Duchesne River at Myton, Utah

Location.—Water-stage recorder, lat. 40°12', long. 110°03', in NW¼ sec. 25, T. 3 S., R. 2 W. Uinta meridian, at Myton, 3 miles below mouth of Lake Fork.

Drainage area.—2,750 square miles.

Records available.—October 1899 to November 1910, July 1911 to September 1937.

Average discharge.—29 years (1899-1902, 1911-37), 858 second-feet.

Extremes.—Maximum discharge during year, 4,140 second-feet May 16 (gage height, 5.65 feet); minimum discharge, 22 second-feet Aug. 28.

1899-1937: Maximum discharge observed, 12,500 second-feet June 10, 1922 (gage height, 7.94 feet); minimum, less than 1 second-foot July 16, 1931, and several days during August and September 1934.

Remarks.—Records good except those for Oct. 2-8, 8-14, Nov. 5 to Mar. 23, which were computed on basis of records for other stations on Duchesne River and are fair. Large diversions for irrigation above station. Flow affected by storage in reservoir on Strawberry River.

Rating tables, water year 1936-37 except period of ice effect (gage height, in feet, and discharge, in second-feet)

Oct. 1 to May 4

May 5 to Sept. 30

1.6	94	1.2	25	2.2	407	3.6	1,490
1.8	158	1.3	53	2.4	515	4.0	1,920
2.0	240	1.4	94	2.6	640	4.5	2,530
2.2	340	1.5	117	2.8	785	5.0	3,190
2.4	459	1.6	152	3.0	945	5.5	3,920
2.6	595	1.8	228	3.3	1,210	5.8	4,370
2.8	750	2.0	312				
3.0	930						
3.3	1,240						

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	118	340				-	525	742	2,260	563	205	582
2	116	324				-	567	801	1,930	515	182	1,070
3	115	269				-	525	911	1,940	423	185	493
4	115	218				-	447	1,020	2,040	378	156	454
5	117	-				-	422	1,110	2,040	368	131	438
6	120	-				-	380	1,770	1,860	330	128	407
7	124	-				-	403	1,780	1,660	325	107	383
8	120	-				-	357	1,920	1,520	675	120	363
9	118	-				-	346	2,290	1,450	1,090	128	340
10	117	-				-	386	2,800	1,390	770	103	303
11	121	-				-	428	2,920	1,380	801	81	228
12	121	-				-	428	2,760	1,350	945	65	205
13	119	-				-	397	2,710	1,270	987	56	189
14	116	-				-	428	3,050	1,220	1,280	45	185
15	134	-				-	525	3,760	1,190	1,060	33	185
16	166	-				-	670	4,040	1,160	825	31	170
17	161	-				-	742	3,910	1,240	696	45	124
18	161	-				-	686	3,800	1,250	793	197	100
19	155	-				-	648	3,650	1,070	770	103	100
20	324	-				-	678	3,060	1,010	569	59	124
21	223	-				-	702	2,780	1,000	449	45	163
22	197	-				-	758	2,790	1,050	392	33	182
23	185	-				-	750	2,690	1,120	303	36	189
24	189	-				434	694	2,380	849	278	45	197
25	193	-				492	655	2,120	747	286	47	201
26	218	-				472	670	1,860	675	269	42	208
27	223	-				440	767	1,620	654	312	28	201
28	223	-				453	810	1,580	588	240	86	182
29	254	-				459	810	1,640	476	240	997	170
30	250	-				479	742	2,400	725	240	1,500	189
31	309	-				492	-	3,120	-	244	545	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						5,202	324	115.	168	10,320		
November.....						7,500	-	-	250	14,880		
December.....						9,300	-	-	300	18,480		
Calendar year 1936.....						200,577	3,750	73	548	397,800		
January.....						10,075	-	-	325	19,980		
February.....						9,800	-	-	350	19,440		
March.....						12,400	-	-	400	24,600		
April.....						17,346	810	346	578	34,400		
May.....						73,784	4,040	742	2,380	146,300		
June.....						38,134	2,260	476	1,271	75,640		
July.....						17,416	1,280	240	562	34,640		
August.....						5,564	1,500	28	179	11,040		
September.....						8,325	1,070	100	278	16,510		
Water year 1936-37.....						214,846	4,040	28	589	426,100		

Strawberry River at Duchesne, Utah

Location.- Staff gage, lat. $40^{\circ}10'$, long. $110^{\circ}25'$, in SW $\frac{1}{4}$ sec. 2, T. 4 S., R. 5 W. Uinta meridian, three-quarters of a mile west of Duchesne and $1\frac{1}{2}$ miles above mouth. Gage datum raised 2.25 feet on May 4, 1937.

Drainage area.- 1,040 square miles.

Records available.- June 1908 to November 1910, March 1914 to September 1937.

Average discharge.- 23 years (1914-37), 172 second-feet.

Extremes.- Maximum discharge observed during year, 1,690 second-feet Sept. 2 (gage height, 7.5 feet, present datum); minimum observed, 55 second-feet Oct. 5-10. 1908-10, 1914-37: Maximum discharge observed, 3,230 second-feet May 27, 1922; minimum observed, 1 second-foot during several days in July 1931.

Remarks.- Records fair. Gage read twice daily. Discharge for period of ice effect, Dec. 6 to Mar. 25, computed on basis of weather records. Discharge for Aug. 17, 29, 30, Sept. 1-3 computed from graph based on two or more daily gage readings. Diversions for irrigation above station. Flow affected by storage in Strawberry Valley Reservoir (capacity, 250,000 acre-feet), which is diverted to Great Salt Lake Basin.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	60	100	70			-	109	338	645	198	121	1,000
2	58	102	80			-	113	479	588	196	112	1,000
3	58	83	83			-	115	592	588	187	106	750
4	56	97	86			-	99	604	571	180	102	210
5	55	88	85			-	104	705	520	175	99	130
6	55	95	-			-	97	780	580	169	93	114
7	55	90	-			-	102	917	555	173	90	110
8	55	93	-			-	95	1,030	505	344	93	112
9	55	90	-			-	100	1,160	487	247	96	103
10	55	83	-			-	93	1,260	455	253	91	89
11	56	83	-			-	119	1,260	417	250	88	96
12	59	75	-			-	121	1,270	409	234	84	98
13	59	61	-			-	126	1,140	377	242	83	93
14	60	85	-			-	139	1,140	359	341	84	90
15	64	83	-			-	162	1,160	344	251	85	90
16	71	85	-			-	173	1,260	324	193	99	90
17	69	83	-			-	202	1,220	307	175	300	89
18	36	83	-			-	185	1,200	298	242	130	89
19	70	80	-			-	177	1,150	273	341	99	86
20	76	72	-			-	228	1,030	267	160	89	88
21	72	72	-			-	251	930	245	152	90	89
22	72	74	-			-	500	904	247	146	86	88
23	69	85	-			-	344	845	228	148	89	89
24	66	81	-			-	298	832	223	135	96	91
25	66	80	-			-	295	748	213	135	86	90
26	66	76	-			111	388	699	216	132	86	91
27	63	74	-			108	656	615	203	141	84	93
28	63	80	-			115	616	555	198	162	85	91
29	63	76	-			111	364	520	287	139	1,000	89
30	75	69	-			106	341	965	216	133	1,500	86
31	81	-	-			-	-	1,010	-	132	121	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						1,967	81	55	63.5	3,900		
November.....						2,498	102	69	85.3	4,950		
December.....						2,635	-	-	85	5,280		
Calendar year 1936.....						56,955	768	-	156	113,000		
January.....						2,480	-	-	80	4,920		
February.....						2,240	-	-	80	4,440		
March.....						3,100	-	-	100	6,150		
April.....						6,621	636	93	221	13,130		
May.....						28,318	1,280	338	913	56,170		
June.....						11,075	645	198	369	21,970		
July.....						6,076	344	132	196	12,050		
August.....						5,458	1,500	83	176	10,850		
September.....						5,434	1,000	86	181	10,780		
Water year 1936-37.....						77,912	1,500	55	213	154,500		

Currant Creek near Fruitland, Utah

Location.- Staff gage, lat. $40^{\circ}12'$, long. $110^{\circ}54'$, in SE $\frac{1}{4}$ sec. 21, T. 3 S., R. 9 W. Uinta meridian, 200 feet below Deep Creek, 250 feet below bridge on U. S. Highway 40, and $\frac{3}{4}$ miles southwest of Fruitland.

Drainage area.- 142 square miles.

Records available.- January 1935 to September 1937.

Extremes.- 1935: Maximum discharge observed during year, 198 second-feet May 28; minimum observed, 5 second-feet Feb. 14.

1935-36: Maximum discharge observed during year, 366 second-feet May 7; minimum observed, 7 second-feet for several days during July, August, and September.

1936-37: Maximum discharge observed during year, 337 second-feet May 15 (gage height, 2.84 feet); minimum observed, 12 second-feet Jan. 4, 6, and 7.

1935-37: Maximum discharge observed, 366 second-feet May 7, 1936 (gage height, 2.88 feet); minimum observed, 5 second-feet Feb. 14, 1935.

Remarks.- Records poor because of large diurnal fluctuations. Gage read once daily. Records of daily discharge for Jan. 1, 1935, to Dec. 31, 1936, furnished by Spanish Fork Water Commissioner. Discharge for period of ice effect, Jan. 8 to Mar. 13, 1937, computed on basis of weather records and those for Sept. 28-30 interpolated. Currant Creek Feeder Canal constructed by Bureau of Reclamation in 1936 diverts from headwaters of Currant Creek to Strawberry Reservoir, thence through Strawberry Tunnel to the Great Basin (1,700 acre-feet diverted during 1937).

Discharge, in second-feet, 1935-37

1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1				13	13	7	23	53	127	41	12	11
2				13	18	17	21	46	124	39	12	11
3				15	7	15	25	45	120	36	11	11
4				13	7	10	26	43	117	34	20	11
5				17	17	7	28	48	126	32	12	11
6				16	18	6	20	54	122	31	11	11
7				14	16	15	19	62	170	27	11	11
8				14	16	14	24	78	151	26	12	12
9				15	10	16	22	88	156	24	12	12
10				16	21	25	18	90	153	24	12	12
11				17	18	18	16	108	156	22	12	12
12				16	14	10	19	93	156	21	12	11
13				7	14	14	21	90	152	21	11	11
14				16	5	23	25	95	136	21	10	11
15				21	21	19	32	110	130	20	11	11
16				18	6	6	40	121	113	18	10	11
17				6	10	17	37	106	103	18	71	10
18				18	6	18	30	95	100	19	20	9
19				17	21	19	26	106	95	18	18	10
20				16	10	16	44	100	95	18	12	11
21				18	18	17	59	94	89	17	12	10
22				19	21	18	70	107	84	16	12	11
23				14	9	19	57	140	70	16	14	12
24				13	16	7	39	176	64	15	14	11
25				7	7	12	39	194	58	15	14	10
26				17	6	17	39	198	56	14	13	10
27				13	14	15	46	178	55	14	12	11
28				13	18	17	44	175	50	15	12	12
29				17	-	18	53	169	48	13	12	12
30				8	-	21	48	146	47	12	11	12
31				18	-	21	-	140	-	12	11	-

Discharge, in second-feet, of Current Creek near Fruitland, Utah, 1935-37--Continued

1935-36												
Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	12	13	15	13	15	15	18	173	176	16	44	10
2	12	13	13	13	15	14	16	207	161	14	16	9
3	12	14	11	13	15	14	15	226	161	12	14	8
4	12	14	13	13	14	14	15	264	146	10	15	9
5	12	14	11	13	13	14	17	315	146	8	13	8
6	12	14	12	13	13	15	16	326	130	7	12	7
7	12	14	12	14	14	15	17	366	130	7	12	8
8	12	13	16	13	13	16	19	248	124	7	12	18
9	12	13	15	13	13	15	20	272	116	7	13	10
10	12	13	12	13	12	14	21	292	107	8	13	11
11	12	14	15	13	13	12	22	321	102	8	14	18
12	12	13	14	13	13	13	26	290	95	7	11	30
13	12	14	15	13	14	15	32	335	89	7	11	23
14	13	13	13	14	13	16	42	326	84	7	12	22
15	13	15	14	14	14	14	58	313	77	7	13	23
16	13	14	12	13	13	11	67	288	79	7	12	23
17	13	15	13	13	13	13	93	280	77	7	11	22
18	14	14	13	13	13	15	109	244	74	8	13	22
19	14	13	12	14	14	16	116	241	70	8	13	21
20	13	14	13	14	13	16	133	226	70	8	13	21
21	12	13	13	15	14	16	145	207	68	8	13	21
22	13	15	13	15	15	16	164	193	61	7	9	21
23	13	13	12	16	15	14	173	176	55	8	8	19
24	13	14	13	15	16	15	164	176	49	8	8	19
25	13	16	13	16	14	16	193	176	44	10	7	19
26	14	16	13	16	13	17	161	176	38	11	7	19
27	13	13	13	15	14	16	173	161	33	11	7	20
28	14	14	13	16	15	16	193	161	28	13	7	22
29	14	15	13	16	16	17	226	146	23	14	11	22
30	14	14	13	14	-	18	193	161	19	13	10	22
31	13	-	13	15	-	17	-	169	-	19	11	-

1936-37												
Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	21	21	17	13		18	24	119	205	62	35	30
2	21	22	18	14			25	131	193	60	33	26
3	21	20	18	13			24	142	186	57	33	24
4	22	22	19	12			25	154	182	53	32	24
5	22	21	19	13			23	166	182	51	32	25
6	21	22	20	12			24	178	172	50	30	26
7	22	21	18	12			28	220	162	67	30	27
8	22	20	19				28	264	160	58	29	26
9	22	19	20				25	289	140	61	29	25
10	22	21	20				31	320	164	67	27	25
11	22	19	19				32	316	130	66	27	25
12	22	17	20				50	297	125	64	26	24
13	21	19	20	58			322	119	93	26	22	
14	21	19	18	21			52	333	110	78	27	22
15	21	19	18	24			64	337	113	58	27	23
16	22	20	19	23	60	327	110	46	31	22		
17	22	20	18	21	63	308	106	48	28	22		
18	22	19	18	22	72	297	99	46	27	22		
19	20	20	17	22	77	271	95	45	28	22		
20	22	20	18	21	84	250	90	41	27	22		
21	22	19	17	23	91	229	83	39	25	30		
22	23	19	18	22	99	205	79	38	24	26		
23	22	20	17	24	102	222	76	37	22	25		
24	22	20	17	24	113	188	73	38	22	25		
25	23	19	18	25	100	183	71	36	23	25		
26	23	18	18	24	132	172	68	36	22	25		
27	24	19	18	13	151	156	66	35	27	24		
28	23	17	16	18	130	143	63	35	28	24		
29	24	17	14	15	128	125	60	35	25	24		
30	25	16	14	18	125	293	63	35	23	25		
31	25	-	13	20	-	222	-	35	23	-		

Discharge, in second-feet, of Curreant Creek near Fruitland, Utah, 1935-37---Continued

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
January 1935	455	21	6	14.7	902
February.....	377	21	5	13.5	748
March.....	474	25	6	15.3	940
April.....	1,010	70	16	33.7	2,000
May.....	3,348	198	43	108	6,640
June.....	3,263	170	47	109	6,470
July.....	667	41	12	21.5	1,320
August.....	449	71	10	14.5	891
September.....	331	12	9	11.0	657
The period.....					20,570
October 1935	395	14	12	12.7	783
November.....	420	16	13	14.0	833
December.....	406	16	11	13.1	805
Calendar year 1935	11,595	198	5	31.8	22,990
January 1936	433	16	13	14.0	859
February.....	402	16	12	13.9	797
March.....	485	18	11	15.0	922
April.....	2,657	226	15	68.6	5,270
May.....	7,455	366	148	240	14,750
June.....	2,632	176	19	87.7	5,220
July.....	293	19	7	9.5	581
August.....	384	44	7	12.4	762
September.....	527	30	7	17.6	1,050
Water year 1935-36	16,469	366	7	45.0	32,670
October 1936.....	687	25	20	22.2	1,360
November.....	586	22	16	19.5	1,160
December.....	552	20	13	17.8	1,090
Calendar year 1936	17,073	366	7	46.6	33,860
January 1937	449	-	-	14.5	891
February.....	448	-	-	16	889
March.....	614	-	-	19.8	1,220
April.....	2,040	161	23	68.0	4,050
May.....	7,179	337	119	232	14,240
June.....	3,504	205	60	117	6,950
July.....	1,570	93	35	50.6	3,110
August.....	848	35	22	27.4	1,680
September.....	737	30	22	24.6	1,460
Water year 1936-37	19,214	337	-	52.6	38,100

Uinta River near Neola, Utah

Location.— Water-stage recorder, lat. 40°32', long. 110°04', in SW¼ sec. 25, T. 2 N., R. 2 W. Uinta meridian, 100 feet below bridge, 1 mile above mouth of Pole Creek, and 7 miles north of Neola.

Drainage area.— 181 square miles.

Records available.— July 1921 to September 1927 (fragmentary), September 1929 to September 1937.

Extremes.— Maximum discharge during year, 1,050 second-feet May 14 (gage height, 2.42 feet); minimum not determined.

1929-37: Maximum discharge, 1,390 second-feet May 21, 1932 (gage height, 2.80 feet); minimum not determined.

Maximum discharge, on June 9, 1922, exceeded 3,000 second-feet but was not determined more exactly because of unstable channel conditions.

Remarks.— Records fair. Mean monthly discharge for November-April estimated on basis of weather records and records for Whiterocks River near Whiterocks and for Ashley Creek near Vernal. Water diverted from Pole Creek and used at Uinta Power & Light Co.'s power plant enters stream 500 feet above gage. Summer flow slightly regulated by storage in several small mountain lakes and reservoirs.

Rating tables, water year 1936-37 (gage height, in feet, and discharge in second-feet)

Oct. 1 to May 14				May 15 to Sept. 30			
0.9	101	1.6	444	1.0	157	1.8	590
1.0	136	1.8	580	1.2	243	2.0	730
1.2	221	2.0	720	1.4	345	2.2	870
1.4	324	2.2	870	1.6	462		

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	136	136					-	108	414	357	324	402
2	133	118					-	164	414	334	292	408
3	133	-					-	217	444	313	277	402
4	144	-					-	275	519	303	265	402
5	136	-					-	347	456	297	265	368
6	140	-					-	382	408	313	258	340
7	136	-					-	401	385	313	248	318
8	133	-					-	573	391	368	243	303
9	122	-					-	699	385	374	243	287
10	118	-					-	706	379	379	230	272
11	108	-					-	657	444	396	272	258
12	108	-					-	601	426	438	277	248
13	108	-					-	671	390	414	297	238
14	104	-					77	822	385	408	287	234
15	112	-					-	821	385	357	277	220
16	125	-					-	765	450	313	303	220
17	133	-					108	737	570	297	292	216
18	133	-					-	730	508	303	292	207
19	136	-					-	674	497	313	282	207
20	144	-					89	551	525	277	277	212
21	122	-					-	557	557	263	272	225
22	122	-					-	590	597	248	282	202
23	122	-					-	557	544	239	268	207
24	108	-					89	512	475	258	258	198
25	112	-					-	475	450	258	243	190
26	101	-					-	414	462	282	234	182
27	105	-					-	390	420	258	230	173
28	101	-					-	444	385	268	243	173
29	101	-					-	468	362	303	351	165
30	115	-					95	508	368	408	351	178
31	125	-					-	462	-	374	456	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	3,776	144	101	122	7,490
November.....	2,550	-	-	85	5,060
December.....	1,860	-	-	60	3,690
Calendar year 1936.....	56,427	650	-	154	111,900
January.....	1,550	-	-	50	3,070
February.....	1,260	-	-	45	2,500
March.....	1,395	-	-	45	2,770
April.....	2,100	-	-	70	4,170
May.....	16,278	822	108	525	32,290
June.....	13,385	597	362	446	26,550
July.....	10,026	438	239	323	19,890
August.....	8,685	456	230	280	17,230
September.....	7,655	408	165	255	15,180
Water year 1936-37.....	70,520	822	-	193	139,900

Whiterocks River near Whiterocks, Utah

Location.— Water-stage recorder, lat. 40°34', long. 109°56', in SW $\frac{1}{4}$ sec. 18, T. 2 N., R. 1 E. Uinta meridian, 25 feet below bridge, three-quarters of a mile above heading of United States Whiterocks and Farm Creek Canals, and 6 $\frac{1}{2}$ miles north of Whiterocks.

Drainage area.— 115 square miles.

Records available.— August 1921 to September 1928 and February 1930 to September 1937.

September 1899 to August 1904 and April 1907 to November 1910, near present site. November 1917 to June 1921, below diversion of United States Whiterocks Canal and above Farm Creek Canal; records equivalent if used in conjunction with those for Whiterocks Canal.

Average discharge.— 13 years (1899-1903, 1908-10, 1930-37), 121 second-feet.

Extremes.— Maximum discharge during year, 1,690 second-feet May 14 (gage height, 3.98 feet), from rating curve extended above 500 second-feet; minimum not determined 1917-28, 1930-37: Maximum discharge observed, 2,750 second-feet June 21, 1922; minimum, less than 14 second-feet during winter of 1920-21.

Remarks.— Records fair. Discharge for Nov. 15 to Apr. 19, May 6-10, June 14-16, 19-27, July 3-13, 17-22, 31, Aug. 1-12, 14-24, Sept. 21-29 computed on basis of weather records, records for Ashley Creek near Vernal and Uinta River near Neola, and range line on the recorder graph when the clock was stopped. Flow slightly regulated by storage in small mountain lakes.

Rating table, water year 1935-36 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used May 16 to Sept. 30)

0.6	25	1.4	85	2.2	305	3.0	770
.8	32	1.6	122	2.4	400	3.3	1,010
1.0	43	1.8	171	2.6	505	3.6	1,290
1.2	60	2.0	232	2.8	650	4.0	1,710

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	84	67					25	75	375	186	202	155
2	82	59					25	108	395	186	188	153
3	81	59					25	145	466	170	173	148
4	78	71					25	200	525	160	162	158
5	78	61					24	242	400	150	156	127
6	75	60					25	340	323	145	150	118
7	72	56					23	410	290	151	144	112
8	69	56					23	580	310	161	140	108
9	69	57					25	690	318	171	134	108
10	63	55					27	725	310	165	123	100
11	61	54					26	686	365	170	111	95
12	60	53					28	651	332	213	109	92
13	60	55					32	850	282	213	109	90
14	59	56					39	1,130	270	183	117	87
15	62	58					47	1,210	257	161	130	84
16	68	58					58	1,050	287	143	130	82
17	72	60					62	978	360	137	130	79
18	74	59					64	914	350	160	130	75
19	77	58					62	954	300	192	120	72
20	82	56					64	672	285	165	117	75
21	71	55					67	604	317	147	111	81
22	66	53					69	637	350	130	112	84
23	64	52					72	604	300	120	110	90
24	63	51					79	559	260	203	110	87
25	64	47					84	517	230	200	110	84
26	62	50					76	410	248	226	99	82
27	62	48					77	380	238	226	87	81
28	60	46					72	400	229	222	92	79
29	61	45					71	420	197	213	148	78
30	63	43					68	523	188	246	131	77
31	68	-					-	445	-	212	184	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	2,130	84	59	68.7	4,220
November.....	1,658	71	43	55.2	3,290
December.....	1,085	-	-	35	2,150
Calendar year 1936.....	33,987	553	26	92.9	67,410
January.....	930	-	-	30	1,840
February.....	700	-	-	25	1,390
March.....	775	-	-	25	1,540
April.....	1,469	84	23	49.0	2,910
May.....	18,109	1,210	75	584	35,920
June.....	9,375	523	188	312	18,600
July.....	5,530	246	120	178	10,970
August.....	4,068	202	87	131	8,070
September.....	2,921	155	72	97.4	5,790
Water year 1936-37.....	48,750	1,210	-	134	96,690

White River near Meeker, Colo.

Location.— Water-stage recorder, lat. 40°02', long. 107°52', in sec. 30, T. 1 N., R. 93 W., 1 mile above mouth of Curtis Creek and 3½ miles east of Meeker.

Drainage area.— 762 square miles.

Records available.— May 1901 to October 1906, May 1910 to November 1913, and October 1933 to September 1937 in reports of Geological Survey; May 1901 to October 1906, May 1910 to September 1937 in reports of State engineer. Records prior to October 1913 obtained 2½ miles downstream from present site.

Average discharge.— 32 years, 650 second-feet.

Extremes.— Maximum discharge during year, 2,300 second-feet May 19 (gage height, 3.33 feet); minimum daily discharge, 208 second-feet Aug. 28.

1901-6, 1910-37: Maximum daily discharge, 6,070 second-feet June 18, 1921; minimum daily discharge, 112 second-feet July 17, 1934.

Remarks.— Records excellent except those for period of erroneous gage heights, Nov. 17 to Dec. 9, and those for period of ice effect, Dec. 10 to Mar. 15, which were computed on basis of two discharge measurements, weather records, and records for Roaring Fork at Glenwood Springs and are good. Diversions for irrigation above station.

Rating tables, water year 1936-37 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Nov. 5-16, and Aug. 22 to Sept. 30)

Oct. 1 to Nov. 16

Mar. 16 to Sept. 30

1.2 234
1.4 324
1.6 430

1.0 160
1.2 225
1.4 305
1.6 410
1.8 535
2.0 675
2.2 825

2.4 990
2.6 1,180
2.8 1,410
3.0 1,690
3.2 2,030
3.4 2,450

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	301	324	270	295	245	250	269	296	1,710	556	320	260
2	306	319	255	270	245	260	267	320	1,510	496	310	264
3	310	292	265	230	255	265	292	404	1,690	476	297	296
4	306	306	270	220	270	250	232	549	1,640	464	269	315
5	319	324	275	245	280	255	274	750	1,290	464	260	300
6	329	319	245	270	290	260	262	802	1,130	440	300	300
7	315	324	260	275	280	265	292	802	1,020	496	287	310
8	310	301	260	265	270	275	282	1,010	865	490	269	305
9	308	315	270	245	250	280	292	1,240	833	516	282	305
10	306	319	255	240	240	290	300	1,370	818	598	296	300
11	301	301	265	250	250	305	315	1,480	889	584	250	305
12	301	296	250	255	255	295	300	1,250	1,040	698	236	296
13	296	296	240	268	270	315	310	1,360	948	922	228	296
14	296	296	260	260	290	310	335	1,490	930	922	225	292
15	296	292	290	255	280	280	399	1,750	922	802	246	287
16	301	287	310	265	260	292	476	1,960	973	654	225	292
17	301	286	290	260	265	300	410	1,960	1,120	563	236	287
18	301	280	280	290	280	292	345	2,010	1,160	502	228	287
19	301	275	260	280	290	292	377	2,150	1,040	483	218	282
20	344	275	280	290	269	256	345	1,830	982	476	211	278
21	339	275	290	265	240	269	296	1,710	905	464	211	274
22	319	275	310	240	270	274	330	1,740	849	452	211	278
23	310	270	265	265	265	292	366	1,820	802	434	211	310
24	301	265	270	265	260	269	350	1,640	742	416	211	335
25	306	260	265	260	270	260	340	1,600	705	399	211	315
26	310	265	290	255	275	278	300	1,490	728	377	208	300
27	306	250	260	265	265	280	372	1,480	647	350	211	296
28	301	255	290	270	260	256	394	1,620	591	345	228	292
29	296	250	290	275	-	264	360	1,740	742	360	246	292
30	306	245	285	270	-	256	335	1,990	535	335	264	292
31	334	-	265	265	-	278	-	1,920	-	355	256	-
Month												
						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						9,574	344	296	309	18,990		
November.....						8,626	324	245	288	17,110		
December.....						8,440	310	240	272	16,740		
Calendar year 1936.....						212,380	2,640	240	580	421,300		
January.....						8,133	295	220	262	16,130		
February.....						7,419	290	240	265	14,720		
March.....						8,523	315	250	275	16,910		
April.....						9,887	476	269	330	19,610		
May.....						43,533	2,150	296	1,404	86,350		
June.....						29,646	1,710	535	988	58,800		
July.....						15,899	922	335	513	31,520		
August.....						7,651	320	208	247	15,180		
September.....						8,841	335	260	295	17,540		
Water year 1936-37.....						166,162	2,150	208	455	329,600		

White River near Watson, Utah

Location.- Water-stage recorder, lat. $39^{\circ}58'$, long. $109^{\circ}10'$, in sec. 2, T. 10 S., R. 24 E. Salt Lake meridian, just below mouth of Evacuation Creek and 10 miles northeast of Watson.

Drainage area.- 4,020 square miles.

Records available.- April to October 1906 (designated as near Dragon, Utah) and October 1933 to September 1937 in reports of Geological Survey; April 1923 to September 1937 in reports of Colorado State engineer.

Extremes.- Maximum discharge during year, 6,380 second-feet July 9 (gage height, 5.86 feet), from rating curve extended above 3,500 second-feet; minimum daily discharge, 131 second-feet Jan. 14 (discharge measurement), probably less during period of ice effect.

1906, 1923-37: Maximum daily discharge, 8,180 second-feet July 15, 1929; minimum discharge, 52 second-feet July 19, 20, 1934.

Remarks.- Records good except those for periods of ice effect, Dec. 23, 24, Dec. 26 to Mar. 21, which were computed on basis of two discharge measurements and weather records and are fair. Diversions for irrigation above station.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	352	379	304			400	374	412	1,930	504	479	864
2	357	374	278			410	374	401	1,780	460	342	1,130
3	357	363	300			410	368	390	1,580	442	395	608
4	357	338	260			420	347	424	1,660	430	323	824
5	379	295	300			420	338	544	1,610	430	282	648
6	384	347	291			430	323	704	1,420	412	314	1,220
7	368	347	314			440	304	824	1,200	492	363	1,100
8	374	363	273			460	309	824	1,070	728	318	517
9	363	347	323			470	300	983	929	1,200	279	485
10	374	314	260			490	295	1,190	858	1,570	286	504
11	363	323	209			520	295	1,380	840	1,320	300	511
12	367	328	209			560	309	1,570	816	1,860	291	511
13	362	318	181			600	328	1,370	888	3,180	266	504
14	362	318	191	*131		630	323	1,460	888	1,810	266	479
15	342	318	236			670	333	1,550	864	1,660	244	464
16	342	314	342			700	368	1,610	848	1,030	244	442
17	342	323	442			730	460	1,850	848	776	323	401
18	347	328	466			740	460	1,850	904	736	406	379
19	352	328	401		*327	730	401	1,890	985	648	286	352
20	696	328	333			740	374	2,050	929	598	264	328
21	504	323	282			760	363	1,880	864	585	236	318
22	424	323	278			537	374	1,670	824	504	244	314
23	368	323	270			492	430	1,670	768	466	236	524
24	347	318	260			530	448	1,720	720	464	269	608
25	342	309	260			395	424	1,840	680	430	202	442
26	338	309	260			342	390	1,610	640	436	202	395
27	347	318	260			368	384	1,550	656	504	206	357
28	352	318	260			424	406	1,440	608	466	266	395
29	347	300	270			406	454	1,550	556	1,050	704	309
30	347	309	260			395	448	1,670	792	1,280	2,360	318
31	424	-	270			379	-	1,980	-	1,090	551	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						11,650	696	338	376	23,110		
November.....						9,848	379	295	328	19,530		
December.....						8,883	466	181	287	17,620		
Calendar year 1936.....						236,594	2,750	191	646	469,300		
January.....						4,960	-	-	160	9,840		
February.....						8,120	-	-	290	16,110		
March.....						15,998	760	342	516	31,730		
April.....						11,104	460	295	370	22,020		
May.....						41,666	2,060	390	1,344	82,640		
June.....						29,935	1,930	566	998	59,360		
July.....						27,528	3,180	412	888	54,600		
August.....						11,708	2,350	202	378	23,220		
September.....						16,241	1,220	309	541	32,210		
Water year 1936-37.....						197,637	3,180	-	541	392,000		

*Discharge measurement.

Price River near Heiner, Utah

Location.— Water-stage recorder, lat. 39°43'05", long. 110°51'55", in SW¼ sec. 1, T. 13 S., R. 9 E., three-quarters of a mile below Willow Creek and two-thirds of a mile north of Heiner.

Records available.— June 1934 to September 1937.

Extremes.— Maximum discharge during year, 1,360 second-feet July 29 (gage height, 4.12 feet); minimum not recorded.

1934-37: Maximum discharge, 4,850 second-feet Aug. 28, 1935, by slope-area method (gage height, 6.16 feet); minimum, less than 1 second-foot at times during Sept. 1-10, 1934.

Remarks.— Records good except those for periods when clock was stopped, Oct. 3-5, 20-23 (computed on basis of range line of pencil travel on recorder graph and weather records), those for period of ice effect, Nov. 8 to Mar. 6 (computed on basis of 6 discharge measurements and weather records), and those for periods when intake was partly clogged, July 10-15, 28, 29 (computed on basis of gage-height graph partly estimated), all of which are fair. Station is above irrigation diversions from main stream. Several small irrigation and municipal diversions from tributaries above. Flow affected by storage in Pleasant Valley Reservoir on Fish Creek (capacity, 42,000 acre-feet).

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	49	34		-	-	16	66	516	734	223	176	179
2	55	28		*13	-	18	84	521	770	193	176	172
3	64	20		-	-	18	238	472	746	170	174	95
4	64	22		-	-	20	273	326	478	170	170	94
5	64	17		-	-	20	288	366	255	163	170	86
6	64	13		-	-	27	291	397	247	165	172	78
7	66	12		-	-	30	273	436	236	174	174	78
8	64	10		-	-	35	285	476	239	188	172	82
9	64		-	-	*9	35	313	512	236	212	174	86
10	64		-	-	-	41	334	530	212	200	174	76
11	63		-	-	-	46	410	530	202	174	170	41
12	63		-	-	-	48	580	494	197	188	176	18
13	63	8		-	-	44	605	476	202	168	183	17
14	61		-	-	-	36	674	472	205	161	185	40
15	48		-	-	*9	36	758	472	217	153	190	157
16	44		*8	-	-	54	782	458	233	151	195	143
17	56		-	-	-	50	707	600	230	149	202	132
18	63	70		-	-	47	652	454	225	159	200	130
19	98		-	-	-	27	288	516	220	147	188	112
20	70		-	-	-	34	273	800	215	143	193	119
21	66		-	-	-	36	286	800	207	135	181	112
22	66		-	-	-	39	301	812	210	155	132	108
23	66	64		-	-	38	284	776	207	122	155	160
24	66		-	-	-	32	247	794	202	135	155	66
25	64		-	-	-	37	260	800	215	174	153	56
26	33		-	-	*14	32	387	770	241	181	174	54
27	31		-	-	-	32	605	776	233	217	193	54
28	29	33		-	-	40	590	724	230	185	239	54
29	29		-	-	-	42	555	752	230	223	387	54
30	31		-	-	-	47	530	836	265	179	220	52
31	33		-	*8	-	56	-	830	-	176	284	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						1,759	98	29	56.7	3,490		
November.....						352	-	-	11.7	698		
December.....						217	-	-	7	430		
Calendar year 1936.....						44,158	734	-	121	87,590		
January.....						186	-	-	6	369		
February.....						224	-	-	8	444		
March.....						1,113	56	16	35.9	2,210		
April.....						12,188	782	66	406	24,170		
May.....						18,494	836	326	597	36,680		
June.....						8,529	770	197	284	16,920		
July.....						5,313	223	122	171	10,540		
August.....						5,887	387	132	190	11,680		
September.....						2,711	179	17	90.4	5,380		
Water year 1936-37.....						56,973	836	-	156	113,000		

*Discharge measurement.

Huntington Creek near Huntington, Utah

Location.- Water-stage recorder, lat. 39°22'15", long. 111°03'45", in SE¼ sec. 6, T. 17 S., R. 8 E., 1 mile above Fish Creek and 7 miles northwest of Huntington.

Drainage area.- 188 square miles.

Records available.- May 1909 to September 1917, October 1918 to November 1920 (fragmentary), April 1921 to September 1937.

Average discharge.- 22 years (1910-17, 1921-29, 1930-37), 100 second-feet.

Extremes.- Maximum discharge during year, 1,630 second-feet July 8 (gage height, 4.52 feet); minimum observed, 12 second-feet Mar. 20 (gage height, 1.00 foot).
1909-37: Maximum discharge, about 2,500 second-feet Aug. 2 or 3, 1930 (gage height, 7.5 feet); probably no flow Nov. 5, 1926.

Remarks.- Records good except those for period of ice effect, Dec. 2 to Mar. 11 (computed on basis of four discharge measurements and weather records), and those for July 9-16 (computed on basis of high-water gage-height graph and precipitation records), which are fair. Small irrigation diversions above station. Flow slightly regulated by small storage reservoirs.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	38	32	24		-	23	29	118	352	155	125	66
2	38	26			*30	24	33	116	309	131	118	90
3	39	24			-	25	31	157	302	106	111	66
4	41	30			-	23	28	225	306	99	95	67
5	38	33			-	25	30	278	278	94	95	64
6	37	33			-	25	31	340	262	99	95	58
7	36	32			-	27	28	392	262	102	95	57
8	36	25			-	27	28	485	271	165	97	56
9	36	28		*22	-	31	31	560	271	150	97	55
10	36	26			-	32	34	596	271	125	97	52
11	36	29			-	31	36	590	274	110	97	51
12	35	30			-	31	36	554	262	100	97	51
13	34	31			-	31	39	627	252	130	99	51
14	33	31			-	31	44	697	246	110	97	50
15	33	30			-	30	58	767	243	100	99	50
16	37	28			-	31	66	809	246	90	97	48
17	35	28			*30	31	55	760	243	83	109	44
18	32	28			-	31	52	725	231	77	90	43
19	36	26			-	25	57	634	214	88	84	38
20	36	26			-	27	62	538	206	83	82	37
21	33	26			-	30	90	505	206	86	80	39
22	30	26			-	31	107	490	203	123	77	40
23	30	23			-	27	88	450	188	125	86	77
24	30	21			-	27	76	400	170	125	74	52
25	29	24			-	34	84	360	167	111	58	42
26	28	23			-	31	161	364	138	116	57	40
27	28	19			-	28	185	378	125	102	57	38
28	28	22			*20	30	150	400	122	140	74	38
29	27	23			-	28	127	415	133	113	76	38
30	31	24			-	28	113	505	162	142	62	51
31	33	-			-	28	-	387	-	133	77	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						1,049	41	27	33.8	2,080		
November.....						807	33	19	26.9	1,600		
December.....						775	-	-	25	1,540		
Calendar year 1936.....						42,665	795	19	117	84,620		
January.....						713	-	-	23	1,410		
February.....						756	-	-	27	1,500		
March.....						833	34	23	28.5	1,750		
April.....						1,989	135	28	66.3	3,950		
May.....						14,622	809	116	472	29,000		
June.....						6,905	352	122	230	13,700		
July.....						3,513	165	77	113	6,970		
August.....						2,754	125	57	88.8	5,460		
September.....						1,549	90	37	51.6	3,070		
Water year 1936-37.....						36,315	809	-	99.5	72,030		

*Discharge measurement.

Cottonwood Creek near Orangeville, Utah

Location.-- Water-stage recorder, lat. 39°15'55", long. 111°07'40", 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 (fragmentary), May 1932 to September 1937.

Average discharge.-- 21 years (1910-20, 1921-27, 1932-37), 109 second-feet.

Extremes.-- Maximum discharge during year, 2,110 second-feet July 8 (gage height, 5.10 feet); minimum observed, 7 second-feet Feb. 16 (discharge measurement). 1909-27, 1932-37; Maximum discharge, about 2,500 second-feet Aug. 22, 1922, and Sept. 9, 1927; minimum observed, 4 second-feet Jan. 24, 1933.

Remarks.-- Records good except those for period of ice effect, Nov. 30 to Feb. 27 (computed on basis of 3 discharge measurements and weather records) and those for July 12-16, Sept. 7-15, 25-29 (computed on basis of records for Huntington Creek near Huntington and precipitation records), which are fair. Small diversions for irrigation above station. Empraim Tunnel, constructed by the Bureau of Reclamation in 1938, diverted about 2,000 acre-feet to the Great Basin during the current year.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	25	25			*12	18	25	73	412	156	55	161
2	25	18			-	19	32	89	394	133	50	185
3	24	25			-	20	27	109	353	122	47	51
4	25	42			-	18	25	136	349	115	44	47
5	24	33			-	20	26	166	309	111	44	45
6	24	26			-	20	27	193	297	115	44	44
7	24	25			-	21	23	216	301	142	44	42
8	23	29		*11	-	21	25	251	313	269	42	40
9	23	34			-	25	32	286	309	190	39	38
10	23	32			-	26	42	349	316	153	38	35
11	23	32			-	26	45	458	332	166	36	33
12	23	32			-	25	42	448	313	120	35	31
13	22	26			-	25	47	543	305	140	35	29
14	22	25			-	25	60	691	297	110	34	28
15	24	24			-	25	202	832	294	100	50	27
16	29	23			*7	26	80	898	309	90	46	25
17	26	21			-	26	55	889	309	122	50	25
18	26	21			-	25	50	848	282	94	34	25
19	29	18			-	20	56	752	268	83	32	25
20	30	22			-	20	62	662	265	74	32	28
21	26	24			-	21	76	662	262	68	31	27
22	25	23			-	21	87	669	262	63	30	28
23	23	25			-	19	82	614	238	62	74	63
24	22	26			-	21	60	543	216	66	57	38
25	22	27			-	23	70	474	199	59	52	30
26	22	27			-	21	87	474	187	77	50	27
27	21	25			-	19	96	513	174	68	48	25
28	21	25			21	21	87	537	163	63	65	25
29	21	28			-	20	74	550	171	85	83	25
30	27	26			-	21	66	640	176	75	84	28
31	29	-			-	21	-	480	-	57	97	-
Month					Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet			
October.....					752	30	21	24.3	1,490			
November.....					789	42	18	26.3	1,560			
December.....					620	-	-	20	1,230			
Calendar year 1936.....					43,574	925	-	119	86,420			
January.....					496	-	-	16	984			
February.....					504	-	-	18	1,000			
March.....					679	26	18	21.9	1,350			
April.....					1,748	202	23	58.3	3,470			
May.....					15,045	898	73	485	29,840			
June.....					8,365	412	163	279	16,590			
July.....					3,348	269	57	108	6,640			
August.....					1,502	97	30	48.5	2,980			
September.....					1,280	165	25	42.7	2,540			
Water year 1936-37.....					35,128	898	-	96.2	69,670			

*Discharge measurement.

San Juan River near Pagosa Springs, Colo.

Location.— Water-stage recorder, lat. 37°22'05", long. 106°53'40", in SE¼ sec. 12, T. 38 N., R. 1 W., at bridge a third of a mile above mouth of West Fork of San Juan River and 9.5 miles northeast of Pagosa Springs.

Drainage area.— 86.9 square miles.

Records available.— May 1935 to September 1937.

Extremes.— Maximum discharge during year, 1,120 second-feet May 18 (gage height, 3.45 feet); minimum daily discharge, 15 second-feet Feb. 8, 21, 22.

1935-37: Maximum discharge, 1,480 second-feet June 9, 1935; maximum gage height, 3.99 feet June 20, 1935; minimum daily discharge (computed), 12 second-feet Dec. 15, 1935.

Greatest known flood occurred Oct. 5, 1911 (discharge not determined).

Remarks.— Records good except those for periods of ice effect, Dec. 1 to Mar. 6, Mar. 16-18 and 24-31, which were computed on basis of five discharge measurements and records for station at Pagosa Springs and are fair.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	39	50	24	22	18	20	45	340	712	316	55	44
2	37	43	21	20	18	18	64	470	745	304	54	41
3	36	30	22	22	21	20	63	610	720	278	60	42
4	35	33	24	22	19	22	54	714	696	252	47	39
5	34	40	26	24	21	24	53	738	610	230	45	37
6	39	42	17	19	18	21	60	650	499	217	48	36
7	35	35	21	19	17	22	54	672	485	186	42	44
8	34	32	22	21	15	28	60	770	535	176	40	34
9	33	32	20	22	21	28	55	868	572	160	38	25
10	32	35	18	19	20	36	117	913	572	148	36	23
11	30	36	19	20	22	55	194	949	632	243	35	22
12	29	36	20	22	24	66	285	935	640	217	33	21
13	29	37	20	24	24	46	364	971	617	166	31	20
14	28	39	22	24	22	36	428	998	579	148	27	20
15	27	58	24	22	20	29	561	998	550	125	29	19
16	27	55	26	20	18	28	603	944	572	116	42	19
17	26	52	26	21	18	34	491	989	610	106	44	19
18	25	49	18	20	17	38	400	1,080	625	102	44	19
19	26	43	18	21	16	26	414	1,020	594	93	42	18
20	40	38	22	20	18	23	414	989	564	81	34	18
21	38	37	24	24	15	28	540	962	579	77	32	18
22	36	34	18	27	15	32	575	926	542	71	31	17
23	36	29	19	27	18	42	484	908	506	68	31	19
24	36	24	22	27	19	35	358	804	451	65	29	19
25	35	24	24	25	20	31	388	704	418	66	28	19
26	34	24	24	22	22	33	526	579	405	77	41	19
27	32	23	18	21	22	36	582	535	339	66	45	18
28	30	22	27	21	22	31	477	542	310	71	42	18
29	29	24	21	22	-	30	358	680	299	75	39	26
30	52	22	20	23	-	28	302	737	304	64	45	91
31	59	-	22	20	-	35	-	745	-	59	66	-
Month	Second-foot-days					Maximum	Minimum	Mean	Run-off in acre-feet			
October.....	1,058					59	25	34.1	2,100			
November.....	1,077					58	22	35.9	2,140			
December.....	669					27	17	21.6	1,330			
Calendar year 1936.....	43,944					826	-	120	87,180			
January.....	693					27	19	22.0	1,350			
February.....	540					24	15	19.3	1,070			
March.....	981					66	18	31.6	1,950			
April.....	9,399					603	45	313	18,640			
May.....	24,720					1,060	340	797	49,030			
June.....	16,282					745	299	543	32,290			
July.....	4,423					316	59	148	8,770			
August.....	1,244					66	27	40.1	2,470			
September.....	823					91	17	27.4	1,630			
Water year 1936-37.....	61,899					1,060	15	170	122,800			

SAN JUAN RIVER BASIN

San Juan River at Pagosa Springs, Colo.

Location.— Water-stage recorder, lat. $37^{\circ}15'55''$, long. $107^{\circ}00'40''$, in S $\frac{1}{4}$ sec. 13, T. 35 N., R. 2 W., under lower highway bridge at Pagosa Springs.

Drainage area.— 298 square miles.

Records available.— January 1911 to November 1914, May 1935 to September 1937.

Extremes.— Maximum discharge during year, 3,250 second-feet May 18 (gage height, 6.26 feet); minimum daily discharge, 40 second-feet Sept. 27, 28.

1911-14, 1935-37: Maximum discharge, 4,710 second-feet June 15, 1935: minimum daily discharge, 25 second-feet Dec. 15, 1935.

Greatest known flood occurred Oct. 5, 1911 (discharge not determined).

Remarks.— Records good except those for periods of missing gage heights, June 16, 17, June 27 and July 7, which were computed on basis of combined flow for San Juan River and West Fork near Pagosa Springs and are fair. Diversions for irrigation above station.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	150	205	104	68	60	59	199	984	1,640	780	177	122
2	141	168	98	60	60	60	290	1,300	1,730	670	160	100
3	132	123	82	65	61	67	293	1,580	1,680	600	156	102
4	132	126	92	63	59	70	254	1,800	1,600	520	142	98
5	126	148	93	65	60	67	276	1,910	1,520	450	139	87
6	137	154	56	63	59	73	305	1,720	1,500	410	160	85
7	130	148	62	62	55	73	278	1,820	1,260	350	162	108
8	130	143	71	67	47	82	362	1,860	1,370	370	132	91
9	119	135	73	67	61	93	485	2,180	1,430	355	106	85
10	112	139	63	59	56	98	643	2,160	1,360	334	112	77
11	106	139	65	62	60	126	1,050	2,280	1,460	596	102	71
12	101	141	68	65	61	148	1,210	2,310	1,530	402	94	66
13	96	141	67	68	61	134	1,390	2,650	1,610	346	91	63
14	93	148	73	68	60	130	1,650	2,830	1,560	337	89	62
15	90	162	76	66	57	123	1,940	2,930	1,340	309	91	56
16	88	168	84	61	57	114	2,120	2,880	1,400	291	94	56
17	86	164	82	67	57	125	1,850	2,950	1,500	281	106	54
18	88	166	70	63	55	134	1,650	2,850	1,520	265	100	61
19	86	146	68	66	55	109	1,580	2,590	1,580	242	120	47
20	156	139	74	63	57	101	1,590	2,470	1,580	215	91	46
21	132	137	78	66	50	116	1,830	2,370	1,460	203	85	43
22	126	128	68	68	51	144	1,940	2,290	1,340	188	82	44
23	126	121	70	71	55	160	1,690	2,290	1,220	175	82	48
24	119	110	74	71	56	130	1,260	2,100	1,170	177	72	48
25	126	112	76	70	57	125	1,290	1,880	1,100	173	69	44
26	121	109	76	67	61	119	1,590	1,650	1,050	195	74	41
27	116	104	68	66	62	123	1,710	1,690	1,050	206	93	40
28	109	102	61	66	61	126	1,410	1,660	860	197	82	40
29	109	106	78	65	—	117	1,080	1,730	800	239	74	46
30	186	96	71	68	—	112	904	1,760	760	199	79	179
31	194	—	68	63	—	135	—	1,720	—	177	186	—
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						3,762	194	86	121	7,460		
November.....						4,118	205	96	137	8,170		
December.....						2,519	104	56	74.8	4,600		
Calendar year 1936.....						122,228	2,000	48	334	242,400		
January.....						2,029	71	59	65.5	4,020		
February.....						1,611	62	47	57.5	3,200		
March.....						3,392	160	59	109	6,750		
April.....						35,790	2,120	199	1,126	67,020		
May.....						65,004	2,950	964	2,097	128,900		
June.....						40,760	1,710	760	1,369	80,850		
July.....						10,282	780	173	332	20,390		
August.....						3,404	186	69	110	6,750		
September.....						2,100	179	40	70.0	4,170		
Water year 1936-37.....						172,671	2,950	40	475	342,500		

San Juan River at Rosa, N. Mex.

Location.- Water-stage recorder, lat. 37°00'20", long. 107°24'10", in sec. 21, T. 32 N., R. 5 W., at Rosa, about 230 yards above highway bridge and about a quarter of a mile below mouth of Piedra River. Prior to May 13, water-stage recorder located about 100 feet upstream.

Drainage area.- 1,990 square miles.

Records available.- October 1930 to September 1937 in reports of Geological Survey; September 1920 to December 1931 in reports of State engineer.

Extremes.- Maximum discharge observed during year, 8,230 second-feet May 18 (gage height 6.79 feet); minimum daily discharge, 143 second-feet Sept. 28.
1930-37: Maximum discharge about 10,400 second-feet June 21, 1935 (gage height, 7.60 feet); minimum daily discharge (estimated), 70 second-feet Dec. 1, 2, 1934.
Greatest known flood occurred Oct. 5, 1911 (discharge not determined).

Remarks.- Records for June fair, others poor. Discharge for periods of missing or partial gage heights, Oct. 13 to May 12, July 6-9, 20-26, 30, 31, Aug. 1-5, 8, 9, 21-27, 30, Sept. 3, 4, 6, 8-12, computed on basis of available gage heights, weather records, and records for station near Blanco. Diversions for irrigation above station.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	476								4,480	2,050	900	483
2	454								4,680	2,300	700	340
3	408								4,480	1,990	600	290
4	396								4,200	1,700	600	310
5	378								3,760	1,690	700	300
6	420							6,000	3,250	1,500	511	280
7	452								3,010	1,300	584	322
8	408								3,250	1,200	600	310
9	396								3,420	1,050	430	300
10	372								3,170	864	395	280
11	354								3,420	1,210	360	250
12	336								3,760	1,540	327	220
13								6,290	3,670	1,310	304	192
14								7,240	3,560	1,060	292	138
15								7,480	3,250	864	284	179
16								7,240	3,250	695	314	173
17								7,480	3,600	584	447	173
18								7,480	3,670	517	345	170
19								6,520	3,580	456	370	161
20								6,290	3,420	400	314	166
21								6,290	3,420	370	280	155
22	330							6,180	3,420	340	250	152
23								6,180	2,940	320	230	152
24								5,840	3,010	300	220	155
25								4,980	2,710	280	210	155
26								4,200	3,090	400	200	149
27								3,670	3,010	666	210	146
28								3,840	2,600	653	268	145
29								4,390	2,170	1,390	280	164
30								5,400	2,240	1,420	250	768
31								5,080	-	900	604	-
Month								Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....								11,110	-	-	368	22,040
November.....								12,900	-	-	450	25,590
December.....								6,510	-	-	210	12,910
Calendar year 1936.....								383,174	6,000	100	1,047	760,000
January.....								5,580	-	-	180	11,070
February.....								7,560	-	-	270	15,000
March.....								38,750	-	-	1,250	76,860
April.....								180,500	-	-	5,350	316,300
May.....								134,070	7,480	-	5,332	365,100
June.....								101,210	4,580	2,170	3,374	290,700
July.....								31,409	2,300	280	1,013	62,300
August.....								12,279	900	200	396	24,360
September.....								7,215	768	143	240	14,310
Water year 1936-37.....								579,093	-	143	1,587	1,149,000

San Juan River near Blanco, N. Mex.

Location.— Water-stage recorder, lat. $36^{\circ}44'$, long. $107^{\circ}49'$, in sec. 18, T. 29 N., R. 9 W., half a mile above highway bridge, 1 mile above mouth of Canyon Largo, and $1\frac{1}{2}$ mile east of Blanco.

Drainage area.— 3,320 square miles.

Records available.— December 1908 to October 1910 and October 1930 to September 1937 in reports of Geological Survey; December 1908 to October 1910 and June 1927 to December 1931 in reports of State engineer.

Extremes.— Maximum discharge during year, about 18,000 second-feet Apr. 16 (gage height, 7.52 feet); minimum daily discharge, 87 second-feet Sept. 28.

1930-37: Maximum discharge, that of Apr. 16, 1937, from rating curve extended above 11,000 second-feet; maximum gage height, 7.65 feet Aug. 21, 1932; minimum daily discharge, 23 second-feet July 7, 1934.

Greatest known flood occurred Oct. 6, 1911 (discharge not determined).

Remarks.— Records good except those for period of ice effect, Jan. 24 to Feb. 28 (computed on basis of gage heights, three discharge measurements, and weather records), and periods of missing gage heights, Jan. 4-21, June 27 to July 7, July 12, 13 (computed on basis of records for stations at Rosa and Farmington), which are poor. Diversions for irrigation above station.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	
1	562	831	378	250	320	425	2,790	3,880	5,520	2,300	995	622	
2	534	1,240	384	237	320	481	4,010	4,440	5,560	2,500	768	431	
3	488	813	368	220	310	638	4,010	5,520	5,560	2,200	638	310	
4	455	520	305		310	520	3,030	6,580	5,040	1,900	555	272	
5	431	481	356		310	548	2,640	7,560	4,560	1,700	768	281	
6	548	576	346	250	340	488	3,260	7,160	4,010	1,550	662	263	
7	590	590	281		380	646	2,810	6,770	3,750	1,350	569	241	
8	534	583	229		600	940	3,260	7,160	3,750	1,230	548	295	
9	481	548	263		450	1,040	4,440	8,420	4,010	1,280	455	286	
10	431	514	300		360	1,450	5,360	8,420	3,750	1,150	362	245	
11	384	520	281	250	340	1,800	6,960	8,640	3,680	1,180	305	217	
12	351	514	288		330	2,010	8,640	8,420	4,160	1,800	281	188	
13	330	514	260		340	2,320	9,340	8,870	4,290	1,700	225	164	
14	320	520	272		360	2,790	9,820	9,570	4,150	1,510	205	152	
15	310	534	300		410	2,420	11,100	9,820	3,880	1,220	198	132	
16	305	562	351	300	650	2,160	13,300	9,820	3,750	1,130	200	119	
17	300	590	413		450	4,440	11,300	10,100	3,880	984	698	114	
18	300	590	378		540	3,880	8,640	10,300	4,160	860	431	110	
19	295	583	355		490	2,250	8,200	9,340	4,010	768	390	105	
20	325	555	310		410	1,480	7,160	8,640	3,880	662	330	99	
21	507	527	340	300	360	1,560	7,560	8,420	3,750	562	258	96	
22	548	514	305		380	2,380	8,420	8,200	3,750	500	202	107	
23	548	494	315		400	3,380	7,770	8,200	3,620	449	180	94	
24	494	488	290		420	1,620	6,040	7,770	3,580	401	164	90	
25	474	449	290		440	1,420	5,190	6,770	3,030	395	155	94	
26	462	419	320	300	400	1,220	5,860	5,690	3,300	378	140	92	
27	455	419	300		370	1,220	6,770	4,730	3,300	618	130	88	
28	419	407	263		400	1,680	6,400	4,880	2,800	726	143	87	
29	395	407	286		-	1,660	5,190	5,360	2,400	1,540	191	150	
30	535	407	272		-	1,420	4,290	6,580	2,500	1,660	202	652	
31	1,130	-	250		-	1,670	-	6,210	-	1,010	254	-	
Month					Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet				
October.....					14,241	1,130	295	459	28,250				
November.....					16,709	1,240	407	557	33,140				
December.....					9,568	413	229	309	18,990				
Calendar year 1936.....					479,614	7,560	137	1,314	951,400				
January.....					8,197	-	-	284	16,280				
February.....					11,190	650	310	400	22,200				
March.....					51,956	4,440	425	1,676	103,100				
April.....					193,560	13,300	2,640	6,452	383,900				
May.....					232,240	10,300	3,880	7,492	460,600				
June.....					116,980	5,520	2,400	3,899	232,000				
July.....					37,213	2,500	378	1,200	73,810				
August.....					11,602	995	130	374	23,010				
September.....					6,196	652	87	207	12,290				
Water year 1936-37.....					709,652	13,300	87	1,944	1,408,000				

San Juan River at Farmington, N. Mex.

Location.- Water-stage recorder, lat. $36^{\circ}43'$, long. $108^{\circ}13'$, in NE $\frac{1}{4}$ sec. 20, T. 29 N., R. 13 W., 1,900 feet below mouth of Animas River and 1 mile southwest of Farmington.

Drainage area.- 6,580 square miles.

Records available.- June 1904 to September 1906, September 1912 to December 1914, and October 1930 to September 1937 in reports of Geological Survey; September 1912 to July 1918 and November 1921 to December 1931 in reports of State engineer.

Extremes.- Maximum discharge during year, 21,800 second-feet Apr. 16 (gage height, 5.90 feet); minimum daily discharge, 106 second-feet Aug. 24-26.
1930-37: Maximum discharge, about 32,800 second-feet Sept. 28, 1935 (gage height, 8.0 feet, estimated); minimum daily discharge, 30 second-feet (estimated) Sept. 1, 1931, July 6, 7, 1934.

Remarks.- Records fair except those for periods of ice effect, Dec. 10-13, 29-31, Jan. 23 to Feb. 13, and of missing gage heights, Dec. 14-20, Jan. 1-22, which were computed on basis of weather records, two discharge measurements, and records for Blanco and Animas Rivers at Farmington, and are poor. Diversions for irrigation above station.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	992	1,060	768	430	560	716	3,900	4,940	8,150	3,830	1,330	654
2	918	1,260	729			807	5,700	5,510	7,200	3,800	1,330	890
3	918	1,190	794			1,120	5,900	7,200	7,440	3,730	876	530
4	862	848	703			1,190	6,320	9,170	7,200	3,300	742	407
5	862	876	666			1,090	4,720	10,800	6,540	2,990	1,260	348
6	862	1,060	703	650	650	1,060	4,750	10,800	5,700	2,540	1,100	589
7	946	992	582			1,120	5,500	9,700	4,940	2,270	904	364
8	1,060	960	550			1,610	5,500	9,980	4,750	2,080	932	540
9	890	932	530			1,710	6,320	12,000	5,120	2,270	755	580
10	807	960	520			2,340	6,750	15,500	5,120	2,320	570	434
11	768	832	540	450	450	2,440	7,910	13,300	4,750	2,670	425	348
12	742	904	500			2,910	9,980	15,000	5,700	3,580	324	293
13	703	876	540			3,050	10,800	13,000	5,900	3,450	212	272
14	716	904	520			1,220	3,800	11,700	13,900	5,700	2,910	165
15	755	918	560			2,960	3,050	12,300	14,900	5,500	2,290	145
16	781	946	600	500	500	2,590	2,820	14,900	15,300	4,940	1,880	135
17	807	904	700			1,490	4,470	16,300	14,800	5,120	1,570	202
18	834	976	800			1,140	6,540	13,300	15,000	5,900	1,340	619
19	742	1,060	750			1,340	3,730	11,700	15,300	5,900	1,100	434
20	781	946	600			876	2,620	11,100	13,500	5,700	890	380
21	904	976	666	500	500	582	2,360	10,800	12,000	5,700	690	279
22	1,100	890	716			594	3,220	12,000	12,000	5,700	540	182
23	1,100	890	678			806	4,940	12,300	11,700	5,310	398	125
24	976	848	678			654	3,160	9,700	11,100	5,310	332	106
25	946	820	729			848	2,460	7,670	9,980	4,940	583	106
26	876	781	729	500	500	1,070	2,620	7,670	7,910	4,940	389	106
27	820	755	654			862	2,490	9,440	6,320	5,500	279	116
28	781	755	582			678	2,770	10,200	6,110	4,940	848	125
29	703	742	640			-	3,220	7,670	7,200	4,370	1,780	120
30	807	768	550			-	3,280	5,900	8,910	3,950	2,420	165
31	1,200	-	460			-	3,220	-	9,170	-	2,340	996

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	26,958	1,200	703	870	53,470
November.....	27,729	1,260	742	924	55,000
December.....	19,737	800	460	637	39,150
Calendar year 1936.....	768,917	12,000	302	2,101	1,525,000
January.....	14,400	-	-	465	28,560
February.....	25,510	2,960	-	911	50,600
March.....	31,933	6,540	716	2,643	162,500
April.....	269,000	16,300	3,900	8,967	533,600
May.....	338,500	16,000	4,940	10,920	671,400
June.....	167,910	8,150	3,930	5,597	333,000
July.....	61,419	3,830	279	1,981	121,800
August.....	15,519	1,330	106	501	30,780
September.....	15,277	5,880	160	509	30,300
Water year 1936-37.....	1,063,893	16,300	106	2,915	2,110,000

San Juan River at Shiprock, N. Mex.

Location.— Water-stage recorder, lat. $36^{\circ}47'$, long. $108^{\circ}44'$, in about sec. 22, T. 30 N., R. 18 W., 3 miles northwest of Shiprock and about 6 miles below mouth of Chaco River. On July 9, 1936, gage datum was lowered 1.54 feet.

Records available.— January to October 1911, October 1930 to September 1931 and October 1932 to September 1937 in reports of Geological Survey; January to October 1911 and November 1915 to December 1931 in reports of State engineer.

Extremes.— Maximum discharge during year, 17,900 second-feet Apr. 18 (gage height, 7.98 feet), from rating curve extended above 14,200 second-feet; minimum daily discharge, 84 second-feet Sept. 23.

1930-31, 1932-37: Maximum discharge, about 44,200 second-feet Sept. 28, 1935 (gage height, 9.44 feet, present datum, from high-water marks), from rating curve extended about 20,000 second-feet; minimum daily discharge 10 second-feet (estimated), July 2-7, 1934.

Stage of about 6.5 feet, former site and datum, occurred Aug. 11, 1929 (discharge, about 80,000 second-feet). A greater discharge probably occurred Oct. 6, 1911, when stage of 22.0 feet on old gage relation (relation to present datum unknown) was recorded.

Remarks.— Records fair except those for Dec. 12-14, Jan. 4 to Feb. 18, which were computed on basis of weather records, two discharge measurements, and records for stations at Pagosa Springs and Farmington, which are poor. Diversions for irrigation above station.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,050	1,350	953	602		1,100	3,950	5,480	8,250	3,730	1,740	780
2	964	1,410	887	532		1,290	5,720	5,480	7,280	3,520	1,740	1,070
3	887	1,510	865	452		1,640	6,880	7,150	7,420	3,620	1,290	690
4	1,020	953	854			1,710	6,360	9,430	7,420	3,110	934	591
5	909	898	823			1,320	5,350	11,000	6,880	2,820	1,140	409
6	876	975	708		600	1,270	5,110	11,600	6,100	2,640	1,150	369
7	1,040	1,160	698			1,320	4,630	10,700	5,230	2,280	1,020	670
8	1,060	1,150	638			1,970	4,630	10,700	4,870	2,200	934	650
9	942	1,140	566			2,610	5,720	12,700	5,230	2,370	833	922
10	920	1,090	575			3,270	7,690	13,700	5,480	2,550	640	573
11	920	1,090	575			3,950	9,430	13,400	4,750	2,920	484	519
12	909	1,100	600	450	700	3,950	11,000	13,700	5,720	5,000	442	460
13	986	1,090	600			3,450	13,000	15,700	6,360	3,950	269	361
14	942	1,040	600		1,750	5,000	13,700	14,400	6,100	3,420	175	324
15	898	1,030	602		3,600	3,950	14,100	15,200	5,980	2,820	138	263
16	837	1,130	629		2,750	3,540	14,800	15,600	4,990	2,370	138	227
17	920	1,130	920		1,700	4,560	14,400	15,200	5,110	1,950	147	185
18	931	1,090	986		1,150	9,430	13,000	15,200	5,980	1,700	660	170
19	909	1,010	876		1,460	5,850	11,000	14,800	6,360	1,420	970	180
20	1,060	920	887		1,490	3,110	10,700	13,000	5,980	1,240	476	160
21	964	854	986		1,210	2,370	10,400	12,000	5,600	910	409	138
22	1,030	844	898		1,260	3,210	11,300	11,600	5,720	740	296	138
23	942	876	802		1,360	4,750	12,300	11,600	5,480	591	180	84
24	909	876	865		1,410	3,840	11,000	11,600	5,230	493	116	112
25	876	909	844		1,720	2,550	8,540	10,700	4,750	425	116	195
26	876	792	920	510	1,680	2,550	7,970	8,830	4,280	903	108	210
27	812	834	760		1,250	2,200	9,430	7,020	5,350	575	108	215
28	898	854	717		1,070	2,280	10,700	6,620	5,110	825	559	221
29	898	834	679		-	2,460	8,830	7,420	4,170	2,030	205	917
30	1,020	844	566		-	2,460	6,620	8,830	3,730	3,020	492	12,000
31	1,350	-	541		-	2,280	-	9,150	-	2,370	1,320	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						29,565	1,330	812	954	58,640		
November.....						30,763	1,510	792	1,025	61,090		
December.....						23,420	986	541	755	46,450		
Calendar year 1936.....						888,803	12,800	256	2,428	1,763,000		
January.....						14,846	-	-	479	29,450		
February.....						32,980	3,600	-	1,177	65,380		
March.....						95,240	9,430	1,100	3,072	188,900		
April.....						278,260	14,800	3,950	9,275	551,900		
May.....						347,490	15,600	5,480	11,210	699,200		
June.....						170,910	8,250	3,730	5,697	338,000		
July.....						68,512	5,000	425	2,210	135,900		
August.....						18,929	1,740	108	611	37,550		
September.....						23,793	12,000	84	793	47,190		
Water year 1936-37.....						1,134,688	15,600	84	3,109	2,251,000		

San Juan River near Bluff, Utah

Location.- Water-stage recorder, lat. 37°09', long. 109°52', in SE $\frac{1}{4}$ sec. 7, T. 42 S., R. 19 E., 1,800 feet below Gypsum Wash, 1,800 feet above bridge, and 20 miles southwest of Bluff.

Drainage area.- 24,000 square miles.

Records available.- October 1914 to September 1917, March 1927 to September 1937.

Average discharge.- 12 years (1915-17, 1927-37), 2,879 second-feet.

Extremes.- Maximum discharge during year, about 23,000 second-feet Sept. 30 (gage height, 17.6 feet, from high-water mark); minimum observed, 105 second-feet Aug. 29.

1915-17, 1927-37: Maximum discharge, about 70,000 second-feet Sept. 10, 1927 (gage height, 32.0 feet); no flow July 3-13, 1934.

Flood of Oct. 6, 1911, which was greatest known at Shiprock, N. Mex., probably exceeded that of Sept. 10, 1927, at this station, but stage was not accurately determined.

Remarks.- Records good except those for period of ice effect Jan. 5 to Feb. 5 which were computed on basis of records for station at Shiprock, N. Mex., and weather records and are poor.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,060	2,490	902	688	1,000	1,060	2,550	6,800	8,970	3,660	2,250	1,480
2	996	2,430	872	625	1,000	1,000	3,660	5,800	7,860	3,660	1,220	1,720
3	964	1,980	842	234	1,000	1,140	5,480	6,120	6,800	3,380	1,260	1,220
4	988	2,030	842	140	1,500	1,350	6,120	7,680	7,140	3,380	902	790
5	948	1,400	806		2,000	1,480	5,000	9,730	6,800	3,080	812	655
6	902	1,140	714		3,380	1,260	4,080	11,500	6,460	2,490	1,100	486
7	858	1,060	734		4,080	1,180	4,380	11,500	5,800	2,490	1,400	783
8	1,020	1,140	734		5,160	1,260	4,230	10,500	5,160	2,310	940	790
9	1,060	1,180	649		2,310	1,720	4,530	10,500	5,000	2,140	762	535
10	980	1,140	613		1,350	2,490	5,800	12,500	5,160	3,660	714	688
11	888	1,060	577		1,600	3,080	7,320	13,100	5,160	4,530	571	607
12	842	1,020	577		2,550	3,520	9,160	13,100	4,680	8,970	480	390
13	769	1,060	565		1,580	3,800	10,900	12,900	5,480	6,460	410	312
14	727	1,020	491		2,200	4,080	11,900	13,500	5,960	3,520	348	308
15	681	1,020	452		7,200	5,480	12,700	14,300	5,640	2,860	303	285
16	714	1,020	631		5,130	4,530	14,300	14,900	5,480	2,430	269	249
17	694	1,060	1,010		7,140	5,000	16,500	14,900	4,840	2,080	196	245
18	649	1,020	902		3,940	6,120	15,300	14,900	4,840	1,920	217	206
19	631	1,060	980		3,250	7,680	12,900	14,900	5,450	1,670	281	189
20	1,060	1,100	902		2,430	4,840	11,700	14,100	5,800	1,350	496	167
21	1,870	1,140	828		1,620	3,380	11,500	12,100	5,480	1,140	425	154
22	1,670	1,100	798		1,140	2,670	11,300	11,700	5,160	940	334	157
23	1,260	1,060	842		1,100	3,180	12,500	11,500	5,160	828	298	189
24	1,260	980	798		1,220	4,840	12,500	11,700	5,160	688	265	178
25	1,060	972	812		1,400	3,940	9,920	11,500	4,840	535	220	140
26	940	948	940		1,580	2,920	8,220	9,730	4,840	595	178	138
27	895	932	972		1,720	2,730	8,780	8,220	4,230	790	160	169
28	872	872	940		1,260	2,490	10,500	6,800	5,000	1,830	130	206
29	865	888	872		-	3,120	8,590	6,970	4,840	2,480	210	245
30	1,180	910	763		-	3,060	8,220	7,860	3,940	3,250	776	10,200
31	4,120	-	850		-	2,920	-	9,160	-	3,380	1,440	-
Month				Second-foot-days		Maximum	Minimum	Mean	Run-off in acre-feet			
October.....				33,473		4,120	649	1,080	66,390			
November.....				36,232		2,490	872	1,208	71,870			
December.....				24,229		1,010	452	782	48,060			
Calendar year 1936.....				844,677		11,500	326	2,308	1,676,000			
January.....				12,487		-	-	403	24,770			
February.....				70,840		7,200	1,000	2,530	140,500			
March.....				97,300		7,680	1,000	3,139	193,000			
April.....				270,540		16,500	2,550	9,018	536,600			
May.....				339,850		14,900	5,800	10,960	674,100			
June.....				187,160		8,970	3,940	5,572	331,600			
July.....				82,476		8,970	535	2,661	163,600			
August.....				19,367		2,260	130	625	38,410			
September.....				23,971		10,200	138	799	47,550			
Water year 1936-37.....				1,177,825		16,500	130	3,227	2,336,000			

West Fork of San Juan River above Borns Lake, near Pagosa Springs, Colo.

Location.- Water-stage recorder, lat. $37^{\circ}29'00''$, long. $106^{\circ}55'45''$, in sec. 36, T. 38 N., R. 1 W., half a mile below mouth of Beaver Creek, $1\frac{1}{2}$ miles above Borns Lake, and 16 miles northeast of Pagosa Springs.

Drainage area.- 41.2 square miles.

Records available.- April to September 1937.

Extremes.- Maximum discharge during period, 783 second-feet May 17 (gage height, 4.23 feet), from rating curve extended above 400 second-feet; minimum discharge, 14 second-feet Sept. 28 (gage height, 1.21 feet).
Greatest known flood occurred Oct. 5, 1911 (discharge not determined).

Remarks.- Records good except those for period of missing gage heights, Apr. 1-4, 13-19, and 21-25, which were computed on basis of records for station near Pagosa Springs and are poor. No diversions or regulation.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1							18	125	379	184	45	31
2							23	212	367	148	45	25
3							22	253	358	129	43	32
4							19	297	319	110	40	29
5							19	305	287	97	38	26
6							20	253	260	88	68	31
7							20	270	280	95	53	32
8							22	342	297	89	48	31
9							28	404	301	78	42	25
10							32	436	312	83	38	22
11							44	436	379	138	38	21
12							56	494	409	107	37	21
13							100	544	400	104	34	19
14							140	576	356	94	34	13
15							170	608	358	79	33	18
16							210	654	375	72	35	18
17							160	701	396	68	37	18
18							110	635	387	64	42	17
19							110	580	375	60	36	18
20							100	576	358	56	32	19
21							150	571	350	54	31	19
22							180	566	338	52	30	20
23							120	548	335	53	28	20
24							100	481	308	48	25	19
25							120	387	283	53	29	17
26							209	319	290	56	34	17
27							192	327	247	55	32	16
28							138	352	200	58	29	15
29							97	418	184	60	26	32
30							90	436	187	51	37	55
31							-	418	-	47	51	-
Month							Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet	
October.....												
November.....												
December.....												
Calendar year												
January.....							-	-	-	-	-	
February.....							-	-	-	-	-	
March.....							-	-	-	-	-	
April.....							2,819	210	18	94.0	5,590	
May.....							13,534	701	125	437	26,840	
June.....							9,705	409	184	324	19,250	
July.....							2,531	184	47	81.6	5,020	
August.....							1,170	68	25	37.7	2,320	
September.....							701	55	15	23.4	1,390	
The period											60,410	

West Fork of San Juan River near Pagosa Springs, Colo.

Location.- Water-stage recorder, lat. $37^{\circ}22'30''$, long. $106^{\circ}53'45''$, in NE $\frac{1}{4}$ sec. 12, T. 36 N., R. 1 W., on downstream side of highway bridge, 0.8 mile above mouth and 10 miles northeast of Pagosa Springs.

Drainage area.- 87.9 square miles.

Records available.- April 1935 to September 1937.

Extremes.- Maximum discharge during year, 1,670 second-feet May 17 (gage height, 5.04 feet); minimum daily discharge, 20 second-feet Feb. 8.
1935-37: Maximum discharge, about 2,250 second-feet June 15, 1935 (gage height, 6.83 feet); minimum daily discharge, 14 second-feet (estimated) Dec. 16, 17, 1935.
Greatest known flood occurred Oct. 5, 1911 (discharge not determined).

Remarks.- Records good except those for periods of ice effect, Dec. 7 to Mar. 12, Mar. 17-20, which were computed on basis of six discharge measurements and records for station on San Juan River at Pagosa Springs and are fair. Diversions for irrigation above station.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	61	63	43	30	26	26	37	342	791	402	86	59
2	57	52	37	30	26	25	46	466	822	342	75	50
3	52	48	37	36	26	25	45	585	802	288	75	52
4	52	59	40	34	24	28	42	684	741	250	72	52
5	50	59	35	35	25	30	42	731	666	224	67	46
6	55	59	28	36	25	27	45	625	567	203	136	46
7	52	59	32	30	23	30	42	629	572	196	98	54
8	55	55	34	32	20	31	46	736	648	183	77	46
9	50	55	34	34	28	34	62	870	666	166	70	46
10	46	55	27	30	26	42	80	892	657	159	67	42
11	46	57	28	29	28	50	139	892	731	239	62	40
12	46	57	29	30	32	70	228	980	770	217	59	38
13	43	59	28	33	32	55	299	1,090	741	200	57	34
14	43	61	30	33	30	55	386	1,240	703	176	57	32
15	45	68	32	32	28	46	506	1,370	657	162	57	31
16	43	68	34	30	28	35	563	1,370	684	139	59	31
17	40	66	31	33	28	38	462	1,390	750	129	57	29
18	37	63	25	32	28	35	394	1,320	765	123	54	29
19	38	59	27	33	27	34	402	1,180	717	113	59	27
20	59	57	29	32	27	35	402	1,150	703	107	46	26
21	55	57	31	34	23	35	506	1,130	707	98	50	24
22	50	52	25	35	24	37	545	1,130	675	92	57	24
23	48	48	27	36	24	35	427	1,110	638	92	52	26
24	48	46	31	37	24	37	338	1,000	576	83	48	26
25	48	46	31	34	24	34	382	909	545	80	44	26
26	50	45	31	29	24	35	523	776	594	86	52	26
27	45	43	26	28	26	32	572	786	510	95	62	26
28	43	42	39	28	28	32	431	859	427	89	48	24
29	43	43	36	28	-	31	334	854	398	107	44	31
30	76	40	30	30	-	34	295	875	386	89	50	95
31	66	-	31	27	-	35	-	843	-	77	104	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	1,641	76	37	49.7	3,060
November.....	1,641	68	40	54.7	3,250
December.....	977	43	25	31.5	1,940
Calendar year 1936.....	52,793	965	-	144	104,700
January.....	990	37	27	31.9	1,960
February.....	734	32	20	26.2	1,460
March.....	1,123	70	25	36.4	2,240
April.....	8,621	572	37	287	17,100
May.....	28,794	1,390	342	929	57,110
June.....	19,609	822	386	654	38,890
July.....	5,006	402	77	161	9,930
August.....	2,001	136	44	645	3,970
September.....	1,138	95	24	37.9	2,260
Water year 1936-37.....	72,180	1,390	20	198	143,200

Turkey Creek near Pagosa Springs, Colo.

Location.— Water-stage recorder, lat. 37°22'15", long. 106°56'45", at west side of Sec. 10, T. 36 N., R. 1 W., 2½ miles above mouth and 8 miles northeast of Pagosa Springs.

Drainage area.— 23.0 square miles.

Records available.— May to September 1937.

Extremes.— Maximum discharge during period, 463 second-feet May 8 (gage height, 2.95 feet), from rating curve extended above 300 second-feet; minimum, 0.3 second-foot Sept. 18 (gage height, 0.76 foot).
Greatest known flood occurred Oct. 5, 1911 (discharge not determined).

Remarks.— Records good. Large percentage of flow diverted above station during irrigation season.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1								137	166	69	14	3.9
2								216	166	69	11	2.4
3								237	148	59	9.4	2.6
4								245	137	50	8.7	1.9
5								254	134	45	9.8	1.2
6								233	122	35	14	1.2
7								254	119	33	12	1.5
8								271	131	28	11	1.2
9								311	131	22	9	1.2
10								362	122	22	7.7	.8
11								381	114	34	7.1	.8
12								381	125	33	6.1	.7
13								306	137	32	5.8	.6
14								266	122	29	5.8	.6
15								258	111	29	6.1	.6
16								254	111	22	5.6	.6
17								254	122	20	6.1	.6
18								249	123	15	7.1	.4
19								249	122	13	6.4	.5
20								245	125	9.4	3.9	.6
21								241	122	9.4	3.9	.6
22								271	109	9.8	3.6	.4
23								249	106	9.4	3.2	.6
24								228	93	9.8	2.6	.6
25								179	80	9.0	1.4	.6
26								159	122	9.4	1.2	.6
27								143	123	14	2.6	.6
28								159	86	12	2.5	.4
29								182	78	20	1.6	1.0
30								193	75	14	3.6	1.4
31								172	-	13	11	-
Month							Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet	
October.....												
November.....												
December.....												
Calendar year												
January.....												
February.....												
March.....												
April.....												
May.....							7,539	381	137	243	14,950	
June.....							3,580	166	75	119	7,100	
July.....							789.2	69	9.0	26.4	1,560	
August.....							203.8	14	1.2	6.57	404	
September.....							43.3	14	.4	1.44	86	
The period											24,100	

Rio Blanco near Pagosa Springs, Colo.

Location.- Water-stage recorder, lat. 37°12'45", long. 106°47'40", in center of sec. 1, T. 34 N., R. 1 E., at highway bridge, 0.4 mile above mouth of White Creek and 12.5 miles southeast of Pagosa Springs.

Drainage area.- 58 square miles.

Records available.- May 1935 to September 1937.

Extremes.- Maximum discharge during year, 1,340 second-feet May 17 (gage height, 4.06 feet); minimum daily discharge, 8.2 second-feet Sept. 28.
1935-37: Maximum discharge, that of May 17, 1937; minimum, that of Sept. 28, 1937.
Greatest known flood occurred Oct. 5, 1911 (discharge not determined).

Remarks.- Records fair. Records for periods of ice effect, Dec. 6 to Mar. 14, Mar. 20, computed on basis of six discharge measurements, weather records, and records for station on Navajo River at Edith. Diversions for irrigation above station.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	52	69	27	19	16	21	31	253	588	224	54	25
2	45	57	25	19	17	24	44	377	576	206	52	22
3	43	56	27	18	17	27	41	437	522	193	46	22
4	39	57	23	18	17	30	36	518	472	168	40	21
5	39	66	22	18	18	32	37	460	346	144	41	19
6	52	64	22	19	18	34	39	542	275	122	40	21
7	51	60	22	20	18	37	37	548	272	112	38	25
8	45	51	22	21	17	50	47	624	318	100	34	19
9	40	50	22	19	16	45	74	677	310	95	31	16
10	36	52	23	18	17	52	121	644	314	111	28	14
11	33	52	23	18	17	38	192	650	365	188	25	12
12	32	52	23	20	17	32	239	663	411	158	24	12
13	30	52	23	21	17	28	306	772	395	139	23	10
14	30	60	23	20	18	26	343	844	355	107	25	9.8
15	28	69	23	19	18	25	465	963	328	89	25	9.8
16	27	64	22	22	17	24	460	963	375	80	34	10
17	26	60	18	22	17	25	343	1,150	416	80	34	12
18	25	53	18	21	16	23	334	944	416	75	34	9.3
19	30	47	19	20	16	23	315	944	422	69	27	9.3
20	55	46	20	19	15	21	324	856	380	61	24	9.3
21	57	45	20	18	14	25	348	744	411	59	24	9.3
22	53	42	19	13	14	27	343	723	400	54	23	12
23	52	41	20	15	14	28	253	656	380	50	22	13
24	57	37	20	18	15	30	195	534	323	50	21	11
25	52	37	20	20	15	24	242	450	370	51	21	11
26	51	56	19	22	15	23	377	332	323	64	26	11
27	51	34	19	22	15	22	372	305	286	70	30	9.3
28	47	34	20	23	17	22	261	350	250	70	28	6.2
29	51	29	19	23	-	26	192	522	235	144	26	29
30	88	30	19	23	-	26	186	695	247	71	44	131
31	78	-	19	19	-	25	-	612	-	58	37	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						1,395	88	25	45.0	2,770		
November.....						1,502	69	29	50.1	2,980		
December.....						661	27	18	21.3	1,310		
Calendar year 1936.....						36,754	733	-	100	72,900		
January.....						607	23	13	19.6	1,200		
February.....						458	18	14	16.4	908		
March.....						595	52	21	28.9	1,180		
April.....						6,597	465	31	220	13,080		
May.....						19,752	1,150	253	637	39,180		
June.....						11,081	688	235	370	21,980		
July.....						3,262	224	50	105	6,470		
August.....						981	54	21	31.6	1,950		
September.....						552.3	131	8.2	18.4	1,100		
Water year 1936-37.....						47,743.3	1,150	8.2	131	94,710		

Rito Blanco near Pagosa Springs, Colo.

Location.- Water-stage recorder, lat. 37°11'40", long. 106°54'20", in SW $\frac{1}{4}$ sec. 12, T. 34 N., R. 1 W., at road crossing, 0.1 mile above Sheep Cabin Creek and $7\frac{1}{4}$ miles southeast of Pagosa Springs.

Drainage area.- 23.3 square miles.

Records available.- May 1935 to September 1937.

Extremes.- Maximum discharge during year, 240 second-feet May 13 (gage height, 2.65 feet); minimum daily discharge, 0.2 second-foot Sept. 21, 28.
1935-37: Maximum discharge, 310 second-feet June 9, 1935 (gage height, 2.87 feet); minimum daily discharge, that of Sept. 21, 28, 1937.
Greatest known flood occurred Oct. 5, 1911 (discharge not determined).

Remarks.- Records good except those for period of ice effect, Dec. 6 to Mar. 4, which were computed on basis of five discharge measurements and weather records and are fair. Diversions for irrigation above station.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5.6	10	17	2.3	1.5	1.9	12	95	124	17	6.2	1.5
2	4.7	9.1	7.6	2.2	1.6	2.0	19	130	112	15	5.1	1.0
3	2.4	8.4	7.0	2.2	1.5	1.9	18	169	103	13	5.6	.8
4	2.4	9.1	11	2.3	1.8	2.1	14	182	92	11	2.8	.8
5	2.1	10	7.0	2.4	1.9	2.3	17	182	82	9.8	2.2	.7
6	3.1	10	4.9	2.5	2.0	2.1	18	179	64	7.8	2.2	.7
7	3.6	9.6	4.2	2.5	1.8	2.4	15	179	57	6.7	2.2	2.0
8	3.1	9.6	4.8	2.4	1.5	3.9	23	193	49	6.2	2.0	1.1
9	2.9	10	3.8	2.2	1.5	6.2	35	189	51	5.4	1.5	.8
10	2.3	10	2.8	1.9	1.6	21	49	186	49	5.4	1.3	.4
11	1.9	10	2.9	2.0	1.6	51	85	196	57	10	1.1	.4
12	1.8	10	3.0	2.1	1.6	39	129	200	70	9.4	.9	.3
13	1.6	10	2.9	2.4	1.6	17	159	210	57	6.5	.6	.3
14	1.2	10	2.9	1.8	1.6	15	169	210	51	5.4	.4	.3
15	1.1	11	3.2	2.0	2.4	18	203	200	44	3.9	.6	.4
16	.9	11	3.4	2.3	2.1	11	196	179	44	2.8	.9	.3
17	.8	11	3.2	2.5	1.8	9.1	169	186	47	2.6	1.5	.3
18	.7	10	3.0	2.4	1.7	8.7	162	186	47	2.6	2.2	.3
19	.6	9.6	3.0	2.1	1.7	21	146	159	51	5.4	3.2	.3
20	2.6	9.1	3.0	1.8	1.6	16	179	146	49	4.8	1.4	.3
21	2.9	9.1	3.2	1.6	1.5	17	189	133	52	4.6	1.3	.2
22	3.9	8.7	3.4	1.4	1.6	15	179	133	51	4.3	1.1	.3
23	4.2	8.7	3.5	1.3	1.6	11	152	130	46	4.1	1.0	.4
24	3.6	9.1	3.5	1.1	1.6	22	115	127	37	4.1	.9	.3
25	4.4	9.1	3.6	1.0	1.5	9.6	121	109	35	3.9	.8	.3
26	4.2	9.6	3.4	1.1	1.5	9.6	156	83	33	5.1	.9	.3
27	3.9	12	3.3	1.1	1.6	7.0	172	75	29	5.9	2.2	.3
28	4.2	14	3.5	1.2	2.0	7.3	143	80	24	10	1.5	.2
29	4.7	15	3.3	1.4	-	6.8	103	109	19	9.8	1.0	.4
30	10	16	2.7	1.4	-	9.6	88	130	21	9.8	1.6	12
31	11	-	2.4	1.5	-	11	-	130	-	7.0	5.1	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						102.4	11	.6	3.30	203		
November.....						308.8	16	8.4	10.3	612		
December.....						136.2	17	2.4	4.39	270		
Calendar year 1936.....						7,175.5	162	.4	19.6	14,230		
January.....						58.4	2.5	1.0	1.88	116		
February.....						47.3	2.4	1.5	1.69	94		
March.....						377.3	51	1.9	12.2	748		
April.....						3,286	203	12	108	6,420		
May.....						4,900	210	75	155	9,520		
June.....						1,647	124	19	54.9	3,270		
July.....						219.3	17	2.6	7.07	435		
August.....						61.3	6.2	.4	1.98	122		
September.....						27.7	12	.2	.92	55		
Water year 1936-37.....						11,021.7	210	.2	30.2	21,860		

Navajo River at Banded Peak Ranch, near Chromo, Colo.

Location.— Water-stage recorder, lat. 37°05'00", long. 106°41'30", in NW¼ sec. 24, T. 33 N., R. 2 E., on Banded Peak Ranch, half a mile below mouth of Aspen Creek and 9 miles northeast of Chromo.

Drainage area.— 69.8 square miles.

Records available.— April to September 1937.

Extremes.— Maximum discharge during period, 683 second-feet May 17 (gage height, 3.27 feet), from rating curve extended above 450 second-feet; minimum, 30 second-feet Sept. 28 (gage height, 1.00 foot).

Greatest known flood occurred Oct. 5, 1911 (discharge not determined),

Remarks.— Records excellent except those for periods of missing gage heights, Apr. 1-12, 23-29 and July 7, 8, which were computed on basis of records for station near Chromo and are fair. No diversions or regulation above station.

Rating table, Apr. 1 to Sept. 30, 1937 (gage height, in feet, and discharge, in second-feet)

1.0	30	2.2	266
1.2	43	2.4	336
1.4	65	2.6	412
1.6	94	2.8	492
1.8	138	3.0	572
2.0	198	3.1	612

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1							31	307	464	276	79	40
2							38	500	454	286	72	38
3							36	297	472	246	64	42
4							34	300	444	218	62	41
5							37	314	420	212	58	37
6							42	347	389	182	61	44
7							40	378	382	164	61	48
8							56	382	401	150	56	43
9							78	347	404	136	55	42
10							140	359	404	169	51	38
11							220	401	460	229	50	37
12							270	397	436	198	50	35
13							311	436	424	172	48	34
14							297	329	397	155	45	33
15							297	307	374	141	43	33
16												
17							280	382	408	124	55	33
18							286	320	428	108	50	33
19							259	580	428	102	49	33
20							259	548	408	92	46	32
21							246	544	395	88	43	32
22							252	536	397	85	44	31
23							263	536	393	82	42	32
24							258	524	374	78	41	33
25							242	500	332	75	40	32
26							275	448	401	84	40	32
27							295	382	332	94	41	32
28							300	412	293	82	42	31
29							280	401	269	84	41	31
30							250	432	246	131	41	46
31							297	460	252	82	48	85
							-	468	-	84	47	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....					
November.....					
December.....					
Calendar year					
January.....	-	-	-	-	-
February.....	-	-	-	-	-
March.....	-	-	-	-	-
April.....	5,969	311	31	199	11,840
May.....	12,874	580	297	415	25,540
June.....	11,709	484	246	390	23,220
July.....	4,409	286	75	142	8,780
August.....	1,565	79	40	50.5	3,100
September.....	1,133	85	31	37.8	2,260
The period					74,700

Navajo River near Chromo, Colo.

Location.- Water-stage recorder, lat. 37°02'00", long. 108°46'50", in SW¼ sec. 6, T. 32 N., R. 2 E., 3.5 miles east of Chromo.

Drainage area.- 118 square miles.

Records available.- May 1935 to September 1937.

Extremes.- Maximum discharge during year, 1,200 second-feet May 15 (gage height, 3.78 feet); minimum daily discharge, 20 second-feet Mar. 20, 1935-37. Maximum discharge, about 1,920 second-feet June 16, 1935 (gage height, 4.46 feet); minimum daily discharge, 20 second-feet Dec. 15, 1935, and Mar. 20, 1937. Greatest known flood occurred Oct. 5, 1911 (discharge not determined).

Remarks.- Records good except those for period of ice effect, Dec. 8 to Mar. 6, which were computed on basis of six discharge measurements and weather records and are fair. Diversions for irrigation above station.

Rating table, water year 1936-37 except period of ice effect (gage height, in feet, and discharge, in second feet)
(Shift-in-control method used Oct. 1 to Dec. 6, Apr. 10-16, May 7-13)

1.4	15	2.6	296
1.6	32	2.8	420
1.8	55	3.0	560
2.0	86	3.5	950
2.2	132	4.0	1,450
2.4	198	4.5	2,050

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	86	90	58	42	33	41	47	262	574	285	91	50
2	83	81	56	42	35	41	78	344	623	326	83	45
3	81	66	52	46	34	41	70	443	602	257	76	43
4	78	64	54	29	38	40	58	497	560	223	80	45
5	76	76	55	32	39	40	64	546	483	215	70	39
6		81	83	47	34	40	35	67	560	434	194	68
7		76	83	48	35	36	47	62	560	427	173	66
8		75	78	48	35	34	68	88	574	448	155	60
9		72	76	48	32	36	46	144	602	462	144	58
10		67	76	51	29	36	80	202	644	462	166	55
11		64	76	50	30	36	43	296	772	490	251	54
12		62	76	55	32	37	38	388	860	511	206	51
13		62	76	50	35	36	32	448	959	490	180	50
14		60	78	48	31	38	28	539	1,060	476	156	46
15		58	80	47	33	42	25	708	1,040	448	136	47
16		58	80	45	37	36	24	693	941	476	129	61
17		56	80	43	36	38	24	553	986	511	121	62
18		55	78	38	35	35	25	434	977	497	112	62
19		56	75	41	34	37	21	394	896	497	100	56
20		72	73	41	32	35	20	407	812	462	91	50
21		72	70	42	24	34	24	511	820	483	90	48
22		68	67	40	25	35	30	490	820	463	98	47
23		70	64	40	24	36	36	407	798	448	96	45
24		67	62	40	30	38	29	285	700	304	83	40
25		68	61	46	36	37	29	296	581	434	91	41
26		72	60	47	38	36	27	401	504	394	99	45
27		68	60	40	41	35	27	448	476	332	95	48
28		67	61	41	42	40	28	356	497	302	99	50
29		66	61	40	43	-	28	256	581	279	138	47
30		95	58	58	43	-	58	232	623	285	107	51
31		97	-	40	36	-	68	-	602	-	93	61

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	2,190	97	55	70.6	4,340
November.....	2,169	90	58	72.3	4,300
December.....	1,429	58	58	46.1	2,830
Calendar year 1936	51,171	713	-	140	101,500
January.....	1,069	46	23	34.5	2,120
February.....	1,022	42	33	36.5	2,030
March.....	1,141	80	20	36.8	2,260
April.....	9,402	708	47	313	18,650
May.....	21,340	1,060	262	688	42,350
June.....	13,767	623	279	459	27,310
July.....	4,689	328	83	151	9,300
August.....	1,769	91	40	57.1	3,510
September.....	1,242	129	30	41.4	2,460
Water year 1936-37	61,229	1,060	20	168	121,400

Navajo River at Edith, Colo.

Location.— Water-stage recorder, lat. $37^{\circ}00'10''$, long. $106^{\circ}04'20''$, in NW $\frac{1}{4}$ sec. 24, T. 32 N., R. 1 W., at highway bridge, a quarter of a mile east of Edith and 1 mile above mouth of Coyote Creek.

Drainage area.— 165 square miles.

Records available.— September 1912 to December 1914 and June 1935 to September 1937 in reports of Geological Survey: September 1912 to December 1928 in reports of State engineers of Colorado and New Mexico.

Extremes.— Maximum discharge during year, 2,370 second-feet Apr. 15 (gage height, 5.77 feet), from rating curve extended above 1,200 second-feet; minimum daily discharge, 30 second-feet Sept. 21, 27, 28.

1935-37: Maximum discharge, that of Apr. 15, 1937; minimum observed, 21 second-feet Jan. 23, 1936 (discharge measurement).

Greatest known flood occurred Oct. 5, 1911 (discharge not determined).

Remarks.— Records good except those for period of ice effect, Dec. 4 to Mar. 17, which were computed on basis of five discharge measurements and weather records and are fair. Diversions for irrigation above station.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	94	111	65	47	58	55	174	518	638	262	103	48
2	88	100	60	45	61	55	252	679	648	342	93	44
3	87	77	55	44	60	56	252	748	610	264	86	44
4	84	72	58	39	64	55	188	796	546	240	84	46
5	80	88	58	40	65	53	199	908	495	218	80	44
6	90	94	54	43	67	43	232	908	441	225	75	45
7	89	94	52	42	64	104	220	929	424	184	70	62
8	85	90	52	44	60	210	295	992	451	174	62	46
9	81	85	52	42	62	218	444	1,060	469	164	58	44
10	76	87	52	39	62	280	600	1,050	458	158	57	38
11	72	87	52	40	62	285	929	1,110	491	254	56	36
12	71	90	52	41	64	230	1,050	1,120	495	223	55	34
13	71	90	52	48	62	170	1,170	1,200	484	195	53	34
14	69	91	51	46	64	120	1,350	1,190	475	170	47	34
15	65	94	49	54	65	100	1,590	1,210	441	153	49	34
16	64	96	47	56	58	98	1,550	1,100	433	142	54	33
17	63	94	46	56	60	98	1,260	1,150	485	133	71	33
18	63	92	42	55	58	106	1,020	1,090	491	125	62	33
19	64	88	44	53	60	87	1,060	999	462	117	60	32
20	55	84	44	51	56	75	1,060	894	455	108	52	31
21	83	83	46	45	54	89	1,180	868	448	98	46	30
22	77	78	44	44	52	110	1,210	894	434	94	47	31
23	80	76	44	46	54	138	1,040	844	410	94	48	33
24	77	69	44	56	55	103	724	760	393	86	45	31
25	78	66	47	62	53	102	718	658	455	93	44	31
26	81	65	46	64	52	94	894	518	417	100	43	31
27	78	63	44	69	52	93	964	507	329	106	44	30
28	78	63	45	71	54	100	760	503	289	108	48	30
29	75	63	44	72	-	103	550	600	270	156	49	42
30	108	61	43	73	-	94	518	690	270	133	64	128
31	120	-	46	64	-	118	-	634	-	104	61	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						2,475	120	65	79.8	4,810		
November.....						2,491	111	61	85.0	4,940		
December.....						1,530	65	42	49.4	3,030		
Calendar year 1936.....						60,007	805	21	164	119,000		
January.....						1,591	73	39	51.3	3,160		
February.....						1,661	68	52	59.3	3,290		
March.....						3,642	285	43	117	7,220		
April.....						23,423	1,580	174	781	46,460		
May.....						27,107	1,210	503	874	53,770		
June.....						13,608	648	270	454	26,990		
July.....						5,023	342	86	162	9,960		
August.....						1,855	103	43	59.8	3,680		
September.....						1,212	128	30	40.4	2,400		
Water year 1936-37.....						85,618	1,580	30	255	169,800		

Little Navajo River at Chromo, Colo.

Location.- Water-stage recorder, lat. 37°02'05", long. 106°50'35", in SE $\frac{1}{4}$ sec. 4, T. 32 N., R. 1 E., at highway bridge a quarter of a mile above mouth at Chromo.

Drainage area.- 21.9 square miles.

Records available.- May 1935 to September 1937.

Extremes.- Maximum daily discharge during year, 240 second-feet Apr. 15 (estimated); minimum daily discharge, 0.3 second-foot Sept. 21-27.
1935-37: Maximum daily discharge, that of Apr. 15, 1937; minimum daily discharge, 0.1 second-foot July 4-9, 28, 1936.
Greatest known flood occurred Oct. 5, 1911 (discharge not determined).

Remarks.- Records good except those for periods of missing gage heights, Nov. 3-16, Apr. 15-22, July 28 to Aug. 1 (computed on basis of records for Rito Blanco near Pagosa Springs), and those for period of ice effect, Dec. 3 to Feb. 22 and Mar. 7-9 (computed on basis of four discharge measurements and weather records), which are fair. Diversions for irrigation above station.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5.3	10	5.6	2.7	2.4	3.0	20	102	42	6.8	1.6	0.6
2	4.3	9.3	4.2	2.5	2.5	3.0	33	122	39	7.1	1.8	.6
3	3.8	8.4	7.2	2.5	2.4	3.0	25	137	34	5.0	1.7	.5
4	3.6	7.4	9.6	2.6	2.7	3.1	16	146	31	2.9	1.6	.5
5	3.5	7.8	6.9	2.7	2.9	3.1	23	152	29	2.1	1.7	.4
6	4.8	8.0	5.0	2.9	3.1	3.3	25	149	28	1.8	1.8	.5
7	5.6	8.0	3.7	2.9	2.7	3.6	23	152	22	1.7	1.8	.6
8	6.1	7.8	3.8	2.7	2.4	4.3	39	150	13	1.7	1.8	.6
9	6.1	8.0	3.0	2.5	2.5	6.0	48	136	10	1.6	1.8	.8
10	5.3	8.0	2.5	2.4	2.5	14	78	119	10	1.4	1.7	.8
11	4.5	8.0	2.6	2.6	2.5	27	94	120	9.3	2.9	1.4	.7
12	4.3	8.0	2.7	2.8	2.6	8.2	91	118	9.3	8.5	1.4	.7
13	4.2	8.0	2.7	3.1	2.7	7.9	112	114	8.5	8.5	1.1	.6
14	4.0	8.4	2.9	2.5	3.1	7.9	187	107	8.9	7.1	.9	.6
15	4.0	8.4	3.2	2.7	3.6	8.2	240	99	7.4	6.5	.8	.6
16	4.0	8.0	3.5	2.9	3.3	6.7	220	93	6.8	4.0	.9	.6
17	4.0	7.2	3.3	3.2	3.0	6.9	200	91	7.1	1.1	1.6	.6
18	4.0	7.6	3.1	3.0	2.8	6.7	190	87	7.7	.9	1.8	.6
19	4.2	7.6	3.2	2.9	2.8	6.9	170	80	7.4	1.3	1.8	.4
20	6.7	7.9	3.2	2.7	2.5	7.2	180	73	7.1	.9	.9	.4
21	6.1	7.9	3.3	2.6	2.4	7.9	200	66	6.8	.9	.8	.3
22	5.6	7.6	3.5	2.3	2.4	10	170	62	6.8	1.0	.9	.3
23	5.8	7.6	3.6	2.1	3.5	13	149	58	5.9	.9	.9	.3
24	5.8	7.6	3.7	1.9	3.3	12	110	55	6.2	.8	.9	.3
25	6.1	7.9	3.8	1.6	3.3	9.3	110	52	17	.6	.9	.3
26	6.1	7.9	3.7	1.7	3.1	8.2	131	44	17	.9	.9	.3
27	5.8	8.2	3.6	1.8	3.0	7.6	155	42	14	.6	.8	.5
28	5.8	7.9	3.6	1.9	3.0	8.6	134	41	11	.8	.7	.4
29	5.6	7.2	3.6	2.0	-	7.6	104	47	7.7	1.0	.5	.9
30	8.6	7.6	3.5	2.1	-	9.3	99	52	7.1	1.2	.8	3.3
31	10	-	3.0	2.2	-	12	-	46	-	1.4	.9	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						163.6	10	3.5	5.28	324		
November.....						239.2	10	7.2	7.97	474		
December.....						120.3	9.6	2.5	3.90	240		
Calendar year 1936.....						5,225.3	179	.1	14.3	10,360		
January.....						77.0	3.2	1.6	2.48	153		
February.....						79.0	3.6	2.4	2.82	157		
March.....						245.5	27	5.0	7.92	487		
April.....						3,348	240	15	112	6,640		
May.....						2,912	152	41	93.9	5,780		
June.....						437.0	42	5.9	14.6	867		
July.....						83.9	8.5	.6	2.71	166		
August.....						38.9	1.8	.5	1.25	77		
September.....						18.4	3.3	.3	.61	36		
Water year 1936-37.....						7,763.3	240	.3	21.3	15,400		

Piedra River at Bridge ranger station, near Pagosa Springs, Colo.

Location.- Water-stage recorder, lat. 37°25'30", long. 107°11'30", in sec. 22, T. 37 N., R. 3 W., a quarter of a mile below Bridge ranger station, 1 mile below mouth of Middle Fork, and 15 miles northwest of Pagosa Springs.

Drainage area.- 82.3 square miles.

Records available.- April to September 1937.

Extremes.- Maximum discharge during period, 776 second-feet May 16 (gage height, 3.37 feet); minimum daily discharge, 18 second-feet Sept. 28.
Greatest known flood occurred Oct. 5, 1911 (discharge not determined).

Remarks.- Records good except those for period of missing gage heights, Apr. 1-21, which were computed on basis of records for West Fork of San Juan River near Pagosa Springs and are fair. Few small diversions for irrigation above station.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1							29	221	482	276	78	38
2							31	295	475	240	55	35
3							29	354	454	195	50	39
4							29	393	429	152	49	38
5							29	406	400	130	50	37
6							31	360	367	115	72	38
7							28	357	372	105	60	37
8							31	419	406	88	53	35
9							47	488	403	69	47	32
10							61	482	393	72	44	31
11							90	506	435	197	40	30
12							150	568	454	187	39	28
13							185	632	485	185	36	24
14							230	688	471	139	36	23
15							270	732	429	95	36	23
16							285	716	451	75	38	23
17							250	724	468	68	40	22
18							210	672	475	59	39	22
19							240	606	448	53	40	22
20							280	620	425	51	35	20
21							290	628	413	50	34	20
22							245	628	400	45	33	19
23							226	628	378	48	32	20
24							245	556	329	45	30	20
25							288	475	322	45	30	18
26							298	416	340	50	32	18
27							267	422	312	59	32	17
28							199	516	274	93	31	16
29							211	576	257	88	30	18
30							197	564	262	64	49	71
31							-	516	-	55	62	-
Month							Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet	
October.....												
November.....												
December.....												
Calendar year												
January.....							-	-	-	-	-	
February.....							-	-	-	-	-	
March.....							-	-	-	-	-	
April.....							5,001	298	29	167	9,920	
May.....							16,166	732	221	521	32,060	
June.....							12,049	488	257	402	23,900	
July.....							3,193	276	45	103	6,330	
August.....							1,532	78	30	43.0	2,640	
September.....							854	71	16	27.8	1,660	
The period											76,500	

Williams Creek near Bridge ranger station, near Pagosa Springs, Colo.

Location.- Water-stage recorder, lat. 37°27'45", long. 107°11'45", in sec. 10, T. 37 N., R. 3 W., 2½ miles north of Bridge ranger station, 3½ miles above mouth, and 17 miles northwest of Pagosa Springs.

Drainage area.- 43.7 square miles.

Records available.- May to September 1937.

Extremes.- Maximum discharge during period, 473 second-feet May 27 (gage height, 3.02 feet); minimum daily discharge, 8.0 second-feet (computed) Sept. 28.
Greatest known flood occurred Oct. 5, 1911 (discharge not determined).

Remarks.- Records good except those for periods of missing gage heights, May 1-5, 7-12, July 16-22, and Sept. 28-29, which were computed on basis of records for Piedra River at Bridge ranger station and are fair.

Rating table, period May to September 1937 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used June 8 to July 8)

1.0	0	2.2	170
1.2	12	2.4	230
1.4	27	2.6	308
1.6	46	2.8	365
1.8	74	3.0	465
2.0	118		

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1								94	212	82	25	17
2								130	218	78	24	16
3								170	206	61	26	20
4								270	194	56	20	18
5								260	179	53	19	16
6								240	164	46	27	14
7								250	176	56	31	15
8								280	194	52	22	14
9								340	185	45	20	16
10								330	135	41	19	15
11								320	111	57	18	13
12								330	111	64	16	12
13								353	120	53	15	11
14								341	128	45	15	10
15								357	145	42	16	9.4
16								365	140	38	15	8.8
17								357	99	33	15	8.8
18								309	116	29	15	9.4
19								285	125	27	13	8.8
20								297	132	25	12	8.8
21								317	132	24	12	8.8
22								313	132	22	11	8.8
23								309	125	20	11	9.4
24								301	140	20	10	8.8
25								221	132	22	10	8.8
26								185	132	21	12	8.8
27								224	106	24	12	8.5
28								230	94	45	11	8.0
29								273	92	32	11	8.8
30								273	82	25	15	16
31								234	-	24	31	-
Month								Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....												
November.....												
December.....												
Calendar year												
January.....												
February.....												
March.....												
April.....												
May.....								8,558	365	94	276	16,970
June.....								4,257	218	82	142	8,440
July.....								1,263	82	20	40.7	2,510
August.....								529	31	10	17.1	1,050
September.....								355.7	20	8.0	11.9	706
The period												29,680

Weminuche Creek near Bridge ranger station, near Pagosa Springs, Colo.

Location.— Water-stage recorder, lat. 37°26'15", long. 107°14'00", in sec. 5, T. 37 N., R. 3 W., 3½ miles northwest of Bridge ranger station, 5 miles above mouth, and 19 miles northwest of Pagosa Springs.

Drainage area.— 53.4 square miles.

Records available.— April to September 1937.

Extremes.— Maximum discharge during period, 501 second-feet May 17 (gage height, 4.16 feet); minimum daily discharge, 8.2 second-feet Sept. 28.

Greatest known flood occurred Oct. 5, 1911 (discharge not determined).

Remarks.— Records excellent except those for period of missing gage heights, Apr. 1-23, which were computed on basis of records for West Fork of San Juan River near Pagosa Springs and are fair. A few diversions for irrigation above station.

Rating table, period April to September 1937 (gage height, in feet, and discharge, in second-feet)

(Shifting-control method used Aug. 31 to Sept. 30)

1.3	6.5	2.5	118
1.5	10	3.0	210
1.7	18	3.5	328
1.9	33	4.0	466
2.1	57	4.2	512
2.3	66		

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1							15	138	217	63	28	31
2							18	192	210	70	24	24
3							17	275	204	56	22	26
4							16	290	186	46	20	32
5							16	328	166	45	19	29
6							18	290	152	44	50	27
7							17	294	154	44	49	32
8							19	350	150	45	30	25
9							25	375	150	43	24	23
10							32	347	142	45	21	19
11							60	345	154	58	18	16
12							104	357	156	56	13	14
13							150	394	149	41	16	14
14							180	401	144	38	17	12
15							210	417	130	37	18	12
16							230	420	130	37	15	12
17							200	443	128	41	14	12
18							185	495	125	42	14	11
19							190	370	120	36	13	11
20							190	357	108	31	13	11
21							220	360	100	27	12	11
22							230	347	99	24	11	11
23							202	330	96	22	11	11
24							178	309	88	22	11	10
25							174	266	77	22	12	9.8
26							208	223	80	22	12	9.2
27							232	219	99	25	14	8.4
28							174	232	71	52	14	8.2
29							135	268	65	68	12	13
30							113	287	65	41	18	50
31							-	249		31	63	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....					
November.....					
December.....					
Calendar year					
January.....	-	-	-	-	-
February.....	-	-	-	-	-
March.....	-	-	-	-	-
April.....	3,768	232	15	125	7,450
May.....	9,898	443	138	319	19,630
June.....	3,915	217	65	130	7,770
July.....	1,276	70	22	41.2	2,530
August.....	658	63	11	20.6	1,270
September.....	536.6	50	8.2	17.9	1,060
The period					39,710

Los Pinos River near Weminuche Pass, Colo.

Location.- Water-stage recorder, lat. 37°39'30", long. 107°19'30", in about sec. 5, T. 39 N., R. 4 W. (township not subdivided), 1½ miles below Weminuche Pass, 6 miles southwest of Rio Grande Reservoir dam, and 26 miles south of Lake City.

Drainage area.- 10 square miles.

Records available.- June to October 1937 (discontinued).

Extremes.- Maximum discharge during period, 39 second-feet June 17 (gage height, 1.79 feet); minimum, 3.4 second-feet Sept. 28 (gage height, 0.49 foot).
Greatest known flood occurred Oct. 5, 1911 (discharge not determined).

Remarks.- Records fair.

June to October 1937

Day							June	July	Aug.	Sept.	Oct.
1							-	17	10	8.6	6.4
2							-	12	10	7.3	6.6
3							-	7.3	9.0	7.0	6.4
4							-	7.2	7.3	6.8	5.7
5							-	7.0	8.6	6.6	4.8
6							-	6.8	11	7.3	4.7
7							32	6.8	11	7.5	4.6
8							32	6.8	8.4	7.7	4.2
9							32	6.6	8.1	7.7	4.6
10							32	6.8	7.7	6.8	4.2
11							35	8.4	7.5	4.6	4.1
12							37	7.0	7.9	4.2	-
13							38	7.5	7.9	4.2	-
14							32	7.5	8.1	4.2	-
15							29	7.3	8.1	4.2	-
16							35	7.5	8.1	4.6	-
17							38	7.5	8.2	4.4	-
18							35	7.3	8.5	4.1	-
19							32	7.3	8.1	4.1	-
20							29	7.3	7.7	4.0	-
21							28	7.3	7.7	4.2	-
22							26	7.2	7.7	4.6	-
23							24	7.2	7.7	4.7	-
24							22	7.2	8.2	4.4	-
25							20	7.2	8.8	4.0	-
26							19	9.5	9.1	3.8	-
27							17	8.6	8.8	3.8	-
28							16	13	8.8	3.6	-
29							15	13	8.8	6.3	-
30							14	12	16	6.6	-
31							-	10	13	-	-
Month							Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
June 7-30							669	38	14	27.9	1,330
July							261.1	17	6.6	8.42	518
August							276.1	16	7.3	8.91	548
September							161.9	8.6	3.6	5.40	321
October 1-11							56.3	6.6	4.1	5.12	112
The period											2,830

Los Pinos River near Bayfield, Colo.

(Locally known as Pine River)

Location.- Water-stage recorder, lat. 37°21', long. 107°36', in sec. 28, T. 38 N., R. 7 W., a quarter of a mile below Red Creek and 9 miles north of Bayfield.

Drainage area.- 284 square miles.

Records available.- October 1933 to September 1937 in reports of Geological Survey; October 1927 to September 1937 at present site and May to September 1926 (revised) at site 2 miles upstream in reports of State engineer. Records practically equivalent.

Average discharge.- 10 years (1927-37), 350 second-feet.

Extremes.- Maximum discharge during year, 2,850 second-feet May 14 (gage height, 5.06 feet); minimum daily discharge, 59 second-feet Dec. 27.

1926-37: Maximum daily discharge, 5,070 second-feet May 26, 1926; minimum discharge observed, 40 second-feet Dec. 8, 1934 (gage height, 0.40 foot), result of discharge measurement.

Greatest known flood occurred Oct. 5, 1911 (discharge not determined).

Remarks.- Records excellent except those for Jan. 1 to Feb. 20, which are good. Discharge for periods of ice effect, Jan. 10, 11, Feb. 1, and of missing gage heights, July 12, 13, computed on basis of records for Animas River at Durango. Natural regulation by numerous lakes. Diversions for irrigation below station.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	184	203	119	66	70	65	117	811	1,090	624	266	335
2	170	196	89	62	87	66	138	1,030	1,130	618	240	274
3	165	188	85	71	87	67	143	1,420	1,090	571	222	251
4	160	164	96	71	88	61	138	1,740	959	526	209	254
5	155	184	92	74	77	62	138	1,940	894	509	209	240
6	162	176	61	75	75	66	151	1,640	852	482	258	219
7	160	176	72	74	63	68	148	1,510	865	455	247	236
8	157	161	80	74	68	75	156	1,980	1,000	439	209	206
9	148	153	78	74	117	78	184	2,260	1,020	402	196	187
10	141	151	72	70	106	82	222	2,200	872	378	184	167
11	134	148	70	70	68	90	286	2,180	1,040	408	167	153
12	128	148	71	74	70	102	392	2,260	1,110	560	156	148
13	125	148	68	71	70	102	498	2,380	1,060	500	145	140
14	121	151	75	68	67	102	624	2,450	1,050	597	145	135
15	121	153	80	72	66	98	886	2,430	944	354	140	135
16	126	158	82	70	67	96	1,080	2,340	997	326	145	130
17	128	158	80	70	67	100	1,080	2,430	1,080	303	167	126
18	128	161	67	68	67	106	1,000	2,300	1,070	282	161	124
19	126	156	63	70	63	96	1,060	1,900	1,020	266	156	124
20	167	148	72	63	71	94	838	1,800	982	244	143	117
21	176	148	78	66	92	104	967	1,860	982	226	130	114
22	167	143	68	71	65	114	1,160	1,900	959	216	126	114
23	167	133	68	71	70	126	1,020	1,850	930	206	119	112
24	158	124	70	71	65	108	894	1,640	865	206	112	110
25	158	124	75	70	66	117	906	1,290	771	203	108	106
26	158	114	74	65	66	110	1,160	1,080	725	209	112	104
27	151	114	59	65	71	106	1,380	1,080	818	206	130	100
28	148	110	71	66	65	104	1,100	1,220	719	354	173	98
29	145	114	75	67	-	106	894	1,370	706	428	176	112
30	193	104	62	63	-	98	784	1,300	662	358	212	219
31	203	-	68	63	-	108	-	1,190	-	298	434	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						4,730	203	121	153	9,380		
November.....						4,479	203	104	149	8,880		
December.....						2,340	119	59	75.5	4,640		
Calendar year 1936.....						129,569	2,120	-	354	257,000		
January.....						2,145	75	62	69.2	4,250		
February.....						2,074	117	63	74.1	4,110		
March.....						2,877	126	61	92.8	5,710		
April.....						19,546	1,380	117	652	39,770		
May.....						54,751	2,450	811	1,766	108,600		
June.....						28,262	1,130	662	942	56,060		
July.....						11,544	624	203	372	22,900		
August.....						5,597	434	108	181	11,100		
September.....						4,890	335	98	163	9,700		
Water year 1936-37.....						143,235	2,450	59	392	284,100		

Los Pinos River at Ignacio, Colo.

Location.- Water-stage recorder, lat. 37°07'45", long. 107°37'50", in sec. 5, T. 33 N., R. 7 W., three-quarters of a mile above Ignacio and about 2 miles above Rock Creek.

Records available.- April 1899 to October 1903, September 1910 to December 1914, and October 1930 to September 1937 in reports of Geological Survey; April 1899 to October 1903, September 1910 to November 1912, and March 1913 to December 1931 in reports of State engineer.

Extremes.- Maximum discharge during year, 2,950 second-feet May 15 (gage height, 4.92 feet); minimum daily discharge, 6.8 second-feet Oct. 11.
1910-14, 1930-37: Maximum discharge, 5,570 second-feet Aug. 27, 1932 (gage height, 6.19 feet); minimum observed, 0.1 second-foot Aug. 11, 1913.
Greatest known flood occurred Oct. 5, 1911 (discharge not determined).

Remarks.- Records good except those for period of ice effect, Dec. 28 to Mar. 8, and periods of missing gage heights, Apr. 10-12, June 12, Aug. 29-31, which were computed on basis of five discharge measurements, weather records, gage heights, and records for Animas River near Cedar Hill, N. Mex., and are poor. Diversions for irrigation above station.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	17	110	87	70	80	95	390	899	688	212	21	55
2	13	132	82	60	75	100	491	1,060	718	206	21	25
3	11	82	73	60	75	100	461	1,580	718	176	19	23
4	9.6	70	80	60	70	110	370	1,750	601	148	23	24
5	9.6	80	80	70	70	120	400	2,020	598	159	79	25
6	10	85	84	75	65	120	497	1,750	467	89	41	22
7	11	93	85	80	65	130	455	1,480	498	68	30	23
8	9.6	93	87	75	60	130	554	1,880	528	50	27	23
9	8.4	89	91	70	60	137	695	2,310	534	30	24	25
10	7.6	89	85	70	65	160	980	2,090	416	25	19	23
11	6.8	87	82	65	70	180	1,020	2,020	509	100	16	21
12	7.2	85	84	70	70	202	1,060	1,950	580	161	14	21
13	8.0	87	87	75	70	230	1,300	2,160	534	143	14	18
14	9.2	91	89	80	75	209	1,450	2,380	528	93	13	14
15	11	91	93	75	60	223	1,750	2,620	428	48	13	13
16	12	95	91	70	90	219	2,020	2,380	450	29	13	13
17	12	102	91	70	80	268	1,680	2,460	503	24	12	13
18	12	104	80	65	75	284	1,480	2,310	528	20	12	13
19	12	102	85	60	70	234	1,490	1,820	509	18	11	15
20	35	93	82	60	65	209	1,400	1,600	455	16	11	12
21	53	89	69	55	60	241	1,430	1,620	438	15	12	12
22	62	87	80	55	70	318	1,620	1,620	450	14	11	12
23	71	97	78	50	75	355	1,500	1,680	416	12	9.6	13
24	71	112	76	60	80	256	1,230	1,450	355	11	8.8	12
25	68	110	85	65	90	256	1,160	1,180	293	11	8.0	11
26	60	110	87	70	90	234	1,370	856	245	10	13	11
27	41	106	82	75	85	216	1,680	725	318	11	18	9.6
28	32	102	80	75	90	234	1,390	864	314	15	14	8.4
29	32	102	75	75	-	226	1,110	1,020	272	76	15	8.8
30	70	89	70	75	-	199	935	1,050	234	46	15	32
31	93	-	80	75	-	272	-	890	-	23	50	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						885.0	93	6.8	29.5	1,760		
November.....						2,864	132	70	95.5	5,680		
December.....						2,580	93	70	83.2	5,120		
Calendar year 1936.....						86,632.3	2,240	3.2	237	171,800		
January.....						2,110	80	50	68.1	4,190		
February.....						2,070	90	60	73.9	4,110		
March.....						6,287	555	95	202	12,410		
April.....						35,568	2,020	370	1,112	66,180		
May.....						51,274	2,620	725	1,654	101,700		
June.....						13,985	718	234	466	27,740		
July.....						2,044	212	10	65.9	4,050		
August.....						607.4	79	8.0	19.6	1,200		
September.....						546.8	55	8.4	18.2	1,080		
Water year 1936-37.....						118,591.2	2,620	6.8	325	235,200		

Animas River at Howardsville, Colo.

Location.— Water-stage recorder, lat. 37°50', long. 107°36', in sec. 12, T. 41 N., R. 7 W., 0.4 mile southwest of Howardsville and half a mile below mouth of Cunningham Creek. Zero of gage is 9,617.98 feet above mean sea level (unadjusted).

Drainage area.— 55.9 square miles.

Records available.— May 1936 to September 1937.

Extremes.— Maximum discharge during year, 889 second-feet May 16 (gage height, 2.57 feet); minimum occurred during period of no record.

1936-37: Maximum discharge, that of May 16, 1937; minimum occurred during period of no record.

Greatest known flood occurred Oct. 5 or 6, 1911 (discharge not determined)

Remarks.— Records good except those for periods of ice effect, Nov. 2-30, May 1-6, WHICH were computed on basis of one discharge measurement and records for West Fork of San Juan near Pagosa Springs and are fair.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	31	27						205	246	238	61	62
2	31	28						250	282	224	59	58
3	31	30						300	303	209	56	56
4	30	31						370	274	180	53	53
5	30	31						500	234	167	51	53
6	31	32						450	220	167	55	59
7	30	33						447	234	162	51	59
8	30	33						514	295	137	48	55
9	30	33						580	286	132	47	52
10	29	33						536	295	116	46	50
11	29	24						502	366	119	44	47
12	30	34						544	358	111	43	43
13	30	36						628	354	111	42	41
14	29	38						628	337	104	42	39
15	29	40						628	320	97	41	37
16	29	40						640	370	90	41	37
17	28	38						634	404	80	37	36
18	28	36						568	396	74	32	35
19	30	33						474	383	72	32	34
20	31	33						452	379	69	32	33
21	31	33						502	366	62	32	33
22	29	30						532	354	61	31	33
23	29	28						486	328	59	30	34
24	29	28						391	303	58	32	33
25	26	28						299	295	62	36	32
26	28	27						254	282	56	35	30
27	27	26						324	254	66	38	30
28	27	26						404	246	67	41	29
29	26	26						400	266	70	41	33
30	27	25						337	266	67	44	37
31	27	-						278	-	64	56	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						904	31	26	29.2	1,790		
November.....						950	40	25	31.7	1,680		
December.....						-	-	-	-	-		
Calendar year												
January.....						-	-	-	-	-		
February.....						-	-	-	-	-		
March.....						-	-	-	-	-		
April.....						-	-	-	-	-		
May.....						14,059	640	205	454	27,890		
June.....						9,296	404	220	310	18,440		
July.....						3,351	238	56	108	6,650		
August.....						1,329	61	30	42.9	2,640		
September.....						1,263	62	29	42.1	2,510		
Water year												

Animas River at Durango, Colo.

Location.-- Water-stage recorder, lat. 37°17', long. 107°52', in sec. 20, T. 35 N., R. 9 W., at Western Colorado Power Co.'s plant in Durango, half a mile above mouth of Lightner Creek. Zero of gage is 6,503.28 feet above mean sea level.

Drainage area.-- 692 square miles.

Records available.-- June 1895 to December 1905, January 1910 to December 1914, and October 1933 to September 1937 in reports of Geological Survey; June 1895 to December 1905 and December 1910 to September 1937 in reports of State engineer.

Average discharge.-- 36 years (1895-1900, 1901-5, 1910-37), 918 second-feet.

Extremes.-- Maximum Discharge during year, 4,970 second-feet May 18 (gage height, 5.17 feet); minimum daily discharge, 140 second-feet Jan. 20.

1895-1900, 1901-5, 1909-37; Maximum discharge, about 25,000 second-feet Oct. 5, 1911 (gage height, 13.6 feet), from rating curve extended above 7,000 second-feet; discharge for flood of June 29, 1927, about 14,000 second-feet (gage height, about 9.6 feet); minimum daily discharge, 50 second-feet Dec. 22, 1917.

Remarks.-- Records excellent except those for Dec. 1 to Feb. 15, which are good. Diversions for irrigation above station. Artificial regulation for power and natural regulation by numerous lakes.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	320	307	221	165	162	187	325	1,140	2,000	1,280	609	427
2	316	298	218	158	178	195	366	1,500	2,010	1,270	472	406
3	303	261	211	178	170	201	396	2,190	2,160	1,150	455	376
4	305	250	218	190	172	198	386	2,120	2,120	1,050	416	366
5	298	286	221	190	187	192	371	3,090	1,860	999	411	348
6	303	290	198	195	190	204	411	2,650	1,650	958	472	358
7	303	294	204	198	207	211	411	2,530	1,540	910	491	357
8	294	290	190	195	172	224	416	3,060	1,750	866	427	343
9	286	277	198	195	172	250	503	3,570	1,830	807	396	329
10	290	281	175	178	181	261	616	3,720	1,620	762	381	316
11	277	273	170	184	192	286	784	3,710	1,980	815	343	298
12	265	289	181	175	201	307	942	3,660	2,120	1,060	316	294
13	261	273	172	190	198	338	1,120	3,950	1,960	999	307	290
14	261	269	178	175	172	316	1,310	4,300	1,980	910	290	280
15	261	273	195	170	221	303	1,660	4,430	1,680	807	281	286
16	258	269	207	184	221	307	2,020	4,410	1,760	724	286	261
17	258	290	218	172	207	325	1,720	4,630	2,050	652	329	254
18	254	280	198	175	198	329	1,490	4,670	2,160	565	358	242
19	254	281	187	184	198	316	1,630	3,950	2,060	564	316	231
20	298	273	187	140	192	298	1,580	3,410	1,960	515	294	221
21	307	269	190	170	201	303	1,790	3,500	2,000	478	286	218
22	298	265	195	184	198	316	2,160	3,610	1,970	438	281	218
23	281	261	187	184	195	348	1,960	3,660	1,920	416	269	221
24	277	258	181	165	195	325	1,530	3,510	1,670	401	261	224
25	269	254	190	160	195	329	1,390	2,590	1,530	381	254	221
26	261	242	195	150	201	320	1,720	2,070	1,540	381	254	221
27	269	235	178	170	192	303	2,240	1,900	1,630	438	286	221
28	258	235	172	168	192	303	1,770	2,290	1,440	497	286	221
29	254	238	198	172	-	298	1,400	2,800	1,440	631	311	235
30	281	224	175	165	-	290	1,160	2,690	1,380	588	316	361
31	298	-	197	178	-	303	-	2,380	-	568	361	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						8,716	320	254	281	17,290		
November.....						8,075	307	224	269	16,020		
December.....						5,995	221	170	193	11,890		
Calendar year 1936.....						263,749	3,680	152	721	523,200		
January.....						5,457	198	140	176	10,820		
February.....						5,360	221	162	191	10,630		
March.....						8,686	348	197	280	17,230		
April.....						35,877	2,240	325	1,186	70,570		
May.....						97,670	4,670	1,140	3,151	193,700		
June.....						54,740	2,160	1,380	1,625	108,600		
July.....						22,920	1,280	381	739	45,460		
August.....						10,695	509	254	345	21,210		
September.....						8,634	427	218	288	17,130		
Water year 1936-37.....						272,625	4,670	140	747	540,600		

Animas River near Cedar Hill, N. Mex.

Location.— Water-stage recorder, lat. 37°02'15", long. 107°52'25", in sec. 7, T. 32 N., R. 9 W., three-quarters of a mile below mouth of Florida River, 2.5 miles above Colorado-New Mexico State line, and 8.5 miles north of Cedar Hill.

Records available.— November 1933 to September 1937.

Extremes.— Maximum discharge during year, 6,410 second-feet May 18 (gage height, 6.40 feet); minimum daily discharge 180 second-feet, (estimated) Dec. 11.
1933-37: Maximum discharge, 9,540 second-feet June 18, 1935 (gage height, 7.62 feet); minimum daily discharge 90 second-feet, (estimated) Jan. 21, 1935.
Greatest known flood occurred Oct. 5 or 6, 1911 (discharge not determined).

Remarks.— Records good except those for periods of ice effect, Dec. 6-18, Dec. 31 to Mar. 5 which were computed on basis of five discharge measurements, weather records, and records for San Juan River at Pagosa Springs and are poor. Diversions for irrigation above station.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	350	530	247	190	210	240	1,060	1,540	2,320	1,450	612	445
2	344	494	256	190	220	250	1,110	1,950	2,290	1,420	575	452
3	326	326	234	190	220	260	990	2,850	2,430	1,290	545	419
4	314	282	238	190	220	270	848	3,500	2,430	1,190	515	400
5	304	314	252	200	220	270	950	4,090	2,100	1,160	508	380
6	350	338	215	190	220	282	1,010	3,500	1,830	1,070	545	362
7	358	352	205	190	200	304	950	2,940	1,690	1,030	605	365
8	314	326	200	200	200	304	1,020	3,690	1,550	1,030	515	447
9	309	309	195	200	210	350	1,210	4,610	1,980	990	452	374
10	309	314	190	190	210	438	1,380	4,720	1,760	930	426	358
11	309	309	180	190	220	487	1,560	4,720	2,040	1,260	374	314
12	276	298	190	200	230	501	1,760	4,610	2,330	1,360	332	304
13	276	309	195	210	230	558	2,080	5,160	2,160	1,240	304	298
14	270	309	195	210	230	673	2,350	5,600	2,210	1,140	287	287
15	270	309	205	210	230	612	2,650	5,620	1,880	1,020	282	292
16	265	309	215	200	220	689	3,300	5,710	1,890	902	282	282
17	265	320	220	210	220	1,210	2,850	5,940	2,190	822	391	265
18	256	338	225	210	220	980	2,510	6,060	2,550	745	380	242
19	260	326	216	210	210	697	2,680	5,150	2,290	681	368	224
20	368	314	220	200	220	575	2,600	4,190	2,180	612	314	216
21	374	304	220	190	200	651	2,760	4,190	2,180	560	292	216
22	344	304	229	200	200	911	3,120	4,400	2,180	508	282	212
23	326	292	299	210	210	830	2,850	4,400	2,120	473	265	216
24	298	276	208	210	220	590	2,290	4,090	1,560	438	260	216
25	292	270	220	220	230	598	2,040	3,120	1,640	426	242	216
26	282	276	242	210	240	605	2,430	2,350	1,720	426	238	212
27	292	265	212	210	240	598	3,030	2,040	1,880	487	260	220
28	287	265	216	210	240	658	2,600	2,480	1,620	530	270	224
29	287	270	229	210	-	697	2,010	3,120	1,570	893	304	308
30	530	256	229	210	-	658	1,650	3,210	1,530	779	326	612
31	393	-	200	210	-	902	-	2,750	-	697	344	-
Month	Second-foot-days					Maximum	Minimum	Mean	Run-off in acre-feet			
October.....	9,778					530	256	315	19,390			
November.....	9,494					530	256	316	19,810			
December.....	6,727					266	180	217	13,540			
Calendar year 1936.....	319,107					4,820	160	872	632,900			
January.....	6,270					220	190	202	12,440			
February.....	6,140					240	200	219	12,180			
March.....	17,808					1,210	240	574	36,320			
April.....	59,818					3,300	848	1,994	118,600			
May.....	122,450					6,060	1,540	3,950	242,900			
June.....	60,480					2,430	1,530	2,016	120,000			
July.....	27,549					1,450	426	869	54,640			
August.....	11,695					612	238	377	23,200			
September.....	9,361					612	212	312	18,670			
Water year 1936-37.....	347,560					6,060	180	952	689,400			

Animas River at Farmington, N. Mex.

Location.— Water-stage recorder, lat. 36°43', long. 108°12', in sec. 21, t. 29 N., R. 13 W., a quarter of a mile above mouth and three-quarters of a mile south of Farmington.

Drainage area.— 1,360 square miles.

Records available.— September 1912 to December 1914 and October 1930 to September 1937 in reports of Geological Survey; September 1912 to December 1931 in reports of State engineer. June 1904 to October 1905, at site half a mile upstream (published as Animas River near Farmington, N. Mex.); records equivalent.

Extremes.— Maximum discharge during year, 6,450 second-feet May 18 (gage height, 6.28 feet, from floodmarks); minimum daily discharge, 23 second-feet Aug. 26.

1930-37: Maximum discharge, 9,350 second-feet June 16, 1935 (gage height, 6.91 feet), from rating curve extended above 6,400 second-feet; minimum daily discharge observed, 10 second-feet Aug. 30, 31, 1931.

Greatest known flood occurred Oct. 6, 1911 (discharge not determined).

Remarks.— Records fair except those for period of ice effect, Dec. 31 to Feb. 25 (computed on basis of four discharge measurements and weather records) and periods of missing gage heights, Nov. 4-9, 12-22, Dec. 11-20, 29-30, Mar. 25 to Apr. 8, May 11-19, June 15 to July 9, Aug. 1-6, Sept. 5-7, (computed on basis of records for Animas River near Cedar Hill), all of which are poor. Diversions for irrigation above station.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	312	370	257	200	260	294	900	1,140	2,080	1,400	480	84
2	312	711	257	200	250	303	1,000	1,240	1,890	1,300	440	178
3	308	508	245	200	260	350	1,200	1,830	1,960	1,200	400	189
4	298	350	231	200	260	330	1,000	2,600	2,020	1,100	350	169
5	294	320	253	210	260	330	900	3,080	1,770	1,100	300	165
6	294	330	290	200	260	298	1,000	2,820	1,500	1,000	320	160
7	345	330	257	200	250	365	1,100	2,220	1,410	1,000	335	180
8	312	320	277	210	240	415	1,000	2,430	1,450	950	298	205
9	281	310	285	210	240	484	1,020	5,450	1,500	900	210	228
10	273	308	285	200	250	634	1,350	3,860	1,340	808	163	192
11	265	303	260	200	260	697	1,500	3,750	1,410	1,030	145	169
12	249	300	240	210	260	725	1,770	3,600	1,720	1,520	92	157
13	234	300	240	210	270	732	1,960	4,000	1,660	1,210	61	133
14	231	300	240	220	290	976	2,220	4,600	1,600	1,100	62	124
15	231	300	240	220	300	928	2,560	5,600	1,500	952	55	112
16	228	310	250	210	300	896	3,170	6,000	1,500	776	54	108
17	224	320	250	210	310	1,260	2,820	5,600	1,800	627	39	88
18	220	330	250	200	320	1,500	2,430	6,000	2,100	508	107	74
19	217	330	250	200	330	880	2,290	5,500	2,000	415	108	88
20	335	320	260	200	300	648	2,290	3,860	2,000	335	90	61
21	335	310	265	190	250	599	2,290	3,550	2,000	249	46	50
22	330	310	257	190	220	760	2,740	3,970	2,000	200	34	55
23	299	306	257	180	260	1,030	2,820	4,080	2,000	192	33	82
24	273	290	261	180	300	760	2,290	3,760	1,700	142	29	92
25	261	277	265	190	310	650	1,830	2,910	1,500	110	26	95
26	249	261	277	200	312	600	1,690	2,220	1,600	154	23	98
27	245	285	253	210	277	600	2,360	1,830	1,700	118	74	92
28	253	285	250	210	265	600	2,430	1,960	1,600	231	102	127
29	255	281	250	220	-	650	1,770	2,500	1,600	400	39	160
30	335	273	260	230	-	700	1,360	2,620	1,400	764	34	730
31	478	-	215	240	-	700	-	2,430	-	557	47	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						8,773	478	217	263	17,400		
November.....						9,870	711	273	329	19,580		
December.....						7,907	290	215	265	15,680		
Calendar year 1936.....						266,196	5,310	133	782	567,700		
January.....						6,350	240	180	205	12,600		
February.....						7,654	330	220	273	15,180		
March.....						20,694	1,600	294	668	41,050		
April.....						55,280	3,170	900	1,843	109,600		
May.....						105,210	6,000	1,140	3,394	208,700		
June.....						51,190	2,100	1,340	1,706	101,500		
July.....						22,338	1,520	110	721	44,310		
August.....						4,595	480	23	148	9,110		
September.....						4,441	730	50	148	8,810		
Water year 1936-37.....						304,302	6,000	23	834	603,500		

Cement Creek near Silverton, Colo.

Location.— Water-stage recorder, lat. 37°51'20", long. 107°40'35", in sec. 31, T. 42 N., R. 7 W., at Yukon mine, 3 miles northwest of Silverton.

Drainage area.— 13.5 square miles.

Records available.— May 1936 to September 1937.

Extremes.— Maximum discharge during year, 218 second-feet May 15 (gage height, 3.46 feet); minimum occurred during period of no record.

1936-37: Maximum discharge, 547 second-feet July 18, 1936 (gage height, 4.45 feet), by slope-area method; minimum occurred during period of no record.
Greatest known flood occurred Oct. 5, 1911 (discharge not determined).

Remarks.— Records good except those for 4-30, May 1 to June 1, which are fair. Those for period of ice effect, Nov. 4-30, and of missing gage heights, May 1-6, 9-12, May 28 to June 1, computed on basis of one discharge measurement and records for Animas River near Howardsville. All upstream diversions returned to creek above station.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	9.8	15						54	59	58	18	16
2	9.2	12						62	59	55	16	14
3	9.2	9.2						72	72	56	16	12
4	9.2							90	72	52	18	12
5	9.2							110	64	50	18	11
6	10							98	59	51	23	10
7	11							98	62	45	21	12
8	9.8							109	77	42	20	14
9	9.8							130	77	38	18	12
10	9.2							122	80	36	18	12
11	8.6							115	96	38	19	13
12	7.4							125	92	33	17	11
13	9.2	9						134	90	32	16	11
14	9.2							142	82	32	18	12
15	8.6							136	83	28	18	12
16	8.0							157	94	28	19	11
17	8.6							137	104	28	21	11
18	7.4							124	102	26	17	10
19	9.8							120	94	24	14	9.6
20	9.8							112	90	24	14	8.4
21	10							116	85	23	16	10
22	9.2							116	88	22	14	10
23	9.2	*9						112	83	21	12	9.6
24	9.8							100	72	23	12	9.2
25	8.6							80	67	20	12	9.2
26	9.2							82	67	19	13	8.8
27	10	9						82	61	23	12	8.4
28	13							112	59	26	14	8.8
29	12							110	61	23	13	14
30	14							84	58	21	14	14
31	15	-						68	-	20	16	-
Month								Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....								303.0	15	7.4	9.77	601
November.....								277.2	13	-	9.2	550
December.....								-	-	-	-	-
Calendar year												
January.....								-	-	-	-	-
February.....								-	-	-	-	-
March.....								-	-	-	-	-
April.....								-	-	-	-	-
May.....								3,309	157	54	107	6,560
June.....								2,307	104	58	76.9	4,580
July.....								1,017	88	19	32.8	2,020
August.....								605	25	12	16.3	1,000
September.....								356.0	16	8.4	11.2	666
Water year												

*Discharge measurement.

Cascade Creek near Tacoma, Colo.

Location.- Water-stage recorder, lat. 37°40', long. 107°49', in sec. 11, T. 39 N., R. 9 W., at crossing of U. S. Highway 550, 10 miles north of Tacoma.

Drainage area.- 26.8 square miles.

Records available.- October 1934 to September 1937 in reports of Geological Survey; October 1928 to September 1937 in reports of State engineer. January 1915 to September 1928 on file in office of State engineer.

Average discharge.- 22 years, 52.3 second-feet.

Remarks.- Complete records furnished by Western Colorado Power Co. No diversions above station.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	15	9.3	8.2	6.1	5.1	5.1	5.1	64	155	66	26	31
2	14	9.3	8.2	6.1	5.1	5.1	5.6	112	162	73	24	31
3	12	9.3	8.2	6.1	5.1	5.1	5.1	178	192	100	22	24
4	12	9.3	8.2	6.1	5.1	5.1	5.6	207	192	53	23	22
5	12	9.3	7.1	5.1	5.1	5.1	5.6	199	145	53	24	20
6	12	9.3	7.1	5.1	5.1	5.1	5.1	140	135	43	24	26
7	12	9.3	7.1	5.1	5.1	5.1	6.1	130	143	44	24	26
8	12	9.3	7.1	5.1	5.1	5.1	6.6	195	141	47	20	20
9	10	9.3	7.1	5.1	5.1	5.1	7.1	234	149	42	17	17
10	10	8.6	7.1	5.1	5.1	5.1	7.7	218	164	37	17	15
11	9.0	8.2	7.1	5.1	5.1	5.1	7.8	225	192	60	16	12
12	9.0	9.3	7.1	5.1	5.1	5.1	8.2	268	185	60	15	12
13	7.9	9.3	7.1	5.1	5.1	5.1	9.3	342	160	58	15	12
14	7.9	9.3	7.1	5.1	5.1	5.1	13	344	137	42	15	12
15	7.9	9.3	7.1	5.1	5.1	5.1	24	332	133	40	14	11
16	7.9	9.3	7.1	5.1	5.1	5.1	51	402	173	34	17	11
17	13	8.2	7.1	5.1	5.1	5.1	69	447	251	33	15	10
18	12	8.2	7.1	5.1	5.1	5.1	56	512	192	28	17	10
19	12	8.2	7.1	5.1	5.1	5.1	48	495	120	27	14	10
20	13	8.2	7.1	5.1	5.1	5.1	53	329	124	26	14	10
21	13	8.2	7.1	5.1	5.1	5.1	58	376	164	24	12	9.0
22	12	8.2	7.1	5.1	5.1	5.1	73	300	118	23	12	9.0
23	12	8.2	7.1	5.1	5.1	5.1	69	261	103	22	12	10
24	10	8.2	7.1	5.1	5.1	5.1	53	240	98	22	11	9.0
25	10	8.2	7.1	5.1	5.1	5.1	63	156	94	22	10	9.0
26	10	8.2	7.1	5.1	5.1	5.1	84	133	94	24	10	9.0
27	9.3	8.2	6.1	5.1	5.1	5.1	105	134	76	20	12	7.9
28	9.3	8.2	6.1	5.1	5.1	5.1	72	205	76	31	19	9.8
29	9.3	8.2	6.1	5.1	-	5.1	59	176	77	31	25	20
30	10	8.2	6.1	5.1	-	5.1	53	170	58	31	31	39
31	10	-	6.1	5.1	-	5.1	-	165	-	28	39	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						335.5	15	7.9	10.8	665		
November.....						261.8	9.3	8.2	8.73	519		
December.....						219.5	8.2	6.1	7.08	435		
Calendar year 1936.....						15,182.9	270	4.2	41.5	30,120		
January.....						162.1	6.1	5.1	5.23	322		
February.....						142.8	5.1	5.1	5.10	283		
March.....						158.1	5.1	5.1	5.10	314		
April.....						1,087.9	105	5.1	36.3	2,160		
May.....						7,689	512	64	248	15,250		
June.....						4,203	251	58	140	8,340		
July.....						1,244	100	20	40.1	2,470		
August.....						566	39	10	18.3	1,120		
September.....						473.7	39	7.9	15.8	940		
Water year 1936-37						16,543.4	512	5.1	45.3	32,820		

Lightner Creek near Durango, Colo.

Location.- Water-stage recorder, lat. 37°16', long. 107°55', in sec. 26, T. 35 N., R. 10 W., 3 miles west of Durango.

Drainage area.- 64 square miles.

Records available.- October 1933 to September 1937 in reports of Geological Survey; June 1927 to September 1937 in reports of State engineer.

Average discharge.- 10 years (1927-37), 19.9 second-feet.

Extremes.- Maximum discharge during year, 1,830 second-feet June 26, (gage height, 5.00 feet, from floodmarks), by slope-area method; minimum daily discharge, 1.2 second-feet Sept. 14-22.

1927-37: Maximum discharge, that of June 26, 1937; minimum daily discharge, 1 second-foot at times during 1930-31, 1933-35.

Remarks.- Records fair except those for period of ice effect, Dec. 18 to Mar. 8, which were estimated and are poor. No regulation or diversions.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4.4	9.8	8.2			2.8	112	72	23	12	6.9	4.2
2	4.4	5.3	6.6			2.8	148	85	20	11	5.9	4.2
3	3.7	4.4	7.2			2.8	139	100	18	11	5.9	4.2
4	3.2	3.7	7.2			3.0	130	115	17	13	5.9	4.2
5	3.2	3.2	7.2			3.0	168	130	16	36	5.3	4.2
6	3.9	3.7	10			3.0	165	100	14	30	4.8	3.5
7	3.9	3.7	8.2			3.2	199	100	14	30	4.6	3.7
8	3.2	3.0	8.2			3.4	291	115	14	30	4.4	3.0
9	3.2	2.6	8.2			3.7	374	115	12	25	3.9	2.6
10	3.2	2.6	10			4.8	441	115	11	25	3.7	2.6
11	3.2	3.0	6.9			11	418	115	11	55	3.0	2.2
12	3.2	3.2	8.5			14	418	100	11	22	3.0	2.2
13	4.4	3.2	6.3			11	418	100	9.8	18	3.0	1.8
14	3.2	3.7	8.5			14	374	100	8.5	15	3.0	1.2
15	3.2	3.7	6.3			23	313	115	8.5	13	3.0	1.2
16	3.2	3.7	6.3			23	274	106	8.5	13	3.0	1.2
17	3.2	3.7	6.3			60	257	100	8.5	11	3.0	1.2
18	3.2	3.7	6			91	236	70	8.5	10	4.2	1.2
19	3.2	4.2	6			38	219	70	8.5	8.2	3.7	1.2
20	5.1	4.8	6			31	199	59	7.9	6.9	3.5	1.2
21	5.6	4.8	5			39	196	51	7.5	5.6	3.0	1.2
22	4.6	4.8	5			70	209	49	7.5	4.6	3.0	1.2
23	4.6	4.8	5			67	172	46	7.5	4.6	3.0	2.2
24	4.6	5.6	5			49	151	41	6.9	4.8	3.0	2.2
25	4.6	5.6	5			34	148	38	6.9	4.4	3.0	2.2
26	4.6	5.6	4			27	145	33	57	3.9	3.0	2.2
27	4.6	7.5	4			31	151	30	34	3.9	3.0	2.6
28	4.6	9.8	4			40	124	30	18	5.9	3.0	3.0
29	3.9	10	4			40	106	32	16	32	3.0	6.3
30	12	9.0	3			42	75	39	13	13	3.0	9.8
31	5.3	-	3			78	-	29	-	8.5	4.2	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						130.4	12	3.2	4.21	259		
November.....						146.4	10	2.6	4.88	290		
December.....						195.1	10	3	6.29	387		
Calendar year 1936.....						7,653.0	350	1.1	20.9	15,170		
January.....						62	-	-	2	123		
February.....						84	-	-	3	167		
March.....						865.6	91	2.8	27.9	1,720		
April.....						6,770	441	75	226	13,430		
May.....						2,400	130	29	77.4	4,760		
June.....						424.0	57	6.9	14.1	841		
July.....						484.3	55	3.9	15.6	961		
August.....						117.9	6.9	3.0	3.80	234		
September.....						83.9	9.8	1.2	2.80	166		
Water year 1936-37						11,763.6	441	1.2	32.2	23,340		

Florida River near Durango, Colo.

Location.- Water-stage recorder, lat. 37°20', long. 107°45', in sec. 4, T. 35 N., R. 8 W., just below mouth of Red Creek and 10½ miles northeast of Durango. Zero of gage is 7,303.58 feet above mean sea level (general adjustment of 1929).

Drainage area.- 96 square miles.

Records available.- May to July 1899, April 1901 to October 1903, September 1910 to September 1912, and October 1933 to September 1937 in reports of Geological Survey; May to July 1899, April 1901 to October 1903, September 1910 to September 1924, and April 1927 to September 1937 in reports of State engineer. During period of record this station has been located at several different sites in the same vicinity; all records equivalent.

Average discharge.- 19 years (1910-12, 1917-24, 1927-37), 128 second-feet.

Extremes.- Maximum discharge during year, 801 second-feet May 13 (gage height, 3.17 feet); minimum, 6.8 second-feet Feb. 17 (discharge measurement), probably less during period of ice effect.
1899, 1901-3, 1910-24, 1927-37: Maximum discharge observed, 4,640 second-feet June 28, 1927 (gage height, 4.50 feet, former site and datum); minimum daily discharge, 0.4 second-foot Feb. 15, 1918.
Greatest known flood occurred Oct. 5, 1911 (discharge not determined).

Remarks.- Records good except those for periods of ice effect or missing gage heights, Dec. 3 to Mar. 20, Apr. 12-14, which were computed on basis of three discharge measurements, weather records, and records for Los Pinos River near Bayfield and are fair. Diversions for irrigation above station.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	47	42	24				60	281	350	126	60	86
2	46	37	21				83	338	385	128	47	72
3	45	30	17				83	413	385	117	41	64
4	41	47	17				72	496	365	99	39	59
5	39	39	17				79	496	338	104	37	50
6	41	35		*12			88	417	306	92	46	46
7	42	34					84	397	315	92	39	43
8	35	31	15				106	471	361	84	32	41
9	35	31					135	615	342	77	29	36
10	35	32					152	601	306	74	26	32
11	31	32				15	185	601	350	117	23	30
12	30	27					250	642	354	163	24	27
13	29	26					310	702	334	147	20	25
14	28	31					370	706	310	119	22	20
15	26	26					438	660	268	97	27	20
16	26	26					417	601	274	86	39	18
17	29	29			*6.6		377	697	292	76	33	18
18	28	31					361	633	262	67	32	16
19	25	31					373	552	268	59	27	15
20	36	29					377	539	246	53	21	14
21	37	31	14				31	405	588	243	47	13
22	33	29					41	425	606	246	47	15
23	32	26					53	389	583	212	41	15
24	30	29					52	338	509	179	37	15
25	29	32					46	357	405	160	39	13
26	29	29					43	381	342	155	35	13
27	26	31					43	417	334	193	36	12
28	27	29					37	361	397	168	76	46
29	26	21					35	299	479	158	112	39
30	39	22					37	268	417	135	97	53
31	41	-					42	-	389	-	72	97
Month							Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet	
October.....							1,043	47	25	33.6	2,070	
November.....							927	47	21	30.9	1,840	
December.....							465	24	-	15.0	922	
Calendar year 1936.....							36,536.8	681	-	99.8	72,470	
January.....							310	-	-	10	615	
February.....							224	-	-	8.0	444	
March.....							758	53	-	24.5	1,500	
April.....							8,040	438	60	268	15,950	
May.....							15,907	706	281	513	31,550	
June.....							8,281	385	135	276	16,430	
July.....							2,616	163	35	84.4	5,190	
August.....							1,062	97	20	34.3	2,110	
September.....							916	86	12	30.5	1,820	
Water year 1936-37.....							40,549	706	-	111	80,440	

*Discharge measurement.

La Plata River at Hesperus, Colo.

Location.- Water-stage recorder and concrete control, lat. 37°17', long. 108°02', in sec. 14, T. 35 N., R. 11 W., an eighth of a mile West of Hesperus.

Drainage area.- 37 square miles.

Records available.- June to August 1904, April to August 1906, August to December 1910, and October 1933 to September 1937 in reports of Geological Survey; June to August 1904, April to August 1906, August to December 1910, and May 1917 to September 1937 in reports of State engineer.

Average discharge.- 20 years (1917-37), 48.1 second-feet.

Extremes.- Maximum discharge during year, 592 second-feet May 16 (gage height, 2.94 feet); minimum, 2.7 second-feet Sept. 28.

1904, 1906, 1910, 1917-37: Maximum discharge, 1,460 second-feet June 28, 1927 (gage height, 4.60 feet, former datum); no flow Apr. 4, 1906.

Greatest known flood occurred Oct. 5 or 6, 1911 (discharge not determined).

Remarks.- Records good except those for period of ice effect, Nov. 28 to Mar. 31, which were computed on basis of six discharge measurements and weather records and are fair. One diversion for irrigation above station.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	11	9.0	-				18	129	128	26	29	13
2	14	8.4	-				18	171	133	35	25	12
3	18	6.0	-			*6.6	18	232	133	37	23	10
4	14	6.0	*8.0				19	216	114	42	18	10
5	15	6.6	-				21	262	98	78	19	10
6	19	6.6	-				22	216	81	47	26	9.6
7	18	5.6	-				25	216	81	45	24	9.2
8	16	5.6	-				26	335	91	47	22	8.9
9	18	6.0	-				37	353	81	52	18	7.7
10	16	5.6	*10				51	340	71	52	16	7.1
11	11	5.6	-				108	363	91	98	14	6.8
12	7.8	5.6	-				153	406	95	114	11	6.5
13	10	6.6	-				201	406	95	102	10	6.2
14	14	7.3	-				212	358	78	55	10	5.6
15	15	6.4	-				224	377	54	94	10	5.9
16	14	9.6	-		*7.4		284	441	66	52	12	5.6
17	14	11	-				212	406	88	54	14	5.3
18	12	14	-				237	411	85	49	12	5.6
19	13	16	-				275	356	74	40	12	5.6
20	13	18	-				249	225	95	29	9.2	4.6
21	13	18	-				266	219	85	19	7.4	5.3
22	12	18	*9.1				245	219	71	14	11	5.6
23	11	18	-				253	225	74	11	10	4.8
24	11	15	-				197	219	66	13	9.8	5.9
25	11	13	-				201	163	61	17	10	5.6
26	10	9.0	-				258	128	74	22	11	5.6
27	9.6	7.2	-				216	152	64	20	14	5.0
28	9.6	7	-	*8.6			174	163	49	25	14	2.7
29	9.6	7	-				143	179	40	38	14	7.1
30	9.6	7	-				129	184	23	42	16	11
31	9.0	-	-				-	147	-	33	16	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						398.2	19	7.6	12.8	790		
November.....						287.2	18	5.6	9.57	570		
December.....						279	-	-	9.0	553		
Calendar year 1936.....						16,657.9	315	-	45.5	33,040		
January.....						266.6	-	-	8.6	529		
February.....						207.2	-	-	7.4	411		
March.....						248	-	-	8.0	492		
April.....						4,492	294	18	150	8,310		
May.....						8,222	441	128	265	16,310		
June.....						2,439	133	23	81.3	4,840		
July.....						1,402	114	11	45.2	2,780		
August.....						467.4	29	7.4	15.1	927		
September.....						213.7	13	2.7	7.12	424		
Water year 1936-37.....						18,922.3	441	2.7	51.8	37,540		

*Discharge measurement.

La Plata River at Colorado-New Mexico State line

Location.- Water-stage recorder, lat. $37^{\circ}00'$, long. $108^{\circ}11'$, in sec. 10, T. 32 N., R. 13 W., 300 feet south of Colorado-New Mexico State line and 3 miles north of Pendleton, N. Mex. Zero of gage is 5,975.15 feet above mean sea level (general adjustment of 1929).

Drainage area.- 331 square miles.

Records available.- October 1933 to September 1937 in reports of Geological Survey; February 1920 to September 1937 in reports of State engineer.

Average discharge.- 17 years, 36.9 second-feet.

Extremes.- Maximum discharge during year, 1,830 second-feet July 29 (gage height, 6.60 feet); no flow July 22 and Sept. 20.
1920-37: Maximum discharge, 4,750 second-feet Aug. 24, 1927 (gage height, 11.36, revised, present datum); no flow at times during 1922, 1924, 1928, 1930, 1933-37.

Remarks.- Records good except those for period of ice effect, Dec. 30 to Feb. 25 (computed on basis of two discharge measurements and weather records), and those for June 8-13 (estimated), which are fair. Diversions for irrigation above station.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	12	26	19		14	11	83	213	60	0.5	18	1.6
2	11	30	17		14	21	122	235	41	.7	17	2.4
3	11	16	15		14	23	137	293	107	4.0	16	2.6
4	9.1	13	19		14	20	110	325	95	.8	14	2.2
5	7.9	13	19		14	20	104	355	64	1.2	15	2.0
6	7.6	13	13		15	24	154	278	58	7.9	11	1.6
7	10	13	11		15	27	128	206	39	8.5	9.1	16
8	9.4	13	14		15	29	158	210	5	36	8.5	4.6
9	7.0	13	10		15	35	219	245	4	56	7.6	5.5
10	7.0	14	9.4		15	43	315	254	2	69	6.1	3.6
11	7.6	15	9.4		16	41	429	282	1	121	4.9	3.6
12	7.9	14	9.4		16	40	544	226	1	89	3.0	3.0
13	8.5	16	9.7		16	53	574	210	1	50	3.2	2.6
14	8.5	16	11		16	59	544	226	1.0	60	3.6	2.0
15	9.4	17	14		16	58	673	245	1.0	41	3.4	1.5
16	9.7	18	13		16	64	700	233	1.0	48	5.5	.8
17	9.7	21	14		16	88	446	233	1.0	49	3.6	.2
18	10	23	12		16	82	372	215	54	47	3.0	.1
19	11	24	11		16	63	415	148	73	29	2.6	.2
20	25	25	12		16	48	401	106	80	4.3	2.8	0
21	21	22	13		17	59	441	82	82	1.0	2.0	1.0
22	25	21	12		17	72	490	76	80	0	1.5	1.4
23	16	18	12		17	90	458	68	82	.4	1.2	2.0
24	16	18	12		17	63	372	59	69	.5	1.4	2.2
25	15	18	14		17	77	350	29	74	7.0	1.5	2.2
26	14	18	15		18	65	398	19	98	9.4	1.8	1.6
27	14	19	12		17	62	438	64	119	4.0	2.0	1.5
28	14	17		*12	11	60	380	101	57	23	1.7	.8
29	14	22	15		67	288	78	8.8	286	1.7	19	
30	30	19	14		56	242	114	2.4	70	1.8	70	
31	28	-	14		64	-	72	-	24	1.8	-	-
Month					Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet			
October.....					406.3	30	7.0	13.1	806			
November.....					545	30	13	18.2	1,080			
December.....					408.9	19	9.4	13.2	811			
Calendar year 1936.....					12,887.6	462	0	35.2	25,540			
January.....					403	-	-	13	799			
February.....					436	18	11	15.6	865			
March.....					1,564	30	11	51.4	3,150			
April.....					10,485	700	83	350	20,800			
May.....					5,460	335	19	176	10,830			
June.....					1,561.2	119	1.0	45.4	2,700			
July.....					1,148.2	286	0	37.0	2,280			
August.....					176.3	18	1.2	5.69	350			
September.....					157.8	70	0	5.26	313			
Water year 1936-37.....					22,581.7	700	0	61.9	44,790			

*Discharge measurement.

La Plata River at La Plata, N. Mex.

Location.— Water-stage recorder, lat. $36^{\circ}58'$, long. $108^{\circ}11'$, in sec. 3, T. 31 N., R. 13 W., 1,900 feet southeast of La Plata and 15 miles above mouth.

Drainage area.— 335 square miles.

Records available.— May 1905 to July 1911, September 1912 to December 1914, October 1930 to November 1934, and June 1936 to September 1937 in reports of Geological Survey; May 1905 to March 1926, and August 1927 to December 1931 in reports of State engineer.

Extremes.— Maximum discharge during year about 370 second-feet Apr. 16 (gage height, 5.24 feet), from rating curve extended above 370 second-feet; minimum daily discharge observed, 0.8 second-foot Sept. 13-23, 28.
1930-34, 1936-37: Maximum discharge, about 4,920 second-feet Aug. 26, 1934 (gage height, 8.67 feet, from floodmarks), from rating curve extended above 370 second-feet; no flow at times.

Remarks.— Records fair except those for periods of ice effect, Dec. 10-20, Dec. 30 to Jan. 27, Jan. 29 to Feb. 18, Feb. 20 to Mar. 5, those for period of missing gage heights, Mar. 31 to Apr. 9, and those for periods of faulty intake action, Apr. 17 to May 17, June 27 to July 15, July 30 to Aug. 7, Sept. 9, which were computed on basis of records for station at State Line and San Juan River at Pagosa Springs, Colo., and are poor. Diversions for irrigation above station.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3.0	20	14	5		20			30			1.3
2	2.2	22	14			21			29			1.3
3	2.2	17	14		5	21	150	250	30			1.3
4	1.8	14	17			21			30	2	4	1.3
5	1.8	14	14			21			30			1.4
6	1.8	14	14			28			29			1.4
7	4.7	14	19			30	160		29			2.1
8	3.6	14	18			31			28			1.8
9	2.6	14	14			35	250	220	27		2.9	2.2
10	1.8	14	12		10	40	337		25	10	1.7	1.1
11	1.5	14	12			46	468		23		1.6	1.2
12	1.5	15	11			45	615		20	100	1.7	.9
13	1.8	15	11			56	662		19	40	1.7	.8
14	3.0	15	12			56	640		19	10	1.9	.8
15	4.7	14	14			56	728	210	19	5	1.8	.8
16	6.5	14	15		15	56			17	3.4	1.6	.8
17	6.5	16	15			73	755		16	3.4	1.4	.8
18	6.5	17	14			68		83	14	3.9	1.5	.8
19	7.6	17	12		17	61		64	11	3.9	1.5	.8
20	17	17	12		14	54		47	9.6	3.6	1.4	.8
21	17	16	12		12	56		44	10	3.4	1.5	.8
22	15	16	11		14	57		41	10	3.4	1.7	.8
23	14	14	12		16	68	430	36	13	3.6	1.6	.8
24	13	14	11		20	56		30	14	3.9	1.4	1.2
25	10	15	11	5	20	63		25	13	4.1	1.4	.9
26	8.8	15	11		19	61		21	13	5.2	1.3	.9
27	4.7	15	12		18	59		17		4.6	1.2	.8
28	1.8	16	12	4.5	18	56		18		5.2	1.1	
29	1.5	16	11		-	59	250	25		79	1.0	13
30	20	14	11		-	63	290	30		40	1.1	64
31	20	-	10	5	-	70	-	30	-	5	1.2	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						207.9	20	1.5	6.71	412		
November.....						461	22	14	15.4	814		
December.....						401	19	10	12.9	795		
Calendar year												
January.....						195.5	-	-	6.31	358		
February.....						350	-	-	12.5	694		
March.....						1,507	73	20	48.6	2,990		
April.....						11,305	755	-	377	22,420		
May.....						4,351	-	17	140	8,530		
June.....						543.6	30	-	18.1	1,080		
July.....						334.6	100	-	12.4	763		
August.....						65.4	-	1.0	2.11	130		
September.....						107.9	64	.8	3.60	214		
Water year 1936-37						19,879.9	755	.8	54.5	39,430		

Cherry Creek near Red Mesa, Colo.

Location.- Water-stage recorder, lat. $37^{\circ}07'$, long. $108^{\circ}12'$, in sec. 7, T. 33 N., R. 12 W., 2 miles northwest of Red Mesa.

Drainage area.- 66 square miles.

Records available.- October 1933 to September 1937 in reports of Geological Survey; March 1928 to September 1937 in reports of State engineer.

Extremes.- Maximum discharge during year, 608 second-feet Apr. 15 (gage height, 3.95 feet); minimum daily discharge, 0.3 second-foot Aug. 27, 28.
1928-37: Maximum discharge, 803 second-feet Aug. 26, 1934 (gage height, 4.50 feet, from floodmarks); no flow at times during 1931, 1933-36.

Remarks.- Records fair. Those for period of ice effect, Oct. 17 to Mar. 23, computed on basis of two discharge measurements and weather records; those for May 13, Aug. 20-25 estimated. Diversions for irrigation above station.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.3						25	82	12	3.6	7.7	0.5
2	2.3						62	82	6.7	12	7.4	.5
3	1.4						77	77	6.7	11	7.4	.6
4	1.4		*8.2				77	72	6.7	11	4.7	.7
5	1.4						77	61	9.3	10	3.2	.8
6	1.4						77	64	10	16	2.6	1.0
7	1.4						45	61	6.7	12	4.7	2.6
8	1.4						67	61	5.4	19	4.7	2.2
9	1.4						127	63	4.2	14	3.2	2.0
10	3.3						176	65	3.2	16	2.8	1.8
11	3.3						248	77	2.2	33	2.2	1.7
12	3.3					8	262	75	2.6	55	1.8	1.5
13	3.3						292	68	2.6	27	1.6	1.5
14	3.3						325	61	2.2	18	1.6	1.2
15	3.3						395	56	3.2	15	1.6	1.2
16	2.3	*10					410	51	3.2	12	1.6	1.1
17	2.3						199	40	3.2	9.0	1.2	1.1
18	2.2						158	24	3.2	7.7	1.2	1.1
19	2						174	24	6.7	6.7	1.0	1.0
20	4						161	19	6.2	5.4	1.0	1.0
21	4						163	16	5.4	4.2	1.0	1.0
22	4						166	12	5.4	3.2	1.0	1.0
23	4						136	12	5.4	3.6	1.0	1.0
24	4						107	8.4	5.4	3.2	.5	.8
25	4					23	97	8.4	5.4	2.8	.5	.7
26	4					15	105	5.4	6.2	2.4	.5	.8
27	4					13	122	4.2	7.4	2.0	.3	.8
28	4					14	102	4.2	7.7	2.2	.3	.6
29	4					13	80	4.2	3.8	18	.5	2.2
30	5					11	72	22	2.6	22	.7	10
31	5					15	-	20	-	9.0	.7	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						93.0	5	1.4	3.0	184		
November.....						240	-	-	8.0	476		
December.....						186	-	-	6.0	369		
Calendar year												
January.....						93	-	-	3.0	184		
February.....						84	-	-	3.0	157		
March.....						311	23	-	10.0	617		
April.....						4,594	410	25	153	9,090		
May.....						1,299.8	82	4.2	41.9	2,580		
June.....						160.9	12	2.2	5.36	319		
July.....						386.0	55	2.0	12.5	766		
August.....						70.2	7.7	.3	2.26	139		
September.....						44.0	10	.5	1.47	87		
Water year 1936-37.....						7,551.9	410	.3	20.7	14,980		

*Discharge measurement.

Mancos River near Mancos, Colo.

Location.- Water-stage recorder, lat. 37°22', long. 108°15', in sec. 23, T. 36 N., R. 13 W., 2 miles east of Mancos.

Drainage area.- 73 square miles.

Records available.- October 1933 to September 1937 in reports of Geological Survey; October 1931 to September 1937 in reports of State engineer.

Extremes.- Maximum discharge during year, 892 second-feet May 4 (gage height, 3.45 feet); minimum daily discharge, 4.0 second-feet Aug. 24, probably less during period of ice effect.

1931-37: Maximum discharge, that of May 4, 1937; minimum not determined.

Remarks.- Records fair. Those for periods of ice effect, Nov. 8, 20-22, 24-28 and Dec. 2 to Mar. 8 computed on basis of three discharge measurements and weather records; those for Apr. 2-7 estimated. Diversions for irrigation above station.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	15	18	5.0			10	24	322	179	93	22	13
2	14	14	-			16	35	461	177	100	19	12
3	13	18	-			16	35	583	177	74	17	13
4	12	43	-			20	30	650	156	59	16	11
5	12	13	-			23	25	592	134	106	15	9.8
6	15	9.4	-			24	45	491	120	71	24	9.3
7	14	9.4	-			27	40	495	116	64	18	9.8
8	13	9.4	-			30	78	597	132	55	14	8.7
9	12	11	-			53	141	616	141	129	14	8.4
10	11	6.9	*4.8			96	177	607	132	214	20	7.8
11	9.8	13	-			126	191	578	143	221	19	7.2
12	9.4	16	-			63	227	504	143	156	17	6.3
13	10	11	-			59	265	526	128	130	15	5.6
14	11	8.4	-			50	330	517	126	102	12	5.2
15	11	8.1	-			56	395	491	112	82	7.5	5.2
16	11	6.0	-			49	354	444	124	66	7.5	5.2
17	11	5.8	-			73	254	440	126	56	8.1	5.2
18	9.0	5.4	-			78	240	408	130	49	8.4	5.4
19	12	5.0	-			69	272	399	124	40	6.3	5.4
20	55	5.0	-			69	287	302	116	34	5.4	5.2
21	40	6.0	-			66	354	284	122	39	4.8	5.4
22	21	7.0	-			64	379	272	114	34	4.8	5.6
23	20	8.7	-			66	310	282	110	27	4.6	5.8
24	16	8.0	-			67	221	237	95	25	4.0	5.8
25	15	8.0	-		*7.2	50	244	188	82	22	5.4	5.6
26	13	8.0	-			28	379	171	89	25	5.8	5.4
27	11	7.0	-	*4.1		25	428	191	110	24	6.0	5.2
28	8.7	7.0	-			24	330	230	89	39	6.9	5.0
29	7.8	6.9	-			21	254	284	85	36	6.9	11
30	43	7.2	-			21	240	282	74	53	7.5	22
31	22	-	-			22	-	205	-	26	11	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						497.7	55	7.8	16.1	987		
November.....						309.6	43	5.0	10.3	614		
December.....						148.8	-	-	4.8	295		
Calendar year 1936.....						20,463.6	435	-	55.9	40,590		
January.....						156.4	-	-	4.4	271		
February.....						168	-	-	6.0	333		
March.....						1,457	126	10	47.0	2,890		
April.....						6,584	428	24	219	13,060		
May.....						12,809	650	171	407	25,010		
June.....						3,706	179	74	124	7,350		
July.....						2,251	221	22	72.6	4,460		
August.....						352.9	24	4.0	11.4	700		
September.....						236.0	22	5.0	7.87	468		
Water year 1936-37.....						28,456.4	650	-	78.0	56,440		

*Discharge measurement.

Mancos River near Towaoc, Colo.

Location.- Water-stage recorder, lat. 37°01', long. 108°48', in sec. 15, T. 32 N., R. 18 W., at Mancos River Trading Post, 12 miles south of Towaoc. Prior to Aug. 9, 1937, datum 0.70 foot higher.

Drainage area.- 558 square miles.

Records available.- October 1933 to September 1937 in reports of Geological Survey; February 1921 to September 1937 in reports of State engineer.

Average discharge.- 16 years, 57.0 second-feet.

Extremes.- Maximum discharge during year, 2,350 second-feet July 28 (gage height, 5.30 feet, present datum), by slope-area method; minimum daily discharge, 2.6 second-feet Aug. 27.

1921-37: Maximum discharge, 4,900 second-feet Aug. 26, 1934 (gage height, 6.55 feet, present datum); no flow at times during 1922, 1924-26, 1928, 1930, 1931, 1933-36.

Remarks.- Records fair for Oct. 1 to Mar. 31 and good for Apr. 1 to Sept. 30. Those for period of ice effect, Dec. 4 to Feb. 24, estimated on basis of two discharge measurements and weather records. Diversions for irrigation above station.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	22	75	22		11	18	118	215	136	47	7.0	3.8
2	21	81	19		10	20	166	292	118	54	7.0	6.5
3	20	49	16		11	26	166	408	103	66	9.5	5.0
4	20	29	13		12	23	131	515	99	53	7.0	4.7
5	20	27	7.0		14	26	123	560	86	44	5.5	4.2
6	25	31	4.5		14	27	146	450	80	120	5.0	4.3
7	27	32	3.5		13	30	127	346	74	63	7.0	7.0
8	21	30	3.5		12	38	127	408	68	69	5.5	7.4
9	18	27	3.5		12	54	178	472	64	63	6.0	5.8
10	16	27	*3.4		12	68	259	450	59	127	6.0	5.6
11	16	26	3.5		13	86	275	515	58	387	5.7	5.0
12	16	25	4.0		13	86	328	472	55	275	5.3	4.7
13	16	25	4.0		14	86	346	429	56	156	5.0	5.2
14	16	26	4.5		14	118	408	429	58	104	4.7	5.0
15	15	26	4.5		14	101	515	429	58	80	4.3	4.2
16	15	27	4.5		14	98	560	387	49	68	4.0	4.0
17	14	27	4.5		15	148	450	366	43	58	4.0	4.0
18	14	27	5.0		16	173	375	328	40	54	4.6	3.8
19	15	27	5.0		17	109	366	275	42	44	4.8	3.8
20	83	27	5.5		16	89	408	223	40	36	4.0	3.7
21	58	27	6.0		15	89	450	178	39	33	3.8	3.5
22	46	27	6.0		16	101	560	156	40	26	3.5	3.5
23	51	25	6.5		16	146	472	166	42	20	3.2	3.5
24	27	23	6.5		15	92	328	156	38	20	3.0	3.8
25	24	20	6.5		15	86	275	152	32	11	3.0	3.8
26	18	20	6.0		23	80	346	127	31	18	2.7	3.5
27	18	20	6.0	*10	18	80	472	101	93	23	2.6	3.7
28	18	21	6.0		18	54	387	93	74	192	2.7	4.2
29	18	24	6.0		-	74	275	101	58	101	3.0	26
30	99	24	6.0		-	101	202	139	54	11	3.0	166
31	95	-	6.0		-	101	-	178	-	9.5	3.0	-
Month				Second-foot-days		Maximum	Minimum	Mean	Run-off in acre-feet			
October.....				902		99	14	29.1	1,790			
November.....				901		81	20	30.0	1,790			
December.....				207.9		22	3.4	6.71	412			
Calendar year 1936.....				20,007.6		480	0	54.7	39,690			
January.....				263.5		-	-	8.5	523			
February.....				403		23	10	14.4	799			
March.....				2,458		173	18	79.3	4,880			
April.....				9,339		560	113	311	18,620			
May.....				9,566		560	93	309	18,970			
June.....				1,887		136	31	62.9	3,740			
July.....				2,431.5		387	9.5	78.4	4,820			
August.....				145.4		9.5	2.6	4.69	288			
September.....				339.4		186	3.5	11.3	673			
Water year 1936-37.....				28,843.7		560	2.6	79.0	57,200			

*Discharge measurement.

Paria River at Lees Ferry, Ariz.

Location.- Water-stage recorder, lat. $36^{\circ}51'45''$, long. $111^{\circ}35'45''$, in NW $\frac{1}{4}$ sec. 13, T. 40 N., R. 7 E., half a mile above mouth and one mile northwest of Lees Ferry. Zero of gage is 3,123.6 feet above mean sea level.

Drainage area.- 1,520 square miles.

Records available.- November 1923 to September 1937.

Average discharge.- 14 years, 35.6 second-feet.

Extremes.- Maximum discharge during year, 3,720 second-feet Aug. 29 (gage height, 8.85 feet); minimum, 2 second-feet several days in January.
1923-37: Maximum discharge, 16,100 second-feet Oct. 5, 1925 (gage height, 17.5 feet); no flow for some periods in December and January of many years.

Remarks.- Records good except those for period of ice effect, Jan. 2 to Feb. 5 (computed on basis of four discharge measurements, parts of gage-height graph unaffected by ice, and weather records), and those for Aug. 30 and Sept. 1, which are fair. Diversions for irrigation above station.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	8	194	14	9	13	46	59	16	12	42	11	40
2	7	89	13	6	9	59	99	12	11	15	7	112
3	7	37	12	5	9	76	101	10	11	8	6	85
4	7	23	15	5	10	65	60	11	11	7	6	63
5	7	22	16	7	12	58	30	12	8	8	7	23
6	9	24	16	20	28	83	33	14	6	11	20	17
7	8	21	11	15	568	115	50	14	5	14	17	125
8	8	20	15	7	158	122	37	10	4	33	13	38
9	7	17	16	5	113	113	37	8	4	214	7	28
10	7	18	14	4	36	120	55	7	3	39	6	16
11	7	18	12	5	32	129	85	7	3	226	5	15
12	7	18	10	6	57	133	74	6	3	275	4	15
13	7	18	10	13	56	272	65	6	4	89	4	13
14	7	18	11	14	66	328	63	7	3	31	4	16
15	7	17	9	10	238	160	76	7	3	17	4	14
16	7	18	20	8	92	127	93	6	4	13	5	13
17	8	18	31	9	63	223	87	5	3	11	22	14
18	11	18	22	10	48	184	48	5	4	8	23	13
19	16	16	14	10	71	159	27	4	4	7	18	12
20	466	16	15	9	58	76	25	3	4	6	19	12
21	56	16	18	6	36	57	23	4	4	5	13	18
22	24	16	17	5	34	49	26	6	4	4	7	53
23	18	16	17	5	44	60	38	6	4	4	6	275
24	16	16	16	4	54	48	23	6	4	4	12	141
25	14	14	16	5	68	40	19	7	6	4	40	31
26	14	14	20	6	63	70	16	9	5	4	28	18
27	15	16	17	6	45	48	16	7	3	5	18	16
28	15	14	43	10	34	50	16	6	3	24	29	15
29	14	14	24	12	-	60	16	5	6	66	668	20
30	16	14	14	15	-	42	16	5	13	40	50	125
31	90	-	11	20	-	43	-	8	-	22	260	-
Month				Second-foot-days		Maximum	Minimum	Mean	Run-off in acre-feet			
October.....				900		456	7	29.0	1,790			
November.....				790		194	14	26.3	1,570			
December.....				509		43	9	16.4	1,010			
Calendar year 1936.....				18,687		2,970	2	50.8	36,980			
January.....				271		20	4	8.7	538			
February.....				2,115		568	9	75.5	4,200			
March.....				3,223		328	40	104	6,390			
April.....				1,413		101	16	47.1	2,800			
May.....				239		16	3	7.7	474			
June.....				162		13	3	5.4	321			
July.....				1,256		275	4	40.5	2,490			
August.....				1,339		668	4	43.2	2,660			
September.....				1,392		276	12	46.1	2,740			
Water year 1936-37.....				13,599		668	3	37.3	26,980			

Little Colorado River at St. Johns, Ariz.

Location.- Water-stage recorder, lat. 34°30'30", long. 109°21'30", in sec. 27, T. 13 N., R. 28 E., at St. Johns.

Drainage area.- 938 square miles.

Records available.- April 1906 to December 1909, May 1929 to October 1933, September 1935 to September 1937.

Extremes.- Maximum discharge during year, 175 second-feet Sept. 6 (gage height, 1.31 feet); no flow on many days.

1929-37: Maximum discharge, 2,100 second-feet Sept. 2, 1936 (gage height, 4.19 feet); no flow part or all of many days each year.

Remarks.- Records good except those for Dec. 31 to Feb. 5, which are poor. Stage-discharge relation affected by ice Dec. 11-13, Dec. 31 to Feb. 5, for which periods discharge was computed on basis of three discharge measurements, parts of gage-height graph which were unaffected by ice, and weather records. Diversions for irrigation above station. Regulation by numerous storage reservoirs upstream (combined capacity about 35,000 acre-feet).

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4	6	9	1	4	7	11	4	4	2	0.5	6
2	5	8	8	0	6	7	10	5	3	2	.4	15
3	5	8	9	0	6	6	10	5	3	1	.2	9
4	4	8	0	7	7	10	6	3	2	2	.1	3
5	5	8	3	1	9	7	10	5	2	1	.2	3
6	5	8	7	2	13	8	10	3	2	1	12	9
7	7	8	7	1	15	8	9	3	2	2	12	14
8	7	8	6	1	12	8	11	3	2	3	.4	5
9	8	8	5	0	8	8	11	5	1	3	0	5
10	8	8	5	0	7	8	11	4	2	14	0	6
11	8	8	4	0	7	3	6	3	3	17	0	6
12	7	8	4	0	8	8	5	3	3	2	0	5
13	7	8	5	2	7	10	7	3	2	1	0	4
14	7	8	6	1	7	11	6	1	3	.8	0	3
15	6	8	6	0	7	10	6	.6	2	.5	0	3
16	7	7	6	1	7	12	3	.8	2	.8	0	2
17	6	7	7	2	9	12	.5	.4	2	1	0	1
18	4	7	8	1	8	10	1	.3	1	1	0	1
19	3	7	8	3	8	11	2	.6	.8	3	0	1
20	4	8	6	4	10	10	3	1	.8	2	0	1
21	5	8	6	3	11	10	10	1	.5	2	0	1
22	5	8	5	2	9	11	15	.9	.5	2	0	1
23	5	8	5	0	8	10	18	1	.5	2	0	2
24	5	8	5	0	8	12	14	0.9	.6	2	.5	1
25	5	8	5	0	8	9	8	1	1	9	0	1
26	5	8	5	0	8	8	6	1	.8	1	10	1
27	5	8	5	2	8	7	3	.2	.5	.6	9	1
28	5	8	3	4	8	7	3	2	.5	1	2	.6
29	5	9	3	5	-	7	3	3	.9	4	2	.4
30	5	9	0	7	-	7	3	3	2	.8	16	1
31	6	-	0	5	-	7	-	4	-	.5	35	-
Month				Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet				
October.....				173	8	3	5.6	343				
November.....				236	9	6	7.9	468				
December.....				174	9	0	5.6	345				
Calendar year 1936.....				2,168.9	110	0	5.93	4,300				
January.....				48	7	0	1.5	95				
February.....				232	15	4	8.3	460				
March.....				271	12	6	8.7	538				
April.....				225.5	18	.5	7.62	447				
May.....				74.7	6	.2	2.41	148				
June.....				51.4	4	.5	1.71	102				
July.....				87.0	17	.5	2.81	175				
August.....				100.3	35	0	3.24	199				
September.....				113.0	16	.4	3.77	224				
Water year 1936-37.....				1,785.9	35	0	4.89	3,540				

LITTLE COLORADO RIVER BASIN

Little Colorado River near Woodruff, Ariz.

Location.- Water-stage recorder, lat. $34^{\circ}48'00''$, long. $110^{\circ}03'00''$, in sec. 7, T. 18 N., R. 22 E., $\frac{1}{2}$ miles northwest of Woodruff and 4 miles below Silver Creek.

Drainage area.- 9,060 square miles.

Records available.- March 1905 to December 1908 and December 1915 to December 1919 (fragmentary), April 1929 to December 1933, September 1935 to September 1937.

Extremes.- Maximum discharge during year, 5,640 second-feet Feb. 7 (gage height, 9.3 feet); no flow May 19.

1929-37: Maximum discharge, 10,700 second-feet July 21, 1929 (gage height, 12.45 feet); no flow on some days during spring or summer of each year.

A maximum discharge of 25,000 second-feet was recorded Dec. 5, 1919 (gage height, 12.0 feet, datum then in use). A maximum gage height of 12.7 feet, same datum, was recorded Jan. 19, 1916 (discharge not determined).

Remarks.- Records good except those for period of ice effect, Dec. 30 to Feb. 4 (computed on basis of three discharge measurements, weather records, and records for Silver Creek near Woodruff), and those for July 3-9 (computed from partial gage-height record), which are fair. Diversions for irrigation above station. Some regulation by reservoirs upstream (combined capacity about 73,000 acre-feet).

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	25	25	21	9	10	66	38	7	2	4	15	242
2	22	22	20	7	10	66	74	6	2	45	6	177
3	19	19	20	5	11	66	74	6	3	21	3	52
4	16	16	20	5	11	81	59	10	3	14	2	29
5	14	14	21	5	14	59	286	7	6	7	16	11
6	11	16	14	6	56	52	238	6	7	18	7	5
7	12	14	10	5	1,360	52	202	5	6	11	6	4
8	12	14	10	5	1,940	52	173	3	8	21	4	3
9	10	14	10	5	447	59	196	3	5	70	2	3
10	9	14	11	5	202	63	214	2	3	102	1	4
11	9	14	10	5	116	63	220	2	1	167	1	3
12	7	15	10	6	88	47	226	2	1	143	1	3
13	5	13	10	7	70	35	214	2	1	92	1	2
14	5	12	10	7	131	931	202	2	1	50	1	2
15	5	11	9	7	458	1,060	156	2	.7	17	111	2
16	5	13	17	8	513	474	145	4	.7	10	107	1
17	6	13	19	9	590	1,020	111	.6	2	6	26	1
18	6	12	11	9	262	738	84	0	2	2	6	1
19	6	12	10	10	238	417	59	1	1	3	7	1
20	6	12	9	10	202	298	52	4	.6	2	2	1
21	9	12	13	10	125	256	50	2	2	2	3	1
22	10	14	12	7	139	214	38	2	1	1	2	1
23	9	14	11	7	97	168	25	5	2	1	1	1
24	13	13	11	8	70	125	24	2	2	.9	9	4
25	14	12	12	8	88	116	16	2	2	.9	5	1
26	225	14	12	8	95	134	14	3	4	19	3	1
27	72	17	12	7	74	129	17	2	3	10	24	1
28	45	19	12	8	70	97	12	3	38	591	18	1
29	29	19	12	9	-	88	12	5	13	77	74	1
30	209	21	9	10	-	88	8	7	12	49	84	4
31	58	-	7	11	-	88	-	3	-	37	345	-
Month					Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet			
October.....					901	223	5	29.1	1,790			
November.....					448	25	11	14.9	889			
December.....					395	21	7	12.7	783			
Calendar year 1936.....					21,492.4	1,780	0	58.7	42,620			
January.....					228	11	5	7.4	452			
February.....					7,485	1,940	10	267	14,850			
March.....					7,202	1,060	35	232	14,280			
April.....					3,289	286	8	110	6,520			
May.....					110.6	10	0	3.57	219			
June.....					135.0	38	.6	4.50	268			
July.....					1,593.8	591	.9	51.4	3,160			
August.....					893	345	1	28.8	1,770			
September.....					563	242	1	18.8	1,120			
Water year 1936-37.....					25,243.4	1,940	0	63.7	46,100			

Little Colorado River at Grand Falls, Ariz.

Location.— Water-stage recorder, lat. 35°26'15", long. 111°12'30", 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 1937.

Average discharge.— 12 years, 335 second-feet.

Extremes.— Maximum discharge during year, 21,800 second-feet Feb. 9 (gage height, 20.25 feet); no flow on many days.
1925-37: Maximum discharge, 50,500 second-feet Apr. 5, 1929 (gage height, 30.0 feet); no flow during some periods of most years.
A discharge of about 120,000 second-feet occurred on Sept. 19, 1923 (gage height, 47.0 feet).

Remarks.— Records excellent except those based on partial gage-height record, which are good. Diversions for irrigation above station.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	*40	1,070	9	3	0	*600	540	227		0	91	709
2	*25	268	7	1	0	*450	491	174		0	53	1,110
3	17	135	10	2	0	387	713	135		0	30	350
4	12	231	9	2	0	382	1,660	115		0	15	245
5	6	182	7	1	0	471	2,220	97		0	6	318
6	3	117	5	0	0	617	1,450	101		0	2	204
7	1	80	5	0	9	569	1,380	97		0	6	133
8	0	55	4	0	1,120	713	1,650	93		0	2	154
9	0	41	4	0	12,700	994	2,080	90		0	9	101
10	0	35	3	0	4,000	1,380	1,950	71		102	34	57
11	0	26	3	0	2,330	1,730	2,310	*40		233	*20	24
12	0	22	2	0	*1,800	2,000	2,710	*20		1,050	*5	*3
13	0	20	1	0	*1,100	2,240	2,850	*10		362	*2	*5
14	0	18	1	0	*1,050	2,590	2,780	*5		177	*1	*2
15	0	16	1	0	1,440	3,500	2,480	*2		80	0	*1
16	0	15	1	0	5,960	4,900	2,330	*1		45	0	0
17	0	15	2	0	7,790	3,590	2,500	0		27	0	0
18	0	13	2	0	5,040	5,450	2,380	0		*10	2	0
19	0	12	3	0	3,240	6,380	1,920	0			*10	0
20	0	13	3	0	2,420	3,400	1,580	0		*1	0	0
21	0	12	2	0	2,020	2,330	1,310	0		0	0	2
22	0	12	2	0	*1,350	1,620	1,030	0		0	0	7
23	0	10	2	0	*975	1,360	871	0		0	0	1
24	0	10	2	0	785	1,430	839	0		0	0	0
25	0	10	6	0	641	1,600	719	0		0	0	0
26	0	10	7	0	761	1,380	575	0		0	0	0
27	0	9	4	0	1,030	1,090	*450	0		0	0	0
28	0	8	4	0	1,000	809	*420	0		8	249	0
29	0	8	5	0	—	809	*370	0		21	179	0
30	9	8	4	0	—	665	330	0		707	341	33
31	56	—	2	0	—	593	—	0		199	344	—
Month					Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet			
October.....					169	56	0	5.5	335			
November.....					2,481	1,070	8	82.7	4,320			
December.....					122	10	1	3.9	242			
Calendar year 1936.....					84,660	3,150	0	231	167,600			
January.....					9	3	0	.3	18			
February.....					58,361	12,700	0	2,084	115,800			
March.....					55,929	6,380	382	1,804	110,900			
April.....					44,818	2,880	330	1,497	89,090			
May.....					1,278	227	0	41.2	2,530			
June.....					0	0	0	0	0			
July.....					3,036	1,060	0	97.9	6,020			
August.....					1,401	344	0	45.2	2,780			
September.....					3,464	1,110	0	115	6,870			
Water year 1936-37.....					171,168	12,700	0	469	339,500			

*Computed from partial gage-height record.

Silver Creek near Woodruff, Ariz.

Location.- Water-stage recorder, lat. 34°44'00", long. 110°01'45", in sec. 32, T. 18 N., R. 22 E., half a mile above mouth and 3 miles south of Woodruff. Control for station is crest of diversion dam 1,700 feet downstream.

Drainage area.- 942 square miles.

Records available.- April 1929 to October 1933, October 1935 to September 1937.

Extremes.- Maximum discharge during year, 4,300 second-feet Feb. 7 (gage height, 7.57 feet); no flow on many days.
1929-37: Maximum discharge, 12,100 second-feet July 21, 1929 (gage height, 11.67 feet); no flow on several days in spring and summer of each year.

Remarks.- Records good except those for period of missing gage heights, Oct. 22 to Nov. 5, and those for period of ice effect Dec. 29 to Feb. 5, which are fair and were computed on basis of partial record, four discharge measurements, weather records, and comparison with record for Little Colorado River near Woodruff. Diversions for irrigation above station. Regulation by several storage reservoirs (combined capacity about 27,000 acre-feet). Records show discharge over dam but do not include flow in canal which diverts at dam.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5	15	11	8	10	24	6	3	2	2	3	65
2	4	10	9	6	10	28	5	2	2	15	2	26
3	4	7	8	5	11	34	5	0	5	10	.4	10
4	4	7	7	5	11	44	6	0	8	4	.3	6
5	3	7	7	5	11	25	7	.1	12	.5	7	3
6	2	7	7	6	39	16	6	.1	11	2	2	2
7	4	6	6	5	1,320	15	6	1	9	4	3	2
8	5	7	5	5	1,180	18	5	.1	3	11	4	2
9	6	7	4	5	276	27	5	.1	0	9	1	3
10	6	7	4	5	120	27	5	0	1	29	.3	4
11	5	7	3	5	46	25	5	0	.5	73	.6	2
12	3	7	3	6	36	18	4	0	.5	27	.3	2
13	2	7	2	7	28	16	4	0	.5	18	0	1
14	2	8	2	7	21	905	7	0	.1	15	.1	1
15	1	7	3	7	191	832	6	1	0	7	3	1
16	2	7	4	8	357	386	6	.1	.1	1	11	.7
17	3	7	7	9	438	878	5	0	2	.1	5	.5
18	4	8	8	9	204	544	6	0	1	0	2	.7
19	3	7	7	10	165	290	8	.1	0	0	4	.7
20	3	8	7	10	97	194	9	.5	.1	0	.7	.6
21	3	7	8	10	58	134	7	1	1	0	.4	.5
22	3	8	7	7	40	105	6	9	0	0	.5	.7
23	4	11	6	7	28	80	5	8	2	0	.9	2
24	6	8	6	8	29	23	4	4	.1	0	10	1
25	8	7	6	8	53	13	4	5	2	.2	6	1
26	80	9	8	8	55	9	4	4	11	3	3	.8
27	30	11	7	7	41	6	0	5	12	3	30	.8
28	20	9	7	8	30	6	.8	7	30	5	11	.6
29	10	9	7	9	-	6	.5	15	12	4	27	.5
30	30	12	6	10	-	6	1	8	12	9	13	1
31	20	-	5	11	-	6	-	4	-	6	89	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						314	80	1	10.1	823		
November.....						244	15	6	8.1	494		
December.....						187	11	2	6.0	371		
Calendar year 1936.....						7,537.2	983	0	20.6	14,960		
January.....						226	11	5	7.3	448		
February.....						4,905	1,320	10	175	9,730		
March.....						4,740	905	6	153	9,400		
April.....						148.3	9	0	4.94	294		
May.....						76.1	13	0	2.45	151		
June.....						156.9	30	0	4.56	272		
July.....						257.8	73	0	8.52	511		
August.....						240.5	89	0	7.76	477		
September.....						142.1	65	.5	4.74	282		
Water year 1936-37.....						11,617.7	1,320	0	31.8	25,040		

Chevelon Fork near Winslow, Ariz.

Location.- Water-stage recorder, lat. 34°55'30", long. 110°31'00", in sec. 27, T. 18 N., R. 17 E., 3 miles above mouth and 12 miles southeast of Winslow.

Drainage area.- 1,010 square miles.

Records available.- December 1905 to December 1908, December 1915 to December 1919, March 1929 to February 1934, September 1935 to September 1937.

Extremes.- Maximum discharge during year, 2,460 second-feet Feb. 8 (gage height, 7.66 feet); minimum daily discharge, 1 second-foot Nov. 2 and Sept. 4-6.
1929-37: Maximum discharge, 18,100 second-feet Apr. 4, 1929 (gage height, 17.8 feet); minimum, about 1 second-foot almost every year.

Remarks.- Records good except for period of ice effect Dec. 30 to Jan. 4, Jan. 7-18, Jan. 20 to Feb. 3, which are based on three discharge measurements, weather records, and comparison with records for Silver Creek near Woodruff and Little Colorado River near Woodruff and are fair. No diversions above station. Chevelon Canal, which has maximum capacity of about 10 second-feet, diverts below station.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4	2	4	4	12	128	82	30	2	5	3	11
2	4	1	4	2	12	122	238	24	2	4	3	4
3	4	2	4	2	15	140	576	23	3	5	3	2
4	4	3	4	2	20	161	569	17	3	5	4	1
5	4	3	4	2	21	163	314	13	2	4	8	1
6	4	3	4	3	30	133	224	11	2	4	5	1
7	4	3	4	2	92	147	483	8	3	5	5	2
8	4	3	4	2	1,080	232	602	8	4	13	5	2
9	4	3	4	2	1,000	367	616	6	3	28	4	3
10	4	3	4	2	640	504	778	6	3	31	4	4
11	4	4	4	2	400	638	895	7	2	27	4	4
12	4	4	4	2	332	733	935	7	3	13	4	4
13	4	4	4	2	240	556	842	10	3	7	3	4
14	4	4	4	6	190	629	779	11	4	4	3	4
15	3	4	4	7	480	779	776	9	4	4	4	4
16	3	4	4	9	1,170	611	816	6	4	4	5	4
17	3	4	4	10	758	824	699	6	4	4	4	4
18	4	5	4	11	573	1,180	527	4	4	4	3	4
19	3	5	4	13	418	748	407	4	4	4	3	4
20	3	5	4	10	357	422	311	5	4	4	3	4
21	3	5	4	9	238	308	235	7	4	4	3	4
22	4	5	4	7	163	259	171	8	4	4	3	3
23	4	4	4	7	163	332	151	8	4	4	3	4
24	4	4	4	9	173	404	119	8	4	4	4	4
25	4	4	3	9	235	262	92	7	5	7	4	4
26	4	4	3	9	291	201	66	7	5	13	4	4
27	4	4	3	7	214	142	50	7	6	11	4	4
28	4	4	3	9	142	106	42	7	5	23	4	4
29	4	4	4	11	-	106	41	7	5	12	15	7
30	4	4	3	12	-	108	37	2	5	8	7	28
31	2	-	2	13	-	84	-	2	-	4	94	-
Month					Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet			
October.....					116	4	2	3.7	230			
November.....					111	5	1	3.7	220			
December.....					117	4	2	3.8	232			
Calendar year 1936.....					16,881	950	1	46.1	33,480			
January.....					199	13	2	6.4	395			
February.....					9,459	1,170	12	338	18,760			
March.....					11,599	1,150	84	374	23,010			
April.....					12,473	935	37	416	24,740			
May.....					285	30	2	9.2	565			
June.....					110	6	2	3.7	218			
July.....					273	31	4	8.8	541			
August.....					225	94	3	7.3	446			
September.....					137	28	1	4.6	272			
Water year 1936-37.....					35,104	1,170	1	96.2	69,630			

Clear Creek near Winslow, Ariz.

Location.- Water-stage recorder, lat. $34^{\circ}57'45''$, long. $110^{\circ}38'15''$, in SE $\frac{1}{4}$ sec. 9, T. 18 N., R. 16 E., $\frac{1}{4}$ miles above mouth and 5 miles southeast of Winslow. Control for station is crest of diversion dam 1,000 feet downstream.

Drainage area.- 607 square miles.

Records available.- March 1929 to February 1934, October 1935 to September 1937. June 1906 to January 1909, at station 3 miles upstream.

Extremes.- Maximum discharge during year, 2,790 second-feet Mar. 17 (gage height, 7.43 feet); no flow on many days.
1929-37: Maximum discharge, 39,000 second-feet Apr. 4, 1929 (gage height, 18.1 feet); no flow on many days of each year.

Remarks.- Records good. Water diverted above station for municipal and industrial use. Records show discharge over dam but do not include flow in canal that diverts at dam.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1			0	0.2	0	215	238	175				
2			0	.1	0	199	355	137				
3			0	.1	0	187	700	127				
4			0	.1	0	187	897	137				
5			0	.2	0	222	640	162				
6			0	.1	0	194	530	156				
7			.1	0	0	230	660	150				
8			.1	0	932	355	919	132				
9			.2	0	1,370	494	886	107				
10			.2	0	780	620	1,100	87				
11			.2	0	539	740	1,250	75				
12			.2	0	414	350	1,410	60				
13			.2	0	347	1,030	1,380	48				
14			.2	0	260	1,260	1,310	40				
15			.2	0	447	1,510	1,340	30				
16			.2	0	1,860	1,090	1,540	25				
17			.2	0	1,120	1,380	1,540	19				
18			.2	0	810	2,120	1,270	13				
19			.2	0	650	1,430	1,050	8.5				
20			.2	0	584	564	886	6.3				
21			.2	0	406	670	770	4.3				
22			.2	0	299	566	680	2.2				
23			.2	0	268	584	670	.9				
24			.2	0	260	670	584	.1				
25			.2	0	327	530	440	0				
26			.2	0	414	449	364	0				
27			.2	0	355	364	331	0				
28			.2	0	245	323	323	0				
29			.2	0	-	283	283	0				
30			.2	0	-	275	222	0				
31			.2	0	-	238	-	0				
Month					Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet			
October.....					0	0	0	0	0			
November.....					0	0	0	0	0			
December.....					4.8	0.2	0	.15	9.5			
Calendar year 1936.....					23,610.5	1,360	0	64.6	46,840			
January.....					.8	.2	0	.03	1.6			
February.....					12,697	1,860	0	453	25,160			
March.....					20,209	2,120	187	862	40,080			
April.....					24,548	1,540	222	818	48,690			
May.....					1,702.3	175	0	54.9	3,380			
June.....					0	0	0	0	0			
July.....					0	0	0	0	0			
August.....					0	0	0	0	0			
September.....					0	0	0	0	0			
Water year 1936-37.....					59,151.9	2,120	0	162	117,300			

Moenkopi Wash near Tuba, Ariz.

Location.- Water-stage recorder, lat. 36°05'30", long. 111°18'30", in T. 31 N., R. 10 E., unsurveyed, on Navajo Indian Reservation, at highway bridge 5 miles southwest of Tuba and 17 miles above mouth.

Drainage area.- 2,270 square miles.

Records available.- July 1926 to September 1937.

Extremes.- Maximum discharge during year, 5,700 second-feet Sept. 2 (gage height, 9.0 feet); no flow on many days.
1928-37: Maximum discharge, 15,100 second-feet Aug. 4, 1929 (gage height, 15.4 feet); no flow on several days in each year.

Remarks.- Records good except for periods of ice effect, Dec. 29 to Jan. 15, Jan. 22-30, which were computed on basis of four discharge measurements, partial gage-height record, and weather records and are fair. Diversions for irrigation above station; no diversions below.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5.1	4.6	5.1	6	6.3	7.4	4.0		0	79	12	16
2	5.1	19	5.1	4	8.3	6.2	3.1		0	19	4.5	912
3	5.1	16	4.6	3	8.3	5.0	4.0		0	6.2	1.7	74
4	5.1	9.9	6.3	3	7.6	3.5	14		0	0.2	0.1	22
5	5.1	8.3	6.3	4	8.3	3.1	12		0	0	0.1	8.2
6	5.1	6.9	4.6	5	9.9	4.0	5.6		0	0	0.5	1.4
7	6.9	6.3	4.1	5	20	6.2	2.7		0	155	5.0	231
8	5.7	5.7	4.6	6	71	6.2	2.3		0	187	1.2	42
9	5.7	5.1	6.3	7	59	5.6	0.5		0	532	0.1	12
10	5.7	4.6	5.1	5	24	5.6	0.1		0	162	0	6.8
11	5.7	4.6	5.1	3	18	5.0	0		0	133	0	4.5
12	5.7	4.6	4.1	3	14	5.0	0		0	568	0	3.5
13	5.7	6.3	4.1	4	13	5.6	0		0	57	0	3.5
14	5.1	5.7	5.1	3	21	6.8	0		0	12	0	3.1
15	4.6	5.1	6.3	3	124	7.4	0		0	5.6	0	4.0
16	5.7	5.7	5.3	2.6	106	8.8	0		0	3.1	0	2.3
17	5.1	5.7	8.3	2.3	55	12	0		0	2.0	0	0.2
18	5.7	5.7	7.6	2.3	34	21	0		0	0	0	0.1
19	5.7	5.7	6.3	2.6	18	15	0		0	0	16	0.1
20	5.7	5.7	6.3	2.6	21	10	0		0	0	1.7	0.1
21	20	5.7	6.9	2.9	10	8.1	0		0	0	0.1	2.4
22	21	5.7	6.3	2	3.5	5.6	0.3		0	0	0	0.4
23	9.1	5.7	5.7	2	9.6	4.0	0.2		0	0	0.1	0.2
24	6.9	5.7	5.7	3	9.6	4.5	0		0	0	0	2.7
25	6.3	5.7	6.3	3	9.6	4.5	0		0	0	0	5.8
26	5.7	5.7	6.9	3	16	5.0	0		0	0	0	4.0
27	5.7	5.7	6.3	3	14	3.5	0		44	38	38	3.1
28	5.7	5.1	6.3	4	10	0.3	0		27	213	28	3.1
29	5.7	5.7	5	4	-	2.2	0		6.1	454	22	12
30	9.9	5.1	5	4	-	3.8	0		2.4	115	23	2,920
31	9.6	-	7	5.7	-	3.5	-		-	42	46	-
Month					Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet			
October.....					301.3	96	4.6	9.72	598			
November.....					238.4	46	4.6	7.95	473			
December.....					181.0	8.3	4.1	5.84	359			
Calendar year 1936.....					10,535.6	1,800	0	28.8	20,900			
January.....					113	7	2	3.65	224			
February.....					729	124	3.5	26.0	1,450			
March.....					194.4	21	.3	6.27	386			
April.....					48.8	14	0	1.63	97			
May.....					0	4	0	0	158			
June.....					79.5	44	0	2.65	158			
July.....					2,803.1	568	0	90.4	5,560			
August.....					200.1	46	0	6.45	397			
September.....					4,301.5	2,920	.1	143	8,530			
Water year 1936-37.....					9,190.1	2,920	0	25.2	18,230			

Bright Angel Creek near Grand Canyon, Ariz.

Location.- Water-stage recorder, supplemented by temporary staff gages, lat. $36^{\circ}05'55''$, long. $112^{\circ}05'44''$, a quarter of a mile above mouth and 11 miles by trail from Grand Canyon, Coconino County. Zero of gage is 2,458.2 feet above mean sea level.

Drainage area.- 100 square miles.

Records available.- October 1923 to September 1937.

Average discharge.- 14 years, 36.5 second-feet.

Extremes.- Maximum discharge observed during year, 2,000 second-feet July 29, determined by velocity-area method (gage height, 4.4 feet); minimum, 18 second-feet Oct. 18, 1923-37: Maximum discharge, 4,400 second-feet Aug. 19, 1936 (gage height, 15.0 feet, from floodmarks, by slope-area method; minimum, 9 second-feet June 29, 1934, caused by regulation.

Remarks.- Records good. Staff gages read twice daily. Minor diversions for irrigation above station. Some fluctuation in discharge caused by operation of power plant 9 miles upstream; no regulation by storage.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	20	24	20	20	19	26	33	198	96	32	25	23
2	20	22	20	19	20	26	34	255	92	32	25	26
3	20	21	20	19	20	26	43	351	87	32	25	26
4	20	21	20	19	20	26	42	380	81	32	24	26
5	19	20	20	19	20	26	40	341	75	32	24	25
6	19	21	20	20	70	25	40	361	72	32	25	26
7	20	21	20	20	61	26	41	356	68	32	25	26
8	20	21	20	20	40	26	43	366	64	53	24	26
9	20	21	20	20	35	26	43	395	60	32	25	26
10	20	21	20	20	30	28	45	370	58	31	24	26
11	19	20	20	20	29	28	55	370	56	30	24	26
12	19	20	20	20	29	30	70	352	54	28	24	26
13	19	20	20	20	29	35	97	303	53	28	24	26
14	19	20	20	20	363	34	101	283	53	28	25	24
15	19	20	20	20	79	32	127	296	51	28	26	24
16	19	20	22	19	40	46	170	307	48	28	25	24
17	19	20	19	19	34	50	192	318	46	27	26	23
18	18	20	19	19	32	46	179	303	44	28	26	23
19	19	20	19	19	30	45	176	280	42	29	25	23
20	20	20	19	19	26	38	188	254	39	28	25	24
21	19	21	19	20	26	38	198	209	38	26	25	24
22	20	21	19	20	26	35	259	176	36	28	25	25
23	20	21	19	20	26	36	280	154	36	28	21	24
24	19	20	19	20	26	34	244	146	37	28	21	24
25	19	21	19	20	26	34	240	143	36	27	21	23
26	20	21	19	20	26	34	255	138	35	26	21	23
27	20	20	19	20	26	34	361	133	34	28	21	23
28	20	20	24	20	26	36	305	125	36	27	21	22
29	20	20	21	20	-	35	225	114	34	171	20	26
30	26	20	20	20	-	32	179	106	33	31	20	78
31	21	-	20	20	-	32	-	106	-	27	20	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	612	26	18	19.7	1,210
November.....	618	24	20	20.6	1,230
December.....	616	24	19	19.9	1,220
Calendar year 1936.....	12,822	251	18	35.0	25,430
January.....	611	20	19	19.7	1,210
February.....	1,254	363	19	44.1	2,450
March.....	1,025	80	25	33.1	2,030
April.....	4,305	361	33	144	8,540
May.....	7,929	395	106	266	15,730
June.....	1,594	96	33	53.1	3,160
July.....	1,071	171	26	34.5	2,120
August.....	732	26	20	23.6	1,460
September.....	791	78	22	26.4	1,570
Water year 1936-37.....	21,138	395	18	57.9	41,920

Virgin River at Virgin, Utah

Location.- Chain gage, lat. 37°13', long. 113°11', in SE $\frac{1}{4}$ sec. 22, T. 41 S., R. 12 W., at east edge of Virgin, half a mile below North Creek.

Drainage area.- 990 square miles.

Records available.- April 1909 to September 1926 (fragmentary), October 1926 to September 1937.

Average discharge.- 18 years (1910-14, 1915-16, 1917-18, 1923-24, 1926-37), 220 second-feet.

Extremes.- Maximum discharge observed during year, 1,920 second-feet May 8 (gage height, 5.96 feet); minimum observed, 58 second-feet Sept. 19.
1909-37: Maximum discharge (estimated), 12,000 second-feet Oct. 27, 1912 (gage height, 11.6 feet, former site and datum); minimum observed, 23 second-feet Sept. 30, 1931.

Remarks.- Records poor. Gage read twice daily during October and once daily during the remainder of the year. Discharge for period of ice effect, Jan. 8 to Feb. 3, and for Nov. 8, 29, Feb. 14, 18, Apr. 25, May 5, July 9, 10, 16, 17, Aug. 5, 6, 8, 12, Sept. 6 computed on basis of records for station at Littlefield, Ariz., and for North Fork of Virgin River near Springdale, Utah. Diversions for irrigation above station.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	76	171	138	121	85	185	338	658	564	200	138	286
2	76	125	129	129	85	216	468	642	468	171	104	292
3	83	61	113	129	95	243	386	1,270	442	161	97	226
4	76	80	156	138	113	195	216	1,530	416	134	97	113
5	69	86	129	147	248	226	380	1,500	392	142	85	83
6	69	100	90	129	719	237	326	1,730	367	152	85	135
7	76	100	90	129	672	237	326	1,710	355	326	83	190
8	86	104	83	120	176	326	398	1,920	320	303	80	100
9	76	108	90	115	258	349	442	1,700	308	300	76	142
10	73	97	90	110	237	386	522	1,340	297	850	83	86
11	69	104	64	100	226	410	599	1,440	264	386	83	66
12	76	113	76	95	258	398	599	1,470	253	280	85	66
13	80	97	69	90	258	1,720	543	1,450	242	226	90	61
14	83	104	83	95	650	349	585	1,390	232	208	142	73
15	86	97	129	95	373	326	735	1,530	211	138	93	73
16	125	104	147	90	258	898	1,130	1,380	200	125	100	66
17	104	121	156	85	195	571	967	1,290	200	120	93	61
18	104	138	76	80	205	642	735	1,230	180	83	100	66
19	509	129	83	75	216	314	735	1,190	171	113	100	56
20	386	121	76	75	138	226	735	839	161	113	86	73
21	147	121	76	70	147	226	923	791	152	83	93	108
22	147	104	76	75	176	258	1,510	759	180	83	171	108
23	138	129	97	80	176	248	751	711	161	97	86	387
24	152	129	129	80	185	185	719	635	134	90	86	161
25	147	138	147	85	226	258	1,000	620	125	83	86	108
26	125	147	121	90	195	270	1,010	564	125	76	80	108
27	121	138	58	90	185	226	1,170	556	125	303	80	108
28	117	138	185	85	147	237	743	442	117	195	80	117
29	129	134	97	85	-	226	564	455	258	658	86	152
30	264	129	64	85	-	185	495	1,070	379	258	86	216
31	367	-	69	85	-	237	-	564	-	156	93	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	4,236	509	69	137	8,400
November.....	3,467	171	61	116	6,880
December.....	3,186	185	58	103	6,320
Calendar year 1936.....	59,474	1,000	50	162	118,000
January.....	3,057	147	70	98.6	6,060
February.....	6,902	719	85	246	13,690
March.....	11,015	1,720	185	355	21,850
April.....	19,750	1,170	216	668	39,170
May.....	34,156	1,920	442	1,102	67,760
June.....	7,799	564	117	260	15,470
July.....	6,611	850	76	213	13,110
August.....	2,927	171	76	94.4	5,810
September.....	3,867	367	56	129	7,670
Water year 1936-37	106,973	1,920	56	293	212,200

Virgin River at Littlefield, Ariz.

Location.- Staff gage, lat. 36°53', long. 113°56', in SW¼ sec. 4, T. 40 N., R. 15 W., Half a mile below Beaverdam Wash and half a mile east of Littlefield.

Drainage area.- 4,400 square miles.

Records available.- October 1929 to September 1937.

Extremes.- Maximum discharge observed during year, about 1,440 second-feet Feb. 7 (gage height, 5.0 feet); minimum observed, 39 second-feet Sept. 15.
1929-37: Maximum discharge (estimated), 25,000 second-feet Aug. 27, 1932;
minimum observed, 25 second-feet Aug. 31, 1935.

Remarks.- Records poor. Gage read once daily. No diversions in Arizona above this point except a few second-feet from Beaverdam Springs. Mesquite Canal diverts water a few miles downstream for irrigation in Nevada.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.					
1	57	509	195	240	119	397	725	850	430	177	155	62					
2	54	354	187	240	117	436	805	805	403	170	144	167					
3	54	279	190	235	174	478	729	828	381	177	126	545					
4	56	268	200	235	195	517	737	850	369	190	119	366					
5	54	265	195	208	248	525	725	859	372	190	96	224					
6	54	257	192	205	268	569	729	872	340	203	98	235					
7	57	251	182	200	1,440	601	689	872	316	229	83	216					
8	59	203	172	190	1,100	549	765	864	305	354	83	195					
9	54	200	172	172	745	629	761	605	296	378	83	180					
10	59	184	162	180	613	637	745	641	285	364	85	203					
11	59	184	153	170	471	725	818	757	276	400	83	180					
12	60	177	148	162	505	765	850	805	257	354	86	86					
13	60	174	150	157	549	985	725	828	243	340	83	65					
14	63	184	148	162	1,050	725	908	753	226	299	85	44					
15	67	192	141	170	1,030	717	962	757	224	235	90	39					
16	70	200	153	162	549	721	882	765	221	203	96	44					
17	109	177	153	119	541	765	886	769	216	190	90	45					
18	109	174	170	111	533	828	805	765	210	113	88	49					
19	135	167	197	102	509	713	777	1,220	205	119	83	46					
20	187	162	180	96	497	721	757	818	205	92	85	49					
21	877	146	187	92	384	753	737	789	203	79	88	53					
22	629	135	195	96	363	701	749	793	187	60	95	72					
23	549	137	184	96	410	713	781	765	180	59	93	104					
24	342	146	187	100	447	725	785	589	184	57	85	447					
25	205	155	208	106	497	721	785	689	177	56	67	348					
26	203	162	240	124	549	737	828	673	195	57	59	296					
27	229	182	282	128	384	729	805	605	160	79	60	274					
28	197	177	262	124	390	745	818	450	153	363	62	182					
29	210	184	268	124	-	725	805	501	155	316	59	177					
30	342	192	262	121	-	713	828	471	162	248	60	144					
31	-	-	248	117	-	725	-	468	-	170	62	-					
Month													Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....													5,929	877	54	181	11,760
November.....													6,177	509	135	205	12,250
December.....													5,963	282	141	192	11,830
Calendar year 1936													72,823	2,710	54	199	144,500
January.....													4,744	240	92	153	9,410
February.....													14,677	1,440	117	524	29,110
March.....													20,990	985	397	677	41,630
April.....													20,701	962	689	740	47,010
May.....													23,076	1,220	450	744	45,770
June.....													7,536	430	153	251	14,950
July.....													6,341	400	56	205	12,580
August.....													2,711	155	59	87.5	5,380
September.....													5,137	545	39	171	10,190
Water year 1936-37.....													126,982	1,440	39	348	251,900

North Fork of Virgin River near Springdale, Utah

Location.- Staff gage, lat. $37^{\circ}12'35''$, long. $112^{\circ}58'40''$, in SW $\frac{1}{4}$ sec. 22, T. 41 S., R. 10 W., in Zion National Park, half a mile below Pine Creek and 2 miles north-east of Springdale.

Records available.- October 1932 to September 1937. June to November 1923 and April 1925 to September 1932 at site a quarter of a mile above Pine Creek.

Average discharge.- 11 years (1925-31, 1932-37), 98.5 second-feet.

Extremes.- Maximum combined discharge observed during year, 2,540 second-feet May 15 (gage height, 5.7 feet at river station, from high-water mark), from rating curve extended above 500 second-feet; minimum observed, 37 second-feet Oct. 1-4.
1925-37: Maximum combined discharge observed, 4,480 second-feet Sept. 2, 1936 (gage height, 7.9 feet at river station, from high-water mark), from rating curve extended above 500 second-feet; minimum observed, 24 second-feet Dec. 17 and 31, 1928.

Remarks.- Records poor. Gage read once or twice daily. River discharge Oct. 19, 20, 31, Nov. 18-21, Jan. 16-27, May 31, June 4, 5, Aug. 8, 30, Sept. 1, 2 computed on basis of records for station on Virgin River at Virgin, Utah. Springdale Canal diverts from North Fork of Virgin River in NW $\frac{1}{4}$ sec. 22, T. 41 S., R. 10 W., for irrigation in vicinity of Springdale. Records give the combined flow of North Fork of Virgin River and Springdale Canal.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	37	102	41	68	68	74	111	635	344	99	85	154
2	37	56	41	69	68	74	121	684	313	99	75	159
3	37	53	41	61	68	74	182	964	285	99	71	73
4	37	53	41	61	68	74	182	843	257	99	74	64
5	39	64	41	61	68	74	182	1,030	276	86	66	60
6	38	64	53	61	69	74	182	1,150	276	99	65	61
7	38	59	41	64	298	74	182	1,090	210	115	65	60
8	38	53	53	68	85	76	270	1,200	200	131	67	63
9	40	51	53	61	84	84	284	1,540	188	131	70	61
10	40	51	41	61	75	93	313	1,150	168	397	70	57
11	39	51	53	73	75	107	616	966	159	111	62	61
12	41	53	61	75	75	180	616	2,070	188	99	62	56
13	40	53	60	61	75	311	481	1,150	188	99	58	52
14	41	53	60	61	179	180	481	1,990	168	85	66	51
15	41	54	68	68	100	180	968	1,620	168	86	74	52
16	45	54	80	64	83	313	968	1,200	149	86	56	51
17	55	54	76	61	83	313	971	1,280	172	86	85	52
18	44	61	68	59	83	480	549	1,090	172	75	85	52
19	195	61	68	57	75	313	558	685	131	75	57	51
20	137	61	68	55	75	181	550	634	114	75	57	74
21	56	61	68	54	67	85	558	479	99	75	58	51
22	56	60	68	57	67	85	686	514	114	67	58	58
23	54	60	68	57	67	84	686	513	99	76	58	210
24	54	61	68	57	67	93	616	480	99	78	58	72
25	53	61	64	60	67	93	818	445	99	74	52	68
26	53	61	68	63	75	102	816	410	99	74	52	60
27	50	61	68	66	75	181	1,120	420	94	171	52	61
28	50	61	53	68	74	101	684	344	100	71	55	57
29	48	53	60	68	-	101	480	344	100	200	55	107
30	102	53	68	76	-	101	480	556	132	86	58	64
31	210	-	68	68	-	102	-	355	-	75	64	-
Month				Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet				
October.....				1,845	210	37	59.5	3,660				
November.....				1,753	102	51	58.4	3,480				
December.....				1,821	80	41	58.7	3,610				
Calendar year 1936.....				33,568	620	33	91.7	66,580				
January.....				1,949	76	54	82.9	3,870				
February.....				2,413	298	67	86.2	4,790				
March.....				4,457	480	74	144	8,840				
April.....				15,711	1,120	111	524	31,160				
May.....				27,891	2,070	344	900	55,320				
June.....				5,161	344	94	172	10,240				
July.....				3,279	397	67	106	6,500				
August.....				1,990	85	52	64.2	3,950				
September.....				2,172	210	51	72.4	4,310				
Water year 1936-37				70,442	2,070	37	193	139,700				

Williams River at Planet, Ariz.

Location.- Water-stage recorder, lat. $34^{\circ}15'30''$, long. $113^{\circ}59'15''$, in NE $\frac{1}{4}$ sec. 36, T. 11 N., R. 17 W., 1 mile west of Planet and 12 miles above mouth. Zero of gage is 556.56 feet above mean sea level (from levels by Metropolitan Water District of Southern California).

Drainage area.- 5,140 square miles.

Records available.- September 1910 to December 1915 (fragmentary), October 1928 to September 1937.

Extremes.- Maximum discharge during year, 92,500 second-feet Feb. 7 (gage height, 13.1 feet); from rating curve extended above 60,000 second-feet on basis of velocity-area study; minimum, 9 second-feet Feb. 2.

1928-37: Maximum discharge, that of Feb. 7, 1937; minimum, 7 second-feet Sept. 30 and Oct. 1, 1934.

Flood of about Jan. 19, 1916, was probably greater than 100,000 second-feet.

Remarks.- Records good. Minor diversions above station for irrigation.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	13	14	15	32	10	230	196	22	18	19	22	19
2	14	15	15	27	10	166	167	24	17	19	22	67
3	14	15	15	25	12	142	123	30	24	19	22	29
4	14	15	16	19	53	158	105	29	25	19	22	25
5	14	15	16	15	181	134	100	19	29	19	21	25
6	14	15	15	16	455	126	76	17	29	19	19	24
7	13	16	16	16	44,700	118	70	17	25	19	19	24
8	13	16	16	83	20,900	110	66	22	25	19	18	24
9	14	15	16	111	3,600	94	60	19	30	22	17	22
10	14	15	16	84	1,620	82	52	17	25	18	17	22
11	14	16	16	64	1,120	70	42	21	22	27	17	22
12	14	17	16	52	818	76	38	21	24	24	17	22
13	14	17	16	58	566	76	25	22	19	22	17	21
14	14	17	16	71	3,170	80	30	19	19	22	18	21
15	15	17	16	71	16,300	63	30	25	17	22	18	21
16	15	18	17	68	3,970	76	29	22	27	22	18	21
17	15	18	17	55	2,070	3,340	24	24	21	22	18	19
18	15	18	18	50	1,410	2,290	22	24	17	21	18	19
19	15	17	18	50	970	1,900	22	24	17	21	18	18
20	15	17	18	44	854	1,180	22	27	15	21	18	18
21	18	16	18	36	614	629	27	24	14	21	18	222
22	23	16	18	32	438	371	27	18	17	21	18	49
23	18	17	18	30	314	264	29	18	18	22	18	124
24	15	16	15	28	290	264	30	17	18	22	45	49
25	14	16	13	26	290	264	29	24	18	21	18	29
26	13	16	13	25	260	215	27	24	18	21	16	21
27	13	16	13	23	230	238	25	24	18	21	16	17
28	14	16	14	20	210	225	24	24	19	21	16	17
29	14	15	245	17	-	342	22	25	21	22	16	17
30	15	15	207	13	-	264	21	21	19	21	16	17
31	14	-	55	10	-	206	-	18	-	21	18	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						454	23	13	14.6	900		
November.....						482	18	14	16.1	956		
December.....						953	245	13	30.7	1,890		
Calendar year 1936.....						11,219	1,120	10	30.7	22,250		
January.....						1,271	111	10	41.0	2,520		
February.....						105,435	44,700	10	3,766	209,100		
March.....						13,801	3,340	63	445	27,370		
April.....						1,560	196	21	52.0	3,090		
May.....						682	30	17	22.0	1,350		
June.....						625	30	14	20.8	1,240		
July.....						650	27	18	21.0	1,290		
August.....						591	45	16	19.1	1,170		
September.....						1,045	222	17	34.8	2,070		
Water year 1936-37.....						127,549	44,700	10	349	252,900		

Gila River near Gila, N. Mex.

Location.- Water-stage recorder, lat. 33°03', long. 108°32', in sec. 30, T. 14 S., R. 16 W., at Hooker dam site, 1 mile above mouth of Mogollon Creek and 7 miles northeast of Gila. Zero of gage is 4,655.8 feet above mean sea level.

Drainage area.- 1,780 square miles.

Records available.- October 1930 to September 1937 in reports of Geological Survey; January 1929 to December 1931 in reports of State engineer. April to December 1914 (in reports of Geological Survey), April to December 1914 and November 1927 to December 1928 (in reports of State engineer), at site 3 miles upstream and about a quarter of a mile below mouth of Turkey Creek.

Extremes.- Maximum discharge during year, about 6,110 second-feet Feb. 16 (gage height, 10.12 feet), from rating curve extended above 1,160 second-feet; minimum daily discharge, 32 second-feet June 19.

1930-37: Maximum discharge and stage, those of Feb. 16, 1937; minimum daily discharge, 21 second-feet June 22, 27, 1934.

Remarks.- Records fair except those for days of faulty intake action, Feb. 11, 12, and those for periods of missing gage heights, Feb. 16-21, July 25, which were computed on basis of gage heights and records for station near Red Rock, and are poor. One small diversion for irrigation above station.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	92	64	90	72	71	383	372	186	111	107	40	45
2	79	66	86	72	72	379	386	171	97	160	40	50
3	72	64	84	64	74	402	429	161	90	169	40	64
4	66	64	83	60	72	429	470	163	85	159	41	88
5	63	64	86	57	72	379	450	190	81	103	38	68
6	58	63	84	58	74	332	417	225	78	92	37	78
7	56	62	79	66	409	346	406	231	71	78	39	150
8	56	62	71	71	2,300	509	413	206	66	76	41	102
9	56	60	71	69	815	760	410	201	64	71	38	159
10	54	58	69	66	450	935	410	214	60	74	37	120
11	53	60	68	62	300	1,000	413	214	60	76	40	346
12	50	68	64	64	240	1,030	433	209	67	66	40	376
13	50	58	62	92	210	935	454	196	53	60	45	183
14	50	60	64	101	188	875	466	193	53	54	42	188
15	50	62	68	88	295	905	474	198	51	50	56	120
16	49	60	71	81	3,400	875	504	212	49	48	49	92
17	49	60	74	81	2,700	3,130	540	214	46	46	50	86
18	49	58	72	81	1,600	2,480	551	232	34	44	76	79
19	48	60	69	79	1,000	1,600	496	203	32	46	68	71
20	48	63	69	81	760	1,100	474	186	41	90	76	64
21	49	66	69	81	620	875	470	173	41	173	58	73
22	50	76	69	78	513	760	433	151	41	71	57	104
23	50	81	69	69	474	732	394	140	46	54	54	118
24	57	88	69	68	528	675	353	131	48	49	57	94
25	69	92	72	69	610	605	336	116	50	45	78	81
26	63	92	79	68	610	558	322	105	57	42	64	74
27	58	86	78	66	509	513	273	97	96	42	57	66
28	57	90	72	66	417	462	212	97	113	44	51	63
29	54	92	76	69	-	437	209	178	109	45	50	58
30	60	90	86	71	-	417	206	231	128	45	48	58
31	68	-	72	72	-	383	-	156	-	40	46	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	1,783	92	48	57.5	3,540
November.....	2,079	92	58	69.3	4,120
December.....	2,295	90	62	74.0	4,550
Calendar year 1936.....	34,393	291	31	94.0	68,200
January.....	2,242	101	57	72.3	4,450
February.....	19,281	3,400	71	689	38,240
March.....	25,201	3,130	332	813	49,990
April.....	12,156	540	206	405	24,110
May.....	5,560	231	97	179	11,030
June.....	2,008	128	32	66.9	3,980
July.....	2,309	173	40	74.5	4,580
August.....	1,543	78	37	49.8	3,060
September.....	3,818	376	45	111	6,580
Water year 1936-37.....	79,775	3,400	32	219	158,200

Gila River near Red Rock, N. Mex.

Location.- Water-stage recorder, lat. $32^{\circ}45'$, long. $108^{\circ}40'$, in sec. 23, T. 18 S., R. 18 W., 4 miles northeast of Red Rock and 11 miles below mouth of Mangas Creek.

Drainage area.- 2,840 square miles.

Records available.- May 1908 to December 1914 and October 1930 to September 1937 in reports of Geological Survey; May 1908 to December 1931 in reports of State engineer.

Extremes.- Maximum discharge during year, about 18,200 second-feet Feb. 16 (gage height, 13.87 feet), from rating curve extended above 5,000 second-feet; minimum daily discharge, 25 second-feet Aug. 6.

1930-37: Maximum discharge and stage, those of Feb. 16, 1937; minimum daily discharge, 5.0 second-feet June 18, 1934.

Remarks.- Records fair except those for periods of faulty intake action, Oct. 1-8, Feb. 18-22, Apr. 23-30, May 1, 13, June 10-24, July 15-21, Aug. 11, 20-23, 26, 27, Sept. 13-18 and for period of missing gage heights, Sept. 20-24, which were computed on basis of weather records and records for station near Gila and are poor. Diversions for irrigation above station.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	130	86	108	105	112	455	490	250	195	122	30	48
2	120	85	105	105	112	392	505	266	168	114	30	53
3	110	85	99	104	112	388	559	269	162	124	30	44
4	100	85	99	101	112	455	642	223	142	204	30	58
5	95	85	99	98	112	425	642	243	127	144	28	55
6	90	85	101	99	112	366	594	280	115	104	25	57
7	85	85	101	104	120	318	564	314	114	83	30	209
8	85	85	98	106	2,420	440	537	290	97	74	30	106
9	83	84	98	106	769	654	510	266	88	75	30	136
10	81	84	97	105	452	926	520	272	80	84	125	249
11	80	84	97	105	353	1,150	526	262	70	93	198	455
12	80	84	97	104	303	1,220	554	255	70	85	57	465
13	80	83	97	111	291	1,190	582	225	65	75	47	270
14	79	83	95	120	288	1,040	582	192	60	68	45	250
15	78	83	97	122	291	990	594	185	60	60	40	170
16	78	83	98	118	6,770	1,050	618	188	55	60	48	130
17	77	84	99	120	8,210	5,040	660	204	50	60	47	130
18	77	83	99	120	2,410	4,870	654	180	45	50	46	120
19	78	81	97	120	1,480	2,490	606	188	40	50	81	96
20	78	84	98	120	1,100	1,480	548	182	35	170	100	100
21	76	86	99	120	880	1,170	532	170	35	90	70	250
22	77	91	99	118	760	1,020	510	159	35	98	60	450
23	77	95	98	114	642	980	480	187	40	76	84	200
24	83	111	98	111	678	896	450	159	45	61	253	160
25	89	108	99	111	809	760	420	142	47	54	110	138
26	86	105	102	111	854	666	390	140	49	51	70	190
27	85	102	102	110	718	606	360	135	129	47	70	109
28	84	102	102	110	554	582	340	127	117	35	74	97
29	83	108	104	110	-	570	300	170	117	36	60	93
30	83	110	106	110	-	554	260	258	115	58	59	93
31	85	-	106	111	-	515	-	240	-	31	53	-
Month	Second-foot-days			Maximum		Minimum		Mean		Run-off in acre-feet		
October.....	2,672			130		76		86.2		5,300		
November.....	2,699			111		81		90.0		5,350		
December.....	3,094			108		95		99.8		6,140		
Calendar year 1936.....	47,550			671		25		130		94,310		
January.....	3,429			122		98		111		6,800		
February.....	31,829			8,210		112		1,137		63,130		
March.....	33,618			5,040		318		1,084		66,680		
April.....	15,529			660		260		518		30,800		
May.....	6,596			314		127		213		13,060		
June.....	2,556			195		36		85.2		5,070		
July.....	2,539			204		31		81.9		5,040		
August.....	2,060			255		25		66.5		4,090		
September.....	4,981			465		44		166		9,880		
Water year 1936-37.....	111,602			8,210		25		306		221,400		

Gila River at Fuller ranch, near Duncan, Ariz.

Location.— Water-stage recorder, lat. 32°38'45", long. 108°50'45", in SE $\frac{1}{4}$ sec. 18, T. 19 S., R. 19 W., N. Mex., at head of canyon immediately downstream from Fuller ranch, 16 miles east of Duncan. Zero of gage is about 3,875 feet above mean sea level.

Drainage area.— 3,140 square miles.

Records available.— June 1931 to September 1937. May 1914 to September 1915 at site 6 miles downstream, above intake of Sunset Canal. January 1923 to September 1926, at site 8 miles downstream, and October 1926 to September 1931, at site at Virden Bridge, 8 $\frac{1}{2}$ miles downstream, both below intake of Sunset Canal.

Extremes.— Maximum discharge during year, 9,070 second-feet Feb. 17 (gage height, 14.65 feet); minimum 4 second-feet Aug. 10 (gage height, 3.91 feet).
1931-37: Maximum discharge, 9,100 second-feet Aug. 3, 1931 minimum, 1 second-foot July 14, 1934.

Remarks.— Records good. Diversions for irrigation above station. Station is above all diversions for Duncan Valley.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	133	94	138	108	121	554	528	255	214	150	27	52
2	124	92	133	106	124	533	508	255	187	142	23	55
3	114	92	121	108	124	539	528	252	171	142	16	55
4	104	96	114	108	124	570	544	236	155	194	11	62
5	100	96	114	104	124	554	554	228	140	190	11	60
6	92	98	110	102	126	504	523	241	131	140	8	61
7	83	96	108	110	138	456	499	255	122	107	8	198
8	83	96	104	114	2,050	470	504	258	112	94	6	176
9	81	94	102	117	1,350	561	518	244	95	92	6	159
10	78	96	100	114	597	744	523	246	86	94	6	175
11	74	96	100	114	412	862	549	239	74	102	192	314
12	72	96	100	112	339	935	576	233	66	102	68	465
13	72	96	98	114	318	988	592	221	59	91	63	244
14	71	96	96	128	290	869	610	198	56	77	30	277
15	68	96	96	140	294	840	627	185	55	67	23	183
16	64	94	98	138	2,090	876	644	179	48	57	19	146
17	63	92	100	138	6,850	2,160	681	194	42	51	36	124
18	61	90	100	140	2,490	4,160	681	185	36	45	40	106
19	61	90	98	140	1,510	2,730	644	179	33	43	275	91
20	63	88	96	138	1,190	1,830	604	179	29	38	137	80
21	60	96	96	140	935	1,360	560	175	27	127	78	70
22	60	106	96	138	771	1,120	523	165	27	108	71	527
23	64	117	98	136	687	988	489	161	30	95	72	222
24	88	135	98	121	675	955	470	165	33	74	362	150
25	100	151	100	117	738	855	447	159	34	57	223	120
26	96	148	102	119	792	764	407	151	40	44	110	162
27	92	143	104	117	718	725	354	148	73	35	94	103
28	87	138	102	117	621	681	313	153	150	30	80	88
29	85	140	104	119	-	668	286	155	153	22	70	77
30	85	146	108	119	-	638	267	236	144	122	67	71
31	88	-	110	121	-	581	-	246	-	44	61	-
Month					Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet			
October.....					2,566	133	60	82.8	5,090			
November.....					3,204	151	88	107	6,360			
December.....					3,244	138	96	105	6,430			
Calendar year 1936.....					45,422	559	7	124	90,100			
January.....					3,756	140	102	121	7,450			
February.....					26,598	6,850	121	950	52,760			
March.....					31,070	4,160	456	1,002	61,630			
April.....					15,553	681	267	518	30,850			
May.....					6,376	258	148	206	12,650			
June.....					2,621	214	27	87.4	5,200			
July.....					2,776	194	22	89.5	5,510			
August.....					2,293	362	6	74.0	4,550			
September.....					4,672	527	52	156	9,270			
Water year 1936-37.....					104,729	6,850	6	287	207,800			

GILA RIVER BASIN

Gila River near Clifton, Ariz.

Location.— Water-stage recorder, lat. $32^{\circ}57'30''$, long. $109^{\circ}18'15''$, in SE $\frac{1}{4}$ sec. 25, T. 5 S., R. 29 E., at highway bridge 7 miles south of Clifton, and 5 miles above San Francisco River. Zero of gage is 3,335.3 feet above mean sea level.

Drainage area.— 4,040 square miles.

Records available.— March 1928 to October 1933, May 1935 to September 1937. November 1910 to July 1918 at site 4 miles upstream, published as Gila River at Guthrie, Ariz.

Extremes.— Maximum discharge during year, 7,450 second-feet Feb. 18 (gage height, 12.72 feet); minimum, 18 second-feet Aug. 12.

1928-37: Maximum discharge, about 11,500 second-feet Aug. 26, 1934 (gage height, 16.0 feet, from floodmarks); minimum probably occurred in 1934; minimum recorded, 10 second-feet July 28, 1925.

Remarks.— Records good. Discharge for Mar. 26-29 computed on basis of records for stations on nearby streams. Diversions for irrigation above station. Station is below all diversions from Gila River above San Francisco River.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	102	75	139	105	111	589	468	205	184	65	29	39
2	96	72	135	125	111	534	425	190	163	60	24	54
3	73	76	130	122	110	510	406	179	145	72	23	30
4	64	84	122	127	104	516	414	170	121	86	22	26
5	53	68	119	120	102	545	460	159	103	116	22	23
6	44	84	119	119	102	513	460	149	84	135	195	105
7	42	78	114	116	108	471	430	146	75	117	44	44
8	47	73	117	117	408	448	414	152	62	95	19	111
9	51	73	112	117	1,570	502	414	159	65	74	26	183
10	44	78	112	122	700	654	398	157	50	57	21	609
11	39	81	111	122	474	852	405	173	45	54	19	593
12	33	78	112	122	371	970	415	179	37	54	45	339
13	31	77	110	117	321	1,030	438	168	32	52	42	306
14	29	77	108	112	278	955	472	146	30	41	24	441
15	32	77	106	125	252	935	494	131	30	32	20	256
16	31	77	104	134	635	945	509	121	29	30	22	152
17	26	77	108	134	3,270	1,120	526	112	27	28	24	123
18	24	77	95	132	4,890	3,000	514	106	26	27	33	97
19	25	77	93	130	2,060	2,520	514	98	24	43	28	71
20	25	93	92	127	1,590	1,740	494	88	24	72	116	59
21	25	96	91	127	1,070	1,340	455	82	24	45	102	56
22	28	102	91	127	847	1,090	433	89	24	33	53	868
23	30	110	86	128	694	925	394	99	42	32	128	417
24	29	117	85	124	654	856	347	96	28	30	393	175
25	114	130	85	119	678	805	322	98	26	29	251	137
26	96	143	88	117	718	740	300	103	26	28	168	98
27	86	143	84	117	744	680	275	95	30	26	101	122
28	89	143	85	116	670	640	254	93	28	25	72	89
29	84	136	78	114	-	590	227	108	34	24	54	73
30	80	137	73	112	-	550	216	125	45	24	83	57
31	73	-	78	111	-	516	-	157	-	24	54	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						1,645	114	24	53.1	3,260		
November.....						2,828	143	72	94.3	5,610		
December.....						3,161	139	73	103	6,310		
Calendar year 1936.....						38,106	810	18	104	75,590		
January.....						3,757	134	105	121	7,450		
February.....						23,442	4,890	102	837	46,500		
March.....						28,111	3,000	448	907	55,760		
April.....						12,293	526	216	410	24,380		
May.....						4,133	205	82	133	8,200		
June.....						1,653	124	24	55.1	3,260		
July.....						1,630	135	24	52.6	3,230		
August.....						2,257	393	19	72.8	4,480		
September.....						5,753	868	23	192	11,410		
Water year 1936-37.....						90,683	4,890	19	248	179,900		

Gila River below Bonita Creek, near Solomonsville, Ariz.

Location.- Water-stage recorder, lat. 32°53'15", long. 109°29'45", in SE $\frac{1}{4}$ sec. 21, T. 6 S., R. 28 E., unsurveyed, three eights of a mile below Bonita Creek and 10 miles north-east of Solomonsville.

Drainage area.- 7,900 square miles.

Records available.- February 1932 to October 1933, May 1935 to September 1937. April 1914 to September 1932, at a station 3 miles downstream and below intake of Brown Canal, published as Gila River near Solomonsville, Ariz.

Extremes.- Maximum discharge during year, 23,700 second-feet Feb. 8 (gage height, 19.1 feet); minimum, 53 second-feet Aug. 5 and 6.
1914-37: Maximum discharge, about 100,000 second-feet Jan. 19, 1916; minimum probably occurred in 1934; minimum recorded, 29 second-feet July 4, 1923.

Remarks.- Records good. Discharge for July 14-18 computed on basis of records for stations on nearby streams. Diversions for irrigation above station. Station is above all diversions for Safford Valley.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	240	201	282	214	240	1,020	975	496	257	146	72	103
2	220	182	267	246	240	926	927	458	250	168	71	122
3	194	172	260	246	240	913	927	433	227	190	65	116
4	166	172	260	234	240	926	965	419	210	219	60	110
5	155	172	246	227	240	965	1,040	410	184	221	60	122
6	144	177	246	227	246	887	995	410	174	238	85	178
7	138	177	246	234	3,660	798	965	410	162	219	253	184
8	128	172	240	240	13,200	735	946	401	145	190	80	186
9	124	166	240	240	4,400	848	917	396	124	190	71	264
10	124	172	234	240	1,830	1,170	908	410	114	166	106	726
11	130	172	214	234	1,130	1,610	908	410	108	178	158	835
12	110	177	214	234	861	1,960	946	410	103	176	122	615
13	106	177	214	309	691	2,160	1,020	380	90	156	118	486
14	97	172	208	456	608	2,230	1,080	360	88	150	108	568
15	97	172	208	348	625	2,230	1,090	330	86	110	112	525
16	102	172	208	318	2,970	2,210	1,140	320	83	100	112	280
17	97	172	214	303	10,700	2,930	1,190	305	80	90	104	220
18	92	172	208	289	8,500	5,170	1,190	289	79	90	106	200
19	92	177	201	282	3,790	5,170	1,150	280	76	80	132	188
20	97	188	201	275	2,930	4,010	1,100	257	73	108	154	170
21	97	246	201	275	2,350	2,980	1,060	247	75	112	228	164
22	102	311	201	287	1,770	2,300	975	234	79	74	168	1,830
23	106	325	201	260	1,420	1,960	879	232	95	76	138	860
24	115	340	201	246	1,240	1,820	807	229	94	97	527	446
25	166	311	194	240	1,250	1,650	713	222	88	91	357	294
26	188	282	208	240	1,380	1,460	674	220	88	78	353	247
27	172	275	214	234	1,380	1,310	628	210	94	74	263	219
28	172	267	220	234	1,180	1,200	593	203	114	72	160	192
29	166	303	214	234	-	1,130	552	212	118	71	120	166
30	166	303	208	234	-	1,090	527	217	136	67	128	154
31	182	-	208	240	-	1,020	-	244	-	74	138	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						4,275	240	92	138	8,480		
November.....						6,477	340	166	216	12,850		
December.....						6,881	282	194	222	13,650		
Calendar year 1936.....						111,288	4,930	45	304	220,800		
January.....						8,100	456	214	261	16,070		
February.....						69,311	13,200	240	2,475	137,500		
March.....						56,788	5,170	735	1,832	112,600		
April.....						27,787	1,190	527	926	55,100		
May.....						10,064	496	203	324	19,990		
June.....						3,694	257	73	123	7,330		
July.....						4,051	238	67	131	8,040		
August.....						4,727	527	60	152	9,380		
September.....						10,772	1,830	103	359	21,370		
Water year 1936-37.....						212,917	13,200	60	583	422,400		

Gila River at Calva, Ariz.

Location.- Water-stage recorder, lat. 33°11'15", long. 110°12'45", in sec. 5, T. 3 S., R. 21 E., unsurveyed, on San Carlos Indian Reservation, at railroad bridge at head of San Carlos Reservoir, 1½ miles northwest of Calva. Zero of gage is 2,514.7 feet above mean sea level (from Arizona Highway Department benchmark).

Drainage area.- 11,490 square miles.

Records available.- March 1929 to September 1937.

Extremes.- Maximum discharge during year 12,800 second-feet Feb. 9 (gage height, 9.37 feet); no flow during parts of July and August.
1929-37: Maximum discharge, 21,500 second-feet Feb. 12, 1932 (gage height, 9.7 feet); no flow on several days of each year. A flood peak probably in excess of 100,000 second-feet occurred Jan. 20, 1918.

Remarks.- Records good, except those for Aug. 17, 19, 20, which were computed from partial gage-height record and are fair. Those for June 12-15 interpolated, and those for July 17-26 computed on basis of partial gage-height record, two discharge measurements, and weather records. Major diversions for irrigation above station.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	141	60	285	49	279	1,240	743	304	36	13	0	10
2	105	86	262	145	291	1,080	622	304	34	23	0	9
3	72	98	256	228	296	978	541	263	34	7	0	10
4	60	98	228	245	285	958	502	245	38	2	0	6
5	58	117	214	259	291	951	484	234	33	1	0	6
6	47	120	209	245	296	911	475	228	34	1	0	6
7	38	114	204	251	636	859	438	234	32	1	178	6
8	32	120	214	274	4,340	830	429	222	29	1	12	4
9	29	120	194	268	8,670	773	396	251	28	5	6	5
10	28	111	180	285	3,200	773	388	267	28	68	4	6
11	24	108	176	279	1,800	917	371	250	25	66	1	424
12	23	117	172	274	1,480	1,190	371	187	23	127	0	421
13	22	120	160	279	1,220	1,390	380	155	22	72	0	362
14	20	114	153	332	991	1,480	388	117	21	34	0	342
15	19	98	141	414	850	1,560	484	108	20	25	1	390
16	19	101	102	368	839	1,700	521	89	19	16	104	328
17	19	101	88	368	5,240	2,020	571	84	18	10	30	205
18	17	104	68	362	8,280	3,100	644	74	16	7	31	166
19	18	120	62	348	6,140	6,230	887	64	15	5	15	114
20	18	142	64	348	3,860	4,680	676	58	12	3	4	89
21	18	135	60	342	2,740	3,410	655	54	12	2	3	76
22	17	178	45	328	2,050	2,690	601	53	10	1	12	222
23	16	240	44	315	1,660	2,220	551	45	8	1	9	945
24	15	250	39	308	1,460	1,920	521	44	4	0	53	414
25	16	256	39	302	1,440	1,660	466	42	4	0	44	302
26	17	250	39	285	1,430	1,430	447	40	6	0	33	225
27	28	267	39	296	1,430	1,430	412	38	4	0	150	183
28	56	267	38	285	1,350	1,210	371	45	6	0	29	124
29	54	273	40	291	-	1,050	339	47	6	0	28	95
30	60	296	44	285	-	987	304	42	5	0	13	82
31	64	-	42	273	-	874	-	39	-	0	13	-
Month				Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet				
October.....				1,170	141	15	37.7	2,320				
November.....				4,581	296	60	153	9,090				
December.....				3,901	285	38	126	7,740				
Calendar year 1936.....				75,100	4,030	0	205	149,000				
January.....				8,911	414	49	287	17,670				
February.....				62,844	8,670	279	2,244	124,600				
March.....				52,501	6,230	773	1,694	104,100				
April.....				14,778	743	304	493	29,310				
May.....				4,225	304	38	136	8,380				
June.....				582	38	4	19.4	1,150				
July.....				491	127	0	15.8	974				
August.....				773	178	0	24.9	1,530				
September.....				5,578	946	4	186	11,060				
Water year 1936-37.....				160,335	8,670	0	439	317,900				

San Carlos Reservoir at Coolidge Dam, Ariz.

Location.- Water-stage recorder, lat. 33°10'30" (revised), long. 110°31'45", in NW $\frac{1}{4}$ sec. 17, T. 3 S., R. 18 E., unsurveyed, at Coolidge Dam, in Gila River. Datum of gage is mean sea level.

Drainage area.- 12,880 square miles.

Records available.- November 1928 to September 1937.

Extremes.- Maximum contents during year, 268,700 acre-feet Apr. 5 (elevation of water surface, 2,451.57 feet); minimum, 16,300 acre-feet Nov. 21 (elevation, 2,393.94 feet). 1930-37: Maximum contents, 444,200 acre-feet Apr. 5, 1932 (elevation 2,471.56 feet); minimum, 1,800 acre-feet Aug. 11, 1934 (elevation, 2,383.96 feet).

Remarks.- Daily records from water-stage recorder after Jan. 15 are as of midnight at close of date shown. Earlier records represent time of day gage was read. Add 2,000.00 feet to gage heights in table to obtain elevation above mean sea-level. Lowest outlet in dam at elevation 2,383.00 feet. Storage begun Nov. 15, 1928 and appreciable amount attained by end of 1929. Reservoir capacity for available storage, 1,165,000 acre-feet at spillway elevation 2,523.00 feet, at top of automatic gates. Records of daily gage height Oct. 1 to Jan. 15 furnished by Indian Service

Gage height, in feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	402.50	395.04	395.08	397.78	406.36	440.48	451.41	450.45	445.55	439.32	431.03	422.50
2	402.32	394.94	395.25	397.90	406.56	440.73	451.48	450.35	445.39	439.15	430.64	422.24
3	402.12	394.79	395.40	398.20	406.78	440.93	451.52	450.25	445.20	438.89	430.24	421.94
4	401.87	394.63	395.52	398.50	407.07	441.09	451.55	450.14	445.03	438.61	429.83	421.65
5	401.62	394.55	395.65	398.75	407.26	441.25	451.56	450.02	444.84	438.42	429.37	421.37
6	401.37	394.54	395.76	399.00	407.45	441.42	451.57	449.90	444.70	438.19	428.90	421.09
7	401.10	394.52	395.88	399.32	413.65	441.56	451.54	449.77	444.50	437.95	428.78	420.87
8	400.80	394.49	395.99	399.62	418.77	441.72	451.52	449.66	444.32	437.71	428.37	420.76
9	400.50	394.46	396.04	399.94	423.57	441.80	451.50	449.52	444.13	437.44	427.89	420.63
10	400.30	394.43	395.99	400.20	425.11	441.92	451.47	449.40	443.96	437.22	427.44	420.39
11	400.02	394.39	395.96	400.47	425.95	442.10	451.45	449.29	443.72	437.06	427.09	420.19
12	399.75	394.31	396.04	400.74	426.51	442.38	451.42	449.18	443.54	436.81	426.73	420.16
13	399.47	394.25	396.02	401.04	426.95	442.72	451.39	449.06	443.36	436.77	426.33	420.17
14	399.20	394.22	396.00	401.64	427.32	443.10	451.34	448.90	443.14	436.60	425.89	420.21
15	398.93	394.18	396.07	402.22	427.63	443.48	451.31	448.77	442.94	436.41	425.48	420.21
16	398.65	394.15	396.14	402.80	427.97	444.00	451.28	448.60	442.73	436.21	425.05	420.19
17	398.40	394.10	396.23	403.09	429.68	444.57	451.24	448.45	442.51	435.99	424.72	420.00
18	398.10	394.05	396.33	403.38	432.88	445.34	451.25	448.28	442.31	435.74	424.44	419.80
19	397.80	394.00	396.44	403.64	435.24	446.63	451.25	448.09	442.10	435.49	424.21	419.61
20	397.64	393.95	396.52	403.90	435.36	447.68	451.25	447.91	441.89	435.25	424.11	419.39
21	397.50	393.94	396.60	404.17	437.22	448.46	451.22	447.70	441.68	435.00	424.04	419.16
22	397.02	393.97	396.67	404.59	437.84	449.01	451.15	447.50	441.43	434.72	424.08	418.98
23	396.77	394.00	396.74	404.89	438.33	449.43	451.31	447.28	441.21	434.40	423.98	419.23
24	396.47	394.14	396.82	404.80	438.75	449.80	451.07	447.07	440.99	434.06	423.99	419.30
25	396.26	394.22	396.90	405.04	439.08	450.10	451.01	446.56	440.78	433.75	423.90	419.23
26	396.04	394.34	396.97	405.23	439.43	450.37	450.94	446.65	440.54	433.39	423.81	419.11
27	395.84	394.47	397.05	405.63	439.60	450.63	450.84	446.44	440.25	433.04	423.78	418.94
28	395.77	394.70	397.13	405.68	440.18	450.84	450.73	446.28	440.01	432.69	423.60	418.72
29	395.47	394.83	397.17	405.86	-	451.01	450.64	446.09	439.81	432.34	423.54	418.48
30	395.30	394.96	397.31	406.06	-	451.16	450.55	445.91	439.57	431.94	423.08	418.24
31	395.14	-	397.55	406.24	-	451.30	-	445.72	-	431.48	422.60	-

Contents, in acre-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	34,500	18,300	18,400	23,800	44,900	191,800	267,500	260,400	225,300	184,700	137,900	98,000
2	34,000	18,200	18,800	24,000	46,400	193,300	268,100	259,600	224,200	183,600	135,900	96,900
3	33,500	17,900	19,000	24,600	46,100	194,600	268,400	258,900	222,900	182,100	134,000	95,600
4	32,900	17,600	19,300	25,300	46,700	195,600	268,600	258,100	221,700	180,400	132,000	94,500
5	32,300	17,400	19,500	25,800	47,500	196,600	268,700	257,200	220,400	179,200	129,800	93,400
6	31,700	17,400	19,700	26,300	48,200	197,700	268,700	256,800	219,400	177,900	127,800	92,300
7	31,100	17,400	20,000	27,000	87,500	198,500	268,500	255,400	218,500	176,400	127,000	91,500
8	30,400	17,300	20,200	27,700	84,300	199,600	268,400	254,600	216,800	175,000	125,000	91,000
9	29,700	17,300	20,300	28,400	102,600	200,100	268,200	253,600	215,500	173,400	122,700	90,700
10	29,200	17,200	20,200	29,000	109,600	200,800	268,000	252,700	214,300	172,100	120,600	89,800
11	28,600	17,100	20,100	29,600	113,500	202,000	267,800	251,900	212,700	171,200	118,900	89,000
12	28,000	17,000	20,300	30,200	116,200	203,800	267,600	251,100	211,500	170,300	117,200	88,900
13	27,400	16,900	20,300	30,900	119,300	206,000	267,400	250,200	210,300	169,500	115,400	89,000
14	26,800	16,800	20,200	32,400	120,000	206,500	267,000	249,000	208,800	168,500	113,300	89,100
15	26,200	16,700	20,400	33,800	121,500	211,100	266,800	248,100	207,400	167,400	111,400	89,100
16	25,600	16,700	20,500	35,200	123,100	214,600	266,600	246,900	206,100	166,200	109,300	89,000
17	25,100	16,600	20,700	36,000	131,300	218,500	266,300	245,800	204,600	165,000	107,800	88,400
18	24,400	16,500	20,900	36,700	147,400	223,800	266,300	244,600	203,300	163,500	106,500	87,700
19	23,800	16,400	21,100	37,400	160,600	232,900	266,300	243,200	202,000	162,100	105,400	87,100
20	23,300	16,300	21,200	38,100	167,100	240,300	266,300	241,900	200,600	160,700	105,000	86,300
21	22,800	16,300	21,400	38,800	172,100	245,900	266,100	240,400	199,300	159,300	104,800	85,600
22	22,200	16,400	21,500	39,300	175,800	249,800	265,600	239,000	197,700	157,700	104,600	85,000
23	21,700	16,400	21,700	39,900	178,700	252,900	265,300	237,400	196,300	155,800	104,400	85,800
24	21,100	16,700	21,800	40,100	181,100	255,600	265,000	236,000	195,000	153,900	104,400	86,000
25	20,700	16,800	22,000	41,200	183,200	257,800	264,500	234,600	193,700	152,200	104,000	85,800
26	20,300	17,000	22,100	41,700	185,300	259,800	264,000	233,000	192,200	150,200	103,600	85,400
27	19,900	17,300	22,500	42,300	187,600	261,700	263,200	231,500	190,600	148,300	103,600	84,800
28	19,300	17,700	22,600	43,000	189,900	263,300	262,500	230,400	188,900	146,400	102,700	84,100
29	19,200	18,000	22,500	43,500	-	264,500	261,800	229,100	187,700	144,600	101,600	83,500
30	18,800	18,200	22,800	44,000	-	265,700	261,100	227,800	186,200	142,500	100,400	82,500
31	18,500	-	23,500	44,500	-	266,700	-	226,500	-	140,100	99,300	-

Gila River at Coolidge Dam, Ariz.

Location.— Water-stage recorder and Parshall flume, lat. 33°10'15", long. 110°31'45" in SW $\frac{1}{4}$ sec. 17, T. 3 S., R. 18 E., unsurveyed, 2,200 feet below Coolidge Dam. Prior to March 9, 1937, water-stage recorder 1,000 feet upstream.

Drainage area.— 12,880 square miles.

Records available.— April 1914 to September 1937. July 1899 to November 1905, at station 8 miles upstream, below San Carlos River. August 1910 to February 1911, at station 9 miles upstream, above San Carlos River.

Extremes.— Maximum discharge during year, 1,240 second-feet July 31 (head on flume, 4.35 feet); no flow several days in January and February.

1914-28: Maximum discharge, 130,000 second-feet Jan. 20, 1916; no flow for several periods.

1929-37: Maximum discharge, that of July 31, 1937; no flow on several days in most years.

Remarks.— Records excellent. Crest width of Parshall flume, 30 feet. Major diversions above San Carlos Reservoir. Discharge regulated at Coolidge Dam since Nov. 15, 1928.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	357	206	121	7	0.1	180	258	638	616	634	1,140	566
2	357	206	121	6	.1	175	308	638	574	667	1,070	566
3	357	203	119	5	.1	212	313	634	563	748	1,060	566
4	357	174	119	6	.1	306	324	634	580	752	1,040	566
5	357	157	121	4	.1	288	362	638	588	764	1,080	563
6	357	152	119	.8	.1	292	435	634	560	748	1,140	580
7	353	157	121	.1	.2	293	432	620	577	736	1,150	428
8	337	157	159	.1	.1	299	423	612	605	744	1,150	209
9	337	157	224	.1	0	300	432	609	634	744	1,160	263
10	337	157	203	.1	0	298	426	609	652	752	1,090	474
11	337	203	212	0	0	298	423	605	638	606	894	486
12	349	164	180	.1	0	300	426	580	638	470	918	497
13	345	162	117	.1	.1	303	447	591	671	480	978	511
14	333	167	114	0	.3	305	477	609	696	485	999	276
15	310	164	112	0	1	311	536	577	705	577	1,010	301
16	310	164	78	0	.3	219	549	616	705	560	1,010	411
17	314	167	9	0	15	131	536	623	725	598	792	516
18	310	175	8	0	55	137	539	645	714	667	682	490
19	314	172	8	0	115	120	566	634	701	667	606	477
20	314	169	8	.2	130	114	602	698	690	675	212	480
21	314	167	8	.1	110	153	649	748	721	701	65	467
22	303	167	7	.1	124	221	652	728	764	788	83	418
23	281	154	7	.1	162	233	652	725	780	828	118	467
24	281	132	7	.1	197	228	634	717	760	902	170	455
25	247	132	7	.1	178	221	620	725	772	923	253	436
26	200	134	7	.1	172	221	634	721	780	931	258	397
27	200	127	7	.1	175	223	623	713	828	914	151	467
28	200	132	84	.1	178	223	627	686	844	898	409	493
29	203	141	78	.1	-	238	634	660	828	944	574	529
30	200	117	18	.1	-	252	638	667	740	1,110	566	480
31	203	-	7	.1	-	260	-	667	-	1,190	566	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						9,374	357	200	302	18,590		
November.....						4,936	206	117	161	9,590		
December.....						2,510	224	7	51.0	4,980		
Calendar year 1936						118,842.4	738	.5	325	235,700		
January.....						30.7	7	0	.99	61		
February.....						1,613.6	197	0	57.6	3,200		
March.....						7,354	306	114	237	14,590		
April.....						15,177	652	258	506	30,100		
May.....						20,201	748	577	652	40,070		
June.....						20,651	844	560	688	40,960		
July.....						23,201	1,190	470	748	46,020		
August.....						22,393	1,160	65	722	44,420		
September.....						13,635	588	209	454	27,040		
Water year 1936-37.....						140,976.3	1,190	0	386	279,600		

Gila River at Kelvin, Ariz.

Location.- Water-stage recorder, lat. 33°06'15", long. 110°58'45", in NW¼ sec. 12, T. 4 S., R. 13 E., at Kelvin, 15 miles below San Pedro River and 19 miles above Ashurst-Hayden Dam.

Drainage area.- 18,200 square miles (revised).

Records available.- January 1911 to September 1937.

Extremes.- Maximum discharge during year, 10,200 second-feet Aug. 21 (gage height, 6.94 feet); minimum, 48 second-feet Dec. 28 (gage height, 2.54 feet); minimum daily mean discharge, 47 second-feet Dec. 28.

1911-37: Maximum discharge, about 132,000 second-feet Jan. 20, 1916 (gage height, 19.5 feet); discharge less than one second-foot during summer of some years prior to 1929.

Remarks.- Records good. Discharge for period of missing gage heights, July 8-12, computed on basis of recorded range in stage and records for stations on nearby streams. Major diversions for irrigation above station. No regulation in the basin above this station and below Coolidge Dam.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	359	246	193	620	62	240	266	638	625	638	1,130	700
2	375	256	188	344	58	240	266	638	577	588	1,040	889
3	382	241	180	156	56	240	298	638	520	650	976	932
4	375	236	180	105	56	272	292	612	520	712	962	833
5	389	206	184	82	58	361	292	600	520	738	932	738
6	396	180	180	65	62	353	377	588	531	738	990	1,350
7	396	180	175	99	2,930	361	445	588	531	820	1,110	1,280
8	389	171	167	148	4,320	361	445	577	542	750	1,050	870
9	375	167	206	188	625	361	435	554	554	800	1,020	521
10	368	171	278	202	190	369	435	554	600	760	1,000	542
11	368	175	262	254	130	361	445	554	638	850	1,230	947
12	361	211	267	375	110	361	445	531	588	650	882	820
13	375	180	226	436	109	369	435	542	600	566	1,000	712
14	368	171	167	632	103	361	478	566	625	542	990	676
15	361	171	163	272	116	353	496	554	676	566	1,070	395
16	340	171	156	175	109	385	566	531	675	625	1,130	353
17	340	171	152	136	100	586	542	566	675	638	1,790	496
18	340	171	91	102	94	345	531	577	675	700	891	542
19	333	175	62	99	100	296	564	600	638	725	1,410	496
20	347	175	58	96	157	214	588	612	625	806	3,890	475
21	333	175	53	94	187	183	638	675	625	752	4,570	486
22	321	184	53	94	178	198	675	700	662	765	5,370	415
23	302	188	53	80	183	253	675	675	700	860	690	435
24	302	171	51	72	203	266	675	688	725	820	1,080	508
25	315	156	51	69	240	272	638	700	712	918	1,400	486
26	278	152	56	65	229	260	660	688	712	932	496	445
27	246	175	56	65	229	253	638	688	725	839	1,030	415
28	246	206	47	60	240	260	625	700	792	874	700	496
29	246	202	401	60	-	260	638	638	806	904	675	577
30	267	211	448	62	-	253	638	650	738	904	820	650
31	266	-	188	65	-	266	-	625	-	1,190	1,270	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	10,479	396	246	338	20,780
November.....	5,645	256	162	186	11,200
December.....	4,990	448	47	161	9,900
Calendar year 1936.....	154,994	3,350	40	423	307,400
January.....	5,372	632	60	173	10,660
February.....	11,234	4,320	56	401	22,280
March.....	9,516	588	183	307	18,870
April.....	16,118	675	266	504	29,990
May.....	19,047	700	531	614	37,780
June.....	19,131	806	520	638	37,950
July.....	23,671	1,190	542	764	46,950
August.....	40,644	4,570	496	1,311	80,620
September.....	19,278	1,350	353	643	38,240
Water year 1936-37.....	184,124	4,570	47	504	365,200

Gila River at Ashurst-Hayden Dam, near Florence, Ariz.

Location.- Water-stage recorder, lat. 33°05'30", long. 111°14'15", in sec. 8, T. 4 S., R. 11 E., at Ashurst-Hayden Dam, 10 miles northeast of Florence. Crest of dam, on which head is measured, is 1,563.0 feet above mean sea level.

Drainage area.- 18,500 square miles (revised).

Records available.- July 1923 to September 1937 (head on crest of dam only).

Extremes.- Maximum head during year, 1.9 feet Aug. 22; no flow over dam for part of year. 1923-37: Maximum head, 8.0 feet Sept. 28, 1926; no flow over dam for parts of each year.

Remarks.- Record for Jan. 1 estimated on basis of recorded range in stage and records for station at Kelvin. Florence-Casa Grande Canal diverts water at this dam. Many other diversions for irrigation upstream. No regulation in the basin above this station and below Coolidge Dam. A considerable quantity of water is passed through the sluice gates in the dam. Water-stage recorder graph furnished by Indian Service.

Daily mean head, in feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1			-	0.1	-	-	-	0.02		-	0.02	-
2			-	-	-	-	-	.03		-	-	0.04
3			-	-	-	-	-	.04		-	-	.01
4			-	-	-	-	-	.03		-	-	-
5			-	-	-	0.01	-	.01		-	-	-
6			-	-	-	-	-	.03		-	-	.19
7			-	-	0.54	-	-	(*)		0.15	.06	.15
8			-	-	.94	-	-	.03		.03	.01	-
9			-	.05	.13	-	-	.03		.11	-	-
10			(*)	.06	-	-	-	.02		-	-	-
11			-	-	-	-	-	.04		.08	.15	.08
12			-	.01	-	-	-	.04		(*)	-	-
13		0.01	-	-	-	-	-	.02		-	.04	(*)
14			-	.16	-	-	-	-		-	-	.06
15			-	-	-	-	-	(*)		-	.05	-
16			-	.03	-	(*)	-	-		-	.07	-
17			-	-	-	.02	-	.01		-	.28	-
18			-	-	-	-	-	(*)		-	.02	.01
19			-	-	-	-	-	.01		-	.09	-
20			-	-	-	-	-	-		-	.64	-
21			-	-	.01	-	-	.03		-	1.07	-
22			-	(*)	.01	-	(*)	-		-	.60	-
23			-	-	-	-	-	-		(*)	.02	-
24			-	-	-	-	(*)	-		-	.05	-
25	(*)		-	-	(*)	-	(*)	-		-	.19	.01
26			-	-	-	-	0.01	-		-	-	-
27			-	-	-	-	.01	-		-	.08	-
28			-	-	-	-	.01	-		-	-	-
29			0.21	-	-	-	(*)	-		-	-	-
30			.20	-	-	-	.02	-		-	(*)	.02
31			-	-	-	-	-	-		.04	.26	-

*Flow over crest of dam for short time, but mean head for day was less than 0.01 foot.

Note.-Water below crest of dam on days for which no head is shown.

Gila River at Gillespie Dam, Ariz.

Location.- Water-stage recorder, lat. $33^{\circ}13'45''$, long. $112^{\circ}45'30''$, in SE $\frac{1}{4}$ sec. 28, T. 2 S., R. 5 W., at Gillespie Dam, 8 miles below Hassayampa River. Zero of gage is 5.0 feet below average elevation of crest of dam, which is 753.8 feet above mean sea level (from Gillespie Land and Irrigation Co. benchmark).

Drainage area.- 49,700 square miles.

Records available.- August 1921 to September 1937.

Extremes.- Maximum discharge during year, 45,800 second-feet Feb. 9 (height over crest of dam, 3.48 feet); no flow for part of year.
1921-37: Maximum discharge, 70,000 second-feet Dec. 28, 1923 (height over crest of dam, 6.0 feet); no flow for some periods of each year.

Remarks.- Records good. Gillespie and Enterprise Canals divert water at this dam and are not included in this record. Other diversions for irrigation above station. Water passed through sluice gates is included in this record. Flow of Gila River and tributaries above this station regulated by storage in San Carlos Reservoir, on Gila River (capacity, 1,165,000 acre-feet), in a series of reservoirs on Salt River (capacity, 1,790,000 acre-feet), and in Lake Pleasant, on Agua Fria River (capacity, 183,500 acre-feet).

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1		0	0	696	53	411	239	2			0	
2		0	0	654	23	314	172	2			0	
3		21	0	344	20	266	172	2			0	
4		53	0	215	20	203	172	2			0	
5		1	0	135	20	203	387	1			0	
6		0	0	100	20	125	667	1			0	
7		0	0	199	195	107	436	0			0	
8		0	0	265	2,170	91	270	0			0	
9		0	0	320	24,500	91	165	0			0	
10		0	0	599	23,700	76	147	0			0	
11		0	0	331	10,100	45	120	0			0	
12		0	0	210	4,560	52	79	0			6	
13		0	0	188	1,960	140	65	0			4	
14		0	0	188	1,160	503	28	0			0	
15		0	0	154	1,060	1,760	25	0			0	
16		0	0	150	1,580	3,290	20	0			0	
17		0	0	121	14,400	2,960	15	0			0	
18		0	0	117	12,200	6,500	10	0			0	
19		0	0	105	7,720	17,600	10	0			0	
20		0	0	103	4,840	12,600	10	0			0	
21		0	0	107	3,300	7,390	10	0			0	
22		0	0	107	2,530	4,320	4	0			185	
23		0	0	118	1,530	2,600	4	0			1,050	
24		0	0	122	955	1,620	4	0			634	
25		0	0	123	571	1,130	4	0			4	
26		0	0	100	332	880	3	0			0	
27		0	0	102	439	715	3	0			0	
28		0	0	108	440	538	3	0			0	
29		0	0	62	-	454	2	0			0	
30		0	544	31	-	337	2	0			0	
31		-	571	39	-	311	-	0			0	
Month				Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet				
October.....				0	0	0	0	0				
November.....				75	53	0	2.5	149				
December.....				1,115	571	0	56.0	2,210				
Calendar year 1936.....				14,597	2,390	0	40.0	28,950				
January.....				6,193	696	31	200	12,280				
February.....				120,388	24,500	20	4,300	238,800				
March.....				67,635	17,600	46	2,182	134,200				
April.....				3,247	667	2	108	6,440				
May.....				10	2	0	.3	20				
June.....				0	0	0	0	0				
July.....				0	0	0	0	0				
August.....				1,883	1,050	0	60.7	3,730				
September.....				0	0	0	0	0				
Water year 1936-37.....				200,546	24,500	0	549	397,800				

Gila River near Dome, Ariz.

Location.- Water-stage recorder, lat. $32^{\circ}45'30''$, long. $114^{\circ}25'15''$, in SW $\frac{1}{4}$ sec. 4, T. 8 S., R. 21 W., 3 miles west of Dome and 18 miles above mouth.

Drainage area.- 58,100 square miles.

Records available.- May 1929 to September 1937. October 1903 to December 1906, at site 4 miles upstream.

Extremes.- Maximum discharge during year, 8,530 second-feet Mar. 24, (gage height, 12.68 feet); no flow during most of year.

1929-37: Maximum discharge, 20,700 second-feet Feb. 15, 1932 (gage height, 16.75 feet); no flow during part of each year.

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

Remarks.- Records excellent. Diversions for irrigation above station. No regulation in the basin above this station and below Gillespie Dam.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1					0	654	562					
2					0	456	468					
3					0	321	390					
4					0	240	319					
5					0	186	259					
6					0	151	215					
7					0	122	171					
8					0	92	135					
9					0	63	103					
10					0	47	81					
11					0	28	65					
12					0	15	106					
13					0	5	141					
14					1,350	1	109					
15					5,410	0	81					
16					3,510	0	60					
17					1,940	13	45					
18					1,150	2	33					
19					639	0	22					
20					378	243	15					
21					822	1,410	7					
22					4,930	2,540	3					
23					5,270	7,060	2					
24					3,750	6,110	1					
25					2,510	5,850	1					
26					1,840	3,750	1					
27					1,420	2,460	1					
28					982	1,650	0					
29					-	1,170	0					
30					-	884	0					
31					-	692	-					
Month					Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet			
October.....					0	0	0	0	0			
November.....					0	0	0	0	0			
December.....					0	0	0	0	0			
Calendar year 1936.....					0	0	0	0	0			
January.....					0	0	0	0	0			
February.....					35,881	5,410	0	1,281	71,170			
March.....					38,215	8,110	0	1,233	75,800			
April.....					3,396	562	0	113	6,740			
May.....					0	0	0	0	0			
June.....					0	0	0	0	0			
July.....					0	0	0	0	0			
August.....					0	0	0	0	0			
September.....					0	0	0	0	0			
Water year 1936-37.....					77,492	8,110	0	212	153,700			

San Francisco River near Glenwood, N. Mex.

Location.— Water-stage recorder, lat. 33°18', long. 108°53', in W $\frac{1}{2}$ sec. 23, T. 12 S., R. 20 W., a quarter of a mile above the hot springs and 8 miles south of Glenwood. Zero of gage is 4,552.06 feet above mean sea level (general adjustment of 1929).

Records available.— February 1934 to September 1937 in reports of Geological Survey. October 1927 to December 1931 (in reports of State engineer) and October 1930 to February 1934 (in reports of Geological Survey), at site $4\frac{1}{2}$ miles upstream.

Extremes.— Maximum discharge during year, about 5,730 second-feet Feb. 7 (gage height, 8.07 feet), from rating curve extended above 300 second-feet; minimum daily discharge, 13 second-feet Sept. 2, 1930-37. Maximum discharge, that of Feb. 7, 1937; maximum gage height, 8.16 feet, former site and datum, Sept. 16, 1931; minimum daily discharge, 7.7 second-feet June 21, 1934.

Remarks.— Records fair except those for periods of faulty intake action, Feb. 9-12, 20, 21, Sept. 11-13, 16-21 and period of missing gage heights, July 21-25, were (computed on basis of records for Gila River near Gila and near Red Rock) and those above 300 second-feet, all of which are poor. Diversions for irrigation above station.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	29	57	38	35	35	180	198	109	40	28	18	14
2	29	44	37	35	35	164	192	109	33	27	19	13
3	29	38	35	26	38	181	216	100	28	53	18	26
4	31	37	35	24	38	188	230	100	28	48	15	33
5	33	37	37	24	40	174	234	112	28	46	15	21
6	38	37	37	26	55	164	230	118	27	42	14	20
7	40	38	35	29	1,740	150	212	115	25	37	14	35
8	48	37	33	31	1,260	178	206	109	21	33	14	22
9	48	37	33	29	400	234	198	106	22	29	22	56
10	53	37	33	24	250	321	198	106	20	28	17	48
11	60	35	31	27	180	377	198	94	20	29	15	40
12	64	33	31	28	100	438	209	89	21	31	16	35
13	69	35	29	44	59	452	216	76	21	31	64	50
14	76	35	31	48	46	533	220	71	22	29	57	66
15	76	35	33	38	180	542	226	76	21	26	57	53
16	81	35	35	31	1,610	502	244	84	23	23	44	60
17	81	33	33	37	1,430	790	251	79	22	20	42	75
18	84	33	33	35	625	1,040	237	71	22	19	48	62
19	79	33	33	29	479	760	223	66	22	16	48	55
20	79	37	33	35	380	570	220	57	22	15	31	55
21	79	44	33	35	280	479	206	48	21	50	26	53
22	79	44	33	28	178	448	195	40	22	30	20	115
23	76	42	33	25	157	430	181	40	24	25	23	76
24	79	40	35	23	178	405	167	33	23	20	27	44
25	79	37	38	27	220	361	147	27	21	15	27	33
26	76	37	42	28	250	325	137	28	21	15	35	29
27	71	35	42	29	192	281	124	26	21	16	24	28
28	60	37	35	28	167	251	118	27	22	19	16	26
29	53	38	38	29	-	230	118	37	22	16	14	23
30	64	38	40	29	-	220	112	50	28	16	16	36
31	61	-	33	35	-	198	-	46	-	16	16	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	1,923	84	28	62.0	3,810
November.....	1,135	57	33	37.8	2,250
December.....	1,080	42	29	34.8	2,140
Calendar year 1936.....	19,102	361	11	52.2	37,880
January.....	951	48	23	30.7	1,890
February.....	10,562	1,740	35	377	20,930
March.....	11,546	1,040	160	372	22,900
April.....	5,850	251	112	195	11,600
May.....	2,249	118	26	72.5	4,460
June.....	713	40	20	23.8	1,410
July.....	848	53	15	27.4	1,680
August.....	832	64	14	26.8	1,650
September.....	1,303	115	13	45.4	2,580
Water year 1936-37.....	38,982	1,740	13	107	77,300

San Francisco River at Clifton, Ariz.

Location.- Water-stage recorder, lat. 33°03'00", long. 109°17'45", in SW¼ sec. 30, T. 4 S., R. 30 E., at Railroad Boulevard bridge at Clifton. Zero of gage is 3,432.3 feet above mean sea level (from Arizona Copper Co. benchmark).

Drainage area.- 2,790 square miles.

Records available.- July 1927 to October 1933, May 1935 to September 1937. October 1910 to July 1918, fragmentary record at several sites within 2 miles upstream.

Extremes.- Maximum discharge during year, 12,400 second-feet Feb. 8 (gage height, 12.7 feet); minimum, 33 second-feet Aug. 3 (gage height, 2.24 feet).
1927-37: Maximum discharge, that of Feb. 8, 1937: probably no flow at times in 1934; minimum discharge recorded, 15 second-feet June 24, 1929.

Remarks.- Records good. Discharge for July 14-17 computed on basis of records for on near-by streams. Diversions for irrigation and municipal supply above station.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	99	98	102	93	93	370	415	238	96	89	36	51
2	88	79	95	102	92	362	432	227	86	93	35	65
3	82	82	90	93	92	370	476	217	85	150	36	66
4	76	78	85	83	93	402	528	217	78	137	38	72
5	70	73	85	78	96	382	514	232	76	121	36	78
6	68	72	86	78	104	344	481	254	74	116	37	81
7	63	70	81	85	2,470	305	472	252	69	93	47	67
8	62	69	76	90	6,980	315	472	235	64	95	44	71
9	61	68	72	88	1,420	378	463	232	59	104	45	130
10	61	67	76	89	651	537	472	235	58	90	71	127
11	57	67	74	78	436	697	486	222	55	119	149	112
12	56	67	72	85	332	807	509	202	52	102	57	125
13	54	65	72	221	279	870	542	189	50	82	49	92
14	54	65	69	249	240	967	652	180	49	70	68	189
15	54	66	70	152	252	1,000	571	174	50	60	72	136
16	53	66	70	125	3,170	989	605	171	49	50	78	86
17	54	66	72	116	4,760	1,650	656	171	49	45	60	82
18	53	65	72	110	2,020	1,970	611	161	48	44	64	95
19	55	70	70	102	1,290	1,600	571	154	46	43	75	87
20	57	96	70	100	978	1,170	537	144	43	43	68	82
21	61	129	70	102	718	956	509	134	40	38	58	78
22	61	161	72	98	541	839	454	125	61	37	54	1,160
23	62	165	72	85	481	812	424	116	49	58	66	328
24	70	193	72	83	453	781	394	110	50	57	97	142
25	79	124	74	85	514	680	351	104	46	48	98	99
26	77	106	85	85	557	590	311	93	48	44	96	87
27	73	98	99	83	509	540	291	83	64	42	90	74
28	69	96	89	83	419	610	275	82	72	40	70	73
29	68	141	86	83	-	490	269	99	63	42	58	71
30	77	114	98	88	-	472	254	110	69	39	51	68
31	108	-	90	90	-	428	-	110	-	37	48	-
Month					Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet			
October.....					2,082	108	53	67.2	4,130			
November.....					2,773	193	66	92.4	5,500			
December.....					2,466	102	69	79.5	4,890			
Calendar year 1936.....					49,883	2,010	21	136	98,930			
January.....					3,182	249	78	103	6,310			
February.....					30,050	6,980	92	1,073	59,600			
March.....					22,583	1,970	305	728	44,790			
April.....					13,859	636	254	465	27,550			
May.....					6,273	254	82	170	10,450			
June.....					1,798	96	40	59.9	3,570			
July.....					2,228	150	37	71.9	4,420			
August.....					1,952	149	35	65.0	3,870			
September.....					4,074	1,160	51	136	8,080			
Water year 1936-37.....					92,350	6,980	35	253	185,200			

San Simon Creek near San Simon, Ariz.

Location.- Water-stage recorder, lat. $32^{\circ}13'30''$, long. $109^{\circ}10'30''$, in SW $\frac{1}{4}$ sec. 10, T. 14 S., R. 31 E., $4\frac{1}{2}$ miles southeast of San Simon.

Drainage area.- 803 square miles.

Records available.- June 1931 to October 1933, May 1935 to September 1937. August 1919 to September 1925, at site $3\frac{1}{2}$ miles downstream.

Extremes.- Maximum discharge during year, 490 second-feet Aug. 9 (gage height, 5.80 feet); no flow during most of year.
1919-25, 1931-37: Maximum discharge, 5,350 second-feet July 21, 1923; no flow for greater part of each year.

Remarks.- Records fair. Minor diversions for irrigation above station.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	0			0	0				0	0	20
2	0	0			0	0				0	0	7
3	0	0			0	0				0	0	0
4	0	0			0	0				0	0	0
5	0	0			0	0				0	0	0
6	0	0			0	0				0	0	0
7	0	0			0	0				0	0	0
8	0	0			7	0				0	0	0
9	0	0			0	0				6	30	0
10	0	0			0	0				0	20	20
11	0	0			0	0				0	0	20
12	0	0			0	0				0	0	10
13	0	0			0	0				0	0	0
14	0	0			0	0				0	0	1
15	0	0			0	0				0	0	0
16	0	0			0	1				0	3	0
17	0	0			0	3				0	0	0
18	0	0			0	0				0	0	0
19	0	0			0	0				0	0	0
20	0	0			0	0				0	2	0
21	0	0			0	0				0	0	0
22	0	0			0	0				0	0	0
23	0	0			0	0				0	0	0
24	1	0			0	0				0	0	0
25	2	0			0	0				0	6	0
26	0	0			0	0				0	4	0
27	0	0			0	0				0	0	0
28	0	0			0	0				0	0	0
29	0	0			0	0				0	0	0
30	0	2			-	-				0	0	0
31	0	-			-	0				0	0	-
Month					Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet			
October.....					3	2	0	0.1	6			
November.....					2	2	0	.1	4			
December.....					0	0	0	0	0			
Calendar year 1936.....					1,275	480	0	3.5	2,530			
January.....					0	0	0	0	0			
February.....					7	7	0	.2	14			
March.....					4	3	0	.1	8			
April.....					0	0	0	0	0			
May.....					0	0	0	0	0			
June.....					0	0	0	0	0			
July.....					6	6	0	.2	12			
August.....					65	30	0	2.1	129			
September.....					78	20	0	2.6	155			
Water year 1936-37.....					165	30	0	.5	328			

San Simon Creek near Solomonsville, Ariz.

Location.— Water-stage recorder, lat. 32°48'00", long. 109°38'15", in NW¼ sec. 25, T. 7 S., R. 26 E., 1 mile southwest of Solomonsville and 2½ miles above mouth. Zero of gage is 2,960.3 feet above mean sea level.

Drainage area.— 2,280 square miles.

Records available.— June 1931 to September 1932, May 1935 to September 1937.

Extremes.— Maximum discharge during year, 2,370 second-feet Aug. 21 (gage height, 7.20 feet); no flow on many days.
1931-37: Maximum discharge, 27,500 second-feet Aug. 9, 1931 (gage height, 19.0 feet), by slope-area method; no flow on many days of each year.

Remarks.— Records fair. Minor diversions for irrigation above station. Record does not include waste water from San Jose Canal, which takes water from Gila River.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1		0							0	0	0	0
2		0							0	1	0	3
3		0							0	0	0	7
4		0							0	0	0	0
5		0							0	1	0	0
6		0							0	6	0	0
7		0							0	0	0	0
8		0							0	0	0	0
9		0							0	0	0	16
10		0							0	0	0	280
11		0							0	352	12	110
12		0							0	30	10	0
13		0							0	0	0	0
14		0							0	0	0	30
15		0							0	0	88	0
16		0							0	0	12	0
17		0							0	0	0	0
18		0							0	0	0	0
19		0							0	0	0	0
20		0							0	0	0	0
21		0							0	0	174	0
22		0							0	0	0	0
23		0							0	0	0	2
24		0							0	0	63	0
25		0							0	0	0	0
26		0							1	0	0	0
27		0							24	0	0	0
28		0							0	0	0	0
29		2							80	0	0	0
30		0							5	0	0	0
31		-							-	0	0	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						0	0	0	0	0		
November.....						2	2	0	.1	4.0		
December.....						0	0	0	0	0		
Calendar year 1936.....						6,857	1,080	0	18.7	13,600		
January.....						0	0	0	0	0		
February.....						0	0	0	0	0		
March.....						0	0	0	0	0		
April.....						0	0	0	0	0		
May.....						0	0	0	0	0		
June.....						110	80	0	3.7	218		
July.....						390	352	0	12.6	774		
August.....						359	174	0	11.6	712		
September.....						448	280	0	14.9	889		
Water year 1936-37.....						1,309	352	0	3.6	2,600		

San Carlos River near Peridot, Ariz.

Location.- Water-stage recorder, lat. 33°16'00", long. 110°26'30", in sec. 7; T. 2 S., R. 19 E., unsurveyed, on San Carlos Indian Reservation, at railroad bridge at head of San Carlos Reservoir, 2 miles south of Peridot. Zero of gage is 2,506.6 feet above mean sea level (from Southern Pacific Railroad benchmark).

Drainage area.- 1,070 square miles.

Records available.- March 1929 to September 1937. August 1910 to January 1911 and April 1914 to September 1915, fragmentary record at site 5½ miles downstream.

Extremes.- Maximum discharge during year, 29,400 second-feet Feb. 7 (gage height, 10.7 feet) from rating curve extended above 15,000 second-feet on basis of records of inflow of San Carlos Reservoir; minimum, 0.3 second-feet July 6.
1929-37: Maximum discharge, that of Feb. 7, 1937; no flow on several days of most years.

Remarks.- Records good. Minor diversions for irrigation above station.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3	9	10	80	36	39	16	7	2	1	1	7
2	4	10	11	174	45	32	15	8	2	1	1	12
3	3	9	11	76	91	30	12	8	2	1	1	7
4	3	7	11	22	91	30	9	8	2	1	1	5
5	3	8	11	19	124	30	11	7	2	1	1	6
6	3	8	11	23	156	30	10	7	2	1	1	14
7	3	10	11	24	11,400	28	8	7	2	1	642	9
8	4	10	11	31	2,610	26	8	7	2	1	102	7
9	4	11	11	36	399	28	8	7	2	1	28	5
10	4	11	11	33	243	26	8	7	2	135	12	6
11	4	11	11	26	154	26	11	6	2	76	91	16
12	4	10	11	88	94	30	11	6	2	30	60	36
13	4	10	11	258	75	30	11	4	2	9	43	30
14	4	10	11	333	70	32	11	4	1	5	18	26
15	4	9	11	130	80	28	9	3	1	3	105	11
16	3	9	11	107	142	30	8	3	2	2	22	5
17	4	9	11	77	232	171	9	3	2	2	19	3
18	4	8	10	66	172	204	8	3	2	1	8	2
19	4	8	10	40	89	108	8	3	2	1	13	2
20	5	9	10	38	63	70	8	3	2	1	23	2
21	5	9	10	40	60	50	8	3	2	1	5	2
22	6	8	10	33	56	30	8	3	1	1	6	10
23	6	9	10	24	43	22	8	3	2	1	3	8
24	6	9	10	23	39	26	8	3	2	1	183	6
25	5	8	11	29	34	28	8	3	1	1	26	6
26	5	8	13	24	36	22	8	3	1	1	12	4
27	7	9	13	31	50	22	8	3	1	1	8	3
28	5	10	11	31	46	16	8	3	1	1	9	2
29	5	10	11	37	-	16	8	4	1	1	17	2
30	6	10	169	33	-	16	8	3	1	1	12	2
31	9	-	68	31	-	15	-	3	-	1	19	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						139	9	3	4.5	276		
November.....						276	11	7	9.2	547		
December.....						558	169	10	18.0	1,110		
Calendar year 1936.....						22,455.4	4,290	0	61.4	44,540		
January.....						2,011	333	19	64.9	3,990		
February.....						16,730	11,400	34	598	33,180		
March.....						1,291	204	15	41.6	2,560		
April.....						281	18	8	9.4	567		
May.....						145	8	3	4.7	238		
June.....						51	2	1	1.7	101		
July.....						285	135	1	9.2	565		
August.....						1,492	642	1	48.1	2,960		
September.....						256	36	2	8.5	508		
Water year 1936-37.....						23,515	11,400	1	64.4	46,640		

San Pedro River at Palominas, Ariz.

Location.-- Water-stage recorder, lat. $31^{\circ}22'45''$, long. $110^{\circ}06'30''$, in SE $\frac{1}{4}$ sec. 33, T. 23 S., R. 22 E., at bridge half a mile east of Palominas, 4 miles downstream from international boundary, and 12 miles southwest of Bisbee. Datum of gage raised 0.20 foot Oct. 18, 1936.

Drainage area.-- 949 square miles (revised).

Records available.-- May 1930 to October 1933, May 1935 to September 1937.

Extremes.-- Maximum discharge during year, 2,090 second-feet Aug. 20 (gage height, 8.31 feet); minimum, 0.8 second-foot June 21, 1930-37: Maximum discharge, 13,500 second-feet Sept. 10, 1936 (gage height, 9.95 feet, present datum); no flow June 29 and July 1, 1930.

Remarks.-- Records good except those for Oct. 1-18, July 12-16, 19-26, Aug. 1-12, Sept. 8-13, which were computed on basis of partial gage-height record, several discharge measurements, and records at Charleston and are poor. No diversions above station in Arizona and probably none in Mexico.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	8	6	8	9	8	6	6	4	2	13	10	141
2	8	6	8	9	7	6	6	4	2	8	10	34
3	8	5	8	8	6	5	6	4	2	37	30	53
4	8	5	7	8	6	6	5	4	2	54	15	55
5	8	5	6	8	8	6	6	4	2	17	5	179
6	8	5	7	8	8	6	5	4	2	7	95	58
7	8	5	8	10	8	6	5	4	2	5	135	267
8	8	6	8	11	8	6	5	4	2	6	10	410
9	8	6	7	11	9	6	5	3	2	348	480	80
10	8	6	7	9	10	5	5	3	2	84	310	100
11	8	6	7	9	10	5	5	3	1	233	20	90
12	8	6	7	9	9	5	5	3	1	10	20	430
13	8	6	6	9	9	6	5	3	1	5	15	40
14	7	6	8	9	8	6	5	3	1	5	9	28
15	7	6	8	9	8	6	5	3	1	5	53	21
16	6	6	7	9	8	8	5	3	1	5	293	16
17	6	6	7	9	8	12	5	3	1	95	446	14
18	5	6	7	8	7	8	5	3	1	551	1,000	12
19	5	6	7	8	7	7	5	3	1	20	2,040	12
20	4	6	7	8	7	7	4	3	1	170	2,540	12
21	5	6	8	7	7	6	4	3	1	10	1,580	14
22	5	9	7	7	7	6	4	3	1	5	121	16
23	5	10	6	7	6	6	4	2	1	5	1,360	12
24	6	16	7	7	6	6	4	2	1	5	386	11
25	5	8	9	8	6	6	4	2	1	5	93	10
26	6	7	10	7	6	6	4	2	1	5	1,370	9
27	6	9	9	6	6	6	4	2	392	5	138	8
28	6	11	9	6	6	6	4	2	56	6	58	8
29	6	11	9	6	-	7	4	2	52	6	35	7
30	6	9	9	6	-	7	4	2	41	75	215	6
31	6	-	9	7	-	6	-	2	-	13	96	-
Month					Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet			
October.....					206	8	4	6.6	409			
November.....					210	16	5	7.0	417			
December.....					237	10	6	7.6	470			
Calendar year 1936.....					10,765	3,100	1	29.4	21,360			
January.....					252	11	6	8.1	500			
February.....					210	10	6	7.5	417			
March.....					197	12	5	6.4	391			
April.....					143	6	4	4.8	284			
May.....					92	4	2	3.0	182			
June.....					577	392	1	19.2	1,140			
July.....					1,817	551	5	58.6	3,600			
August.....					12,787	2,540	5	412	25,360			
September.....					2,153	430	6	71.8	4,270			
Water year 1936-37.....					18,881	2,540	1	51.7	37,440			

San Pedro River at Charleston, Ariz.

Location.— Water-stage recorder, lat. 31°38'45", long. 110°10'45". in SW¼ sec. 35, T. 20 S., R. 21 E., unsurveyed, in Spanish land grant of San Juan de las Boquillas y Nogales, at Charleston dam site, three-quarters of a mile north of Charleston and 6 miles above Babocomari River. Zero of gage is 3,923.0 feet above mean sea level (from Southern Pacific Railroad benchmark).

Drainage area.— 1,440 square miles (revised).

Records available.— May 1928 to December 1933, May 1935 to September 1937. 1904 to 1906 and 1910 to 1928, at several sites, either upstream or downstream.

Extremes.— Maximum discharge during year, 9,430 second-feet Aug. 20 (gage height, 8.5 feet); minimum, 4 second-feet June 19, 1928-37: Maximum discharge, 24,500 second-feet Aug. 9, 1931 (gage height 12.0 feet); minimum, 2 second-feet in June or July of several years. Maximum discharge known, about 98,000 second-feet Sept. 28, 1926 (gage height, 21.9 feet, from floodmarks).

Remarks.— Records good except those for July 5-6, 12-16, 19, 22-28, which were computed on basis of weather records and partial gage-height record and are fair. Diversions for irrigation above station.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	26	16	15	27	23	20	15	12	8	22	142	106
2	24	18	18	27	26	20	16	12	6	21	19	142
3	22	20	16	27	24	21	17	12	8	23	12	50
4	20	24	20	27	22	21	17	12	8	211	26	62
5	18	22	18	24	22	18	16	12	8	45	12	230
6	20	26	18	22	21	20	16	12	8	25	11	355
7	22	24	20	24	22	21	15	11	7	21	167	125
8	24	26	22	30	22	20	15	11	6	24	12	670
9	26	28	20	32	20	20	15	11	6	310	406	115
10	28	28	18	32	22	21	15	11	7	152	578	115
11	24	28	24	26	21	18	14	11	6	298	67	100
12	24	22	22	22	21	18	14	11	6	35	49	420
13	26	24	22	23	21	18	15	10	6	25	42	115
14	26	24	16	26	15	18	15	11	5	20	27	74
15	28	22	18	22	17	18	14	10	5	15	51	68
16	26	18	24	23	17	21	13	11	5	15	354	50
17	24	18	20	22	20	23	12	11	5	40	114	45
18	24	16	20	23	21	26	13	12	5	569	1,390	45
19	20	16	26	28	18	26	14	12	5	45	2,660	39
20	16	15	24	32	18	23	14	11	5	186	3,880	38
21	22	15	28	30	17	21	14	10	5	30	2,490	49
22	24	18	26	32	16	20	14	10	5	15	232	36
23	22	38	24	27	17	18	13	10	5	15	1,050	35
24	24	22	18	26	16	17	13	10	5	15	1,160	28
25	26	15	20	26	17	18	12	10	5	14	145	27
26	20	13	24	27	20	17	12	9	6	13	1,390	25
27	14	14	24	28	21	17	13	9	217	12	163	23
28	18	15	26	28	20	17	13	9	98	12	57	21
29	22	20	28	24	-	15	13	10	186	176	44	20
30	20	16	28	22	-	15	12	10	46	57	127	20
31	18	-	26	17	-	16	-	8	-	124	109	-
Month						Second-foot-days	Maximum	Minimum	Mean		Run-off in acre-feet	
October.....						698	28	14	22.5		1,390	
November.....						620	38	13	20.7		1,230	
December.....						673	28	15	21.7		1,330	
Calendar year 1936						21,347	3,400	3	58.3		42,320	
January.....						806	32	17	26.0		1,600	
February.....						557	26	15	19.9		1,100	
March.....						602	26	15	19.4		1,190	
April.....						424	17	12	14.1		841	
May.....						531	12	8	10.7		657	
June.....						703	217	5	23.4		1,390	
July.....						2,585	569	12	83.4		5,130	
August.....						15,988	3,880	11	548		33,690	
September.....						3,258	420	20	108		6,420	
Water year 1936-37.....						28,223	3,880	5	77.3		55,960	

GILA RIVER BASIN

San Pedro River near Mammoth, Ariz.

Location.— Water-stage recorder, lat. $32^{\circ}44'30''$, long. $110^{\circ}38'45''$, in NE $\frac{1}{4}$ sec. 18, T. 8 S., R. 17 E., at highway bridge $1\frac{1}{2}$ miles north of Mammoth.

Drainage area.— 3,800 square miles (revised).

Records available.— May 1931 to September 1937.

Extremes.— Maximum discharge during year, 14,100 second-feet Aug. 30 (gage height, 9.6 feet); no flow during part of year.

1931-37: Maximum discharge, 19,400 second-feet Oct. 2, 1931 (gage height, 11.1 feet); no flow during part of each year.

Greatest known flood, 90,000 second-feet (estimated) Sept. 28, 1926.

Remarks.— Records fair. Discharge Oct. 24 to Dec. 1, June 26-30, and July 9 to Aug. 19 computed on basis of several discharge measurements, partial gage-height record, weather records, records of stations on nearby streams, information from local residents, and observations of high-water marks and channel conditions by Survey engineers. Diversions for irrigation above station.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	1	15	37	7	0			0	14	0	110
2	0	1	14	16	6	0			0	3	0	750
3	0	1	8	8	6	0			0	0	0	340
4	0	1	4	7	7	0			0	0	0	115
5	0	1	5	5	5	0			0	0	0	425
6	0	1	4	3	5	0			0	6	0	575
7	0	1	4	9	433	0			0	4	1	1,110
8	0	1	6	11	1,510	0			0	271	20	315
9	0	1	5	20	183	0			0	40	100	1,020
10	0	1	4	34	50	0			0	200	10	355
11	0	1	5	47	20	0			0	30	10	110
12	0	1	4	27	7	0			0	40	20	115
13	0	1	4	45	4	0			0	5	20	680
14	0	1	4	100	2	0			0	0	60	210
15	0	1	3	21	1	0			0	0	200	100
16	0	1	3	18	1	0			0	0	300	50
17	0	1	4	18	8	15			0	0	1,600	20
18	0	1	4	15	3	10			0	0	100	7
19	0	1	6	14	1	1			0	0	1,400	2
20	0	1	5	10	0	0			0	0	5,620	0
21	0	1	6	6	0	0			0	0	3,270	0
22	0	1	6	2	0	0			0	0	2,300	0
23	0	1	7	1	0	0			0	0	222	10
24	4	2	6	1	0	0			0	0	1,210	130
25	0	2	5	2	0	0			0	10	373	4
26	0	2	7	2	0	0			0	0	115	0
27	0	30	10	3	0	0			0	0	2,550	0
28	0	20	9	4	0	0			0	0	456	0
29	1	17	25	5	—	0			1	0	212	0
30	1	16	24	6	—	0			0	0	980	90
31	1	—	21	6	—	0			—	—	170	—

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	7	4	0	0.2	14
November.....	112	30	1	3.7	222
December.....	237	25	3	7.6	470
Calendar year 1936.....	16,906	2,350	0	46.2	32,530
January.....	503	100	1	16.2	998
February.....	2,259	1,510	0	80.7	4,480
March.....	26	15	0	.8	52
April.....	0	0	0	0	0
May.....	0	0	0	0	0
June.....	1	1	0	.03	2.0
July.....	623	271	0	20.1	1,240
August.....	21,319	5,620	0	688	42,290
September.....	6,643	1,110	0	221	13,180
Water year 1936-37.....	31,730	5,620	0	86.9	62,950

San Pedro River at Winkelman, Ariz.

Location.- Lat. 32°58'45", long. 110°47'15", in SW¼ sec. 23, T. 5 S., R. 15 E., at mouth, 1 mile west of Winkelman.

Drainage area.- 4,680 square miles (revised).

Records available.- December 1928 to September 1937 (discharge measurements only).

October 1933 to September 1934 published as miscellaneous measurements. April to August 1890 (monthly discharge), published as San Pedro River at Dudleyville, Ariz.

Remarks.- Diversions for irrigation above station.

Discharge measurements, in second-feet, water year 1936-37

Oct.	2	8.0
	12	3.2
	22	2.8
Nov.	2	9.8
	12	5.7
	22	20.0
Dec.	3	34.8
	12	25.4
	22	19.4
Jan.	3	59.2
	22	35.9
Feb.	2	26.6
	12	40.7
	22	24.0
Mar.	2	15.9
	12	5.5
	23	18.2
Apr.	2	6.6
	12	2.6
	22	2.7
May	3	2.8
	12	0.25
	24	0.4
June	3	1.4
	14	0
	22	0
July	1	0
	2	10.2
	13	61.3
	27	6.0
Aug.	9	28.1
Sept.	21	7.5

Aravaipa Creek near Feldman, Ariz.

Location.— Water-stage recorder, lat. $32^{\circ}50'30''$, long. $110^{\circ}37'45''$, in NW $\frac{1}{4}$ sec. 9, T. 7 S., R. 17 E., 6 miles above mouth and 6 miles southeast of Feldman.

Drainage area.— 535 square miles.

Records available.— May 1931 to September 1937. April 1919 to September 1921, at station 6 miles downstream.

Extremes.— Maximum discharge during year, 3,380 second-feet Feb. 7 (gage height, 7.30 feet); minimum, 1 second-foot July 20.

1931-37: Maximum discharge, 10,000 second-feet Aug. 15, 1935 (gage height, 10.9 feet); minimum, 1 second-foot several days in 1934, 1935, and 1937.

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

Remarks.— Records good. Discharge for May 30 to June 1 interpolated. Diversions for irrigation above and below station.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	14	11	19	300	18	16	8	11	7	4	7	180
2	13	11	18	69	17	16	7	10	5	4	21	47
3	12	12	17	43	13	15	6	10	4	4	11	10
4	11	11	16	39	19	16	6	10	4	5	10	10
5	11	11	25	37	22	16	9	10	5	7	7	141
6	12	10	20	36	26	16	11	10	5	9	7	236
7	12	10	19	44	765	16	12	9	5	7	31	109
8	11	10	19	46	1,060	16	12	9	5	42	16	80
9	11	10	18	51	77	16	12	9	5	14	10	15
10	10	10	16	74	37	14	13	7	5	17	10	14
11	9	10	16	158	31	13	13	8	5	31	10	214
12	9	10	16	186	29	14	11	8	4	15	13	13
13	8	11	16	427	24	15	10	7	4	13	13	16
14	6	12	14	183	23	15	12	6	4	12	39	27
15	7	12	14	79	22	15	12	7	4	10	40	15
16	7	12	14	51	21	28	13	7	5	6	60	14
17	6	12	12	42	22	27	13	6	4	4	171	13
18	9	11	12	36	22	18	12	5	4	2	11	12
19	9	12	12	31	21	17	13	5	3	2	8	11
20	10	11	12	29	21	17	13	5	3	2	20	11
21	12	11	12	29	20	16	13	4	3	12	71	10
22	12	12	12	24	19	15	13	4	3	7	11	9
23	12	12	10	22	18	17	13	4	3	6	19	9
24	15	12	10	21	16	18	13	5	3	7	80	8
25	17	13	10	19	18	17	12	6	3	7	6	8
26	14	14	10	17	16	16	12	5	3	5	5	8
27	12	16	10	17	17	15	11	6	4	3	63	8
28	12	24	11	17	17	12	10	14	5	73	11	7
29	12	23	114	17	-	11	10	14	4	17	13	7
30	12	19	84	17	-	11	11	12	4	10	20	6
31	12	-	40	18	-	11	-	9	-	7	22	-
Month					Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet			
October.....					341	17	6	11.0	676			
November.....					375	24	10	12.5	744			
December.....					648	114	10	20.9	1,290			
Calendar year 1936.....					9,762	730	3	26.7	19,380			
January.....					2,179	427	17	70.3	4,320			
February.....					2,440	1,060	17	87.1	4,840			
March.....					495	28	11	16.0	982			
April.....					336	13	6	11.2	666			
May.....					242	14	4	7.8	480			
June.....					126	7	3	4.2	250			
July.....					364	73	2	11.7	722			
August.....					836	171	5	27.0	1,660			
September.....					1,270	236	7	42.3	2,520			
Water year 1936-37.....					9,652	1,060	2	26.4	19,150			

Santa Cruz River near Nogales, Ariz.

Location.- Water-stage recorder, lat. $31^{\circ}20'30''$, long. $110^{\circ}51'15''$, in NW $\frac{1}{4}$ sec. 18, T. 24 S., R. 15 E., unsurveyed, on Spanish land grant of Buena Vista, three-quarters of a mile downstream from international boundary and $5\frac{1}{2}$ miles east of Nogales.

Drainage area.- 515 square miles (revised).

Records available.- May 1930 to December 1933, July 1935 to September 1937. March to November 1907 and April 1909 to June 1920 fragmentary, at site $5\frac{1}{2}$ miles downstream. April 1921 to June 1922 at site 6 miles downstream.

Extremes.- Maximum discharge during year, 3,790 second-feet Aug. 16 (gage height, 6.80 feet); no flow during part of June and July.
1930-37: Maximum discharge, 14,000 second-feet Aug. 31, 1935 (gage height, 12.3 feet); no flow on several days or parts of days each year.

Remarks.- Records good except those for periods of missing gage heights, July 12-15 and 17-27, which were computed on basis of partial gage-height record and weather records and are fair. Minor diversions for irrigation above station.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.5	2	7	10	12	7	5	1	0.1	0	0.4	44
2	.6	2	7	8	12	7	3	.7	.1	0	.4	32
3	.6	2	6	7	13	6	4	.9	.1	0	.3	102
4	.6	2	6	7	13	6	5	.5	0	0	.3	107
5	.6	3	6	7	13	6	4	.5	0	0	.2	200
6	.5	2	6	7	12	6	3	.5	0	0	.75	230
7	.5	3	6	22	12	6	4	.4	0	9	110	145
8	.5	2	6	32	12	6	3	.4	0	2	5	155
9	.5	3	6	27	11	6	2	.4	0	13	135	235
10	.5	2	6	24	10	7	2	.4	0	200	200	86
11	.5	3	6	21	9	6	2	.5	0	110	7	220
12	.5	3	6	20	10	6	2	.4	0	2	2	73
13	.6	3	6	87	9	6	2	.4	0	1	1	46
14	.5	3	6	87	8	6	2	.4	0	1	1	34
15	.5	3	6	46	7	6	2	.3	0	1	490	26
16	.6	3	7	34	8	8	1	.2	0	75	450	24
17	.9	3	7	27	9	12	2	.2	0	2	88	24
18	.9	3	6	24	8	9	2	.2	0	1	66	23
19	.9	4	5	23	8	8	2	.2	0	1	90	18
20	.9	4	5	21	9	7	2	.2	0	1	310	23
21	1	4	5	21	9	7	2	.1	0	1	234	23
22	1	6	5	19	9	8	1	.1	0	1	308	19
23	1	7	5	19	9	7	1	.1	0	5	517	19
24	1	7	5	19	7	4	1	.1	0	2	183	17
25	1	7	5	18	6	5	1	.2	0	1	75	15
26	1	5	6	17	6	4	1	.1	0	1	77	15
27	1	8	6	17	6	4	1	.3	0	2	55	13
28	1	12	6	16	6	5	.7	.5	.2	80	166	10
29	1	8	8	16	-	5	.9	.4	0	1	160	9
30	1	8	10	15	-	4	.7	.2	0	.6	150	10
31	1	-	8	14	-	4	-	.2	-	.5	54	-
Month				Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet				
October.....				23.1	1	0.5	0.75	46				
November.....				127	12	2	4.2	252				
December.....				191	10	5	6.2	379				
Calendar year 1936.....				6,286.0	656	0	17.2	12,470				
January.....				731	87	7	23.6	1,450				
February.....				263	13	6	9.4	522				
March.....				194	12	4	6.3	365				
April.....				64.0	5	.7	2.13	127				
May.....				11.0	1	.1	.35	22				
June.....				.5	.2	0	.02	1.0				
July.....				514.1	200	0	16.6	1,020				
August.....				3,978.6	517	0.2	128	7,890				
September.....				1,997	235	9	66.6	3,960				
Water year 1936-37.....				8,094.3	517	0	22.2	16,050				

Santa Cruz River at Tucson, Ariz.

Location.- Water-stage recorder, lat. 32°13'15", long. 110°59'00", in NE¼ sec. 14, T. 14 S., R. 13 E., at Congress Street bridge, in Tucson. Zero of gage is 2,327.2 feet above mean sea level.

Drainage area.- 2,140 square miles (revised).

Records available.- October 1905 to September 1937.

Extremes.- Maximum discharge during year, 3,280 second-feet July 10 (gage height, 9.10 feet); no flow during greater part of year.

1905-37: Maximum discharge, 11,400 second-feet Sept. 28, 1926 (gage height, 12.2 feet); no flow during greater part of each year.

Remarks.- Records fair except those computed on basis of weather records and partial gage-height record, which are poor. Diversions for irrigation above station.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1				0						0	0	69
2				0						0	0	*10
3				0						0	0	0
4				0						0	0	0
5				0						0	0	0
6				0						0	6	19
7				*1						0	119	149
8				0						18	2	23
9				0						0	2	0
10				0						580	169	0
11				0						*15	8	205
12				0						0	5	*70
13				0						0	54	1
14				0						0	1	0
15				0						0	35	0
16				0						0	80	0
17				0						0	101	0
18				0						0	*30	0
19				0						0	1	0
20				0						0	905	0
21				0						46	273	0
22				0						9	*5	*1
23				0						0	113	0
24				0						0	679	0
25				0						30	*30	*1
26				0						*15	*1	0
27				0						0	0	0
28				0						0	1	0
29				0						145	0	6
30				0						31	10	0
31				0						0	91	-
Month					Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet			
October.....					0	0	0	0	0			
November.....					0	0	0	0	0			
December.....					0	0	0	0	0			
Calendar year 1936.....					4,045	1,500	0	11.1	8,020			
January.....					1	1	0	0	2			
February.....					0	0	0	0	0			
March.....					0	0	0	0	0			
April.....					0	0	0	0	0			
May.....					0	0	0	0	0			
June.....					0	0	0	0	0			
July.....					889	580	0	28.7	1,760			
August.....					2,721	905	0	37.8	5,400			
September.....					554	205	0	18.5	1,100			
Water year 1936-37.....					4,165	905	0	11.4	8,260			

*Computed from weather record and partial gage-height record.

Sonoita Creek near Patagonia, Ariz.

Location.— Water-stage recorder, lat. $31^{\circ}30'00''$, long. $110^{\circ}49'30''$, in sec. 20, T. 22 S., R. 15 E., unsurveyed, in Spanish land grant of San Jose de Sonoita, $5\frac{1}{2}$ miles downstream from Patagonia.

Drainage area.— 210 square miles.

Records available.— June 1930 to December 1933, July 1935 to September 1937.

Extremes.— Maximum discharge during year, 4,030 second-feet Sept. 6 (gage height, 8.70 feet); minimum, 0.5 second-foot June 23.
1930-37: Maximum discharge, about 20,000 second-feet in August 1934 (gage height, 15.2 feet, from floodmarks); minimum, 0.2 second-foot Aug. 9, 1933.

Remarks.— Records fair. Discharge for July 11-23, 25, 26 computed on basis of partial gage-height record and weather records. Minor diversions for irrigation and mining above station.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4	4	6	6	7	6	4	3	1	1	5	4
2	4	4	5	6	7	6	4	3	1	1	5	5
3	4	4	5	6	6	6	4	3	1	1	3	7
4	4	4	5	5	6	6	5	3	1	1	3	42
5	4	4	5	5	7	6	5	3	1	1	2	50
6	4	4	5	5	7	7	5	3	1	1	12	390
7	4	4	4	6	7	7	5	3	1	2	3	25
8	4	4	4	6	61	7	5	3	1	2	4	15
9	4	4	5	6	15	6	5	3	1	26	35	6
10	4	3	4	5	7	5	5	3	1	75	3	6
11	3	3	4	5	6	5	4	2	1	3	3	5
12	3	3	4	5	6	5	4	2	1	2	17	5
13	4	3	4	6	6	5	4	2	1	2	4	4
14	4	3	4	12	6	5	4	2	1	2	6	4
15	4	3	5	9	6	5	4	1	1	2	10	4
16	4	3	5	7	6	6	3	1	1	2	7	4
17	4	3	5	6	6	6	3	1	1	2	9	4
18	4	3	5	6	6	6	3	1	1	1	8	4
19	4	3	5	7	6	6	3	1	1	1	80	4
20	5	3	6	7	6	6	3	1	1	1	100	5
21	4	4	6	7	6	6	3	1	1	1	4	4
22	4	4	6	6	6	6	3	1	1	1	3	4
23	4	4	6	6	6	6	3	1	1	1	3	3
24	5	4	6	6	6	6	3	1	1	5	10	3
25	5	4	6	6	6	6	3	1	1	2	7	3
26	4	4	6	6	6	6	3	1	1	2	6	3
27	4	5	6	6	6	5	3	2	1	125	6	3
28	4	5	6	6	6	5	3	2	1	5	6	3
29	4	5	6	6	—	5	3	2	1	2	5	4
30	5	5	6	6	—	5	3	2	1	5	5	4
31	5	—	6	7	—	5	—	1	—	5	4	—

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	127	5	3	4.1	252
November.....	112	5	2	3.7	222
December.....	161	6	4	5.2	319
Calendar year 1936.....	2,975	504	1	6.1	5,900
January.....	203	14	5	6.5	403
February.....	258	61	6	8.5	472
March.....	178	7	5	5.7	355
April.....	112	5	3	5.7	222
May.....	59	3	1	1.9	117
June.....	30	1	1	1.0	60
July.....	283	125	1	9.1	561
August.....	378	100	2	12.2	750
September.....	627	390	3	20.9	1,240
Water year 1936-37.....	2,508	390	1	6.9	4,970

GILA RIVER BASIN

Rillito Creek near Tucson, Ariz.

Location.- Water-stage recorder, lat. 32°17'45", long. 110°59'00", 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.- 903 square miles.

Records available.- January 1911 to September 1937.

Extremes.- Maximum discharge during year, 2,980 second-feet Aug. 17 (gage height, 7.85 feet); no flow during most of year.
1911-37: Maximum discharge, 24,000 second-feet Sept. 23, 1929; no flow during most of each year.

Remarks.- Records fair except those computed on basis of partial gage height record and weather records, which are poor. Diversions for irrigation above station.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1			0		0	0				0	0	26
2			0		0	0				0	0	0
3			0		0	0				0	0	0
4			0		0	0				0	0	0
5			0		0	0				0	0	3
6			0		1	0				0	0	0
7			0		413	0				0	0	*2
8			0		748	0				0	0	0
9			0		90	0				0	0	0
10			0		5	0				61	0	0
11			0		0	0				*1	0	0
12			0		0	0				0	0	*3
13			0		0	0				0	0	0
14			0		0	0				0	0	0
15			0		47	0				0	*5	0
16			0		115	10				0	120	0
17			0		88	113				0	220	0
18			0		20	49				0	0	0
19			0		6	*20				0	0	0
20			0		0	*1				0	*10	0
21			0		0	0				*5	0	0
22			0		0	0				*1	0	0
23			0		0	0				0	10	0
24			0		0	0				*25	*5	0
25			0		0	0				0	0	0
26			0		0	0				0	0	0
27			0		0	0				0	0	0
28			0		0	0				0	5	0
29			0		-	0				0	10	0
30			*1		-	0				0	0	-
31			0		-	0				0	3	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						0	0	0	0	0		
November.....						0	0	0	0	0		
December.....						1	1	0	0	2		
Calendar year 1936.....						1,805	490	0	4.9	3,580		
January.....						0	0	0	0	0		
February.....						1,533	748	0	54.8	3,040		
March.....						193	113	0	6.2	383		
April.....						0	0	0	0	0		
May.....						0	0	0	0	0		
June.....						0	0	0	0	0		
July.....						93	61	0	3.0	184		
August.....						388	220	0	12.5	770		
September.....						34	26	0	1.1	67		
Water year 1936-37.....						2,242	748	0	6.1	4,450		

*Computed on basis of partial gage-height records and weather records.

Sabino Creek near Tucson, Ariz.

Location.- Water-stage recorder and concrete control, lat. 32°19'00", long. 110°48'45", in E½ sec. 9, T. 13 S., R. 15 E., half a mile north of Coronado National Forest boundary and 12 miles northeast of Tucson.

Drainage area.- 35.0 square miles.

Records available.- June 1932 to September 1937.

Extremes.- Maximum discharge during year, 2,020 second-feet Feb. 7 (gage height, 6.51 feet); no flow during part of July and August, 1932-37; Maximum discharge, that of Feb. 7, 1937; no flow during parts of June, July, and August in several years.

Remarks.- Records excellent. No diversions above station. Slight regulation by several small recreational detention dams constructed to provide recreational lakes.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.09	0.03	2.7	12	12	24	13	3.5	0.05	0.01	0	0.7
2	.07	.03	1.7	11	14	27	12	3.0	.04	.01	0	.4
3	.07	.03	1.3	8.6	20	31	12	2.7	.04	.01	0	.5
4	.06	.03	1.1	7.2	28	26	14	2.3	.04	.01	0	.3
5	.05	.03	1.3	6.8	36	24	14	2.3	.04	.01	0	.2
6	.04	.04	1.2	6.2	46	22	13	2.3	.04	.01	0	1.0
7	.04	.04	.9	8.3	655	25	13	2.3	.05	.01	0	.5
8	.04	.04	.7	8.9	235	28	13	2.3	.02	.01	0	.4
9	.03	.04	1.1	10	96	32	13	2.0	.01	.02	0	.6
10	.04	.03	1.3	10	60	32	13	1.8	.01	.01	0	.6
11	.03	.03	1.1	15	44	32	14	1.7	.01	.01	0	.7
12	.03	.03	1.0	27	39	31	13	1.5	.01	.01	0	3.9
13	.03	.03	.8	39	37	26	13	1.3	.01	.01	0	3.2
14	.03	.03	.6	29	57	26	13	1.1	.01	.01	0	1.5
15	.03	.02	.5	24	89	25	14	.8	.01	.01	0	.9
16	.04	.02	.5	23	160	138	15	.7	.01	0	0	.7
17	.04	.02	.5	20	104	169	14	.5	.01	0	0	.5
18	.03	.02	.4	18	75	79	13	.4	.01	0	0	.4
19	.03	.01	.4	18	65	34	11	.3	.01	0	0	.2
20	.04	.01	.5	16	51	38	10	.3	.01	0	0	.2
21	.04	.01	.4	14	39	31	9.7	.2	.01	0	18	.2
22	.03	.01	.4	12	38	26	8.2	.1	.01	0	6.3	.4
23	.03	.01	.4	12	42	24	7.2	.09	.01	0	2.3	.4
24	.04	.01	.4	10	44	21	7.2	.09	.01	0	1.3	.3
25	.03	.01	.5	10	42	18	6.2	.07	.01	0	1.2	.2
26	.01	.02	.7	9.7	34	16	5.5	.07	.01	0	.8	.2
27	.02	.02	7.8	11	28	14	4.9	.07	.01	0	.6	.1
28	.02	3.2	4.9	13	25	13	4.6	.09	.01	0	.5	.1
29	.02	9.5	13	15	-	13	4.3	.09	.01	0	.5	.09
30	.03	4.6	16	10	-	14	4.0	.06	.01	0	.2	.09
31	.03	-	11	14	-	14	-	.07	-	0	.3	-
Month					Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet			
October.....					1.15	0.09	0.01	0.037	2.3			
November.....					17.95	9.5	.01	.598	36			
December.....					74.1	15	.4	2.39	147			
Calendar year 1936.....					2,087.47	183	0	5.72	4,140			
January.....					454.7	39	6.2	14.7	902			
February.....					2,261	655	12	80.8	4,480			
March.....					1,071	169	15	34.5	2,120			
April.....					321.8	15	4.0	10.7	638			
May.....					34.09	3.5	.05	1.10	68			
June.....					.52	.05	.01	.017	1.0			
July.....					.16	.02	0	.006	.32			
August.....					32.0	19	0	1.05	63			
September.....					19.48	3.9	.09	.649	39			
Water year 1936-37					4,287.95	655	0	11.7	8,500			

GILA RIVER BASIN

180

Salt River near Chrysotile, Ariz.

Location.— Water-stage recorder, lat. 33°48'00", long. 110°29'45", in sec. 5, T. 5 N., R. 18 E., unsurveyed, on San Carlos Indian Reservation, 1,200 feet above bridge on U. S. Highway 60, 5½ miles northeast of Chrysotile, and 8 miles above Cibecue Creek. Zero of gage is 3,381.2 feet above mean sea level.

Drainage area.— 2,830 square miles.

Records available.— September 1924 to September 1937.

Average discharge.— 13 years, 653 second-feet.

Extremes.— Maximum discharge during year, 61,500 second-feet Feb. 7 (gage height, 15.18 feet), from rating curve extended above 20,000 second-feet; minimum, 133 second-feet Aug. 6 (gage height, 1.52 feet).

1924-37: Maximum discharge, that of Feb. 7, 1937; minimum, 95 second-feet July 16, 1934.

Remarks.— Records excellent except those for periods of ice effect or missing gage heights, Nov. 29 to Dec. 9, Dec. 15-19, Jan. 22-30 (computed on basis of records for station near Roosevelt), and those above 10,000 second-feet, which are good. Minor diversions above station.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	230	235	260	262	309	1,130	1,500	1,550	656	246	163	282
2	221	253	270	258	304	1,150	1,790	1,460	604	237	156	201
3	213	278	260	230	294	1,180	2,220	1,450	555	246	153	189
4	209	235	260	174	276	1,300	2,340	1,490	534	261	146	186
5	201	217	250	161	350	1,220	2,220	1,520	507	345	143	228
6	189	217	250	189	656	1,170	2,070	1,540	480	479	140	186
7	185	213	240	239	28,900	1,090	2,250	1,510	467	461	374	327
8	185	213	220	244	18,500	1,240	2,460	1,460	442	296	167	266
9	181	213	215	249	3,610	1,540	2,640	1,430	410	345	206	210
10	178	213	213	221	1,680	1,950	2,930	1,420	392	369	361	193
11	174	209	213	193	1,150	2,330	3,230	1,390	369	495	457	223
12	171	205	205	221	962	2,650	3,780	1,300	345	357	241	241
13	168	205	197	283	832	2,760	4,230	1,250	329	291	370	271
14	164	201	193	350	731	5,470	4,470	1,230	318	251	210	276
15	164	197	210	309	1,640	4,280	4,580	1,240	307	219	266	215
16	161	189	220	267	2,950	3,440	4,950	1,260	291	197	193	193
17	161	189	220	258	3,870	7,740	5,200	1,260	276	186	320	186
18	161	189	210	267	2,620	5,030	4,970	1,210	261	178	261	136
19	164	185	210	244	2,190	3,530	4,660	1,160	251	170	286	182
20	169	189	209	249	1,860	2,760	4,440	1,120	241	167	237	170
21	181	197	205	267	1,450	2,320	3,960	1,060	232	163	215	178
22	189	213	205	220	1,180	2,140	3,570	978	219	167	219	201
23	197	230	201	180	1,130	2,220	3,350	904	219	167	201	186
24	201	253	201	200	1,190	2,270	2,950	840	232	170	232	206
25	217	262	209	210	1,350	1,960	2,490	785	223	193	195	193
26	193	267	249	230	1,500	1,800	2,310	724	232	178	251	178
27	189	267	267	230	1,410	1,650	2,200	671	241	170	232	170
28	181	267	253	240	1,170	1,540	2,050	648	261	220	228	159
29	178	260	423	260	-	1,570	1,860	641	261	230	219	153
30	221	250	417	280	-	1,510	1,700	724	246	186	201	180
31	278	-	267	304	-	1,420	-	731	-	182	215	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						5,873	278	161	189	11,660		
November.....						6,711	278	185	224	13,310		
December.....						7,427	428	193	240	14,730		
Calendar year 1936.....						283,772	8,390	145	775	562,800		
January.....						7,489	350	161	242	14,860		
February.....						24,166	28,900	278	3,006	166,900		
March.....						73,460	7,740	1,090	2,370	145,700		
April.....						93,360	5,200	1,500	3,112	185,200		
May.....						35,956	1,550	641	1,160	71,320		
June.....						10,391	656	219	346	20,610		
July.....						7,822	495	163	252	15,510		
August.....						7,258	457	140	234	14,400		
September.....						6,215	327	153	207	12,350		
Water year 1936-37.....						346,128	28,900	140	948	686,510		

Salt River near Roosevelt, Ariz.

Location.- Water-stage recorder, lat. 33°37'15", long. 110°54'45", in NE¼ sec. 9, T. 3 N., R. 14 E., unsurveyed, 100 feet below bridge on Roosevelt-Young highway, a quarter of a mile below Pinal Creek, 1 mile above diversion dam for power canal, 3 miles above Roosevelt Reservoir, and 13 miles east of Roosevelt. Zero of gage is 2,178.7 feet above mean sea level.

Drainage area.- 4,310 square miles.

Records available.- October 1913 to September 1937.

Extremes.- Maximum discharge during year, 88,000 second-feet Feb. 7 (gage height, 23.4 feet) from rating curve extended above 35,000 second-feet based on slope-area and velocity-area methods; minimum, 150 second-feet Aug. 7 (gage height, 5.44 feet). 1913-37: Maximum discharge, about 100,000 second-feet Jan. 19, 1916; minimum, 91 second-feet June 30, 1934. Minimum discharge known, about 42 second-feet Aug. 5, 1911.

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

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	272	300	324	519	368	1,530	1,740	1,710	710	266	202	283
2	257	414	332	448	363	1,540	1,990	1,600	665	262	178	347
3	253	448	337	386	424	1,560	2,490	1,530	626	259	172	264
4	236	386	328	307	463	1,650	2,820	1,540	596	274	165	211
5	234	324	320	257	556	1,580	2,680	1,590	568	281	162	211
6	227	303	316	246	742	1,490	2,520	1,600	545	371	153	250
7	220	280	311	324	31,000	1,420	2,560	1,620	522	589	172	220
8	213	280	287	395	35,000	1,460	2,790	1,580	492	453	355	326
9	206	284	276	372	6,660	1,730	2,940	1,520	445	375	195	269
10	206	280	253	368	2,990	2,260	3,240	1,490	437	399	358	230
11	206	276	249	341	1,700	2,760	3,470	1,460	416	466	470	255
12	202	263	257	341	1,510	2,990	3,950	1,380	379	462	437	311
13	199	264	246	443	1,320	4,300	4,440	1,350	363	371	355	307
14	202	249	238	562	1,140	9,150	4,940	1,330	351	316	335	301
15	196	249	238	540	3,690	6,230	4,920	1,340	335	277	244	304
16	186	249	249	448	4,150	5,310	5,000	1,290	324	248	274	240
17	182	246	257	419	5,040	14,200	5,600	1,250	308	223	226	218
18	182	246	257	419	3,610	8,870	5,460	1,250	300	206	355	216
19	192	242	253	395	2,820	5,760	5,190	1,240	281	192	281	211
20	196	242	249	386	2,700	3,990	4,820	1,180	266	185	304	208
21	206	242	249	372	2,090	3,340	4,440	1,130	270	185	262	231
22	216	260	246	376	1,660	2,990	4,030	1,050	265	178	339	253
23	231	280	242	307	1,480	2,850	3,700	976	237	301	293	240
24	242	291	238	264	1,480	2,970	3,360	917	241	230	255	230
25	249	316	268	260	1,610	2,710	2,690	844	259	198	255	223
26	257	324	328	295	1,900	2,470	2,590	778	269	216	230	220
27	234	337	386	311	1,950	2,180	2,430	716	262	202	255	206
28	227	345	363	311	1,680	2,070	2,280	700	277	212	241	194
29	220	337	701	316	-	2,010	2,100	695	300	248	241	185
30	567	328	771	332	-	1,920	1,920	690	295	244	395	185
31	445	-	514	350	-	1,790	-	747	-	198	347	-
Month				Second-foot-days		Maximum	Minimum	Mean	Run-off in acre-feet			
October.....				7,563		567	182	238	14,600			
November.....				8,890		448	242	296	17,650			
December.....				9,883		771	238	319	19,600			
Calendar year 1936				326,024		11,300	152	891	646,700			
January.....				11,430		562	246	369	22,670			
February.....				120,296		3,500	363	4,296	238,600			
March.....				107,080		14,200	1,420	3,454	212,400			
April.....				103,200		5,600	1,740	3,440	204,700			
May.....				38,063		1,710	685	1,228	75,600			
June.....				11,674		710	237	366	22,960			
July.....				8,887		589	178	287	17,630			
August.....				8,506		470	153	274	16,870			
September.....				7,348		347	185	245	14,570			
Water year 1936-37				442,520		35,000	153	1,212	877,730			

Reservoir system on Salt River at and below Roosevelt Dam, Ariz.

Location.- This system is comprised of four storage reservoirs created by four separate dams in Salt River: Roosevelt Lake, formed by Roosevelt Dam in sec. 20, T. 4 N., R. 12 E., unsurveyed; Apache Lake, formed by Horse Mesa Dam 17 miles below Roosevelt Dam; Canyon Lake, formed by Mormon Flat Dam 26 miles below Roosevelt Dam; Stewart Mountain Lake, formed by Stewart Mountain Dam 36 miles below Roosevelt Dam.

Drainage area.- 6,200 square miles at Stewart Mountain Dam.

Records available.- October 1934 to September 1937.

Extremes.- Maximum daily contents for system during year, 1,312,200 acre-feet May 3; minimum daily contents, 404,900 acre-feet Dec. 25.

Remarks.- Total storage capacity of the four reservoirs is 1,790,000 acre-feet, divided as follows: Roosevelt Lake, 1,412,000 acre-feet; Apache Lake, 245,000 acre-feet; Canyon Lake, 63,200 acre-feet; Stewart Mountain Lake, 70,000 acre-feet. Water from this system is used for irrigation of Salt River Valley near Phoenix. The four dams forming these reservoirs completely develop the fall in Salt River between Roosevelt Lake and Stewart Mountain Dam. Records of daily contents furnished by Salt River Valley Water Users' Association.

Daily contents, in thousands of acre-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	471.2	429.3	407.9	422.1	463.3	839.9	1,159.2	1,311.5	1,282.6	1,161.0	1,025.0	873.5
2	468.0	430.6	408.0	425.2	464.2	842.8	1,163.1	1,311.8	1,259.8	1,156.6	1,020.6	868.7
3	465.2	431.4	408.0	427.0	464.6	846.8	1,167.3	1,312.2	1,257.2	1,152.3	1,015.9	864.5
4	465.6	432.3	408.3	428.5	464.9	850.4	1,172.0	1,311.6	1,254.7	1,147.3	1,009.2	861.2
5	461.9	432.4	408.6	429.5	465.5	855.7	1,177.9	1,309.7	1,252.1	1,142.0	1,005.4	857.9
6	459.8	431.6	409.4	430.5	466.3	857.1	1,183.3	1,308.2	1,250.2	1,137.7	999.8	854.3
7	457.4	430.0	409.8	431.7	470.1	860.3	1,188.3	1,307.2	1,248.1	1,133.9	994.4	850.6
8	454.9	429.2	410.2	433.1	603.5	863.5	1,193.2	1,306.0	1,246.0	1,129.9	989.0	846.3
9	452.7	428.3	410.4	434.9	685.6	866.9	1,198.4	1,304.9	1,243.0	1,125.6	984.3	841.0
10	450.8	426.7	410.4	437.0	709.1	870.7	1,203.8	1,304.0	1,239.6	1,122.0	979.7	835.7
11	448.7	425.2	410.2	436.5	718.2	875.2	1,209.8	1,302.9	1,236.0	1,119.9	972.5	830.2
12	447.3	423.4	410.0	439.8	723.8	880.5	1,216.6	1,301.6	1,232.7	1,118.0	968.1	824.4
13	445.5	421.5	409.7	441.4	727.8	886.9	1,224.1	1,300.0	1,229.6	1,115.6	963.7	818.8
14	443.6	420.0	409.6	443.5	731.8	899.5	1,232.3	1,299.3	1,226.6	1,112.5	958.3	813.0
15	441.6	418.4	409.6	445.7	740.7	936.4	1,240.9	1,297.8	1,223.3	1,109.0	952.9	807.1
16	439.6	417.7	409.7	447.8	754.8	954.2	1,249.3	1,296.0	1,219.4	1,104.7	946.5	801.2
17	438.6	416.7	409.4	450.0	767.8	983.4	1,257.3	1,294.3	1,215.5	1,100.2	941.0	795.0
18	437.7	415.1	409.0	450.8	780.5	1,034.6	1,266.6	1,293.3	1,211.2	1,095.1	936.1	788.7
19	436.9	413.2	408.5	452.1	790.4	1,064.6	1,275.1	1,291.8	1,207.1	1,090.4	931.6	782.9
20	436.3	411.2	407.9	453.4	798.2	1,082.4	1,282.6	1,290.2	1,203.7	1,085.6	927.1	776.9
21	435.5	410.6	407.4	453.8	804.9	1,095.0	1,288.8	1,287.9	1,200.3	1,080.3	922.6	771.7
22	434.3	410.8	406.7	455.1	810.0	1,103.8	1,293.6	1,285.2	1,197.0	1,075.2	918.2	768.3
23	433.1	410.8	405.7	455.9	814.1	1,110.8	1,297.3	1,282.9	1,193.1	1,070.0	913.9	765.4
24	432.2	410.5	405.1	456.6	817.6	1,117.6	1,300.4	1,280.9	1,189.0	1,064.8	910.2	762.7
25	431.6	409.6	404.9	457.7	821.1	1,124.4	1,303.7	1,279.0	1,184.5	1,059.9	905.7	760.3
26	431.3	408.3	406.0	458.4	825.4	1,103.6	1,306.5	1,276.3	1,179.8	1,054.8	900.8	757.9
27	431.0	407.5	407.2	459.1	829.8	1,136.0	1,307.9	1,272.4	1,176.3	1,049.7	895.6	755.8
28	430.1	407.2	408.3	459.8	834.2	1,141.6	1,308.4	1,269.1	1,172.4	1,044.3	890.3	753.3
29	428.9	407.2	410.9	460.7	-	1,146.7	1,309.5	1,267.3	1,168.6	1,039.2	885.7	750.3
30	428.0	407.5	415.0	461.4	-	1,150.9	1,311.0	1,265.9	1,165.2	1,034.5	881.6	746.9
31	428.4	-	417.9	462.4	-	1,155.2	-	1,264.6	-	1,029.3	878.4	-

Salt River at Stewart Mountain Dam, Ariz.

Location.- Water-stage recorder, lat. 33°35'15", long. 111°32'00", in SE $\frac{1}{4}$ sec. 33, T. 3 N., R. 8 E., unsurveyed, in Tonto National Forest, three-quarters of a mile below Stewart Mountain Dam and 9 miles above Verde River. Zero of gage is 1,396.87 feet above mean sea level (from Salt River Valley Water Users' Association benchmark).

Drainage area.- 6,200 square miles.

Records available.- October 1934 to September 1937.

Extremes.- Maximum discharge during year, 3,450 second-feet Sept. 16, minimum, 15 second-feet Dec. 6.

1934-37: Maximum discharge, that of Sept. 16, 1937; minimum, 3 second-feet Jan. 8-20, 1935.

Remarks.- Records excellent. Discharge regulated at Stewart Mountain Dam and at three other dams, as described under "Reservoir system on Salt River at and below Roosevelt Dam, Ariz." Entire flow is diverted for irrigation by Salt River Valley Water Users' Association at Granite Reef Dam, 13 miles downstream.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,790	77	246	19	114	16	87	1,350	1,760	2,470	2,240	2,730
2	1,680	110	330	19	412	16	150	1,540	1,700	2,550	2,420	2,440
3	1,370	183	271	19	522	33	48	1,900	1,840	2,560	2,580	2,020
4	1,350	108	251	19	471	66	46	2,400	1,730	2,490	2,550	1,890
5	1,310	780	105	19	522	16	46	2,520	1,650	2,590	2,830	1,760
6	1,440	880	25	19	395	16	52	2,110	1,670	2,550	2,820	2,130
7	1,460	519	132	80	23	16	193	2,160	1,770	2,460	2,740	2,520
8	1,590	832	230	16	16	16	58	2,090	1,870	2,710	2,520	2,670
9	1,550	846	291	17	16	16	112	1,880	2,070	2,430	2,670	2,850
10	1,220	955	356	17	16	16	140	1,930	2,150	2,510	2,840	3,060
11	1,010	1,150	412	17	16	16	60	1,980	2,170	1,870	3,000	3,130
12	1,210	1,240	338	17	16	18	37	1,980	1,930	1,710	3,010	3,170
13	1,540	1,090	352	17	16	17	107	2,010	1,830	1,910	3,000	3,200
14	1,220	929	300	17	16	16	417	2,050	1,970	2,140	2,820	3,240
15	1,120	661	264	17	16	16	773	2,030	2,190	2,470	2,900	3,320
16	992	722	312	17	16	22	973	1,840	2,350	2,590	2,940	3,340
17	716	1,020	417	17	16	19	799	1,730	2,500	2,510	3,040	3,400
18	592	1,190	595	17	16	16	873	1,870	2,340	2,440	2,880	3,350
19	632	1,010	559	18	16	16	1,260	2,070	2,050	2,450	2,780	3,080
20	726	601	492	18	16	16	1,530	2,240	1,730	2,800	2,640	2,960
21	826	296	538	18	16	16	1,700	2,240	1,910	2,890	2,530	2,530
22	926	265	722	150	16	35	1,830	2,240	2,260	2,890	2,300	1,950
23	728	598	683	18	16	24	1,840	1,920	2,380	2,880	2,540	1,710
24	565	755	314	17	16	20	1,600	1,850	2,380	2,840	2,800	1,360
25	325	873	65	17	16	20	1,490	2,110	2,360	2,640	2,870	1,470
26	461	635	54	17	16	19	1,710	2,110	2,350	2,790	2,840	1,380
27	679	565	125	17	16	19	1,660	2,040	2,160	2,760	2,800	1,520
28	846	480	271	17	15	19	1,620	2,000	2,310	2,720	2,790	1,700
29	880	166	25	17	-	19	1,450	1,650	2,140	2,650	2,570	1,850
30	543	180	19	17	-	19	1,480	1,280	2,270	2,510	2,640	1,720
31	150	-	19	22	-	18	-	1,370	-	2,430	2,850	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						30,749	1,790	150	992	60,930		
November.....						20,067	1,240	77	669	39,820		
December.....						9,103	728	19	294	18,060		
Calendar year 1936.....						368,855	2,660	18	1,084	787,200		
January.....						745	150	17	24.0	1,480		
February.....						2,795	522	16	99.8	5,540		
March.....						627	66	16	20.2	1,240		
April.....						24,196	1,840	46	807	47,990		
May.....						60,540	2,520	1,280	1,953	120,100		
June.....						81,360	2,500	1,650	2,062	122,700		
July.....						77,810	2,890	1,670	2,510	154,300		
August.....						84,850	3,040	2,240	2,737	168,300		
September.....						73,540	3,400	1,360	2,451	145,900		
Water year 1936-37.....						446,891	3,400	16	1,224	886,400		

GILA RIVER BASIN

Tonto Creek near Roosevelt, Ariz.

Location.- Staff gages, about lat. 33°52', long. 111°18', at several sites in sec. 14, T. 8 N., R. 10 E., 7 miles above Roosevelt Reservoir and 17 miles northwest of Roosevelt. Site changed from time to time because of changes in channel.

Drainage area.- 813 square miles.

Records available.- October 1913 to September 1937.

Extremes.- Maximum discharge during year not determined; minimum discharge observed 1 second-foot Oct. 16-19.
1913-1937: Maximum discharge not determined (estimated maxima previously published probably subject to considerable error); probably no flow at times during the drier years.

Remarks.- Records for low and uniform flow, fair; those for high and fluctuating flow, poor. Staff gage read to tenths or half-tenths once daily. Discharge during flood periods, Feb. 7-20, Mar. 14-20, not determined. Minor diversions for irrigation above station. Gage readings furnished by Salt River Valley Water Users' Association.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	9	50	15	261	99	400	315	70	23	4	3	7
2	8	64	15	395	124	400	315	66	22	4	3	9
3	7	93	15	278	133	400	315	63	21	4	2	9
4	6	70	15	158	217	370	315	60	20	4	2	9
5	5	38	15	133	391	340	295	58	18	4	2	6
6	4	29	15	133	645	310	240	56	17	4	2	6
7	4	24	15	147	-	290	240	54	16	4	2	6
8	4	23	15	281	-	260	240	52	15	97	33	6
9	4	19	15	261	-	240	240	50	14	182	14	6
10	3	16	15	261	-	250	240	48	14	107	8	6
11	3	15	14	295	-	270	240	46	13	129	6	6
12	3	15	14	368	-	290	240	44	12	141	5	6
13	3	14	13	491	-	320	240	41	11	74	5	5
14	3	13	12	418	-	-	230	39	10	54	5	5
15	3	13	12	346	-	-	220	36	10	41	3	5
16	1	12	13	299	-	-	200	34	10	35	11	5
17	1	12	13	251	-	-	190	32	10	23	50	5
18	1	13	13	226	-	-	180	30	9	19	22	4
19	1	13	10	195	-	-	170	29	9	15	27	4
20	3	13	10	187	-	-	160	27	8	10	17	4
21	3	11	13	162	500	500	150	26	8	9	17	4
22	4	11	12	165	400	400	140	24	8	8	13	3
23	4	14	13	84	400	400	130	23	7	7	42	9
24	3	15	13	108	400	400	120	22	7	6	38	22
25	3	15	13	100	400	400	110	21	7	5	25	18
26	3	15	46	94	400	400	100	21	6	5	17	10
27	3	15	67	93	400	405	90	21	6	4	14	10
28	3	15	61	87	500	360	85	21	5	4	11	8
29	3	15	529	95	-	360	80	20	5	4	9	6
30	70	15	346	103	-	315	75	29	4	3	9	6
31	7	-	268	97	-	315	-	23	-	3	9	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						182	70	1	5.9	361		
November.....						700	93	11	23.3	1,390		
December.....						1,655	529	10	53.4	3,280		
Calendar year 1936.....						28,750	1,850	1	78.6	57,030		
January.....						5,573	491	84	212	13,040		
February.....						-	-	99	-	-		
March.....						-	-	240	-	-		
April.....						5,905	315	75	197	11,710		
May.....						1,186	70	20	38.3	2,350		
June.....						345	23	4	11.5	684		
July.....						1,013	182	3	32.7	2,010		
August.....						426	50	2	13.7	845		
September.....						215	22	3	7.2	426		

Verde River near Camp Verde, Ariz.

Location.— Water-stage recorder, lat. 34°27'00", long. 111°47'15", in sec. 1, T. 12 N., R. 5 E., unsurveyed, a short distance below Camp Verde dam site, about 750 feet above Chasm Creek and 9 miles southeast of Camp Verde. Zero of gage is 2,874.8 feet above mean sea level (from Bureau of Reclamation benchmark).

Drainage area.— 5,010 square miles.

Records available.— April 1934 to September 1937. December 1912 to March 1920, at station on Verde River at Camp Verde, Ariz., 15 miles upstream.

Extremes.— Maximum discharge during year, 41,700 second-feet Feb. 7 (gage height, 19.9 feet), from rating curve extended above 25,000 second-feet by velocity-area method; minimum, 63 second-feet July 25.

1912-20, 1934-37: Maximum discharge, that of Feb. 7, 1937; minimum, 31 second-feet July 28 and 29, 1914.

Remarks.— Records excellent. Minor diversions for irrigation above station.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	147	318	209	288	225	930	1,450	152	120	196	80	126
2	150	638	206	270	222	1,040	2,260	141	120	179	78	180
3	147	807	203	255	225	1,540	2,460	137	120	163	83	226
4	147	374	209	238	238	1,460	1,840	133	126	156	83	167
5	150	290	215	234	288	1,290	1,340	126	126	159	83	163
6	145	252	218	243	451	1,600	1,500	116	130	281	75	159
7	150	241	215	288	24,700	2,240	2,250	116	126	311	83	152
8	147	232	215	292	20,100	2,800	2,100	110	128	385	91	141
9	147	213	212	273	6,080	2,910	2,030	107	116	257	86	137
10	145	215	212	262	3,020	2,940	2,130	107	113	235	91	130
11	145	212	206	248	2,000	3,350	2,250	100	110	239	91	126
12	147	206	206	241	1,490	3,360	2,140	100	107	230	281	123
13	145	200	206	255	1,160	3,220	1,850	97	97	213	104	120
14	137	203	203	259	4,590	7,210	1,550	94	94	192	86	113
15	132	203	203	259	19,100	3,310	1,340	94	91	159	94	116
16	132	203	209	252	10,500	3,360	1,320	94	89	137	89	104
17	134	203	209	248	6,470	13,700	1,160	94	86	123	132	100
18	142	203	209	252	4,470	9,170	875	89	83	110	213	107
19	164	196	206	248	3,860	4,220	666	89	89	100	159	110
20	200	196	209	252	2,530	3,360	554	94	83	89	152	110
21	218	196	206	245	1,570	1,950	443	94	83	78	137	219
22	206	203	200	232	1,240	1,640	344	104	80	70	141	280
23	200	206	200	228	1,240	1,790	295	107	83	97	130	217
24	200	203	196	225	1,640	1,750	272	104	86	75	123	184
25	203	206	203	228	2,150	1,480	235	107	91	65	272	156
26	193	203	225	232	1,700	1,180	204	104	89	80	200	133
27	196	200	218	228	1,080	1,210	175	104	91	78	171	123
28	190	200	232	225	862	1,180	163	107	97	70	148	126
29	181	206	292	228	-	1,180	159	116	190	70	133	130
30	280	206	284	228	-	1,460	156	123	244	72	133	156
31	391	-	262	228	-	1,230	-	120	-	75	130	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						5,411	391	132	175	10,730		
November.....						7,439	638	196	248	14,760		
December.....						6,698	292	195	216	13,290		
Calendar year 1936.....						105,591	3,310	56	288	209,400		
January.....						7,689	292	225	248	15,250		
February.....						123,201	24,700	222	4,400	244,400		
March.....						89,060	13,700	930	2,873	176,600		
April.....						35,581	2,460	156	1,186	70,570		
May.....						3,383	152	89	109	6,710		
June.....						3,286	244	80	110	6,520		
July.....						4,744	385	65	153	9,410		
August.....						3,952	281	75	127	7,840		
September.....						4,434	290	100	148	8,790		
Water year 1936-37.....						294,878	24,700	65	608	584,900		

Verde River below East Verde River, near Pine, Ariz.

Location.— Water-stage recorder, lat. $34^{\circ}16'00''$, long. $111^{\circ}40'30''$, in sec. 30, T. 11 N., R. 7 E., unsurveyed, $2\frac{1}{2}$ miles below East Verde River and 15 miles southwest of Pine. Zero of gage is 2,402.1 feet above mean sea level (from Salt River Valley Water Users' Association benchmark).

Drainage area.— 5,650 square miles.

Records available.— June 1934 to September 1937.

Extremes.— Maximum discharge during year, 68,600 second-feet Feb. 7 (gage height, 20.6 feet), from rating curve extended above 50,000 second-feet by velocity-area method; minimum, 69 second-feet July 28 (gage height, 6.01 feet), caused by power regulation of Fossil Creek.

1934-37: Maximum discharge, that of Feb. 7, 1937; minimum, 68 second-feet June 21, 1936.

Remarks.— Records excellent. Minor diversions for irrigation above station. Some regulation by power plant 9 miles upstream using water from Fossil Creek.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	190	406	255	406	300	1,050	1,470	223	178	246	109	163
2	197	530	255	374	324	1,100	2,250	230	174	226	112	174
3	197	714	255	338	348	1,530	2,710	208	174	208	117	259
4	182	486	264	319	390	1,720	2,230	216	174	200	117	228
5	197	374	268	310	492	1,420	1,570	204	174	204	117	196
6	197	300	268	310	1,040	1,740	1,570	192	170	212	114	216
7	190	310	268	353	41,300	2,540	2,260	188	167	355	125	200
8	192	286	268	394	26,600	2,960	2,300	179	174	391	150	188
9	192	273	264	374	3,230	3,090	2,130	163	170	333	134	178
10	188	273	264	328	3,880	3,320	2,370	163	160	277	128	172
11	174	264	255	333	2,330	3,580	2,400	163	153	307	130	167
12	178	260	255	333	1,740	3,530	2,350	167	140	292	215	169
13	195	258	242	353	1,380	3,210	2,080	160	147	272	257	160
14	184	255	346	364	5,360	8,540	1,750	156	128	241	136	156
15	174	251	251	348	22,500	3,990	1,520	156	137	208	119	147
16	167	255	264	333	12,800	6,440	1,460	140	128	185	140	147
17	170	260	260	328	7,750	19,300	1,370	137	125	167	144	140
18	178	260	260	328	5,320	11,700	1,060	144	122	156	268	146
19	218	255	260	328	4,420	5,780	835	140	128	147	244	134
20	226	246	246	324	3,070	4,130	686	140	125	134	212	140
21	264	243	242	324	1,950	2,560	578	144	117	128	185	174
22	260	242	255	305	1,470	2,010	467	150	120	117	181	297
23	242	255	255	295	1,340	2,030	389	144	119	112	185	297
24	242	246	251	286	1,720	2,090	366	156	120	128	178	235
25	234	246	260	291	2,300	1,800	322	160	122	106	239	200
26	242	245	273	291	2,090	1,520	277	163	127	101	259	174
27	238	246	277	291	1,360	1,400	264	160	127	120	224	174
28	238	251	282	291	1,080	1,290	246	156	125	117	204	165
29	234	246	412	295	-	1,410	236	167	216	112	181	162
30	467	251	417	295	-	1,660	232	167	264	109	176	181
31	480	-	400	286	-	1,430	-	174	-	109	170	-
Month												
	Second-foot-days				Maximum		Minimum		Mean		Run-off in acre-feet	
October.....	6,947				487		167		224		13,780	
November.....	8,968				714		242		300		17,830	
December.....	8,492				417		242		274		16,840	
Calendar year 1936.....	134,718				5,240		82		368		267,200	
January.....	10,118				406		286		326		20,070	
February.....	162,884				41,300		300		5,817		323,100	
March.....	109,670				19,300		1,050		3,538		217,500	
April.....	39,798				2,710		232		1,327		76,940	
May.....	5,204				228		137		168		10,320	
June.....	4,505				264		117		150		8,940	
July.....	6,042				385		101		195		11,980	
August.....	5,270				268		109		170		10,450	
September.....	5,540				297		134		185		10,990	
Water year 1936-37.....	373,452				41,300		101		1,023		740,700	

Verde River above Camp Creek, near McDowell, Ariz.

Location.- Water-stage recorder, lat. 33°46'45", long. 111°39'15", in sec. 16, T. 5 N., R. 7 E., unsurveyed, half a mile above Camp Creek, 4½ miles below Bartlett Dam, and 10 miles north of McDowell. Zero of gage is 1,530.4 feet above mean sea level (from Bureau of Reclamation benchmark).

Drainage area.- 6,230 square miles.

Records available.- February 1925 to September 1937. August to September 1889, April 1897 to November 1899, and January 1901 to February 1925, at site three-quarters of a mile above mouth of Verde River.

Extremes.- Maximum discharge during year, 63,000 second-feet Feb. 7 (gage height, 18.8 feet); minimum, 73 second-feet June 16, caused by temporary regulation at Bartlett dam. 1897-1937: Maximum discharge, 96,000 second-feet (estimated) Nov. 27, 1905; minimum, 32 second-feet July 19 and 20, 1904.

Remarks.- Records excellent. Minor diversions above station. Some temporary regulation of low flow by construction of Bartlett dam.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	194	494	251	916	357	1,200	1,490	289	155	219	94	162
2	191	421	248	571	357	1,210	1,720	279	174	248	92	167
3	191	565	251	479	365	1,300	2,670	266	167	222	95	165
4	194	668	254	425	438	1,820	2,710	236	177	211	100	202
5	191	454	258	395	495	1,610	2,140	233	169	205	100	225
6	194	391	262	386	645	1,470	1,640	236	162	177	98	208
7	197	329	272	434	27,100	1,830	1,840	225	160	205	100	236
8	185	333	269	566	39,200	2,600	2,400	211	155	295	101	213
9	188	302	269	592	12,000	3,060	2,130	205	157	539	112	200
10	188	284	272	527	5,530	3,160	2,260	202	162	428	121	187
11	188	276	276	498	3,400	3,370	2,360	184	180	446	113	167
12	166	276	272	571	2,350	3,870	2,410	184	155	354	112	160
13	166	269	269	628	1,910	3,870	2,270	179	161	340	181	182
14	182	262	262	592	1,610	8,210	1,990	187	139	302	280	174
15	175	258	262	532	21,700	5,900	1,710	179	136	266	179	163
16	160	248	265	498	17,800	4,050	1,540	169	123	236	132	147
17	167	248	265	466	10,000	24,200	1,530	172	115	195	128	140
18	160	244	276	421	6,360	16,500	1,320	155	124	195	130	136
19	166	244	269	416	5,120	9,870	1,070	155	124	192	211	134
20	204	240	269	412	4,220	5,920	983	153	123	174	248	132
21	220	248	262	408	2,800	3,490	760	149	117	162	216	167
22	251	251	258	399	1,930	2,700	654	149	115	134	269	233
23	254	248	269	374	1,730	2,380	548	153	113	124	195	269
24	244	251	265	357	1,700	2,150	481	155	113	100	222	292
25	244	251	269	349	2,000	2,210	438	149	113	112	187	248
26	230	248	280	345	2,630	1,960	399	160	113	113	187	213
27	234	251	284	341	2,010	1,580	343	140	126	100	257	187
28	230	248	291	337	1,540	1,560	322	157	123	101	225	172
29	227	258	472	341	-	1,570	302	169	124	110	213	169
30	235	254	561	357	-	1,590	292	172	219	106	189	165
31	478	-	508	370	-	1,760	-	169	-	96	179	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	6,544	478	157	211	12,980
November.....	9,364	668	240	312	18,570
December.....	9,010	561	248	291	17,870
Calendar year 1936.....	146,417	4,900	64	400	290,400
January.....	14,303	916	337	461	28,370
February.....	177,320	39,200	357	6,533	351,700
March.....	124,370	24,200	1,200	4,076	250,700
April.....	42,612	2,710	292	1,420	84,520
May.....	5,821	289	140	188	11,550
June.....	4,261	219	113	142	8,460
July.....	6,707	539	96	216	13,300
August.....	5,066	280	92	163	10,060
September.....	5,605	292	152	187	11,120
Water year 1936-37.....	412,984	39,200	92	1,131	819,200

Granite Creek near Prescott, Ariz.

Location.- Water-stage recorder, lat. 34°33'30", long. 112°26'30", in SW $\frac{1}{4}$ sec. 26, T. 14 N., R. 2 W., unsurveyed, at highway bridge 2 miles north of Prescott and $\frac{1}{2}$ miles above Willow Creek. Zero of gage is 5,207.3 feet above mean sea level (from Arizona Highway Department benchmark).

Drainage area.- 39 square miles.

Records available.- July 1932 to September 1937.

Extremes.- Maximum discharge during year, 2,900 second-feet Feb. 7 (gage height, 9.20 feet), from rating curve extended above 1,500 second-feet; no flow on many days.

1932-37: Maximum discharge, that of Feb. 7, 1937; no flow for part of each year.

Remarks.- Records good. Discharge Jan. 4 to Feb. 2 computed on basis of one discharge measurement, weather records, and information from local residents. City of Prescott takes water for municipal supply from storage reservoirs on tributaries. Water stored for irrigation in reservoir 3 miles below station, (capacity, about 4,000 acre-feet).

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.1	0.3	0	0.1	10	20	18	1.7	0.3	0.2	0.1	0.1
2	.1	1.1	0	.6	15	20	17	1.5	.1	.2	.1	.1
3	.1	.1	0	.5	15	22	18	1.5	.5	0	.1	.1
4	.1	.1	0	.5	17	19	17	1.4	.7	.2	.1	.1
5	.1	.1	0	.5	25	19	15	1.4	.6	.7	.1	.1
6	.1	.1	0	1	325	19	13	1.2	.5	2.0	.2	.1
7	.1	0	0	1	1,450	20	11	1.2	.1	.5	.3	.1
8	.1	.1	0	1	221	21	10	1.0	.6	.4	.3	.2
9	0	0	0	1	102	24	10	.9	.7	.3	.2	.2
10	0	.1	0	1	60	24	9.2	.9	.7	.3	.1	.2
11	0	0	0	1	49	25	8.6	.6	.6	.3	.1	.2
12	0	0	0	1	40	26	7.2	.4	.6	.2	.1	.1
13	0	.1	0	1	36	54	6.4	.4	.4	.2	.1	.1
14	0	.1	0	1	897	63	6.8	.3	.4	.2	100	.1
15	0	0	0	1	380	54	5.6	.2	0	.1	1	.1
16	0	0	0	1	159	241	5.3	.1	.4	0	.2	.1
17	0	0	0	1	111	307	5.3	.2	.4	.1	8.1	.1
18	.1	0	0	1	87	190	5.3	.1	.4	.1	.4	.1
19	4.8	0	0	.5	76	118	4.2	.1	.2	.2	.4	.1
20	.1	0	0	.5	57	80	3.9	.1	0	.5	.3	.1
21	.1	0	0	.5	46	60	4.2	.1	.3	.3	.3	.1
22	.1	0	0	.5	41	54	4.2	.1	.4	.4	.4	0
23	.1	0	0	.5	40	54	5.3	.3	.4	.3	.2	0
24	.1	0	0	.5	33	43	4.2	1.8	.4	.2	.2	0
25	.1	0	0	1	36	41	3.6	15	.4	.6	.2	0
26	.1	0	0	2	31	31	3.3	10	.4	.5	.2	.1
27	.1	0	0	2	24	28	3.1	.6	.3	.8	.2	.1
28	0	0	3.6	3	21	29	2.8	.4	.3	.4	.2	.1
29	0	0	7.6	4	-	25	2.4	.3	.3	.6	.2	0
30	.2	0	1.3	4	-	24	2.2	.2	.3	.1	.2	0
31	.1	-	.2	5	-	24	-	.2	-	.1	.2	-
Month					Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet			
October.....					6.8	4.3	0	0.22	13			
November.....					2.2	1.1	0	.07	4.4			
December.....					12.7	7.6	0	.41	25			
Calendar year 1936.....					465.9	34	0	1.27	924			
January.....					39.2	5	.1	1.26	78			
February.....					4,454	1,450	10	159	8,830			
March.....					1,779	307	19	57.4	3,550			
April.....					232.1	16	2.2	7.74	460			
May.....					44.2	15	.1	1.43	88			
June.....					11.7	.7	0	.39	23			
July.....					10.8	2.0	0	.35	21			
August.....					114.3	100	.1	3.70	228			
September.....					2.8	.2	0	.09	5.6			
Water year 1936-37.....					5,710.3	1,450	0	18.4	13,310			

Willow Creek near Prescott, Ariz.

Location.- Water-stage recorder, lat. $34^{\circ}36'30''$, long. $112^{\circ}25'30''$, in SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 12, T. 14 N., R. 2 W., three-eighths of a mile above mouth and 5 miles north of Prescott. Zero of gage is 5,031.0 feet above mean sea level (from Arizona Highway Department benchmark).

Drainage area.- 22 square miles.

Records available.- June 1932 to March 1937 (discontinued).

Extremes.- 1932-35, unregulated flow: Maximum discharge, about 1,300 second-feet Aug. 25, 1935 (gage height, 8.6 feet); minimum, 0.02 second-foot Aug. 10, 1935.

Remarks.- Records fair. Discharge Jan. 3 to Feb. 2 computed on basis of one discharge measurement and weather records. Discharge since October 1935 regulated at Willow Creek Reservoir (capacity, 8,000 acre-feet), about a mile above station. Reservoir filled about Mar. 21, 1937. No diversions above station.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.1	0.2	0.2	0.2	0.2	0.1						
2	.1	.2	.2	.3	.2	.1						
3	.1	.2	.2	.2	.3	.1						
4	.1	.2	.2	.2	.3	.1						
5	.1	.2	.2	.2	.3	.1						
6	.1	.2	.2	.2	.9	.1						
7	.1	.2	.2	.2	3.3	.1						
8	.1	.2	.2	.2	.7	.1						
9	.2	.2	.2	.2	.6	.1						
10	.2	.2	.2	.2	.6	.1						
11	.2	.2	.2	.2	.5	.1						
12	.2	.2	.2	.2	.5	.1						
13	.2	.2	.2	.2	.6	.1						
14	.2	.2	.2	.2	.9	.1						
15	.2	.2	.2	.2	.7	.1						
16	.2	.2	.2	.2	.6	.9						
17	.2	.1	.2	.2	.6	.3						
18	.2	.2	.2	.2	.6	.5						
19	.3	.1	.2	.2	.6	.2						
20	.3	.1	.2	.2	.4	.2						
21	.2	.1	.2	.2	.2	1.4						
22	.3	.1	.2	.2	.2	13						
23	.2	.1	.2	.2	.2	8.8						
24	.2	.2	.2	.2	.1	9.0						
25	.2	.2	.2	.2	.2	12						
26	.2	.2	.2	.2	.2	8.3						
27	.2	.2	.2	.2	.1	8.7						
28	.2	.2	.2	.2	.1	12						
29	.2	.2	.3	.2	-	11						
30	.2	.2	.2	.2	-	7.1						
31	.2	-	.2	.2	-	6.8						
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						5.6	0.3	0.1	0.18	11		
November.....						5.4	.2	.1	.18	11		
December.....						6.3	.3	.2	.20	12		
Calendar year 1936.....						106.9	1.0	0	.29	212		
January.....						6.3	.3	.2	.20	12		
February.....						14.7	3.3	.1	.52	29		
March.....						101.7	13	.1	3.28	202		
April.....						-	-	-	-	-		
May.....						-	-	-	-	-		
June.....						-	-	-	-	-		
July.....						-	-	-	-	-		
August.....						-	-	-	-	-		
September.....						-	-	-	-	-		
The period										277		

Gillespie Canal at Gillespie Dam, Ariz.

Location.- Water-stage recorder, lat. $33^{\circ}13'45''$, long. $112^{\circ}45'30''$, in $SE\frac{1}{4}$ sec. 28, T. 2 S., R. 5 W., 200 feet below head gates at Gillespie Dam. Zero of gage is 744.2 feet above mean sea level (from Gillespie Land and Irrigation Co. benchmark).

Records available.- May 1935 to September 1937.

Remarks.- Records good. Canal diverts from left side of Gila River at Gillespie Dam. Water used for irrigation near Gila Bend.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	42	56	77	199	180	192	176	189	120	57	38	91
2	41	59	80	161	180	192	196	198	122	58	39	90
3	40	50	86	158	176	191	193	185	111	60	38	110
4	37	3	93	192	174	188	192	187	99	59	38	89
5	37	39	106	187	170	175	198	182	95	60	37	72
6	37	50	101	188	170	178	200	177	94	64	36	83
7	37	52	97	187	175	185	198	170	91	61	37	74
8	34	53	104	183	143	187	196	162	88	62	37	126
9	34	54	104	182	61	188	195	169	84	66	38	132
10	35	56	97	182	92	192	191	162	85	118	36	132
11	34	55	97	178	122	193	188	160	86	148	37	81
12	32	58	99	174	147	196	194	155	87	138	31	71
13	30	58	94	177	166	199	200	150	88	118	26	68
14	29	55	99	175	165	202	222	146	88	104	28	66
15	28	57	99	175	170	199	221	142	85	92	44	65
16	30	60	106	175	174	198	221	135	82	93	39	63
17	33	59	101	174	167	149	220	130	81	78	35	62
18	35	60	95	174	171	174	216	127	77	75	36	62
19	36	64	102	174	178	151	213	122	74	74	36	61
20	38	60	108	175	178	195	206	121	75	68	36	61
21	37	61	108	176	181	180	198	120	74	63	35	69
22	39	61	108	171	187	174	196	122	71	57	151	95
23	44	65	101	169	198	196	200	121	68	48	209	76
24	40	70	106	169	198	201	197	118	66	50	215	72
25	43	66	122	169	198	197	199	116	67	49	195	70
26	44	70	138	169	195	194	199	113	66	49	156	65
27	40	78	132	168	196	203	196	107	65	47	181	76
28	43	80	142	166	195	200	191	106	62	42	159	78
29	66	77	178	166	-	198	188	108	68	39	124	72
30	59	78	224	178	-	202	189	110	64	38	125	67
31	54	-	233	180	-	188	-	113	-	40	107	-
Month				Second-foot-days		Maximum	Minimum	Mean	Run-off in acre-feet			
October.....				1,197		59	28	38.6	2,370			
November.....				1,743		80	3	58.1	3,460			
December.....				5,537		233	77	114	7,020			
Calendar year 1936				33,032		249	3	90.3	65,520			
January.....				5,460		199	158	176	10,810			
February.....				4,707		198	61	168	9,340			
March.....				5,857		203	149	189	11,820			
April.....				5,987		222	176	200	11,890			
May.....				4,401		189	106	142	8,750			
June.....				2,483		122	62	82.8	4,920			
July.....				2,165		148	38	69.8	4,290			
August.....				2,378		215	26	76.7	4,720			
September.....				2,449		182	61	81.6	4,860			
Water year 1936-37.....				42,354		233	3	116	84,020			

Enterprise Canal at Gillespie Dam, Ariz.

Location.- lat. $33^{\circ}13'30''$, long. $112^{\circ}45'45''$, in ~~SW~~^{NE} sec. 28, T. 2 S., R. 5 W., at head of canal at Gillespie Dam.

Records available.- June 1935 to September 1937 (discharge measurements only).

Remarks.- Canal diverts water for irrigation from right bank of Gila River at Gillespie Dam. The quantity of water diverted is regulated so as to be nearly constant.

Discharge measurements, in second-feet, water year 1936-37

Oct. 3	9.4	Apr. 4	15.4
14	13.6	14	13.2
24	9.1	24	8.6
Nov. 14	13.2	29	8.9
24	12.6	May 4	9.1
Dec. 5	10.6	13	9.6
14	11.5	25	9.3
24	10.6	June 4	9.2
Jan. 4	15.6	14	9.3
14	15.5	24	9.7
24	15.7	July 3	8.5
Feb. 4	12.5	14	8.7
14	12.3	28	10.7
Mar. 4	14.0	Aug. 11	8.9
14	17.4	26	11.4
22	9.3	Sept. 9	12.9
		23	10.2

Whitewater Draw near Douglas, Ariz.

Location.- Water-stage recorder, lat. 31°21'15", long. 109°35'00", in SW¼ sec. 10, T. 24 S., R. 27 E., at bridge on U. S. Highway 80, 1½ miles upstream from international boundary and two miles west of Douglas. Zero of gage is 3,887.7 feet above mean sea level (from Arizona Highway Department benchmark).

Drainage area.- 1,023 square miles.

Records available.- August 1911 to April 1922, June 1930 to December 1933, May 1935 to September 1937.

Extremes.- Maximum discharge during year, 2,770 second-feet Aug. 19 (gage height, 10.30 feet), from rating curve extended above 2,000 second-feet; minimum, about 0.25 second-foot estimated Aug. 17.

1930-37: Maximum discharge, 3,450 second-feet Aug. 10, 1931 (gage height, 12.15 feet); minimum, 0.2 second-foot July 25, 1935.

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

Remarks.- Records good except those for July 12-19, July 21 to Aug. 18, Aug. 26 to Sept. 30, which were computed on basis of five discharge measurements, partial gage-height record, and weather records and are poor. Diversions for irrigation above station.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.6	1.2	0.6	2.1	0.5	0.6	0.9	0.6	0.6	0.6	1	2
2	.6	1.0	.7	1.6	.6	.4	.7	.6	.2	4.8	1	4
3	.6	1.2	.6	2.1	.7	.2	.5	.6	.3	1.2	1	20
4	.6	1.0	1.0	2.4	.7	.3	.5	.6	.4	.7	1	2
5	.6	1.2	.9	2.4	.9	.4	.6	.4	.2	.9	1	2
6	.6	1.4	.7	1.6	.9	.3	.7	.3	.3	.7	1	200
7	.6	1.6	1.0	3.0	.9	.6	.7	.4	.7	.4	1	200
8	.6	1.4	1.0	2.1	1.2	.6	.6	.5	.2	.4	1	5
9	.6	1.4	1.0	1.9	.7	.4	.7	.4	.1	1.2	10	2
10	.5	1.4	.9	1.6	.4	.6	.7	.5	.2	1.6	2	1
11	.5	1.6	1.0	2.1	.6	.5	.6	.6	.3	6.9	1	2
12	.9	1.6	1.0	1.6	.6	.9	.6	.7	.3	1	1	1
13	1.0	1.6	1.2	1.6	.5	.9	.6	.7	.4	.5	1	1
14	1.0	1.6	1.2	1.4	.6	1.0	.6	.7	.6	.5	1	1
15	1.0	1.4	1.4	1.4	.6	1.0	.6	.7	.3	.5	.5	1
16	1.0	1.4	1.4	1.4	.7	1.2	.5	.5	.5	.5	.5	1
17	1.2	1.4	1.2	1.4	.4	1.0	.4	1.4	.6	.5	.3	1
18	1.2	1.0	1.2	1.0	.6	.5	.4	.9	.6	1	150	1
19	1.2	.9	1.2	1.0	.5	.5	.5	.5	1.0	.5	1,130	1
20	1.4	4.6	1.0	1.2	.3	.9	.6	.3	.9	177	823	1
21	1.2	2.6	.9	1.2	.3	.9	.7	.3	1.2	2	1,050	1
22	1.9	1.6	1.4	1.6	.4	.9	.6	.4	.6	1	120	1
23	1.4	1.4	1.4	1.6	.7	.9	.5	.4	.6	.3	804	1
24	1.9	.6	1.2	1.2	.7	.9	.6	.9	.7	.3	220	.5
25	1.2	.6	1.6	1.2	.6	.7	.9	.5	.9	.3	50	.5
26	1.0	.7	1.2	1.0	.7	.7	.7	.1	.9	.3	20	.5
27	1.0	1.2	.9	1.2	.9	1.0	.7	.2	.9	.3	25	.5
28	1.0	1.2	1.0	1.0	.9	.9	.5	.2	1.4	.3	3	.5
29	.9	1.0	1.9	1.0	-	.6	.5	.5	.7	.3	2	.5
30	.9	.7	2.1	.9	-	.7	.5	.3	.5	.3	20	.5
31	1.2	-	1.6	.7	-	.9	-	.7	-	5	2	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						29.9	1.9	0.5	0.96	59		
November.....						41.5	4.6	.6	1.38	82		
December.....						35.4	2.1	.6	1.14	70		
Calendar year 1936.....						1,529.7	1,000	.5	4.18	3,030		
January.....						47.5	3.0	.7	1.53	94		
February.....						18.1	1.2	.3	.65	36		
March.....						21.9	1.2	.2	.71	43		
April.....						18.2	.9	.4	.61	36		
May.....						16.4	1.4	.1	.55	33		
June.....						17.1	1.4	.1	.57	34		
July.....						216.3	177	.3	6.95	429		
August.....						4,444.3	1,130	.3	143	8,820		
September.....						455.5	200	.5	15.2	903		
Water year 1936-37.....						5,362.1	1,130	.1	14.7	10,640		

In addition to the records of stream flow obtained at gaging stations in the Colorado River Basin and reported in the preceding pages, measurements of flow were made also at the points indicated in the following table.

Miscellaneous discharge measurements in the Colorado River Basin during the water year October 1935 to September 1937

Date	Stream	Tributary to or diverting from-	Locality	Discharge (sec.-ft.)
Aug. 2	Fremont River.....	Colorado River....	NE $\frac{1}{4}$ sec. 34, T. 25 S., R. 2 E., 100 feet below Fremont Irrigation Co.'s control gates at outlet of Fish Lake, 15 miles southeast of Loa, Utah (gates completely raised).	23.7
Apr. 18	....do.....	....do.....	In NE $\frac{1}{4}$ sec. 7, T. 29 S., R. 4 E., at Bicknell Narrows dam site, 3 miles southeast of Bicknell, Utah (below Torrey and Mill Race canals).	*353
May 19	....do.....	....do.....	....do.....	27.5
July 30	....do.....	....do.....	....do.....	30.1
May 31	....do.....	....do.....	Sec. 16, T. 28 S., R. 11 E., at Hanksville, Utah (no water in canals).	34.6
May 20	Torrey Canal.....	Fremont River....	In NE $\frac{1}{4}$ sec. 7, T. 29 S., R. 4 E., at head of canal, 3 miles southeast of Bicknell, Utah.	33.6
July 30	....do.....	....do.....	....do.....	33.9
May 20	Mill race.....	....do.....	NE $\frac{1}{4}$ sec. 7, T. 29 S., R. 4 E., at head of race, 3 miles southeast of Bicknell, Utah.	4.3
July 30	....do.....	....do.....	....do.....	3.8
Oct. 17	San Juan River....	Colorado River....	NE $\frac{1}{4}$ sec. 36, T. 37 N., R. 1 E., at dam site, 8,000 feet above mean sea level, 14 $\frac{1}{2}$ miles northeast of Pagosa Springs, Colo.	22.6
31	....do.....	....do.....	....do.....	33.5
Nov. 20	....do.....	....do.....	....do.....	32.4
Dec. 3	....do.....	....do.....	....do.....	22.4
Oct. 17	Sand Creek.....	San Juan River....	Sec. 4, T. 36 N., R. 1 E., at mouth, 8,000 feet above mean sea level, 12 $\frac{1}{2}$ miles northeast of Pagosa Springs, Colo.	5.25
31	....do.....	....do.....	....do.....	21.3
Nov. 20	....do.....	....do.....	....do.....	13.1
Dec. 3	....do.....	....do.....	....do.....	7.14
Oct. 18	Coal Creek.....	....do.....	SE $\frac{1}{4}$ sec. 36, T. 36 N., R. 1 W., 8,000 feet above mean sea level, 6 $\frac{1}{2}$ miles northeast of Pagosa Springs, Colo.	.68
Nov. 19	....do.....	....do.....	....do.....	2.62
Dec. 4	....do.....	....do.....	....do.....	.97
Oct. 2	Mill Creek.....	San Juan River....	N $\frac{1}{2}$ sec. 7, T. 35 N., R. 1 E., 8,000 feet above mean sea level, 7 miles northeast of Pagosa Springs, Colo.	.58
16	....do.....	....do.....	....do.....	.41
Nov. 7	....do.....	....do.....	....do.....	1.92
Dec. 18	....do.....	....do.....	....do.....	2.42
Dec. 4	....do.....	....do.....	....do.....	.70
Oct. 2	Leche Creek.....	Rio Blanco.....	SW $\frac{1}{4}$ sec. 1, T. 34 N., R. 1 E., at mouth, 7,950 feet above mean sea level, 12 $\frac{1}{2}$ miles southeast of Pagosa Springs, Colo.	2.35
16	....do.....	....do.....	....do.....	2.15
Nov. 5	....do.....	....do.....	....do.....	4.64
Dec. 18	....do.....	....do.....	....do.....	3.18
Dec. 2	....do.....	....do.....	....do.....	2.07
16	....do.....	....do.....	....do.....	1.52
Jan. 26	....do.....	....do.....	....do.....	4.70
Apr. 21	....do.....	....do.....	....do.....	23.4
May 11	....do.....	....do.....	....do.....	63.3
Oct. 2	Big Branch.....	....do.....	NW $\frac{1}{4}$ sec. 28, T. 34 N., R. 1 E., 8,200 feet above mean sea level, below ditch diversion and inflow, 11 $\frac{1}{2}$ miles southeast of Pagosa Springs, Colo.	.38
18	....do.....	....do.....	....do.....	.22
Nov. 6	....do.....	....do.....	....do.....	.97
19	....do.....	....do.....	....do.....	.98
Dec. 4	....do.....	....do.....	....do.....	.95
Oct. 2	Sheep Cabin Creek.	Rito Blanco.....	E $\frac{1}{2}$ Sec. 5, T. 34 N., R. 1 E., 7,750 feet above mean sea level, 9 miles southeast of Pagosa Springs, Colo.	4.20
16	....do.....	....do.....	....do.....	.35
Nov. 5	....do.....	....do.....	....do.....	.69
Dec. 18	....do.....	....do.....	....do.....	.37
Dec. 2	....do.....	....do.....	....do.....	.25
16	....do.....	....do.....	....do.....	.17
Jan. 26	....do.....	....do.....	....do.....	4.10
Apr. 21	....do.....	....do.....	....do.....	44.4
May 11	....do.....	....do.....	....do.....	7.73
Apr. 6	St. Johns Canal..	Little Colorado River.	At head of canal at diversion dam at St. Johns, Ariz.	1.2
Apr. 5	Woodruff Canal....	Silver Creek.....	At Silver Creek diversion dam near Woodruff, Ariz.	4.1
Dec. 19	Clear Creek.....	Little Colorado River.	1 mile below station on Clear Creek near Winslow, Ariz.	2.6
Aug. 12	....do.....	....do.....	....do.....	2.4

*Total flow, including canals, about 425 second-feet.
†Estimated.

Miscellaneous discharge measurements in the Colorado River Basin during the water year October 1936 to September 1937 - Continued

Date	Stream	Tributary to or diverting from-	Locality	Discharge (sec.-ft.)
June 13	Clear Creek Canal.	Clear Creek.....	1 mile below diversion dam that is control for station on Clear Creek near Winslow, Ariz.	4.3
Mar. 1	Beaver Creek.....	Verde River.....	1 mile above mouth of creek at Camp Verde, Ariz., and below all diversions.	371
Mar. 8	....do.....	....do.....	....do.....	1,210
26	....do.....	....do.....	....do.....	234
Apr. 2	....do.....	....do.....	....do.....	672
10	....do.....	....do.....	....do.....	800
16	....do.....	....do.....	....do.....	681
23	....do.....	....do.....	....do.....	59.4
30	....do.....	....do.....	....do.....	3.1
May 7	....do.....	....do.....	....do.....	1.0
15	....do.....	....do.....	....do.....	.05
22	....do.....	....do.....	....do.....	.05
25	....do.....	....do.....	At mouth of creek near Camp Verde, Ariz.	9.0
29	....do.....	....do.....	....do.....	8.6
June 5	....do.....	....do.....	....do.....	7.7
12	....do.....	....do.....	....do.....	0
July 10	....do.....	....do.....	....do.....	0
Mar. 1	West Clear Creek..	....do.....	About 1,000 feet above bridge on road from Camp Verde to Payson, Ariz., $2\frac{1}{2}$ miles above mouth of creek.	130
9	....do.....	....do.....	....do.....	523
26	....do.....	....do.....	....do.....	160
Apr. 2	....do.....	....do.....	....do.....	182
9	....do.....	....do.....	....do.....	222
16	....do.....	....do.....	....do.....	136
23	....do.....	....do.....	....do.....	47.7
30	....do.....	....do.....	....do.....	25.8
May 8	....do.....	....do.....	....do.....	14.7
15	....do.....	....do.....	....do.....	14.2
22	....do.....	....do.....	....do.....	14.1
29	....do.....	....do.....	....do.....	16.8
June 5	....do.....	....do.....	....do.....	13.5
12	....do.....	....do.....	....do.....	11.2
18	....do.....	....do.....	....do.....	9.7
26	....do.....	....do.....	....do.....	10.6
July 7	....do.....	....do.....	....do.....	15.9
10	....do.....	....do.....	....do.....	24.3
17	....do.....	....do.....	....do.....	12.3
Mar. 1	....do.....	....do.....	At mouth of creek, 5 miles from Camp Verde, Ariz.	117

INDEX

	Page		Page
Accuracy of data and computed results..	2-3	Cooperation, record of.....	8
Acres-foot, definition of.....	1	Cottonwood Creek near Orangeville, Utah.....	102
Agencies other than Geological Survey, records collected by.....	8	Crystal River near Redstone, Colo.....	46-47
Almont, Colo., East River at.....	59	Current Creek near Fruitland, Utah.....	93-95
Taylor River at.....	57	Daniel, Wyo., Green River near.....	70
Animas River at Durango, Colo.....	126	Horse Creek near.....	74
at Farmington, N. Mex.....	128	Data, accuracy of.....	2-3
at Howardsville, Colo.....	125	explanation of.....	1-2
near Cedar Hill, N. Mex.....	127	Dillon, Colo., Blue River at.....	41
Arapaho Creek below Monarch Lake, Colo.	24	Snake River at.....	42
Aravaipa Creek near Feldman, Ariz.....	174	Tenmile Creek at.....	43
Ashley Creek near Vernal, Utah.....	87	Dolores River at Dolores, Colo.....	68
Aspen, Colo., Roaring Fork at.....	44	at Gateway, Colo.....	69
Bardine, Colo., East Muddy Creek near.....	63	Dome, Ariz., Gila River near.....	164
Bayfield, Colo., Los Pinos River near.....	123	Douglas, Ariz., Whitewater Draw near.....	192
Beaver Creek, Ariz., discharge measure- ments of.....	194	Duchesne, Utah, Duchesne River at.....	90
Big Branch, Colo., discharge measure- ments of.....	193	Strawberry River at.....	92
Blanco, N. Mex., San Juan River near.....	106	Duchesne River at Duchesne, Utah.....	90
Blue River at Dillon, Colo.....	41	at Myton, Utah.....	91
Bluff, Utah, San Juan River near.....	109	at Provo River Trail, near Hanna, Utah.....	88
Boulder, Wyo., New Fork near.....	75	near Tabiona, Utah.....	89
Boulder Dam, Ariz.-Nev., Lake Mead at.....	17	Duncan, Ariz., Gila River near.....	155
Bright Angel Creek near Grand Canyon, Ariz.....	148	Durango, Colo., Animas River at.....	126
Burnt Fork at Burnt Fork, Wyo.....	81	Florida River near.....	133
Buzzard Creek near Collbran, Colo.....	56	Lightner Creek near.....	132
near Heiberger, Colo.....	55	East Muddy Creek near Bardine, Colo.....	63
Calva, Ariz., Gila River at.....	158	East River at Almont, Colo.....	59
Cameo, Colo., Colorado River near.....	13	Edith, Colo., Navajo River at.....	117
Plateau Creek near.....	54	Elk River at Clark, Colo.....	84
Camp Verde, Ariz., Verde River near.....	185	Enterprise Canal at Gillespie Dam, Ariz.....	191
Carr Creek at Altenbern ranch, near Highmore, Colo.....	52	Farmington, N. Mex., Animas River at.....	128
Cascade Creek near Tacoma, Colo.....	131	San Juan River at.....	107
Cedar Hill, N. Mex., Animas River near.....	127	Feldman, Ariz., Aravaipa Creek near.....	174
Cedaredge, Colo., Leroux Creek near.....	64	Florence, Ariz., Gila River near.....	162
Surface Creek at.....	65	Florida River near Durango, Colo.....	133
Cement Creek near Silverton, Colo.....	129	Fontenelle Creek near Fontenelle, Wyo.....	79
Charleston, Ariz., San Pedro River at.....	171	Fraser, Colo., Middle Fork of Ranch Creek near.....	34
Cherry Creek near Red Mesa, Colo.....	137	North Fork of Ranch Creek near.....	33
Chevelon Fork near Winslow, Ariz.....	145	Ranch Creek near.....	30-31
Chromo, Colo., Little Navajo River at.....	118	St. Louis Creek near.....	29
Navajo River near.....	115-116	Fraser River above West Portal, Colo.....	26
Chrysotile, Ariz., Salt River near.....	180	near West Portal, Colo.....	27
Cisco, Utah, Colorado River near.....	14	Fremont River, Utah, discharge measure- ments of.....	193
Clark, Colo., Elk River at.....	84	Mill race discharge measurements of.....	193
Clear Creek, Ariz., discharge measure- ments of.....	193-194	Fruitland, Utah, Current Creek near.....	93-95
near Winslow, Ariz.....	146	Gateway, Colo., Dolores River at.....	69
Clifton, Ariz., Gila River near.....	156	Gila River at Ashurst-Hayden Dam, near Florence, Ariz.....	162
San Francisco River at.....	166	at Calva, Ariz.....	158
Coal Creek, Colo., discharge measure- ments of.....	193	at Coolidge Dam, Ariz.....	160
Collbran, Colo., Buzzard Creek near.....	56	at Fuller ranch, near Duncan, Ariz.....	155
Plateau Creek near.....	53	at Gillespie Dam, Ariz.....	163
Colona, Colo., Uncompahgre River at.....	66	at Kelvin, Ariz.....	161
Colorado River at Bright Angel Creek, near Grand Canyon, Ariz.....	16	below Bonita Creek, near Solomonsville, Ariz.....	157
at Hotwood Springs, Colo.....	12	near Clifton, Ariz.....	156
at Glen Sulphur Springs, Colo.....	11	near Dome, Ariz.....	164
at Lees Ferry, Ariz.....	15	near Gila, N. Mex.....	153
at Yuma, Ariz.....	22-23	near Red Rock, N. Mex.....	154
near Cameo, Colo.....	13	Gila River Basin, N. Mex.-Ariz., gaging- station records in.....	153-191
near Cisco, Utah.....	10	Gillespie Dam, Ariz., Enterprise Canal at.....	191
near Granby, Colo.....	9	Gila River at.....	163
near Grand Lake, Colo.....	20	Gillespie Canal at.....	190
near Parker, Ariz.....	21	Glenwood, N. Mex., San Francisco River near.....	165
near Picoacho, Calif.....	19	Glenwood Springs, Colo., Colorado River at.....	12
near Topock, Ariz.....	18	Roaring Fork at.....	45
Colorado River and tributaries above Green River, Colo.-Utah-Ariz.- Calif., gaging-station records in.....	9-69	Granby, Colo., Colorado River near.....	10
Computations, results of, accuracy of.....	2-3	Strawberry Creek near.....	37
Control, definition of.....	1	Willow Creek near.....	25
Coolidge Dam, Ariz., Gila River at.....	160	Grand Canyon, Ariz., Bright Angel Creek near.....	148
San Carlos Reservoir at.....	159	Colorado River near.....	16
		Grand Falls, Ariz., Little Colorado River at.....	143

	Page		Page
Grand Junction, Colo., Gunnison River near.....	58	Pagosa Springs, Colo., San Juan River at.....	104
Grand Lake, Colo., Colorado River near.....	9	San Juan River near.....	103
Granite Creek near Prescott, Ariz.....	188	Turkey Creek near.....	112
Green River at Green River, Utah.....	73	Weminuche Creek near.....	121
at Green River, Wyo.....	71	West Fork of San Juan River near.....	110-111
at Warren Bridge, near Daniel, Wyo.....	70	Williams Creek near.....	120
near Linwood, Utah.....	72	Palominas, Ariz., San Pedro River at.....	170
Green River Basin, Wyo., Utah-Colo., gaging-station records in.....	70-102	Paris River at Lees Ferry, Ariz.....	140
Gunnison River near Grand Junction, Colo.....	58	Parker, Ariz., Colorado River near.....	20
North Fork of, near Somerset, Colo.....	62	Parshall, Colo., Williams River near.....	40
Hanna, Utah, Duchesne River near.....	88	Patagonia, Ariz., Sonoita Creek near.....	177
Haiberger, Colo., Buzzard Creek near.....	55	Peridot, Ariz., San Carlos River near.....	169
Heiner, Utah, Price River near.....	100	Picacho, Calif., Colorado River near.....	21
Henrys Fork at Linwood, Utah.....	80	Piedra River at Bridge ranger station, near Pagosa Springs, Colo.....	119
Hanson Creek at Lake City, Colo.....	61	Pine, Ariz., Verde River near.....	186
Hesperus, Colo., La Plata River at.....	134	Pine Creek at Pinedale, Wyo.....	76
Highmore, Colo., Carr Creek near.....	52	Pinedale, Wyo., Pine Creek at.....	76
Roan Creek near.....	51	Planet, Ariz., Williams River at.....	152
Horse Creek near Daniel, Wyo.....	74	Plateau Creek near Cameo, Colo.....	54
Hot Sulphur Springs, Colo., Colorado River at.....	11	near Collbran, Colo.....	53
Howardaville, Colo., Animas River at.....	125	Prescott, Ariz., Granite Creek near.....	188
Huntington Creek near Huntington, Utah.....	101	Willow Creek near.....	189
Ignacio, Colo., Los Pinos River at.....	124	Price River near Heiner, Utah.....	100
Kahnah Creek near Whitewater, Colo.....	67	Publications on stream flow by Geological Survey.....	3-6
Kelvin, Ariz., Gila River at.....	161	by State agencies.....	6-7
Labarge, Creek near Labarge, Wyo.....	78	information concerning.....	3-7
Lake City, Colo., Henson Creek at.....	61	Ranch Creek above forks, near Fraser, Colo.....	30
Lake Fork at.....	60	Middle Fork of, near Fraser, Colo.....	34
Lake Mead at Boulder Dam, Ariz.-Nev.....	17	near Fraser, Colo.....	31
La Plata River at Colorado-New Mexico State line.....	135	near Tabernash, Colo.....	32
at Hesperus, Colo.....	134	North Fork of, near Fraser, Colo.....	33
at La Plata, N. Mex.....	136	South Fork of, near West Portal, Colo.....	35
Leal, Colo., Williams River near.....	39	Raven, Colo., Willow Creek near.....	48-50
Leche Creek (formerly published as White Creek), Colo., discharge measurements of.....	193	Red Mesa, Colo., Cherry Creek near.....	137
Lees Ferry, Ariz., Colorado River at.....	15	Red Rock, N. Mex., Gila River near.....	154
Paris River at.....	140	Redstone, Colo., Crystal River near.....	46-47
Leroux Creek near Cedaredge, Colo.....	64	Rillito Creek near Tucson, Ariz.....	178
Lightner Creek near Durango, Colo.....	132	Rio Blanco near Pagosa Springs, Colo.....	113
Lily, Colo., Little Snake River near.....	85	Rito Blanco near Pagosa Springs, Colo.....	114
Linwood, Utah, Green River near.....	72	Roan Creek at Simmons ranch, near Highmore, Colo.....	51
Henrys Fork at.....	80	Roaring Fork at Aspen, Colo.....	44
Little Colorado River at Grand Falls, Ariz.....	143	at Glenwood Springs, Colo.....	45
at St. Johns, Ariz.....	141	Roosevelt, Ariz., Salt River near.....	181
near Woodruff, Ariz.....	142	Tonto Creek near.....	184
Little Colorado River Basin, Ariz., gaging-station records in.....	141-147	Roosevelt Dam, Ariz., reservoir system on Salt River at and below.....	182
Little Navajo River at Chromo, Colo.....	118	Rosa, N. Mex., San Juan River at.....	105
Little Snake River near Lily, Colo.....	85	Run-off in inches, definition of.....	1
Littlefield, Ariz., Virgin River at.....	150	Sabino Creek near Tucson, Ariz.....	179
Los Pinos River at Ignacio, Colo.....	124	St. Johns, Ariz., Little Colorado River at.....	141
near Bayfield, Colo.....	123	St. Johns Canal, Ariz., discharge measurement of.....	193
near Weminuche Pass, Colo.....	122	St. Louis Creek near Fraser, Colo.....	29
McDowell, Ariz., Verde River near.....	187	Salt River, reservoir system on, at and below Roosevelt Dam, Ariz.....	182
Mammoth, Ariz., San Pedro River near.....	172	Salt River at Stewart Mountain Dam, Ariz.....	183
Mancos River near Mancos, Colo.....	136	near Chrysotile, Ariz.....	180
near Tsaoc, Colo.....	139	near Roosevelt, Ariz.....	181
Mason, Wyo., North Piney Creek near.....	77	San Carlos Reservoir at Coolidge Dam, Ariz.....	159
Maybell, Colo., Yampa River near.....	83	San Carlos River near Peridot, Ariz.....	169
Meadow Creek near Tabernash, Colo.....	36	San Francisco River at Clifton, Ariz.....	166
Meeker, Colo., White River near.....	98	near Glenwood, N. Mex.....	165
Mill Creek, Colo., discharge measurements of.....	193	San Juan River at Farmington, N. Mex.....	107
Mineral Creek near Silverton, Colo.....	130	at Pagosa Springs, Colo.....	104
Moenkopi Wash near Tuba, Ariz.....	147	at Roa, N. Mex.....	105
Monarch Lake, Colo., Arapaho Creek below.....	24	at Shiprock, N. Mex.....	108
Myton, Utah, Duchesne River at.....	91	discharge measurements of.....	193
Navajo River at Banded Peak Ranch, near Chromo, Colo.....	115	near Blanco, N. Mex.....	106
at Edith, Colo.....	117	near Bluff, Utah.....	109
near Chromo, Colo.....	116	near Pagosa Springs, Colo.....	103
Neola, Utah, Uinta River near.....	96	West Fork of above Burns Lake, near Pagosa Springs, Colo.....	110
New Fork near Boulder, Wyo.....	75	near Pagosa Springs, Colo.....	111
Nogales, Ariz., Santa Cruz River near.....	175	San Juan River Basin, Colo.-N. Mex., Utah, gaging-station records in.....	103-139
North Piney Creek near Mason, Wyo.....	77	San Pedro River at Charleston, Ariz.....	171
Orangeville, Utah, Cottonwood Creek near.....	102	at Palominas, Ariz.....	170
Pagosa Springs, Colo., Piedra River near.....	119	at Winkelman, Ariz.....	172
Rio Blanco near.....	113	near Mammoth, Ariz.....	172
Rito Blanco near.....	114	San Simon Creek near San Simon, Ariz.....	167
		near Solomonsville, Ariz.....	168

	Page		Page
Sand Creek, Colo., discharge measurements of.....	193	Vasquez Creek near West Portal, Colo....	28
Santa Cruz River at Tucson, Ariz.....	176	Verde River above Camp Creek, near McDowell, Ariz.....	187
near Nogales, Ariz.....	175	below East Verde River, near Pine, Ariz.....	186
Second-feet per square mile, definition of.....	1	near Camp Verde, Ariz.....	185
Second-foot, definition of.....	1	Vernal, Utah, Ashley Creek near.....	87
Second-foot-day, definition of.....	1	Virgin River at Littlefield, Ariz.....	150
Sheep Cabin Creek, Colo., discharge measurements of.....	193	at Virgin, Utah.....	149
Shiprock, N. Mex., San Juan River at... 108		North Fork of, near Springdale, Utah	151
Silver Creek near Woodruff, Ariz.....	144	Watson, Utah, White River near.....	99
Silverton, Colo., Cement Creek near... 129		Weminuche Creek near Bridge ranger station, near Pagosa Springs, Colo.....	121
Mineral Creek near.....	130	Weminuche Pass, Colo., Los Pinos River near.....	122
Slater Fork near Slater, Colo.....	86	West Clear Creek, Ariz., discharge measurements of.....	194
Snake River at Dillon, Colo.....	42	West Portal, Colo., Fraser River above Fraser River near.....	26
Solomonville, Ariz., Gila River near... 157		South Fork of Ranch Creek near.....	27
San Simon Creek near.....	168	Vasquez Creek near.....	28
Somerset, Colo., North Fork of Gunnison River near.....	62	White River near Hecker, Colo.....	98
Soncita Creek near Patagonia, Ariz..... 177		near Watson, Utah.....	99
Springdale, Utah, North Fork of Virgin River near.....	151	Whiterocks River near Whiterocks, Utah	97
Stage-discharge relation, definition of Steamboat Springs, Colo., Yampa River at.....	1	Whitewater, Colo., Kahnah Creek near... 67	
Steelman Creek, Colo., Williams River below.....	82	Whitewater Draw near Douglas, Ariz..... 192	
Stewart Mountain Dam, Ariz., Salt River at.....	38	Williams Creek near Bridge ranger station, near Pagosa Springs, Colo.. 120	
Strawberry Creek near Granby, Colo..... 183		Williams River (tributary above Green River) below Steelman Creek, Colo.....	38
Strawberry River at Duchesne, Utah..... 92		near Leal, Colo.....	39
Surface Creek at Cedaredge, Colo..... 65		near Parshall, Colo.....	40
Tabernash, Colo., Meadow Creek near... 36		William River (tributary below Green River) at Planet, Ariz.....	152
Ranch Creek near.....	32	Willow Beach, Ariz., Colorado River near.....	18
Tabiona, Utah, Duchesne River near..... 89		Willow Creek (Gila River Basin) near Prescott, Ariz.....	189
Tacoma, Colo., Cascade Creek near..... 131		Willow Creek (Grand County) near Granby, Colo.....	25
Taylor River at Almont, Colo.....	57	Willow Creek (Mesa County) near Raven, Colo.....	48-50
Tennile Creek at Dillon, Colo.....	43	Winkelman, Ariz., San Pedro River at... 173	
Terms, definition of.....	1	Winslow, Ariz., Chevelon Fork near... 145	
Tonto Creek near Roosevelt, Ariz..... 184		Clear Creek near.....	146
Topock, Ariz., Colorado River near... 19		Woodruff, Ariz., Little Colorado River near.....	142
Torrey Canal, Utah, discharge measurements of.....	193	Silver Creek near.....	144
Towaco, Colo., Mancos River near..... 139		Woodruff Canal, Ariz., discharge measurement of.....	193
Tuba, Ariz., Moenkopi Wash near..... 147		Work, division of.....	8
Tucson, Ariz., Rillito Creek near..... 178		scope of.....	1
Sabino Creek near.....	179	Yampa River at Steamboat Springs, Colo. near Maybell, Colo.....	82
Santa Cruz River at.....	176	Yuma, Ariz., Colorado River at.....	83
Turkey Creek near Pagosa Springs, Colo. 112			22-23
Uinta River near Neola, Utah.....	96		
Uncompahgre River at Colona, Colo..... 66			

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