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TWENTY-SIXTH BIENNIAL REPORT

OF THE

STATE ENGINEER

TO THE

GOVERNOR OF COLORADO

FOR THE YEARS

1931-1932

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Twenty-Sixth Biennial Report

OF THE

STATE ENGINEER

TO THE

Governor of Colorado

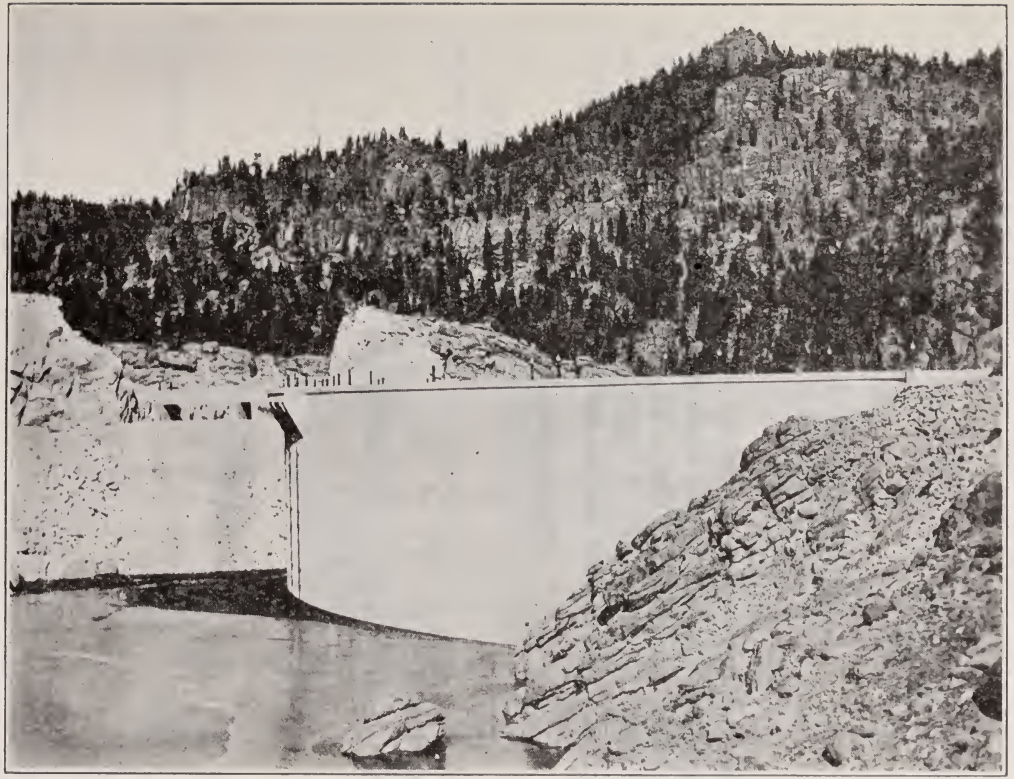
For the Years 1931-1932

M. C. HINDERLIDER
STATE ENGINEER

BRADFORD-ROBINSON PRINTING CO.
DENVER, COLORADO
1933



PENROSE-ROSEMONT ROCK FILL STEEL FACED DAM UNDER CONSTRUCTION



ELEVEN MILE CANON DAM
Denver: Board of Water Commissioners
Completed in 1932

LETTER OF TRANSMITTAL

Sir:

In compliance with provisions of law, I have the honor to transmit herewith the Twenty-sixth Biennial Report of the activities of the Department of State Engineer, for the two calendar years 1931 and 1932, many of which are not herein reported, due to lack of funds needful for the publication of the same.

Very respectfully,

M. C. HINDERLIDER,
State Engineer.

To His Excellency,

ED C. JOHNSON,
Governor.

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LIST OF OFFICERS AND EMPLOYEES

State Engineering Department

M. C. Hinderlider.....State Engineer

C. C. Hezmalhalch.....Deputy State Engineer

J. H. Baily, until Feb. 1, 1931.....Chief Hydrographer

L. T. Burgess, since Feb. 1, 1931.....Chief Hydrographer

L. T. Burgess, until Feb. 1, 1931.....Chief Clerk and Draftsman

W. T. Blight, since Feb. 1, 1931.....Chief Clerk and Draftsman

Bessie Thompson .....Stenographer

J. E. Whitten.....Hydrographer, Div. 1

C. E. McGraw .....Hydrographer, Div. 1

Ralph Owens .....Hydrographer, Div. 2

F. C. Snyder.....Hydrographer, Div. 2

D. S. Jones, Jr.....Hydrographer, Div. 3

F. C. Hart.....Hydrographer
On special investigations in San Luis Valley

R. J. Tipton.....In charge of Interstate River Studies

IRRIGATION DIVISION ENGINEERS

Div. No. 1, C. C. Hezmalhalch, Deputy State Engineer.....Denver

Div. No. 2, C. W. Beach.....Pueblo

Div. No. 3, E. S. Counselor, until Jan. 5, 1932.....Alamosa

Div. No. 3, W. D. Carroll, since Jan. 5, 1932.....Alamosa

Div. No. 4, H. C. Getty.....Montrose

Div. No. 5, A. J. Dickson.....Glenwood Springs

Div. No. 6, B. T. Chase.....Steamboat Springs

Div. No. 7, J. R. Williams.....Durango

WATER COMMISSIONERS

Div. No.	Dist. No.		Address
1	1	J. L. Samples	Ft. Morgan
1	2	Roy Boston	Ft. Lupton
1	3	W. J. McAnelly	Fort Collins
1	4	H. H. Kelly	Loveland
1	5	J. A. Lee	Lyons
1	6	Thomas L. Platt	Boulder
1	7	A. E. Jones	Golden
1	8	Louis Bertolett	Littleton
1	9	H. S. Rainwater	Morrison
2	10	J. M. Pribble	Colorado Springs
2	11	Howard Sneddon	Salida
2	12	D. S. Jones	Canon City
2	13	H. W. Hendershot	Westcliffe
2	14	Joe Burgess	Pueblo
2	15	John Simonson	Beulah
2	16	H. W. Craig	La Veta
2	17	S. W. Cressy	Rocky Ford
2	18	Juan A. Mestas	Aguilar
2	19	H. B. Bostick	Trinidad
3	20	Thomas Carr	Del Norte
3	21	Wm. Neff	La Jara
3	22	L. W. Sowards	Manassa
1–2	23	J. Desserich	Pine
3	24	Miguel Martinez and Fares Gold	San Luis
3	25	John L. Charles	Crestone
3	26	S. O. Proffitt	Saguache
3	27	Jas. Medina	La Garita
4	28	J. Roy Hicks	Sargents
7	29	No Commissioner	
7	30	George H. Tyner	Falfa
7	31	No Commissioner	
7	32	No Commissioner	
7	33	Jerry Griggs	Breen
7	34	Hugo Weston	Mancos
3	35	Stephen Calkins	Fort Garland
5	36	No Commissioner	
5	37	B. F. Long	Eagle

Div. No.	Dist. No.		Address
5	38	P. K. Bartheel	Carbondale
5	39	Isam W. Graham	Rifle
4	40	C. H. Luellen	Eckert
4	41	A. J. Baxter	Montrose
4	42	George M. Saunders	Mesa
6	43	F. A. Carstens	Meeker
6	44	Eben Hamilton	Craig
5	45	Frank Taughenbaugh	Silt
1	47	Clarence Boston	Walden
1	48	R. A. Mosier	Jelm, Wyo.
2	49	No Commissioner	
5	50	No Commissioner	
5	51	P. S. Elting	Sulphur Springs
5	52	Carl Forster	Radium
5	53	Chas. Plasters	Burns
6	54	E. W. Leggett	Baggs, Wyo.
6	55	No Commissioner	
6	56	No Commissioner	
6	57	Jas. N. Kennedy	Hayden
6	58	E. H. Godfrey	Oak Creek
4	59	Leon H. Dutemeyer	Gunnison
4	60	E. Lin Guy	Redvale
4	61	W. O. Roberts	Bedrock
4	62	Leon H. Dutemeyer	Gunnison
4	63	No Commissioner	
1	64	John M. Shea	Sterling
1	65	John Hultquist	Laird
2	67	H. P. Syp and R. J. McGrath	Lamar
4	68	Wm. R. Burkitt	Ridgway
7	69	F. C. Hardman	Cedar
5	70	John Moore	DeBeque

STATE ENGINEER'S OFFICE

FEES RECEIVED BY OFFICE DURING BIENNIUM

January 1, 1931, December 31, 1932

Filings	$4,510.00
Postage	2.05
Sale of Blue Prints	623.61
Certifications	172.00
Examination Dam Plans	137.00
Filing Transfer Decrees	28.00
Transfer of Filings	7.00
Office Labor	28.00
Total Deposited with State Treasurer	$5,507.66

CHAPTER I

FINANCIAL STATEMENT

APPROPRIATIONS

	1931-1932	1932-1933	Balance Turned Back to General Fund from Appropriation at End of Fiscal Year June 30, 1931	June 30, 1932
State Engineer, Salary	$ 5,000.00	$ 5,000.00	$ .00	$ .00
Deputy State Engineer, Salary	3,000.00	3,000.00	.00	.00
Chief Clerk, Salary	2,000.00	2,000.00	.00	.06
Stenographer, Salary	1,200.00	1,260.00	.00	.00
Special Deputy State Engineer, Salary	2,500.00	2,500.00	.00	.00
Chief Hydrographer, Salary	2,400.00	2,400.00	†200.00	.00
Five Hydrographers, Salary	9,000.00	9,000.00	.00	.00
Five Division Engineers, Salary	12,500.00	12,500.00	.00	*94.11
Traveling and Contingent Fund—				
State Engineer and Deputy	2,100.00	2,100.00	344.65	255.70
Chief Hydrographers Expense	600.00	600.00	.04	116.22
Traveling Expenses Five Hydrographers	5,750.00	5,750.00	1,199.81	515.11
Traveling Expenses Special Deputy State Engineer	1,200.00	1,200.00	3.01	61.66
Traveling Expenses Five Division Engineers	5,000.00	5,000.00	239.64	.00
Incidental Expenses, Including Gage Readers' Salaries, Etc.	4,800.00	4,800.00	157.85	428.07
Totals	$57,050.00	$57,110.00	$2,145.00	$1,470.93

†No Chief Hydrographer for one month. *No Division Engineer for part of month.

CHAPTER II

WATER SUPPLY AND SEASONAL AND CROP CONDITIONS

The seasonal conditions of 1931 will doubtless go down in history as the most trying which the irrigationist has ever had to meet, not only from the standpoint of insufficient water supplies, but also as the result of a combination of other conditions, such as prolonged and excessive temperatures, deficient rainfall, insect pests, low crop returns, both in tonnage and quality, all culminating in ruinous price returns, generally below costs of production. The net result of which has been a body blow to irrigated farming and livestock interests, our two principal industries.

The snow deposits thruout the state during the winter of 1930-31 varied from 30% to 75% of the normal, the average approximating 50%, while the water content of same was subnormal. Temperature conditions thruout the growing season were generally above normal, and continuous, which greatly increased the amount of evaporation from cropped areas and water sources.

Precipitation thruout the state was subnormal during the growing period, the net result of which was to reduce natural stream flow to, from 33% to 85% of normal. As a result of deficient snow supplies in the mountains, the 1,400 storage reservoirs in the state filled to but a fraction of their capacities. Such fillings ranged from nothing to 80%, depending upon their location. Since the storage reservoirs of the state supply, at the most vital period of crop growth, a very large part of all the water used for irrigation, deficiencies in storage supplies have a twofold effect upon crop production, particularly when accompanied by deficient precipitation during the growing period.

The effect of temperature conditions and deficient water supplies varied thruout the state, depending somewhat upon the altitude, and character of crops grown. In general, the effect was most detrimental to late maturing crops, such as sugar-beets, potatoes, melons, corn, and late cuttings of alfalfa. Earlier crops, such as grain, small fruits and vegetables, escaped the worst effects of the drouth, which also greatly affected pasturage and mountain range feed.

In general, the tonnage produced varied from 25% to 90% of normal, while the quality of the same was generally below normal. Such conditions apply particularly to such crops as sugar-beets, potatoes, and the last cuttings of alfalfa.

As a result of deficient snow and rainfall, the ground water supplies, particularly thruout the mountainous regions, were greatly depleted, which occasioned serious inconvenience and material losses to stockmen. Perennial springs and streams, and many wells all over the state, ceased to flow for the first time in the knowledge of local residents. Continuous dry weather was

also conducive to the development of insect larvae, which later resulted in hordes of grasshoppers, crickets, and other pests; in many parts of the state serious damage to the already depleted crops occurred as a result of such pests. In several instances municipalities and towns suffered serious inconvenience, both as the result of insufficient water supplies, and the accompanying insanitary conditions.

Ditches with water rights dating back into the 1850's did not receive their regular water supplies, for the first time in history. Ditches and canals with the more junior decrees received little or no water thruout the season, while those with ordinarily good priorities were cut off in the middle of the season.

Records just compiled disclose that in every part of the state, with the exception of the South Platte River basin, the water supply in 1931 was less than that in 1902, the year of lowest water supply known in this state. In the South Platte basin, the water supply, while below normal, was still materially in excess of that of the year 1902. This was the result of more copious and early snows, which occurred over the headwaters of the South Platte above South Park. While a much larger acreage was irrigated in 1931 than in 1902, this was possible as the result of a large carry over of water in storage reservoirs from 1930, increased seepage and return waters which now constitute about 47% of the total water supply of the main stem of the South Platte River.

With the exception of the year 1919, 1931 was the only year of record when there was no water for storage along the South Platte during the irrigation season.

Conditions in the Arkansas, Rio Grande, Colorado and San Juan River basins were very similar, as regards stream flow, storage supplies and climatic peculiarities, with somewhat better conditions prevailing over northwestern Colorado.

The storage reservoirs of the state have again demonstrated the fact that they are absolutely indispensable to our major industry, and hence their great value to our state as a whole. The capacity of our present reservoir system is substantially 2,500,000 acre feet, which is equivalent to more than one-fourth of the total quantity of water annually diverted from our streams for irrigation and other uses, and about one-half the quantity of water actually consumed each year.

The reservoir system of the state should be greatly enlarged, to effect proper regulation of stream flow. Upon such extension, and thru transmountain diversions, may the eastern slope of the state look for further stabilization of present water supplies.

In the interest of such matters, the State Engineer has been conducting extensive investigations and studies thruout all sections of the state during the past two years. The results of such studies in the South Platte basin were recently published, and are

available to the public. Studies of similar conditions in the Arkansas and Rio Grande Valleys are being carried on, while determinations have been made of present uses of water, and requirements for future uses thruout the Colorado River basin, in connection with negotiations for a compact between the states of Colorado, Wyoming, Utah and New Mexico.

The outlook for water supplies for the season of 1932 is at the present time much more encouraging, more snow having fallen so far this winter than during the entire past winter. Repeated heavy snowfalls have so far occurred over the Colorado, Rio Grande and San Juan basins, and over certain parts of the Arkansas and South Platte watersheds. Abnormal snow deposits will be required, however, to replenish ground water supplies, which have been largely exhausted. This latter condition will undoubtedly have a profound effect upon stream flow in 1932, unless precipitation is abnormally high during the new year.

1931

South Platte Basin.

While water supplies were subnormal, they were 95% to 238% of the supply in 1902, and far more plentiful than in any other part of the state. This was due to heavy snow deposits over the headwaters of the South Platte, to large reservoir supplies carried over from 1930, and to underground water supplies which were drawn on heavily. Snow deposits averaged about 63% of normal.

Rainfall during the growing season was probably 60% of normal.

Temperatures were the highest since 1881.

Reservoir supplies were from 80% to 100%, while the natural stream flow ranged from 50% to 100% according to locality—generally averaged about 73%.

The effect of shortage, on senior decrees, was quite pronounced. Ditches which had never been denied water were closed for considerable periods of time.

The season of 1931 was, with the single exception in 1919, the only year in which the reservoirs could not store water during the spring period of peak runoff, or at any other time during the irrigation season. The first storage was permitted on November 21st last, which was thirty days later than normal.

Ditches with priorities dating back to early sixties, and even to 1859, were short of water for the first time in history.

Reservoirs saved at least 50% of the crops, and as high as 80% in one section of the South Platte basin.

Arkansas River Basin.

The past year was the worst in the history of irrigation. Snowfall was far below normal. (Water content 3.69". Average water content for past 18 years was 4.19".)

The irrigation season opened favorably, and up to June 1st conditions were promising. Rainfall for June, July and August, which usually is required to supplement water supplies, was below normal, while temperatures were generally above normal, resulting in a condition of drouth.

The natural flow of the Arkansas River at Pueblo was 230,300 acre feet as compared with an average for the previous 36 years of 567,000 acre-feet, or about 40%.

The lowest year of record prior to 1931 was that of 1902, which showed a runoff of 293,300 acre-feet.

This deficiency in water supply greatly affected old decrees which had never before been short.

Reservoirs again proved their great worth, although deliveries from same were not adequate to overcome deficiencies in natural stream flow.

The average quantity of water usually carried over in storage from one year to another, is 170,795 acre-feet. The quantity carried over November 1, 1931, is more than 150,000 acre-feet below normal.

Crops were from 25% to 50% normal, and often very inferior. The sugar beet crop was very low, both in tonnage and sugar content, and had a tendency to deteriorate before it could be sliced.

Total acreage reported irrigated was 535,000.

The largest crop is alfalfa, the second cereals, and the third sugar beets.

Rio Grande Basin.

Snowfall was but 61% of normal, which resulted in a 50% water supply, based upon records of Rio Grande at Del Norte.

Temperature conditions were above normal, while the seasonal rainfall was but 25% of normal.

Reservoirs were enabled to store but 12% to 30% of their capacities.

The quantity of water in storage at the beginning of the irrigation season was but 44,000 acre-feet. The total amount of reservoir water used was about 30,000 acre-feet. All storage supplies were virtually exhausted before the close of the season.

Ground water supplies all over the basin were seriously depleted. As a result of deficient water supplies and high temperatures, the tonnage and character of crops were far below normal, and range conditions in the mountains were acute. The potato crop in tonnage and quantity averaged not to exceed 20% of normal.

The total amount of land reported irrigated was 653,000 acres, although the acreage which received sufficient water for proper irrigation was but a fraction of this amount.

Natural grasses and alfalfa continue to be the largest crops grown, and amount to substantially two-thirds of the total acreage.

Irrigated cereals, field peas and potatoes are the next largest crops produced, in the order given, the acreage being 73,582, 60,717 and 57,350 acres respectively.

Crops produced on an average were from one-fourth to two-thirds of normal.

Colorado River Basin.

Upper Portion.

Snowfall in mountains during winter 1930-31 was subnormal in amount and in water content. The same came later in fall of 1930 and fell on frozen ground.

Rainfall during season far below normal, and too late to do much good to growing crops, but aided fall plowing.

The few reservoirs in this division were able to store very little water.

Extremely low stream flow affected decrees which had never heretofore been without water, and also seriously affected water supplies for certain towns; also livestock interests, thru shortage of forage and drinking water for stock even up in the higher areas. Fish in some streams perished by the thousands, and had to be removed to other streams.

The area in cultvation was reduced, due to shortage of water.

Sugar beets and potato crops short, but quality good.

Yield of fruit good, but prices low.

Range cattle came thru summer in excellent condition, due to cured nature of range feed, but prices ruinous.

Sheep business heavy loser.

Gunnison and Lower Colorado.

Season unlike any for past 20 years.

Snowfall far below normal.

Most of mountain passes and roads open all winter of 1930-31.

Snowfall thruout basin was 50% of normal, and water content 30% to 60% of normal.

Rainfall during growing season probably 60% of normal.

Temperatures well above normal, which in the main was detrimental to most crops except corn.

Stream flow of 40% to 85% of normal.

Storage supplies ranged from nothing to 66% of normal.

Underground water supplies greatly depleted.

Streams and springs thruout mountainous areas which were never known to fail, dried up, resulting in great hardship for stockmen.

Return flow of seepage water to the streams 20% to 60% of normal.

Conditions seriously affected early ditch decrees which had never been short before.

Water supplies of Gunnison and Uncompahgre sufficient to supply but 50% of demands on same.

In general, tonnage and qualty of crops were below normal, and in some instances resulting in almost complete failure. Range stock developed good fat, due to cured condition of range feed.

Northwestern Colorado Div. No. 6.

Second consecutive year of deficient moisture, with abnormally high temperature. Snow measures 66% to 75% of normal.

Stream flow lowest in history, being less than 50% of normal, and water supplies from 25% to 83% short of supplying demands upon same.

Few reservoirs in this part of the state; storage 50% to 75% normal but used to great advantage. Drainage of beaver dams even resorted to, to save crops.

Rainfall came too late to benefit most crops.

Shipments of lettuce and vegetable crops 50% of normal.

Shrinkage of crops due more to deficient water supplies both in stream flow and storage, than to temperature conditions. Character and quality practically nearly normal.

Climatic conditions had a serious effect upon seepage and return flow to streams.

Water supplies for various towns seriously affected, not only as to quantity but quality. Sanitary conditions bad in some instances.

Principal crops in order of acreage were: Timothy and clover 68,000 acres, alfalfa 38,664 acres, cereals 6,650, the total acreage irrigated in 1931 being 116,000 acres as against 107,000 acres in 1930.

Animas and San Juan Basin.

Snow deposits were 30% to 60% normal, with water content below average.

Temperatures during growing period were above normal and precipitation subnormal.

Natural stream flow was the lowest ever known, being but 45% of normal and but 82% to 92% of that for 1902, the year of lowest record ever known before.

The quantity of water in storage at the beginning of the year was from 50% to 90% of the usual quantity.

Storage facilities in this division are inadequate, but of great value, and enabled many farmers to save their crops.

Crops produced ranged in tonnage from 0 to 60% normal, the quality in general being up to average.

The deficiency of snow and rainfall caused a great depletion in underground water supplies and the return flow to streams.

Old decrees dating back to 1877 were adversely affected for the second time in history.

The unprecedenetd shortage of water in the La Plata River had a disastrous effect upon junior appropriators in Colorado, and permitted but one rotation of water with New Mexico.

The principal crops grown in this section of the state are cereals, alfalfa, natural grasses, potatoes, and fruits, in the order given. The total acreage reported irrigated is 165,500 acres.

Altogether 1931 was the most disastrous year ever known to farmers in Southwestern Colorado.

RECORD OF COMPARATIVE STREAM FLOW FOR SEASON OF 1931

Stream	Location	Length of Record—Years	% of Normal	% of 1902
South Platte	South Platte	39	73	238 %
St. Vrain	Lyons	42	61	127 %
Boulder	Orodell	25	73	No record for 1902
Cache la Poudre	Mouth of Canon	48	56	95%
North Platte	Northgate	27	44	No record
Arkansas	Pueblo	36	40	78%
Rio Grande	Del Norte	42	42	140%
Animas	Durango	32	42	70%
Colorado River	Glenwood Springs	32	55	82%

CHAPTER III

DAMS AND RESERVOIRS

As a result of the economic and financial conditions which prevailed during the biennium, construction of new storage dams was confined to the completion of those structures previously initiated. Two of the most important dams in the state, typical of outstanding types, were completed in 1932. These were the Eleven Mile Canon Dam, across the South Fork of the Platte River, which was built by the City of Denver to impound water for municipal and irrigation uses, and the Penrose-Rosemont Dam, near Colorado Springs, which was built by the Broadmoor Hotel Company for like purposes.

The Eleven Mile Canon Dam is a concrete arch, of the semi-gravity type, of a maximum height of 122 feet above the lowest point of the foundations, the radius of the upstream face being 270 feet. The foundations are of an excellent grade of granite, which disclosed some minor faulting and shallow fractures in the right abutment. Extreme care was exercised in preparing the foundations for this dam, all faults and fractures being sealed by pressure grouting. During the entire progress of this work, covering two summer seasons, continuous sampling of all concrete materials which entered into the construction of the dam was conducted in a field laboratory at the dam, under state supervision. All concrete aggregates, including sand, were manufactured from granite excavations from the spillway site at the northerly end of the dam. The outlet valves consist of the largest size of the cone-type valve ever installed. These valves are placed in tandem in a suitable valve house at the downstream toe of the dam, while emergency valves, of the sluice-gate type, are located on the upstream face of the dam. The valve and outlet system, which is large in capacity, for the purpose of taking care of senior decreed rights on the river below the dam, is thoroughly protected by heavy steel grillage, supported by a reinforced concrete structure.

The form work and quality of concrete which entered into this dam we believe to be the best coming under our observation.

This complete development was made at a cost of about one and one-fourth million dollars. The dam forms a remarkably fine reservoir, of a capacity of about 80,000 acre-feet.

The Penrose-Rosement Dam consist of a combination structure of loosely-dumped and derrick-placed stone and rubble masonry. An unusual feature is a steel diaphragm which forms the water-tight upstream face of the dam, which is of a maximum height of about 100 feet, and of a crest length of 566 feet. A decided fault plane extends through the dam site, near the left

abutment, and substantially perpendicular to the axis of the dam. Heavy pressure grouting was applied along the entire length of the upstream face of the dam, through two rows of diamond-drill holes, and all faults and fractures were carefully treated and sealed, the water face, consisting of copper-bearing plates transversely welded in place, with provisions made for contraction and movement due to temperature changes.

The completed structure affords a pleasing appearance, and we believe constitutes one of the most outstanding examples of this type of dam. The reservoir formed by the same has a capacity of about 1,200 acre feet.

The foundations of both the aforementioned dams were reported upon favorably by competent geologists, both before and after the excavations were substantially completed.

These two dams are shown in the frontispieces of this report.

In addition to the aforementioned structures, a number of smaller dams of the earth type, such as the Comanche, Long Draw, Mesa, and others, were completed within the biennium, but the limitations of this report will not permit of further mention of the same.

Repairs to existing dams under state supervision, of which there are about 1,100 in this state, were limited to those most necessary, due to financial conditions. Such repairs usually consisted of the installation of drainage systems, widening and extending of spillways, increasing the height of the structure to provide a greater degree of safety, and repairs to valves and outlets. Such matters require constant vigilance on the part of this office, for the protection of life and property below such structures.

The City of Denver made much needed repairs to the valve system of Cheesman Dam, at an opportune time, when the reservoir was almost empty, the first occurrence of the kind since the dam was completed in 1904.

Important repairs were also made to a number of other dams, too numerous to describe herein.

No dam failures occurred during the biennium.

CHAPTER IV

INTERSTATE RIVER COMPACTS, AND ADMINISTRATION OF SAME

The three Interstate River Compacts or treaties, which have been in force between Colorado and some of her sister states for several years, were administered as usual by this Department, with little or no friction or discord, although 1931 was the year of lowest recorded water supplies in the Rio Grande and Colorado River Basins.

On the La Plata River, in the Colorado River Basin, where there is always a shortage of water for meeting the needs of the water users in both Colorado and New Mexico, conditions were particularly acute in 1931. Through the cooperation of the water users in both states, and the excellent judgment and efficiency displayed by J. R. Williams, our special representative for administering the La Plata River Compact, and Charles Holly, who represents in like manner the State Engineer of New Mexico, the available amount of water was made to serve in the largest possible manner the dire needs of the water users, without causing undue friction. Much credit, therefore, is due to these water users, and to the local water officials, for the successful administration of the compact, under most trying conditions.

There is great need for a storage reservoir to provide supplemental water supplies for lands along the La Plata River, in Colorado and New Mexico. Preliminary investigations by this office disclose that it is feasible to provide such relief, and we know of no more worthy project, nor one more deserving of state support. The ratification of the La Plata River Compact by the legislature of Colorado had the effect of depriving Colorado citizens of water which they had formerly used in establishing themselves on their lands, and without which they are gradually being forced to abandon their homes. It is believed that at least a moral obligation rests upon the State of Colorado to assist these good people in remedying their present plight, and that the present is a most opportune time to provide this relief.

The three members of the Rio Grande Compact Committee met at Santa Fe in 1932, and at El Paso in 1933, and checked and exchanged stream flow data, and prepared the annual reports of the committee to the governors of the States of Colorado, New Mexico and Texas, required by the terms of the Rio Grande Compact. As a result of the recommendations of the committee, and the governors of the states in question, the legislatures memorialized the Congress of the United States, in the spring of 1933, urging the early construction of a 40-mile drain to unwater the San Luis Valley sump or enclosed basin.

In behalf of this undertaking, the State Engineer and Ex-lieutenant Governor Corlett were designated by you to present the matter before the proper committees of the Congress. There is a strong hope and expectation that this development will be among those designed by executive order of the President for construction, and the way be thus paved for reaching a permanent compact between Colorado, New Mexico and Texas, concerning the waters of the Rio Grande.

No change in the articles of agreement adopted several years ago for the administration of the South Platte River Compact between Colorado and Nebraska, has been found needful, and this compact has been administered for the past nine years without friction or discord between the two states in question.

CHAPTER V

INTERSTATE RIVER NEGOTIATIONS

Numerous conferences between representatives of the States of Colorado, Wyoming and Nebraska have been held during the past biennium, looking to an understanding concerning the waters of the North Platte River. Pressure on the part of Wyoming, for favorable consideration by the Congress of the Casper-Alcova Reclamation Project, and Seminoe Power Development, made necessary several trips to Washington by the State Engineer and other Colorado representatives in this connection.

During the biennium this office caused to be made extensive surveys and studies of several possibilities for the diversion of water from the North Platte River, in North Park, Colorado, to the Poudre River Basin, where supplemental water supplies are greatly needed. Such investigations and studies were not completed, due to lack of funds and the approach of winter. Two possibilities have been investigated thus far, one involving a tunnel under Cameron Pass, located at an altitude of 10,000 feet, which it is anticipated would be capable of diverting from 45,000 to 50,000 acre-feet per year; the other proposed development which was investigated consists of a canal which would traverse the upper or northerly end of North Park, at an altitude of substantially 8,800 feet, and which would involve the construction of a tunnel about 10.8 miles in length, between North Park and the Poudre River. This latter project contemplates the construction of a storage reservoir near the village of Rand, in North Park, of a capacity of 81,000 acre feet. Our studies disclose that such development would be capable of diverting about 180,000 acre-feet of water per year.

Lack of funds and time prevented an examination of intermediate possibilities between the two aforementioned extremes.

From our studies of the water resources of the North Platte and Platte Rivers in Colorado, Wyoming and Nebraska, and the relative needs of these states, it is believed that there is ample water for the satisfaction of the needs of the citizens in each state, if proper means are provided for the conservation of the same. Studies also definitely indicate the availability of storage reservoir sites in all three states, which may be developed at a feasible cost. Colorado and Nebraska now need supplemental water supplies to stabilize old developed irrigated regions, while Wyoming is anxious to develop an irrigated area near Casper, and possibly at Saratoga, to stabilize the livestock industry in those parts of the state. All three states should work together in the development of this great natural resource, the North Platte River, for their common good, particularly when the time is opportune.

CHAPTER VI

DESCRIPTIONS OF STREAM GAGING STATIONS AND TABLES OF STREAM DISCHARGE

RELATED RUNOFF IN PERCENTAGE OF THE NORMAL FOR STREAMS IN COLORADO.

Stream	Years of Record	Mean Ac. Ft.	1931 %	1932 %
Animas River at Durango	34	689,600	42	108
Arkansas River at Canon City	45	542,000	52	83
Bear Creek at Idledale	13	45,700	75	41
Big Thompson River near Drake	15	145,800	68	71
Blue River at Dillon	22	91,810	69	83
Boulder Creek near Orodell	26	71,510	73	76
Cache la Poudre River at Canon	49	316,540	56	83
Clear Creek near Golden	23	180,000	60	66
Colorado River at Glenwood Springs	33	2,261,500	55	89
Colorado River at Lees Ferry, Arizona	38	15,166,000	42	101
Conejos River near Mogote	30	283,650	48	130
Dolores River at Dolores	23	385,150	39	118
Fraser River at West Portal	22	32,850	64	77
La Plata River at Hesperus	18	37,800	41	111
Laramie River near Jelm, Wyoming	24	135,390	55	91
Little Snake River at Lily Park	12	549,820	83	138
North Platte River near Northgate	17	410,680	44	107
Purgatoire River at Trinidad	25	72,240	85	69
Rio Grande River near Del Norte	43	721,400	49	124
Roaring Fork River at Glenwood Springs	26	1,166,300	66	98
Saguache Creek near Saguache	22	62,510	52	89
South Boulder Creek at Eldorado Springs	40	56,480	68	65
*South Platte River at South Platte	41	276,330	73	54
St. Vrain Creek at Lyons	43	100,840	61	67
White River near Meeker	29	483,900	73	112
White River near Watson, Utah	11	635,400	57	94
Yampa River at Steamboat Springs	27	373,970	66	101
Yampa River at Maybell	22	1,312,300	63	106

*Corrected for storage.

NOTE—The mean in acre feet is based on all available years of record as shown in first column, including the year 1932.

PLATTE DRAINAGE

SOUTH FORK OF SOUTH PLATTE RIVER AT ELEVEN MILE CANON NEAR LAKE GEORGE

Location—In NW¼ Sec. 21, T. 13 S., R. 72 W., in Eleven Mile Canon, eight miles west of Lake George and approximately one mile below Eleven Mile Canon Reservoir.

Records Available—Oct. 1, 1929, to Sept. 30, 1932. On station at Lake George eight miles below from Oct. 22, 1910, to Sept. 30, 1929.

Gage—Automatic recording gage.

Accuracy—Records considered good.

Co-operation—Station maintained in co-operation with the United States Geological Survey and the City of Denver.

SOUTH FORK SOUTH PLATTE RIVER ABOVE LAKE CHEESMAN

Location—One-half mile above high water line of Lake Cheesman. Sharp crested weir.

Records Available—October 1, 1924, to September 30, 1932. Acre-foot estimates 1909 to date.

Gage—Automatic recording gage.

Accuracy—Records considered good.

Co-operation—Records kept by the City of Denver.

SOUTH FORK SOUTH PLATTE RIVER BELOW LAKE CHEESMAN

Location—One-quarter mile below dam.

Records Available—October 1, 1924, to September 30, 1932. Acre-foot estimates 1909 to date.

Gage—Automatic recording gage.

Accuracy—Records considered good.

Co-operation—Station maintained in co-operation with the City of Denver.

NORTH FORK OF SOUTH PLATTE RIVER AT SOUTH PLATTE

Location—In Sec. 25, T. 7 S., R. 70 W., one-third mile above South Platte.

Records Available—January 4, 1909, to September 30, 1910; April 1, 1913, to September 30, 1932.

Gage—Automatic recording gage.

Accuracy—Records considered good.

Co-operation—Station maintained in co-operation with the United States Geological Survey and the City of Denver.

SOUTH PLATTE RIVER AT SOUTH PLATTE

Location—In Sec. 25, T. 7 S., R. 70 W., three-fourths of a mile east of South Platte and about 300 feet below junction of North and South Forks.

Records Available—March 28, 1902, to September 30, 1932.

Gage—Automatic recording gage.

Accuracy—Estimates are considered good.

Co-operation—Station maintained in co-operation with the United States Geological Survey and City of Denver.

SOUTH PLATTE RIVER AT WATERTON

Location—In Sec. 34, T. 6 S., R. 69 W., 200 feet east of highway bridge at pipe line crossing from Platte Canon Reservoir to filter beds.

Records Available—May 1, 1926, to Sept. 30, 1932.

Gage—Automatic recording gage.

Accuracy—Records considered good.

SOUTH PLATTE RIVER AT DENVER

Location—Between 15th Street and 16th Street Bridges in Denver and about 500 feet below the mouth of Cherry Creek.

Records Available—May 7, 1895, to August 29, 1931. This station moved to 19th Street bridge August 29, 1931.

Gage—Automatic recording gage.

Accuracy—Estimates considered good.

SOUTH PLATTE RIVER AT DENVER

Location—At point just above 19th Street Bridge in Denver and one-half mile below mouth of Cherry Creek. Waste water from Farmers and Gardners Ditch enters river above station.

Records Available—August 29, 1931, to September 30, 1932. From May 7, 1895, to August 29, 1931, station was maintained between 15th and 16th Street Bridges in Denver.

Gage—Automatic recording gage.

Accuracy—Records considered good.

SOUTH PLATTE RIVER AT HENDERSON

Location—In Sec. 34, T. 1 S., R. 67 W., 6th P. M. just below highway bridge at Henderson.

Records Available—May 1, 1926, to September 30, 1932.

Gage—Automatic recording gage.

Accuracy—Records considered good.

SOUTH PLATTE RIVER AT FT. LUPTON

Location—300 feet below highway bridge at Ft. Lupton in Sec. 6, T. 1 N., R. 66 W.

Records Available—May 10 to Sept. 15, 1906; Apr. 29, 1929, to Sept. 30, 1932.

Gage—Automatic recording gage.

Accuracy—Records considered good.

SOUTH PLATTE RIVER NEAR KERSEY

Location—Fifty feet below highway bridge in Sec. 9, T. 5 N., R. 64 W., and one and three-quarters mile north of Kersey.

Records Available—April 27, 1901, to October 31, 1903; March 1, 1905, to November 30, 1912; January 1, 1914, to September 30, 1932.

Gage—Automatic recording gage.

Accuracy—Records considered good.

SOUTH PLATTE RIVER AT SUBLETTE

Location—In Sec. 14, T. 4 N., R. 61 W., at highway bridge south of Sublette.

Records Available—April 19, 1926, to September 30, 1932.

Gage—Automatic recording gage.

Accuracy—Records considered fair.

SOUTH PLATTE RIVER AT BALZAC

Location—One-half mile below highway in Sec. 13, T. 5 N., R. 55 W., and three-quarters mile east of Balzac.

Records Available—January, 1917, to September 30, 1932.

Gage—Automatic recording gage.

Accuracy—Records considered fair.

SOUTH PLATTE RIVER AT JULESBURG

Location—In Sec. 33, T. 12 N., R. 44 W., at highway bridge at Julesburg, Colorado.

Records Available—April 2, 1902, to November 16, 1906; May 12, 1908, to November 30, 1912; April 8, 1914, to September 30, 1932.

Gage—Two automatic recording gages.

Accuracy—Records considered fair.

Co-operation—Station maintained in co-operation with the State of Nebraska.

TARRYALL CREEK NEAR LAKE GEORGE

Location—In Sec. 22, T. 11 S., R. 72 W., at McLaughlin's ranch.

Records Available—June 19 to October 26, 1916; April 1, 1925, to September 30, 1932.

Gage—Automatic recording gage.

Accuracy—Records considered good.

GOOSE CREEK AT LAKE CHEESMAN

Location—About one mile above high water line of Lake Cheesman. Sharp crested weir.

Records Available—October 1, 1924, to September 30, 1932. Acre-foot estimates, 1909 to date.

Gage—Automatic recording gage.

Accuracy—Records considered fair.

Co-operation—Records furnished by City of Denver.

BEAR CREEK AT (STARBUCK) IDLEDALE

Location—In Sec. 32, T. 4 S., R. 70 W., at bridge at Idledale postoffice.

Records Available—October 1, 1919, to September 30, 1932.

Gage—Automatic recording gage.

Accuracy—Records considered good.

BEAR CREEK AT MOUTH

Location—In Sec. 5, T. 5 S., R. 68 W.

Records Available—April 1 to November 30, 1914; February 23, 1927, to September 30, 1932.

Gage—Automatic recording gage.

Accuracy—Records considered fair.

CLEAR CREEK NEAR GOLDEN

Location—In Sec. 32, T. 3 S., R. 70 W., one and one-half miles above Golden.

Records Available—December 4, 1908, to December 31, 1909; June 8 to September 24, 1911; January 26, 1912, to September 30, 1932.

Gage—Automatic recording gage.

Accuracy—Records considered good.

CLEAR CREEK NEAR MOUTH

Location—In Sec. 36, T. 2 S., R. 68 W., where East Lake Highway crosses Clear Creek.

Records Available—April 1, 1914, to November 30, 1914; February 25, 1927, to September 30, 1932.

Gage—Automatic recording gage.

Accuracy—Records considered fair.

WEST FORK OF CLEAR CREEK NEAR EMPIRE

Location—In Sec. 27, T. 3 S., R. 74 W., below highway bridge one mile east of Empire on Georgetown road.

Records Available—June 1, 1929, to Sept. 30, 1931.

Gage—Automatic recording gage.

Accuracy—Records considered good.

Co-operation—Records furnished by the United States Geological Survey.

FALL RIVER NEAR IDAHO SPRINGS

Location—At highway bridge one and one-half miles west of Idaho Springs in Sec. 28, T. 3 S., R. 73 W.

Records Available—Apr. 1, 1930, to Sept. 30, 1932.

Gage—Automatic recording gage.

Accuracy—Records considered good.

SOUTH BOULDER CREEK NEAR ELDORADO SPRINGS

Location—In Sec. 25, T. 1 S., R. 71 W., one-half mile above Community dam. Station moved to present location Sept. 25, 1929.

Records Available—May 15, 1895, to Sept. 30, 1901; July 1, 1904, to Sept. 30, 1932.

Gage—Automatic recording gage.

Accuracy—Records considered good.

BOULDER CREEK NEAR ORODELL

Location—One mile above Orodell in Sec. 34, T. 1 N., R. 71 W., and one-fourth mile below power plant.

Records Available—May 12, 1917, to September 30, 1932. From May 14, 1895, to December 20, 1909, station was located 4 miles below present station. From March 8, 1907, to November 26, 1914, and February 27 to December 12, 1916, station was located one mile below present station. Four Mile Creek enters one and one-half miles below present station.

Gage—Automatic recording gage.

Accuracy—Records considered good.

Co-operation—Station maintained in co-operation with Public Service Company.

BOULDER CREEK AT MOUTH

Location—On Section line between Secs. 16 and 17, T. 2 N., R. 68 W., about ¼ mile below highway bridge and four and one-half miles southeast of Longmont.

Records Available—March 16, 1927, to September 30, 1932.

Gage—Automatic recording gage.

Accuracy—Records considered good.

MIDDLE BOULDER CREEK AT NEDERLAND

Location—In Sec. 13, T. 1 S., R. 73 W., at inlet of Barker Meadow Reservoir. This record includes North Beaver Creek.

Records Available—Jan., 1908, to Sept. 30, 1932.

Gage—Automatic recording gage.

Accuracy—Records considered good.

Co-operation—Records furnished by Public Service Company.

NORTH BOULDER CREEK NEAR NEDERLAND

Location—In SW¼ Sec. 6, T. 1 S., R. 72 W., 100 yards above highway bridge on Nederland-Ward highway.

Records Available—June 19, 1929, to Sept. 30, 1931.

Gage—Automatic recording gage.

Accuracy—Records considered good.

Co-operation—Records furnished by the United States Geological Survey.

ST. VRAIN CREEK AT LYONS

Location—Three-fourths mile below Lyons in Sec. 17, T. 3 N., R. 70 W., and one-fourth mile below the junction of the North and South Forks.

Records Available—August 1, 1887, to October 31, 1890; June 13, 1895, to October 31, 1903; July 1, 1904, to September 30, 1932.

Gage—Automatic recording gage.

Accuracy—Records considered good.

NORTH FORK OF ST. VRAIN CREEK AT LONGMONT DAM

Location—In Sec. 16, T. 3 N., R. 71 W., just below the upper concrete dam of City of Longmont. City diverts water below station.

Records Available—1913 to 1917 (partial records); June 1, 1926, to September 30, 1932.

Gage—Automatic recording gage.

Accuracy—Records considered good.

SOUTH ST. VRAIN CREEK NEAR WARD

Location—In Sec. 36, T. 2 N., R. 73 W.

Records Available—May 29 to Sept. 30, 1926; May 21, 1929, to Sept. 30, 1931.

Gage—Automatic recording gage.

Accuracy—Records considered good.

Co-operation—Records furnished by the United States Geological Survey.

ST. VRAIN CREEK AT MOUTH

Location—In Sec. 4, T. 3 N., R. 67 W., four miles northwest of Platteville.

Records Available—April 1 to December 31, 1915; February 24, 1927, to September 30, 1932.

Gage—Automatic recording gage.

Accuracy—Records considered good.

LEFT HAND CREEK NEAR BOULDER

Location—In Sec. 26, T. 2 N., R. 71 W., 1.8 miles west of highway bridge on Boulder-Lyons highway.

Records Available—May 16, 1929, to Sept. 30, 1931.

Gage—Automatic recording gage.

Accuracy—Records considered good.

Co-operation—Records furnished by the United States Geological Survey.

LEFT HAND CREEK NEAR MOUTH NEAR LONGMONT

Location—In Sec. 15, T. 2 N., R. 69 W.

Records Available—March 1, 1927, to September 30, 1932.

Gage—Automatic recording gage.

Accuracy—Records considered good.

BIG THOMPSON RIVER NEAR ESTES PARK

Location—In SW¼ Sec. 21, T. 5 N., R. 72 W., on highway bridge at Mike's Roost, 3 miles east of Estes Park P. O.

Records Available—June 24 to Sept. 30, 1932.

Gage—Staff gage.

Accuracy—Records good.

BIG THOMPSON RIVER BELOW LOVELAND POWER PLANT NEAR DRAKE

Location—In Sec. 7, T. 5 N., R. 70 W., ¼ mile below City of Loveland Power Plant.

Records Available—Oct. 1, 1929, to Sept. 30, 1932.

Accuracy—Records considered good.

Co-operation—Records furnished by the United States Geological Survey in co-operation with City of Loveland.

BIG THOMPSON RIVER AT CANON MOUTH

Location—In Sec. 4, T. 5 N., R. 70 W., at highway bridge one mile above Handy Dam. This station is four miles east of location used prior to 1927.

Records Available—September 18, 1917, to September 30, 1932.

Gage—Automatic recording gage.

Accuracy—Records considered good.

Co-operation—Station maintained in co-operation with City of Loveland.

BIG THOMPSON RIVER AT MOUTH

Location—On Section line between Secs. 33 and 34, T. 5 N., R. 66 W., at the first bridge on Big Thompson River above mouth.

Records Available—April 1 to November 30, 1914; March 1, 1927, to September 30, 1932.

Gage—Automatic recording gage.

Accuracy—Records considered good.

BIG SOUTH CACHE LA POUDRE RIVER NEAR HOME

Location—In Sec. 28, T. 8 N., R. 75 W., 3½ miles above Laramie-Poudre tunnel.

Records Available—May 20, 1929, to Sept. 30, 1931.

Gage—Automatic recording gage.

Accuracy—Records considered good.

Co-operation—Records furnished by the United States Geological Survey.

LITTLE SOUTH CACHE LA POUDRE RIVER NEAR EGGERS

Location—In Sec. 36, T. 8 N., R. 73 W., at highway bridge 8 miles southwest of Eggers above the mouth of Little Beaver Creek.

Records Available—May 31, 1929, to September 30, 1931.

Gage—Automatic recording gage.

Accuracy—Records considered good.

Co-operation—Records furnished by the United States Geological Survey.

CACHE LA POUDRE RIVER NEAR LOG CABIN

Location—In Sec. 33, T. 9 N., R. 73 W., one-half mile east of Rustic.

Records Available—Jan. 6, 1909, to Dec. 31, 1911; June 22, 1929, to Sept. 30, 1931.

Gage—Automatic recording gage.

Accuracy—Records considered good.

Co-operation—Records furnished by the United States Geological Survey.

CACHE LA POUDRE RIVER AT MOUTH OF CANON NEAR FORT COLLINS

Location—In Sec. 15, T. 8 N., R. 70 W., 3 miles below the intake of Fort Collins Water Works.

Records Available—May 15, 1884, to September 30, 1932.

Gage—Automatic recording gage.

Accuracy—Records considered good.

CACHE LA POUDRE RIVER NEAR MOUTH

Location—In Sec. 2, T. 5 N., R. 65 W., 2 miles east of Greeley just below highway bridge.

Records Available—March 24, 1903, to November 30, 1904; February 1, 1914, to December 17, 1919, and May 27, 1924, to September 30, 1932.

Gage—Automatic recording gage.

Accuracy—Records considered good.

NORTH FORK CACHE LA POUDRE RIVER AT LIVERMORE

Location—In Sec. 32, T. 10 N., R. 70 W., at highway bridge at Livermore.

Records Available—May 24, 1929, to Sept. 30, 1931.

Gage—Chain gage.

Accuracy—Records considered good.

Co-operation—Records furnished by the United States Geological Survey.

BIG GRIZZLY CREEK NEAR WALDEN

Location—Sec. 14, T. 7 N., R. 81 W., 14 miles southwest of Walden and 1 mile northeast of Hebron.

Records Available—May 13, 1904, to October 1, 1905; May 1 to September 30, 1923; October 1, 1926, to September 30, 1932.

Gage—Automatic recording gage.

Accuracy—Records considered good.

CANADIAN RIVER NEAR COWDREY

Location—In Sec. 6, T. 10 N., R. 79 W., ½ mile east of Cowdrey on main highway.

Records Available—May 12, 1904, to Oct. 31, 1905; May 23, 1929, to Sept. 30, 1931.

Gage—Chain gage.

Accuracy—Records considered good.

Co-operation—Station maintained in co-operation with the United States Geological Survey.

ILLINOIS CREEK NEAR RAND

Location—At highway bridge one mile east of Rand on the road to Owl.

Records Available—July 11, 1931, to September 30, 1932.

Gage—Automatic recording gage.

Accuracy—Records considered good.

ILLINOIS CREEK NEAR WALDEN

Location—Sec. 20, T. 9 N., R. 79 W., on highway bridge one-half mile north of Walden.

Records Available—May 1, 1917, to August 31, 1918, and May 1, 1923, to September 30, 1932.

Gage—Staff gage.

Accuracy—Records considered good.

LITTLE GRIZZLY CREEK AT MOUTH NEAR HEBRON

Location—On Peterson Ranch bridge ¼ mile from Walden-Coalmont Highway and about one mile upstream from junction with Big Grizzly Creek.

Records Available—June 26, 1931, to September 30, 1932.

Gage—Staff gage.

Accuracy—Records considered fair.

MICHIGAN RIVER NEAR LINDLAND

Location—Approximately two miles northeast of Lindland Post Office on the Cameron Pass Highway at the crossing of Michigan Creek and one mile above the junction of the North Fork.

Records Available—July 12, 1931, to September 30, 1932.

Gage—Automatic recording gage.

Accuracy—Records considered good.

MICHIGAN RIVER NEAR WALDEN

Location—Sec. 20, T. 9 N., R. 79 W., on highway bridge north of Walden.

Records Available—May 8, 1904, to October 31, 1905; June 1, 1918, to July 26, 1918, and May 1, 1923 to September 30, 1932.

Gage—Automatic recording gage.

Accuracy—Records considered good.

NORTH PLATTE RIVER NEAR WALDEN

Location—In Sec. 12, T. 8 N., R. 81 W., on highway bridge 9 miles southwest of Walden. Roaring Fork enters above station.

Records Available—May 13, 1904, to October 31, 1905, and October 1, 1923, to September 30, 1932.

Gage—Automatic recording gage.

Accuracy—Records considered good.

NORTH PLATTE RIVER NEAR NORTH GATE

Location—In Sec. 11, T. 11 N., R. 80 W., at highway bridge 6 miles south of Colorado-Wyoming line.

Records Available—May 23, 1915, to September 30, 1932.

Gage—Automatic recording gage.

Accuracy—Results considered good.

Co-operation—Station maintained by the United States Geological Survey.

ROARING FORK NEAR WALDEN

Location—In Sec. 11, T. 8 N., R. 81 W., on highway bridge 10 miles southwest of Walden.

Records Available—July 20, 1904, to October 31, 1905, and October 27, 1923, to September 30, 1932.

Gage—Automatic recording gage.

Accuracy—Records considered good.

WILLOW CREEK NEAR RAND

Location—On main highway bridge 2.6 miles north of Rand.

Records Available—July 10, 1931, to September 30, 1932.

Gage—Automatic recording gage.

Accuracy—Records considered good.

LARAMIE RIVER NEAR GLENDEVEY

Location—In Sec. 36, T. 10 N., R. 76 W., 5 miles east of Glendevey Postoffice and at Sholine's Ranch.

Records Available—June 24, 1904, to October 31, 1905, and August 18, 1910, to September 30, 1932.

Gage—Automatic recording gage.

Accuracy—Records considered good.

LARAMIE RIVER NEAR JELM, WYOMING

Location—At highway bridge in Sec. 15, T. 12 N., R. 77 W., one-fourth mile north of the Colorado-Wyoming line.

Records Available—May 7, 1911, to September 30, 1932. From June 22, 1904, to October 31, 1905, a station was maintained three-fourths of a mile south of this station.

Gage—Automatic recording gage.

Accuracy—Records considered good.

Co-operation—Station maintained by the United States Geological Survey.

Discharge of South Fork of South Platte River at Eleven Mile Canon near Lake George for year ending Sept. 30, 1931. Drainage area .. Square Miles. Altitude .. Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	292	40	....	....	....	....	50	24	26	311	35	15
2....	303	37	....	....	....	....	55	47	23	134	33	16
3....	314	39	....	....	....	....	75	62	29	73	33	18
4....	327	39	....	....	....	....	65	58	38	48	32	15
5....	325	35	....	....	....	....	70	41	63	35	28	12
6....	341	36	....	....	....	....	100	41	69	23	28	9
7....	349	40	....	....	....	....	140	39	56	27	36	9
8....	330	41	....	....	....	....	170	31	59	25	43	8
9....	317	43	....	....	....	....	180	22	81	20	44	9
10....	311	44	....	....	....	....	190	23	85	28	70	6
11....	325	42	....	....	....	....	200	24	70	35	66	5
12....	333	41	....	....	....	....	246	20	48	32	43	5
13....	327	41	....	....	....	....	246	17	45	24	32	4
14....	322	30	....	....	....	....	109	14	42	17	25	4
15....	308	30	....	....	....	....	80	14	38	24	24	3
16....	300	30	....	....	....	....	63	15	45	35	24	3
17....	290	30	....	....	....	....	50	14	70	37	33	3
18....	282	30	....	....	....	....	41	16	66	81	44	3
19....	279	30	....	....	....	....	32	15	50	77	48	3
20....	273	30	....	....	....	....	27	20	87	61	46	4
21....	170	25	....	....	....	....	19	28	90	48	49	4
22....	63	25	....	....	....	....	16	85	88	39	36	5
23....	51	25	....	....	....	....	16	75	90	28	33	5
24....	47	25	....	....	....	....	14	58	96	21	30	5
25....	41	25	....	....	....	....	13	52	116	20	26	5
26....	39	28	....	....	....	....	12	51	125	17	21	4
27....	38	28	....	....	....	....	13	67	140	16	77	4
28....	38	28	....	....	....	....	16	90	136	22	15	3
29....	37	28	....	....	....	....	17	87	162	31	13	1
30....	36	28	....	....	....	....	20	50	214	45	11	33
31....	38	....	....	....	....	....	....	30	....	38	11	....
Total	6846	993	....	....	....	....	2339	1230	2347	1477	1028	223
Mean.	221	33.1	15	8	5	35	78.0	39.7	78.2	47.6	33.2	7.4
Max...	349	44	....	....	....	....	246	90	214	311	70	33
Min...	36	....	....	....	....	....	12	14	23	16	11	1
Ac.-ft.	13600	1970	....	....	....	....	4640	2440	4650	2930	2040	440

Discharge of South Fork of South Platte River at Eleven Mile Canon near Lake George for year ending Sept. 30, 1932. Drainage Area .. Square Miles. Altitude .. Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	20	174	15	....	....	5	40	73	43	144	119	66
2....	7	205	15	....	....	5	40	53	31	201	126	64
3....	5	212	15	....	....	5	40	49	40	203	96	60
4....	4	205	15	....	....	5	40	21	63	157	69	56
5....	4	203	15	....	....	5	40	26	99	138	76	53
6....	4	212	10	....	....	5	50	23	59	126	58	49
7....	3	225	10	....	....	5	50	23	40	117	50	46
8....	3	223	10	....	....	5	50	21	35	106	43	43
9....	3	218	10	....	....	5	50	19	40	94	37	43
10....	70	196	10	....	....	5	50	19	65	94	31	39
11....	181	179	5	....	....	8	60	19	94	106	29	37
12....	81	170	5	....	....	8	60	17	94	119	28	38
13....	89	172	5	....	....	8	60	17	108	174	38	35
14....	90	148	5	....	....	8	60	18	82	212	41	33
15....	87	144	5	....	....	8	166	25	75	128	106	31
16....	84	161	5	....	....	18	166	25	106	105	106	31
17....	82	163	5	....	....	18	179	31	174	69	106	28
18....	86	166	5	....	....	18	181	30	183	92	170	23
19....	90	170	5	....	....	18	150	31	142	136	234	15
20....	90	165	5	....	....	18	142	114	136	94	234	13
21....	94	100	5	....	....	30	190	81	115	65	227	10
22....	97	100	5	....	....	30	223	62	123	50	245	9
23....	99	100	5	....	....	30	227	99	94	47	227	18
24....	101	100	5	....	....	30	212	101	190	75	188	23
25....	101	100	5	....	....	30	280	89	185	97	136	32
26....	97	75	5	....	....	40	270	89	229	108	106	39
27....	39	75	5	....	....	40	130	79	247	70	166	39
28....	14	75	5	....	....	40	69	62	174	60	115	37
29....	69	75	5	....	....	40	67	49	205	73	110	39
30....	166	75	5	....	....	40	74	41	148	174	79	56
31....	174	....	5	....	....	40	....	43	....	132	65	....
Total	2134	4586	230	....	....	570	3416	1459	3419	3566	3461	1105
Mean.	68.8	153	7.4	4	5	18.4	114	47.1	114	115	112	36.8
Max...	181	225	....	....	....	....	280	114	247	203	245	66
Min...	3	....	....	....	....	....	....	17	31	47	28	9
Ac.-ft.	4230	9100	455	246	288	1130	6780	2900	6780	7070	6890	2190

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of South Platte River above Lake Cheesman for Year Ending Sept. 30, 1931.
Drainage Area 1,680 Square Miles. Altitude, 6,835 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	399	....	....	....	....	....	....	148	206	447	99	52
2....	399	....	....	....	....	....	....	193	181	439	81	52
3....	399	....	....	....	....	....	....	284	193	314	82	49
4....	399	....	....	....	....	....	....	382	206	252	107	48
5....	399	....	....	....	....	....	....	378	245	212	120	45
6....	399	....	....	....	....	....	....	307	280	175	116	41
7....	407	....	....	....	....	....	....	273	259	143	125	38
8....	399	....	....	....	....	....	....	245	231	127	134	38
9....	382	....	....	....	....	....	....	212	248	89	131	37
10....	374	....	....	....	....	....	....	202	262	75	148	37
11....	386	....	....	....	....	....	....	196	310	86	187	35
12....	421	....	....	....	....	....	....	184	266	92	148	33
13....	408	....	....	....	....	....	....	170	218	87	107	32
14....	386	....	....	....	....	....	....	151	193	80	91	31
15....	378	....	....	....	....	....	....	146	175	72	79	30
16....	366	....	....	....	....	....	....	141	161	82	77	27
17....	354	....	....	....	....	....	....	146	215	107	74	29
18....	346	....	....	....	....	....	125	146	245	141	79	26
19....	358	....	....	....	....	....	118	156	196	209	105	31
20....	342	....	....	....	....	....	102	164	167	184	127	35
21....	322	....	....	....	....	....	84	187	181	151	125	37
22....	175	....	....	....	....	....	78	245	180	109	122	38
23....	134	....	....	....	....	....	70	350	181	90	114	37
24....	129	....	....	....	....	....	68	374	180	75	102	36
25....	116	....	....	....	....	....	66	311	199	58	94	35
26....	114	....	....	....	....	....	58	266	222	54	86	31
27....	109	....	....	....	....	....	60	252	228	57	82	30
28....	105	....	....	....	....	....	86	262	259	60	67	30
29....	113	....	....	....	....	....	122	303	255	75	52	30
30....	92	....	....	....	....	....	127	295	310	73	45	15
31....	90	....	....	....	....	....	....	235	....	92	44	....
Total	9200	....	....	....	....	....	....	7304	6652	4307	3150	1065
Mean.	297	....	....	....	....	....	....	236	222	139	102	35.5
Max..	421	....	....	....	....	....	....	382	310	447	187	52
Min...	90	....	....	....	....	....	....	141	161	54	44	15
Acre-ft.	18300	....	....	....	....	....	....	14500	13200	8550	6270	2110

Discharge of South Platte River Above Lake Cheesman for Year Ending Sept. 30, 1932.
Drainage Area 1,680 Square Miles. Altitude, 6,835 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	38	....	....	....	....	....	....	153	76	219	374	141
2....	33	....	....	....	....	....	....	143	79	245	362	131
3....	25	....	....	....	....	....	....	108	71	307	212	125
4....	21	....	....	....	....	....	....	94	90	245	156	113
5....	18	262	....	....	....	....	....	90	170	222	146	97
6....	17	270	....	....	....	....	....	83	222	209	129	90
7....	16	273	....	....	....	....	....	84	187	196	97	94
8....	15	276	....	....	....	....	....	78	94	184	79	94
9....	15	276	....	....	....	....	....	75	77	141	63	84
10....	25	262	....	....	....	....	....	71	141	131	50	78
11....	212	242	....	....	....	....	....	69	225	143	46	56
12....	206	228	....	....	....	....	....	46	238	148	52	56
13....	94	228	....	....	....	....	....	38	212	326	87	61
14....	141	222	....	....	....	....	....	70	200	434	178	63
15....	131	200	....	....	....	....	181	72	164	399	190	59
16....	129	212	....	....	....	....	175	76	167	225	187	55
17....	127	215	....	....	....	....	232	75	245	181	181	54
18....	148	212	....	....	....	....	203	81	276	146	212	48
19....	153	206	....	....	....	....	193	79	262	256	299	32
20....	156	212	....	....	....	....	193	100	238	245	307	27
21....	161	212	....	....	....	....	256	187	232	170	314	27
22....	161	....	....	....	....	....	280	173	219	148	366	26
23....	167	....	....	....	....	....	299	173	203	106	383	28
24....	164	....	....	....	....	....	262	209	245	94	270	30
25....	161	....	....	....	....	....	314	203	266	136	222	45
26....	159	....	....	....	....	....	342	200	291	190	209	57
27....	153	....	....	....	....	....	262	203	342	196	225	65
28....	55	....	....	....	....	....	136	141	314	146	219	63
29....	52	....	....	....	....	....	136	104	326	136	203	63
30....	212	....	....	....	....	....	141	81	262	307	181	63
31....	235	....	....	....	....	....	....	73	....	456	151	....
Total	3400	....	....	....	....	....	....	3432	6134	6687	6150	2025
Mean.	110	....	....	....	....	....	....	111	204	216	198	67.5
Max..	235	....	....	....	....	....	....	209	342	456	383	141
Min...	15	....	....	....	....	....	....	38	71	94	46	26
Acre-ft.	6760	....	....	....	....	....	....	6820	12100	13300	12200	4020

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of South Platte River Below Lake Cheesman for Year Ending Sept. 30, 1931.
Drainage Area, 1,766 Square Miles. Altitude, Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	293	69	32	....	....	29	30	207	287	664	478	216
2....	282	69	32	....	....	29	30	256	258	579	478	164
3....	342	69	32	....	....	29	30	336	248	503	481	151
4....	453	69	32	....	....	29	30	427	248	346	427	151
5....	389	69	32	....	....	29	30	475	280	271	448	150
6....	328	69	32	....	....	29	30	416	311	232	339	150
7....	357	69	32	....	....	29	32	377	311	218	231	150
8....	371	68	32	....	....	29	32	344	287	205	214	138
9....	364	68	32	....	....	29	31	304	285	189	218	131
10....	295	69	32	....	....	29	31	282	304	169	269	131
11....	306	68	32	....	....	29	31	260	354	156	302	144
12....	352	68	32	....	....	29	30	256	334	156	267	150
13....	379	56	32	....	....	29	30	252	291	154	213	131
14....	371	34	32	....	....	29	30	248	254	186	180	138
15....	315	33	32	....	....	29	50	267	232	196	178	131
16....	306	33	31	....	....	29	244	280	216	171	202	120
17....	315	32	31	....	....	29	248	289	222	250	207	126
18....	253	32	31	....	....	29	207	304	265	463	184	130
19....	243	32	31	....	....	29	202	289	242	562	184	133
20....	245	32	31	....	....	29	202	280	204	579	180	148
21....	245	32	31	....	....	29	177	280	209	526	285	151
22....	226	32	31	....	....	29	145	296	250	369	500	150
23....	126	32	31	....	....	29	130	436	344	200	481	148
24....	69	32	31	....	....	29	121	500	542	300	457	147
25....	69	32	31	....	....	29	120	457	510	313	427	145
26....	69	32	31	....	....	29	113	408	519	311	164	144
27....	69	32	31	....	29	29	119	369	572	324	162	142
28....	69	32	31	....	29	29	140	359	611	354	162	140
29....	69	32	31	....	....	29	159	382	596	500	161	145
30....	69	32	31	....	....	29	184	388	676	494	267	147
31....	69	....	31	....	....	29	....	339	....	442	291	....
Total	7708	1428	976	....	....	899	2988	10363	10262	10382	9039	4342
Mean.	249	47.6	31.5	39.6	47.8	29.0	99.6	334	342	335	292	145
Max..	453	69	32	....	....	29	248	500	676	664	500	216
Min...	69	32	31	....	....	29	30	207	204	154	161	120
Acre-ft.	15300	2830	1940	2430	2650	1780	5930	20500	20400	20600	18000	8630

Discharge of South Platte River Below Lake Cheesman for Year Ending Sept. 30, 1932.
Drainage Area, 1,766 Square Miles. Altitude, ... Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	156	75	20	20	50	25	28	190	170	334	338	140
2....	174	79	20	20	50	25	28	248	168	314	312	138
3....	182	275	20	20	50	25	28	238	171	324	305	136
4....	157	130	20	20	50	25	29	199	199	324	232	120
5....	151	78	20	20	50	25	27	190	215	290	214	120
6....	148	78	20	20	50	25	20	179	286	262	210	116
7....	140	79	20	20	50	25	20	160	305	319	201	105
8....	132	80	20	20	49	25	20	158	290	412	186	105
9....	129	82	20	20	50	25	21	158	242	334	173	104
10....	134	85	20	20	50	25	22	156	194	353	152	102
11....	152	87	20	20	50	25	23	156	252	336	144	100
12....	157	79	20	20	50	25	23	166	322	336	140	90
13....	157	79	20	20	50	25	81	145	355	370	110	87
14....	148	80	20	20	50	25	138	127	341	548	116	87
15....	108	81	20	20	50	25	189	130	270	600	192	88
16....	104	81	20	20	50	25	171	151	242	365	294	156
17....	94	58	20	20	50	25	139	166	240	264	355	151
18....	94	57	20	20	50	26	136	166	305	197	308	150
19....	98	52	20	20	50	26	136	168	401	176	390	148
20....	122	46	20	20	50	26	138	196	367	331	478	140
21....	123	40	20	20	50	26	139	252	336	299	395	132
22....	138	33	20	50	50	26	140	297	290	223	290	126
23....	142	26	20	50	50	26	140	290	272	186	367	126
24....	142	20	20	50	50	27	142	286	264	178	308	126
25....	142	20	20	50	50	28	166	283	308	179	226	123
26....	142	20	20	50	40	28	138	279	346	179	226	108
27....	139	20	20	50	40	28	139	277	420	228	226	130
28....	132	20	20	50	40	28	170	279	484	272	228	133
29....	115	20	20	50	40	28	187	236	401	290	230	148
30....	73	20	20	50	....	28	199	189	377	341	186	136
31....	73	....	20	50	....	28	....	178	....	462	165	....
Total	4098	1980	620	900	1409	804	2977	6293	8833	9626	7697	3671
Mean.	132	66.0	20	29	48.6	25.9	99.2	203	294	310	248	122
Max..	182	275	....	....	....	....	199	297	484	600	478	156
Min...	73	20	....	....	....	....	20	127	168	176	110	87
Acre-ft.	8120	3930	1230	1780	2800	1590	5900	12500	17500	19100	15200	7260

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of North Fork of South Platte River at South Platte for Year Ending Sept. 30, 1931.
Drainage Area, 484 Square Miles. Altitude, 6,097 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	120	90	....	....	....	....	70	168	494	443	153	69
2....	128	90	....	....	....	....	70	203	522	354	124	78
3....	126	91	57	....	....	....	70	247	504	343	120	72
4....	126	86	....	....	....	44	70	254	494	305	116	69
5....	124	81	....	....	....	....	70	241	466	254	102	67
6....	118	86	....	46	42	....	100	258	458	234	108	65
7....	116	83	....	....	....	....	100	278	474	228	116	71
8....	116	72	....	....	....	....	100	276	478	214	118	74
9....	112	74	....	....	....	....	100	261	394	201	104	69
10....	112	76	....	....	....	....	100	263	375	197	143	63
11....	112	71	....	....	....	....	110	250	354	190	143	59
12....	124	68	....	....	....	....	110	263	337	186	134	58
13....	120	74	....	....	....	....	110	258	337	166	128	58
14....	110	74	....	....	....	....	110	281	323	158	128	57
15....	108	72	....	....	....	....	110	334	316	184	132	58
16....	106	58	....	....	....	....	110	419	346	210	153	49
17....	102	64	....	....	....	....	126	494	340	217	168	55
18....	100	76	....	....	....	....	149	565	313	210	151	59
19....	104	58	....	....	....	....	166	410	298	201	134	63
20....	102	46	....	....	....	....	173	363	276	197	104	64
21....	100	50	....	....	....	....	132	318	286	192	95	58
22....	100	50	....	....	....	....	130	295	274	177	86	53
23....	95	50	....	....	....	....	108	366	267	158	93	57
24....	97	50	....	....	....	....	102	426	267	156	88	62
25....	97	50	....	....	....	....	120	526	265	124	84	59
26....	100	50	....	....	....	....	106	610	283	122	78	58
27....	91	50	....	....	....	....	124	630	293	124	76	55
28....	99	50	....	....	....	....	128	517	348	118	72	55
29....	95	50	....	....	....	....	141	482	329	128	65	54
30....	90	50	....	....	....	....	147	419	363	118	63	54
31....	90	....	....	....	....	....	....	430	....	120	63	....
Total	3340	1990	1705	1395	1176	1550	3362	11195	10874	6229	3442	1842
Mean.	108	66.3	55	45	42	50	112	358	362	201	111	61.4
Max..	128	91	....	....	....	....	173	630	522	443	168	78
Min...	90	....	....	....	....	....	....	168	265	118	63	49
Acre-ft.	6640	3950	3380	2770	2330	3070	6660	22000	21500	12400	6820	3650

Discharge of North Fork of South Platte River at South Platte for Year Ending Sept. 30, 1932.
Drainage Area, 484 Square Miles. Altitude, 6,097 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	54	62	....	....	....	....	45	70	265	301	206	94
2....	51	59	....	....	49	....	45	80	270	298	186	89
3....	57	60	....	....	....	32	45	104	298	290	162	82
4....	59	48	50	....	....	....	45	102	301	265	158	82
5....	56	49	....	30	....	....	45	98	293	259	147	76
6....	52	51	....	....	....	....	55	102	276	240	134	76
7....	51	51	....	....	....	....	55	106	284	229	131	75
8....	60	49	....	....	....	....	56	100	307	216	127	62
9....	59	56	....	....	....	....	51	100	335	213	123	60
10....	72	54	....	....	....	....	43	114	324	231	118	68
11....	70	48	....	....	....	....	42	120	318	282	114	67
12....	70	39	....	....	....	....	49	142	324	321	125	65
13....	65	26	....	....	....	....	54	170	321	354	120	64
14....	59	29	....	....	....	....	62	186	329	296	110	60
15....	56	32	....	....	....	....	68	229	346	248	112	59
16....	48	35	....	....	....	....	75	231	374	240	114	59
17....	45	25	....	....	....	....	85	240	354	287	114	56
18....	46	35	....	....	....	....	82	259	332	276	123	56
19....	45	48	....	....	....	....	70	310	324	262	110	69
20....	49	31	....	....	....	....	68	276	321	251	110	59
21....	60	35	....	....	....	....	80	301	310	226	120	60
22....	57	35	....	....	....	....	85	401	307	206	138	70
23....	51	35	....	....	....	....	98	443	321	206	118	52
24....	56	35	....	....	....	....	70	357	304	203	106	60
25....	54	35	....	....	....	....	57	346	304	198	98	96
26....	48	50	....	....	....	....	92	307	329	179	112	89
27....	48	50	....	....	....	....	76	268	349	179	110	76
28....	39	50	....	....	....	....	73	273	329	177	110	73
29....	40	50	....	....	....	....	68	282	315	179	118	78
30....	29	50	....	....	....	....	68	290	301	268	102	75
31....	35	....	....	....	....	....	....	268	....	282	96	....
Total	1641	1312	....	....	....	....	1907	6675	9465	7662	3872	2099
Mean.	52.9	43.7	48	32	45	45	63.6	215	316	247	125	70.0
Max..	72	62	....	....	....	....	98	443	374	354	206	96
Min...	29	25	....	....	....	....	42	70	265	177	96	52
Acre-ft.	3250	2600	2950	1970	2590	2770	3780	13200	18800	15200	7690	4170

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of South Platte River at South Platte for Year Ending Sept. 30, 1931.
Drainage Area, 2,550 Square Miles. Altitude, 6,097 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	404	174	....	....	....	....	140	383	906	1280	750	338
2....	369	171	....	....	....	....	140	429	871	983	708	280
3....	386	174	110	....	....	....	140	530	836	962	726	248
4....	488	170	....	....	....	....	140	615	829	756	630	238
5....	496	166	....	....	....	113	140	672	857	560	600	235
6....	394	171	....	93	111	....	190	666	878	520	605	232
7....	411	168	....	....	....	....	190	655	899	478	433	238
8....	414	160	....	....	....	....	190	620	857	441	408	235
9....	418	160	....	....	....	....	190	575	756	408	394	213
10....	390	163	....	....	....	....	190	565	762	383	449	209
11....	348	158	....	....	....	....	220	525	780	366	492	207
12....	404	155	....	....	....	....	220	520	774	348	465	228
13....	433	163	....	....	....	....	220	510	720	330	414	209
14....	425	154	....	....	....	....	220	530	645	338	369	205
15....	383	144	....	....	....	....	220	600	600	411	376	205
16....	358	128	....	....	....	....	275	696	610	408	404	180
17....	358	138	....	....	....	....	358	750	575	425	470	182
18....	317	146	....	....	....	....	352	850	585	690	383	195
19....	293	131	....	....	....	....	352	714	545	801	352	199
20....	290	118	....	....	....	....	362	672	474	885	317	209
21....	288	120	....	....	....	....	305	645	465	808	305	215
22....	285	106	....	....	....	....	270	635	461	750	565	209
23....	240	102	....	....	....	....	235	857	550	386	605	213
24....	193	102	....	....	....	....	225	1010	762	478	565	211
25....	186	112	....	....	....	....	242	1080	756	457	520	207
26....	182	104	....	....	....	....	218	1070	762	457	330	207
27....	174	104	....	....	....	....	235	1050	864	470	248	203
28....	180	105	....	....	....	....	262	1010	1010	515	240	201
29....	171	108	....	....	....	....	282	969	941	620	235	199
30....	170	110	....	....	....	....	317	934	1060	666	265	205
31....	171	....	....	....	....	....	....	913	....	672	358	....
Total	10019	4185	....	....	....	....	7040	22250	22390	18052	13981	6555
Mean.	323	140	120	95	110	115	235	718	746	582	451	218
Max..	496	174	....	....	....	....	362	1080	1060	1280	750	338
Min...	170	102	....	....	....	....	....	383	461	330	235	180
Acre-ft.	19900	8330	7380	5840	6110	7070	14000	44100	44400	35800	27700	13000

Discharge of South Platte River at South Platte for Year Ending Sept. 30, 1932.
Drainage Area, 2,550 Square Miles. Altitude, 6,097 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	203	134	....	....	....	....	98	293	478	685	670	250
2....	222	134	....	....	....	....	99	390	474	635	528	224
3....	236	303	....	....	....	....	108	418	496	630	514	224
4....	216	213	....	....	....	....	121	363	510	615	435	203
5....	203	142	....	....	....	....	113	344	523	595	363	203
6....	195	134	....	....	....	....	126	348	546	528	344	203
7....	190	134	....	....	....	....	124	330	610	514	326	190
8....	188	136	....	....	....	....	114	320	630	675	309	171
9....	193	142	....	....	....	....	110	309	635	568	290	171
10....	216	146	....	....	....	....	102	326	568	615	277	178
11....	233	141	....	....	....	....	101	326	568	660	244	168
12....	247	131	....	....	....	....	109	340	665	685	247	162
13....	247	124	....	....	....	....	114	370	706	750	284	148
14....	230	125	....	....	....	....	230	348	700	870	193	144
15....	180	128	....	....	....	....	287	386	650	940	274	144
16....	168	128	....	....	....	....	313	402	645	780	374	190
17....	155	108	....	....	....	....	271	443	615	590	546	216
18....	153	107	....	....	....	....	262	474	615	550	443	216
19....	157	118	....	....	....	....	290	518	706	469	496	213
20....	185	99	....	....	....	....	287	514	728	600	620	213
21....	206	109	....	....	....	....	300	568	670	582	650	198
22....	219	56	....	....	....	....	306	756	635	487	439	190
23....	219	48	....	....	....	....	333	792	620	426	474	178
24....	227	18	....	....	....	....	300	675	595	406	496	200
25....	222	38	....	....	....	....	287	660	610	402	340	238
26....	216	66	....	....	....	....	300	625	670	367	370	198
27....	211	77	....	....	....	....	256	595	792	382	367	195
28....	188	76	....	....	....	....	259	605	891	460	363	208
29....	180	74	....	....	....	....	293	600	798	469	370	238
30....	130	77	....	....	....	....	326	528	700	768	323	227
31....	125	....	....	....	....	....	....	492	....	792	268	....
Total	6160	3466	....	....	....	....	6339	14458	19049	18495	12237	5901
Mean.	199	116	72.5	61.5	106	86.9	211	466	635	597	395	197
Max..	247	303	....	....	....	....	333	792	891	940	670	250
Min...	125	18	....	....	....	....	98	293	474	367	193	144
Acre-ft.	12200	6900	4460	3780	6100	5340	12600	28700	37800	36700	24300	11700

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of South Platte River at Waterton for Year Ending Sept. 30, 1931. Drainage Area, 2,621 Square Miles. Altitude, 5,507 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	146	42	50	14	22	27	30	48	425	622	514	154
2....	180	50	48	12	22	27	59	34	420	443	443	92
3....	128	56	45	10	25	32	37	115	334	502	443	48
4....	135	53	56	8	25	30	22	180	289	431	448	65
5....	70	48	48	7	22	30	22	252	318	313	397	22
6....	56	48	40	7	17	30	37	334	339	289	397	22
7....	42	48	42	8	20	50	67	275	354	256	200	20
8....	40	32	48	8	20	42	118	243	328	247	172	20
9....	34	37	34	9	20	34	101	216	397	221	135	12
10....	34	40	32	10	20	37	95	188	648	192	180	7
11....	32	35	14	12	17	37	104	234	655	161	247	7
12....	32	25	15	14	17	32	118	484	648	150	230	10
13....	27	32	25	20	17	30	115	354	622	128	172	10
14....	22	27	22	17	17	37	111	128	557	118	132	8
15....	22	25	42	22	17	32	139	165	454	172	111	10
16....	22	20	73	20	17	30	212	298	386	196	212	10
17....	20	25	79	25	15	27	303	344	431	204	180	3
18....	22	42	121	30	17	30	284	334	526	234	157	10
19....	24	32	95	27	14	27	234	270	508	280	139	10
20....	150	20	70	22	17	27	115	303	449	334	98	12
21....	256	35	86	22	20	32	40	354	408	261	80	12
22....	243	89	64	20	20	34	30	252	397	243	108	10
23....	168	82	30	20	20	37	27	454	490	157	132	15
24....	48	115	27	20	20	27	24	557	431	221	98	22
25....	64	135	34	22	22	30	34	655	354	225	76	14
26....	59	128	8	17	20	27	24	569	339	234	59	15
27....	59	82	24	17	22	25	17	569	408	238	40	14
28....	45	76	43	22	32	76	22	454	551	265	34	14
29....	56	37	10	20	....	70	27	425	454	365	34	14
30....	42	40	22	20	....	24	30	414	545	437	45	17
31....	42	....	17	20	....	22	....	386	....	466	142	....
Total	2320	1556	1364	522	554	1052	2598	9888	13465	8605	5855	699
Mean.	74.8	51.9	44.0	16.8	19.8	33.9	86.6	319	449	278	189	23.3
Max..	256	135	121	30	32	76	303	655	655	622	514	154
Min...	20	20	8	7	14	22	17	34	289	118	34	3
Acre-ft.	4600	3090	2700	1030	1100	2080	5150	19600	26700	17100	11600	1390

Discharge of South Platte River at Waterton for Year Ending Sept. 30, 1932. Drainage Area, 2,621 Square Miles. Altitude, 5,507 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	22	6	12	18	4	4	2	156	276	410	84	118
2....	37	6	12	20	2	8	2	232	268	420	59	90
3....	56	8	14	20	4	4	2	264	276	406	232	90
4....	28	4	14	20	4	6	2	248	289	388	240	73
5....	20	8	14	16	4	10	2	228	280	397	160	59
6....	16	4	16	16	2	6	6	240	294	330	164	66
7....	28	4	14	18	2	6	4	236	348	307	160	52
8....	25	2	12	18	2	8	2	220	374	294	145	28
9....	25	31	16	14	2	12	6	172	384	248	118	22
10....	28	49	20	16	2	10	6	180	338	252	84	28
11....	28	56	18	14	4	8	6	192	284	298	52	28
12....	37	49	25	12	10	6	6	204	260	338	62	22
13....	37	31	20	12	8	4	8	228	248	361	200	28
14....	31	31	16	8	4	10	156	208	248	256	156	31
15....	18	28	14	4	8	2	196	252	248	470	180	25
16....	18	37	16	12	10	2	200	252	252	443	256	22
17....	18	12	20	2	12	2	160	280	284	248	298	28
18....	18	14	18	2	8	2	145	302	384	320	152	22
19....	16	16	18	6	4	2	160	334	452	236	216	22
20....	20	14	18	6	12	2	160	312	452	356	330	25
21....	40	14	18	4	4	2	164	348	438	388	415	31
22....	59	16	16	12	4	2	172	484	406	284	320	25
23....	56	16	18	6	6	2	208	541	388	216	325	20
24....	46	16	20	4	6	2	164	447	361	196	379	31
25....	49	16	18	4	4	2	149	424	384	204	192	43
26....	43	20	20	2	4	2	172	402	415	176	196	34
27....	43	31	16	2	6	2	118	366	512	176	264	49
28....	28	25	16	6	6	2	12	379	574	268	240	59
29....	18	16	16	8	4	2	49	361	466	256	236	87
30....	14	18	22	4	....	2	104	312	370	498	208	73
31....	14	....	18	6	....	2	....	289	....	384	145	....
Total	936	598	515	312	152	136	2543	9093	10553	9824	6268	1331
Mean.	30.2	19.9	16.6	10.1	5.24	4.39	84.8	293	352	317	202	44.4
Max..	59	56	25	20	12	12	208	541	574	498	415	118
Min...	14	2	12	2	2	2	2	156	248	176	52	20
Acre-ft.	1860	1180	1020	621	301	270	5050	18000	20900	19500	12400	2640

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of South Platte River at Denver for Year Ending Sept. 30, 1931.
Drainage Area, 3,840 Square Miles. Altitude, 5,240 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	210	152	167	109	102	133	141	301	749	678	860	264
2....	279	150	176	117	99	125	164	403	694	651	760	225
3....	360	141	167	109	99	133	182	604	651	594	710	162
4....	368	133	158	107	102	125	158	656	549	630	699	96
5....	227	147	150	94	107	136	127	783	544	564	564	94
6....	234	147	144	102	109	130	125	940	574	434	579	96
7....	191	144	147	99	109	112	147	927	569	340	416	112
8....	144	127	127	97	104	136	164	749	549	305	324	99
9....	133	117	122	97	99	147	207	721	408	276	301	89
10....	130	120	114	92	97	155	188	699	738	247	294	76
11....	155	125	107	92	94	155	194	683	716	227	328	66
12....	152	130	112	94	102	144	204	860	716	210	294	68
13....	158	127	112	78	107	138	227	807	716	191	247	80
14....	161	136	122	78	99	133	217	372	646	167	194	66
15....	173	138	99	87	102	125	234	309	574	170	268	70
16....	179	130	87	82	107	122	272	356	499	210	599	74
17....	230	120	107	80	97	120	377	539	438	332	368	72
18....	182	133	85	73	87	114	399	554	509	332	336	74
19....	176	147	62	66	85	120	381	604	549	283	272	89
20....	161	136	75	64	87	127	332	549	519	356	237	84
21....	340	136	97	78	97	122	194	755	559	394	188	89
22....	356	185	85	78	112	122	188	614	466	336	158	92
23....	364	207	85	80	112	120	176	667	461	276	207	94
24....	352	194	90	85	114	122	147	836	524	247	210	104
25....	320	258	85	82	109	130	198	972	425	320	152	101
26....	272	294	78	80	109	94	194	909	368	317	117	89
27....	254	254	87	80	114	90	173	807	412	336	107	72
28....	237	240	87	87	147	112	182	755	546	368	87	72
29....	188	204	104	94	....	188	170	778	549	438	94	70
30....	173	176	102	97	....	167	261	848	574	620	89	68
31....	150	....	104	94	....	152	....	783	....	651	148	....
Total	7009	4848	3444	2752	2908	4049	6323	21140	16791	11500	10207	2907
Mean.	226	162	111	88.8	104	131	211	682	560	371	329	96.9
Max..	368	294	176	117	147	188	399	972	749	678	860	264
Min...	130	117	62	64	85	90	125	301	368	167	87	66
Acre-ft.	13900	9640	6820	5460	5780	8060	12600	41900	33300	22800	20200	5770

Discharge of South Platte River at Denver for Year Ending Sept. 30, 1932.
Drainage Area, 3,840 Square Miles. Altitude, 5,240 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	66	100	111	71	57	76	57	145	325	392	415	189
2....	78	98	108	73	76	71	53	154	325	462	136	154
3....	98	90	100	71	64	64	53	244	403	487	151	142
4....	116	90	93	83	51	69	41	248	561	438	292	157
5....	96	90	90	76	100	73	41	206	370	415	224	139
6....	86	93	93	57	111	66	51	214	345	345	192	127
7....	90	93	83	76	100	57	73	268	370	291	189	127
8....	98	93	93	76	96	33	51	224	409	277	160	114
9....	90	98	93	76	98	41	60	179	487	268	148	96
10....	78	127	96	80	116	51	66	160	526	232	127	80
11....	116	145	98	71	93	47	49	154	450	275	122	86
12....	133	154	93	73	76	76	43	151	381	360	111	78
13....	130	145	76	76	86	103	37	176	325	480	173	80
14....	125	133	76	60	76	108	37	182	287	325	221	76
15....	116	136	76	60	78	106	170	186	264	444	166	69
16....	125	130	73	64	83	96	196	228	256	717	224	69
17....	108	136	83	66	73	83	170	232	260	444	252	73
18....	100	116	88	66	73	76	136	248	376	468	244	73
19....	93	114	88	78	76	69	125	273	513	365	282	73
20....	88	108	88	73	78	73	122	355	598	355	301	66
21....	166	98	88	76	73	83	116	315	553	444	420	71
22....	151	111	93	62	73	76	136	500	450	426	450	71
23....	157	100	90	71	71	76	310	590	403	292	376	71
24....	145	122	88	51	69	78	256	493	408	248	387	66
25....	151	116	93	55	73	78	196	426	409	214	381	73
26....	139	114	86	76	71	71	228	506	468	206	287	93
27....	139	106	93	71	71	64	217	462	605	173	350	88
28....	139	106	88	71	73	69	142	438	751	236	310	88
29....	130	125	90	51	76	60	96	426	668	296	273	127
30....	122	111	80	60	....	60	90	365	468	487	248	145
31....	111	....	80	69	....	55	....	320	....	821	221	....
Total	3570	3398	2768	2139	2311	2208	3418	9068	13015	11683	7832	2961
Mean.	115	113	89.3	69.0	79.7	71.2	114	292	434	377	253	98.7
Max..	166	154	111	83	116	108	310	590	751	821	450	189
Min...	66	90	73	51	51	33	37	145	256	173	111	66
Acre-ft.	7070	6720	5490	4240	4580	4380	6780	18000	25800	23200	15600	5870

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of South Platte River at Henderson for Year Ending Sept. 30, 1931.
Drainage Area, ... Square Miles. Altitude, ... Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	120	60	71	61	61	65	61	228	616	616	330	96
2....	162	61	77	77	61	65	57	208	622	546	414	118
3....	270	68	80	58	63	65	52	224	583	462	251	115
4....	462	181	82	58	65	66	51	188	498	528	318	84
5....	270	224	80	56	69	72	50	192	552	426	196	74
6....	232	224	86	56	63	63	50	552	712	324	149	89
7....	188	100	80	61	65	61	48	570	754	313	155	112
8....	96	82	79	62	62	61	51	390	698	251	237	86
9....	87	76	79	61	58	56	53	468	335	232	200	93
10....	79	77	84	65	58	61	62	534	622	228	181	89
11....	72	80	80	63	62	62	60	564	635	208	174	91
12....	69	79	77	58	62	63	68	414	504	177	149	102
13....	63	76	69	60	61	62	61	402	510	149	137	95
14....	57	72	71	58	62	61	60	159	438	134	105	79
15....	54	74	69	54	61	61	52	192	324	122	96	95
16....	53	66	71	51	60	56	47	313	516	152	510	105
17....	58	61	77	55	60	57	47	635	492	266	570	105
18....	53	65	79	55	61	54	56	747	486	379	330	112
19....	61	86	76	51	58	51	77	719	558	242	280	112
20....	61	84	76	53	56	51	74	656	534	246	224	98
21....	89	79	74	65	58	51	79	859	564	302	177	100
22....	177	91	69	69	57	51	98	796	498	232	140	95
23....	166	89	84	65	57	49	137	649	450	200	143	86
24....	118	82	74	60	60	52	86	859	516	128	162	80
25....	93	79	63	56	62	53	69	894	402	140	137	68
26....	76	79	63	54	63	51	93	950	335	162	118	61
27....	76	77	68	57	62	65	82	873	357	242	98	68
28....	74	79	63	62	68	63	69	810	649	232	93	80
29....	68	79	61	60	....	65	72	859	534	414	91	91
30....	70	79	60	58	....	62	174	922	486	308	84	89
31....	58	....	63	61	....	63	....	726	....	177	84	....
Total	3632	2709	2285	1840	1715	1838	2096	17552	15780	8538	6333	2768
Mean.	117	90.3	73.7	59.4	61.2	59.3	69.9	566	526	275	204	92.3
Max...	462	224	86	77	69	72	174	950	754	616	570	118
Min...	53	60	60	....	56	49	47	159	324	122	84	61
Acre-ft.	7190	5370	4530	3650	3400	3650	4160	34800	31300	16900	12500	5490

Discharge of South Platte River at Henderson for Year Ending Sept. 30, 1932.
Drainage Area, ... Square Miles. Altitude, ... Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	64	45	255	60	214	178	29	45	255	492	480	167
2....	72	29	228	58	237	182	28	64	290	540	219	144
3....	64	26	178	62	260	182	26	80	360	554	113	110
4....	52	33	128	54	255	167	28	122	930	540	178	94
5....	54	40	100	68	260	170	70	131	547	480	228	107
6....	39	36	76	66	295	174	74	128	372	426	194	94
7....	38	38	74	66	255	163	110	260	322	349	137	147
8....	60	62	82	58	232	154	90	285	360	354	104	107
9....	64	47	87	58	237	157	90	198	468	354	97	100
10....	62	51	78	62	265	163	76	150	534	360	100	100
11....	64	51	76	72	237	147	42	128	480	390	107	102
12....	87	72	76	84	202	131	27	107	474	504	122	110
13....	107	72	78	190	255	131	27	102	426	624	137	110
14....	97	74	72	186	260	131	30	128	344	516	147	116
15....	76	128	68	190	260	163	35	210	300	316	119	122
16....	72	104	72	190	246	131	100	255	349	547	122	110
17....	60	97	76	174	242	102	97	242	338	510	147	104
18....	39	76	64	182	210	82	76	228	316	390	144	94
19....	33	60	68	214	182	74	70	237	462	360	190	100
20....	45	51	74	232	190	92	45	327	492	295	157	100
21....	78	72	76	228	202	100	39	438	528	360	295	113
22....	87	100	82	242	206	90	40	438	547	408	354	107
23....	110	130	72	214	182	78	128	666	554	349	275	102
24....	119	160	62	219	182	66	255	596	547	270	265	84
25....	119	190	47	224	186	56	137	450	540	214	295	66
26....	116	220	43	232	167	58	190	575	610	198	178	45
27....	178	230	43	246	160	58	232	390	760	163	232	58
28....	167	232	58	246	167	51	190	390	903	154	255	72
29....	131	250	68	237	160	47	72	344	840	246	224	87
30....	87	255	64	219	....	42	47	338	631	450	206	66
31....	66	....	56	214	....	34	....	305	....	948	182	....
Total	2613	3031	2681	4847	6406	3554	2500	8357	14879	12661	6003	3038
Mean.	84.3	101	86.5	156	221	115	83.3	270	496	408	194	101
Max...	178	255	255	246	295	182	255	666	930	948	480	167
Min...	33	26	43	58	160	34	26	45	255	154	97	45
Acre-ft.	5180	6010	5320	9590	12700	7070	4960	16600	29500	25100	11900	6010

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of South Platte River at Fort Lupton for Year Ending Sept. 30, 1931.
Drainage Area .... Square Miles. Altitude 4900 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	184	114	123	105	103	119	116	344	600	426	212	39
2....	218	116	126	119	101	119	101	262	595	440	319	42
3....	348	110	133	116	116	126	97	259	584	311	238	49
4....	595	252	133	116	114	133	91	277	505	413	228	43
5....	418	319	140	108	128	126	83	264	573	348	205	39
6....	344	344	126	114	110	110	81	515	634	266	130	46
7....	344	273	148	112	108	110	83	568	628	319	128	49
8....	218	187	143	114	105	103	81	445	612	266	187	48
9....	175	167	146	110	99	108	81	485	440	225	196	56
10....	141	162	148	112	99	116	89	540	395	164	184	51
11....	121	153	146	110	101	119	87	495	634	143	170	54
12....	103	151	146	101	99	110	85	455	490	119	148	53
13....	95	143	136	103	101	114	97	470	422	97	136	54
14....	93	138	126	101	105	101	87	307	307	79	101	49
15....	97	141	123	97	101	97	76	190	391	68	74	61
16....	95	128	126	91	101	95	61	273	404	70	196	70
17....	91	121	136	95	101	93	56	500	356	121	694	70
18....	97	128	119	91	99	101	61	688	361	262	352	77
19....	103	148	121	87	97	101	83	683	404	212	303	85
20....	112	128	121	89	101	101	91	628	408	164	238	70
21....	126	136	123	101	101	97	108	832	431	199	193	67
22....	256	146	116	101	101	91	114	838	422	196	143	76
23....	264	156	123	101	101	85	153	617	395	148	126	74
24....	256	128	121	95	105	91	172	738	418	112	136	63
25....	228	130	121	99	108	101	103	802	365	83	123	63
26....	164	138	116	95	108	68	133	856	292	89	89	91
27....	148	130	114	101	101	97	128	790	273	151	63	72
28....	146	128	108	110	114	130	110	738	413	172	49	48
29....	138	130	105	108	....	116	87	814	480	242	46	61
30....	128	126	110	101	....	110	133	910	348	300	46	67
31....	121	....	108	101	....	119	....	705	....	172	39	....
Total	5967	4771	3931	3204	2928	3307	2928	17288	13580	6377	5492	1787
Mean.	192	159	127	103	104	107	97.6	558	452	206	177	59.6
Max...	595	344	148	119	128	133	172	910	634	440	694	91
Min...	91	114	105	87	97	85	56	190	273	68	39	39
Acre-ft.	11800	9460	7810	6330	5780	6580	5810	34300	26900	12700	10900	3550

Discharge of South Platte River at Fort Lupton for Year Ending Sept. 30, 1932.
Drainage Area .... Square Miles. Altitude 4900 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	36	146	341	124	242	266	80	82	287	364	534	152
2....	46	110	349	129	259	262	78	105	252	392	304	108
3....	68	82	262	135	294	256	80	113	308	408	160	59
4....	62	88	211	149	246	252	78	181	760	420	132	36
5....	73	92	193	129	285	256	110	205	544	376	199	85
6....	71	95	178	121	312	262	157	184	412	345	152	34
7....	62	90	160	113	312	252	163	276	337	259	95	90
8....	55	102	172	121	290	246	181	349	345	246	71	73
9....	88	102	181	129	298	208	166	249	388	242	46	52
10....	88	95	178	138	318	205	146	184	508	239	34	41
11....	85	118	178	138	333	202	98	154	485	256	36	43
12....	102	127	172	140	294	208	78	116	472	345	41	43
13....	138	135	152	233	276	249	62	121	416	480	62	41
14....	146	143	143	270	273	287	62	149	326	498	62	43
15....	124	172	140	284	246	312	55	249	270	273	66	55
16....	121	193	138	242	259	233	132	308	262	404	73	50
17....	121	196	146	259	256	193	160	280	298	548	75	43
18....	100	184	154	266	256	160	154	252	256	337	88	43
19....	98	166	166	287	256	156	124	280	384	368	98	41
20....	118	157	175	298	262	150	90	345	408	290	113	64
21....	121	149	184	298	276	149	59	440	440	298	106	68
22....	149	143	187	276	266	149	68	420	372	304	273	78
23....	163	172	181	276	270	146	132	566	400	266	249	92
24....	199	266	160	275	262	118	364	575	426	211	199	75
25....	208	312	138	273	273	100	252	420	436	181	239	64
26....	205	312	129	272	276	100	273	485	454	140	190	43
27....	252	287	132	270	273	105	326	396	526	95	169	25
28....	276	308	152	270	273	85	284	388	635	75	276	21
29....	242	326	163	242	273	88	154	356	670	140	223	55
30....	211	333	157	226	....	90	100	337	490	239	202	64
31....	175	....	143	236	....	88	....	333	....	635	184	....
Total	4003	5201	5515	6619	8009	5833	4266	8898	12501	9674	4811	1781
Mean.	129	173	178	213	276	188	142	287	417	312	155	59.4
Max...	276	333	349	298	333	312	364	575	700	635	534	152
Min...	36	82	129	113	242	85	55	82	252	75	34	21
Acre-ft.	7930	10300	10900	13100	17900	11600	8450	17600	24800	19200	9530	3530

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of South Platte River Near Kersey for Year Ending Sept. 30, 1931.
Drainage Area .... Square Miles. Altitude 4600 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	443	683	605	500	401	401	568	333	854	186	138	183
2....	455	667	605	513	396	401	547	417	675	150	138	198
3....	553	659	590	513	391	423	513	474	575	128	145	224
4....	836	651	582	487	386	443	506	468	547	126	145	217
5....	1090	643	547	493	380	487	480	474	513	122	150	207
6....	980	667	560	500	380	500	468	468	818	109	147	186
7....	917	683	575	506	380	500	443	628	980	99	147	160
8....	926	683	547	493	366	480	417	749	998	98	145	160
9....	872	605	547	500	362	487	407	715	890	101	147	140
10....	818	553	553	506	362	487	412	699	598	98	143	128
11....	783	520	540	462	357	506	407	707	487	96	138	126
12....	749	520	527	468	362	506	396	659	500	99	140	122
13....	707	513	533	468	375	506	386	449	417	109	140	111
14....	699	487	533	462	375	506	362	319	375	94	155	111
15....	667	480	540	462	375	487	362	231	302	94	152	109
16....	667	480	506	468	375	480	362	172	201	96	152	105
17....	635	480	513	468	375	487	333	138	174	99	135	107
18....	643	487	520	443	380	480	302	166	160	101	140	109
19....	667	506	468	436	386	462	285	289	124	101	126	113
20....	675	474	500	401	386	436	277	342	113	105	118	113
21....	707	500	547	436	391	436	273	386	128	109	120	109
22....	715	533	547	455	386	425	265	651	163	107	115	109
23....	758	560	547	462	386	407	281	732	155	133	120	115
24....	827	582	547	468	391	396	333	575	145	152	120	118
25....	836	598	547	436	391	401	396	575	289	150	115	124
26....	758	620	520	423	386	333	417	526	273	142	111	124
27....	699	628	493	412	386	261	401	493	224	126	111	122
28....	699	635	487	430	401	380	338	443	183	124	111	120
29....	707	635	506	436	....	568	319	513	217	124	107	118
30....	707	605	500	417	....	547	324	1100	224	128	126	115
31....	683	....	493	430	....	553	....	1070	....	128	160	....
Total	22878	17337	16625	14354	10668	14172	11580	15691	12302	3634	4152	4103
Mean.	738	578	539	463	381	457	386	515	410	117	134	137
Max...	1090	683	605	513	401	568	568	1100	998	186	160	224
Min...	443	474	468	401	357	261	265	138	113	94	107	105
Acre-ft.	45400	34400	33100	28500	21200	28100	23000	31700	24400	7190	8240	8150

Discharge of South Platte River Near Kersey for Year Ending Sept. 30, 1932.
Drainage Area .... Square Miles. Altitude 4600 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	111	449	683	480	506	449	264	152	110	132	675	98
2....	109	423	707	468	500	436	295	122	103	142	618	89
3....	111	412	699	449	520	425	286	103	112	155	327	94
4....	111	401	643	436	506	407	278	91	158	150	236	122
5....	105	357	620	436	500	419	278	77	199	145	179	132
6....	107	324	575	436	493	425	278	77	213	137	142	137
7....	115	315	560	423	547	419	291	77	170	117	127	117
8....	122	302	568	423	582	436	300	105	142	110	117	112
9....	120	302	568	443	590	440	313	98	127	132	112	110
10....	124	328	560	443	651	440	309	91	170	119	105	117
11....	128	324	553	419	651	440	295	82	273	94	100	119
12....	128	311	540	462	620	440	278	77	341	91	96	117
13....	126	307	506	480	605	450	260	74	350	91	103	124
14....	126	307	480	493	582	459	278	75	332	82	127	119
15....	138	307	474	533	553	550	220	75	196	80	132	112
16....	124	311	468	513	553	675	196	74	142	80	115	110
17....	138	328	474	493	547	651	150	65	117	84	119	115
18....	120	352	468	443	540	582	139	70	119	82	117	119
19....	126	380	500	527	540	540	139	51	206	80	124	122
20....	128	436	506	553	540	449	122	60	256	80	127	127
21....	174	480	533	560	533	425	100	63	216	79	117	132
22....	234	474	547	540	520	443	89	68	176	96	110	139
23....	253	474	568	513	513	391	96	67	129	105	115	139
24....	307	500	540	513	506	328	134	65	117	105	107	147
25....	328	540	513	500	487	298	173	65	122	89	103	150
26....	328	560	493	506	468	289	164	75	124	94	100	139
27....	352	582	480	506	468	269	173	91	124	96	112	139
28....	474	620	474	513	449	261	213	117	132	103	107	145
29....	500	635	527	513	446	257	213	112	134	137	107	132
30....	520	651	513	506	....	253	188	112	137	1960	100	129
31....	487	....	487	506	....	245	....	110	....	1080	103	....
Total	6374	12492	16827	15059	15516	12982	6512	2641	5257	6127	4979	3703
Mean.	206	416	543	486	535	419	217	85.2	175	198	161	123
Max...	520	651	707	560	651	675	313	152	350	1960	675	150
Min...	105	302	468	423	446	245	89	51	103	79	96	89
Acre-ft.	12700	24800	33400	29500	30800	25800	12900	5240	10400	12200	9900	7320

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of South Platte River at Sublette for Year Ending Sept. 30, 1931.
Drainage Area .... Square Miles. Altitude .... Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	177	77	75	64	67	452	692	160	692	301	160	134
2....	174	73	79	62	64	515	680	192	575	266	166	134
3....	180	67	85	69	67	550	645	216	545	201	189	155
4....	266	67	75	67	73	570	475	252	645	198	160	144
5....	335	69	71	62	65	595	192	183	595	195	163	142
6....	305	64	89	56	67	605	105	166	580	183	160	137
7....	195	62	95	59	71	630	101	158	680	180	155	130
8....	140	69	101	62	73	615	101	160	730	172	158	140
9....	116	69	89	64	67	600	97	220	635	158	158	177
10....	112	60	91	67	73	565	97	207	426	152	158	158
11....	114	65	99	69	79	273	79	216	327	152	163	152
12....	112	69	91	64	67	213	77	229	331	152	166	155
13....	99	59	79	69	71	192	85	226	280	147	152	147
14....	103	60	79	73	77	189	83	204	276	152	152	144
15....	103	64	64	65	71	180	116	204	394	158	172	152
16....	109	62	58	64	65	172	150	287	298	158	174	158
17....	118	63	58	73	109	172	155	256	266	160	186	152
18....	130	64	58	69	105	174	160	229	236	163	186	155
19....	123	65	60	64	97	163	163	252	229	158	183	166
20....	91	66	67	65	91	150	169	366	223	150	155	166
21....	91	67	77	69	137	127	169	398	204	152	152	169
22....	93	68	77	62	140	116	207	505	204	150	163	174
23....	85	69	77	62	134	105	316	665	226	144	172	177
24....	85	69	77	65	140	101	186	635	229	142	155	174
25....	85	73	79	64	140	101	105	600	242	152	163	180
26....	79	77	83	62	134	89	140	575	301	147	174	195
27....	73	67	91	64	213	103	204	520	308	132	174	201
28....	81	65	83	67	294	384	183	485	294	142	169	198
29....	87	81	65	64	....	665	169	525	269	140	160	201
30....	71	79	65	62	....	650	163	741	316	134	152	198
31....	71	....	71	69	....	670	....	803	....	144	130	....
Total	4003	2029	2408	2017	2851	10686	6264	10835	11556	5135	5080	4865
Mean.	129	67.6	77.7	65.1	102	345	209	350	385	166	164	162
Max...	335	81	101	73	294	670	692	803	730	301	189	201
Min...	71	59	58	56	64	89	77	158	204	132	130	130
Acre-ft.	7930	4020	4780	4000	5660	21200	12400	21500	22900	10200	10100	9640

Discharge of South Platte River at Sublette for Year Ending Sept. 30, 1932.
Drainage Area .... Square Miles. Altitude .... Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	199	141	80	85	64	60	95	155	207	172	242	166
2....	205	149	80	67	64	61	103	141	201	163	312	144
3....	226	226	80	62	73	58	64	136	192	158	298	140
4....	223	262	85	56	105	60	87	130	201	166	320	155
5....	216	270	85	60	64	60	120	125	207	169	280	163
6....	226	294	87	99	67	58	125	128	226	152	242	134
7....	152	302	87	128	67	58	191	219	192	152	216	130
8....	130	226	85	71	61	60	304	230	169	140	207	130
9....	123	230	80	60	64	60	296	226	163	134	195	130
10....	128	234	80	56	62	61	304	195	163	140	183	130
11....	123	242	75	50	60	58	304	138	189	147	174	120
12....	120	216	75	52	60	60	195	128	242	144	172	118
13....	125	195	70	55	60	56	213	123	273	140	169	114
14....	125	195	70	52	56	52	195	133	223	134	177	114
15....	115	178	67	50	55	55	205	136	220	130	180	132
16....	110	164	67	58	60	71	216	133	216	127	169	150
17....	128	164	62	58	60	125	198	130	210	132	160	147
18....	123	110	65	56	56	93	188	125	210	140	150	144
19....	112	62	81	71	56	93	181	117	256	142	147	147
20....	115	60	75	69	60	95	184	117	301	134	142	155
21....	107	75	77	64	56	97	170	123	327	142	134	155
22....	99	97	65	62	55	97	170	110	298	140	142	155
23....	99	91	67	77	58	103	198	117	273	147	140	150
24....	107	81	62	107	58	97	248	136	245	158	140	158
25....	110	80	61	123	56	97	254	133	207	163	140	207
26....	115	80	65	128	58	107	283	130	189	147	140	226
27....	147	75	71	77	61	99	279	133	189	144	140	232
28....	103	71	64	65	60	89	293	141	201	140	150	232
29....	75	77	71	64	58	81	312	149	198	144	158	239
30....	71	77	107	75	....	67	205	178	183	223	166	232
31....	112	....	174	73	....	67	....	188	....	809	172	....
Total	4169	4724	2420	2230	1794	2355	6180	4503	6571	5273	5857	4749
Mean.	134	157	78.1	72.0	61.9	76.0	206	145	219	170	189	158
Max...	226	....	....	128	105	125	312	230	327	809	342	232
Min...	71	....	....	51	55	52	64	110	163	127	134	114
Acre-ft.	8240	9340	4800	4430	3560	4670	12300	8920	13000	10400	11600	9400

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of South Platte River at Balzac for Year Ending Sept. 30, 1931.
Drainage Area .... Square Miles. Altitude .... Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	61	24	235	121	84	433	810	11	454	135	216	230
2....	59	24	231	123	82	447	846	13	371	149	208	216
3....	64	24	212	125	83	528	846	16	284	108	187	201
4....	72	24	187	....	86	533	834	20	276	82	180	167
5....	65	22	157	....	84	528	728	22	405	73	180	146
6....	76	23	159	....	84	468	388	24	338	62	187	140
7....	47	24	157	....	146	433	184	65	288	59	198	138
8....	32	22	140	....	143	468	105	205	343	55	184	140
9....	32	22	133	....	129	543	91	224	399	46	187	194
10....	30	22	135	....	113	334	65	212	365	39	174	212
11....	30	21	119	....	107	249	61	231	284	55	184	212
12....	28	21	117	....	107	89	65	140	235	91	194	219
13....	28	21	117	....	107	46	55	94	181	100	194	212
14....	28	20	119	....	107	59	51	80	151	106	180	212
15....	30	20	101	....	107	82	65	90	159	127	149	217
16....	29	20	91	....	103	84	115	125	167	138	146	201
17....	27	19	83	....	97	58	99	143	205	118	205	208
18....	23	20	76	....	177	28	61	149	138	187	216	230
19....	32	32	70	152	405	31	48	146	120	256	191	239
20....	30	143	77	121	412	23	71	205	115	205	180	219
21....	30	786	67	113	394	16	67	187	113	132	219	212
22....	31	376	61	94	376	14	57	178	100	113	243	191
23....	30	365	48	80	371	30	37	205	95	146	264	154
24....	25	305	55	65	371	40	39	253	100	167	243	143
25....	25	288	50	65	394	75	42	280	93	154	212	347
26....	26	296	62	64	382	100	32	218	95	205	198	157
27....	25	260	80	80	276	200	11	224	95	167	184	82
28....	25	249	90	82	433	450	12	218	83	152	194	100
29....	26	228	100	82	....	535	13	284	113	143	208	146
30....	24	235	121	82	....	604	12	314	113	174	212	152
31....	20	....	123	80	....	810	....	365	....	187	219	....
Total	1110	3956	3573	....	5860	8338	5910	4941	6278	3931	6136	5637
Mean.	35.8	132	115	85.9	209	269	197	159	209	127	198	188
Max...	76	786	235	....	433	810	846	365	454	256	264	347
Min...	20	19	48	....	82	....	11	11	83	39	146	82
Acre-ft.	2200	7860	7070	5280	11600	16500	11700	9780	12400	7810	12200	11200

Discharge of South Platte River at Balzac for Year Ending Sept. 30, 1932.
Drainage Area .... Square Miles. Altitude .... Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	170	93	....	....	....	13	16	39	200	205	970	190
2....	175	75	....	....	....	16	16	38	190	195	430	190
3....	202	84	....	....	....	15	24	39	187	200	447	189
4....	175	80	....	....	....	48	25	44	178	192	297	187
5....	173	73	....	....	....	33	26	63	190	192	202	186
6....	168	67	....	....	....	30	71	128	178	200	180	184
7....	159	62	....	....	....	27	139	159	145	198	178	184
8....	159	57	....	....	....	22	120	128	132	190	178	183
9....	161	57	....	....	....	19	175	130	137	170	205	182
10....	168	57	....	....	....	17	242	130	190	168	200	182
11....	170	57	....	....	....	17	260	173	205	175	200	190
12....	188	57	....	....	....	17	249	228	202	188	192	192
13....	200	50	....	....	....	17	195	205	192	154	198	190
14....	205	46	....	....	....	19	141	202	182	152	200	192
15....	205	44	....	....	....	20	116	200	170	150	198	195
16....	205	40	....	....	18	21	124	258	166	166	178	190
17....	208	38	34	....	....	22	148	272	164	161	188	192
18....	208	35	....	221	....	89	141	242	185	166	185	195
19....	210	30	....	....	....	67	130	225	212	141	200	192
20....	210	27	....	....	12	50	130	239	242	126	210	185
21....	215	24	....	....	12	32	145	249	355	137	225	188
22....	212	22	....	....	11	20	175	252	220	139	246	178
23....	218	23	....	....	12	23	218	212	222	141	220	178
24....	218	20	....	....	15	29	258	225	198	145	195	168
25....	212	19	....	....	16	25	112	249	180	175	212	150
26....	208	20	....	....	15	17	59	252	178	164	205	141
27....	225	19	....	....	16	21	48	249	178	185	218	139
28....	269	19	....	....	16	32	44	252	215	175	210	141
29....	269	18	....	....	14	19	39	233	210	185	205	141
30....	228	18	....	....	....	18	41	233	218	212	198	143
31....	170	....	....	....	....	16	....	225	....	1000	192	....
Total	6163	1331	....	....	....	841	3627	5773	5812	6147	7562	5337
Mean	199	44.4	66	140	100	27.1	121	186	194	198	244	178
Max	269	93	....	....	....	89	260	272	355	1000	970	195
Min..	159	....	....	....	....	....	16	38	132	126	178	139
Acre-ft.	12200	2640	4060	8610	5750	1670	7200	11400	11500	12200	15000	10600

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of South Platte River at Julesburg for Year Ending Sept. 30, 1931.
Drainage Area .... Square Miles. Altitude 3469 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	157	404	689	468	439	532	1573	160	46	60	29	28
2....	174	400	611	463	427	537	1882	152	42	60	32	28
3....	190	396	623	445	412	553	1702	123	36	55	23	23
4....	281	396	650	445	398	571	1576	111	39	82	24	21
5....	446	403	627	412	391	669	1528	102	69	75	20	23
6....	449	403	656	412	405	778	1456	96	68	60	23	20
7....	428	405	618	423	420	829	1379	80	59	57	28	18
8....	394	407	596	405	428	860	1170	71	43	48	32	19
9....	400	407	608	395	406	902	900	104	53	40	28	20
10....	454	399	603	364	406	876	738	79	51	38	25	17
11....	501	401	588	350	454	1052	638	80	59	33	28	15
12....	490	399	573	325	437	967	535	72	55	31	28	19
13....	461	386	568	310	447	840	492	69	50	30	25	17
14....	436	380	554	251	445	768	419	62	45	29	23	14
15....	445	387	554	211	441	549	356	57	39	35	24	21
16....	461	382	560	255	421	542	335	55	38	30	20	23
17....	449	365	552	291	427	524	266	63	37	27	20	24
18....	433	372	522	299	411	498	224	51	36	27	23	29
19....	414	370	503	281	386	498	191	50	35	24	24	36
20....	408	222	472	264	318	509	169	50	41	26	21	27
21....	416	152	471	323	355	427	158	46	40	25	23	26
22....	420	132	449	390	469	444	154	45	46	25	28	33
23....	420	121	474	444	526	469	182	42	38	23	25	37
24....	419	216	492	494	554	305	254	34	37	22	25	44
25....	440	486	474	490	565	248	305	34	39	24	24	43
26....	435	579	430	459	546	202	309	45	43	22	24	41
27....	414	651	438	464	537	180	292	43	44	23	24	36
28....	407	675	422	477	543	238	227	45	31	25	24	32
29....	407	711	442	460	....	276	194	47	27	24	24	43
30....	399	687	468	445	....	382	176	47	37	23	23	47
31....	397	....	496	453	....	568	....	47	....	22	22	....
Total	12445	12094	16783	11968	12414	17624	19790	2162	1323	1125	766	824
Mean.	401	403	541	386	443	568	660	69.7	44.1	36.3	24.7	27.6
Max...	501	711	689	494	565	1052	1882	160	69	82	32	47
Min...	157	121	422	211	318	180	154	34	27	22	20	14
Acre-ft.	24700	24000	33300	23700	24600	34900	39300	4280	2620	2230	1520	1640

Discharge of South Platte River at Julesburg for Year Ending Sept. 30, 1932.
Drainage Area .... Square Miles. Altitude 3469 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	51	61	308	97	505	344	184	209	40	35	28	25
2....	53	57	300	105	500	314	134	208	40	27	28	20
3....	55	57	276	117	500	282	94	173	31	27	28	21
4....	51	57	257	148	490	250	77	173	29	27	28	20
5....	48	57	270	213	490	225	63	176	37	27	23	20
6....	48	55	270	316	480	220	59	175	28	27	24	18
7....	49	56	269	355	474	218	52	175	28	27	24	18
8....	48	51	266	609	475	207	46	174	28	27	22	18
9....	46	52	243	661	481	205	57	144	28	27	20	17
10....	49	59	275	718	486	200	57	113	28	27	20	17
11....	49	63	300	801	497	201	57	98	60	27	18	17
12....	55	64	308	903	502	209	56	79	61	20	22	17
13....	58	63	234	715	448	218	56	67	60	20	116	17
14....	62	69	178	581	416	255	45	76	48	20	92	17
15....	61	73	163	469	336	310	44	73	48	20	64	16
16....	62	66	153	457	304	370	43	61	36	20	53	16
17....	69	69	163	430	315	407	42	61	36	27	48	20
18....	66	69	186	400	385	440	41	53	27	27	39	20
19....	64	66	248	420	410	431	40	53	47	20	36	19
20....	64	68	342	496	480	363	40	52	37	20	32	20
21....	64	69	372	564	509	303	41	42	36	20	28	19
22....	63	72	396	576	527	290	42	41	35	20	26	26
23....	63	74	396	516	527	239	71	31	35	27	24	27
24....	63	87	351	455	474	176	352	31	35	45	22	27
25....	61	105	345	370	450	154	276	31	27	27	21	29
26....	62	174	337	340	438	128	235	50	35	27	26	31
27....	90	296	302	455	402	108	211	50	27	20	30	29
28....	109	322	291	520	382	91	222	49	35	20	36	29
29....	96	335	283	526	357	101	222	49	35	27	33	29
30....	68	330	215	520	....	196	221	60	35	27	27	23
31....	63	....	107	518	....	216	....	49	....	35	27	....
Total	1910	3096	8404	14371	13040	7681	3180	2876	1112	794	1065	642
Mean.	61.6	103	271	464	450	248	106	92.8	37.1	25.6	34.4	21.4
Max...	109	335	396	903	527	440	352	209	61	45	116	31
Min...	46	51	107	97	304	91	40	31	27	20	18	16
Acre-ft.	3790	6130	16700	28500	25900	15200	6310	5710	2210	1570	2120	1270

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of Tarryall Creek Near Lake George for Year Ending Sept. 30, 1931.
Drainage Area 460 Square Miles. Altitude .... Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	53	....	....	....	....	....	....	15	90	152	14	8
2....	56	....	....	....	....	....	....	24	81	220	12	7
3....	59	....	....	....	....	....	....	64	95	157	12	6
4....	71	....	....	....	....	....	....	204	106	145	46	6
5....	65	....	....	....	....	....	....	172	118	121	47	6
6....	60	....	....	....	....	....	....	116	134	89	48	6
7....	58	....	....	....	....	....	....	94	128	62	50	6
8....	56	....	....	....	....	....	25	86	118	50	50	6
9....	51	....	....	....	....	....	18	73	116	24	41	6
10....	47	....	....	....	....	....	18	63	160	20	56	6
11....	51	....	....	....	....	....	39	57	180	19	54	6
12....	79	....	....	....	....	....	98	58	154	18	37	6
13....	68	....	....	....	....	....	160	51	122	18	29	6
14....	61	....	....	....	....	....	164	47	106	17	26	6
15....	56	....	....	....	....	....	136	43	93	16	28	6
16....	52	....	....	....	....	....	89	48	88	18	21	9
17....	48	....	....	....	....	....	21	52	140	27	18	7
18....	45	....	....	....	....	....	13	57	138	30	16	9
19....	47	....	....	....	....	....	11	65	99	26	26	12
20....	48	....	....	....	....	....	10	63	78	26	33	15
21....	45	....	....	....	....	....	10	68	65	29	33	16
22....	44	....	....	....	....	....	9	109	56	20	33	17
23....	43	....	....	....	....	....	9	182	53	18	37	19
24....	43	....	....	....	....	....	8	220	50	12	35	25
25....	40	....	....	....	....	....	9	158	52	10	34	32
26....	42	....	....	....	....	....	8	123	52	10	33	36
27....	43	....	....	....	....	....	8	109	66	10	31	42
28....	41	....	....	....	....	....	12	104	69	11	15	47
29....	44	....	....	....	....	....	12	127	72	14	13	55
30....	40	....	....	....	....	....	13	130	99	11	11	60
31....	38	....	....	....	....	....	....	108	....	11	10	....
Total	1594	....	....	....	....	....	....	2900	2978	1411	949	494
Mean.	51.4	....	....	....	....	....	44	93.5	99.3	45.5	30.6	16.5
Max...	79	....	....	....	....	....	....	220	180	220	56	60
Min...	38	....	....	....	....	....	....	15	50	10	10	6
Acre-ft.	3160	....	....	....	....	....	2620	5750	5910	2800	1880	982

Discharge of Tarryall Creek Near Lake George for Year Ending Sept. 30, 1932.
Drainage Area 460 Square Miles. Altitude .... Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	4	17	....	....	....	....	....	39	24	57	243	41
2....	4	17	....	....	....	....	....	30	35	56	176	36
3....	4	17	....	....	....	....	....	25	39	50	52	35
4....	4	16	....	....	....	....	....	41	43	43	35	31
5....	8	16	....	....	....	....	....	40	93	42	28	23
6....	6	16	....	....	....	....	....	40	140	40	28	21
7....	6	17	....	....	....	....	....	41	117	37	17	30
8....	6	18	....	....	....	....	....	40	35	14	13	24
9....	7	18	....	....	....	....	....	38	34	9	13	21
10....	9	19	....	....	....	....	....	37	105	7	13	19
11....	10	20	....	....	....	....	47	37	130	5	13	14
12....	11	20	....	....	....	....	51	19	124	7	28	14
13....	12	18	....	....	....	....	50	31	74	217	54	15
14....	13	19	....	....	....	....	50	40	70	239	84	15
15....	13	17	....	....	....	....	49	41	55	196	76	13
16....	12	12	....	....	....	....	50	40	50	55	45	15
17....	17	12	....	....	....	....	51	40	70	36	54	13
18....	20	11	....	....	....	....	50	37	76	36	52	11
19....	20	14	....	....	....	....	48	37	76	85	51	10
20....	20	15	....	....	....	....	48	41	72	86	54	13
21....	19	15	....	....	....	....	35	44	70	40	53	13
22....	18	15	....	....	....	....	35	66	70	35	144	13
23....	17	15	....	....	....	....	40	64	70	21	106	10
24....	17	15	....	....	....	....	41	69	70	19	49	11
25....	17	15	....	....	....	....	45	69	73	20	45	20
26....	17	....	....	....	....	....	41	69	73	59	56	18
27....	18	....	....	....	....	....	40	72	72	68	49	19
28....	17	....	....	....	....	....	43	37	93	42	55	31
29....	20	....	....	....	....	....	40	25	152	25	51	27
30....	18	....	....	....	....	....	41	23	70	170	50	19
31....	19	....	....	....	....	....	....	21	....	248	45	....
Total	403	....	....	....	....	....	....	1253	2275	2073	1832	595
Mean.	13.0	16.0	....	....	....	....	41.5	41.7	75.8	66.9	59.1	19.8
Max...	20	....	....	....	....	....	....	72	152	248	243	41
Min...	4	....	....	....	....	....	....	19	24	5	13	10
Acre-ft.	799	952	....	....	....	....	2470	2560	4510	4110	3630	1180

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of Goose Creek at Lake Cheesman for Year Ending Sept. 30, 1931.
Drainage Area, 86 Square Miles. Altitude, 6,835 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	25	17	....	....	....	....	....	56	86	69	40	19
2....	25	18	....	....	....	....	....	70	86	51	30	27
3....	25	19	....	....	....	....	....	74	85	49	27	17
4....	25	19	....	....	....	....	....	73	81	49	24	15
5....	25	18	....	....	....	....	....	64	87	42	21	13
6....	24	18	....	....	....	....	....	67	85	37	21	12
7....	25	18	....	....	....	....	....	74	81	35	26	13
8....	25	17	....	....	....	....	....	77	79	33	28	14
9....	25	....	....	....	....	....	....	65	81	31	32	13
10....	24	....	....	....	....	....	....	61	83	31	26	12
11....	26	....	....	....	....	....	....	56	84	30	20	11
12....	29	....	....	....	....	....	....	64	77	28	17	11
13....	24	....	....	....	....	....	....	72	74	27	16	9
14....	23	....	....	....	....	....	....	83	72	27	18	9
15....	22	....	....	....	....	....	....	106	69	26	12	9
16....	20	....	....	....	....	....	....	114	69	31	23	9
17....	19	....	....	....	....	....	....	112	64	30	28	9
18....	19	....	....	....	....	....	46	119	60	37	21	10
19....	22	....	....	....	....	....	65	88	58	27	19	12
20....	22	....	....	....	....	....	70	74	51	26	29	16
21....	22	....	....	....	....	....	37	73	52	24	24	15
22....	22	....	....	....	....	....	32	74	50	22	18	12
23....	24	....	....	....	....	....	27	114	49	21	23	12
24....	23	....	....	....	....	....	24	110	50	23	21	11
25....	19	....	....	....	....	....	23	110	48	25	16	11
26....	19	....	....	....	....	....	21	109	46	23	18	10
27....	17	....	....	....	....	....	27	109	44	22	13	11
28....	18	....	....	....	....	....	31	100	62	31	12	10
29....	18	....	....	....	....	....	42	99	46	38	12	10
30....	18	....	....	....	....	....	50	92	53	26	11	10
31....	17	....	....	....	....	....	....	90	....	23	11	....
Total	691	....	....	....	....	....	....	2649	2012	994	657	372
Mean..	223	....	....	....	....	....	....	85.4	67.1	32.1	21.2	12.4
Max...	....	....	....	....	....	....	....	119	87	69	40	27
Min...	....	....	....	....	....	....	....	56	44	21	11	9
Acre-ft.	1370	....	....	....	....	....	....	5250	3990	1970	1300	738

Discharge of Goose Creek at Lake Cheesman for Year Ending Sept. 30, 1932.
Drainage Area, 86 Square Miles. Altitude, 6,835 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	9	....	....	....	....	....	....	26	24	17	25	15
2....	9	....	....	....	....	....	....	42	22	15	17	14
3....	11	....	....	....	....	....	....	54	23	13	15	12
4....	12	....	....	....	....	....	....	49	23	11	13	12
5....	11	....	....	....	....	....	....	49	22	9	14	12
6....	11	....	....	....	....	....	....	46	21	8	12	14
7....	11	....	....	....	....	....	....	31	19	8	13	14
8....	11	....	....	....	....	....	....	34	18	8	13	12
9....	12	....	....	....	....	....	....	35	21	8	14	9
10....	10	....	....	....	....	....	....	37	31	9	13	9
11....	10	....	....	....	....	....	....	40	25	15	12	9
12....	11	....	....	....	....	....	....	40	20	14	12	9
13....	12	....	....	....	....	....	....	36	19	16	13	9
14....	12	....	....	....	....	....	....	31	17	22	13	9
15....	11	....	....	....	....	....	....	31	15	17	14	9
16....	14	....	....	....	....	....	44	31	13	12	18	9
17....	10	....	....	....	....	....	60	30	12	11	15	9
18....	10	....	....	....	....	....	43	28	15	13	25	9
19....	10	....	....	....	....	....	32	29	16	11	20	9
20....	11	....	....	....	....	....	41	34	14	10	18	9
21....	12	....	....	....	....	....	58	46	13	9	18	9
22....	12	....	....	....	....	....	59	42	12	8	28	9
23....	12	....	....	....	....	....	40	34	12	9	22	9
24....	11	....	....	....	....	....	16	29	12	12	16	9
25....	10	....	....	....	....	....	12	28	14	10	15	17
26....	10	....	....	....	....	....	26	27	20	10	15	15
27....	9	....	....	....	....	....	24	29	18	9	41	12
28....	9	....	....	....	....	....	20	32	20	9	25	12
29....	10	....	....	....	....	....	18	30	19	16	22	13
30....	10	....	....	....	....	....	18	27	18	42	17	13
31....	9	....	....	....	....	....	....	25	....	33	15	....
Total	332	....	....	....	....	....	....	1082	548	414	543	331
Mean.	10.7	....	....	....	....	....	....	34.9	18.3	13.4	17.5	11.0
Max...	14	....	....	....	....	....	....	54	31	42	41	17
Min...	9	....	....	....	....	....	....	25	12	8	12	9
Acre-ft.	658	....	....	....	....	....	....	2140	1090	824	1080	654

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of Bear Creek at Idledale for Year Ending Sept. 30, 1931.
Drainage Area, 111 Square Miles. Altitude, 6,400 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	56	29	14	....	....	18	22	91	234	118	64	31
2....	53	26	10	....	....	16	24	108	246	100	46	30
3....	54	24	10	....	....	15	26	135	222	89	41	24
4....	58	21	11	....	....	15	23	135	216	89	40	23
5....	54	21	11	....	....	15	26	132	220	80	39	24
6....	53	21	12	....	....	21	36	142	220	69	39	24
7....	54	20	13	....	....	32	45	138	220	65	39	25
8....	52	18	13	....	....	31	47	142	213	61	41	23
9....	51	19	13	....	....	29	36	135	184	57	42	21
10....	51	19	14	....	....	24	38	135	174	54	40	21
11....	51	27	....	....	....	21	46	125	152	51	38	20
12....	48	26	....	....	....	20	50	120	150	50	35	29
13....	38	24	....	....	16	19	50	118	155	48	33	19
14....	35	23	....	13	18	25	51	120	145	48	31	18
15....	34	27	....	....	16	19	56	138	140	50	32	17
16....	39	21	....	....	16	17	53	178	150	45	50	17
17....	42	23	....	....	18	19	52	195	153	62	43	16
18....	45	24	....	....	18	18	57	205	132	71	35	18
19....	45	20	....	....	17	24	64	170	120	48	34	20
20....	38	18	....	....	17	21	68	170	118	48	36	18
21....	32	18	....	....	16	22	53	155	112	45	32	18
22....	31	17	....	....	17	23	57	152	106	42	33	18
23....	29	17	....	....	16	24	47	174	100	41	33	19
24....	27	16	....	....	19	23	48	199	100	41	31	20
25....	27	16	....	....	18	23	54	223	95	40	26	18
26....	28	16	....	....	18	19	47	242	93	41	26	16
27....	37	15	....	....	16	15	59	246	108	39	24	17
28....	39	15	....	....	18	15	64	227	115	40	27	17
29....	30	15	....	....	....	20	64	230	132	47	28	17
30....	26	14	....	....	....	20	71	213	138	40	26	16
31....	26	....	....	....	....	22	....	209	....	43	26	....
Total	1283	610	....	....	....	645	1435	5102	4664	1762	1110	605
Mean.	41.4	20.3	12.5	12.5	15.5	20.8	47.8	165	155	56.8	35.8	20.2
Max..	58	....	....	....	....	32	71	246	246	118	64	31
Min...	26	....	....	....	....	15	22	91	93	39	24	16
Acre-ft.	2550	1210	769	769	861	1280	2840	10100	9220	3490	2200	1206

Discharge of Bear Creek at Idledale for Year Ending Sept. 30, 1932.
Drainage Area, 111 Square Miles. Altitude, 6,400 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	14	16	....	....	....	....	16	21	37	60	74	38
2....	15	16	....	....	....	....	20	22	34	60	72	36
3....	17	16	....	....	....	....	19	24	39	58	60	37
4....	16	16	....	....	....	....	19	26	46	55	54	36
5....	16	15	....	....	....	....	18	27	40	58	49	33
6....	14	15	....	....	....	....	16	28	36	52	43	32
7....	18	14	....	....	....	....	17	36	38	47	43	29
8....	19	14	....	....	....	....	16	33	49	47	38	28
9....	18	15	....	....	....	....	15	28	65	49	32	27
10....	18	16	....	....	....	....	15	32	58	49	34	28
11....	22	16	13	....	....	....	14	34	54	57	33	26
12....	22	16	....	....	....	....	14	36	52	60	33	25
13....	20	15	....	....	....	....	14	37	46	67	33	26
14....	19	14	....	10	....	....	14	43	54	55	32	27
15....	19	14	....	....	....	....	19	55	55	49	33	25
16....	19	14	....	....	....	....	21	49	62	58	31	24
17....	19	15	....	....	5	....	22	49	57	78	47	25
18....	18	15	....	....	....	....	20	55	54	58	58	25
19....	19	14	....	....	....	....	16	62	52	58	50	25
20....	23	14	....	....	....	....	17	57	47	58	46	25
21....	29	17	....	....	....	14	17	60	46	52	43	25
22....	32	17	....	....	....	17	20	74	47	47	42	24
23....	39	16	....	....	....	17	25	78	54	49	44	22
24....	37	15	....	....	....	15	17	58	50	52	43	22
25....	32	14	....	....	....	17	16	55	50	50	38	34
26....	28	13	....	....	....	16	23	47	57	46	34	28
27....	22	13	....	....	....	14	20	42	58	49	38	27
28....	22	13	....	....	....	14	19	49	74	44	37	28
29....	22	13	....	....	....	17	18	43	62	54	43	28
30....	19	13	....	....	....	14	22	40	57	85	37	27
31....	16	....	....	....	....	16	....	36	....	92	40	....
Total	663	444	....	....	....	....	539	1336	1530	1753	1334	842
Mean.	21.4	14.8	12.0	9.0	6.0	16.0	18.0	43.1	51.0	56.5	43.0	28.1
Max..	39	17	....	....	....	....	25	78	74	92	74	38
Min..	14	....	....	....	....	....	....	21	34	44	31	22
Acre-ft.	1320	881	714	536	345	615	1070	2650	3030	3470	2640	1670

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of Bear Creek at Mouth for Year Ending Sept. 30, 1931.
Drainage Area, ... Square Miles. Altitude, ... Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	19	14	14	....	12	12	10	112	77	28	29	20
2....	19	14	10	....	12	11	9	116	79	22	25	17
3....	20	14	10	....	12	12	9	94	76	22	23	11
4....	20	13	10	....	12	11	7	69	72	23	21	9
5....	14	13	10	....	12	11	6	71	71	19	21	8
6....	14	14	10	....	12	12	5	70	74	18	21	8
7....	12	13	10	....	12	12	5	64	72	20	21	8
8....	10	11	10	....	12	12	4	62	59	20	21	7
9....	9	14	10	....	11	11	4	60	26	17	21	7
10....	10	13	10	....	11	12	4	60	26	16	20	6
11....	11	14	13	....	11	12	3	57	26	15	21	6
12....	12	14	13	....	11	10	3	58	26	15	17	6
13....	12	14	13	....	11	11	2	53	26	12	19	6
14....	12	14	13	....	11	11	2	48	26	9	19	6
15....	12	16	13	....	11	10	3	35	26	7	15	7
16....	12	16	13	14	11	10	3	43	26	13	27	8
17....	13	15	....	....	11	10	3	58	22	22	26	8
18....	13	16	....	....	11	10	4	66	18	26	20	8
19....	13	17	....	....	10	10	4	59	15	19	20	8
20....	13	17	....	....	11	10	3	79	17	17	21	7
21....	13	17	....	....	12	10	3	97	19	20	21	6
22....	13	17	....	....	12	10	4	82	16	17	20	6
23....	12	19	....	....	12	10	6	93	13	17	20	7
24....	13	16	....	....	12	10	7	79	17	17	20	8
25....	12	17	....	....	12	10	68	99	19	17	17	8
26....	13	16	....	....	11	10	98	94	20	15	11	9
27....	12	16	....	....	11	10	105	90	22	15	12	7
28....	13	16	....	....	12	11	106	80	20	16	10	7
29....	12	15	....	....	....	11	105	82	14	18	9	7
30....	12	17	....	....	....	10	104	81	21	18	9	10
31....	12	....	....	....	....	11	....	76	....	20	17	....
Total	407	452	....	....	321	333	699	2287	1041	550	594	246
Mean.	13.1	15.1	12.0	13.0	11.5	10.7	23.3	73.8	34.7	17.7	19.2	8.20
Max..	20	19	....	....	12	12	106	116	79	28	29	20
Min...	9	11	....	....	10	10	2	35	13	7	9	6
Acre-ft.	806	898	738	799	639	658	1390	4540	2060	1090	1180	488

Discharge of Bear Creek at Mouth for Year Ending Sept. 30, 1932.
Drainage Area, ... Square Miles. Altitude, ... Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	7.8	16	20	....	....	....	4.2	3.4	3.2	10	4.5	5.9
2....	8.4	15	20	....	....	....	3.7	3.4	5.5	9.4	4.5	5.5
3....	8.4	15	20	....	....	....	3.4	3.4	6.5	10	3.3	5.5
4....	7.8	16	20	....	....	....	3.2	3.4	7.6	6.8	4.7	5.4
5....	8.1	15	20	....	....	....	3.0	3.4	5.4	7.6	4.7	4.8
6....	7.8	15	....	....	....	....	4.0	3.6	4.7	6.1	5.0	4.7
7....	11	16	....	....	....	....	3.7	8.1	5.2	6.1	5.2	4.7
8....	12	15	....	....	....	....	3.2	6.1	4.0	6.5	5.4	4.8
9....	12	14	....	....	....	....	3.6	3.9	3.7	5.2	6.3	2.6
10....	11	14	....	....	....	....	3.9	3.2	5.4	5.5	4.8	4.0
11....	12	14	19	....	....	....	3.2	4.0	4.7	7.0	4.0	3.9
12....	16	14	....	....	....	....	3.7	3.7	5.0	12	7.0	4.0
13....	17	15	....	12	....	....	3.0	2.6	5.5	10	8 1	6.3
14....	14	14	....	....	....	10	3.6	3.4	5.9	9.7	5.9	5.4
15....	12	14	....	....	16	....	3.2	2.7	5.9	7.8	6.8	3.3
16....	11	14	....	....	....	....	2.4	2.7	8.1	20	7.4	5.7
17....	15	16	....	....	....	....	2.5	3.4	5.2	21	5.9	3.9
18....	13	16	....	....	....	....	3.0	3.3	5.4	8.8	5.9	3.7
19....	9.1	18	....	....	....	5.4	2.9	4.5	6.8	7.6	7.8	4.5
20....	13	17	....	....	....	5.9	2.6	5.4	7.8	6.8	10	5.4
21....	20	18	...	....	....	5.9	2.5	4.2	5.9	5.5	11	7.8
22....	15	19	....	....	....	5.5	2.5	4.8	6.5	3.2	13	7.6
23....	13	18	....	....	...	5.5	9.4	3.4	6.8	2.4	11	5.5
24....	11	20	....	....	....	5.7	12	2.7	7.1	2.1	6.3	5.4
25....	12	22	....	....	....	5.4	6.5	3.3	7.6	2.3	5.9	5.2
26....	14	22	....	....	....	5.0	9.4	5.9	7.0	2.4	5.5	5 0
27....	18	22	....	....	...	5.0	10	8.8	8.4	2.3	6.1	5 5
28....	17	23	....	....	....	5.2	7.8	7.8	9.4	1.8	6.1	5.5
29....	16	20	....	....	....	5.0	5.4	5.7	5.0	1.8	7.0	5.2
30....	13	19	....	....	....	5.2	3.7	4.3	6.5	2.7	7.0	5.2
31....	18	....	....	....	....	4.8	....	4.2	....	6.8	6.3	....
Total	393.4	506	....	....	....	....	135.2	132.7	181.8	217.2	202.4	151.9
Mean.	12.7	16.9	18.0	14.0	14.0	8.0	4.51	4.28	6.06	7.01	6.53	5.06
Max..	20	23	....	....	....	....	12	8.8	9.4	20	13	7.8
Min...	7.8	14	....	....	....	....	2.4	2.7	3.2	1.8	3.3	2.6
Acre-ft.	781	1010	1110	861	805	492	268	263	361	431	402	301

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of Clear Creek Near Golden for Year Ending Sept. 30, 1931.
Drainage Area, 392 Square Miles. Altitude, 5,620 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	105	85	....	....	....	60	50	93	566	662	241	125
2....	107	....	....	....	....	51	51	96	704	500	217	129
3....	120	....	....	....	....	46	52	99	753	485	196	118
4....	116	....	....	....	....	48	54	102	808	455	193	104
5....	105	....	....	....	....	47	55	105	784	396	177	111
6....	97	....	....	....	....	51	58	109	920	348	177	102
7....	102	....	....	....	....	57	69	109	1060	324	177	102
8....	104	....	....	....	....	57	71	111	976	300	180	109
9....	104	....	....	....	....	88	62	112	808	274	183	90
10....	104	52	53	....	....	100	59	112	648	268	170	75
11....	102	....	....	....	....	100	67	112	554	256	157	82
12....	99	....	....	....	....	57	72	133	590	271	147	76
13....	94	55	....	....	....	48	75	129	572	253	141	75
14....	93	54	....	....	....	51	83	155	566	226	120	72
15....	90	59	....	....	....	51	84	193	596	226	125	51
16....	87	38	....	35	....	50	80	292	690	241	183	72
17....	80	60	....	....	....	55	120	445	704	250	165	72
18....	84	70	....	....	....	55	96	495	620	238	175	77
19....	77	....	....	....	....	55	104	352	584	211	165	80
20....	73	....	....	....	....	49	97	296	542	187	180	73
21....	72	....	....	....	....	55	90	253	536	183	168	51
22....	71	....	....	....	....	57	90	235	480	170	165	75
23....	67	....	....	....	....	53	81	280	460	165	170	76
24....	60	....	....	....	31	52	77	368	450	173	168	77
25....	63	....	....	....	31	51	80	380	440	165	151	72
26....	75	....	....	....	29	50	77	554	495	165	139	81
27....	58	....	....	....	31	49	80	641	480	145	125	80
28....	69	....	....	....	31	49	84	614	590	163	121	55
29....	57	....	....	....	....	48	87	490	524	211	111	75
30....	62	....	....	....	....	48	90	435	614	180	125	73
31....	67	....	....	....	....	49	....	435	....	196	123	....
Total	2664	....	....	....	....	1737	2295	8335	19114	8287	5035	2510
Mean.	85.9	62.9	49.6	37.5	31.6	56.0	76.5	269	637	267	162	83.7
Max..	120	....	....	....	....	....	120	641	1060	662	241	129
Min...	57	....	....	....	....	....	50	93	440	145	111	51
Acre-ft.	5280	3740	3050	2310	1760	3440	4550	16500	37900	16400	9960	4980

Discharge of Clear Creek Near Golden for Year Ending Sept. 30, 1932.
Drainage Area, 392 Square Miles. Altitude, 5,620 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	73	40	....	....	....	....	48	131	435	595	306	120
2....	75	40	....	....	....	....	54	118	412	620	287	124
3....	86	40	....	....	....	....	60	96	458	610	246	111
4....	84	54	....	....	....	....	51	111	458	600	218	109
5....	59	54	....	....	....	....	64	138	458	561	207	107
6....	84	54	....	....	....	....	84	138	444	507	173	109
7....	94	46	....	....	....	....	76	155	466	466	179	111
8....	86	34	....	....	....	....	66	145	516	444	179	113
9....	84	34	....	....	....	....	57	140	494	426	207	102
10....	107	40	....	....	....	....	51	150	480	448	200	98
11....	88	34	....	....	....	....	49	158	462	462	194	98
12....	102	40	....	....	....	....	57	218	494	471	197	94
13....	122	34	....	....	....	....	62	268	507	534	194	86
14....	56	34	....	41	....	....	75	350	534	448	176	94
15....	54	34	39	....	....	....	78	366	590	412	185	84
16....	62	34	....	....	....	....	86	310	698	430	191	82
17....	75	34	....	....	33	....	104	326	698	426	191	82
18....	76	34	....	....	....	....	118	362	650	426	194	67
19....	57	34	....	....	....	....	111	430	605	408	188	11
20....	71	34	....	....	....	....	118	440	641	378	173	64
21....	88	....	....	....	....	46	143	485	620	342	168	67
22....	84	....	....	....	....	....	200	552	668	326	170	67
23....	82	....	....	....	....	....	224	615	740	322	165	67
24....	90	....	....	....	....	....	145	525	704	342	155	88
25....	54	....	....	....	....	....	145	512	710	323	150	94
26....	34	....	....	....	....	....	200	458	770	295	145	80
27....	40	....	....	....	....	....	185	399	758	287	158	90
28....	44	....	....	....	....	34	145	382	710	265	152	92
29....	69	....	....	....	....	34	142	382	680	291	148	88
30....	78	....	....	....	....	40	136	426	638	346	129	84
31....	71	....	....	....	....	46	....	417	....	350	118	....
Total	2329	....	....	....	....	....	3134	9653	17531	13161	5743	2713
Mean.	75.1	38	39	40	35	40	104	311	584	424	185	90.4
Max..	122	....	....	....	....	....	224	615	770	620	306	124
Min...	34	....	....	....	....	....	48	96	412	265	118	41
Acre-ft.	4620	2260	2400	2460	2010	2460	6190	19100	34800	26100	11400	5380

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of Clear Creek Near Mouth for Year Ending Sept. 30, 1931.
Drainage Area, ... Square Miles. Altitude, ... Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	8	16	....	....	30	10	16	24	90	97	14	14
2....	8	16	....	....	30	11	14	36	112	82	14	13
3....	12	16	....	....	27	12	12	35	108	76	15	11
4....	20	14	....	....	26	13	12	32	124	70	17	10
5....	13	26	....	....	25	13	11	32	145	61	15	8
6....	15	26	....	....	22	14	10	41	207	48	17	6
7....	10	25	....	....	20	16	10	39	240	45	18	6
8....	6	26	....	....	18	16	9	34	228	31	17	4
9....	5	26	....	....	14	16	14	29	143	30	18	5
10....	5	24	....	....	12	18	12	28	103	21	16	3
11....	7	21	....	....	12	16	10	38	90	15	16	3
12....	9	19	....	....	10	17	9	22	94	18	15	4
13....	9	19	....	....	9	18	8	20	94	16	13	4
14....	10	23	....	....	9	19	7	20	83	15	13	4
15....	10	23	....	....	10	19	8	42	78	18	18	4
16....	11	20	....	....	8	20	12	60	92	27	46	4
17....	11	20	....	....	5	21	13	80	89	35	55	4
18....	11	22	....	....	4	20	12	110	73	38	28	4
19....	11	24	....	....	4	22	12	89	73	28	19	6
20....	11	27	....	....	5	22	15	82	69	23	18	7
21....	12	26	....	....	6	23	16	82	77	20	14	6
22....	12	34	....	....	7	19	16	66	71	15	14	5
23....	12	30	....	....	9	16	17	62	73	14	15	6
24....	12	28	....	....	8	15	18	61	85	13	15	6
25....	11	30	....	....	8	14	24	61	78	12	14	5
26....	13	31	....	....	8	22	33	84	86	10	12	4
27....	13	32	....	....	8	27	26	105	96	10	13	3
28....	13	32	....	....	9	27	18	105	108	12	12	2
29....	14	32	....	....	....	24	17	101	88	34	10	2
30....	16	32	....	....	....	22	18	95	90	15	10	2
31....	16	....	....	....	....	20	....	82	....	22	12	....
Total	346	740	....	....	363	562	429	1797	3187	971	543	165
Mean.	11.2	24.7	28.5	16.0	13.0	18.1	14.3	58.0	106	31.3	17.5	5.50
Max..	20	34	....	....	30	27	33	110	240	97	55	14
Min...	5	14	....	....	4	10	7	20	69	10	10	2
Acre-ft.	689	1470	1750	984	722	1119	851	3570	6310	1920	1080	327

Discharge of Clear Creek Near Mouth for Year Ending Sept. 30, 1932.
Drainage Area, ... Square Miles. Altitude, ... Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	2	6	64	15	69	20	13	18	54	106	100	9
2....	2	4	61	17	69	20	9	15	104	85	64	7
3....	4	4	62	18	69	14	11	16	124	118	18	6
4....	5	5	63	24	74	31	11	15	162	104	16	6
5....	4	6	64	17	87	20	8	16	95	88	140	5
6....	3	6	68	17	69	18	9	20	58	97	11	4
7....	3	6	66	24	40	25	9	56	60	90	11	3
8....	3	5	69	18	34	30	7	45	79	108	10	3
9....	4	5	69	20	29	35	8	26	106	114	15	3
10....	4	6	73	21	32	40	6	33	79	120	15	2
11....	5	6	76	25	30	45	6	33	39	118	12	2
12....	5	6	72	27	29	50	2	33	37	118	16	2
13....	4	6	80	24	30	55	2	33	39	139	36	2
14....	4	5	80	31	31	60	4	74	39	100	24	2
15....	4	5	87	40	28	76	6	110	65	21	32	2
16....	4	5	87	59	23	43	3	96	92	16	14	2
17....	4	4	80	66	21	28	11	70	82	23	12	2
18....	4	2	61	67	20	16	12	70	62	18	12	1
19....	2	3	58	59	19	24	7	103	96	36	13	1
20....	2	5	54	57	24	55	8	163	89	43	10	1
21....	4	15	44	32	23	55	10	148	84	16	10	1
22....	4	59	40	36	20	51	7	154	124	14	9	1
23....	5	59	22	36	17	35	26	163	157	16	8	1
24....	5	70	19	56	16	28	26	128	154	28	6	1
25....	5	59	14	53	16	28	12	100	165	28	5	1
26....	4	50	14	49	16	40	35	96	169	22	7	1
27....	3	49	14	47	16	27	26	68	168	15	11	1
28....	5	69	17	40	16	25	16	33	202	11	11	1
29....	7	77	18	61	16	20	18	24	158	15	16	1
30....	8	69	17	74	....	18	15	43	134	128	7	1
31....	7	....	16	63	....	14	....	50	....	121	10	....
Total	129	676	1629	1193	983	1046	343	2052	3076	2076	681	75
Mean.	4.16	22.5	52.5	38.5	33.9	33.7	11.4	66.2	103	67.0	22.0	2.50
Max..	8	77	87	74	87	....	35	163	202	139	140	9
Min...	2	2	14	15	16	14	2	15	37	11	5	1
Acre-ft.	256	1340	3230	2370	1950	2070	678	4070	6130	4120	1350	149

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of West Fork of Clear Creek Near Empire for Year Ending Sept. 30, 1931.
Drainage Area, 57.3 Square Miles. Altitude, 8,300 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	30	19	17	....	....	8	9	16	262	229	56	28
2....	32	18	....	....	....	8	8	18	283	186	48	28
3....	33	18	....	....	10	8	8	20	353	172	46	26
4....	32	16	....	....	....	8	10	19	353	153	45	25
5....	30	16	....	....	8	8	9	18	346	132	43	24
6....	28	17	....	....	....	8	10	20	409	124	43	23
7....	28	14	....	9	....	8	12	24	532	108	41	24
8....	26	15	....	....	....	8	13	25	496	98	42	25
9....	26	13	....	....	....	8	11	22	339	90	39	22
10....	25	14	....	....	....	8	13	22	249	86	37	22
11....	24	14	....	....	....	9	14	20	213	86	36	20
12....	23	15	....	....	....	9	14	23	229	86	36	20
13....	23	16	....	....	....	9	17	30	208	80	35	19
14....	24	16	....	....	....	9	17	43	213	77	33	19
15....	24	15	....	....	....	9	17	60	229	76	38	20
16....	25	20	....	....	....	10	16	74	303	74	41	19
17....	23	17	....	....	....	9	18	112	317	71	40	19
18....	25	16	....	....	....	9	22	114	276	68	36	20
19....	24	17	....	....	....	9	23	83	249	62	35	24
20....	22	15	....	....	....	8	18	68	213	60	34	23
21....	22	16	....	....	....	9	17	58	196	57	32	22
22....	22	16	....	....	....	10	15	55	172	55	32	20
23....	21	16	....	....	....	9	14	62	161	52	35	20
24....	20	16	....	....	....	10	14	76	161	51	32	25
25....	21	16	....	....	....	9	14	112	165	48	32	22
26....	21	17	....	....	....	10	14	176	176	48	31	21
27....	17	17	....	....	....	9	15	208	161	48	30	20
28....	20	17	....	....	....	10	15	196	202	50	29	19
29....	16	17	....	....	....	9	16	139	176	51	28	19
30....	19	17	....	....	....	9	17	134	196	48	28	18
31....	19	....	....	....	....	8	....	157	....	57	27	....
Total	745	486	....	....	....	272	430	2204	7778	2683	1140	656
Mean.	24.0	16.2	13	9	8	8.8	14.3	71.1	259	86.5	36.8	21.9
Max..	33	20	....	....	....	10	23	208	532	229	56	28
Min...	16	13	....	....	....	8	8	16	161	48	27	18
Acre-ft.	1480	964	799	553	444	541	851	4370	15400	5320	2260	1300

Discharge of Fall River Near Idaho Springs for Year Ending Sept. 30, 1931.
Drainage Area, 23.6 Square Miles. Altitude, 7,720 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept
1....	14	7	9	....	....	....	5	10	80	45	37	13
2....	14	7	....	....	....	....	5	10	97	40	35	11
3....	14	7	....	....	4	....	5	12	124	34	30	10
4....	12	7	....	....	....	....	6	11	126	31	26	11
5....	12	8	....	....	3	3	4	12	120	30	25	10
6....	12	7	....	....	....	....	5	11	88	31	22	9
7....	12	6	....	4	....	....	4	11	120	27	21	14
8....	11	6	....	....	....	....	6	11	51	31	19	14
9....	11	8	....	....	....	....	5	11	39	21	23	12
10....	11	7	....	....	....	....	3	11	34	22	16	6
11....	11	7	....	....	....	....	7	11	37	23	14	8
12....	11	6	....	....	....	....	7	12	37	20	12	7
13....	10	7	....	....	....	....	8	17	37	18	12	7
14....	11	7	....	....	....	....	9	26	34	18	12	8
15....	10	6	....	....	....	....	10	37	40	18	13	7
16....	10	12	....	....	....	....	11	47	44	40	38	5
17....	9	10	....	....	....	....	11	85	43	50	63	7
18....	10	9	....	....	....	....	12	80	35	38	70	5
19....	10	9	....	....	....	....	12	47	38	32	68	3
20....	10	10	....	....	....	....	12	37	29	30	66	6
21....	10	9	....	....	....	....	11	27	40	31	50	5
22....	8	8	....	....	....	....	7	27	41	28	40	6
23....	8	7	....	....	....	....	6	37	40	28	30	7
24....	8	7	....	....	....	....	8	61	35	25	20	8
25....	8	7	....	....	....	....	7	85	38	30	16	7
26....	8	7	....	....	....	....	8	124	40	28	10	7
27....	10	7	....	....	....	....	10	117	40	29	8	7
28....	9	6	....	....	....	....	12	111	47	37	10	7
29....	7	6	....	....	....	....	10	102	47	35	8	6
30....	8	6	....	....	....	....	10	68	47	28	11	6
31....	8	....	....	....	....	....	....	55	....	34	12	....
Total	317	223	....	....	....	....	236	1323	1670	932	840	243
Mean.	10.2	7.43	6.0	4.0	3.0	3.0	7.87	42.7	55.7	30.1	27.1	8.10
Max..	14	12	....	....	....	....	....	124	136	50	....	14
Min..	7	....	....	....	....	....	....	10	34	18	8	5
Acre-ft	627	442	369	246	167	184	468	2620	3310	1850	1670	482

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of Fall River Near Idaho Springs for Year Ending Sept. 30, 1932.
Drainage Area, 23.6 Square Miles. Altitude, 7,720 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	5	6	....	....	....	....	....	9	50	61	30	10
2....	7	6	....	....	....	....	....	12	48	60	27	10
3....	6	5	....	....	....	....	....	14	51	58	24	10
4....	6	4	....	....	....	....	....	14	42	57	23	10
5....	6	5	....	....	....	....	....	14	61	50	22	9
6....	8	4	....	....	....	....	....	12	74	46	21	9
7....	8	4	....	....	....	....	....	13	80	41	19	7
8....	8	6	....	....	....	....	5	14	84	40	19	6
9....	7	6	4	....	....	....	....	18	77	39	52	5
10....	9	6	....	....	....	....	....	23	72	42	50	6
11....	9	6	....	....	....	....	5	32	72	46	46	6
12....	9	6	....	4	5	....	6	37	72	47	45	6
13....	8	6	....	....	....	....	6	38	70	46	41	6
14....	8	5	....	....	....	....	6	35	71	41	41	6
15....	8	6	....	....	....	3	7	35	82	41	45	6
16....	7	6	....	....	....	....	10	40	94	40	39	6
17....	7	5	....	....	....	....	10	46	90	41	38	6
18....	7	6	....	....	....	....	7	52	80	39	41	6
19....	7	8	....	....	....	....	7	58	94	38	38	5
20....	7	8	....	....	....	....	9	65	80	30	29	4
21....	7	8	....	....	....	....	12	65	74	28	28	5
22....	8	8	....	....	....	....	15	58	77	26	21	5
23....	7	....	....	....	....	....	9	52	78	24	16	6
24....	7	....	....	....	....	....	7	52	72	22	13	7
25....	7	....	....	....	....	....	10	46	71	21	14	6
26....	6	....	....	....	....	....	10	40	80	21	12	6
27....	6	....	....	....	....	....	9	35	78	22	12	6
28....	6	....	....	....	....	....	8	35	78	22	13	6
29....	5	....	....	....	....	....	7	42	77	26	12	6
30....	6	....	....	....	....	....	8	52	72	30	11	6
31....	5	....	....	....	....	....	....	46	....	38	10	....
Total	217	....	....	....	....	....	....	1104	2201	1188	852	199
Mean.	7.0	6.0	4.0	4.0	4.0	4.0	7.0	35.6	73.4	38.3	27.5	6.63
Max..	9	....	....	....	....	....	15	65	94	66	52	10
Min...	5	....	....	....	....	....	....	9	42	21	10	4
Acre-ft	430	357	246	246	230	246	416	2190	4370	2360	1690	394

Discharge of South Boulder Creek Near Eldorado Springs for Year Ending Sept. 30, 1931.
Drainage Area, 114 Square Miles. Altitude, 5,800 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	32	15	....	....	....	....	10	87	282	175	72	19
2....	28	14	....	....	....	....	12	93	341	129	57	22
3....	29	14	....	....	....	....	13	91	354	119	45	16
4....	33	11	....	....	....	....	15	91	354	115	41	15
5....	27	11	....	....	....	....	17	87	350	93	39	15
6....	24	14	....	....	....	....	17	115	346	83	41	14
7....	24	11	....	....	....	....	31	121	341	75	38	14
8....	24	17	....	....	....	....	41	124	341	70	38	14
9....	22	15	....	....	....	....	44	124	292	67	40	14
10....	21	14	....	....	....	....	44	112	264	63	33	12
11....	25	14	....	....	....	....	45	101	271	62	32	11
12....	22	18	....	....	....	....	49	104	257	57	30	12
13....	18	12	....	....	....	....	50	110	251	54	26	11
14....	18	10	....	....	....	....	50	121	248	52	23	10
15....	18	12	7.3	....	....	....	53	138	248	49	25	10
16....	17	17	....	....	....	14	50	181	275	49	36	11
17....	14	10	....	....	....	....	49	212	300	50	59	10
18....	22	15	....	....	....	....	57	242	257	50	45	9
19....	22	16	....	4	9	....	67	224	227	50	40	12
20....	20	16	....	....	....	....	56	184	221	42	31	15
21....	20	....	....	....	....	....	40	184	212	40	26	15
22....	15	....	....	....	....	....	45	136	186	35	29	15
23....	6	....	....	....	....	....	33	186	170	32	28	15
24....	15	20	....	....	....	....	41	200	173	31	27	14
25....	16	....	....	....	....	....	45	224	173	31	24	15
26....	18	....	....	....	....	....	40	275	175	33	22	14
27....	14	....	....	....	....	....	47	296	175	33	21	13
28....	18	....	....	....	....	....	56	282	184	32	18	13
29....	13	....	....	....	....	....	65	239	194	32	18	12
30....	15	....	....	....	....	....	72	227	186	31	18	12
31....	15	....	....	....	....	....	....	233	....	52	16	....
Total	625	....	....	....	....	....	1254	5144	7648	1886	1038	404
Mean.	20.2	15.5	9.06	6.0	7.0	14.0	41.8	166	255	60.8	33.5	13.5
Max..	33	....	....	....	....	....	....	296	354	175	72	22
Min...	6	....	....	....	....	....	....	87	170	31	16	9
Acre-ft.	1240	922	557	369	389	861	2490	10200	15200	3740	2060	803

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of South Boulder Creek Near Eldorado Springs for Year Ending Sept. 30, 1932. Drainage Area, 114 Square Miles. Altitude, 5,800 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	12	15	....	....	....	....	....	33	203	197	67	16
2....	12	13	....	....	....	....	....	47	197	177	64	14
3....	13	13	....	....	....	....	....	60	209	165	57	13
4....	14	14	....	....	....	....	....	65	203	156	50	12
5....	13	13	....	....	....	....	....	72	203	142	43	12
6....	13	12	....	....	....	....	....	65	206	126	38	12
7....	14	11	....	....	....	....	....	69	219	118	30	12
8....	14	11	....	....	....	....	....	90	245	115	27	11
9....	14	11	....	....	....	....	16	97	235	115	25	11
10....	14	11	....	....	....	....	19	97	219	106	26	11
11....	20	9	....	....	....	....	20	113	219	110	26	10
12....	17	12	....	....	....	....	25	131	209	115	26	9
13....	14	11	....	....	....	....	25	159	216	120	29	9
14....	11	10	....	....	....	....	33	190	225	110	25	9
15....	7	11	....	....	....	....	35	181	242	104	25	8
16....	7	11	5	....	....	....	46	184	252	115	25	8
17....	10	14	....	....	....	....	48	187	255	128	28	7
18....	11	12	....	....	6	....	42	213	235	115	29	7
19....	11	15	....	2.5	....	....	34	242	209	92	26	7
20....	12	....	....	....	....	....	36	235	216	82	25	7
21....	14	....	....	....	....	....	39	268	216	72	25	7
22....	16	....	....	....	....	....	51	308	222	64	26	7
23....	14	....	....	....	....	....	47	304	242	55	21	7
24....	15	....	....	....	....	12	20	268	232	58	20	9
25....	14	....	....	....	....	....	39	261	229	55	19	11
26....	12	....	....	....	....	....	52	235	213	52	19	11
27....	12	....	....	....	....	....	38	213	222	50	19	10
28....	12	....	....	....	....	....	29	187	222	48	27	10
29....	14	....	....	....	....	....	30	177	222	54	22	9
30....	11	....	....	....	....	....	29	203	213	67	18	9
31....	14	....	....	....	....	....	....	193	....	78	18	....
Total	401	....	....	....	....	....	....	5147	6650	3161	915	295
Mean.	12.9	11.5	5.42	3.0	5.62	10.8	29.4	166	222	102	29.5	9.85
Max..	20	....	....	....	....	....	....	308	255	197	67	16
Min...	7	....	....	....	....	....	....	33	197	48	18	7
Acre-ft.	793	684	333	184	323	664	1750	10200	13200	6270	1810	585

Discharge of Boulder Creek Near Orodell for Year Ending Sept. 30, 1931. Drainage Area, 105 Square Miles. Altitude, 5,800 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	58	15	22	5	11	6	51	76	295	320	96	25
2....	51	25	30	31	15	23	52	82	375	291	84	42
3....	46	15	28	13	14	22	46	82	395	238	87	40
4....	42	24	26	16	18	23	20	86	395	211	82	40
5....	32	19	31	26	9	31	10	79	400	189	79	40
6....	28	22	16	23	13	30	28	94	335	166	72	28
7....	28	21	14	30	9	18	42	115	370	115	65	26
8....	23	14	25	26	14	13	42	124	380	107	65	24
9....	22	12	30	23	10	25	23	111	385	102	65	28
10....	20	13	33	11	13	24	25	84	410	122	58	24
11....	17	12	33	14	15	22	23	82	340	92	55	26
12....	13	18	38	20	16	25	28	89	302	98	54	28
13....	24	23	16	22	20	24	63	105	272	107	50	23
14....	31	20	20	25	8	18	62	126	256	92	50	22
15....	29	20	38	18	16	12	57	131	266	81	48	23
16....	28	4	40	30	5	27	54	105	360	90	51	17
17....	28	11	26	5	7	31	53	146	385	92	58	15
18....	24	17	38	21	10	25	39	150	375	73	58	16
19....	18	18	40	42	8	30	58	119	360	86	62	16
20....	28	14	22	36	11	28	36	195	360	92	66	23
21....	31	16	21	32	15	19	31	150	320	98	68	40
22....	26	12	18	30	11	13	38	171	299	87	65	38
23....	22	13	33	26	15	32	37	174	283	76	63	31
24....	22	21	30	26	26	31	28	163	302	75	61	18
25....	29	18	9	8	25	41	23	241	302	72	61	19
26....	11	13	27	20	21	46	29	295	335	65	66	21
27....	19	9	28	18	20	19	30	310	375	63	65	25
28....	25	13	11	11	10	52	37	425	360	66	59	24
29....	14	6	34	9	....	34	46	335	345	68	42	21
30....	13	10	34	9	....	42	61	226	310	82	38	21
31....	11	....	41	8	....	37	....	232	....	87	34	....
Total	813	468	865	634	385	860	1175	4903	10217	3606	1927	784
Mean.	26.2	15.6	27.9	20.5	13.8	27.7	39.2	158	342	116	62.2	26.1
Max...	58	25	41	42	26	52	63	425	410	320	96	40
Min...	11	4	9	5	5	6	10	76	256	63	34	15
Acre-ft	1610	928	1720	1260	766	1700	2330	9720	20400	7130	3820	1550

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of Boulder Creek Near Orodell for Year Ending Sept. 30, 1932.
Drainage Area, 105 Square Miles. Altitude, 5,800 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	16	11	15	7	5	10	20	26	242	334	174	48
2....	18	10	23	11	5	12	13	45	248	290	193	42
3....	9	11	14	10	9	12	15	58	252	268	208	35
4....	12	9	15	11	5	12	15	83	242	262	188	24
5....	15	9	8	7	6	14	23	74	217	262	162	23
6....	22	9	11	10	6	8	20	65	226	226	144	25
7....	30	7	18	7	5	9	18	83	242	202	106	29
8....	30	9	18	5	5	22	26	74	286	193	110	29
9....	18	11	18	5	5	17	20	92	293	202	91	27
10....	15	7	13	5	5	15	18	83	232	188	78	27
11....	17	7	9	7	13	15	15	92	258	191	67	22
12....	18	9	7	5	13	18	26	102	258	236	59	22
13....	18	7	9	7	12	23	30	102	286	258	52	22
14....	18	7	15	11	13	24	23	112	293	252	48	20
15....	16	8	13	20	13	25	26	144	330	252	59	18
16....	15	7	20	18	18	13	36	169	350	239	62	16
17....	16	9	23	38	25	9	58	226	350	248	76	15
18....	26	12	11	15	32	13	58	226	330	255	79	11
19....	14	13	10	18	29	7	58	226	276	258	85	16
20....	16	11	7	20	19	9	58	242	312	226	76	13
21....	16	14	9	20	4	12	65	258	330	182	69	11
22....	21	9	7	20	6	24	65	276	293	182	65	12
23....	16	18	9	26	7	21	74	312	330	172	65	10
24....	19	18	11	7	6	32	45	312	350	159	58	10
25....	25	18	9	9	11	28	58	276	370	159	50	16
26....	17	18	15	7	9	19	74	258	350	159	50	13
27....	13	18	23	6	9	9	45	211	312	149	62	13
28....	14	14	7	9	9	11	33	156	330	137	69	15
29....	13	14	18	7	21	22	40	156	350	126	65	11
30....	10	13	20	8	....	11	33	196	358	137	45	10
31....	9	....	20	7	....	13	....	258	....	137	45	....
Total	532	337	425	363	325	489	1108	4993	8896	6541	2760	605
Mean.	17.2	11.2	13.7	11.7	11.2	15.8	36.9	161	296	211	89.0	20.2
Max..	30	18	23	38	32	32	74	312	370	334	208	48
Min...	9	7	7	5	4	7	13	26	217	126	45	10
Acre-ft.	1060	666	842	719	644	972	2200	9900	17600	13000	5470	1200

Discharge of Boulder Creek at Mouth for Year Ending Sept. 30, 1931.
Drainage Area, ... Square Miles. Altitude, ... Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	10	17	27	....	43	30	83	42	116	1	4	2
2....	15	14	41	....	38	30	81	99	142	1	4	4
3....	40	12	44	....	32	31	82	130	156	1	3	3
4....	74	13	43	....	28	32	78	114	145	2	3	4
5....	46	15	37	....	26	39	50	118	219	4	7	5
6....	36	13	41	....	23	28	34	153	248	2	7	3
7....	36	12	34	....	21	26	53	140	203	2	6	3
8....	22	12	34	....	17	25	63	134	169	2	8	3
9....	16	12	53	....	14	23	58	104	158	2	9	2
10....	14	11	53	....	14	28	38	103	128	2	8	2
11....	13	14	39	....	14	37	26	83	107	4	6	2
12....	14	13	40	....	13	32	22	107	52	9	4	2
13....	9	15	60	....	13	27	23	95	16	4	3	2
14....	12	16	62	....	17	27	56	93	8	2	2	2
15....	14	17	33	....	17	25	62	104	5	4	4	2
16....	12	15	44	....	19	28	56	104	1	4	5	3
17....	13	9	55	....	23	26	51	113	1	4	2	3
18....	14	17	....	....	22	26	48	113	1	4	2	2
19....	12	33	....	28	16	26	34	88	2	4	3	3
20....	10	33	....	....	15	26	41	68	9	6	2	2
21....	12	32	....	....	15	29	30	180	14	5	2	2
22....	17	29	....	....	15	28	30	163	5	2	2	2
23....	16	34	....	....	16	24	44	227	4	2	4	4
24....	14	28	....	....	20	24	34	189	4	2	3	4
25....	13	50	....	....	21	27	41	174	3	4	2	4
26....	13	41	....	....	21	23	47	195	2	6	4	4
27....	9	35	....	....	21	48	38	178	26	8	3	4
28....	16	26	....	....	25	55	43	239	63	6	3	4
29....	25	34	....	....	....	89	36	317	76	5	3	3
30....	16	36	....	53	....	65	32	213	19	5	3	4
31....	17	....	....	53	....	92	....	137	....	4	2	....
Total	600	658	....	....	579	1076	1414	4317	2102	113	123	89
Mean.	19.4	21.9	42.6	35.3	20.7	34.7	47.1	139	70.1	3.64	3.97	2.97
Max..	74	50	....	....	43	92	83	317	248	9	9	4
Min...	9	9	....	....	13	23	22	42	1	1	2	2
Acre-ft.	1190	1300	2620	2170	1150	2130	2800	8550	4170	224	244	177

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of Boulder Creek at Mouth for Year Ending Sept. 30, 1932.
Drainage Area, ... Square Miles. Altitude, ... Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	2	3	5	9	15	4	6	11	2	20	3	3
2....	2	3	5	10	15	4	7	8	2	5	5	2
3....	2	3	3	8	15	4	8	8	10	4	4	3
4....	2	3	3	10	16	4	7	13	25	3	4	3
5....	2	3	3	9	16	5	14	14	4	3	3	3
6....	2	3	4	8	17	5	12	18	3	3	3	2
7....	2	3	3	11	17	3	11	24	2	3	3	2
8....	2	3	4	10	17	4	11	24	3	3	2	3
9....	2	3	5	10	17	4	12	11	8	3	3	3
10....	4	3	5	10	17	4	12	5	6	10	3	3
11....	5	2	6	7	18	4	10	3	3	6	3	2
12....	4	2	6	12	18	5	7	3	4	10	3	2
13....	4	2	4	10	20	5	7	3	3	69	8	3
14....	4	2	3	10	12	6	7	3	3	46	5	2
15....	4	2	3	12	14	6	7	3	3	17	3	3
16....	4	2	4	13	16	7	9	3	3	10	3	2
17....	4	2	4	12	18	8	23	3	4	4	3	2
18....	3	2	5	12	12	6	36	3	10	3	3	1
19....	3	3	7	12	14	7	37	4	17	6	3	2
20....	3	3	8	14	17	8	31	4	5	8	3	2
21....	5	3	13	16	23	8	28	7	12	5	3	2
22....	5	3	12	19	3	7	31	8	20	5	2	2
23....	4	3	8	19	3	8	60	3	13	5	3	2
24....	4	3	8	16	4	8	60	2	39	4	3	2
25....	3	3	6	16	4	8	31	3	43	4	3	2
26....	2	3	3	14	3	10	20	3	39	4	3	2
27....	2	3	4	14	4	9	20	3	60	5	4	2
28....	2	3	12	14	4	10	16	3	49	5	5	2
29....	2	4	12	15	5	8	14	3	26	3	3	2
30....	3	4	13	15	....	8	13	3	39	5	3	2
31....	3	....	12	15	....	7	....	3	....	4	3	....
Total	95	84	193	382	374	194	567	209	460	285	105	68
Mean.	3.06	2.80	6.22	12.3	12.9	6.26	18.9	6.74	15.3	9.19	3.39	2.27
Max..	5	4	13	19	23	10	60	24	60	69	5	3
Min...	2	2	3	8	3	....	6	2	2	3	2	1
Acre-ft.	188	167	382	756	742	385	1120	414	910	565	208	135

Discharge of Middle Boulder Creek at Nederland for Year Ending Sept. 30, 1931.
Drainage Area, 38.0 Square Miles. Altitude, 8,180 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	20	9	5	....	3	3	4	24	192	140	61	19
2....	21	10	5	....	3	4	4	42	228	126	44	19
3....	23	10	5	....	3	4	4	34	234	114	38	19
4....	24	9	4	....	3	4	4	31	240	89	34	15
5....	23	9	4	....	3	4	4	31	266	83	32	14
6....	21	9	4	....	3	4	6	33	268	75	32	14
7....	18	8	5	....	3	5	10	42	312	71	30	14
8....	18	8	4	....	3	4	10	39	250	67	29	13
9....	16	8	4	....	3	6	10	34	206	63	26	12
10....	15	9	5	....	3	4	11	33	170	60	25	11
11....	14	8	5	....	3	4	14	31	192	58	23	11
12....	15	8	4	....	2	4	16	34	192	58	22	11
13....	16	8	4	....	3	4	16	44	176	55	20	10
14....	15	8	4	....	3	4	16	68	152	52	19	10
15....	14	6	....	....	3	4	16	100	174	52	21	10
16....	14	3	....	....	3	4	20	163	214	49	32	10
17....	11	7	....	....	3	4	20	230	220	51	47	10
18....	18	7	....	....	3	5	30	195	186	49	35	10
19....	17	7	....	....	3	4	35	128	180	44	33	16
20....	16	9	....	....	3	4	29	99	166	42	29	18
21....	14	8	....	....	3	4	23	76	164	38	26	16
22....	14	8	....	....	3	5	18	77	158	35	24	14
23....	14	8	....	....	3	4	16	99	160	35	27	14
24....	13	8	....	....	3	4	16	122	158	34	30	18
25....	15	9	....	....	3	3	16	155	164	34	25	17
26....	12	7	....	....	3	3	16	199	212	33	21	15
27....	10	7	....	....	3	4	16	215	178	34	19	13
28....	11	7	....	....	3	4	16	172	184	35	18	12
29....	8	6	....	....	....	4	19	139	184	59	16	12
30....	10	6	....	....	....	4	24	134	174	44	16	11
31....	10	....	....	....	....	4	....	151	....	50	16	....
Total	480	234	....	....	83	126	340	2974	5954	1829	870	408
Mean.	15.5	7.80	....	....	2.96	4.06	11.3	95.9	198	59.0	28.1	13.6
Max..	24	10	....	....	3	5	35	230	312	140	61	19
Min..	8	3	....	....	2	3	4	24	152	33	16	10
Acre-ft.	953	464	....	....	164	250	672	5900	11800	3630	1730	809

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of Middle Boulder Creek at Nederland for Year Ending Sept. 30, 1932.
Drainage Area, 38.0 Square Miles. Altitude, 8,180 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	14	8	....	....	....	8	5	22	153	222	80	19
2....	12	8	....	4	....	9	7	29	153	202	68	18
3....	16	8	....	....	....	9	8	40	166	189	56	16
4....	15	8	....	....	....	9	9	48	143	163	52	16
5....	14	7	....	....	....	6	10	51	152	161	48	15
6....	14	8	....	....	....	4	10	44	166	131	44	15
7....	30	7	....	....	....	4	8	45	190	131	42	15
8....	29	7	....	....	....	4	8	43	210	115	38	15
9....	27	7	....	....	....	5	7	48	169	111	37	13
10....	29	....	....	....	....	5	8	59	162	117	37	13
11....	37	....	....	....	....	5	9	86	165	138	35	13
12....	31	....	....	4	....	5	10	108	171	139	40	12
13....	19	....	....	....	....	5	14	135	188	149	37	12
14....	15	....	....	....	....	5	18	170	207	131	35	11
15....	14	....	....	....	....	5	21	167	243	132	32	11
16....	12	....	....	....	....	5	25	150	243	130	32	11
17....	11	....	....	....	....	5	25	160	219	124	33	11
18....	10	....	....	....	....	5	23	191	180	115	33	10
19....	10	....	....	3	....	5	24	213	190	104	32	10
20....	10	....	....	3	....	5	27	202	202	92	31	10
21....	13	....	....	3	....	4	30	214	207	84	29	10
22....	14	....	....	....	....	4	30	270	237	82	25	11
23....	15	....	....	....	....	4	28	215	256	74	24	11
24....	13	....	....	....	....	4	29	190	229	78	24	11
25....	14	....	....	....	....	4	34	164	223	79	22	11
26....	14	....	....	....	....	4	28	132	217	70	22	11
27....	9	....	....	....	....	5	27	101	256	59	27	11
28....	11	....	....	....	....	5	23	91	282	59	30	11
29....	10	....	....	....	....	5	22	125	267	70	26	10
30....	10	....	....	....	....	4	21	152	248	93	23	10
31....	12	....	....	3	....	5	....	142	....	96	21	....
Total	504	....	....	....	....	161	548	3807	6094	3640	1115	373
Mean.	16.2	8.0	4.0	4.0	....	5.19	18.3	123	203	117	36.0	12.4
Max...	37	....	....	....	....	9	34	270	282	222	80	19
Min...	9	....	....	....	....	4	5	22	143	59	21	10
Acre-ft.	996	476	246	....	....	319	1090	7560	12100	7190	2210	738

Discharge of North Boulder Creek Near Nederland for Year Ending Sept. 30, 1931.
Drainage Area 24.6 Square Miles. Altitude .... Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	22	....	....	....	....	....	1	6	66	154	38	11
2....	19	....	....	....	....	....	1	9	68	141	44	21
3....	14	....	....	....	....	....	1	10	70	134	43	17
4....	25	....	....	....	....	....	1	10	74	127	42	18
5....	13	....	....	....	....	....	1	10	78	116	38	14
6....	8	....	....	....	....	....	1	11	112	74	29	14
7....	5	....	....	....	....	....	1	17	109	34	28	14
8....	5	....	....	....	....	....	1	17	68	34	28	14
9....	5	....	....	....	....	....	1	12	58	33	28	14
10....	4	....	....	....	....	....	1	11	97	32	26	14
11....	4	....	....	....	....	....	1	11	56	32	24	14
12....	4	....	....	....	....	....	6	12	56	32	25	14
13....	6	0.3	....	....	....	....	7	18	56	27	26	14
14....	2	....	....	....	....	....	6	24	52	23	26	11
15....	1	....	....	....	....	....	4	33	62	23	27	6
16....	1	....	....	....	....	....	1	43	168	24	27	4
17....	1	....	....	....	....	....	1	72	127	26	30	2
18....	1	....	....	....	....	....	4	48	81	28	25	7
19....	0.5	....	....	....	....	....	6	26	164	31	24	7
20....	0.5	....	....	....	....	....	0.3	17	207	43	22	20
21....	0.5	....	....	....	....	....	1.0	19	182	42	21	19
22....	0.5	....	....	....	....	....	0.2	26	89	34	21	10
23....	0.5	....	....	....	....	....	0.3	38	72	33	22	6
24....	0.5	....	....	....	....	....	0.1	54	89	34	20	6
25....	0.5	....	....	....	....	....	0.2	60	112	35	26	7
26....	0.5	....	....	....	....	....	1.0	74	212	35	30	5
27....	0.5	....	....	....	....	....	1.0	102	243	35	30	10
28....	0.5	....	....	....	....	....	2	186	233	32	20	5
29....	0.5	....	....	....	....	....	3	68	168	31	12	3
30....	0.5	....	....	....	....	....	6	64	159	29	12	3
31....	0.5	....	....	....	....	....	....	68	....	30	9	....
Total	146.5	9.0	9.3	9.3	8.4	9.3	61.1	1176	3388	1538	823	324
Mean.	4.72	.3	.3	.3	.3	.3	2.04	37.9	113	49.6	26.5	10.8
Max...	25	....	....	....	....	....	7	186	243	154	44	21
Min...	....	....	....	....	....	....	0.1	6	52	23	9	2
Acre-ft.	290	18	18	18	17	18	121	2330	6720	3050	1630	643

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of St. Vrain Creek at Lyons for Year Ending Sept. 30, 1931.
Drainage Area, 226 Square Miles. Altitude, 5,349 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	61	17	18	9	11	11	18	137	436	357	142	57
2....	58	15	18	9	12	13	20	152	502	262	122	60
3....	57	15	18	11	11	13	14	155	457	337	106	48
4....	53	12	16	12	12	11	11	147	547	214	94	35
5....	50	12	15	12	12	10	14	106	591	169	85	31
6....	45	12	14	12	10	12	17	122	586	142	102	28
7....	41	12	15	12	10	12	28	139	597	129	98	29
8....	38	12	14	12	11	12	39	139	580	120	94	28
9....	37	14	17	12	11	12	33	106	468	112	92	28
10....	38	14	16	11	11	11	31	100	414	110	85	29
11....	50	12	15	9	10	11	34	90	457	102	64	28
12....	39	12	15	8	10	11	40	87	452	98	58	28
13....	37	17	16	8	10	12	49	87	479	94	52	27
14....	28	16	15	5	9	11	46	102	463	90	54	26
15....	32	14	13	5	9	12	41	127	468	87	51	21
16....	25	15	14	5	9	14	39	207	507	100	54	20
17....	22	13	13	4	9	16	43	332	507	178	58	19
18....	23	14	9	4	9	12	54	404	446	155	50	18
19....	22	15	4	2	9	10	62	275	398	150	45	23
20....	22	15	4	2	10	9	62	228	367	139	44	34
21....	27	14	3	2	10	10	43	197	342	137	55	35
22....	31	16	5	3	10	10	46	217	317	117	75	35
23....	30	11	5	4	10	12	38	294	312	94	67	34
24....	28	19	5	4	9	13	37	298	332	92	62	33
25....	25	20	5	5	9	13	37	352	347	100	68	41
26....	25	20	5	8	10	14	33	414	367	104	70	35
27....	21	20	5	9	10	14	45	468	317	106	78	30
28....	14	20	4	10	9	15	67	409	303	110	72	29
29....	14	18	4	10	....	16	85	352	294	134	67	28
30....	14	18	3	12	....	18	98	332	312	115	62	27
31....	18	....	4	11	....	19	....	342	....	127	58	....
Total	1025	454	327	242	282	389	1224	6917	12869	4381	2284	944
Mean.	33.1	15.1	10.5	7.81	10.1	12.5	40.8	223	429	141	73.7	31.5
Max...	61	20	18	12	12	19	98	468	597	357	142	60
Min...	14	12	3	2	9	9	11	87	294	87	44	18
Acre-ft.	2040	898	646	480	561	769	2430	13700	25500	8670	4530	1870

Discharge of St. Vrain Creek at Lyons for Year Ending Sept. 30, 1932
Drainage Area, 226 Square Miles. Altitude, 5,349 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	29	26	12	4	2	5	13	47	272	521	135	45
2....	29	21	12	4	3	3	20	55	285	507	121	41
3....	29	19	12	4	3	2	25	62	331	500	114	40
4....	30	18	11	4	3	2	29	68	289	472	105	37
5....	26	18	11	4	5	2	28	74	302	428	99	35
6....	27	17	10	3	8	2	31	71	331	336	94	29
7....	33	18	10	3	8	2	24	84	357	312	82	30
8....	35	18	10	3	7	2	24	94	440	312	86	34
9....	24	18	10	3	8	2	25	92	398	293	71	30
10....	25	17	10	3	8	2	23	95	375	280	60	29
11....	27	13	10	4	5	2	26	128	398	293	58	26
12....	34	19	10	6	9	2	30	128	380	298	58	27
13....	31	16	10	4	8	2	30	148	392	302	64	24
14....	28	14	9	6	6	3	40	177	392	263	63	24
15....	26	11	8	4	8	3	45	234	478	247	60	21
16....	24	9	8	3	8	3	51	268	543	243	58	21
17....	21	9	7	3	8	3	56	199	434	280	62	20
18....	7	10	7	2	9	4	50	222	428	263	63	19
19....	5	12	7	2	6	6	45	280	386	247	67	17
20....	5	8	11	2	7	14	48	312	351	230	74	17
21....	6	9	12	3	7	11	56	363	357	199	78	18
22....	8	8	12	3	8	9	67	507	398	184	74	21
23....	7	8	10	3	7	12	73	492	466	174	73	20
24....	9	12	10	4	9	12	54	375	514	177	67	19
25....	10	16	10	4	12	12	63	351	614	171	64	20
26....	14	17	9	3	10	10	68	285	606	148	60	23
27....	11	14	8	3	9	6	51	230	638	140	64	25
28....	9	16	9	3	13	10	48	203	672	177	63	27
29....	17	17	8	3	16	15	53	203	630	177	60	20
30....	20	14	9	2	....	9	50	276	582	171	53	19
31....	23	....	6	2	....	10	....	280	....	162	51	....
Total	629	442	298	104	220	182	1246	6403	13039	8507	2301	777
Mean	20.3	14.7	9.61	3.35	7.59	5.87	41.5	207	434	274	74.2	25.9
Max...	35	26	12	6	16	15	73	507	672	521	135	45
Min...	5	8	6	2	2	2	13	47	272	140	51	17
Acre-ft	1248	875	591	206	436	361	2470	12700	25800	16800	4560	1530

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of North St. Vrain Creek at Longmont Dam for Year Ending Sept. 30, 1931.
Drainage Area, 109 Square Miles. Altitude, 6,080 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	50	20	15	7.5	8.7	8.7	14	124	355	241	95	33
2....	49	20	14	7.9	8.7	8.9	15	122	355	183	88	32
3....	48	20	15	8.1	8.5	8.9	12	120	386	173	80	29
4....	45	19	15	8.3	8.7	8.9	12	117	378	148	70	29
5....	45	19	14	7.7	8.9	8.5	12	113	462	126	62	27
6....	42	22	13	7.9	8.9	8.3	16	140	435	111	62	27
7....	40	19	13	7.7	8.7	8.3	22	170	522	109	66	27
8....	33	20	12	7.5	8.5	8.5	31	161	492	100	67	27
9....	30	19	13	7.5	8.5	8.7	21	145	334	97	63	24
10....	30	20	12	7.1	8.3	8.7	23	126	287	100	62	24
11....	30	20	13	6.5	8.3	9.2	29	111	295	106	60	24
12....	31	24	13	6.3	8.1	9.8	30	104	270	106	52	23
13....	30	19	11	5.7	8.1	9.2	36	100	282	104	49	23
14....	30	17	13	5.7	8.1	9.2	24	113	334	94	47	23
15....	29	17	12	5.9	8.5	10	24	135	304	90	52	24
16....	30	16	10	5.9	8.9	11	28	164	355	108	60	22
17....	33	16	11	5.9	8.3	11	30	229	338	124	57	21
18....	30	16	10	5.9	8.5	11	30	229	229	138	54	22
19....	28	20	9.2	5.4	8.7	12	36	229	254	117	53	31
20....	27	18	8.3	4.8	8.7	12	30	138	233	106	52	34
21....	27	17	7.9	4.8	8.5	12	19	113	222	97	53	33
22....	26	22	8.3	5.2	8.5	15	24	151	218	80	51	29
23....	24	19	8.9	5.2	8.7	13	24	192	207	72	60	29
24....	24	18	9.8	5.7	8.7	12	25	207	225	74	56	31
25....	24	18	9.6	5.9	8.7	11	26	233	270	76	50	39
26....	23	18	8.1	6.3	8.9	10	26	299	270	77	45	34
27....	20	18	7.5	6.5	8.7	11	24	325	233	82	43	27
28....	25	16	6.7	7.3	8.1	11	47	308	214	82	40	28
29....	20	15	6.5	7.5	....	10	51	258	210	92	34	27
30....	23	16	6.5	7.9	....	11	74	270	225	90	32	26
31....	23	....	6.7	8.3	....	12	....	278	....	89	30	....
Total	969	558	333	206	239	319	815	5524	9194	3392	1745	829
Mean.	31.3	18.6	10.7	6.64	8.54	10.3	27.2	178	306	109	56.3	27.6
Max...	50	24	15	8.3	8.9	15	74	325	522	241	95	39
Min...	20	15	6.5	4.8	8.1	8.3	12	100	207	72	30	21
Acre-ft.	1920	1110	658	408	474	633	1620	10900	18200	6700	3460	1640

Discharge of North St. Vrain Creek at Longmont Dam for Year Ending Sept. 30, 1932.
Drainage Area, 109 Square Miles. Altitude, 6,080 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	25	23	11	4	5	14	14	35	164	318	113	42
2....	26	22	12	5	6	9	18	47	164	297	99	37
3....	26	20	11	6	6	11	22	50	170	297	87	36
4....	28	20	11	6	6	10	22	52	164	297	83	34
5....	26	18	12	6	7	6	23	55	215	264	76	30
6....	26	18	11	6	8	8	25	57	199	224	71	28
7....	26	18	12	5	8	8	18	69	260	212	70	28
8....	26	18	11	6	7	6	20	69	208	202	67	28
9....	27	18	10	6	8	8	22	66	208	196	65	28
10....	25	15	12	7	8	8	18	73	237	184	58	34
11....	30	16	11	7	8	7	23	83	244	193	58	34
12....	30	17	11	7	8	7	24	101	237	184	61	33
13....	28	14	8	7	8	7	26	108	260	190	60	32
14....	26	14	6	6	7	10	35	135	267	167	58	33
15....	25	16	9	6	7	10	38	154	308	154	57	26
16....	25	14	8	4	9	10	42	142	345	154	58	25
17....	25	11	8	5	7	10	43	144	329	190	66	26
18....	24	17	12	5	7	10	40	176	277	167	60	26
19....	24	13	11	6	8	11	37	190	247	154	78	25
20....	24	10	10	6	8	10	40	218	264	146	74	25
21....	26	15	11	5	7	10	48	244	267	142	73	24
22....	27	14	11	6	7	10	58	264	297	137	70	24
23....	27	11	11	6	7	10	55	231	314	128	65	23
24....	26	19	10	6	7	11	48	187	290	128	58	23
25....	25	13	10	6	7	11	56	164	311	121	55	28
26....	25	13	9	6	8	11	50	135	314	110	54	24
27....	18	11	7	6	10	11	39	124	349	106	56	23
28....	21	11	10	6	13	11	26	126	392	103	54	23
29....	23	13	10	5	14	11	40	126	374	108	50	22
30....	21	13	7	5	....	10	37	167	341	128	46	22
31....	23	....	8	5	....	12	....	162	....	117	44	....
Total	784	465	311	178	226	298	1011	3954	8016	5518	2044	846
Mean.	25.3	15.5	10.0	5.74	7.79	9.61	33.7	128	267	178	65.9	28.2
Max...	30	23	12	7	14	14	58	264	392	318	113	42
Min...	18	10	6	4	5	6	14	35	164	103	44	22
Acre-ft.	1560	922	615	353	448	591	2000	7870	15900	10900	4050	1680

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of South St. Vrain Creek Near Ward for Year Ending Sept. 30, 1931.
Drainage Area, 15 Square Miles. Altitude, ... Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1	9	5	....	....	....	....	....	3	98	97	32	12
2	10	5	....	....	....	....	....	5	114	79	26	12
3	10	5	....	....	....	....	....	5	121	69	27	10
4	10	5	....	....	....	....	....	5	121	63	54	10
5	10	5	....	....	....	....	....	5	140	58	65	11
6	10	5	....	....	....	....	....	10	142	48	61	11
7	9	4	....	....	....	....	....	10	152	45	61	11
8	9	4	....	2	....	....	....	10	134	40	58	11
9	9	4	....	....	....	....	....	10	130	36	51	11
10	9	4	....	....	....	....	....	10	125	36	46	11
11	9	4	....	....	....	....	....	15	135	36	49	11
12	9	4	....	....	....	....	....	30	130	35	47	11
13	9	4	....	....	....	....	....	45	125	35	42	10
14	9	4	....	....	....	....	....	67	120	35	46	10
15	8	3	....	....	....	....	....	94	130	34	26	10
16	8	3	....	....	....	....	6	105	137	34	26	10
17	8	3	....	....	....	....	....	136	130	33	32	9
18	8	3	....	....	....	2	....	115	125	32	26	9
19	8	3	....	....	....	....	....	82	113	31	24	11
20	7	3	....	....	....	....	....	70	106	30	21	13
21	7	2	....	....	....	....	....	60	101	26	19	12
22	7	2	....	....	....	....	....	45	100	27	18	10
23	6	2	....	....	....	....	....	38	106	26	20	9
24	6	2	....	....	....	....	....	56	121	26	20	10
25	6	2	....	....	....	....	....	73	116	28	18	12
26	6	2	....	....	....	....	....	92	126	27	17	9
27	7	2	....	....	....	....	....	96	121	26	16	9
28	6	2	....	....	....	....	....	81	106	28	13	9
29	6	2	....	....	....	....	....	62	100	33	12	9
30	6	2	....	....	....	....	....	6	103	43	12	9
31	5	....	....	....	....	....	....	70	....	61	12	....
Total	246	100	62	62	56	62	150	1564	3628	1257	997	312
Mean	7.9	3.3	2	2	2	2	5	50.5	121	40.5	32.2	10.4
Max	10	5	....	....	....	....	....	136	152	97	65	13
Min	5	....	....	....	....	....	....	....	98	26	12	9
Acre-ft	486	196	123	123	111	123	298	3110	7200	2490	1980	619

Discharge of St. Vrain Creek at Mouth for Year Ending Sept. 30, 1931.
Drainage Area, ... Square Miles. Altitude, ... Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1	137	96	86	....	....	76	128	107	193	129	95	104
2	145	94	82	....	....	76	118	126	217	117	117	109
3	161	92	92	....	....	80	117	177	255	95	106	101
4	198	91	86	....	....	74	115	168	253	95	86	92
5	189	92	89	....	....	92	104	163	311	101	76	95
6	147	88	....	....	....	86	94	190	480	101	69	92
7	137	85	....	....	....	87	87	195	405	75	69	84
8	134	88	....	....	....	87	95	192	418	70	67	66
9	120	88	....	....	....	84	95	173	340	74	67	56
10	109	88	....	....	....	86	86	163	294	79	70	51
11	110	88	....	....	....	95	82	157	255	83	69	45
12	113	88	....	....	....	96	80	153	215	89	65	45
13	112	84	....	....	....	87	76	155	200	98	59	42
14	112	82	....	....	....	83	83	150	169	104	54	44
15	117	83	78	....	....	82	98	147	158	113	57	52
16	113	83	....	....	65	79	100	157	136	120	112	57
17	106	76	....	....	66	79	92	176	121	123	91	57
18	110	76	....	....	67	79	88	209	115	184	66	57
19	106	89	....	....	69	79	84	213	110	149	59	55
20	100	89	....	....	64	79	75	215	117	131	53	52
21	102	80	....	....	69	79	76	215	155	134	16	52
22	102	82	....	119	70	76	79	221	152	136	47	52
23	98	82	....	....	66	70	81	244	117	129	46	52
24	96	79	....	....	69	70	84	255	144	125	46	45
25	96	79	....	....	70	79	89	209	131	123	46	41
26	95	87	....	....	65	79	102	219	133	120	48	42
27	94	95	....	....	63	76	98	233	147	96	45	43
28	94	88	....	....	67	79	102	229	200	84	44	42
29	98	86	....	....	....	80	102	305	223	92	84	39
30	106	87	....	....	....	79	104	313	160	88	102	38
31	95	....	....	....	....	107	....	247	....	92	101	....
Total	3652	2585	....	....	....	2540	2814	6043	6357	3349	2162	1805
Mean	118	86.2	85	92	71	81.9	93.8	195	212	108	69.7	60.2
Max	198	96	....	....	....	107	128	313	480	184	117	109
Min	94	76	....	....	....	70	75	107	110	70	44	38
Acre-ft	7260	5130	5220	5660	3946	5040	5580	12000	12600	6640	4290	3580

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of St. Vrain Creek at Mouth for Year Ending Sept. 30, 1932.
Drainage Area, ... Square Miles. Altitude, ... Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	33	44	....	....	....	....	47	39	43	130	99	62
2....	33	42	....	....	....	....	47	40	41	90	82	53
3....	34	45	....	....	....	....	46	40	48	93	79	46
4....	34	45	....	....	....	....	46	41	85	90	72	67
5....	32	46	....	....	....	....	38	48	98	76	66	72
6....	32	45	....	....	....	....	38	52	66	53	59	71
7....	42	46	....	....	....	....	35	71	60	45	52	69
8....	43	45	....	....	....	....	35	91	50	54	49	62
9....	43	43	....	....	....	....	35	82	59	65	44	58
10....	46	42	....	....	....	....	35	67	102	86	36	58
11....	47	44	....	....	....	....	34	56	104	109	29	65
12....	46	42	....	....	....	....	34	46	101	118	30	62
13....	47	42	....	....	....	....	33	34	99	188	40	56
14....	50	45	30	....	....	....	33	31	88	248	45	52
15....	48	45	....	....	53	....	33	34	73	140	53	47
16....	46	42	....	....	....	....	34	48	66	104	46	45
17....	50	37	....	....	....	....	34	40	60	102	42	41
18....	50	33	....	....	....	....	34	28	58	108	43	44
19....	44	30	....	....	....	....	34	31	162	94	43	45
20....	38	33	....	....	....	....	34	33	158	90	46	43
21....	44	40	....	....	....	....	33	42	124	73	43	45
22....	43	....	....	....	....	....	33	52	128	57	52	48
23....	42	....	....	....	....	....	34	57	104	57	51	48
24....	44	....	....	....	....	47	34	36	99	68	50	47
25....	44	....	....	....	....	47	34	31	115	86	49	49
26....	42	....	....	57	....	47	34	34	99	73	50	50
27....	38	50	....	....	....	47	33	48	120	62	50	46
28....	41	....	....	....	....	47	33	69	152	58	65	44
29....	42	....	....	....	....	47	33	73	122	71	78	43
30....	42	....	....	....	....	47	33	69	113	98	72	41
31....	44	....	....	....	....	47	....	59	....	96	67	....
Total	1304	....	....	....	....	....	1073	1522	2797	2882	1682	1579
Mean.	42.1	43.6	45	50	54	49	35.8	49.1	93.2	93.0	54.2	52.6
Max...	50	....	....	....	....	....	....	91	162	248	99	72
Min...	32	....	....	....	....	....	....	28	41	45	29	41
Acre-ft.	2590	2590	2770	3070	3110	3010	2130	3020	5550	5720	3330	3130

Discharge of Lefthand Creek Near Boulder for Year Ending Sept. 30, 1931.
Drainage Area, 48.3 Square Miles. Altitude, ... Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	12	3	....	....	....	0.5	2	58	115	123	40	9
2....	12	2	....	....	....	0.5	2	67	138	101	28	9
3....	14	3	....	....	....	0.5	1	71	165	84	25	8
4....	12	2	....	....	....	0.5	1	68	165	74	21	7
5....	12	2	....	....	....	0.5	2	65	173	60	19	7
6....	12	3	....	....	....	0.5	2	68	168	46	25	7
7....	11	1	....	....	....	0.5	5	71	165	44	24	7
8....	10	0.6	....	....	....	0.5	6	76	160	41	21	7
9....	9	2.0	....	....	....	0.5	4	70	145	39	16	7
10....	8	0.5	....	....	....	0.5	5	65	133	36	14	6
11....	12	0.4	....	....	....	0.5	6	57	133	38	12	7
12....	10	0.6	....	....	....	0.5	8	49	126	38	11	6
13....	12	1.0	....	....	....	0.5	9	46	126	40	10	6
14....	13	0.5	....	....	....	0.6	9	61	135	43	13	5
15....	12	0.4	....	....	....	0.6	8	101	131	47	23	6
16....	12	0.0	....	....	....	0.6	8	128	148	50	18	5
17....	10	0.0	....	....	....	0.5	8	138	168	53	34	5
18....	10	0.1	....	....	....	1.0	9	123	150	55	25	5
19....	8	0.5	....	....	....	3.0	10	99	133	61	21	6
20....	8	0.5	....	....	....	3.0	12	87	117	60	18	9
21....	7	0.5	....	....	....	4.0	8	70	111	50	16	10
22....	6	0.5	....	....	....	6.0	9	61	105	46	14	8
23....	6	0.5	....	....	....	6.0	6	89	103	41	16	7
24....	5	0.5	....	....	....	3.0	6	117	121	38	16	7
25....	4	0.5	....	....	....	2.0	7	123	119	36	14	10
26....	4	0.5	....	....	....	2.0	7	123	126	38	14	8
27....	3	0.5	....	....	....	2.0	9	121	133	35	12	7
28....	4	0.5	....	....	....	1.0	14	117	115	35	10	7
29....	2	0.5	....	....	....	0.6	20	111	111	40	9	6
30....	2	0.5	....	....	....	0.4	36	101	119	40	8	6
31....	3	....	....	....	....	0.4	....	105	....	53	8	....
Total	265	28.1	31	31	14	43.2	239	2706	4057	1585	553	210
Mean.	8.5	.94	1	1	.5	1.39	8.0	87.3	135	51.1	17.8	7.0
Max...	14	3	....	....	....	6	36	138	173	123	40	10
Min...	2	0	....	....	....	0.4	1	46	103	35	8	5
Acre-ft.	523	56	61	61	28	85	476	5370	8030	3140	1090	417

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of Lefthand Creek Near Mouth Near Longmont for Year Ending Sept. 30, 1931.
Drainage Area, ... Square Miles. Altitude, ... Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	8	6	6	....	4	5	3	4	21	15	8	2
2....	9	6	6	....	4	4	3	6	22	9	4	2
3....	8	6	6	....	4	4	3	6	41	7	3	2
4....	7	6	6	....	4	4	3	6	30	6	5	2
5....	4	7	5	....	4	6	3	5	51	6	3	2
6....	4	6	6	....	3	4	2	8	60	5	3	2
7....	4	6	7	....	3	4	3	18	58	4	3	2
8....	4	6	7	....	4	4	3	26	55	4	3	2
9....	4	7	6	....	3	4	2	24	42	4	3	2
10....	4	7	6	....	4	4	2	17	32	4	2	2
11....	4	8	8	....	4	4	2	15	22	4	2	2
12....	3	8	6	....	3	4	2	13	12	4	2	2
13....	3	8	6	....	3	3	2	12	12	3	2	2
14....	4	7	6	....	4	4	2	9	17	3	2	2
15....	4	6	7	....	3	4	3	12	17	4	2	3
16....	3	5	....	....	3	4	3	26	9	3	2	3
17....	4	5	....	....	3	3	2	36	12	4	2	3
18....	4	6	....	....	3	3	3	22	10	10	2	3
19....	4	6	....	7	3	3	3	11	9	9	2	2
20....	4	5	....	....	3	3	3	15	9	7	2	2
21....	4	5	....	....	3	3	3	17	16	7	2	2
22....	4	7	....	....	3	3	3	13	15	3	2	2
23....	4	7	....	....	3	3	3	17	17	3	2	2
24....	4	7	....	....	3	3	3	22	20	5	2	2
25....	4	6	....	....	3	3	4	19	18	5	2	2
26....	4	6	....	....	4	4	3	12	16	4	2	3
27....	4	6	....	....	3	3	3	14	17	4	2	3
28....	4	6	....	....	7	4	3	9	15	4	2	2
29....	4	6	....	....	....	3	4	19	14	6	2	2
30....	5	6	....	....	....	3	3	18	13	4	2	2
31....	5	....	....	....	....	3	....	20	....	4	1	....
Total	139	189	....	....	98	113	84	471	702	164	78	66
Mean.	4.48	6.3	6.6	6.0	3.50	3.65	2.80	15.2	23.4	5.29	2.52	2.20
Max...	9	8	....	....	7	5	4	36	60	15	8	3
Min...	3	5	....	....	3	3	2	4	9	3	1	2
Acre-ft.	275	375	406	369	194	224	167	935	1390	325	155	131

Discharge of Lefthand Creek Near Mouth Near Longmont for Year Ending Sept. 30, 1932.
Drainage Area, ... Square Miles. Altitude, ... Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	2	3	....	....	....	....	2	6	1	8	11	4
2....	2	2	....	....	....	....	3	8	1	8	8	4
3....	3	2	....	....	....	1	2	7	2	10	8	3
4....	2	3	....	....	....	4	2	8	5	10	7	2
5....	2	3	....	....	....	3	2	6	4	8	6	2
6....	2	3	....	....	....	6	3	6	4	8	6	2
7....	2	4	....	....	....	7	3	13	4	6	3	1
8....	3	3	....	....	....	8	3	10	6	6	2	1
9....	4	2	....	....	....	9	3	7	16	7	3	1
10....	4	2	....	....	....	8	3	5	19	8	4	2
11....	4	2	....	....	....	8	2	7	16	8	2	3
12....	2	2	....	....	....	10	2	2	15	11	2	2
13....	2	2	....	....	....	....	2	2	12	14	2	1
14....	3	2	....	....	....	....	3	1	8	6	2	1
15....	2	2	....	....	....	....	4	6	4	5	1	1
16....	2	2	3	....	....	....	4	3	22	6	1	1
17....	2	3	....	....	....	3	6	1	9	7	2	1
18....	2	4	....	....	....	3	5	1	27	7	1	1
19....	2	4	....	2	2	3	3	1	50	10	1	1
20....	2	4	....	....	....	3	3	1	24	10	3	1
21....	4	....	....	....	....	4	3	2	18	8	6	1
22....	2	....	....	....	....	4	3	2	7	8	4	1
23....	2	....	....	....	....	4	10	1	6	9	3	1
24....	3	4	....	....	....	2	12	1	6	8	4	1
25....	3	....	....	....	....	2	9	1	4	8	2	2
26....	2	....	....	....	....	3	14	1	6	8	2	3
27....	2	....	....	....	....	3	14	3	8	9	2	3
28....	2	....	....	....	....	2	10	4	10	8	2	3
29....	2	....	....	....	....	2	6	1	6	10	5	3
30....	3	....	....	....	....	2	6	1	6	21	7	3
31....	4	....	....	....	....	2	....	1	....	18	4	....
Total	78	....	....	....	....	....	147	119	326	278	116	56
Mean.	2.52	3.13	3.0	2.0	2.0	4.10	4.90	3.84	10.9	8.97	3.74	1.87
Max...	4	4	....	....	....	....	14	13	50	21	11	4
Min...	2	....	....	....	....	....	2	1	1	5	1	1
Acre-ft.	155	186	184	123	115	252	292	236	649	552	230	111

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of Big Thompson River Near Estes Park for Year Ending Sept. 30, 1931.
Drainage Area, 158 Square Miles. Altitude, 7,360 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	78	44	....	.. .	....	....	....	65	245	245	304	119
2....	73	53	....	....	....	....	....	73	245	241	220	114
3....	82	47	....	....	....	....	....	80	245	237	262	90
4....	92	42	....	....	....	....	....	82	249	237	237	88
5....	92	44	....	....	....	....	....	72	254	205	146	84
6....	78	33	....	....	....	....	....	90	254	190	190	86
7....	77	36	....	....	....	....	....	98	258	205	148	82
8....	73	36	....	....	....	....	....	112	430	205	364	80
9....	72	36	....	....	....	....	....	100	382	202	124	66
10....	72	36	....	....	....	....	....	107	254	241	119	62
11....	63	36	....	....	....	....	....	77	245	283	96	57
12....	72	28	....	....	....	....	....	88	245	249	84	56
13....	72	31	....	....	....	....	....	96	245	202	90	56
14....	70	29	....	....	....	....	....	161	249	202	86	49
15....	65	34	....	....	....	....	....	233	475	173	84	50
16....	59	30	12	....	....	....	....	336	258	245	117	49
17....	56	30	....	....	....	13	31	369	254	241	114	49
18....	70	30	....	....	....	....	50	393	254	254	119	48
19....	65	30	....	....	....	....	70	323	245	254	132	49
20....	57	29	....	12	9	....	59	237	245	190	114	62
21....	56	29	....	....	....	....	34	190	245	132	112	59
22....	55	29	....	....	....	....	32	187	241	129	105	56
23....	52	28	....	....	....	....	35	154	241	135	102	47
24....	52	28	....	....	....	....	36	198	241	129	100	105
25....	47	27	....	....	....	...	33	279	245	190	100	100
26....	45	27	....	....	....	....	30	254	475	161	132	80
27....	39	27	....	....	....	....	33	245	258	233	135	78
28....	45	26	....	....	....	....	36	237	245	245	129	68
29....	39	26	....	....	....	....	33	233	245	350	129	60
30....	49	25	....	....	....	....	46	233	245	388	114	60
31....	45	....	....	....	....	....	....	233	....	304	110	....
Total	1962	986	....	....	....	....	....	5635	2813	6897	4418	2109
Mean.	63.3	32.9	13.0	12.0	10.0	15.0	35.0	182	274	222	142	70.3
Max...	92	53	....	....	....	....	....	393	475	388	364	119
Min...	39	....	....	....	....	....	....	65	241	129	84	47
Acre-ft.	3890	1960	799	738	555	922	2080	11200	16300	13600	8730	4180

Discharge of Big Thompson River Near Estes Park for Year Ending Sept. 30, 1932.
Drainage Area, 158 Square Miles. Altitude, 7,360 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	51	36	....	....	....	....	....	44	328	486	244	100
2....	52	36	....	....	....	....	....	58	328	468	248	88
3....	58	34	....	....	....	....	....	71	337	481	224	67
4....	55	36	....	....	....	....	....	88	324	468	232	59
5....	51	35	....	....	....	....	....	96	359	491	224	56
6....	48	34	....	....	....	....	....	80	381	359	224	59
7....	58	32	....	....	....	....	....	100	422	359	220	56
8....	59	30	....	....	....	....	....	102	458	332	143	55
9....	58	34	....	....	....	....	....	110	472	354	128	49
10....	61	30	....	....	....	....	....	122	403	350	125	44
11....	56	31	....	....	....	....	....	162	394	359	112	46
12....	58	27	....	....	....	....	....	175	403	385	115	38
13....	52	31	....	....	....	....	....	372	440	445	112	38
14....	47	29	....	12	....	....	....	337	359	394	118	37
15....	44	28	....	....	....	....	....	337	570	440	115	34
16....	43	24	....	....	....	....	....	306	630	354	128	35
17....	42	24	11	....	....	....	....	289	561	354	128	35
18....	40	24	....	....	....	....	....	302	523	363	122	33
19....	40	26	....	....	14	....	....	422	412	350	172	32
20....	39	26	....	....	....	....	....	422	477	337	146	30
21....	39	24	....	....	....	....	....	523	468	350	155	31
22....	38	25	....	....	....	....	....	600	580	350	224	31
23....	38	26	....	....	....	16	....	640	610	281	168	33
24....	38	25	....	....	....	....	....	518	650	260	185	36
25....	38	24	....	....	....	....	....	491	640	252	118	54
26....	38	23	....	....	....	....	....	346	495	240	102	43
27....	36	22	....	....	....	....	....	328	523	244	125	41
28....	36	21	....	....	....	....	40	332	640	236	108	38
29....	36	20	....	....	....	....	52	260	532	232	110	38
30....	46	20	....	....	....	....	49	324	509	232	102	36
31....	46	....	....	....	....	....	....	341	....	232	100	....
Total	1441	837	....	....	....	....	....	8698	14228	10838	4777	1372
Mean.	46.5	27.9	14.0	12.0	14.0	15.0	24.0	280	474	350	154	45.7
Max...	61	....	....	....	....	....	....	640	650	491	248	100
Min...	36	....	....	....	....	....	....	44	324	232	100	30
Acre-ft.	2860	1660	861	738	805	922	1430	17200	28200	21500	9470	2720

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of Big Thompson River Below Loveland Power Plant Near Drake for Year Ending Sept. 30, 1931. Drainage Area, 277 Square Miles. Altitude, ... Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	85	61	36	13	15	12	22	92	548	496	320	120
2....	88	55	34	10	15	14	26	98	576	432	231	124
3....	96	57	33	16	12	13	15	117	594	412	184	112
4....	96	52	30	10	15	13	14	118	611	374	156	105
5....	92	51	27	16	12	13	18	111	656	305	138	96
6....	90	59	27	11	15	13	22	123	642	265	138	92
7....	86	48	18	13	15	14	34	144	656	246	137	96
8....	82	44	32	11	12	13	47	152	692	222	145	98
9....	80	46	34	16	12	13	30	138	642	205	134	90
10....	78	45	30	16	14	14	32	134	572	197	123	84
11....	81	47	30	13	12	13	38	124	562	188	116	82
12....	85	54	30	7	14	15	35	118	576	184	106	79
13....	81	65	20	12	14	15	49	126	572	180	102	78
14....	80	50	26	7	9	15	53	180	541	172	101	74
15....	76	51	28	10	12	16	49	290	555	172	106	72
16....	76	20	20	11	14	19	42	401	628	214	156	70
17....	64	35	21	10	11	20	45	471	618	222	190	69
18....	77	45	20	9	13	18	59	502	541	205	145	69
19....	73	47	17	7	12	19	77	326	506	182	137	76
20....	71	48	14	8	13	20	76	254	488	170	142	79
21....	70	44	12	8	13	18	48	214	485	157	135	80
22....	56	30	14	9	12	18	50	194	468	142	126	73
23....	62	46	6	10	13	19	34	254	454	134	134	72
24....	64	50	7	8	14	18	37	308	474	142	130	83
25....	63	50	14	11	11	16	44	387	499	150	118	126
26....	62	45	13	12	13	15	29	496	618	163	128	100
27....	56	42	12	10	14	10	45	562	552	172	130	88
28....	62	43	8	13	13	15	51	485	572	176	124	83
29....	53	36	11	15	....	13	61	446	524	305	120	79
30....	56	30	11	12	....	14	77	394	558	259	112	74
31....	57	....	11	12	....	15	....	440	....	236	110	....
Total	2298	1396	656	346	364	473	1259	8199	16980	7079	4374	2623
Mean.	74.1	46.5	21.2	11.2	13.0	15.3	42.0	264	566	228	141	87.4
Max...	96	65	36	16	15	20	77	562	692	496	320	126
Min...	53	20	6	7	9	10	14	92	454	134	101	69
Acre-ft.	4560	2770	1300	689	722	941	2500	16200	33700	14000	8670	5200

Discharge of Big Thompson River Below Loveland Power Plant Near Drake for Year Ending Sept. 30, 1932. Drainage Area, 277 Square Miles. Altitude, ... Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	67	48	26	16	10	30	28	54	350	560	298	95
2....	63	43	24	18	7	22	34	60	310	515	236	84
3....	64	42	22	14	11	22	35	75	335	515	203	79
4....	62	43	21	18	10	20	31	84	335	515	182	75
5....	59	41	22	14	15	18	36	95	365	475	172	70
6....	58	40	20	12	12	17	36	95	400	382	162	67
7....	67	39	21	12	14	18	23	110	435	365	152	64
8....	73	35	20	16	15	18	30	118	475	365	143	62
9....	71	38	22	13	16	23	30	110	455	365	134	60
10....	67	34	23	15	17	25	22	118	418	350	134	58
11....	71	32	22	16	16	24	26	152	418	382	126	57
12....	70	37	23	16	15	26	28	192	400	400	126	53
13....	63	30	21	16	18	16	32	236	435	475	126	50
14....	59	27	19	17	16	18	42	310	475	418	126	48
15....	55	31	19	17	18	18	49	350	560	365	126	48
16....	53	28	14	17	18	19	57	310	635	350	126	45
17....	52	25	13	15	18	18	58	285	585	365	143	45
18....	49	19	17	13	18	18	60	335	455	335	134	42
19....	49	31	17	16	18	21	53	418	435	322	172	42
20....	48	18	15	16	19	28	56	435	495	310	162	40
21....	48	18	22	11	18	22	67	495	495	285	172	38
22....	53	15	27	16	20	18	83	538	560	260	182	38
23....	49	18	24	13	20	18	95	585	660	248	162	41
24....	48	25	22	18	21	18	73	455	635	225	143	45
25....	46	32	22	12	22	21	80	418	635	248	126	57
26....	47	32	25	11	23	20	84	335	635	225	118	56
27....	38	34	20	11	28	15	60	298	660	214	126	50
28....	35	30	23	12	29	21	58	272	710	203	126	48
29....	38	25	21	10	33	24	62	272	660	272	110	48
30....	40	28	20	9	....	20	57	335	610	298	102	45
31....	44	....	18	13	....	24	....	335	....	310	102	....
Total	1706	938	645	443	515	640	1485	8280	15031	10917	4652	1650
Mean.	55.0	31.3	20.8	14.3	17.8	20.6	49.5	267	501	352	150	55.0
Max...	73	48	27	18	33	30	95	585	710	560	298	95
Min...	35	15	13	9	7	15	22	54	310	203	102	38
Acre-ft.	3380	1860	1280	879	1020	1270	2950	16400	29800	21600	9220	3270

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of Big Thompson River at Canon Mouth for Year Ending Sept. 30, 1931.
Drainage Area, 301 Square Miles. Altitude, ... Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	90	51	....	....	....	....	24	92	625	472	238	136
2....	95	50	....	....	....	....	28	104	685	436	197	116
3....	100	48	....	....	....	....	20	130	738	388	173	106
4....	100	47	....	....	....	....	20	132	846	326	156	93
5....	98	54	....	....	....	....	20	124	804	280	153	90
6....	95	....	....	....	....	....	24	130	882	250	153	95
7....	93	....	....	....	....	....	35	147	936	228	160	102
8....	93	....	....	....	....	....	50	171	834	217	147	88
9....	92	....	....	....	....	....	40	145	675	208	153	80
10....	90	....	....	....	....	....	42	140	675	202	126	75
11....	90	....	....	....	....	....	48	126	680	199	116	73
12....	90	....	....	....	....	....	45	122	685	193	107	73
13....	90	....	....	....	....	....	50	130	645	187	107	73
14....	85	....	....	....	....	....	57	175	660	187	116	72
15....	83	....	....	....	....	....	55	248	786	228	173	78
16....	79	....	....	....	....	....	50	374	768	233	208	66
17....	65	....	....	....	....	....	55	480	675	222	168	63
18....	78	....	....	....	....	....	62	560	592	199	153	69
19....	72	....	....	....	....	....	74	302	568	185	158	72
20....	69	....	....	....	....	....	72	240	556	173	153	73
21....	67	....	....	....	....	....	52	204	544	156	140	66
22....	60	....	....	....	....	....	51	191	512	147	147	63
23....	60	....	....	....	....	....	38	240	548	156	149	81
24....	60	....	....	....	....	....	42	288	592	166	134	128
25....	55	....	....	....	....	....	47	362	816	177	144	91
26....	55	....	....	....	....	....	39	496	640	189	147	78
27....	51	....	....	....	....	....	47	588	700	193	140	69
28....	47	....	....	....	....	....	52	472	620	285	136	66
29....	50	....	....	....	....	....	58	416	690	258	130	62
30....	49	....	....	....	....	....	71	359	580	242	124	59
31....	49	....	....	....	....	....	....	416	....	317	130	....
Total	2350	....	....	....	....	....	1368	8104	20557	7299	4636	2456
Mean.	75.8	....	....	....	....	....	45.6	261	686	235	150	81.9
Max...	....	....	....	....	....	....	....	588	936	472	238	136
Min...	....	....	....	....	....	....	....	92	512	147	107	59
Acre-ft.	4660	....	....	....	....	....	2710	16000	40800	14400	9220	4870

Discharge of Big Thompson River at Canon Mouth for Year Ending Sept. 30, 1932.
Drainage Area, 301 Square Miles. Altitude, ... Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	64	....	....	....	....	....	....	61	388	625	294	99
2....	61	42	....	....	....	....	....	64	346	595	238	89
3....	62	41	....	....	....	....	....	77	374	572	202	83
4....	59	40	....	....	....	....	....	87	368	615	186	80
5....	55	39	....	....	....	....	....	102	402	532	172	76
6....	54	39	....	....	....	....	....	103	452	432	168	73
7....	61	39	....	....	....	....	....	112	496	420	160	71
8....	68	39	....	....	....	....	....	126	581	424	154	68
9....	67	38	....	....	....	....	....	121	550	417	144	66
10....	64	....	....	....	....	....	....	130	492	417	134	63
11....	64	....	....	....	....	....	....	168	480	456	130	62
12....	63	....	....	....	....	....	....	218	480	480	132	59
13....	59	....	....	....	....	....	....	258	532	572	130	56
14....	54	....	....	....	....	....	50	343	586	476	127	54
15....	52	....	....	....	....	....	51	396	725	424	124	49
16....	51	....	....	....	....	....	60	329	835	385	124	49
17....	50	....	....	....	....	....	58	300	715	424	148	46
18....	48	....	....	....	....	....	66	360	518	364	136	46
19....	46	....	....	....	....	....	62	472	484	336	178	43
20....	45	....	....	....	....	....	61	504	563	306	172	42
21....	44	....	....	....	....	....	75	625	536	275	198	40
22....	50	....	....	....	....	....	98	780	645	255	192	41
23....	46	....	....	....	....	....	103	770	760	238	178	39
24....	46	....	....	....	....	....	75	558	740	232	130	40
25....	42	....	....	....	....	....	84	518	725	248	132	50
26....	46	....	....	....	....	....	85	399	725	225	122	51
27....	42	....	....	....	....	....	63	329	785	210	121	47
28....	44	....	....	....	....	....	64	288	830	204	126	47
29....	43	....	....	....	....	....	67	291	765	268	115	47
30....	42	....	....	....	....	....	63	368	690	297	106	44
31....	42	....	....	....	....	....	....	378	....	309	104	....
Total	1634	....	....	....	....	....	....	9635	17568	12133	4777	1720
Mean.	52.7	33.0	....	....	....	....	55.0	311	586	391	154	57.3
Max...	68	....	....	....	....	....	....	780	835	625	294	99
Min...	....	....	....	....	....	....	....	61	346	204	104	39
Acre-ft.	3240	1960	....	....	....	....	3270	19100	34900	24000	9470	3410

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of Big Thompson River at Mouth for Year Ending Sept. 30, 1931.
Drainage Area, ... Square Miles. Altitude, ... Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	36	66	61	57	49	52	42	28	22	21	3	3
2....	36	66	63	58	48	49	41	32	30	16	50	8
3....	44	66	63	59	47	46	41	37	34	20	10	4
4....	58	67	57	58	47	50	42	30	26	24	3	2
5....	61	68	55	56	43	38	40	28	20	31	3	3
6....	61	64	56	52	40	41	38	34	43	19	3	4
7....	76	60	56	53	44	51	38	37	43	3	3	4
8....	78	61	54	53	44	51	36	35	42	2	3	4
9....	78	62	53	54	42	51	35	26	27	6	5	6
10....	77	61	53	54	42	52	38	5	15	7	4	6
11....	76	61	54	55	43	54	41	4	17	7	2	4
12....	74	62	59	56	41	54	40	6	19	8	2	4
13....	74	60	59	58	39	53	39	7	20	8	2	4
14....	75	57	64	59	43	53	39	7	22	8	3	3
15....	75	57	65	57	41	52	39	5	13	7	3	2
16....	72	57	60	52	39	50	38	5	8	7	9	2
17....	70	56	64	50	40	51	38	6	10	4	25	2
18....	72	61	58	50	40	53	31	8	9	6	12	3
19....	73	66	51	50	40	49	19	8	3	7	12	2
20....	70	72	60	50	41	45	18	3	7	9	9	2
21....	72	67	62	50	46	46	19	3	42	5	8	2
22....	73	65	59	52	47	46	20	3	46	10	7	2
23....	70	62	63	52	46	45	20	2	37	7	7	2
24....	66	63	66	53	50	45	17	6	84	5	6	2
25....	68	64	60	50	52	44	22	4	84	4	6	2
26....	68	61	56	45	50	78	22	2	84	4	7	3
27....	68	59	60	44	49	100	19	2	71	3	6	2
28....	66	59	59	48	53	103	19	5	52	3	6	2
29....	68	61	58	40	....	100	22	6	53	3	4	1
30....	65	62	58	48	....	95	22	11	26	4	3	1
31....	64	....	59	50	....	87	....	9	....	5	4	....
Total	2084	1873	1825	1623	1246	1784	935	404	1009	273	230	90
Mean.	67.2	62.4	58.9	52.4	44.5	57.5	31.2	13.0	33.6	8.81	7.42	3.00
Max...	78	72	66	59	53	103	42	37	84	31	50	8
Min...	36	56	51	40	39	38	17	2	3	2	2	1
Acre-ft.	4130	3710	3620	3220	2470	3540	1860	799	2000	542	456	178

Discharge of Big Thompson River at Mouth for Year Ending Sept. 30, 1932.
Drainage Area, ... Square Miles. Altitude, ... Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept
1....	3	50	60	60	35	35	28	3	24	2	79	2
2....	4	50	62	53	32	32	28	3	22	3	60	2
3....	6	51	62	51	30	32	28	3	23	4	47	2
4....	4	53	61	50	28	30	16	3	46	3	44	2
5....	4	54	59	49	28	30	8	2	22	5	42	2
6....	5	52	57	49	27	28	8	2	16	6	41	1
7....	8	51	55	48	26	28	5	2	11	14	44	1
8....	11	51	60	....	25	30	5	2	11	21	26	1
9....	10	47	63	....	26	32	5	2	20	15	6	1
10....	11	46	61	....	26	34	5	2	21	5	6	1
11....	11	47	62	....	27	36	4	2	17	5	5	1
12....	12	45	58	....	28	38	4	2	17	7	5	1
13....	12	42	55	....	30	40	3	1	11	13	4	1
14....	13	41	52	....	32	42	3	1	5	10	3	1
15....	14	42	51	....	33	46	3	5	8	8	3	1
16....	15	46	49	....	36	48	4	2	4	18	3	1
17....	17	45	51	....	36	50	4	2	28	21	2	1
18....	22	48	57	....	37	54	4	2	8	23	2	1
19....	39	49	59	....	41	52	4	2	49	13	1	1
20....	38	50	59	....	43	49	4	9	32	10	1	1
21....	43	55	59	....	41	46	3	18	33	6	1	1
22....	43	53	59	....	41	42	3	23	18	5	1	1
23....	41	51	58	....	40	38	4	21	14	7	1	1
24....	40	51	58	....	40	34	4	21	11	7	1	1
25....	39	52	60	....	40	34	4	22	10	5	2	1
26....	40	54	62	35	38	34	4	60	12	8	2	1
27....	42	58	63	....	37	34	3	14	6	10	2	1
28....	43	60	63	....	36	32	3	16	28	5	2	1
29....	42	59	63	....	36	31	3	8	25	141	2	1
30....	41	57	64	....	....	31	3	5	8	266	2	1
31....	47	....	60	....	....	30	....	15	....	119	2	....
Total	720	1510	1822	....	....	1152	207	275	561	785	442	35
Mean.	23.2	50.3	58.8	41.7	33.6	37.2	6.90	8.87	18.7	25.3	14.2	1.17
Max...	47	60	64	60	....	....	28	60	49	266	79	2
Min...	3	41	49	....	....	....	3	1	4	2	1	1
Acre-ft.	1430	2990	3620	2560	1930	2290	410	545	1110	1560	873	70

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of Big South Cache La Poudre River Near Home for Year Ending Sept. 30, 1931.
Drainage Area, 91 Square Miles. Altitude, ... Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	51	33	10	....	....	....	5	20	738	262	124	31
2....	46	35	10	....	....	....	5	20	769	276	73	30
3....	48	28	10	....	2	....	5	20	846	274	60	24
4....	49	28	10	....	....	....	5	20	850	300	49	21
5....	45	28	10	....	....	....	5	20	805	372	45	20
6....	45	26	10	2	....	....	5	20	836	347	47	19
7....	41	45	10	....	....	....	5	20	990	546	53	18
8....	38	38	10	....	....	....	5	20	886	642	49	16
9....	36	38	10	....	....	....	5	20	792	574	42	16
10....	35	38	10	....	....	....	5	27	570	141	36	16
11....	36	36	10	....	....	....	12	27	666	94	32	15
12....	43	33	10	....	....	....	12	30	598	86	31	15
13....	42	28	10	....	....	....	12	45	546	79	26	15
14....	39	27	10	....	....	....	12	97	578	73	25	15
15....	34	26	10	....	....	....	12	248	630	73	28	16
16....	31	25	5	....	....	....	12	411	666	81	49	15
17....	43	18	5	....	....	3	12	606	447	78	63	14
18....	42	18	5	....	....	....	12	492	320	70	46	14
19....	36	18	5	....	....	....	12	238	293	64	53	14
20....	36	18	5	....	....	....	12	122	255	60	45	19
21....	34	18	5	....	....	....	15	89	274	56	41	16
22....	31	18	5	....	....	....	15	109	323	52	38	14
23....	31	18	5	....	....	....	15	272	202	53	54	14
24....	29	18	5	....	....	....	15	472	238	56	40	44
25....	28	18	5	....	....	....	15	638	238	53	33	39
26....	21	18	5	....	....	....	15	850	345	55	30	33
27....	20	18	5	....	....	....	15	662	276	58	27	26
28....	20	18	5	....	....	....	15	387	274	56	24	22
29....	20	18	5	....	....	....	15	306	310	104	23	21
30....	25	18	5	....	....	....	15	345	284	64	23	20
31....	30	....	5	....	....	....	....	610	....	81	21	....
Total	1105	764	230	62	56	93	320	7263	15845	5180	1330	612
Mean.	35.6	25.5	7.4	2	2	3	10.7	234	528	167	42.9	20.4
Max...	51	45	....	....	....	....	....	850	990	642	124	44
Min...	20	....	....	....	....	....	....	....	202	52	21	14
Acre-ft.	2190	1520	455	123	111	184	637	14400	31400	10300	2640	1210

Discharge of Little South Cache La Poudre River Near Eggers for Year Ending Sept. 30, 1931.
Drainage Area, 69.3 Square Miles. Altitude, ... Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	28	22	....	....	....	....	....	20	237	131	151	36
2....	28	21	....	....	....	....	....	20	275	117	107	35
3....	28	20	....	....	5	....	....	20	257	107	89	31
4....	28	20	....	....	....	....	....	20	243	98	78	30
5....	25	23	....	....	....	....	....	20	275	85	72	29
6....	25	20	....	4	....	....	....	25	253	72	72	29
7....	24	24	....	....	....	....	....	25	301	64	68	34
8....	23	33	....	....	....	....	....	25	264	59	61	37
9....	22	28	....	....	....	....	....	25	243	54	54	33
10....	22	30	....	....	....	....	....	25	207	52	50	28
11....	25	32	....	....	....	....	....	35	243	49	48	27
12....	26	36	....	....	....	....	....	35	212	44	45	25
13....	24	35	....	....	....	....	16	35	198	43	42	25
14....	22	35	....	....	....	....	....	50	193	44	40	24
15....	22	33	....	....	....	....	....	85	230	48	68	25
16....	20	15	....	....	....	7	....	141	253	105	107	24
17....	22	15	....	....	....	....	....	164	212	89	103	22
18....	25	15	....	....	....	....	....	174	195	96	74	23
19....	23	15	....	....	....	....	....	91	166	103	76	24
20....	22	15	....	....	....	....	....	54	136	103	74	25
21....	22	15	....	....	....	....	....	40	144	74	66	21
22....	21	15	....	....	....	....	....	39	124	39	50	20
23....	19	15	....	....	....	....	....	54	114	36	49	20
24....	19	15	....	....	....	....	....	91	129	37	44	33
25....	19	15	....	....	....	....	....	171	154	52	42	27
26....	19	15	....	....	....	....	....	227	174	105	40	24
27....	18	15	....	....	....	....	....	224	148	94	38	22
28....	20	15	....	....	....	....	....	159	151	98	37	21
29....	20	15	....	....	....	....	....	126	129	151	36	21
30....	22	15	....	....	....	....	....	110	154	174	35	20
31....	21	....	....	....	....	....	....	151	....	184	34	....
Total	704	637	248	155	140	217	540	2481	6014	2607	1950	795
Mean.	22.7	21.2	8	5	5	7	18	80	200	84.1	62.9	26.5
Max...	28	36	....	....	....	....	....	227	301	184	151	37
Min...	18	....	....	....	....	....	....	....	114	36	34	20
Acre-ft.	1400	1260	492	307	278	430	1070	4920	11900	5170	3870	1580

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of Cache La Poudre River Near Log Cabin for Year Ending Sept. 30, 1931. Drainage Area, 235 Square Miles. Altitude, ... Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	82	24	17	10	10	8	15	33	1170	575	309	89
2....	85	31	17	10	10	8	15	34	1440	517	198	96
3....	101	31	17	10	10	8	15	40	1410	491	159	78
4....	101	22	17	10	10	8	15	47	1540	434	236	65
5....	108	28	17	10	10	8	15	37	1540	530	232	47
6....	92	32	17	10	10	8	20	36	1020	517	236	44
7....	101	27	17	10	10	8	20	54	1400	735	257	43
8....	85	29	17	10	10	8	20	89	1380	840	257	44
9....	82	30	17	10	10	8	20	73	1380	726	216	43
10....	78	28	17	10	10	8	20	58	938	323	108	37
11....	73	27	15	9	10	15	20	44	938	247	108	35
12....	80	23	15	9	10	15	20	52	1050	240	87	34
13....	76	23	15	9	10	15	21	87	1020	219	74	34
14....	73	24	15	9	10	15	27	182	1070	201	73	35
15....	174	21	15	9	10	15	28	342	1320	204	76	35
16....	386	17	12	9	10	15	26	597	1290	342	253	42
17....	337	22	12	9	10	15	30	771	1220	347	342	36
18....	333	20	12	9	10	15	42	810	960	347	295	35
19....	337	20	12	9	10	15	64	347	780	342	304	37
20....	328	17	12	9	10	15	67	222	648	295	304	50
21....	333	20	12	12	9	15	35	187	664	286	286	50
22....	342	22	12	12	9	15	33	166	753	147	119	43
23....	164	19	12	12	9	15	30	323	690	137	135	43
24....	114	19	12	12	9	15	31	605	708	144	119	94
25....	58	19	12	12	9	15	31	938	690	147	119	128
26....	30	19	12	12	9	10	27	1110	699	204	94	92
27....	27	19	12	12	9	10	26	1200	726	216	364	73
28....	25	19	12	12	9	10	22	830	735	213	364	64
29....	24	19	12	12	....	10	31	664	656	282	247	55
30....	24	19	12	12	....	10	34	622	656	232	108	52
31....	24	....	12	12	....	10	....	914	....	240	80	....
Total	4277	690	437	322	272	365	820	11514	30491	10720	6159	1653
Mean.	138	23.0	14.1	10.4	9.7	11.8	27.3	371	1020	346	199	55.1
Max...	386	32	....	....	....	....	67	1200	1540	840	364	128
Min...	24	17	....	....	....	....	....	33	648	137	73	34
Acre-ft.	8480	1370	867	640	539	726	1620	22800	60700	21300	12200	3280

Discharge of Cache La Poudre River at Mouth of Canon Near Fort Collins for Year Ending Sept. 30, 1931. Drainage Area, 1,048 Square Miles. Altitude, 5,070 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	168	73	56	....	....	36	44	144	1500	705	502	138
2....	185	75	56	....	....	36	54	159	1580	612	337	156
3....	191	77	61	....	....	35	51	162	1540	583	286	144
4....	191	77	54	....	....	35	40	175	1620	562	310	118
5....	165	75	52	....	....	35	38	178	1600	628	319	102
6....	165	71	54	....	....	28	63	185	1300	562	332	95
7....	162	75	51	....	....	34	102	168	1500	569	342	102
8....	156	65	....	....	....	41	112	195	1600	825	328	118
9....	159	60	....	....	....	49	118	198	936	745	306	110
10....	188	56	....	....	....	42	120	162	1100	520	222	100
11....	165	56	....	....	....	40	125	132	1050	294	172	88
12....	198	52	....	....	....	32	122	120	1180	278	156	81
13....	198	58	....	....	....	36	128	138	1130	259	135	85
14....	195	61	....	....	....	32	135	219	1110	248	125	88
15....	182	56	....	....	....	36	132	390	1230	240	128	85
16....	310	52	20	....	....	38	128	721	1360	342	302	90
17....	370	35	....	....	....	38	128	964	1340	410	400	95
18....	405	54	....	....	....	38	178	1140	1110	385	365	90
19....	416	54	....	....	....	51	202	665	928	385	385	98
20....	405	52	....	12	13	71	219	432	785	355	410	100
21....	405	52	....	....	....	71	205	324	753	355	360	108
22....	410	47	....	....	....	73	172	274	854	219	294	102
23....	306	58	....	....	....	54	128	395	793	153	205	95
24....	178	56	....	....	....	36	110	635	785	175	202	100
25....	135	75	....	....	....	36	120	1040	793	191	178	191
26....	108	71	....	....	25	38	105	1300	809	255	159	150
27....	100	65	....	....	34	26	105	1480	825	319	294	125
28....	85	61	....	....	41	30	165	1060	761	319	405	105
29....	92	60	....	....	....	42	135	893	713	472	370	95
30....	77	54	....	....	....	35	125	769	817	444	212	90
31....	77	....	....	....	....	38	....	1050	....	555	147	....
Total	6547	1833	....	....	....	1262	3609	15867	33382	12964	8688	3244
Mean.	211	61.1	30	11	20	40.7	120	512	1110	418	280	108
Max...	416	77	....	....	....	73	219	1480	1620	825	502	191
Min...	77	35	....	....	....	26	38	120	713	153	125	81
Acre-ft.	13000	3640	1840	861	1110	2500	7140	31500	66000	25700	17200	6430

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of Cache La Poudre River at Mouth of Canon Near Fort Collins for Year Ending Sept. 30, 1932. Drainage Area, 1,048 Square Miles. Altitude, 5,070 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	80	74	....	....	....	....	39	212	1570	1570	480	370
2....	74	76	....	....	....	....	48	170	1370	1510	462	320
3....	74	72	....	....	....	....	50	248	1340	1030	395	142
4....	74	72	....	....	....	....	50	360	1330	1460	345	95
5....	74	71	....	....	....	....	48	380	1520	1240	306	78
6....	71	71	....	....	....	....	46	385	1660	1020	272	67
7....	84	71	....	....	....	....	44	400	1860	973	253	67
8....	89	69	....	....	....	....	42	385	2140	955	234	67
9....	91	71	....	....	....	....	40	405	2040	886	234	67
10....	84	71	....	....	....	....	39	420	1620	656	238	71
11....	91	62	....	....	....	....	36	456	1510	686	272	63
12....	95	72	....	....	....	....	38	558	1610	798	306	62
13....	100	72	....	....	....	62	46	758	1660	870	234	58
14....	91	60	....	20	....	62	55	750	1780	774	180	55
15....	84	60	....	....	....	62	63	830	2040	854	173	54
16....	82	62	....	....	....	49	112	886	2080	854	253	48
17....	76	....	18	....	....	43	130	894	1960	830	380	48
18....	74	....	....	....	26	41	139	1070	1490	718	380	49
19....	71	....	....	....	....	41	130	1540	1300	718	370	49
20....	71	....	....	....	....	49	125	1690	1510	710	390	48
21....	72	....	....	....	....	41	139	1930	1510	635	400	50
22....	74	....	....	....	....	30	142	2730	1660	558	390	49
23....	84	....	....	....	....	27	212	2600	1720	534	340	56
24....	84	....	....	....	....	32	147	2210	1640	540	238	71
25....	82	....	....	....	....	36	147	2000	1570	552	160	80
26....	82	....	....	....	....	30	160	1550	1820	534	150	86
27....	82	....	....	....	....	20	128	1330	2040	480	147	78
28....	67	....	....	....	....	23	160	1200	2160	456	340	74
29....	71	....	....	....	....	27	208	1290	1980	534	370	67
30....	71	....	....	....	....	24	170	1650	1760	516	340	65
31....	72	....	....	....	....	27	....	1490	....	540	375	....
Total	2471	....	....	....	....	1141	2933	32777	51350	24991	9407	2554
Mean.	79.3	62.4	27.3	20.0	22.0	36.8	97.8	1060	1710	806	303	85.1
Max...	100	....	....	....	....	....	212	2730	2160	1570	480	370
Min...	67	....	....	....	....	....	39	170	1300	456	147	48
Acre-ft.	4880	3710	1680	1239	1260	2260	5820	65200	102000	49600	18600	5060

Discharge of Cache La Poudre River Near Mouth for Year Ending Sept. 30, 1931. Drainage Area, ... Square Miles. Altitude, 4,610 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	92	114	101	89	80	79	88	30	41	20	16	16
2....	92	113	102	92	80	80	82	32	29	17	18	18
3....	124	113	106	90	80	82	77	35	25	16	18	34
4....	145	113	102	89	79	82	77	33	25	17	18	31
5....	133	110	102	86	77	83	74	31	31	18	18	29
6....	127	108	106	92	77	80	75	30	39	18	17	23
7....	135	107	106	89	77	82	74	32	30	17	18	10
8....	169	114	107	89	76	79	74	30	29	16	18	9
9....	149	114	110	88	76	86	71	26	25	15	18	9
10....	145	113	113	86	76	90	71	26	26	14	18	8
11....	157	114	112	82	77	92	71	24	36	13	18	8
12....	161	114	112	88	74	86	70	20	35	12	18	8
13....	143	112	116	88	74	74	59	17	43	20	18	8
14....	149	108	119	90	75	77	53	16	62	12	34	9
15....	151	107	118	92	74	82	47	18	54	11	33	9
16....	129	106	118	98	72	83	44	22	44	11	28	10
17....	127	107	119	100	71	82	46	24	42	12	14	9
18....	135	112	110	82	71	83	43	22	40	11	14	10
19....	133	113	107	80	72	82	44	26	22	11	12	10
20....	133	96	106	82	72	82	42	28	24	10	12	10
21....	133	112	110	82	75	82	41	29	32	11	12	10
22....	133	114	102	86	74	79	43	30	33	12	12	11
23....	125	116	102	86	74	71	47	28	30	16	12	11
24....	120	108	104	88	74	68	57	27	25	28	13	12
25....	122	113	96	83	74	70	75	28	25	30	12	12
26....	116	114	96	79	75	47	80	25	24	25	13	10
27....	116	114	98	79	75	47	68	25	24	13	13	9
28....	118	116	95	77	75	57	57	30	25	13	14	9
29....	120	112	94	77	....	80	49	52	22	12	14	9
30....	118	102	90	79	....	80	31	57	18	14	13	10
31....	114	....	90	80	....	90	....	49	....	14	13	....
Total	4064	3329	3269	2668	2106	2417	1830	902	960	479	519	381
Mean.	131	111	105	86.1	75.2	78	61	29.1	32	15.4	16.7	12.7
Max...	169	116	119	100	80	92	88	57	62	30	34	34
Min...	92	96	90	77	71	47	31	16	18	10	12	8
Acre-ft.	8060	6610	6460	5290	4180	4800	3630	1790	1900	9470	1030	756

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of Cache La Poudre River Near Mouth for Year Ending Sept. 30, 1932.
Drainage Area, ... Square Miles. Altitude, 4,610 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	6	110	86	63	53	59	58	3	9	12	100	13
2....	6	122	87	63	54	61	58	3	7	16	69	10
3....	7	112	76	63	58	56	58	3	14	19	37	12
4....	6	108	72	60	52	52	54	3	53	12	31	41
5....	7	106	76	59	53	56	54	4	22	9	24	44
6....	6	106	79	59	56	58	55	9	9	6	22	33
7....	6	108	69	55	58	49	53	22	9	4	20	12
8....	4	108	74	54	59	47	50	35	9	11	21	9
9....	3	112	73	60	60	55	52	17	22	38	21	8
10....	3	112	70	59	65	54	48	14	81	34	23	12
11....	6	98	69	58	59	50	45	6	135	9	20	9
12....	6	93	74	59	54	54	47	4	83	8	20	10
13....	9	87	72	60	60	55	42	5	68	9	24	11
14....	15	87	63	54	60	54	29	17	39	8	52	15
15....	16	97	72	49	60	60	3	23	3	6	41	14
16....	14	112	74	52	60	68	3	11	3	8	21	11
17....	22	114	70	52	61	73	3	5	3	12	20	13
18....	21	118	69	52	55	77	3	3	3	12	17	13
19....	20	114	74	53	53	80	4	3	42	11	16	11
20....	26	113	77	54	55	73	4	9	59	9	15	12
21....	63	119	79	50	54	72	4	22	45	12	15	12
22....	65	97	81	48	55	74	3	27	27	45	14	10
23....	61	100	81	50	56	74	14	13	3	46	15	9
24....	88	98	77	49	58	68	34	6	3	39	16	10
25....	106	95	74	52	55	68	17	5	3	14	15	9
26....	102	90	76	53	54	69	13	18	12	18	12	7
27....	107	91	73	54	56	65	27	33	14	21	14	8
28....	112	94	72	47	58	64	24	40	15	17	15	9
29....	113	87	76	45	56	65	4	31	12	54	17	7
30....	114	83	74	52	....	64	3	30	11	1700	16	16
31....	110	....	66	53	....	61	....	22	....	272	16	....
Total	1250	3091	2305	1691	1647	1935	866	446	818	2491	779	410
Mean.	40.3	103	74.4	54.5	56.8	62.4	28.9	14.4	27.3	80.4	25.1	13.7
Max...	114	122	87	63	65	80	58	40	135	1700	100	44
Min...	3	83	63	45	52	47	3	3	3	4	12	7
Acre-ft.	2480	6130	4570	3350	3270	3840	1720	885	1620	4940	1540	815

Discharge of North Fork Cache La Poudre River at Livermore for Year Ending Sept. 30, 1931.
Drainage Area, 541 Square Miles. Altitude, ... Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	48	16	....	....	....	6	8	43	16	13	15	10
2....	48	16	....	....	....	6	9	48	13	12	13	14
3....	46	16	....	....	8	6	7	52	11	12	10	6
4....	23	16	....	....	....	6	6	53	13	12	8	6
5....	24	16	....	7	....	6	7	54	16	12	7	5
6....	23	15	....	....	....	6	52	58	29	12	8	16
7....	23	15	....	....	....	6	55	40	21	11	7	17
8....	23	16	....	....	....	6	57	36	18	10	7	16
9....	72	15	....	....	....	7	56	26	15	9	7	16
10....	50	16	....	....	....	6	63	10	14	8	8	16
11....	35	16	....	....	....	6	62	7	14	9	8	14
12....	32	16	....	....	....	7	56	7	14	10	7	13
13....	31	15	....	....	....	6	64	6	15	10	7	12
14....	30	15	....	....	....	6	64	6	13	9	8	10
15....	30	15	....	....	....	7	63	18	13	7	10	9
16....	28	16	....	....	....	6	59	24	11	7	9	10
17....	26	16	....	....	....	6	79	15	12	7	7	10
18....	24	16	....	....	....	7	119	8	10	6	7	10
19....	23	15	....	....	....	31	119	6	8	7	7	12
20....	24	16	....	....	....	43	119	6	11	6	10	12
21....	23	16	....	....	....	38	116	5	15	6	8	11
22....	21	15	....	....	....	18	76	6	14	6	7	12
23....	21	16	....	....	....	6	53	6	12	6	7	12
24....	22	14	....	....	....	6	46	7	12	6	6	13
25....	21	14	....	....	....	6	43	6	12	6	13	13
26....	20	14	....	....	....	6	41	6	13	6	15	19
27....	18	14	....	....	....	6	57	7	14	6	15	15
28....	17	14	....	....	....	6	122	8	14	374	16	15
29....	17	14	....	....	....	6	51	8	15	10	16	15
30....	16	14	....	....	....	7	41	15	13	502	15	13
31....	17	....	....	....	....	7	....	18	....	26	15	....
Total	876	458	279	248	196	298	1770	615	421	1143	303	372
Mean.	28.3	15.3	9	8	7	9.6	59.0	19.8	14.0	36.9	9.8	12.4
Max...	72	16	....	....	....	43	122	58	29	502	16	19
Min...	16	....	....	....	....	....	6	5	8	6	6	5
Acre-ft.	1740	910	553	492	389	590	3510	1220	833	2270	603	738

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of Big Grizzly Creek Near Walden for Year Ending Sept. 30, 1931.
Drainage Area, 181 Square Miles. Altitude, ... Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	22	14	....	....	....	....	....	....	71	22	6	2
2....	19	14	....	....	....	....	....	....	70	22	10	4
3....	21	....	....	....	....	....	....	....	77	18	9	4
4....	26	....	....	....	....	....	....	....	67	18	8	4
5....	28	....	....	....	....	....	....	....	71	18	7	5
6....	27	....	....	....	....	....	....	....	82	18	8	4
7....	26	....	....	....	....	....	....	....	76	16	8	3
8....	22	....	....	....	....	....	....	....	70	12	9	2
9....	20	....	....	....	....	....	....	....	74	8	10	2
10....	20	....	....	....	....	....	....	....	73	5	8	1
11....	22	....	....	....	....	....	....	....	64	4	7	1
12....	22	....	....	....	....	....	....	....	53	5	7	1
13....	26	....	....	....	....	....	....	....	55	4	3	1
14....	23	....	....	....	....	....	....	....	48	4	6	1
15....	22	....	....	....	....	....	....	....	45	3	5	1
16....	20	....	....	....	....	....	....	....	39	2	5	1
17....	34	....	....	....	....	....	....	....	34	2	9	1
18....	20	....	....	....	....	....	....	....	28	1	12	1
19....	22	....	....	....	....	....	....	....	25	1	10	2
20....	22	....	....	....	....	....	....	82	18	2	9	3
21....	22	....	....	....	....	....	....	77	10	2	8	5
22....	22	....	....	....	....	....	....	79	9	2	8	7
23....	21	....	....	....	....	....	....	69	8	1	10	8
24....	20	....	....	....	....	....	....	64	10	1	9	10
25....	21	....	....	....	....	....	....	70	8	1	10	24
26....	20	....	....	....	....	....	....	88	8	1	8	37
27....	20	....	....	....	....	....	....	107	9	1	4	36
28....	21	....	....	....	....	....	....	108	11	1	2	29
29....	18	....	....	....	....	....	....	100	15	2	2	26
30....	13	....	....	....	....	....	....	93	19	3	2	24
31....	12	....	....	....	....	....	....	77	....	4	2	....
Total	674	....	....	....	....	....	....	....	1247	204	221	250
Mean.	21.7	....	....	....	....	....	....	....	41.6	6.58	7.13	8.33
Max...	34	....	....	....	....	....	....	....	82	22	12	37
Min...	12	....	....	....	....	....	....	....	8	1	2	1
Acre-ft.	1330	....	....	....	....	....	....	....	2480	405	438	496

Discharge of Big Grizzly Creek Near Walden for Year Ending Sept. 30, 1932.
Drainage Area, 181 Square Miles. Altitude, ... Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	22	....	....	....	....	....	....	313	430	101	105	12
2....	21	....	....	....	....	....	....	379	430	86	95	12
3....	24	....	....	....	....	....	....	504	350	70	58	12
4....	24	....	....	....	....	....	....	534	300	70	38	11
5....	22	....	....	....	....	....	....	534	280	41	31	9
6....	15	....	....	....	....	....	....	445	260	33	24	7
7....	17	....	....	....	....	....	....	427	220	26	23	7
8....	16	....	....	....	....	....	....	410	194	24	21	6
9....	16	....	....	....	....	....	....	399	194	18	21	6
10....	18	....	....	....	....	....	....	430	193	12	21	5
11....	19	....	....	....	....	....	....	469	194	11	17	4
12....	21	....	....	....	....	....	....	527	206	12	13	4
13....	21	....	....	....	....	....	....	605	225	20	14	4
14....	22	....	....	....	....	....	....	600	228	26	16	4
15....	19	....	....	....	....	....	....	600	221	19	16	4
16....	17	....	....	....	....	....	....	511	221	20	16	4
17....	18	....	....	....	....	....	....	485	225	20	14	4
18....	17	....	....	....	....	....	....	472	221	24	13	4
19....	16	....	....	....	....	....	....	481	219	21	13	4
20....	18	....	....	....	....	....	377	524	175	19	15	4
21....	18	....	....	....	....	....	400	582	185	20	8	3
22....	21	....	....	....	....	....	380	605	182	19	6	3
23....	24	....	....	....	....	....	340	589	155	19	6	3
24....	26	....	....	....	....	....	330	570	178	19	11	4
25....	24	....	....	....	....	....	300	492	167	22	8	4
26....	24	....	....	....	....	....	325	481	162	24	7	4
27....	22	....	....	....	....	....	350	445	130	22	10	4
28....	22	....	....	....	....	....	323	435	136	21	13	4
29....	22	....	....	....	....	....	299	420	127	22	13	3
30....	25	....	....	....	....	....	323	430	114	38	13	3
31....	22	....	....	....	....	....	....	430	....	88	12	....
Total	633	....	....	....	....	....	....	15128	6522	987	691	162
Mean.	20.4	....	....	....	....	....	....	488	217	31.8	22.3	5.40
Max...	26	....	....	....	....	....	....	605	430	101	105	12
Min...	15	....	....	....	....	....	....	313	114	11	6	3
Acre-ft.	1250	....	....	....	....	....	....	30000	12900	1960	1370	321

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of Canadian River Near Cowdrey for Year Ending Sept. 30, 1931.
Drainage Area, 201 Square Miles. Altitude, ... Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1	27	26	....	....	....	....	30	83	68	38	18	9
2	27	....	....	....	....	....	30	68	59	36	19	10
3	30	....	....	....	....	....	30	59	61	35	21	9
4	47	....	....	....	....	....	30	54	71	27	16	5
5	44	....	....	....	....	....	30	54	90	29	14	8
6	41	....	....	....	....	....	100	49	106	26	15	7
7	41	....	....	....	....	....	100	47	118	18	16	7
8	39	....	....	....	....	....	100	49	110	13	16	6
9	38	....	....	....	....	....	100	44	113	10	14	5
10	38	....	....	....	....	....	100	41	132	9	11	4
11	41	....	....	....	....	....	250	37	138	8	9	4
12	42	....	....	....	....	....	350	33	148	8	8	3
13	37	....	....	....	....	....	500	32	116	7	6	3
14	33	....	....	....	....	....	500	28	107	6	6	4
15	32	....	....	....	....	....	415	26	98	6	6	3
16	36	....	....	....	....	....	233	32	83	5	14	3
17	35	....	....	....	....	....	130	29	74	4	14	4
18	32	....	....	....	....	....	136	35	62	5	16	3
19	30	....	....	....	....	....	148	37	49	6	16	7
20	28	....	....	....	....	....	114	44	41	6	13	8
21	27	....	....	....	....	....	82	49	33	6	10	11
22	29	....	....	....	....	....	56	42	27	5	9	10
23	27	....	....	....	....	....	39	33	25	5	10	8
24	26	....	....	....	....	....	12	30	23	4	11	11
25	25	....	....	....	....	....	14	36	20	4	10	35
26	25	....	....	....	....	....	24	54	16	6	10	24
27	23	....	....	....	....	....	34	59	11	8	7	16
28	22	....	....	....	....	....	42	66	26	11	6	13
29	20	....	....	....	....	....	43	65	33	16	6	11
30	23	....	....	....	....	....	61	70	36	20	7	10
31	26	....	....	....	....	....	....	59	....	16	8	....
Total	991	....	....	....	....	....	3833	1444	2090	403	362	261
Mean	32.0	....	....	....	....	....	128	46.6	69.7	13.0	11.7	8.7
Max	47	....	....	....	....	....	....	83	148	38	21	35
Min	20	....	....	....	....	....	12	26	11	4	6	3
Acre-ft.	1970	....	....	....	....	....	7620	2870	4150	799	719	518

Discharge of Illinois Creek Near Rand for Year Ending Sept. 30, 1931.
Drainage Area, 76.7 Square Miles. Altitude, 8,600 ± Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1	....	....	....	....	....	....	....	....	....	....	18	10
2	....	....	....	....	....	....	....	....	....	....	12	10
3	....	....	....	....	....	....	....	....	....	....	7	8
4	....	....	....	....	....	....	....	....	....	....	7	7
5	....	....	....	....	....	....	....	....	....	....	8	7
6	....	....	....	....	....	....	....	....	....	....	8	6
7	....	....	....	....	....	....	....	....	....	....	11	5
8	....	....	....	....	....	....	....	....	....	....	13	5
9	....	....	....	....	....	....	....	....	....	....	8	5
10	....	....	....	....	....	....	....	....	....	....	6	4
11	....	....	....	....	....	....	....	....	....	34	6	4
12	....	....	....	....	....	....	....	....	....	32	6	5
13	....	....	....	....	....	....	....	....	....	26	6	4
14	....	....	....	....	....	....	....	....	....	24	6	4
15	....	....	....	....	....	....	....	....	....	26	7	6
16	....	....	....	....	....	....	....	....	....	26	10	7
17	....	....	....	....	....	....	....	....	....	24	10	7
18	....	....	....	....	....	....	....	....	....	20	10	7
19	....	....	....	....	....	....	....	....	....	15	9	9
20	....	....	....	....	....	....	....	....	....	13	10	10
21	....	....	....	....	....	....	....	....	....	12	10	8
22	....	....	....	....	....	....	....	....	....	12	10	7
23	....	....	....	....	....	....	....	....	....	10	10	7
24	....	....	....	....	....	....	....	....	....	8	8	31
25	....	....	....	....	....	....	....	....	....	9	8	23
26	....	....	....	....	....	....	....	....	....	8	8	14
27	....	....	....	....	....	....	....	....	....	7	7	10
28	....	....	....	....	....	....	....	....	....	9	7	8
29	....	....	....	....	....	....	....	....	....	18	7	8
30	....	....	....	....	....	....	....	....	....	14	7	8
31	....	....	....	....	....	....	....	....	....	14	7	....
Total	....	....	....	....	....	....	....	....	....	....	267	254
Mean	....	....	....	....	....	....	....	....	....	24.6	8.61	8.47
Max	....	....	....	....	....	....	....	....	....	....	18	31
Min	....	....	....	....	....	....	....	....	....	....	6	4
Acre-ft.	....	....	....	....	....	....	....	....	....	1510	529	504

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of Illinois Creek Near Rand for Year Ending Sept. 30, 1932.
Drainage Area, 76.7 Square Miles. Altitude, 8,600± Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	5	....	....	....	....	....	....	49	194	121	47	7
2....	5	....	....	....	....	....	....	59	179	118	39	6
3....	6	....	....	....	....	....	....	45	156	112	31	6
4....	7	....	....	....	....	....	....	35	168	96	28	6
5....	8	....	....	....	....	....	....	37	179	87	24	6
6....	8	....	....	....	....	....	....	35	186	87	24	6
7....	9	....	....	....	....	....	....	39	194	78	20	6
8....	9	....	3	....	....	....	....	55	225	70	16	6
9....	9	....	....	....	....	....	....	71	213	65	16	6
10....	9	11	....	....	....	....	....	90	175	57	17	6
11....	9	....	....	....	....	....	....	135	160	49	18	5
12....	10	....	....	....	....	....	....	153	149	59	17	5
13....	11	....	....	....	....	....	....	221	153	57	17	5
14....	10	....	....	....	....	....	....	229	168	47	13	6
15....	8	....	....	....	....	....	....	186	217	41	9	7
16....	7	....	....	....	....	....	....	190	281	43	11	6
17....	9	....	....	....	....	....	....	198	277	41	13	6
18....	8	....	....	....	....	....	....	252	213	39	13	5
19....	6	....	....	....	....	....	....	361	175	33	23	5
20....	5	....	....	....	....	....	....	497	213	37	22	5
21....	10	....	....	....	....	....	116	428	194	33	26	5
22....	11	....	....	....	....	....	....	532	202	33	17	5
23....	10	....	....	....	....	....	....	655	256	31	13	5
24....	10	....	....	....	....	....	....	532	221	28	10	11
25....	9	....	....	....	....	....	....	451	217	26	10	14
26....	8	....	....	....	....	....	....	335	205	23	11	13
27....	10	....	....	....	....	....	....	248	256	33	17	10
28....	10	....	....	....	....	....	....	213	252	33	16	10
29....	10	....	....	....	....	....	....	198	183	35	12	10
30....	10	....	....	....	....	....	....	236	145	65	12	9
31....	10	....	....	....	....	....	....	236	....	72	23	....
Total	266	....	....	....	....	....	....	7001	6006	1749	585	208
Mean.	858	9.50	3.10	....	....	....	....	226	200	56.4	18.9	6.93
Max...	11	....	....	....	....	....	....	655	281	121	47	14
Min...	5	....	....	....	....	....	....	35	145	23	9	5
Acre-ft.	528	565	191	....	....	....	....	13900	11900	3470	1160	412

Discharge of Illinois Creek Near Walden for Year Ending Sept. 30, 1931.
Drainage Area, 254 Square Miles. Altitude, 8300 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	21	9	....	....	....	....	....	85	49	19	10	2
2....	17	8	....	....	....	....	....	78	41	26	9	1
3....	16	9	....	....	....	....	....	59	44	29	7	1
4....	17	11	....	....	....	....	....	54	49	61	7	2
5....	27	11	....	....	....	....	....	59	75	44	5	2
6....	19	13	....	....	....	....	....	48	102	26	4	2
7....	17	15	....	....	....	....	....	42	89	22	4	1
8....	19	15	....	....	....	....	....	34	85	17	2	1
9....	21	16	....	....	....	....	....	32	113	16	2	1
10....	21	16	....	....	....	....	....	40	137	14	2	1
11....	16	17	....	....	....	....	....	48	155	15	4	1
12....	17	17	....	....	....	....	....	42	141	11	4	1
13....	19	16	....	....	....	....	....	34	119	10	2	1
14....	19	15	....	....	....	....	....	26	111	10	2	1
15....	17	15	....	....	....	....	220	24	78	8	1	1
16....	16	....	....	....	....	....	215	22	73	5	6	1
17....	19	....	....	....	....	....	174	21	48	5	7	1
18....	21	....	....	....	....	....	141	43	46	6	8	2
19....	21	....	....	....	....	....	146	48	36	6	13	2
20....	19	....	....	....	....	....	135	59	34	4	15	2
21....	17	....	....	....	....	....	78	52	32	3	13	4
22....	17	....	....	....	....	....	82	56	29	2	13	5
23....	16	....	....	....	....	....	100	32	26	2	15	8
24....	16	....	....	....	....	....	115	34	17	2	9	20
25....	15	....	....	....	....	....	115	26	16	2	8	22
26....	15	....	....	....	....	....	26	17	13	5	6	24
27....	11	....	....	....	....	....	32	15	11	5	4	15
28....	10	....	....	....	....	....	34	32	13	6	3	13
29....	7	....	....	....	....	....	36	65	15	9	2	10
30....	11	....	....	....	....	....	80	76	19	6	2	10
31....	10	....	....	....	....	....	....	78	....	6	2	....
Total	524	....	....	....	....	....	....	1381	1816	402	191	158
Mean.	16.9	13.5	....	....	....	....	....	44.5	60.5	13.0	6.16	5.27
Max...	27	....	....	....	....	....	....	85	155	61	15	24
Min...	7	....	....	....	....	....	....	15	11	2	1	1
Acre-ft.	1040	803	....	....	....	....	....	2740	3600	799	379	314

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of Illinois Creek Near Walden for Year Ending Sept. 30, 1932.
Drainage Area, 254 Square Miles. Altitude, 8300 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1	8	10	....	.. .	....	....	....	170	158	190	102	8
2	9	9	....	....	....	....	....	199	170	142	80	8
3	8	6	....	....	....	....	....	221	158	127	62	8
4	9	6	....	....	....	....	....	234	147	122	44	6
5	10	9	....	....	....	....	....	199	142	73	34	6
6	8	9	....	....	....	....	....	202	172	42	28	5
7	7	7	....	....	....	....	....	190	172	29	22	5
8	7	7	3	....	....	....	....	181	172	26	20	4
9	5	8	....	....	....	....	....	164	164	23	17	4
10	4	6	....	....	....	....	....	178	142	23	15	2
11	4	8	....	....	....	....	....	172	132	24	16	2
12	5	8	....	....	....	....	....	214	122	28	15	2
13	5	6	....	2	....	....	....	221	120	51	10	2
14	5	5	....	....	....	....	....	230	117	51	8	1
15	4	5	....	. ..	....	....	....	240	120	38	8	1
16	4	....	....	....	....	....	....	208	117	48	6	1
17	4	....	....	....	....	....	....	175	153	40	8	1
18	4	....	....	....	....	....	478	175	193	45	8	1
19	5	....	....	....	....	....	435	172	208	45	6	1
20	5	....	....	....	....	....	446	221	178	45	8	1
21	4	....	....	....	....	....	490	299	187	32	8	1
22	6	....	....	....	....	....	538	377	161	24	8	1
23	8	....	....	....	....	....	442	343	161	17	9	1
24	13	....	....	....	....	....	164	384	150	21	12	1
25	9	....	....	....	....	....	142	454	147	26	8	3
26	9	....	....	....	....	....	221	384	156	25	8	4
27	8	....	....	....	....	....	199	288	184	21	10	5
28	8	....	....	....	....	....	205	234	202	20	8	7
29	6	....	....	....	....	....	170	178	202	20	8	6
30	8	....	....	....	....	....	170	140	178	22	8	5
31	8	....	....	....	....	....	....	153	....	35	6	....
Total	207	....	....	....	....	....	....	7200	4785	1475	610	103
Mean.	6.68	6.0	....	....	....	....	....	232	160	47.6	19.7	34.3
Max...	13	....	....	....	....	....	....	454	208	190	102	8
Min...	4	....	....	....	....	....	....	140	117	17	6	1
Acre-ft.	411	357	....	....	....	....	....	14300	9520	2930	1210	204

Discharge of Little Grizzly Creek at Mouth Near Hebron for Year Ending Sept. 30, 1931.
Drainage Area, ... Square Miles. Altitude, ... Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1	....	....	....	....	....	....	....	....	....	15	1	1
2	....	....	....	....	....	....	....	....	....	15	1	1
3	....	....	....	....	....	....	....	....	....	13	1	1
4	....	....	....	....	....	....	....	....	....	14	1	1
5	....	....	....	....	....	....	....	....	...	12	1	1
6	....	....	....	....	....	....	....	....	....	12	1	1
7	....	....	....	....	....	....	....	....	....	8	1	1
8	....	....	....	....	....	....	....	....	....	8	1	1
9	....	....	....	....	....	....	....	....	....	8	1	1
10	....	....	....	....	....	....	....	....	....	7	1	1
11	....	....	....	....	....	....	....	....	....	6	1	1
12	....	....	....	....	....	....	....	....	....	4	1	1
13	....	....	....	....	....	....	....	....	....	4	1	1
14	....	....	....	....	....	....	....	....	....	3	1	1
15	....	....	....	....	....	....	....	....	....	2	1	1
16	....	....	....	....	....	....	....	....	....	2	1	1
17	....	....	....	....	....	....	....	....	....	1	1	3
18	....	....	....	....	....	....	....	....	....	1	1	8
19	....	....	....	....	....	....	....	....	....	1	1	8
20	....	....	....	....	....	....	....	....	....	1	1	15
21	....	....	....	....	....	....	....	....	....	1	1	15
22	....	....	....	....	....	....	....	....	....	1	1	18
23	....	....	....	....	....	....	....	....	....	1	1	19
24	....	....	....	....	....	....	....	....	....	1	1	22
25	....	....	....	....	....	....	....	....	....	1	1	32
26	....	....	....	....	....	....	....	....	11	1	1	36
27	....	....	....	....	....	....	....	....	8	1	1	34
28	....	....	....	....	....	....	....	....	30	1	1	34
29	....	....	....	....	....	....	....	....	31	1	1	33
30	....	....	....	....	....	....	....	....	15	1	1	28
31	....	....	....	....	....	....	....	....	....	1	1	....
Total	....	....	....	....	....	....	....	....	....	148	31	321
Mean.	....	....	....	....	....	....	....	....	....	4.77	1.0	10.7
Max...	....	....	....	....	....	....	....	....	....	15	1	....
Min...	....	....	....	....	....	....	....	....	....	1	1	1
Acre-ft.	....	....	....	....	....	....	....	....	....	293	61	637

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of Little Grizzly Creek at Mouth Near Hebron for Year Ending Sept. 30, 1932.
Drainage Area, ... Square Miles. Altitude, ... Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	64	26	44	....	....	....	....	193	213	406	115	2
2....	50	21	44	....	....	....	....	193	203	393	97	2
3....	44	26	....	....	....	....	....	234	257	406	80	1
4....	37	32	....	....	....	....	....	304	246	354	72	1
5....	32	37	....	....	....	....	....	329	224	342	57	1
6....	32	32	....	....	....	....	....	329	234	280	50	1
7....	21	32	....	....	....	....	....	354	234	234	50	2
8....	26	32	....	....	....	....	....	380	246	193	50	2
9....	21	26	....	....	....	....	....	432	234	153	44	2
10....	21	26	....	....	....	....	....	458	213	134	44	2
11....	26	21	....	....	....	....	....	513	224	97	37	1
12....	26	21	....	....	....	....	....	541	234	97	37	1
13....	21	21	....	....	....	....	....	570	316	88	37	1
14....	21	26	....	....	....	....	....	585	380	64	37	1
15....	12	26	....	....	....	....	....	541	406	72	37	1
16....	12	32	....	....	....	....	....	541	458	64	37	1
17....	12	32	....	....	....	....	....	485	132	57	44	1
18....	16	37	....	....	....	....	....	432	458	57	50	1
19....	21	37	....	....	....	....	....	432	432	50	64	1
20....	26	37	....	....	....	....	234	380	458	50	64	1
21....	26	37	....	....	....	....	316	354	485	44	26	1
22....	32	44	....	....	....	....	292	329	458	44	16	1
23....	32	44	....	....	....	....	224	329	458	37	8	2
24....	37	32	....	....	....	....	193	316	472	37	8	2
25....	32	37	....	....	....	....	153	280	499	37	8	2
26....	32	37	....	....	....	....	134	234	485	64	16	2
27....	26	44	....	....	....	....	115	234	458	80	8	8
28....	26	50	....	....	....	....	106	224	406	115	8	8
29....	26	57	....	....	....	....	106	203	458	115	2	8
30....	32	57	....	....	....	....	115	213	406	134	5	8
31....	26	....	....	....	....	....	....	213	....	144	5	....
Total	868	1019	....	....	....	....	....	11155	10687	4442	1213	68
Mean.	28.0	34.0	....	....	....	....	200	360	356	143	39.1	2.27
Max...	64	57	....	....	....	....	....	585	499	406	115	8
Min...	12	21	....	....	....	....	....	193	203	37	2	1
Acre-ft.	1720	2020	....	....	....	....	11900	22100	21200	8790	2400	135

Discharge of Michigan River Near Lindland for Year Ending Sept. 30, 1931.
Drainage Area, 61.9 Square Miles. Altitude, 8,800± Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	....	....	....	....	....	....	....	....	....	....	29	19
2....	....	....	....	....	....	....	....	....	....	....	21	19
3....	....	....	....	....	....	....	....	....	....	....	18	18
4....	....	....	....	....	....	....	....	....	....	....	15	17
5....	....	....	....	....	....	....	....	....	....	....	16	17
6....	....	....	....	....	....	....	....	....	....	....	17	16
7....	....	....	....	....	....	....	....	....	....	....	19	15
8....	....	....	....	....	....	....	....	....	....	....	20	16
9....	....	....	....	....	....	....	....	....	....	....	18	17
10....	....	....	....	....	....	....	....	....	....	....	16	15
11....	....	....	....	....	....	....	....	....	....	....	15	13
12....	....	....	....	....	....	....	....	....	....	19	15	13
13....	....	....	....	....	....	....	....	....	....	18	14	13
14....	....	....	....	....	....	....	....	....	....	18	14	12
15....	....	....	....	....	....	....	....	....	....	18	18	13
16....	....	....	....	....	....	....	....	....	....	14	24	13
17....	....	....	....	....	....	....	....	....	....	12	25	12
18....	....	....	....	....	....	....	....	....	....	12	25	13
19....	....	....	....	....	....	....	....	....	....	12	26	17
20....	....	....	....	....	....	....	....	....	....	11	25	16
21....	....	....	....	....	....	....	....	....	....	11	26	13
22....	....	....	....	....	....	....	....	....	....	11	27	12
23....	....	....	....	....	....	....	....	....	....	11	25	13
24....	....	....	....	....	....	....	....	....	....	11	20	43
25....	....	....	....	....	....	....	....	....	....	11	18	27
26....	....	....	....	....	....	....	....	....	....	12	18	23
27....	....	....	....	....	....	....	....	....	....	12	16	19
28....	....	....	....	....	....	....	....	....	....	13	16	18
29....	....	....	....	....	....	....	....	....	....	22	16	16
30....	....	....	....	....	....	....	....	....	....	17	16	12
31....	....	....	....	....	....	....	....	....	....	21	15	....
Total	....	....	....	....	....	....	....	....	....	....	603	500
Mean.	....	....	....	....	....	....	....	....	....	14.3	19.4	16.7
Max...	....	....	....	....	....	....	....	....	....	....	29	43
Min...	....	....	....	....	....	....	....	....	....	....	14	12
Acre-ft.	....	....	....	....	....	....	....	....	....	879	1190	994

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of Michigan River Near Lindland for Year Ending Sept. 30, 1932.
Drainage Area, 61.9 Square Miles. Altitude, 8,800± Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1	13	....	....	....	....	....	....	35	183	173	54	14
2	13	....	....	....	....	....	....	38	166	158	50	16
3	14	....	....	....	....	....	....	38	179	149	47	18
4	12	....	....	....	....	....	....	39	188	138	43	17
5	14	....	....	....	....	....	....	38	194	109	44	15
6	14	....	....	....	....	....	....	38	201	95	44	15
7	14	....	....	....	....	....	....	40	221	85	43	17
8	16	....	....	....	....	....	....	43	238	85	41	16
9	15	....	....	....	....	....	....	62	216	78	40	16
10	17	9	6	....	....	....	....	61	203	71	40	16
11	22	....	....	....	....	....	....	86	192	71	40	16
12	20	....	....	....	....	....	....	117	207	69	38	16
13	20	....	....	....	....	....	....	149	207	59	39	15
14	20	....	....	....	....	....	....	145	214	56	36	15
15	17	....	....	....	....	....	....	149	257	48	35	11
16	17	....	....	....	....	....	....	158	283	49	35	10
17	16	....	....	....	....	....	....	175	259	47	34	10
18	17	....	....	....	....	....	....	212	209	43	38	9
19	17	....	....	....	....	....	....	238	198	39	36	9
20	18	....	....	....	....	....	....	254	230	40	40	9
21	26	....	....	....	....	....	....	281	212	39	37	9
22	24	....	....	....	....	....	40	388	269	39	32	9
23	23	....	....	....	....	....	....	340	298	44	26	8
24	24	....	....	....	....	....	....	276	283	46	25	13
25	23	....	....	....	....	....	....	242	298	47	21	15
26	21	....	....	....	....	....	....	179	278	47	21	14
27	15	....	....	....	....	....	....	158	298	47	26	13
28	18	....	....	....	....	....	....	154	295	43	23	14
29	20	....	....	....	....	....	....	181	240	47	18	10
30	20	....	....	....	....	....	....	201	201	60	16	7
31	20	....	....	....	....	....	....	183	....	67	15	....
Total	560	....	....	....	....	....	....	4698	6917	2188	1077	392
Mean.	18.1	9.6	4.5	....	....	....	....	152	230	70.6	34.7	13.1
Max...	26	....	....	....	....	....	....	388	298	173	54	18
Min...	12	....	....	....	....	....	....	35	166	39	15	7
Acre-ft.	1110	571	277	....	....	....	....	9350	13700	4340	2130	780

Discharge of Michigan River Near Walden for Year Ending Sept. 30, 1931.
Drainage Area, 185 Square Miles. Altitude, 8,300 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1	....	....	....	....	....	....	....	46	42	107	21	14
2	....	....	....	....	....	....	....	42	52	84	26	15
3	....	....	....	....	....	....	....	30	82	75	28	13
4	....	....	....	....	....	....	....	21	117	100	26	13
5	....	....	....	....	....	....	....	24	202	65	26	12
6	....	....	....	....	....	....	....	19	225	45	24	12
7	....	....	....	....	....	....	....	14	202	34	24	10
8	....	....	....	....	....	....	....	10	225	24	23	11
9	....	....	....	....	....	....	....	8	284	24	21	11
10	....	....	....	....	....	....	....	6	268	22	20	10
11	....	....	....	....	....	....	....	6	272	24	17	10
12	....	....	....	....	....	....	....	7	236	23	16	8
13	....	....	....	....	....	....	....	6	225	14	14	7
14	....	....	....	....	....	....	232	6	192	11	14	6
15	....	....	....	....	....	....	178	13	147	10	16	9
16	....	....	....	....	....	....	144	28	133	8	22	12
17	....	....	....	....	....	....	135	57	122	8	24	12
18	....	....	....	....	....	....	122	83	107	7	24	12
19	....	....	....	....	....	....	112	60	88	7	24	16
20	....	....	....	....	....	....	105	35	65	6	25	17
21	....	....	....	....	....	....	75	24	49	5	22	17
22	....	....	....	....	....	....	55	88	33	5	19	16
23	....	....	....	....	....	....	44	13	25	5	22	16
24	....	....	....	....	....	....	36	12	24	5	23	35
25	....	....	....	....	....	....	34	11	21	8	23	41
26	....	....	....	....	....	....	33	15	26	8	20	40
27	....	....	....	....	....	....	32	17	88	5	17	33
28	....	....	....	....	....	....	30	20	102	8	16	27
29	....	....	....	....	....	....	32	25	98	13	15	25
30	....	....	....	....	....	....	47	30	107	15	14	21
31	....	....	....	....	....	....	....	30	....	17	15	....
Total	....	....	....	....	....	....	....	806	3859	792	641	501
Mean.	....	....	....	....	....	....	....	26	129	25.5	20.7	16.7
Max...	....	....	....	....	....	....	....	88	284	107	28	41
Min...	....	....	....	....	....	....	....	6	21	5	14	6
Acre-ft.	....	....	....	....	....	....	....	1600	7680	1570	1270	994

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of Michigan River Near Walden for Year Ending Sept. 30, 1932.
Drainage Area, 185 Square Miles. Altitude, 8,300 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	27	33	....	....	....	....	....	127	210	210	125	35
2....	27	30	....	....	....	....	....	166	200	188	112	35
3....	30	26	....	....	....	....	....	204	188	162	92	35
4....	28	30	....	....	....	....	....	207	204	125	76	33
5....	27	30	....	....	....	....	....	214	218	115	63	33
6....	27	30	....	....	....	....	....	214	243	84	57	32
7....	31	31	....	....	....	....	....	200	235	71	48	32
8....	30	30	....	....	....	....	....	194	239	68	44	31
9....	30	31	....	....	....	....	....	188	256	65	41	31
10....	30	27	....	....	....	....	....	221	232	65	41	18
11....	30	27	....	....	....	....	....	287	214	67	45	29
12....	32	29	....	....	....	....	....	311	197	50	39	28
13....	32	28	....	....	....	....	....	384	200	49	38	18
14....	34	28	....	....	....	....	....	474	200	40	32	16
15....	32	27	....	....	....	....	....	442	207	33	30	14
16....	31	27	....	....	....	....	....	362	221	36	30	15
17....	31	29	....	....	....	....	....	315	296	39	32	15
18....	31	27	....	....	....	....	....	315	306	35	30	16
19....	30	25	....	....	....	....	....	325	239	35	32	18
20....	30	26	....	....	....	....	....	430	197	32	35	18
21....	32	27	....	....	....	....	....	430	252	32	34	20
22....	36	26	....	....	....	....	....	362	214	36	35	20
23....	37	25	....	....	....	....	....	455	235	39	34	21
24....	39	25	....	....	....	....	131	558	291	44	31	24
25....	35	....	....	....	....	....	127	468	296	44	27	29
26....	35	....	....	....	....	....	149	401	315	53	26	20
27....	31	....	....	....	....	....	154	311	301	54	36	22
28....	33	....	....	....	....	....	142	264	320	49	36	22
29....	32	....	....	....	....	....	123	228	373	60	33	20
30....	30	....	....	....	....	....	119	228	282	73	32	18
31....	28	....	....	....	....	....	....	252	....	108	35	....
Total	968	....	....	....	....	....	....	9537	7381	2161	1401	718
Mean.	31.2	27.5	....	....	....	....	....	308	246	69.7	45.2	23.9
Max...	39	....	....	....	....	....	....	558	373	210	125	35
Min...	27	....	....	....	....	....	....	127	188	32	26	....
Acre-ft.	1920	1640	....	....	....	....	....	18900	14600	4280	2780	1420

Discharge of North Platte River Near Walden for Year Ending Sept. 30, 1931.
Drainage Area, 446 Square Miles. Altitude, ... Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	118	89	....	....	....	....	....	295	210	116	66	18
2....	129	92	....	....	....	....	....	267	382	91	65	21
3....	145	92	....	....	....	....	....	238	515	92	61	18
4....	177	85	....	....	....	....	....	223	510	67	54	16
5....	188	86	....	....	....	....	....	213	485	62	50	18
6....	183	82	....	....	....	....	....	205	444	58	46	17
7....	181	84	....	....	....	....	....	193	490	53	44	17
8....	177	89	....	....	....	....	....	200	580	48	47	16
9....	173	85	....	....	....	....	....	193	545	43	46	15
10....	168	82	....	....	....	....	....	166	436	35	41	12
11....	177	81	....	....	....	....	....	186	411	31	35	10
12....	164	76	....	....	....	....	....	203	398	27	28	10
13....	164	54	....	....	....	....	....	151	390	23	25	10
14....	154	42	....	....	....	....	....	147	315	19	24	10
15....	147	31	....	....	....	....	....	186	308	16	25	16
16....	141	21	....	....	....	....	....	270	308	14	26	16
17....	118	26	....	....	....	....	....	329	255	13	34	12
18....	138	21	....	....	....	....	....	333	188	13	39	15
19....	129	19	....	....	....	....	....	315	156	15	46	23
20....	126	16	....	....	....	....	....	252	132	16	40	31
21....	119	18	....	....	....	....	....	220	114	16	38	35
22....	121	....	....	....	....	....	....	203	98	16	40	39
23....	116	....	....	....	....	....	....	179	91	15	35	54
24....	111	....	....	....	....	....	....	173	82	15	31	55
25....	108	....	....	....	....	....	....	267	73	16	28	56
26....	106	....	....	....	....	....	....	411	66	24	27	64
27....	94	....	....	....	....	....	....	390	60	32	23	67
28....	105	....	....	....	....	....	....	329	64	49	19	68
29....	94	....	....	....	....	....	....	261	288	53	16	65
30....	91	....	....	....	....	....	....	223	118	55	16	62
31....	91	....	....	....	....	....	....	186	....	56	16	....
Total	4253	....	....	....	....	....	....	7407	8512	1199	1131	886
Mean.	137	55.0	....	....	....	....	....	239	284	38.7	36.5	29.5
Max...	188	....	....	....	....	....	....	411	580	116	66	68
Min...	91	....	....	....	....	....	....	147	60	13	16	10
Acre-ft.	8420	3270	....	....	....	....	....	14700	16900	2380	2240	1760

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of North Platte River Near Walden for Year Ending Sept. 30, 1932.
Drainage Area, 446 Square Miles. Altitude, ... Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	42	79	....	....	....	....	....	433	592	905..	219	84
2....	39	68	....	....	....	....	....	561	579	448	221	85
3....	45	68	....	....	....	....	....	636	515	418	221	79
4....	49	66	....	....	....	....	....	711	588	770	200	76
5....	54	66	....	....	....	....	....	786	742	597	171	73
6....	61	61	....	....	....	....	....	861	780	440	145	70
7....	66	66	....	....	....	....	....	930	642	372	143	67
8....	80	68	....	....	....	....	....	945	724	314	133	64
9....	70	66	30	....	....	....	....	945	765	320	123	61
10....	73	64	....	....	....	....	....	1050	825	282	115	58
11....	80	76	....	....	....	....	....	1140	865	259	114	55
12....	85	73	....	....	....	....	....	1260	845	344	117	36
13....	67	62	....	....	....	....	....	1400	875	347	112	35
14....	64	62	....	....	....	....	....	1500	990	301	104	30
15....	54	....	....	....	....	....	....	1540	1090	254	96	28
16....	48	....	....	....	....	....	....	1290	1100	259	94	26
17....	47	....	....	....	....	....	....	1210	1180	256	96	25
18....	44	....	....	....	....	....	....	1150	1040	240	108	24
19....	42	....	....	....	....	....	733	1220	880	214	109	23
20....	52	....	....	....	....	....	830	1380	865	207	100	23
21....	61	....	....	....	....	....	800	1450	965	189	91	27
22....	48	....	....	....	....	....	725	1390	990	175	84	30
23....	54	....	....	....	....	....	600	1370	1080	175	82	30
24....	55	....	....	....	....	....	502	1240	1160	177	80	31
25....	52	....	....	....	....	....	433	960	1170	180	73	32
26....	50	....	....	....	....	....	566	820	1130	182	70	30
27....	44	....	....	....	....	....	452	670	1100	186	102	31
28....	41	....	....	....	....	....	437	540	1250	177	108	30
29....	80	....	....	....	....	....	350	471	1160	184	108	28
30....	76	....	....	....	....	....	421	527	985	210	96	30
31....	82	....	....	....	....	....	....	633	....	212	97	....
Total	1805	....	....	....	....	....	....	31019	27472	9594	3732	1321
Mean.	58.2	54.0	30.0	....	....	....	585	1000	916	309	120	44.0
Max...	85	....	....	....	....	....	....	1540	1250	905	221	85
Min...	39	....	....	....	....	....	....	433	515	175	70	23
Acre-ft.	3580	3210	1840	....	....	....	34800	61500	54500	19000	7380	2620

Discharge of North Platte River Near North Gate for Year Ending Sept. 30, 1931.
Drainage Area, 1,440 Square Miles. Altitude, 7,600 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	256	180	....	....	....	....	185	679	374	379	130	69
2....	265	203	....	....	....	....	185	613	434	318	157	78
3....	273	195	....	....	....	....	185	550	626	253	148	86
4....	328	199	....	....	....	....	185	512	713	266	130	78
5....	342	180	....	....	....	....	185	506	854	249	119	67
6....	353	180	....	....	....	....	540	464	956	197	111	59
7....	337	195	....	....	....	....	540	440	904	157	114	52
8....	328	199	....	....	....	....	540	412	983	133	114	50
9....	314	154	....	....	....	....	540	412	1180	116	106	50
10....	314	126	....	....	....	....	540	363	1120	106	94	45
11....	332	142	....	....	....	....	1600	348	1140	106	84	40
12....	369	134	....	....	....	....	1600	337	1090	98	76	35
13....	365	151	....	....	....	....	1600	298	1010	84	71	33
14....	340	137	....	....	....	....	1600	275	929	80	67	33
15....	320	95	....	....	....	....	1730	289	808	71	63	33
16....	300	95	....	....	....	....	1670	358	748	69	80	35
17....	285	95	....	....	....	....	1650	500	652	67	122	41
18....	290	95	....	....	....	....	1540	600	537	69	114	43
19....	290	95	....	....	....	....	1340	581	440	80	108	49
20....	290	95	....	....	....	....	1140	488	374	63	122	59
21....	282	95	....	....	....	....	920	423	294	52	128	64
22....	265	95	....	....	....	....	588	374	253	49	122	74
23....	256	95	....	....	....	....	430	322	212	49	193	76
24....	240	95	....	....	....	....	410	253	193	52	190	130
25....	233	95	....	....	....	....	395	258	183	54	136	220
26....	233	95	....	....	....	....	410	337	176	63	111	224
27....	214	95	....	....	....	....	410	470	176	76	94	193
28....	225	95	....	....	....	....	470	519	197	84	80	176
29....	214	95	....	....	....	....	506	537	294	116	71	154
30....	188	95	....	....	....	....	613	494	379	130	65	136
31....	184	....	....	....	....	....	....	429	....	133	65	....
Total	8825	3895	2790	3100	3360	4340	24247	13441	18229	3819	3385	2482
Mean.	285	130	90	100	120	140	808	434	608	123	109	82.7
Max...	369	203	....	....	....	....	....	679	1180	379	193	224
Min...	184	....	....	....	....	....	....	253	176	49	63	33
Acre-ft.	17500	7740	5530	6150	6660	8610	48100	26700	36200	7560	6700	4920

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of North Platte River Near North Gate for Year Ending Sept. 30, 1932.
Drainage Area, 1,440 Square Miles. Altitude, 7,600 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	119	185	....	....	....	....	900	981	1280	1920	793	203
2....	116	185	....	....	....	....	900	1140	1290	1780	819	182
3....	128	175	....	....	....	....	900	1480	1180	1710	622	168
4....	140	172	....	....	....	....	900	1710	1190	1520	498	152
5....	137	165	....	....	....	....	900	1700	1320	1310	422	137
6....	143	159	....	....	....	....	820	1760	1520	1010	378	134
7....	156	159	....	....	....	....	820	1820	1530	810	357	122
8....	175	162	....	....	....	....	820	1860	1420	710	351	113
9....	168	172	....	....	....	....	820	1880	1310	665	341	110
10....	162	162	75	....	....	....	820	2000	1340	629	317	108
11....	167	178	....	....	....	....	980	2160	1410	574	308	110
12....	189	168	....	....	....	....	1000	2360	1420	608	298	108
13....	203	146	....	....	....	....	1080	2600	1450	725	289	105
14....	196	131	....	....	....	....	1600	2710	1560	695	280	102
15....	182	165	....	....	....	....	2280	2850	1680	608	285	102
16....	172	162	....	....	....	....	3680	2660	1750	580	270	105
17....	165	140	....	....	....	....	3720	2160	1920	587	265	105
18....	159	140	....	....	....	....	3020	2000	2080	608	260	100
19....	152	140	....	....	....	....	2280	2020	1890	567	255	94
20....	152	140	....	....	....	....	2070	2530	1680	548	250	88
21....	172	110	....	....	....	....	2350	2800	1810	510	246	83
22....	182	110	....	....	....	....	2820	2770	1770	480	234	91
23....	207	110	....	....	....	....	2560	2710	1780	456	226	96
24....	203	110	....	....	....	....	1390	2770	1970	445	218	96
25....	196	110	....	....	....	....	1080	2520	2070	474	200	105
26....	185	100	....	....	....	....	1210	2260	2120	492	182	110
27....	149	100	....	....	....	....	1170	1870	2080	474	258	116
28....	156	100	....	....	....	....	1180	1650	2210	428	263	116
29....	172	100	....	....	....	....	1060	1240	2380	445	242	116
30....	162	100	....	....	....	....	1000	1170	2150	492	218	116
31....	168	....	....	....	....	....	....	1310	....	587	207	....
Total	5133	4256	....	....	....	....	46130	63451	50560	23447	10152	3493
Mean.	166	142	110	105	110	160	1540	2050	1690	756	327	116
Max...	207	185	....	....	....	....	3720	2850	2380	1920	819	203
Min...	116	....	....	....	....	....	....	981	1180	428	182	83
Acre-ft.	10200	8450	6760	6460	6330	9840	91600	126000	101000	46500	20100	6900

Discharge of Roaring Fork Near Walden for Year Ending Sept. 30, 1931.
Drainage Area, 84 Square Miles. Altitude, ... Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	49	22	....	....	....	....	....	42	74	30	38	16
2....	47	22	....	....	....	....	....	35	115	21	36	18
3....	49	22	....	....	....	....	....	26	162	19	32	13
4....	58	24	....	....	....	....	....	29	202	22	30	12
5....	56	24	....	....	....	....	....	28	190	19	29	14
6....	54	23	....	....	....	....	....	28	170	17	26	12
7....	51	22	....	....	....	....	....	30	190	16	26	11
8....	49	24	....	....	....	....	....	22	172	16	28	12
9....	47	23	....	....	....	....	....	18	162	12	25	12
10....	46	23	....	....	....	....	....	18	153	12	22	10
11....	58	22	....	....	....	....	....	22	145	13	21	9
12....	59	24	....	....	....	....	....	21	135	14	18	9
13....	52	21	....	....	....	....	94	18	122	12	17	11
14....	50	19	....	....	....	....	78	17	96	11	16	11
15....	50	19	....	....	....	....	70	22	89	10	19	15
16....	45	18	....	....	....	....	71	44	89	8	20	16
17....	39	17	....	....	....	....	80	36	64	12	23	15
18....	44	20	....	....	....	....	84	30	62	13	24	15
19....	39	23	....	....	....	....	86	27	59	15	24	20
20....	36	29	....	....	....	....	72	25	52	13	21	23
21....	36	32	....	....	....	....	59	17	41	14	20	21
22....	36	....	....	....	....	....	33	18	38	13	32	22
23....	35	....	....	....	....	....	41	12	36	13	34	23
24....	32	....	....	....	....	....	28	10	33	15	24	51
25....	31	....	....	....	....	....	35	29	28	18	22	47
26....	30	....	....	....	....	....	28	83	24	24	18	44
27....	25	....	....	....	....	....	32	91	25	33	14	38
28....	26	....	....	....	....	....	35	65	40	45	13	34
29....	26	....	....	....	....	....	39	68	58	39	14	34
30....	24	....	....	....	....	....	42	69	34	35	12	34
31....	22	....	....	....	....	....	...	72	....	34	12	....
Total	1301	....	....	....	....	....	....	1072	2860	578	710	622
Mean.	42	22	....	....	....	....	....	34.6	95.3	18.6	22.9	20.7
Max...	59	....	....	....	....	....	....	91	202	45	38	51
Min...	22	....	....	....	....	....	....	10	24	8	12	9
Acre-ft.	2580	1310	....	....	....	....	....	2130	5670	1140	1410	1230

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of Roaring Fork Near Walden for Year Ending Sept. 30, 1932.
Drainage Area, 84 Square Miles. Altitude, ... Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	33	35	....	....	....	....	....	167	125	408	190	48
2....	33	28	....	....	....	....	....	194	123	428	158	37
3....	36	27	....	....	....	....	....	224	109	395	123	36
4....	35	26	....	....	....	....	....	212	154	364	100	35
5....	33	22	....	....	....	....	....	213	204	278	91	35
6....	36	21	....	....	....	....	....	208	212	230	82	34
7....	40	26	....	....	....	....	....	221	203	199	80	33
8....	35	27	....	....	....	....	....	213	172	172	75	28
9....	30	27	....	....	....	....	....	206	174	183	70	27
10....	34	25	....	....	....	....	....	203	204	159	67	26
11....	37	28	....	....	....	....	....	206	239	149	79	25
12....	35	26	....	....	....	....	....	226	244	195	72	25
13....	36	24	....	....	....	....	....	276	300	197	67	25
14....	36	20	....	....	....	....	....	329	335	163	62	26
15....	32	28	....	....	....	....	....	320	362	122	58	24
16....	29	25	....	....	....	....	....	242	397	125	60	22
71....	27	29	....	....	....	....	....	231	416	123	68	20
18....	27	28	....	....	....	....	....	235	359	113	77	18
19....	25	....	....	....	....	....	246	253	307	109	70	16
20....	25	....	....	....	....	....	224	311	355	120	68	15
21....	29	....	....	....	....	....	262	267	353	107	62	16
22....	26	....	....	....	....	....	286	309	393	102	55	17
23....	24	....	....	....	....	....	216	311	450	107	51	17
24....	25	....	....	....	....	....	147	248	456	116	51	20
25....	24	....	....	....	....	....	143	215	478	123	48	20
26....	21	....	....	....	....	....	145	179	440	125	47	20
27....	22	....	....	....	....	....	134	136	492	118	77	22
28....	20	....	....	....	....	....	129	107	532	107	74	21
29....	32	....	....	....	....	....	111	82	480	122	62	18
30....	29	....	....	....	....	....	134	120	444	131	56	20
31....	33	....	....	....	....	....	....	136	....	185	56	....
Total	939	....	....	....	....	....	....	6800	9512	5575	2356	746
Mean.	30.3	26	....	....	....	....	150	219	317	180	76.0	24.9
Max...	40	....	....	....	....	....	....	329	532	428	190	48
Min...	20	....	....	....	....	....	....	82	109	102	47	15
Acre-ft.	1860	1550	....	....	....	....	8920	13500	18900	11100	4670	1480

Discharge of Willow Creek Near Rand for Year Ending Sept. 30, 1931.
Drainage Area, 62.2 Square Miles. Altitude, 8,530± Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	....	....	....	....	....	....	....	....	....	....	7	3
2....	....	....	....	....	....	....	....	....	....	....	5	3
3....	....	....	....	....	....	....	....	....	....	....	5	2
4....	....	....	....	....	....	....	....	....	....	....	4	2
5....	....	....	....	....	....	....	....	....	....	....	5	2
6....	....	....	....	....	....	....	....	....	....	....	5	2
7....	....	....	....	....	....	....	....	....	....	....	6	2
8....	....	....	....	....	....	....	....	....	....	....	6	2
9....	....	....	....	....	....	....	....	....	....	....	5	2
10....	....	....	....	....	....	....	....	....	....	2	5	2
11....	....	....	....	....	....	....	....	....	....	2	4	1
12....	....	....	....	....	....	....	....	....	....	2	3	1
13....	....	....	....	....	....	....	....	....	....	2	2	1
14....	....	....	....	....	....	....	....	....	....	4	2	1
15....	....	....	....	....	....	....	....	....	....	4	2	1
16....	....	....	....	....	....	....	....	....	....	3	3	2
17....	....	....	....	....	....	....	....	....	....	3	2	1
18....	....	....	....	....	....	....	....	....	....	3	2	2
19....	....	....	....	....	....	....	....	....	....	3	3	2
20....	....	....	....	....	....	....	....	....	....	3	3	3
21....	....	....	....	....	....	....	....	....	....	6	4	2
22....	....	....	....	....	....	....	....	....	....	6	4	2
23....	....	....	....	....	....	....	....	....	....	5	4	2
24....	....	....	....	....	....	....	....	....	....	5	4	13
25....	....	....	....	....	....	....	....	....	....	4	4	7
26....	....	....	....	....	....	....	....	....	....	4	4	4
27....	....	....	....	....	....	....	....	....	....	3	3	4
28....	....	....	....	....	....	....	....	....	....	4	3	3
29....	....	....	....	....	....	....	....	....	....	5	3	2
30....	....	....	....	....	....	....	....	....	....	4	2	2
31....	....	....	....	....	....	....	....	....	....	5	2	....
Total	....	....	....	....	....	....	....	....	....	....	116	78
Mean.	....	....	....	....	....	....	....	....	....	3.22	3.74	2.60
Max...	....	....	....	....	....	....	....	....	....	....	7	13
Min...	....	....	....	....	....	....	....	....	....	....	2	1
Acre-ft	....	....	....	....	....	....	....	....	....	198	230	155

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of Willow Creek Near Rand for Year Ending Sept. 30, 1932.
Drainage Area, 62.2 Square Miles. Altitude, 8,530± Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	2	....	....	....	....	....	....	34	84	24	26	6
2....	2	....	....	....	....	....	....	50	82	25	22	6
3....	4	....	....	....	....	....	....	69	57	23	15	5
4....	3	....	....	....	....	....	....	58	67	16	10	5
5....	3	....	....	....	....	....	....	56	82	13	8	5
6....	3	....	....	....	....	....	....	44	80	9	10	4
7....	3	....	....	....	....	....	....	43	70	9	8	4
8....	4	....	2	....	....	....	....	40	66	8	6	4
9....	3	....	....	....	....	....	....	42	72	10	7	3
10....	4	6	....	....	....	....	....	40	72	9	9	4
11....	4	....	....	....	....	....	....	40	76	9	8	3
12....	4	....	....	....	....	....	....	20	66	18	8	3
13....	4	....	....	....	....	....	....	44	72	20	8	3
14....	4	....	....	....	....	....	....	52	70	20	6	4
15....	3	....	....	....	....	....	....	46	74	14	5	4
16....	3	....	....	....	....	....	....	50	78	17	5	3
17....	4	....	....	....	....	....	....	54	90	18	6	4
18....	4	....	....	....	....	....	....	57	88	16	6	3
19....	3	....	....	....	....	....	....	90	62	16	6	3
20....	4	....	....	....	....	....	....	256	76	14	6	3
21....	6	....	....	....	....	....	100	148	45	11	6	4
22....	6	....	....	....	....	....	96	196	32	9	5	3
23....	6	....	....	....	....	....	26	268	41	9	6	3
24....	4	....	....	....	....	....	15	260	41	9	6	4
25....	4	....	....	....	....	....	18	196	49	8	5	4
26....	3	....	....	....	....	....	26	142	45	8	5	4
27....	3	....	....	....	....	....	23	94	49	7	6	4
28....	3	....	....	....	....	....	28	78	62	6	6	4
29....	3	....	....	....	....	....	24	57	42	10	5	4
30....	3	....	....	....	....	....	30	79	31	32	6	4
31....	4	....	....	....	....	....	....	96	....	32	8	....
Total	113	....	....	....	....	....	....	2790	1921	449	249	117
Mean.	3.65	4	2	....	....	....	38.0	90.0	64.0	14.5	8.0	3.90
Max...	6	....	....	....	....	....	....	268	90	32	26	6
Min...	2	....	....	....	....	....	....	20	31	6	5	3
Acre-ft.	224	238	123	....	....	....	2260	5530	3810	892	492	232

Discharge of Laramie River Near Glendevey for Year Ending Sept. 30, 1931.
Drainage Area, 101 Square Miles. Altitude, 8,231 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	53	33	....	....	....	....	....	37	170	89	25	19
2....	49	32	....	....	....	....	....	41	174	69	21	19
3....	49	....	....	....	....	....	....	46	174	69	18	15
4....	63	....	....	....	....	....	....	41	167	111	18	14
5....	53	....	....	....	....	....	....	39	185	46	19	15
6....	49	....	....	....	....	....	....	37	200	32	19	15
7....	51	....	....	....	....	....	....	43	235	29	19	14
8....	49	....	....	....	....	....	....	61	266	28	19	13
9....	48	....	....	....	....	....	....	42	231	26	18	13
10....	48	....	....	....	....	....	....	42	167	26	17	12
11....	53	....	....	....	....	....	....	37	283	26	17	13
12....	51	....	....	....	....	....	....	40	147	26	17	13
13....	46	....	....	....	....	....	....	54	160	26	17	14
14....	46	....	....	....	....	....	....	125	134	25	17	13
15....	48	....	....	....	....	....	53	289	134	26	19	14
16....	38	....	....	....	....	....	53	300	160	26	21	15
17....	36	....	....	....	....	....	56	306	125	27	20	13
18....	46	....	....	....	....	....	59	222	109	27	19	14
19....	46	....	....	....	....	....	67	106	79	27	20	15
20....	43	....	....	....	....	....	56	77	61	26	18	15
21....	42	....	....	....	....	....	48	56	86	27	17	14
22....	45	....	....	....	....	....	46	69	71	26	19	14
23....	38	....	....	....	....	....	41	134	54	22	23	15
24....	35	....	....	....	....	....	41	157	49	15	19	46
25....	36	....	....	....	....	....	43	157	45	18	19	29
26....	39	....	....	....	....	....	29	131	84	18	21	24
27....	30	....	....	....	....	....	31	138	114	19	19	21
28....	33	....	....	....	....	....	32	145	77	21	17	20
29....	31	....	....	....	....	....	36	152	103	26	18	21
30....	31	....	....	....	....	....	38	159	101	22	17	21
31....	31	....	....	....	....	....	....	166	....	24	16	....
Total	1356	....	....	....	....	....	....	3449	4145	1025	583	513
Mean.	43.7	....	....	....	....	....	47	111	138	33.1	18.8	17.1
Max...	63	....	....	....	....	....	....	306	283	111	25	46
Min...	30	....	....	....	....	....	....	37	45	15	16	12
Acre-ft.	2690	....	....	....	....	....	2800	6820	8210	2040	1160	1020

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of Laramie River Near Glendevey for Year Ending Sept. 30, 1932.
Drainage Area, 101 Square Miles. Altitude, 8,231 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept
1....	23	28	....	....	....	....	....	....	308	197	35	1
2....	22	27	....	....	....	....	....	....	303	182	32	1
3....	25	27	....	....	....	....	....	....	313	164	29	1
4....	22	28	....	....	....	....	....	120	318	143	27	1
5....	21	26	....	....	....	....	....	110	323	137	24	1
6....	24	26	....	....	....	....	....	98	360	118	24	1
7....	26	25	....	....	....	....	....	102	334	98	22	1
8....	24	26	....	....	....	....	....	102	339	84	21	1
9....	22	26	....	....	....	....	....	108	323	75	21	1
10....	25	24	....	....	....	....	....	128	313	77	21	1
11....	36	27	....	....	....	....	....	143	313	93	22	1
12....	32	24	....	....	....	....	....	120	308	93	21	1
13....	27	....	....	....	....	....	....	137	303	77	20	1
14....	32	....	....	....	....	....	....	185	313	59	20	1
15....	31	....	....	....	....	....	....	213	344	48	22	1
16....	30	....	....	....	....	....	....	205	360	41	51	1
17....	31	....	....	....	....	....	....	209	308	37	110	1
18....	30	....	....	....	....	....	....	288	264	36	63	1
19....	29	....	....	....	....	....	....	344	268	36	58	1
20....	30	....	....	....	....	....	....	456	328	36	38	1
21....	40	....	....	....	....	....	....	574	303	31	30	1
22....	38	....	....	....	....	....	....	845	303	27	26	1
23....	37	....	....	....	....	....	....	633	376	28	22	1
24....	36	....	....	....	....	....	....	495	334	29	20	2
25....	35	....	....	....	....	....	....	430	161	31	20	2
26....	32	....	....	....	....	....	....	288	303	30	17	2
27....	23	....	....	....	....	....	....	264	318	29	20	1
28....	27	....	....	....	....	....	....	255	418	32	19	1
29....	29	....	....	....	....	....	....	288	264	40	17	1
30....	22	....	....	....	....	....	....	339	221	41	19	1
31....	20	....	....	....	....	....	....	112	....	41	20	....
Total	881	....	....	....	....	....	....	....	9344	2190	911	49
Mean.	28.4	26.0	....	....	....	....	....	254	311	70.6	29.4	16.5
Max...	40	....	....	....	....	....	....	845	418	197	110	2
Min...	20	....	....	....	....	....	....	....	161	27	17	1
Acre-ft.	1750	1550	....	....	....	....	....	15600	18500	4340	1810	98

Discharge of Laramie River Near Jelm, Wyoming, for Year Ending Sept. 30, 1931.
Drainage Area, 297 Square Miles. Altitude, 7,730 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	100	55	....	....	....	35	65	125	555	163	75	35
2....	96	54	....	....	....	35	90	153	620	133	64	39
3....	92	55	....	....	....	35	120	186	590	120	55	34
4....	108	52	....	....	....	35	150	163	585	163	49	29
5....	105	54	....	....	32	35	222	125	590	115	45	27
6....	108	55	....	....	....	40	414	108	575	82	48	25
7....	100	48	....	29	....	40	565	128	620	65	49	24
8....	88	47	....	....	....	40	466	211	620	56	49	24
9....	84	47	....	....	....	40	285	179	595	48	43	22
10....	80	48	....	....	....	40	273	144	530	44	40	21
11....	76	47	....	....	....	45	260	117	630	42	39	21
12....	84	49	....	....	....	45	237	133	525	42	36	21
13....	82	58	....	....	....	45	226	166	470	45	34	21
14....	78	47	....	....	....	45	166	302	427	51	31	23
15....	73	49	....	....	....	45	139	466	386	45	36	22
16....	67	42	....	....	....	36	120	595	382	47	47	25
17....	65	45	....	....	....	45	117	545	346	49	45	24
18....	78	45	....	....	....	45	133	560	302	48	44	23
19....	80	45	....	....	....	45	139	324	260	52	39	27
20....	76	45	....	....	....	45	128	281	226	52	39	31
21....	73	40	....	....	....	40	100	237	207	52	39	29
22....	70	40	....	....	....	40	98	211	189	49	44	27
23....	65	40	....	....	....	40	82	333	169	48	65	27
24....	64	40	....	....	....	40	82	395	147	49	47	70
25....	62	40	....	....	....	40	73	500	133	51	36	92
26....	64	42	....	....	....	35	62	500	139	49	33	59
27....	58	42	....	....	....	35	73	505	196	52	30	51
28....	64	42	....	....	....	35	68	456	160	52	29	45
29....	54	42	....	....	....	35	73	451	166	68	29	42
30....	58	42	....	....	....	35	105	386	179	62	28	40
31....	55	....	....	....	....	35	....	451	....	68	29	....
Total	2404	1397	992	930	980	1226	5131	9436	11519	2062	1316	1000
Mean.	77.5	46.6	32	30	35	39.5	171	304	384	66.5	42.5	33.3
Max...	108	58	....	....	....	....	565	595	630	163	75	92
Min...	54	....	....	....	....	....	62	108	133	42	28	21
Acre-ft.	4770	2770	1970	1840	1940	2430	10200	18700	22800	4090	2610	1980

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of Laramie River Near Jelm, Wyoming, for Year Ending Sept. 30, 1932.
Drainage Area, 297 Square Miles. Altitude, 7,730 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	39	56	....	....	28	....	55	90	780	456	86	54
2....	40	52	....	....	....	....	55	112	720	432	84	45
3....	47	51	....	....	....	....	55	147	680	409	70	40
4....	48	48	....	25	....	....	55	169	780	342	65	38
5....	44	47	....	....	....	....	55	196	915	277	62	35
6....	48	45	....	....	....	....	70	179	990	237	58	35
7....	58	44	....	....	....	....	70	182	915	207	54	34
8....	58	43	....	....	....	....	70	182	840	176	51	31
9....	51	44	....	....	....	....	70	200	840	163	51	30
10....	51	42	....	....	....	....	70	237	840	147	47	29
11....	61	47	36	....	....	....	85	298	840	150	52	30
12....	68	52	....	....	....	....	85	320	840	182	49	30
13....	61	54	....	....	....	....	85	409	780	153	47	29
14....	52	54	....	....	....	....	85	555	840	130	47	27
15....	54	58	....	....	....	....	85	640	915	110	47	27
16....	52	54	....	....	....	....	100	640	990	103	52	27
17....	51	50	....	....	....	....	100	610	840	94	82	25
18....	51	50	....	....	....	....	125	780	680	92	75	24
19....	49	50	....	....	....	....	115	1080	640	82	72	23
20....	49	50	....	....	....	....	122	1460	720	78	62	23
21....	59	45	....	....	....	....	150	1790	680	73	59	25
22....	67	45	....	....	....	....	163	2310	640	73	59	27
23....	65	45	....	....	....	....	139	2180	780	73	55	28
24....	62	45	....	....	....	....	108	1560	680	75	48	30
25....	61	45	....	....	....	....	120	1260	640	82	43	38
26....	61	40	....	....	....	....	120	780	610	75	42	40
27....	55	40	....	....	....	....	92	640	610	70	48	35
28....	51	40	....	....	....	....	96	610	640	68	51	36
29....	54	40	....	....	....	....	90	640	555	94	45	36
30....	59	40	....	....	....	....	88	840	480	88	44	34
31....	56	....	....	....	....	....	....	720	....	98	52	....
Total	1682	1416	....	....	....	....	2778	21816	22700	4889	1759	965
Mean.	54.3	47.2	35	30	30	40	92.6	704	757	158	56.7	32.2
Max...	68	58	....	....	....	....	163	2310	990	456	86	54
Min...	39	....	....	....	....	....	....	90	480	68	42	23
Acre-ft.	3340	2810	2150	1840	1730	2460	5510	43300	45000	9720	3490	1920

Unless otherwise noted, all discharges are in cubic feet per second.

ARKANSAS RIVER DRAINAGE

ARKANSAS RIVER AT GRANITE

Location—At Granite in Sec. 31, T. 11 S., R. 79 W.

Records Available—May 1, 1897, to September 10, 1899; April 6, 1910, to September 30, 1932.

Gage—Automatic recording gage.

Accuracy—Records considered good.

Co-operation—Station maintained in co-operation with the Arkansas Valley Ditch Association.

ARKANSAS RIVER AT SALIDA

Location—In the City Park at Salida.

Records Available—April 11, 1895, to October 31, 1903; November 3, 1909, to September 30, 1932.

Gage—Automatic recording gage.

Accuracy—Records considered good.

ARKANSAS RIVER AT CANON CITY

Location—Opposite the Southern Colorado Power Plant at Canon City.

Records Available—May 1, 1888, to September 30, 1932.

Gage—Automatic recording gage.

Accuracy—Records considered good.

ARKANSAS RIVER AT PUEBLO

Location—At South Side water-works intake.

Records Available—May 1, 1885, to September 30, 1886; September 19, 1894, to September 30, 1932. A station was maintained 9 miles above Pueblo from June 1 to September 30, 1887, and May 1 to August 31, 1889.

Gage—Automatic recording gage.

Accuracy—Records considered good.

Co-operation—Station maintained in co-operation with the Arkansas Valley Ditch Association.

ARKANSAS RIVER NEAR NEPESTA

Location—At Oxford Farmers Canal Company's dam in Sec. 31, T. 21 S., R. 60 W. Records corrected for Oxford Farmers Canal waste water from 1918 to 1926. Records not corrected for waste water from 1927 to date.

Records Available—September 8, 1897, to October 31, 1903; July 14, 1909, to November 30, 1912; January 1, 1914, to September 30, 1932. From 1918 to June 4, 1921, station maintained at Nepesta.

Gage—Automatic recording gage.

Accuracy—Results poor.

Co-operation—Station maintained in co-operation with Arkansas Valley Ditch Association.

ARKANSAS RIVER AT LA JUNTA

Location—At East Bridge in La Junta.

Records Available—May 20 to August 31, 1889; December 5, 1893, to December 31, 1895; 1899 to 1901; April 7 to October 31, 1903; August 27 to November 30, 1908; April 11, 1912, to September 30, 1932. This station has been maintained at different places during this time, but the records are comparable.

Gage—Automatic recording gage.

Accuracy—Records considered fair.

Co-operation—Station maintained in co-operation with the Arkansas Valley Ditch Association.

ARKANSAS RIVER AT LAMAR

Location—At highway bridge one mile north of Lamar.

Records Available—May 11, 1913, to September 30, 1932.

Gage—Automatic recording gage.

Accuracy—Records considered fair.

Co-operation—Station maintained in co-operation with the Arkansas Valley Ditch Association.

ARKANSAS RIVER AT HOLLY

Location—At highway bridge half mile southeast of Holly in Sec. 14, T. 23 S., R. 23 W.

Records Available—October 15, 1907, to September 30, 1932.

Gage—Automatic recording gage.

Accuracy—Records considered good.

Co-operation—Station maintained in co-operation with the Arkansas Valley Ditch Association.

SOUTH FORK ARKANSAS RIVER NEAR SALIDA

Location—In Sec. 6, T. 49 N., R. 9 E., near mouth.

Records Available—April 1, 1922, to December 31, 1924; June 9, 1929, to September 30, 1932.

Gage—Automatic recording gage.

Accuracy—Records considered good.

GRAPE CREEK NEAR WESTCLIFFE

Location—In Sec. 36, T. 21 S., R. 73 W., at weir one mile above DeWeese Reservoir.

Records Available—December 1, 1924, to June 30, 1928; March 25, 1930, to September 30, 1932.

Gage—Automatic recording gage.

Accuracy—Records considered good.

ST. CHARLES RIVER AT BURNT MILL CROSSING

Location—In Sec. 8, R. 66 W., T. 23 S., at highway bridge at Burnt Mill Crossing.

Records Available—March, 1923, to September 30, 1932.

Gage—Automatic recording gage.

Accuracy—Records considered fair.

HUERFANO RIVER AT MANZANARES CROSSING

Location—In Sec. 5, T. 27 S., R. 71 W., at ford 4 miles above Redwing.

Records Available—July 14, 1923, to September 30, 1932.

Gage—Automatic recording gage.

Accuracy—Records considered fair.

CUCHARA RIVER NEAR LA VETA

Location—In Sec. 5, T. 30 S., R. 68 W., six miles above La Veta at Goemmer's Ranch.

Records Available—January 1, 1923, to September 30, 1932.

Gage—Automatic recording gage.

Accuracy—Records considered fair.

PURGATOIRE RIVER AT TRINIDAD

Location—One-fourth mile above Animas Street bridge in Trinidad.

Records Available—1897 to 1899, 1905 to 1912, April 1, 1916, to September 30, 1932.

Gage—Automatic recording gage.

Accuracy—Records considered fair.

PURGATOIRE RIVER AT NINE MILE DAM

Location—In Sec. 32, T. 26 S., R. 54 W., just above Nine Mile Dam and fifteen miles south of La Junta.

Records Available—October 1, 1924, to September 30, 1932.

Gage—Automatic recording gage.

Accuracy—Records considered fair.

PURGATOIRE RIVER NEAR MOUTH NEAR LAS ANIMAS

Location—In Sec. 23, T. 23 S., R. 52 W., on highway bridge two miles southeast of Las Animas.

Records Available—April 1, 1922, to September 30, 1931. Gage station discontinued September 30, 1931, and moved to Highland Dam. Unable to obtain reliable records at mouth due to washing of banks.

Gage—Automatic recording gage.

Accuracy—Records considered fair.

PURGATOIRE RIVER AT HIGHLAND DAM

Location—In Sec. 1, T. 25 S., R. 53 W., at west end Highland Dam situated 11 miles southeast of Las Animas.

Records Available—October 1, 1931, to September 30, 1932. This station established at this point instead of at the mouth on account of greater accuracy of records.

Gage—Automatic recording gage.

Accuracy—Records considered good.

WILD HORSE CREEK AT MOUTH NEAR HOLLY

Location—In Sec. 15, T. 23 S., R. 42 W., one-fourth mile southeast of Holly. This is not included in Arkansas River record at Holly.

Records Available—October 1, 1922, to September 30, 1932.

Gage—Automatic recording gage.

Accuracy—Records considered fair.

HOLLY DRAIN NEAR COOLIDGE, KANSAS

Location—In Sec. 16, T. 23 S., R. 43 W., where Santa Fe R. R. crosses Cheyenne Creek.

Records Available—January 1, 1924, to September 30, 1932.

Gage—Automatic recording gage.

Accuracy—Records considered good.

Note: Some waste water and water from Cheyenne Creek included in this table.

Discharge of Arkansas River at Granite for Year Ending Sept. 30, 1931.
Drainage Area, 431 Square Miles. Altitude, 8,930 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	172	90	76	....	....	70	60	151	694	634	260	145
2....	166	90	65	....	....	70	56	148	736	571	252	137
3....	160	92	56	....	....	70	52	299	724	566	242	125
4....	157	87	54	....	....	76	54	457	700	550	227	122
5....	157	90	56	....	....	70	58	457	700	476	231	117
6....	178	92	54	....	....	65	75	326	760	410	245	117
7....	169	87	54	....	....	65	102	154	819	405	249	117
8....	154	90	54	....	....	65	122	160	833	387	238	115
9....	148	83	56	....	....	65	99	299	760	317	193	107
10....	148	85	61	....	....	65	102	476	712	317	176	107
11....	154	87	65	....	....	60	125	433	688	313	164	104
12....	142	87	65	....	....	60	145	396	582	292	157	92
13....	137	85	61	....	....	60	234	356	566	272	154	92
14....	134	83	58	....	....	60	242	360	550	249	148	89
15....	131	81	50	....	....	60	224	438	582	242	145	97
16....	134	74	53	....	....	58	213	605	646	256	176	92
17....	115	87	48	....	....	75	224	664	664	300	189	97
18....	94	92	51	....	....	80	252	730	611	309	176	99
19....	92	83	54	....	....	77	252	628	571	272	176	112
20....	90	61	51	....	....	64	231	566	550	249	170	131
21....	87	67	....	....	....	69	200	523	533	224	160	120
22....	104	61	....	....	....	62	193	378	544	256	154	112
23....	110	65	....	....	....	72	189	288	617	272	157	107
24....	102	65	....	....	....	69	183	369	599	284	157	115
25....	104	67	....	....	....	67	186	507	571	220	151	112
26....	110	74	....	....	....	54	183	646	571	220	151	109
27....	94	72	....	....	....	54	186	682	588	220	145	109
28....	104	74	....	....	....	56	180	605	623	206	137	107
29....	92	74	....	....	....	54	157	582	577	210	128	102
30....	94	79	....	....	....	54	157	664	605	213	128	89
31....	87	....	....	....	....	56	....	640	....	224	128	....
Total	3920	2404	....	....	....	1997	4736	13987	11976	9936	5564	3296
Mean.	126	80.1	53.5	54.5	77.4	64.4	158	451	399	321	179	110
Max...	178	92	76	....	....	....	252	730	833	634	260	145
Min...	87	61	....	....	....	....	52	148	533	206	128	89
Acre-ft.	7750	4770	3290	3350	4300	3960	9400	27700	23700	19700	11000	6550

Discharge of Arkansas River at Granite for Year Ending Sept. 30, 1932.
Drainage Area, 431 Square Miles. Altitude, 8,930 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	92	80	66	....	....	68	94	167	903	1170	513	203
2....	92	80	70	....	....	68	125	217	1010	1070	462	196
3....	102	75	72	....	....	68	117	249	1060	1030	437	189
4....	99	77	75	....	....	68	104	256	1080	1130	427	186
5....	97	73	75	....	....	68	120	252	1080	1060	442	183
6....	97	71	....	....	....	69	97	245	994	903	427	167
7....	92	67	....	....	....	69	71	224	955	875	394	180
8....	92	69	....	....	....	69	77	231	994	833	375	170
9....	87	69	....	....	....	69	80	264	1020	819	343	160
10....	80	54	....	....	....	69	125	292	1070	813	347	148
11....	80	71	....	....	....	70	137	321	1090	854	375	132
12....	87	73	....	....	....	70	145	342	1130	882	379	140
13....	87	64	....	64	....	70	164	382	1160	826	370	193
14....	80	85	....	....	....	70	167	476	1190	634	356	186
15....	80	80	....	....	....	70	148	544	1170	776	366	173
16....	77	80	....	....	....	70	160	566	1250	795	408	160
17....	77	69	....	....	....	70	193	646	1250	907	422	140
18....	102	71	....	....	65	70	180	760	1250	838	347	132
19....	77	67	....	....	....	71	154	882	1240	764	321	126
20....	82	58	....	....	....	75	180	826	1220	723	288	140
21....	97	51	....	....	....	64	206	833	1160	683	304	140
22....	94	58	....	....	....	62	193	1030	1220	660	338	148
23....	87	56	....	....	....	58	148	1110	1270	706	300	134
24....	82	54	....	....	....	60	117	1080	1270	671	309	140
25....	85	52	....	....	....	67	128	1120	1460	613	284	160
26....	71	50	....	....	....	67	151	1050	1560	596	245	137
27....	49	52	....	....	....	62	125	948	780	556	249	129
28....	51	56	....	....	....	73	131	882	1020	534	245	121
29....	60	60	....	....	....	67	128	955	1270	636	256	110
30....	56	62	....	....	....	58	131	963	1180	545	227	105
31....	64	....	....	....	....	71	....	868	....	384	213	....
Total	2555	1984	....	....	....	2100	4096	18981	34306	24286	10769	4628
Mean	82.4	66.1	71.5	63.5	65.4	67.7	137	612	1140	783	347	154
Max.	102	85	....	....	....	....	206	1120	1560	1170	513	203
Min...	49	....	....	....	....	....	71	167	780	384	213	105
Acre-ft	5070	3930	4400	3900	3760	4160	8150	37600	67800	48100	21300	9160

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of Arkansas River at Salida for Year Ending Sept. 30, 1931.
Drainage Area, 1,210 Square Miles. Altitude, 7,038 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	342	270	238	208	196	201	205	270	987	870	404	249
2....	369	266	242	211	200	199	208	268	1060	829	376	268
3....	351	278	234	208	204	201	203	252	1120	747	344	254
4....	329	278	242	186	208	201	197	459	1050	656	314	246
5....	312	274	238	178	211	205	197	327	980	651	314	239
6....	320	278	242	186	215	199	199	330	1020	534	314	236
7....	346	274	246	182	215	199	214	311	1140	466	320	236
8....	338	258	242	186	223	197	229	252	1250	470	344	231
9....	333	262	242	186	219	201	234	254	1120	426	361	226
10....	333	262	250	182	211	205	219	467	934	368	320	224
11....	355	262	258	175	204	208	210	530	834	379	314	224
12....	351	270	258	178	200	214	229	500	747	358	293	222
13....	346	270	250	178	204	219	246	446	677	351	296	217
14....	338	282	246	182	196	219	317	426	693	327	284	214
15....	324	282	227	186	196	214	317	474	677	340	273	210
16....	312	266	211	189	196	212	299	662	736	334	284	212
17....	320	303	230	182	196	214	299	775	883	630	327	212
18....	307	329	208	175	196	214	305	928	769	500	320	212
19....	307	329	208	171	200	212	323	915	672	426	314	214
20....	299	299	204	171	200	210	323	804	662	390	308	226
21....	274	262	196	182	211	208	302	688	688	340	284	229
22....	286	262	189	186	204	219	290	552	646	311	270	224
23....	307	258	193	186	196	222	284	419	693	334	268	212
24....	303	266	193	189	196	214	276	422	730	320	265	210
25....	295	282	193	186	204	212	270	584	747	327	262	222
26....	299	278	193	182	204	208	270	747	747	299	259	229
27....	299	270	204	189	204	199	273	908	741	305	257	229
28....	295	274	193	193	200	201	276	816	741	308	257	231
29....	291	262	200	196	....	205	287	714	725	334	254	222
30....	282	246	204	196	....	203	270	769	781	311	249	222
31....	274	....	204	204	....	203	....	864	....	358	244	....
Total	9837	8252	6878	5789	5709	6438	7771	17133	25250	13599	9293	6802
Mean.	317	275	222	187	204	208	259	553	842	439	300	227
Max...	369	329	258	211	223	222	323	928	1250	870	404	268
Min...	274	246	189	171	196	197	197	252	646	299	244	210
Acre-ft.	19500	16400	13600	11500	11300	12800	15400	34000	50100	27000	18400	13500

Discharge of Arkansas River at Salida for Year Ending Sept. 30, 1932.
Drainage Area, 1,210 Square Miles. Altitude, 7,038 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	219	194	214	210	184	222	160	285	1410	1850	995	532
2....	217	199	217	212	182	210	174	316	1390	2110	964	491
3....	217	199	219	212	180	200	195	346	1480	1940	886	465
4....	219	199	222	201	176	193	181	350	1570	1900	857	424
5....	217	199	222	197	184	183	181	362	1510	1910	801	408
6....	212	199	226	190	186	188	193	370	1410	1680	745	392
7....	210	201	226	190	197	202	176	346	1330	1620	694	367
8....	208	194	226	190	186	195	172	339	1310	1490	610	344
9....	208	197	236	190	197	186	170	339	1370	1460	605	325
10....	205	197	236	190	192	188	168	386	1410	1470	546	312
11....	203	192	234	182	184	193	190	407	1450	1510	556	312
12....	203	205	236	186	184	186	200	476	1550	1520	575	288
13....	205	205	212	186	182	178	207	530	1710	1580	560	299
14....	201	199	219	184	190	178	224	629	1810	1350	556	302
15....	199	210	214	182	178	183	219	708	1760	1330	551	288
16....	199	212	212	186	180	178	214	779	1900	1350	738	290
17....	194	205	214	186	180	176	246	1100	1900	1510	920	276
18....	194	203	229	182	180	172	249	1120	1870	1440	656	274
19....	203	205	229	182	180	172	227	1360	1930	1350	722	266
20....	192	205	224	182	183	178	214	1350	1960	1260	600	260
21....	194	222	231	182	186	174	227	1300	1820	1190	600	268
22....	199	212	226	180	195	160	232	1580	1900	1100	667	263
23....	190	214	212	182	190	158	222	1660	2020	1070	615	252
24....	184	203	210	180	195	164	198	1560	1970	1120	620	242
25....	180	192	208	178	198	168	193	1560	2240	995	575	266
26....	178	208	205	182	198	164	212	1350	2380	977	560	285
27....	176	210	205	180	210	158	212	1300	1730	904	590	276
28....	176	214	214	176	214	158	244	1250	1460	869	694	279
29....	178	217	210	176	217	162	267	1580	2040	1010	728	282
30....	184	210	203	180	....	156	273	1500	1970	1170	585	276
31....	188	....	197	182	....	156	....	1450	....	750	580	....
Total	6152	6121	6788	5798	5488	5539	6240	27988	51560	42785	20951	9604
Mean.	198	204	219	187	189	179	208	903	1720	1380	676	320
Max...	219	222	236	212	217	222	273	1660	2380	2110	995	532
Min...	176	192	197	176	176	156	160	285	1310	750	546	242
Acre-ft.	12200	12100	13500	11500	10900	11000	12400	55500	102000	84800	41600	19000

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of Arkansas River at Canon City for Year Ending Sept. 30, 1931.
Drainage Area, 3,090 Square Miles. Altitude, 5,363 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	295	287	372	322	304	308	270	351	1070	906	361	211
2....	300	291	378	327	332	287	451	513	1170	895	394	211
3....	313	304	356	342	342	304	445	519	1260	853	308	220
4....	304	295	356	337	346	313	356	422	1240	763	266	208
5....	300	274	361	304	332	313	351	584	1170	735	248	192
6....	287	274	372	318	313	300	422	576	1130	647	252	184
7....	287	279	361	337	308	259	500	547	1240	513	259	181
8....	295	266	367	300	313	262	532	351	1390	468	283	184
9....	283	255	367	318	327	270	445	318	1310	494	378	168
10....	291	266	372	322	322	304	405	351	1150	451	295	163
11....	300	266	378	300	322	291	356	554	1100	405	259	156
12....	300	262	383	291	300	259	351	532	996	388	241	156
13....	304	266	356	291	304	274	322	481	884	361	266	151
14....	304	270	372	300	295	274	322	410	906	346	259	148
15....	291	274	327	308	313	270	372	422	918	327	230	153
16....	291	287	291	308	308	270	356	539	792	300	208	144
17....	287	295	308	313	291	270	327	853	929	308	234	146
18....	283	342	287	295	270	283	295	1010	853	680	255	151
19....	283	367	262	279	266	304	262	1010	735	487	248	160
20....	283	383	262	270	270	300	255	1070	663	433	259	208
21....	266	356	259	313	287	300	234	1100	672	346	244	230
22....	266	346	255	313	295	322	220	1200	672	295	255	208
23....	270	356	259	304	287	361	234	744	639	279	295	195
24....	283	378	283	308	270	337	214	532	707	304	300	195
25....	274	410	291	308	274	322	230	584	716	300	252	192
26....	283	405	283	287	255	313	237	823	726	351	234	211
27....	291	383	308	287	259	274	220	1060	726	287	234	237
28....	291	378	313	300	283	252	208	1080	744	287	217	237
29....	300	367	322	295	....	270	262	918	744	304	201	217
30....	291	351	332	291	....	283	279	843	754	308	204	211
31....	291	....	332	291	....	259	....	1010	....	266	198	....
Total	8987	9533	10125	9479	8388	9008	9733	21307	28006	14087	8137	5628
Mean.	290	318	327	306	300	291	324	687	934	454	262	188
Max...	313	410	383	342	346	361	532	1200	1390	906	394	237
Min...	266	255	255	270	255	252	208	318	639	266	198	144
Acre-ft.	17800	18900	20100	18800	16700	17900	19300	42200	55600	27900	16100	11200

Discharge of Arkansas River at Canon City for Year Ending Sept. 30, 1932.
Drainage Area, 3,090 Square Miles. Altitude, 5,363 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	212	186	345	237	308	295	275	450	1420	2170	854	676
2....	205	176	321	278	321	290	290	393	1490	2300	976	666
3....	202	182	335	278	295	252	280	393	1620	2240	897	605
4....	202	189	321	269	230	273	280	404	1720	2090	832	572
5....	205	205	326	273	230	265	256	393	1720	2360	772	534
6....	212	189	312	257	312	261	256	410	1640	2030	752	498
7....	205	176	340	233	330	261	275	430	1490	1780	752	470
8....	195	186	385	261	308	265	234	393	1430	1660	732	416
9....	173	176	412	304	295	265	170	381	1490	1620	694	393
10....	170	179	385	299	340	257	193	416	1520	1590	666	370
11....	170	189	365	252	290	265	167	436	1590	1570	638	358
12....	198	189	350	261	257	252	182	464	1660	1570	772	347
13....	192	195	321	265	265	240	193	527	1780	1570	752	320
14....	182	198	286	252	278	226	204	622	1950	1530	647	331
15....	176	192	308	222	278	195	234	792	1900	1280	657	331
16....	176	189	350	248	282	189	201	988	2040	1320	704	315
17....	179	192	380	269	273	195	201	988	2030	1450	1120	315
18....	176	195	407	269	261	186	252	1390	2080	1530	1320	304
19....	176	198	407	278	248	168	238	1700	2140	1430	952	280
20....	186	189	365	286	248	165	212	1900	2190	1290	812	256
21....	176	226	391	261	265	204	197	1760	2080	1220	772	261
22....	168	215	396	248	261	234	204	1900	2120	1290	832	270
23....	176	176	335	252	248	225	243	2090	2290	1020	832	261
24....	173	248	312	219	252	243	221	2080	2320	1060	723	261
25....	192	226	308	192	257	261	185	2040	2640	1040	704	285
26....	176	252	304	261	248	315	185	1980	3040	929	713	261
27....	179	278	278	278	248	290	294	1860	2700	940	657	261
28....	173	304	290	286	295	280	320	1660	1430	854	752	247
29....	168	330	295	219	290	280	347	1600	2190	968	822	234
30....	173	290	248	222	....	294	410	1740	2290	1470	752	238
31....	173	....	233	265	....	275	....	1690	....	1080	694	....
Total	5719	6315	10411	7994	8013	7666	7190	34270	58000	46251	24554	10936
Mean.	184	210	336	258	276	247	240	1110	1930	1490	792	365
Max...	212	330	412	304	340	315	410	2090	3040	2360	1320	676
Min...	168	176	233	192	230	165	167	381	1420	854	638	234
Acre-ft.	11300	12500	20700	15900	15900	15200	14300	68200	115000	91600	48700	21700

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of Arkansas River at Pueblo for Year Ending Sept 30, 1931.
Drainage Area, 4,820 Square Miles. Altitude, 4,675 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Aprii	May	June	July	Aug.	Sept.
1....	269	354	306	322	188	248	261	301	824	707	122	746
2....	248	346	370	294	216	194	322	529	948	707	343	216
3....	262	298	322	267	216	122	462	844	1010	854	210	122
4....	262	338	346	267	222	136	428	670	958	784	146	122
5....	276	404	346	294	216	188	308	717	1090	652	150	88
6....	290	338	338	235	205	235	267	726	1030	512	104	76
7....	290	322	354	280	194	222	358	661	1000	412	57	66
8....	322	370	322	216	199	205	521	495	1090	294	122	69
9....	283	338	338	322	216	199	487	358	1280	287	166	72
10....	255	346	314	322	194	205	366	420	1260	274	216	76
11....	269	387	338	294	141	301	329	555	1200	322	182	66
12....	298	404	322	267	160	242	301	625	1080	301	182	60
13....	290	379	354	182	160	280	280	607	916	261	122	60
14....	283	379	338	210	216	301	235	470	895	205	122	66
15....	276	404	370	267	229	229	160	397	905	166	160	63
16....	283	354	346	267	222	131	205	470	726	155	160	60
17....	298	379	330	267	216	88	177	698	844	131	108	45
18....	283	362	338	254	182	274	171	679	844	329	146	48
19....	262	512	306	182	112	329	150	958	643	315	146	84
20....	290	531	306	235	182	322	205	1190	538	287	126	80
21....	314	512	314	274	166	301	216	1280	521	205	141	117
22....	298	484	306	294	182	274	199	1280	564	194	117	166
23....	290	456	314	308	216	248	177	1030	572	92	131	177
24....	276	413	306	267	155	280	166	670	572	76	141	150
25....	283	413	298	267	150	274	182	794	529	96	104	126
26....	255	447	322	274	141	280	235	874	616	112	88	126
27....	248	404	298	254	108	261	261	948	572	117	92	146
28....	255	338	306	280	210	188	199	1040	504	88	96	171
29....	290	290	306	242	....	199	182	958	487	104	88	205
30....	262	314	306	235	....	294	280	916	538	150	84	194
31....	269	....	298	182	....	301	....	937	....	69	88	....
Total	8629	11616	10078	8121	5214	7351	8090	23097	24556	9258	4260	3863
Mean.	278	387	325	262	186	237	270	745	819	299	137	129
Max...	322	531	....	....	229	329	521	1280	1280	854	343	746
Min...	248	290	....	....	108	88	150	301	487	69	57	45
Acre-ft.	17100	23000	20000	16100	10300	14600	16100	45800	48700	18400	8420	7680

Discharge of Arkansas River at Pueblo for Year Ending Sept. 30, 1932.
Drainage Area, 4,820 Square Miles. Altitude, 4,675 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	155	188	290	242	220	254	110	358	1330	2400	820	560
2....	166	199	294	172	230	236	106	402	1200	2150	886	522
3....	117	199	254	175	240	172	115	332	1370	2230	820	447
4....	136	229	216	172	250	167	132	350	1480	2000	712	384
5....	104	248	279	206	254	183	166	315	1470	2040	660	384
6....	104	254	289	183	254	172	166	315	1370	1900	522	367
7....	108	216	221	172	242	178	193	367	1200	1680	456	350
8....	117	248	259	206	254	218	199	315	1110	1520	438	232
9....	104	242	230	230	194	295	161	273	1130	1410	384	265
10....	141	205	300	230	254	225	84	265	1230	1360	393	298
11....	150	216	269	254	194	225	70	298	1290	1430	341	273
12....	150	210	239	230	136	200	48	307	1370	1430	589	209
13....	155	182	163	254	140	212	46	358	1500	1470	512	166
14....	205	177	235	308	131	218	85	438	1680	1360	350	166
15....	194	188	198	322	136	189	123	551	1660	1060	367	180
16....	131	188	189	212	140	127	144	650	1610	1010	670	144
17....	136	171	244	218	156	118	127	744	1770	1030	1450	144
18....	117	182	284	172	151	89	144	886	1800	1200	853	158
19....	104	177	323	230	145	71	127	1180	1890	1190	1230	202
20....	160	177	317	194	140	114	115	1440	2040	1140	723	194
21....	261	190	244	140	114	100	78	1120	2120	1270	610	202
22....	222	350	290	178	109	101	60	1500	2020	1180	942	216
23....	141	212	310	183	127	88	119	1830	2060	908	1080	216
24....	122	250	270	175	118	64	187	1920	2180	886	744	187
25....	166	250	260	175	145	77	151	1860	2310	1050	610	232
26....	177	250	250	225	167	106	106	1770	2890	842	748	224
27....	182	250	240	250	200	193	131	1760	3350	798	1100	384
28....	199	275	236	240	218	150	273	1620	2160	831	620	224
29....	248	275	242	200	254	119	249	1470	2130	776	660	194
30....	222	280	254	200	....	137	315	1520	2520	2680	640	194
31....	194	....	248	210	....	132	....	1580	....	1530	1110	....
Total	4888	6678	7937	6558	5313	4930	4130	28094	53240	43761	22040	7918
Mean.	158	223	256	212	183	159	138	906	1770	1410	711	264
Max...	261	....	....	....	....	....	315	1920	3350	2680	1450	560
Min...	104	171	....	....	109	64	46	265	1110	776	341	144
Acre-ft.	9720	13300	15700	13000	10500	9780	8210	55700	105000	86700	43700	15700

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of Arkansas River Near Nepesta for Year Ending Sept. 30, 1931.
Drainage Area, ... Square Miles. Altitude, ... Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	246	278	....	....	....	79	228	356	1070	492	45	54
2....	340	278	....	....	....	149	110	626	1710	732	72	427
3....	325	....	....	....	....	221	173	1050	1420	749	256	120
4....	434	....	....	....	....	210	240	1030	1300	405	156	120
5....	309	....	....	....	....	228	87	866	1350	301	113	110
6....	348	....	....	....	....	199	9	454	1510	467	113	83
7....	253	....	....	....	....	234	188	376	1530	479	75	35
8....	259	....	....	....	....	194	415	240	1280	317	83	20
9....	278	....	....	....	....	240	542	301	1480	194	132	16
10....	246	....	....	....	....	210	376	333	1510	178	170	23
11....	246	....	....	....	....	215	317	385	1580	167	195	27
12....	137	....	....	....	....	240	253	309	1280	204	160	52
13....	141	....	....	....	....	340	253	246	1260	158	110	32
14....	141	....	....	....	....	425	259	178	1130	90	56	32
15....	113	....	....	....	....	425	240	194	900	37	0	12
16....	110	....	....	....	....	325	415	376	833	27	30	5
17....	117	....	....	....	....	259	87	504	816	37	100	30
18....	128	....	....	....	....	234	228	799	866	48	93	37
19....	107	....	....	....	....	425	246	1010	444	268	83	20
20....	128	....	....	....	....	479	215	1240	309	356	106	45
21....	167	....	....	....	....	555	265	1890	221	268	106	35
22....	124	....	....	....	....	517	272	1640	366	175	93	20
23....	120	....	....	....	....	467	215	1440	366	152	103	89
24....	117	....	....	....	....	405	210	1260	265	86	165	128
25....	120	....	....	....	....	356	215	1600	376	0	160	106
26....	104	....	....	....	....	356	253	1840	479	0	136	54
27....	79	....	....	....	....	395	259	1690	517	0	75	78
28....	90	....	....	....	....	259	286	1840	479	30	52	113
29....	104	....	....	....	....	215	215	1640	467	37	50	106
30....	188	....	....	....	....	183	259	1370	405	45	41	120
31....	204	....	....	....	....	340	....	866	....	86	37	....
Total	5823	....	....	....	....	9379	7330	27949	27519	6585	3166	2149
Mean.	188	....	....	....	....	302	244	902	917	212	102	71.6
Max...	434	....	....	....	....	555	542	1890	1710	749	256	427
Min...	79	....	....	....	....	79	9	178	221	0	0	5
Acre-ft.	11600	....	....	....	....	18600	14500	55500	54600	13000	6270	4260

Discharge of Arkansas River at Nepesta for Year Ending Sept. 30, 1932.
Drainage Area, ... Square Miles. Altitude, ... Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	153	256	....	....	....	332	173	287	1120	2450	768	972
2....	120	214	....	....	....	382	139	313	972	1660	906	636
3....	168	188	....	....	....	339	158	326	1020	2070	884	590
4....	134	214	....	....	....	287	144	313	1180	1750	768	572
5....	90	203	....	....	....	339	163	326	1200	1400	600	493
6....	94	220	....	....	....	326	220	306	1280	1350	572	375
7....	86	256	....	....	....	300	208	326	1280	1240	493	313
8....	74	256	....	....	....	300	250	319	1090	1010	346	287
9....	82	287	....	....	....	250	281	294	1010	922	306	274
10....	64	326	....	....	....	250	203	268	1210	872	268	281
11....	70	326	....	....	....	200	129	244	1200	1080	250	281
12....	110	287	....	....	....	200	106	262	1200	1140	300	256
13....	163	274	....	....	....	200	74	250	1350	1120	581	220
14....	98	244	....	....	....	175	51	281	1660	1040	600	134
15....	173	262	....	....	....	160	21	319	1750	947	502	90
16....	203	214	....	....	....	158	64	382	1300	838	502	35
17....	124	226	....	....	....	110	67	537	1480	838	3240	30
18....	51	220	....	....	....	129	82	590	1550	897	1090	24
19....	13	250	....	....	....	110	183	884	1360	922	1380	24
20....	41	244	....	....	....	82	168	1320	1500	884	747	70
21....	78	226	....	....	....	129	120	1320	1430	960	685	67
22....	148	....	....	....	....	148	78	1280	1460	849	674	86
23....	158	....	....	....	....	139	98	1440	1550	803	849	106
24....	208	....	....	....	....	102	203	1680	1770	636	737	78
25....	178	....	....	....	....	54	193	1550	1660	934	803	41
26....	200	....	....	....	....	82	163	1360	1640	636	627	250
27....	232	....	....	....	....	153	139	1600	2360	590	947	354
28....	244	....	....	....	....	198	214	1300	1550	581	803	382
29....	281	....	....	....	....	173	274	1040	1320	554	627	420
30....	313	....	....	....	....	153	250	1050	2270	7810	627	368
31....	287	....	....	....	....	183	....	1010	....	2320	1010	....
Total	4438	....	....	....	....	6143	4616	22777	42722	41103	23546	8109
Mean.	143	250	....	....	....	198	154	735	1420	1330	760	270
Max...	313	....	....	....	....	382	281	1680	2360	7810	3240	972
Min...	13	....	....	....	....	54	21	244	972	554	250	24
Acre-ft.	8790	14900	....	....	....	12200	9160	45200	84500	81800	46700	16100

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of Arkansas River at La Junta for Year Ending Sept. 30, 1931.
Drainage Area, 12,200 Square Miles. Altitude, 4,052 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	66	71	141	19	13	40	243	20	125	85	43	56
2....	58	66	161	20	10	26	243	60	167	49	38	56
3....	161	80	110	21	9	23	340	280	156	161	35	54
4....	95	80	52	17	9	21	260	540	60	300	41	31
5....	192	66	37	17	15	24	74	364	156	320	43	37
6....	85	60	38	15	10	27	34	377	300	260	45	40
7....	77	49	68	15	8	56	21	340	214	71	50	43
8....	63	49	50	13	6	23	25	250	141	63	49	50
9....	54	60	50	12	11	22	40	192	184	47	45	54
10....	50	68	60	12	13	19	45	250	221	40	38	54
11....	63	49	49	12	12	21	45	214	310	28	43	49
12....	58	58	49	12	13	26	54	214	270	66	45	50
13....	49	66	88	11	13	27	92	243	340	38	50	50
14....	74	80	58	11	13	22	74	192	350	37	49	49
15....	66	37	50	21	14	20	41	161	125	49	41	50
16....	54	43	52	22	15	23	37	63	167	41	49	45
17....	54	49	49	16	16	35	103	35	300	49	47	45
18....	146	49	45	11	22	40	74	85	340	41	43	47
19....	310	50	40	12	41	38	68	260	473	47	43	49
20....	300	52	199	33	38	50	68	522	364	38	38	49
21....	228	350	199	28	41	43	56	576	432	40	45	45
22....	103	375	37	14	40	54	63	250	300	56	47	52
23....	47	375	41	9	37	40	88	151	130	41	52	66
24....	52	375	37	15	28	34	63	58	110	33	54	63
25....	52	300	49	12	27	43	33	63	77	43	60	58
26....	66	250	35	11	28	30	38	340	30	49	63	45
27....	95	250	21	11	33	28	40	391	82	58	54	37
28....	60	220	22	11	30	35	58	290	85	56	54	41
29....	58	210	18	13	....	156	66	377	33	38	54	43
30....	60	200	17	19	....	177	33	300	80	41	52	43
31....	71	....	16	11	....	184	....	161	....	40	52	....
Total	2967	4087	1938	476	565	1407	2519	7619	6122	2325	1462	1451
Mean.	95.7	136	62.5	15.4	20.2	45.4	84.0	246	204	75.0	47.2	48.4
Max...	310	375	199	33	41	184	340	576	473	320	63	66
Min...	49	37	16	9	6	19	21	20	33	28	35	31
Acre-ft.	5880	8090	3840	947	1120	2790	5000	15100	12100	4610	2900	2880

Discharge of Arkansas River at La Junta for Year Ending Sept. 30, 1932.
Drainage Area, 12,200 Square Miles. Altitude, 4,052 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	21	23	22	60	65	38	10	23	532	478	654	341
2....	21	23	37	60	70	25	15	59	632	274	766	238
3....	21	19	34	35	50	18	17	107	572	665	654	157
4....	21	18	37	20	84	18	18	90	562	665	451	211
5....	19	30	38	12	78	23	22	59	505	505	410	111
6....	19	34	34	12	36	38	24	59	469	632	334	52
7....	21	43	69	12	84	19	34	100	505	562	370	30
8....	19	43	100	12	40	15	40	72	562	505	222	28
9....	16	20	90	13	16	57	66	42	532	514	111	25
10....	15	18	93	16	20	60	64	31	552	523	64	27
11....	16	37	78	13	21	60	54	34	402	469	38	26
12....	16	36	72	14	28	60	26	50	592	514	40	36
13....	13	26	104	13	40	60	23	52	532	542	37	32
14....	15	26	72	17	32	80	37	59	552	582	327	43
15....	17	26	40	19	28	280	36	78	542	602	134	42
16....	17	30	37	54	34	93	31	139	562	460	69	25
17....	16	20	31	26	28	22	28	115	505	582	268	21
18....	17	22	37	72	30	15	32	148	572	532	487	22
19....	16	28	34	25	24	14	30	286	612	523	836	30
20....	16	30	23	22	28	16	30	478	348	523	687	43
21....	16	24	32	18	22	17	30	552	148	386	523	43
22....	15	30	26	19	20	17	28	442	469	232	394	59
23....	18	22	27	21	19	27	37	572	542	96	262	52
24....	36	19	30	18	16	19	37	698	665	410	592	31
25....	21	20	48	18	18	16	34	622	478	327	487	32
26....	16	21	40	16	16	16	31	523	268	496	676	26
27....	18	19	40	18	23	19	34	622	320	334	514	19
28....	18	26	40	18	28	17	66	612	227	206	451	66
29....	24	24	43	30	20	14	42	562	341	126	327	48
30....	25	24	54	54	....	13	20	434	514	676	201	134
31....	37	....	64	60	....	14	....	542	....	3570	139	....
Total	596	781	1526	817	1018	1198	996	8262	14614	17511	11625	2050
Mean.	19.2	26.0	49.2	26.4	35.1	38.6	33.2	267	487	565	375	68 3
Max...	37	43	104	....	....	....	66	698	665	3570	836	341
Min...	13	18	22	....	....	....	10	23	148	96	37	19
Acre-ft.	1180	1550	3030	1620	2020	2370	1980	16400	29000	34700	23100	4060

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of Arkansas River at Lamar for Year Ending Sept. 30, 1931.
Drainage Area, ... Square Miles. Altitude, 3,570 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	8	44	350	....	208	35	270	4	1030	5	3	3
2....	738	47	290	....	192	40	262	4	76	4	3	3
3....	1480	44	270	....	192	20	254	4	10	9	3	2
4....	6980	48	250	....	291	26	280	4	40	5	3	2
5....	2220	49	250	....	270	11	344	5	11	4	3	2
6....	785	44	180	....	239	29	344	5	14	5	3	2
7....	172	49	200	....	200	30	333	5	12	5	3	2
8....	96	47	175	....	186	40	32	4	13	5	3	3
9....	70	47	200	....	169	60	11	4	10	4	4	3
10....	42	40	250	....	126	113	14	4	14	4	4	2
11....	420	44	280	....	158	10	13	5	11	3	4	2
12....	477	37	307	....	215	9	11	5	11	3	4	2
13....	755	37	307	....	88	7	10	4	9	3	3	3
14....	219	44	277	....	66	6	8	4	7	2	3	2
15....	116	43	320	....	54	7	7	4	8	2	3	2
16....	168	39	374	....	69	6	7	4	135	2	3	2
17....	79	43	277	....	72	29	6	4	9	2	3	3
18....	101	34	219	....	66	30	6	4	6	2	3	3
19....	157	34	288	....	69	6	5	4	7	2	3	2
20....	210	70	219	....	12	6	5	4	6	2	3	2
21....	172	125	320	....	10	5	5	19	6	2	3	2
22....	176	150	260	....	6	4	4	69	8	2	3	2
23....	183	150	238	....	7	5	5	20	6	2	3	2
24....	149	200	320	....	5	4	5	18	7	2	3	2
25....	59	200	300	....	5	5	5	50	8	3	3	2
26....	47	300	300	....	6	58	5	5	5	3	3	2
27....	45	300	300	....	6	60	4	5	5	3	3	2
28....	44	350	300	....	36	100	4	4	5	3	3	3
29....	49	350	300	....	....	100	4	5	5	3	3	3
30....	50	350	300	....	....	150	4	33	5	3	3	2
31....	43	....	300	....	....	200	....	981	....	3	3	....
Total	16310	3359	8521	....	3023	1209	2267	1294	1497	102	97	69
Mean.	526	112	275	80.6	108	39.0	75.6	41.7	49.9	3.29	3.13	2.30
Max...	6980	....	374	....	291	....	344	981	1030	9	4	3
Min...	8	34	....	....	5	4	4	4	5	2	3	2
Acre-ft.	32300	6660	16900	4960	6000	2400	4500	2560	2970	202	192	137

Discharge of Arkansas River at Lamar for Year Ending Sept. 30, 1932.
Drainage Area, ... Square Miles. Altitude, 3,570 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	2	3	20	25	30	3	5	2	7	2	1120	4
2....	2	2	20	20	30	3	5	2	6	15	14	4
3....	2	2	17	20	30	3	5	2	6	5	5	4
4....	2	2	17	20	30	3	5	1	6	4	3	4
5....	2	2	17	20	35	4	5	2	7	3	1	2
6....	2	2	16	20	36	4	5	2	6	4	1	2
7....	2	2	18	20	152	8	4	3	6	3	1	3
8....	2	2	19	40	85	6	4	2	5	3	1	2
9....	2	2	19	60	32	6	3	1	5	3	1	2
10....	2	2	16	70	6	5	3	1	6	3	2	3
11....	2	2	24	95	5	4	3	1	6	2	2	3
12....	2	3	15	30	4	4	2	2	126	2	2	3
13....	2	3	15	21	4	4	3	2	17	2	2	3
14....	2	2	11	22	4	10	2	1	4	2	2	3
15....	2	2	10	8	4	39	2	2	4	3	2	3
16....	2	2	17	12	3	8	2	2	3	3	4	2
17....	2	2	16	18	4	8	1	2	2	3	5	2
18....	2	2	20	12	3	7	2	2	4	3	3	2
19....	2	3	20	13	3	6	2	3	60	3	3	2
20....	2	5	32	7	3	6	2	3	100	3	25	1
21....	2	4	26	5	3	131	2	3	789	3	4	1
22....	2	11	20	12	3	15	1	4	4	5	4	1
23....	2	10	27	11	3	8	4	4	1	25	3	2
24....	2	29	24	10	3	6	1	5	1	3	2	1
25....	2	29	24	21	3	6	1	5	3	3	3	1
26....	2	25	22	37	3	6	1	37	27	3	20	1
27....	2	44	25	40	2	6	2	14	5	3	16	1
28....	3	27	24	45	3	5	3	10	4	2	5	1
29....	2	25	18	45	3	5	2	50	5	3	5	1
30....	2	24	20	40	....	5	2	11	34	3	4	1
31....	3	....	34	40	....	5	....	7	....	1470	4	....
Total	64	275	623	889	529	339	84	188	1259	1594	1269	65
Mean.	2.06	9.17	20.1	28.7	18.3	10.9	2.80	6.06	4.20	51.4	40.9	2.17
Max...	3	44	34	....	....	....	5	50	789	1470	1120	4
Min...	....	2	10	....	....	....	1	1	1	2	1	1
Acre-ft.	127	546	1240	1760	1050	670	167	373	2500	3160	2510	129

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of Arkansas River at Holly (State Line) for Year Ending Sept. 30, 1931.
Drainage Area .... Square Miles. Altitude, 3,387 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	106	210	519	210	388	228	720	27	945	3	3	2
2....	122	178	502	200	380	286	696	58	502	4	4	2
3....	555	150	418	200	365	270	624	61	228	4	3	2
4....	3250	210	410	220	380	334	528	35	106	5	2	2
5....	2010	236	493	240	425	302	636	29	110	4	2	2
6....	4990	202	380	365	418	219	732	40	84	4	2	2
7....	696	302	365	425	380	150	636	29	70	3	2	2
8....	365	262	388	365	365	286	410	27	58	2	2	2
9....	228	185	388	326	372	365	219	26	55	2	143	2
10....	236	143	372	326	342	365	150	22	43	2	6	2
11....	2280	202	365	270	334	302	92	26	40	2	6	2
12....	3660	202	350	228	334	244	88	26	46	2	3	2
13....	1020	171	334	228	365	122	79	26	36	2	4	2
14....	870	143	358	185	365	110	79	27	36	2	3	1
15....	564	171	334	194	358	129	79	22	33	2	2	1
16....	476	150	302	244	334	136	70	21	31	2	2	1
17....	236	122	310	278	310	156	67	22	102	2	2	2
18....	365	150	286	253	262	143	70	21	46	2	2	2
19....	502	157	270	171	236	194	61	20	33	2	2	2
20....	442	36	260	129	270	226	79	27	26	3	2	2
21....	468	46	300	194	342	219	70	61	33	2	3	2
22....	502	67	300	286	425	194	55	302	394	2	3	2
23....	484	84	300	310	350	210	67	433	12	3	30	2
24....	418	84	260	365	372	185	67	350	10	3	22	2
25....	402	262	240	372	342	143	64	310	9	3	5	2
26....	318	484	300	326	262	278	38	294	8	3	3	2
27....	318	537	240	310	194	302	35	122	8	3	2	2
28....	262	519	230	334	110	358	27	102	6	3	2	3
29....	219	720	220	334	....	493	27	102	4	2	2	2
30....	236	484	210	334	....	1100	29	110	3	2	2	2
31....	244	....	210	342	....	900	....	164	....	2	2	....
Total	26844	6869	10214	8564	9380	8939	6594	2942	3117	82	273	58
Mean.	866	229	329	276	335	288	220	94.9	104	2.64	8.81	1.93
Max...	4990	720	519	425	425	1100	732	433	945	5	143	3
Min...	106	36	210	129	110	110	27	20	3	2	2	1
Acre-ft.	53200	13600	20200	17000	18600	17700	13100	5840	6190	162	542	115

Discharge of Arkansas River at Holly (State Line) for Year Ending Sept. 30, 1932.
Drainage Area .... Square Miles. Altitude, 3,387 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	2	4	70	29	95	35	18	27	8	228	1170	3
2....	2	4	88	52	129	36	16	24	8	102	414	3
3....	2	4	110	64	210	52	18	22	8	122	67	3
4....	2	5	97	106	129	36	17	21	15	84	64	3
5....	3	4	79	178	202	38	13	19	1480	49	88	2
6....	3	4	97	122	278	46	13	19	31	33	33	2
7....	3	5	88	164	334	50	12	35	11	22	20	2
8....	3	4	67	210	406	50	11	20	6	15	12	2
9....	4	4	74	219	398	50	14	17	6	9	9	2
10....	3	4	74	310	210	48	13	17	6	7	6	2
11....	3	5	74	318	102	45	11	15	5	7	5	4
12....	4	4	88	262	70	45	10	11	610	5	4	2
13....	4	4	55	210	70	45	10	11	342	2	2	2
14....	4	4	61	149	64	45	10	11	164	2	2	2
15....	4	4	74	150	67	45	9	11	29	2	1	2
16....	4	5	92	150	70	46	10	11	20	2	2	2
17....	4	5	106	150	70	38	10	11	15	2	2	2
18....	4	5	88	140	64	26	17	10	15	2	2	2
19....	4	8	58	140	64	20	17	10	573	2	2	2
20....	6	8	92	135	74	21	11	10	624	2	2	2
21....	5	10	97	130	74	18	8	10	454	2	1	2
22....	4	11	84	130	67	40	8	10	732	2	3	3
23....	4	11	84	120	58	97	10	10	178	2	106	5
24....	5	16	79	100	46	84	10	10	84	3	16	4
25....	5	20	92	100	40	43	10	10	61	2	7	5
26....	4	20	92	100	31	43	11	10	67	2	6	5
27....	4	25	84	100	31	58	24	10	194	2	4	5
28....	4	30	88	100	33	43	61	10	88	2	4	4
29....	5	30	88	100	33	33	27	10	52	2	3	4
30....	4	46	58	100	....	19	29	10	129	2	3	4
31....	5	....	33	100	....	19	....	9	....	2	3	....
Total	117	313	2511	4438	3419	1314	458	441	6015	722	2063	87
Mean.	3.77	10.4	81.0	143	118	42.4	15.3	14.2	200	23.3	66.6	2.90
Max...	6	....	110	....	....	....	61	35	1480	228	1170	5
Min...	2	4	33	....	....	....	8	9	5	2	1	2
Acre-ft.	232	619	4980	8790	6790	2610	910	873	11900	1430	4100	173

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of South Arkansas River at Salida for Year Ending Sept. 30, 1931.
Drainage Area .... Square Miles. Altitude, 7,038 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	1	3	58	....	45	47	35	2.5	2.5	0.8	0.5	0.4
2....	1	4	63	....	45	48	39	2.7	1.6	0.8	0.4	0.6
3....	1	4	68	....	45	45	35	2.9	1.9	0.6	0.9	0.7
4....	1	7	61	....	45	48	32	2.2	2.4	0.4	0.3	0.3
5....	1	10	55	....	45	50	32	2.2	1.3	0.4	0.3	0.2
6....	1	6	49	....	45	53	33	2.0	1.3	0.4	0.5	0.1
7....	1	5	60	....	45	48	29	2.4	1.3	0.4	0.5	0.2
8....	1	4	57	....	45	51	27	2.5	1.9	0.5	0.4	0.2
9....	1	3	62	....	45	48	20	1.8	1.4	0.6	0.4	0.2
10....	1	3	59	....	45	47	16	2.0	1.8	0.9	0.4	0.2
11....	1	3	56	....	45	39	15	2.0	2.2	0.9	0.3	0.4
12....	1	3	49	....	45	40	12	1.6	1.6	0.9	0.3	0.3
13....	1	3	....	....	44	40	8.8	1.9	1.0	0.7	0.3	0.2
14....	1	2	....	....	47	42	4.8	2.4	0.8	0.4	0.2	0.7
15....	1	3	....	....	44	41	3.1	5.0	0.7	0.5	0.2	0.7
16....	1	5	....	....	43	43	3.1	6.5	0.8	0.7	0.2	0.7
17....	2	30	....	....	44	42	2.0	5.8	0.6	4.5	0.3	1.2
18....	2	42	....	....	45	44	1.9	33	0.4	4.5	0.2	1.6
19....	4	52	....	....	45	45	2.0	11	0.9	0.9	0.2	1.9
20....	2	49	....	....	44	43	0.9	6.8	1.4	0.7	0.3	1.8
21....	2	60	....	....	44	41	1.2	5.8	0.4	0.6	0.3	1.3
22....	1	62	....	....	44	43	1.6	3.9	0.4	0.5	0.1	1.2
23....	2	55	....	....	46	41	3.3	3.1	0.4	0.7	0.0	1.4
24....	2	53	....	....	45	41	4.3	3.3	0.4	0.6	0.1	1.3
25....	2	48	....	....	43	35	2.2	3.5	0.5	0.4	0.1	0.9
26....	2	47	....	....	41	36	2.2	4.5	0.7	0.6	0.2	1.0
27....	2	44	....	....	40	39	2.9	4.3	0.6	0.6	0.3	1.0
28....	2	36	....	....	40	33	2.0	2.4	0.4	0.4	0.4	1.0
29....	2	50	....	....	....	32	2.2	2.4	0.4	0.4	0.4	1.8
30....	2	57	....	....	....	23	2.2	2.9	0.7	0.6	0.3	1.4
31....	2	....	....	....	....	52	....	3.5	....	0.6	0.3	....
Total	47	753	....	....	1239	1310	375.7	138.8	32.7	26.5	9.6	24.9
Mean.	1.52	25.1	....	....	44.2	42.3	12.5	4.48	1.09	0.85	0.31	0.83
Max...	4	62	....	....	....	53	39	33	2.5	4.5	0.9	1.9
Min...	1	2	....	....	....	32	0.9	1.6	0.4	0.4	....	0.1
Acre-ft.	93	1490	....	....	2450	2600	744	275	65	52	19	49

Discharge of South Fork Arkansas River at Salida (Mouth) for Year Ending Sept. 30, 1932.
Drainage Area .... Square Miles. Altitude, 7,038 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	0.6	0.3	....	....	....	35	8.0	56	46	28	2.4	10
2....	0.2	0.3	....	....	....	35	8.0	31	45	29	1.4	7
3....	0.2	0.2	....	....	....	35	10	22	55	25	1.0	3.8
4....	0.2	0.3	....	....	....	33	9.0	12	65	27	1.3	3.2
5....	0.2	1.2	....	....	....	34	8.0	7.0	71	23	2.0	2.4
6....	0.2	1.1	....	....	....	32	5.0	4.6	62	9	0.2	2.2
7....	0.3	1.2	....	....	....	29	5.0	4.1	57	4.3	0.0	2.0
8....	0.2	1.5	....	....	....	31	4.1	3.4	52	4.3	0.0	1.8
9....	0.2	1.5	....	....	....	33	3.8	4.1	47	0.3	0.0	0.5
10....	0.2	2.2	46	....	....	33	1.6	5.5	58	0.3	0.0	0.4
11....	0.2	2.6	....	....	....	33	0.1	7.0	59	0.4	0.0	0.4
12....	0.3	2.2	....	....	....	35	0.0	17	72	0.6	0.0	0.3
13....	0.3	1.6	....	....	....	36	0.0	37	84	1.1	0.0	0.3
14....	0.4	1.8	....	37	....	40	0.0	48	105	1.1	0.0	0.3
15....	0.3	1.8	....	....	....	31	0.0	77	87	1.2	0.0	0.4
16....	0.3	2.8	....	....	....	32	1.2	138	98	2.0	16	0.3
17....	0.4	6.0	....	....	....	27	0.6	140	77	1.8	18	0.4
18....	0.4	5.8	....	....	....	24	0.3	216	64	2.4	14	0.4
19....	0.4	5.3	....	....	39	18	0.2	231	58	1.4	16	0.5
20....	0.5	6.0	....	....	....	11	0.3	146	52	0.9	14	0.4
21....	0.8	37	....	....	....	10	0.6	170	41	0.5	14	0.6
22....	0.6	42	....	....	....	11	0.1	201	36	0.4	18	0.6
23....	0.6	42	....	....	....	13	1.4	165	36	0.8	20	0.8
24....	0.8	44	....	....	....	14	4.1	149	40	1.4	19	0.8
25....	0.7	45	....	....	....	13	1.5	153	112	1.5	17	0.6
26....	0.8	45	....	....	....	14	2.0	176	71	1.2	15	0.8
27....	1.4	45	....	....	....	16	13	172	64	1.4	20	0.6
28....	1.4	45	....	....	....	13	37	100	58	1.0	31	0.9
29....	1.2	45	....	....	....	13	59	131	46	3.8	25	1.1
30....	0.9	45	....	....	....	12	74	100	34	7.0	18	1.4
31....	0.7	....	....	....	....	10	....	75	....	3.4	13	....
Total	15.9	480.7	....	....	....	756	257.3	2798.7	1852	185.5	296.3	45.2
Mean.	0.51	16.0	46	38	38	24.4	8.58	90.3	61.7	5.98	9.56	1.51
Max...	1.4	....	....	....	....	40	74	231	112	29	31	10
Min...	0.2	....	....	....	....	10	0	3.4	34	0.3	0	0.3
Acre-ft	31	952	2830	2340	2190	1500	511	5550	3670	368	588	90

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of Grape Creek Near Westcliffe for Year Ending Sept. 30, 1931.
Drainage Area, 346 Square Miles. Altitude, 7,800 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	12	12	....	....	....	....	270	60	139	93	9	6
2....	12	12	....	....	....	....	274	60	136	109	10	7
3....	12	13	....	....	....	....	232	60	136	87	14	6
4....	12	13	....	....	....	....	139	60	125	81	13	5
5....	12	14	....	....	....	....	142	60	117	65	11	5
6....	11	14	....	....	....	....	227	59	114	44	11	5
7....	10	13	....	....	....	....	279	50	122	32	10	4
8....	10	13	....	....	....	....	255	52	130	25	12	5
9....	10	14	....	....	....	....	182	57	125	19	15	5
10....	10	13	....	....	....	....	139	57	139	14	21	4
11....	12	15	....	....	....	....	112	60	186	13	22	4
12....	12	16	....	....	....	....	83	50	130	12	19	4
13....	12	12	....	....	....	....	83	44	112	10	14	5
14....	12	11	....	....	....	....	64	41	99	11	10	6
15....	12	12	....	....	....	....	59	50	99	10	10	8
16....	12	....	....	....	....	....	65	75	104	10	9	10
17....	12	....	....	....	....	....	68	96	93	10	9	12
18....	12	....	....	....	....	....	59	95	68	20	10	12
19....	12	....	....	....	....	....	49	136	48	20	9	18
20....	11	....	....	....	....	....	43	269	37	15	9	29
21....	10	....	....	....	....	....	42	316	32	14	7	44
22....	10	....	....	....	....	....	42	269	29	15	7	37
23....	10	....	....	....	....	....	45	145	33	12	7	28
24....	9	....	....	....	....	....	67	116	44	12	6	27
25....	8	....	....	....	....	....	99	129	40	11	6	80
26....	8	....	....	....	....	....	99	146	34	10	6	88
27....	9	....	....	....	....	....	69	156	32	9	5	70
28....	10	....	....	....	....	....	62	156	22	8	5	54
29....	11	....	....	....	....	....	60	142	27	8	5	40
30....	11	....	....	....	....	....	69	144	32	6	4	36
31....	11	....	....	....	....	....	....	146	....	7	4	....
Total	337	....	....	....	....	....	3469	3356	2594	812	309	664
Mean.	10.9	....	....	....	....	....	116	108	865	26.2	9.97	22.1
Max...	12	....	....	....	....	....	279	316	186	109	22	88
Min...	8	....	....	....	....	....	42	41	27	6	4	4
Acre-ft.	670	....	....	....	....	....	6900	6640	5150	1610	613	1320

Discharge of Grape Creek Near Westcliffe for Year Ending Sept. 30, 1932.
Drainage Area, 346 Square Miles. Altitude, 7,800 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	30	18	....	....	....	....	35	80	35	97	30	30
2....	28	18	....	....	....	....	37	50	29	90	22	24
3....	28	17	....	....	....	....	39	40	35	93	12	20
4....	27	17	....	....	....	....	41	38	54	75	13	17
5....	24	18	....	....	....	....	43	35	65	53	14	15
6....	23	18	....	....	....	....	45	31	55	32	12	14
7....	23	18	....	....	....	....	45	32	32	18	10	13
8....	22	18	....	....	....	....	45	27	21	13	10	10
9....	23	17	....	....	....	....	43	25	15	14	10	8
10....	24	18	....	....	....	....	40	28	18	15	9	8
11....	22	19	....	....	....	....	37	40	29	15	8	7
12....	27	19	....	....	....	....	34	34	34	21	8	6
13....	31	18	....	....	....	....	33	28	44	52	8	6
14....	30	16	....	....	....	....	38	33	53	51	7	7
15....	29	16	....	....	....	....	42	40	61	34	7	7
16....	28	17	....	....	....	....	42	44	55	26	15	6
17....	27	16	....	....	....	....	44	44	60	22	17	7
18....	26	....	....	....	....	....	46	42	55	18	30	6
19....	25	....	....	....	....	....	37	44	48	11	25	6
20....	24	....	....	....	....	....	29	62	44	9	27	6
21....	24	....	....	....	....	....	32	58	44	8	27	7
22....	22	....	....	....	....	....	62	52	51	10	35	7
23....	22	....	....	....	....	....	58	61	44	10	41	7
24....	21	....	....	....	....	....	35	75	64	12	37	8
25....	19	....	....	....	....	....	31	67	106	21	32	10
26....	17	....	....	....	....	....	31	53	134	22	27	8
27....	16	....	....	....	....	....	30	41	136	18	34	8
28....	18	....	....	....	....	....	30	41	160	16	46	10
29....	18	....	....	....	....	....	71	45	126	25	52	7
30....	18	....	....	....	....	....	102	46	102	42	45	7
31....	20	....	....	....	....	....	....	41	....	35	35	....
Total	736	....	....	....	....	....	1277	1377	1809	978	705	302
Mean.	23.7	19.7	....	....	....	....	42.6	44.4	60.3	31.5	22.7	10.1
Max...	31	....	....	....	....	....	....	80	160	97	52	30
Min...	16	....	....	....	....	....	....	25	15	8	7	6
Acre-ft.	1460	1170	....	....	....	....	2530	2730	3590	1940	1400	601

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of St. Charles River at Burnt Mill for Year Ending Sept. 30, 1931.
Drainage Area, 166 Square Miles. Altitude .... Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	9	8	13	13	14	16	21	158	219	35	2	9
2....	11	7	17	11	16	12	26	198	201	22	7	17
3....	7	6	18	11	14	9	29	185	190	21	7	14
4....	4	4	15	13	13	10	25	158	165	22	7	10
5....	6	4	17	11	14	10	28	120	154	21	7	10
6....	6	3	18	11	14	9	39	118	132	18	7	6
7....	8	5	18	13	14	13	43	118	128	17	10	6
8....	6	4	18	12	15	13	63	129	114	15	30	8
9....	4	4	15	14	9	23	54	104	97	14	25	8
10....	3	5	12	11	8	19	63	104	135	13	19	8
11....	4	4	12	13	9	12	74	91	168	10	10	6
12....	6	4	9	12	9	16	91	79	317	9	8	5
13....	3	5	9	11	9	18	74	68	105	8	6	4
14....	4	6	9	9	9	18	64	74	92	6	6	5
15....	6	4	6	9	9	18	70	106	94	5	9	4
16....	7	4	9	11	9	20	54	142	87	4	8	5
17....	6	4	10	11	9	15	50	145	68	5	9	3
18....	6	4	11	11	9	20	49	178	58	44	6	4
19....	5	10	11	11	9	21	55	155	58	13	6	4
20....	5	14	12	11	9	19	55	158	58	8	7	4
21....	4	9	10	11	8	18	39	178	48	6	6	7
22....	4	10	10	13	8	20	33	206	47	4	4	7
23....	3	12	10	13	8	25	26	340	42	4	5	6
24....	4	12	11	11	8	22	21	388	33	2	8	6
25....	4	12	11	12	8	23	21	372	30	2	8	6
26....	3	11	11	12	9	19	16	356	25	2	6	5
27....	3	14	11	17	9	15	16	325	27	3	6	4
28....	4	12	11	21	9	16	15	272	24	2	8	6
29....	6	12	11	21	....	16	24	260	22	2	9	4
30....	5	12	11	19	....	15	64	287	21	2	10	3
31....	7	....	13	14	....	15	....	241	....	2	9	....
Total	163	225	379	393	288	509	1302	5814	2959	341	275	194
Mean.	5.26	7.50	12.2	12.7	10.3	16.4	43.4	188	98.6	11.0	8.87	6.47
Max...	11	14	....	....	....	25	91	388	317	44	....	17
Min...	3	3	....	....	....	9	15	68	21	2	2	3
Acre-ft.	323	446	750	781	572	1010	2580	11600	5870	676	545	385

Discharge of St. Charles River at Burnt Mill for Year Ending Sept. 30, 1932.
Drainage Area, 166 Square Miles. Altitude .... Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	3	6	10	10	6	11	10	10	11	1	15	2
2....	3	7	8	9	7	10	14	14	8	9	5	2
3....	3	6	9	8	7	10	14	15	5	8	4	2
4....	3	5	7	6	8	8	15	10	5	8	4	2
5....	4	5	7	6	8	8	14	14	6	1	4	2
6....	2	4	6	6	9	6	14	14	7	3	3	2
7....	1	5	7	7	7	6	14	7	6	2	3	2
8....	3	6	7	7	8	4	13	7	6	1	3	2
9....	6	7	9	7	11	4	10	7	11	1	2	2
10....	10	6	8	7	10	7	8	9	7	2	2	1
11....	11	6	8	9	8	5	6	9	7	20	2	1
12....	14	7	7	7	7	4	8	8	7	4	2	1
13....	11	8	6	9	7	5	8	11	7	2	2	1
14....	5	6	7	8	7	6	14	8	8	6	2	1
15....	5	6	7	6	7	12	13	8	9	8	2	2
16....	8	6	7	8	7	4	13	10	8	9	22	1
17....	6	6	7	8	6	4	19	11	7	10	29	1
18....	5	6	7	9	7	4	19	8	6	14	9	1
19....	10	6	8	10	7	5	15	10	5	12	2	1
20....	6	6	9	8	8	7	18	13	6	3	2	1
21....	7	6	8	8	8	10	23	12	7	2	2	2
22....	6	6	8	8	8	8	17	16	5	1	2	2
23....	5	6	8	7	8	6	12	12	3	2	2	2
24....	5	7	8	7	8	7	10	12	3	4	2	31
25....	6	8	8	7	7	8	8	11	11	6	2	6
26....	5	9	8	7	8	7	14	10	16	8	51	6
27....	9	8	9	7	8	6	11	9	9	6	5	6
28....	20	9	8	7	10	8	8	9	6	4	2	8
29....	6	9	7	8	11	9	8	8	5	5	2	5
30....	4	10	8	5	....	9	8	12	2	14	2	4
31....	4	....	6	6	....	8	....	12	....	50	7	....
Total	196	198	237	232	228	216	378	326	210	226	198	102
Mean.	6.32	6.60	7.65	7.48	7.86	6.96	12.6	10.5	7.0	7.29	6.39	3.40
Max...	20	....	....	....	....	12	23	16	16	50	....	....
Min...	1	....	....	....	....	4	6	7	2	1	....	....
Acre-ft.	389	393	470	460	452	428	750	646	417	448	393	202

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of Huerfano River at Mansanarez Crossing for Year Ending Sept. 30, 1931.
Drainage Area, 76 Square Miles. Altitude .... Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	20	....	....	....	....	....	15	30	130	98	34	19
2....	19	....	....	....	....	....	15	40	122	78	34	20
3....	19	....	....	....	....	....	15	40	124	71	29	17
4....	19	....	....	....	....	....	15	40	119	71	26	17
5....	19	....	....	....	....	....	16	41	113	58	27	17
6....	18	....	....	....	....	....	18	47	110	49	25	16
7....	18	....	....	....	....	....	22	53	116	46	24	16
8....	18	....	....	....	....	....	20	52	110	41	29	17
9....	17	....	....	....	....	....	20	48	96	39	28	17
10....	17	....	....	....	....	....	20	47	116	38	23	18
11....	17	....	....	....	....	....	22	41	89	37	22	18
12....	18	....	....	....	....	....	24	44	85	34	22	18
13....	19	....	....	....	....	....	25	49	83	30	22	20
14....	20	....	....	....	....	....	27	61	80	30	23	21
15....	21	....	....	....	....	....	26	89	85	33	23	85
16....	19	....	....	....	....	....	25	122	83	36	22	55
17....	18	....	....	....	....	....	24	122	89	39	19	44
18....	18	....	....	....	....	....	28	133	85	70	18	50
19....	18	....	....	....	....	....	28	116	82	55	19	61
20....	18	....	....	....	....	....	26	89	80	48	17	61
21....	18	....	....	....	....	....	26	78	80	46	17	47
22....	17	....	....	....	....	....	25	73	80	38	17	42
23....	17	....	....	....	....	....	23	78	75	35	17	38
24....	17	....	....	....	....	....	23	100	73	36	16	122
25....	17	....	....	....	....	....	22	140	68	33	16	85
26....	17	....	....	....	....	....	22	151	70	30	16	64
27....	17	....	....	....	....	....	22	143	76	30	16	52
28....	17	....	....	....	....	....	24	136	71	30	17	42
29....	18	....	....	....	....	....	27	140	67	28	17	35
30....	17	....	....	....	....	....	29	130	82	30	16	32
31....	18	....	....	....	....	....	....	130	....	30	15	....
Total	560	....	....	....	....	....	674	2603	2739	1367	666	1166
Mean.	18.1	....	....	....	....	....	22.5	84.0	91.3	44.1	21.5	38.9
Max...	21	....	....	....	....	....	29	151	130	98	34	122
Min...	17	....	....	....	....	....	15	30	67	28	15	16
Acre-ft.	1110	....	....	....	....	....	1340	5160	5430	2710	1320	2310

Discharge of Huerfano River at Mansanarez Crossing for Year Ending Sept. 30, 1932.
Drainage Area, 76 Square Miles. Altitude .... Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	28	18	....	....	....	....	18	56	142	102	63	38
2....	28	....	....	....	....	....	21	56	137	112	55	37
3....	30	....	....	....	....	....	22	63	134	98	51	26
4....	30	....	....	....	....	....	22	64	122	95	40	25
5....	28	....	....	....	....	....	26	66	102	86	38	25
6....	27	....	....	....	....	....	28	66	84	77	37	23
7....	27	....	....	....	....	....	28	66	82	72	35	23
8....	26	....	....	....	....	....	25	66	91	64	34	22
9....	34	....	....	....	....	15	25	68	100	66	28	20
10....	45	....	....	....	....	....	24	72	105	72	28	20
11....	40	....	....	....	....	....	26	75	102	110	33	18
12....	38	....	....	....	....	....	26	84	105	129	49	17
13....	35	....	....	....	....	....	31	91	114	105	30	16
14....	33	....	....	....	....	....	33	114	122	79	26	16
15....	31	....	....	....	....	....	35	127	124	66	24	16
16....	30	....	....	....	....	....	40	129	134	63	24	18
17....	29	10	....	....	....	....	40	147	122	86	26	18
18....	29	....	....	....	....	....	39	181	114	72	39	16
19....	28	....	....	....	....	....	46	195	107	63	49	14
20....	25	....	....	....	....	....	58	164	105	58	40	14
21....	24	....	....	....	....	....	66	170	102	56	98	16
22....	23	....	....	....	....	....	70	201	105	52	86	15
23....	23	....	....	....	....	....	68	198	117	51	79	15
24....	23	....	....	....	....	....	64	187	110	72	72	15
25....	20	....	....	....	....	....	64	184	129	86	56	16
26....	20	....	....	....	....	....	56	164	124	64	52	16
27....	20	....	....	....	....	....	49	134	129	56	51	15
28....	19	....	....	....	....	....	52	140	119	58	55	16
29....	19	....	....	....	....	16	52	142	117	52	59	16
30....	20	....	....	....	....	16	53	150	105	59	49	16
31....	20	....	....	....	....	16	....	142	....	73	43	....
Total	852	....	....	....	....	....	1207	3762	3405	2354	1449	578
Mean.	27.5	13.5	....	....	....	15.2	40.2	121	114	75.9	46.7	19.3
Max...	45	....	....	....	....	....	70	201	142	129	98	38
Min...	19	....	....	....	....	....	18	56	82	51	24	14
Acre-ft.	1690	803	....	....	....	935	2390	7440	6780	4670	2870	1150

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of Cuchara River Near La Veta for Year Ending Sept. 30, 1931.
Drainage Area, 75 Square Miles. Altitude .... Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	10	4	....	....	....	....	10	49	132	38	17	8
2....	8	4	....	....	....	....	11	62	113	36	18	3
3....	7	4	....	....	....	....	11	73	107	37	16	2
4....	7	4	....	....	....	....	9	72	102	36	14	2
5....	6	....	....	....	....	....	8	67	98	36	13	2
6....	6	....	....	....	....	....	11	72	84	35	13	2
7....	6	....	....	....	....	....	15	79	80	29	12	2
8....	6	3	....	....	....	....	19	96	80	27	14	2
9....	5	....	....	....	....	....	17	87	79	27	13	2
10....	5	....	....	....	....	....	21	84	80	24	13	2
11....	4	....	....	....	....	....	30	73	77	22	11	2
12....	5	....	....	....	....	....	36	63	67	20	10	2
13....	4	....	....	....	....	....	36	79	61	19	10	2
14....	6	....	....	....	....	....	43	87	56	16	9	2
15....	5	....	....	....	....	....	45	122	56	15	8	2
16....	5	....	....	....	....	....	37	153	52	14	9	3
17....	5	....	....	....	....	....	32	158	50	17	9	3
18....	5	....	....	....	....	....	31	164	50	33	8	3
19....	6	....	....	....	....	....	39	156	45	26	9	4
20....	6	....	....	....	....	....	42	127	35	23	8	5
21....	6	....	....	....	....	....	36	109	36	23	7	4
22....	6	....	....	....	....	....	33	105	35	18	6	3
23....	5	....	....	....	....	....	30	113	34	18	6	3
24....	5	....	....	....	....	....	31	153	32	19	4	2
25....	4	....	....	....	....	....	28	173	34	18	4	2
26....	4	....	....	....	....	....	27	173	34	17	4	2
27....	3	....	....	....	....	....	28	173	34	17	4	2
28....	4	....	....	....	....	....	28	158	30	17	4	2
29....	4	....	....	....	....	....	32	144	30	14	4	2
30....	4	....	....	....	....	....	42	134	30	15	4	2
31....	4	....	....	....	....	....	....	132	....	17	4	....
Total	166	....	....	....	....	....	818	3490	1834	723	285	79
Mean.	5.35	3.0	....	....	....	....	27.3	113	61.1	23.3	9.19	2.63
Max...	10	....	....	....	....	....	45	173	132	38	18	8
Min...	3	....	....	....	....	....	8	49	30	14	4	2
Acre-ft.	329	178	....	....	....	....	1620	6950	3640	1430	565	156

Discharge of Cuchara River Near La Veta for Year Ending Sept. 30, 1932.
Drainage Area, 75 Square Miles. Altitude .... Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	3	....	....	....	....	....	8	22	54	37	12	4
2....	3	....	....	....	....	....	11	22	51	35	9	4
3....	4	....	....	....	....	....	11	27	48	34	9	3
4....	4	....	....	....	....	....	12	29	50	33	8	3
5....	4	....	....	....	....	....	16	35	50	29	7	4
6....	4	....	....	....	....	....	17	39	48	20	7	4
7....	4	....	....	....	....	....	16	31	44	19	7	4
8....	4	....	....	....	....	....	15	24	43	21	8	4
9....	4	....	....	....	....	5	14	28	44	22	7	3
10....	5	....	....	....	....	....	12	35	45	24	6	3
11....	5	....	....	....	....	....	14	33	29	28	5	3
12....	5	....	....	....	....	....	18	33	35	24	5	3
13....	5	....	....	....	....	....	22	44	35	22	5	3
14....	4	....	....	....	....	....	25	48	36	19	5	3
15....	5	....	....	....	....	6	25	53	36	19	5	3
16....	4	3	....	....	....	5	26	56	35	17	6	3
17....	4	....	....	....	....	5	27	65	37	16	9	3
18....	4	....	....	....	....	5	27	66	37	16	8	3
19....	4	....	....	....	....	6	27	94	37	15	7	3
20....	3	....	....	....	....	6	25	100	33	14	6	3
21....	4	....	....	....	....	5	26	93	31	14	7	3
22....	4	....	....	....	....	5	28	96	33	13	7	3
23....	3	....	....	....	....	6	22	111	38	12	6	3
24....	3	....	....	....	....	6	27	100	38	13	6	4
25....	3	....	....	....	....	6	29	82	52	13	6	4
26....	3	....	....	....	....	5	24	74	42	12	6	4
27....	3	....	....	....	....	6	20	67	44	11	5	4
28....	3	....	....	....	....	6	19	62	44	14	5	4
29....	3	....	....	....	....	6	18	63	43	15	5	4
30....	3	....	....	....	....	6	19	62	40	12	3	3
31....	5	....	....	....	....	6	....	60	....	13	4	....
Total	119	....	....	....	....	....	600	1754	1232	616	201	102
Mean.	3.84	3	....	....	....	5.45	20.0	56.6	41.1	19.9	6.48	3.40
Max...	5	....	....	....	....	....	29	111	54	37	12	4
Min...	3	....	....	....	....	....	8	22	29	11	3	3
Acre-ft.	236	179	....	....	....	335	1190	3480	2450	1220	398	202

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of Purgatoire River at Trinidad for Year Ending Sept. 30, 1931.
Drainage Area, 742 Square Miles. Altitude, 5,990 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	74	34	36	....	40	20	95	225	348	152	76	60
2....	55	29	40	....	36	17	122	336	348	210	100	74
3....	71	30	34	....	34	26	68	462	306	660	137	42
4....	44	30	30	....	22	34	68	336	312	144	82	40
5....	60	29	30	....	29	44	66	276	288	125	82	44
6....	71	30	36	....	26	29	91	264	276	121	74	40
7....	40	30	30	....	16	20	107	240	246	118	88	63
8....	32	34	36	....	22	26	114	252	235	114	104	71
9....	29	36	30	....	24	36	104	240	264	85	95	44
10....	28	38	42	....	16	32	98	235	258	71	85	32
11....	186	36	34	....	18	30	101	215	240	66	57	30
12....	50	42	38	....	26	44	114	220	195	57	46	28
13....	29	46	32	....	26	57	104	210	160	48	36	23
14....	44	48	28	....	17	44	104	210	164	48	29	44
15....	44	44	26	....	28	44	98	270	156	40	18	44
16....	42	38	16	....	28	44	107	312	190	40	18	48
17....	40	32	22	....	29	50	91	336	182	29	18	46
18....	38	32	23	....	23	63	82	354	152	235	18	44
19....	38	35	....	....	28	74	91	367	148	156	16	71
20....	36	40	....	....	30	50	91	402	125	129	16	82
21....	34	48	....	17	30	68	82	324	114	190	22	82
22....	40	48	....	....	28	94	74	348	118	91	28	82
23....	32	57	....	....	29	118	68	330	118	66	50	85
24....	36	55	....	....	24	66	71	348	137	46	94	79
25....	34	46	....	....	23	82	60	395	129	46	50	66
26....	36	63	....	....	26	80	66	402	140	26	38	55
27....	36	85	....	....	28	78	63	388	104	18	34	57
28....	32	48	....	....	34	76	71	348	98	16	32	55
29....	34	44	....	....	....	74	98	374	91	14	44	55
30....	34	42	....	....	....	66	152	395	205	11	52	55
31....	30	....	....	....	....	71	....	348	....	50	44	....
Total	1429	1249	....	....	740	1657	2721	9762	5847	3222	1683	1641
Mean.	46.1	41.6	24.2	19.4	26.4	53.4	90.7	315	195	104	54.3	54.7
Max...	186	85	....	....	40	118	152	462	348	660	137	85
Min...	28	29	....	....	16	17	60	210	91	11	16	23
Acre-ft.	2830	2480	1490	1190	1470	3280	5400	19400	11600	6400	3340	3250

Discharge of Purgatoire River at Trinidad for Year Ending Sept. 30, 1932.
Drainage Area, 742 Square Miles. Altitude, 5,990 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	46	37	....	....	22	21	12	39	164	268	56	40
2....	68	35	....	....	31	19	8	35	154	362	50	35
3....	42	37	....	....	21	21	8	44	133	164	47	31
4....	50	39	....	....	32	21	10	79	172	115	50	26
5....	42	34	....	....	27	20	12	84	177	109	40	27
6....	34	32	....	....	42	20	14	96	150	84	21	25
7....	32	30	....	....	48	18	18	87	136	53	444	25
8....	39	32	....	....	34	15	18	68	122	29	54	23
9....	48	29	....	....	46	10	17	60	122	29	35	22
10....	109	32	....	....	43	9	19	68	129	57	30	20
11....	76	30	....	19	32	9	19	100	126	60	35	19
12....	62	32	....	21	19	27	21	93	122	81	25	18
13....	55	32	....	22	17	25	25	81	136	112	22	23
14....	55	32	....	25	35	25	29	109	140	103	76	34
15....	48	30	....	16	30	32	33	126	140	81	38	30
16....	48	30	...	21	27	24	25	154	159	62	30	30
17....	44	30	....	18	25	18	30	132	150	57	68	28
18....	39	27	....	21	30	15	24	140	146	65	53	16
19....	46	....	....	21	24	15	29	182	132	65	71	14
20....	55	....	....	29	27	15	39	186	115	24	71	13
21....	48	....	....	25	24	37	42	284	115	19	289	14
22....	44	....	....	25	18	29	32	164	133	32	59	15
23....	39	....	....	14	16	27	32	185	240	536	47	23
24....	30	....	....	16	16	31	32	204	133	78	48	27
25....	32	....	....	16	17	31	32	191	172	70	50	32
26....	32	....	....	22	17	29	30	186	436	157	50	40
27....	35	....	....	25	17	21	35	154	195	124	59	34
28....	55	....	....	27	18	17	46	191	226	38	76	31
29....	55	....	....	24	19	16	53	204	644	43	61	29
30....	39	....	....	22	....	16	42	191	240	45	40	28
31....	37	....	....	16	....	15	....	195	....	52	34	....
Total	1484	....	....	....	774	648	786	4113	3286	3174	2129	772
Mean.	47.9	29.1	19.5	20.8	26.7	20.9	26.2	133	310	102	68.7	25.7
Max...	109	....	....	....	48	37	53	284	644	536	444	40
Min...	30	....	....	....	16	9	8	35	115	19	21	13
Acre-ft.	2940	1730	1200	1280	1540	1280	1560	8180	18400	6270	4220	1530

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of Purgatoire River at Nine Mile Dam for Year Ending Sept. 30, 1931.
Drainage Area.... Square Miles. Altitude .... Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	428	26	....	....	195	101	183	38	307	38	0	144
2....	1090	28	....	....	240	118	165	64	259	30	38	128
3....	2060	31	....	....	220	99	299	68	283	37	101	160
4....	393	31	....	....	200	99	349	60	291	46	76	121
5....	121	31	....	....	170	131	291	64	267	94	53	72
6....	96	30	....	....	170	99	219	78	195	101	34	41
7....	74	28	....	....	178	65	219	83	251	88	24	22
8....	58	28	....	....	195	65	267	118	189	51	23	10
9....	64	30	....	....	146	65	275	96	156	23	72	2
10....	58	30	....	....	128	86	160	88	118	16	195	0
11....	201	26	....	....	111	99	170	81	101	16	147	0
12....	543	27	....	37	128	131	195	78	94	14	96	0
13....	128	27	....	....	128	201	178	111	83	11	68	0
14....	96	26	....	....	128	201	189	114	156	8	47	0
15....	78	26	....	....	128	204	189	104	170	5	37	0
16....	58	27	36	....	81	283	142	107	121	4	27	3
17....	41	28	....	....	81	219	147	118	99	12	23	25
18....	35	27	....	....	124	201	170	88	94	20	18	74
19....	34	31	....	....	93	178	138	64	96	12	0	40
20....	34	37	....	....	121	213	114	88	83	55	0	16
21....	30	40	....	....	91	243	101	147	72	40	0	14
22....	27	76	....	....	104	183	91	283	70	25	3	12
23....	27	70	....	....	88	237	81	521	68	38	0	12
24....	27	100	....	....	118	307	78	283	70	27	0	24
25....	27	142	....	....	101	349	64	243	60	14	0	124
26....	27	118	....	....	101	267	53	259	53	9	0	91
27....	26	189	....	....	88	118	50	291	51	4	0	78
28....	131	183	....	....	101	140	41	315	46	2	0	28
29....	26	225	....	....	....	160	38	420	44	0	0	22
30....	24	195	....	....	....	165	40	1020	41	0	3	18
31....	26	....	....	....	....	160	....	632	....	0	1	....
Total	6088	1913	....	....	3757	5003	4696	6124	3988	840	1086	1281
Mean.	196	62.8	65	75	134	161	156	198	133	27.1	35.0	42.7
Max...	2060	225	....	....	240	349	349	1020	307	101	195	160
Min...	24	26	....	....	81	65	38	38	41	0	0	0
Acre-ft.	12000	3740	4000	4610	7440	9900	9280	12200	7910	1670	2150	2540

Discharge of Purgatoire River at Nine Mile Dam for Year Ending Sept. 30, 1932.
Drainage Area.... Square Miles. Altitude .... Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	17	21	25	....	40	32	21	111	34	265	10	5
2....	16	23	25	....	45	25	19	103	23	97	8	2
3....	15	22	25	....	50	25	17	86	16	38	7	1
4....	14	22	25	....	55	25	15	67	21	62	5	1
5....	14	22	25	....	60	25	13	50	76	81	1	1
6....	17	23	25	....	86	27	12	27	130	42	1	0
7....	14	26	25	....	48	22	13	16	52	34	0	0
8....	16	28	25	....	62	19	12	12	22	24	0	0
9....	18	21	25	....	92	26	15	11	16	8	12	0
10....	18	22	25	....	89	19	16	12	114	12	31	0
11....	16	19	25	....	103	19	16	14	212	27	14	0
12....	17	16	25	....	106	19	20	12	84	16	11	1
13....	34	16	20	44	74	19	25	10	44	24	10	0
14....	28	18	14	....	60	19	54	10	28	6	62	0
15....	26	21	14	....	48	19	60	10	19	12	52	0
16....	35	26	14	....	46	19	46	8	14	12	14	0
17....	27	24	14	....	56	31	52	6	9	8	19	0
18....	23	21	14	....	46	41	32	4	7	2	41	0
19....	21	23	19	....	36	27	34	2	14	0	8	0
20....	18	35	19	....	31	22	16	1	42	0	15	0
21....	16	30	19	....	31	22	13	5	17	30	11	0
22....	17	15	24	....	31	36	11	4	13	692	25	0
23....	16	15	26	....	29	39	21	9	13	158	60	1
24....	15	15	20	....	38	29	117	38	19	86	32	3
25....	16	25	20	....	35	38	62	25	97	106	23	3
26....	18	91	20	....	36	36	92	74	177	54	17	12
27....	14	86	20	....	35	42	69	97	275	48	79	20
28....	21	48	20	42	34	31	76	108	198	36	26	14
29....	20	35	20	....	31	26	74	86	108	20	22	24
30....	18	86	20	....	....	24	89	46	124	16	14	17
31....	18	....	20	....	....	22	....	38	....	13	7	....
Total	594	905	657	....	1533	821	1132	1102	2018	2029	633	105
Mean.	19.2	30.2	21.5	42.6	52.9	26.5	37.7	35.5	67.3	65.4	20.4	3.50
Max...	35	....	....	....	....	....	117	111	275	692	62	24
Min...	14	....	....	....	....	....	11	1	7	0	0	0
Acre-ft.	1180	1800	1320	2620	3040	1630	2240	2180	4000	4020	1250	208

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of Purgatoire River at Mouth for Year Ending Sept. 30, 1931.
Drainage Area .... Square Miles. Altitude, 3,884 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	20	28	95	....	127	61	311	10	647	5	3	2
2....	2390	28	86	....	213	65	283	8	535	5	3	95
3....	4000	37	65	....	184	99	256	61	561	5	3	116
4....	4800	28	65	....	190	149	364	149	130	5	23	95
5....	890	23	61	....	199	65	443	116	130	5	37	23
6....	633	24	74	....	213	74	237	99	90	5	2	5
7....	430	24	61	....	155	105	302	57	90	57	4	4
8....	320	21	78	47	162	121	353	138	90	57	3	3
9....	246	21	61	....	144	86	430	191	57	30	135	2
10....	213	24	61	....	110	74	548	221	30	15	106	2
11....	456	21	42	....	105	57	342	177	57	10	135	2
12....	834	21	48	....	155	42	320	86	30	9	60	2
13....	283	34	82	....	177	31	353	91	30	8	65	2
14....	184	40	105	....	149	57	320	65	20	7	21	2
15....	228	26	95	....	138	105	237	61	469	6	5	2
16....	149	54	....	....	74	177	127	65	180	4	2	2
17....	138	37	....	....	45	221	105	51	90	4	2	2
18....	155	37	....	....	110	199	74	61	50	4	2	2
19....	162	30	....	....	91	199	82	65	20	4	2	2
20....	162	30	....	....	127	213	65	70	15	4	2	2
21....	155	37	....	....	105	274	40	70	15	4	2	2
22....	184	37	....	....	105	320	65	70	15	4	2	2
23....	206	37	....	....	110	320	42	200	15	4	2	2
24....	274	37	....	....	86	256	31	400	15	3	2	2
25....	342	37	....	....	91	353	40	130	15	3	2	8
26....	246	37	....	....	70	456	34	90	15	3	5	110
27....	155	37	....	....	65	450	17	155	12	3	4	42
28....	57	37	....	....	86	400	26	177	10	3	2	12
29....	54	37	....	....	....	311	26	375	8	3	2	5
30....	51	37	....	....	....	149	19	590	6	3	2	3
31....	40	....	....	....	....	105	....	2290	....	3	2	....
Total	18457	958	....	....	3586	5594	5892	6389	3447	285	642	555
Mean.	595	31.9	61.5	58.1	128	180	196	206	115	9.19	20.7	18.5
Max...	4800	....	....	....	213	456	548	....	....	....	....	....
Min...	20	....	....	....	45	31	17	....	....	....	....	....
Acre-ft.	36600	1900	3780	3570	7110	11100	11700	12700	6840	565	1270	1100

Discharge of Purgatoire River at Highland (Carmen) Dam for Year Ending Sept. 30, 1932.
Drainage Area .... Square Miles. Altitude .... Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	13	12	15	8	15	16	20	67	28	238	6	4
2....	12	15	15	10	20	17	18	74	20	212	3	0
3....	11	16	15	10	15	17	15	47	13	118	1	0
4....	11	17	15	10	20	15	12	48	19	48	1	0
5....	9	16	15	10	20	13	10	28	108	74	1	0
6....	8	16	15	15	88	20	5	27	63	74	0	0
7....	9	17	15	15	63	10	4	25	30	25	0	0
8....	9	17	15	15	27	10	4	19	22	17	0	0
9....	9	15	15	15	56	10	4	15	16	13	0	0
10....	10	15	15	15	67	10	3	12	27	11	0	0
11....	12	15	20	15	56	10	3	15	135	8	2	0
12....	12	15	20	20	72	10	2	9	96	14	3	0
13....	14	15	15	20	52	15	2	9	34	14	3	0
14....	23	14	15	15	38	38	2	8	21	19	22	0
15....	16	16	15	15	38	36	20	0	20	14	267	0
16....	19	19	15	20	27	11	41	0	18	7	52	0
17....	21	16	15	20	22	10	23	0	17	6	25	0
18....	13	17	15	20	23	15	82	0	58	3	135	0
19....	12	16	20	20	23	22	27	0	59	1	61	0
20....	11	20	20	25	25	19	23	0	201	0	26	0
21....	12	20	20	25	20	20	10	0	43	0	11	0
22....	10	20	25	25	17	47	8	0	7	864	11	0
23....	9	20	28	20	16	48	3	0	4	659	10	0
24....	9	20	20	20	9	24	188	44	3	272	115	0
25....	10	20	25	15	7	16	61	39	208	297	50	0
26....	9	20	25	15	11	23	72	19	151	244	54	0
27....	9	20	20	15	16	27	90	72	250	132	135	0
28....	9	20	20	15	18	28	82	101	316	132	118	0
29....	10	20	20	15	19	20	67	85	143	30	61	0
30....	11	20	15	15	....	15	59	30	85	11	15	0
31....	12	....	15	15	....	20	....	14	....	8	8	....
Total	365	519	553	508	900	612	960	807	2215	3565	1196	4
Mean.	11.8	17.3	17.8	16.4	31.0	19.7	32.0	26.0	73.8	115	38.6	0.13
Max...	23	....	....	....	....	....	188	101	316	864	267	4
Min...	8	....	....	....	....	....	2	0	3	0	0	0
Acre-ft.	726	1030	1090	1010	1780	1210	1900	1600	4390	7070	2370	8

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of Wild Horse Creek at Mouth Near Holly for Year Ending Sept. 30, 1931.
Drainage Area .... Square Miles. Altitude, 3,387 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	0	58	0	0.5	0	76	11	0	9	0	0	0
2....	0	70	1	0.5	0	51	20	0	12	0	0	0
3....	0	70	1	0.5	0	42	12	0	11	0	0	0
4....	64	70	1	0.5	0	63	11	6	2	0	0	0
5....	210	5	2	0.5	0	61	11	3	3	0	0	0
6....	150	0	0	0.5	0	19	53	16	2	0	0	0
7....	86	0	0	0.5	0	44	47	5	0	0	0	0
8....	86	0	0	0.5	0	0	6	22	0	0	0	0
9....	175	1	0	0.5	0	11	14	128	0	0	0	0
10....	20	5	0	0.5	0	9	138	22	0	0	0	0
11....	190	7	3	0	0	2	162	13	0	0	0	0
12....	210	1	4	0	0	2	58	9	0	0	0	0
13....	70	0	7	0	0	46	34	10	0	0	0	0
14....	27	0	7	0	0	61	6	9	2	0	0	0
15....	17	36	7	0	0	49	3	10	0	0	0	0
16....	20	36	1	0	0	57	0	1	0	0	0	0
17....	5	36	0	0	0	70	0	2	0	0	0	0
18....	1	36	0	0	0	61	0	2	0	0	0	0
19....	0	52	0	0	0	92	0	1	0	0	0	0
20....	0	70	0	0	0	37	0	0	0	0	0	0
21....	0	3	0	0	0	26	0	10	0	0	0	0
22....	0	1	0	0	0	25	0	2	0	0	0	0
23....	0	0	0	0	0	22	0	30	0	0	0	0
24....	0	0	0	0	0	108	0	23	0	0	0	0
25....	0	0	0	0	7	158	0	5	0	0	0	0
26....	0	0	0	0	31	57	2	2	0	0	0	0
27....	102	2	0	0	27	0	2	4	0	0	0	0
28....	17	0	0	0	80	0	0	0	0	0	0	0
29....	70	0	0	0	....	0	0	0	0	0	0	0
30....	47	0	0	0	....	0	2	0	0	0	0	0
31....	67	0	0	0	....	0	....	0	....	0	0	....
Total	1634	559	34	5	145	1249	592	335	41	0	0	0
Mean.	52.7	18.6	1.10	0.16	5.18	40.3	19.7	10.8	1.37	0	0	0
Max...	210	70	7	0.5	80	158	162	128	12	0	0	0
Min...	0	0	0	0	0	0	0	0	0	0	0	0
Acre-ft.	3240	1110	68	10	288	2480	1170	664	82	0	0	0

Discharge of Wild Horse Creek at Mouth Near Holly for Year Ending Sept. 30, 1932.
Drainage Area .... Square Miles. Altitude, 3,387 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	0	0	0	0	0	0	3	36	0	20	0	0
2....	5	0	6	0	0	0	0	34	0	23	0	0
3....	7	0	0	0	0	0	0	17	0	8	0	0
4....	6	0	0	0	0	0	0	0	0	10	0	0
5....	4	0	0	0	0	0	0	0	42	9	0.5	0
6....	2	0	0	0	0	0	0	0	21	0	0	0
7....	0	0	0	0	0	0	0	0	33	0	0	0
8....	0	0	0	0	0	0	0	6	14	0	0	0
9....	0	0	0	0	0	0	0	0	0	0	0	0
10....	0	0	0	0	3	0	17	0	0	1	0	0
11....	2	0	0	0	38	0	5	0	0	0	0	0
12....	6	0	0	0	51	0	2	0	0	0	0	0
13....	6	4	0	0	38	0	0	0	0	0	0	0
14....	6	7	0	0	0	0	3	0	0	0	0	0
15....	0	8	0	0	0	8	2	0	4	0	0	0
16....	0	8	0	0	0	26	3	0	0	0	0	0
17....	0	6	0	0	0	11	11	0	0	0	0	....
18....	0	3	0	0	0	6	6	0	6	0	0	....
19....	0	9	0	0	0	5	9	0	75	0	0	0
20....	0	11	0	0	0	5	0	0	41	0	0	2
21....	0	13	0	0	0	10	0	0	68	0	0	0
22....	8	0	0	0	0	9	0	7	56	0	8	0
23....	8	0	0	0	0	11	9	0	74	0	10	0
24....	0	0	0	0	0	4	37	0	24	0	0	0
25....	0	0	0	6	0	15	10	0	42	0	0	0
26....	0	0	0	0	0	10	5	0	26	5	0	0
27....	0	0	0	0	0	8	13	0	15	0	0	0
28....	0	0	0	0	0	7	11	0	56	0	0	0
29....	0	0	4	0	0	3	7	0	7	0	0	0
30....	0	0	3	0	....	13	18	0	34	0	0	0
31....	0	....	0	0	....	13	....	0	....	0	0	....
Total	60	69	7	0	130	164	171	100	668	76	18	2
Mean.	1.94	2.30	0.23	0	4.48	5.29	5.70	3.22	22.3	2.45	0.58	0.07
Max...	7	13	4	0	51	26	37	36	75	23	10	2
Min...	0	0	0	0	0	0	0	0	0	0	0	0
Acre-ft.	119	137	14	0	258	325	339	198	1330	151	36	4

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of Holly Drain, Near Coolidge, Kan. at State Line for Year Ending Sept. 30, 1931.
Drainage Area .... Square Miles. Altitude .... Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	46	41	31	30	29	32	46	51	49	28	27	19
2....	57	39	32	30	29	28	40	32	37	29	27	18
3....	53	37	32	30	29	28	38	32	55	29	25	17
4....	71	35	32	30	29	28	36	58	55	43	24	18
5....	74	35	32	30	29	27	35	57	67	30	24	18
6....	54	50	32	29	29	32	34	71	73	27	23	18
7....	54	52	32	29	29	59	51	62	44	27	25	19
8....	64	38	31	29	28	52	48	52	38	28	23	19
9....	52	50	31	29	28	42	34	35	38	29	27	20
10....	62	50	31	29	28	39	32	50	56	28	27	20
11....	112	42	31	28	28	37	34	44	56	32	26	21
12....	75	37	31	28	29	43	37	48	40	28	26	21
13....	51	40	31	29	28	46	30	45	45	26	25	22
14....	48	48	31	28	28	36	29	39	39	27	26	22
15....	45	46	30	28	28	36	28	44	34	29	26	20
16....	38	51	30	28	28	32	28	42	30	31	24	20
17....	42	52	31	29	27	31	28	42	33	34	23	21
18....	39	50	30	29	25	68	29	40	38	30	22	21
19....	38	51	30	29	24	65	28	40	26	26	22	21
20....	37	34	31	29	24	54	27	44	24	34	21	21
21....	37	34	29	30	28	42	27	70	24	28	26	22
22....	37	34	29	29	30	38	26	59	23	27	34	22
23....	36	35	30	29	29	57	27	50	22	26	100	23
24....	36	34	30	29	29	64	27	52	22	26	61	27
25....	37	35	30	30	32	65	29	42	27	25	25	25
26....	36	32	29	29	30	50	30	40	24	24	27	28
27....	38	31	30	30	29	54	30	46	23	24	27	32
28....	56	32	29	29	29	86	33	44	23	23	27	33
29....	44	32	29	29	....	35	44	52	27	22	26	34
30....	57	32	30	29	....	30	51	44	27	22	22	34
31....	48	....	30	29	....	33	....	56	....	24	22	....
Total	1574	1209	947	902	792	1369	1016	1483	1119	866	890	676
Mean.	50.8	40.3	30.5	29.1	28.3	44.2	33.9	47.8	37.3	27.9	28.7	22.5
Max...	112	52	22	30	32	86	51	71	73	43	100	34
Min...	36	31	29	28	24	27	26	32	22	22	21	17
Acre-ft.	3120	2400	1880	1790	1570	2720	2020	2940	2220	1720	1760	1340

Discharge of Holly Drain Near Coolidge, Kan., at State Line for Year Ending Sept. 30, 1932.
Drainage Area .... Square Miles. Altitude .... Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	27	25	24	20	20	26	23	28	18	29	28	18
2....	24	21	24	20	20	26	33	24	18	38	28	19
3....	19	20	23	20	19	25	31	32	18	33	28	20
4....	19	20	23	21	19	22	34	47	50	30	35	24
5....	19	20	22	20	20	22	25	38	106	25	32	23
6....	18	20	22	20	20	21	28	40	47	30	25	18
7....	19	20	22	21	20	20	40	33	40	34	24	18
8....	23	20	23	21	20	21	42	40	37	27	22	18
9....	23	19	23	21	20	20	40	35	42	25	20	18
10....	21	20	23	21	21	20	28	28	34	24	19	20
11....	20	20	22	22	22	21	42	34	38	24	19	24
12....	19	28	22	22	24	21	34	29	34	22	20	20
13....	22	30	21	21	20	21	35	20	35	20	20	20
14....	19	21	21	20	21	27	33	18	28	21	22	22
15....	19	21	21	21	21	44	27	18	54	19	20	22
16....	19	21	27	21	22	24	22	18	50	19	19	27
17....	19	21	22	20	21	32	22	19	35	20	19	20
18....	19	22	22	20	21	33	23	18	36	19	20	20
19....	19	26	20	21	20	31	29	18	208	19	22	19
20....	18	24	20	21	21	32	34	18	78	18	22	19
21....	18	23	21	21	20	19	34	18	65	19	21	19
22....	18	23	21	21	20	24	33	19	52	18	29	20
23....	20	25	20	20	20	28	40	18	64	19	30	27
24....	32	26	19	20	20	24	22	18	49	23	22	30
25....	33	25	20	20	20	23	24	18	40	27	21	27
26....	34	25	20	20	23	24	38	18	48	20	23	29
27....	34	25	19	21	25	25	40	18	53	19	25	27
28....	32	24	20	20	25	34	44	18	56	19	30	32
29....	21	24	19	20	26	24	55	18	42	20	24	31
30....	21	24	29	20	....	22	50	18	38	26	25	30
31....	20	....	21	19	....	24	....	18	....	22	19	....
Total	688	683	676	636	611	780	1005	754	1513	728	733	681
Mean.	22.2	22.8	21.8	20.5	21.1	25.2	33.5	24.3	50.4	23.5	23.6	22.7
Max...	34	30	29	22	26	44	55	47	208	38	35	32
Min...	18	19	19	19	19	19	22	18	18	18	19	18
Acre-ft.	1360	1360	1340	1260	1210	1550	1990	1490	3000	1440	1450	1350

Unless otherwise noted, all discharges are in cubic feet per second.

RIO GRANDE RIVER DRAINAGE

RIO GRANDE RIVER AT THIRTY MILE BRIDGE

Location—In Sec. 13, T. 40 N., R. 4 W., about 30 miles southwest of Creede at Rio Grande Reservoir.

Records Available—June 18, 1909, to September 30, 1923; May 16, 1925, to September 30, 1932.

Gage—Automatic recording gage.

Accuracy—Records considered fair.

Co-operation—Station maintained in co-operation with Farmers Union Reservoir Company.

RIO GRANDE RIVER AT WASON BELOW CREEDE

Location—In Sec. 8, T. 41 N., R. 1 E., three miles southeast of Creede.

Records Available—April 24, 1907, to September 30, 1932.

Gage—Automatic recording gage.

Accuracy—Records considered good.

RIO GRANDE RIVER NEAR DEL NORTE

Location—In Sec. 30, T. 40 N., R. 5 E., six miles west of Del Norte at State Bridge. From October 11, 1889, to November 30, 1906, a station was maintained four miles below the present station.

Records Available—October 11, 1889, to September 30, 1932.

Gage—Automatic recording gage.

Accuracy—Records considered good.

RIO GRANDE RIVER NEAR MONTE VISTA

Location—In Sec. 24, T. 39 N., R. 7 E., N. M. P. M., where Gunbarrel highway crosses river north of town.

Records Available—May 1, 1926, to September 30, 1932.

Gage—Automatic recording gage.

Accuracy—Records considered good.

Co-operation—Station maintained in co-operation with the Rio Grande Water Users.

RIO GRANDE RIVER AT ALAMOSA

Location—At State Street bridge in Alamosa.

Records Available—May 15, 1912, to September 30, 1932.

Gage—Automatic recording gage.

Accuracy—Records considered good.

RIO GRANDE RIVER NEAR LOBATOS

Location—In Sec. 22, T. 33 N., R. 11 E., six miles north of the State line at highway bridge.

Records Available—June 28, 1899, to September 30, 1932.

Gage—Automatic recording gage.

Accuracy—Records considered good.

NORTH CLEAR CREEK BELOW CONTINENTAL RESERVOIR

Location—In Sec. 22, T. 42 N., R. 3 W., just below Continental Reservoir.

Records Available—May 1, 1929, to September 30, 1932.

Gage—Automatic recording gage on a ten-foot Parshall flume.

Accuracy—Records good.

Co-operation—Station maintained in co-operation with Del Norte Irrigation District.

ALAMOSA RIVER AT JASPER

Location—Three-fourths mile above Jasper, on log bridge, short distance off road to Stunner and in Sec. 30, T. 37 N., R. 5. E.

Records Available—October 12, 1931, to September 30, 1932.

Gage—Staff gage.

Accuracy—Records considered good.

Co-operation—Station maintained in co-operation with the United States Geological Survey.

ALAMOSA RIVER BELOW TERRACE RESERVOIR

Location—One-half mile below Terrace dam in Sec. 23, T. 36 N., R. 6. E.

Records Available—April 18, 1909, to November 30, 1912; April 1, 1915, to October 31, 1915; February 1, 1917, to October 31, 1920; April 1, 1922, to September 30, 1932.

Gage—Automatic recording gage.

Accuracy—Records considered good.

Co-operation—Station maintained in co-operation with Terrace Irrigation District.

LA JARA CREEK NEAR CAPULIN

Location—In Sec. 21, T. 34 N., R. 7 E., eleven miles above Capulin. Station prior to 1924 was located two miles south of this point.

Records Available—April, 1916, to November 30, 1917; April 1, 1919, to September 30, 1932.

Gage—Automatic recording gage.

Accuracy—Records considered good.

LA JARA CREEK NEAR MOUTH

Location—In Sec. 17, T. 36 N., R. 11 E., eight miles southeast of Alamosa, one and one-half miles below river road.

Records Available—October 1, 1924, to September 30, 1932.

Gage—Automatic recording gage.

Accuracy—Records considered fair.

TRINCHERA CREEK BELOW THE SMITH RESERVOIR

Location—In Sec. 5, T. 31 S., R. 73 W., 6 P. M.

Records Available—October 1, 1929, to September 30, 1932.

Accuracy—Fair.

Gage—Bristol automatic.

Co-operation—Maintained in conjunction with the Trinchera Irrigation District.

TRINCHERA CREEK ABOVE MOUNTAIN HOME RESERVOIR NEAR FORT GARLAND

Location—In Sec. 31, T. 30 S., R. 71 W., just above Mountain Home Reservoir.

Records Available—May 1, 1923, to September 30, 1932.

Gage—Automatic recording gage.

Accuracy—Records considered good.

Co-operation—Maintained in conjunction with the Trinchera Irrigation District.

TRINCHERA CREEK ABOVE TURNER'S RANCH NEAR FORT GARLAND

Location—In Sec. 2, T. 31 S., R. 71 W., just above Turner's ranch.

Records Available—April 1, 1923, to September 30, 1932.

Gage—Automatic recording gage.

Accuracy—Records considered good.

SANGRE DE CRISTO CREEK NEAR FORT GARLAND

Location—In Sec. 23, T. 30 S., R. 72 W., one and one-half miles east of Fort Garland on Turner Ranch road.

Records Available—March 15 to October 9, 1916; May 1, 1923, to September 30, 1932.

Gage—Automatic recording gage.

Accuracy—Records considered good.

Co-operation—Maintained in conjunction with the Trinchera Irrigation District.

SANGRE DE CRISTO CREEK ABOVE SMITH RESERVOIR

Location—In Sec. 35, T. 30 S., R. 73 W., on County road 200 feet above bridge and two miles south of Blanca, and about three-fourths mile above high water line of reservoir.

Records Available—April 24, 1929, to September 30, 1932.

Gage—Automatic recording gage.

Accuracy—Records considered good.

Co-operation—Station maintained in co-operation with Trinchera Irrigation District.

UTE CREEK NEAR FORT GARLAND

Location—In Sec. 2, T. 30 S., R. 72 W., about two and one-half miles north of Fort Garland.

Records Available—March 16 to October 8, 1916; May 1, 1923, to September 30, 1932.

Gage—Automatic recording gage.

Accuracy—Records considered good.

CONEJOS RIVER NEAR MOGOTE

Location—In Sec. 34, T. 33 N., R. 7 E., 12 miles west of Antonito at Broyles Bridge.

Records Available—September 1, 1899, to March 31, 1900, and April 17, 1903, to October 31, 1905, at a point one mile below present station. March 21, 1907, to October 5, 1911, three miles above present station. January 1, 1912, to September 30, 1932, at present station.

Gage—Automatic recording gage.

Accuracy—Records considered good.

CONEJOS RIVER AT MOUTH NEAR LA SAUSES

Location—In Sec. 2, T. 35 N., R. 11 E., about one-half mile above mouth.

Records Available—March 29, 1921, to September 30, 1932.

Gage—Two automatic recording gages on two channels.

Accuracy—Records considered good.

SAN ANTONIO RIVER NEAR ORTIZ

Location—In Sec. 24, T. 32 N., R. 8 E., N. M. P. M., just across the State line from Ortiz, Colorado.

Records Available—January 1 to October 31, 1915; May 1, 1919, to October 31, 1920; October 1, 1924, to September 30, 1932.

Gage—Automatic recording gage.

Accuracy—Records considered good.

SAN ANTONIO RIVER AT MOUTH NEAR MANASSA

Location—In Sec. 21, T. 34 N., R. 10 E., two and one-half miles east of Manassa on highway bridge.

Records Available—April 1, 1923, to September 30, 1932.

Gage—Automatic recording gage.

Accuracy—Records considered good.

LOS PINOS CREEK NEAR ORTIZ

Location—In Sec. 27, T. 32 N., R. 8 E., N. M. P. M., two and one-half miles above Ortiz.

Records Available—January 1, 1914, to November 30, 1920; October 1, 1924, to September 30, 1932.

Gage—Automatic recording gage.

Accuracy—Records considered good.

CULEBRA RIVER NEAR SAN LUIS

Location—In Sec. 35, T. 3 N., R. 72 W., Beaubien and Miranda Grant Survey, one mile above concrete bridge in San Luis.

Records Available—May 1, 1909, to September 2, 1919; April 1, 1927, to September 30, 1932; April 21, 1924, to September 30, 1926, station was maintained near Chama in Sec. 2, T. 2 N., R. 71 W. 12′—Venturi Flume since May 1, 1931.

Gage—Automatic recording gage.

Accuracy—Records considered good.

Co-operation—Costilla Estates Development Company and San Luis Mill.

LA GARITA CREEK NEAR LA GARITA

Location—In Sec. 10, T. 41 N., R. 6 E., five miles southwest of La Garita Post Office at Curby Ranch.

Records Available—April 1, 1919, to September 30, 1932.

Gage—Automatic recording gage.

Accuracy—Records considered good.

CARNERO CREEK NEAR LA GARITA

Location—In Sec. 26, T. 42 N., R. 6 E., three miles northwest of La Garita at O'Dell Ranch.

Records Available—April 1, 1919, to September 30, 1932.

Gage—Automatic recording gage.

Accuracy—Records considered good.

SAGUACHE CREEK NEAR SAGUACHE

Location—In Sec. 14, T. 45 N., R. 6 E., at Ward's ranch, ten miles west of Saguache, and one-fourth mile below house.

Records Available—August 7, 1910, to September 23, 1912; June 1, 1914, to September 30, 1932.

Gage—Automatic recording gage.

Accuracy—Records considered good.

Discharge of Rio Grande River at Thirty Mile Bridge for Year Ending Sept. 30, 1931.
Drainage Area, 163 Square Miles. Altitude, 9,380 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	61	....	....	....	....	....	3	226	648	417	109	52
2....	83	....	....	....	....	....	3	121	693	277	90	57
3....	100	....	....	....	....	....	3	89	698	277	78	43
4....	103	....	....	....	....	....	3	100	688	322	69	39
5....	81	....	....	....	....	....	3	127	483	220	75	43
6....	61	....	....	....	....	....	3	144	363	186	161	46
7....	56	....	....	....	....	....	3	173	550	161	109	41
8....	57	....	....	....	....	....	3	200	693	149	121	39
9....	54	....	....	....	....	....	3	238	638	133	123	37
10....	54	....	....	....	....	....	3	200	470	121	92	36
11....	57	....	....	....	....	....	3	158	363	119	84	43
12....	57	....	....	....	....	....	3	154	318	109	93	49
13....	72	....	....	....	....	....	3	156	448	99	76	55
14....	85	....	....	....	....	....	3	166	703	95	65	50
15....	87	....	....	....	....	....	62	274	724	99	62	62
16....	85	....	....	....	....	....	61	409	838	97	64	57
17....	179	....	....	....	....	....	57	426	875	127	76	47
18....	187	....	....	....	....	....	60	479	880	121	79	48
19....	182	....	....	....	....	....	78	515	797	191	68	76
20....	176	....	....	....	....	....	111	310	465	113	56	123
21....	174	....	....	....	....	....	138	197	342	95	52	85
22....	174	....	....	....	....	....	117	147	322	84	53	81
23....	162	....	....	....	....	....	95	163	326	78	50	82
24....	172	....	....	....	....	....	95	363	302	73	45	235
25....	187	....	....	....	....	....	97	515	292	76	44	161
26....	111	....	....	....	....	....	232	601	295	87	43	131
27....	54	....	....	....	....	....	270	430	270	81	41	115
28....	67	....	....	....	....	....	248	302	380	95	36	104
29....	52	....	....	....	....	....	241	322	346	109	36	100
30....	47	....	....	....	....	....	235	448	380	97	37	95
31....	23	....	....	....	....	....	....	586	....	117	43	....
Total	3100	....	....	....	....	....	2239	8739	15590	4425	2230	2232
Mean.	100	3	3	3	3	3	74.6	282	520	143	71.9	74.4
Max...	187	3	3	3	3	3	270	601	880	417	161	235
Min...	23	3	3	3	3	3	3	89	270	73	36	36
Acre-ft.	6150	178	184	184	167	184	4440	17300	30900	8790	4420	4430

Discharge of Rio Grande River at Thirty Mile Bridge for Year Ending Sept. 30, 1932.
Drainage Area, 163 Square Miles. Altitude, 9,380 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	81	44	....	....	....	....	3	118	31	640	699	250
2....	130	38	....	....	....	....	3	150	32	729	784	228
3....	190	40	....	....	....	....	3	254	101	761	784	214
4....	143	42	....	....	....	....	3	338	434	730	769	195
5....	118	36	....	....	....	....	38	345	308	699	722	172
6....	106	34	....	....	....	....	74	338	410	560	707	167
7....	103	34	....	....	....	....	108	341	518	458	518	192
8....	90	41	....	....	....	....	225	341	518	507	530	206
9....	86	42	....	....	....	....	241	381	154	463	586	206
10....	114	23	....	....	....	....	316	453	200	868	586	184
11....	97	28	....	....	....	....	353	606	429	994	560	154
12....	82	3	....	....	....	....	353	640	699	930	548	139
13....	74	3	....	....	....	....	349	234	1100	655	548	132
14....	68	3	....	....	....	....	334	244	1610	699	554	132
15....	66	3	....	....	....	....	364	662	1660	640	548	128
16....	68	3	....	....	....	....	372	238	1510	548	554	114
17....	70	3	....	....	....	....	357	99	1370	458	554	97
18....	74	3	....	....	....	....	368	89	1260	463	512	76
19....	82	3	....	....	....	....	360	71	1040	496	507	74
20....	92	3	....	....	....	....	360	120	800	507	453	73
21....	90	3	....	....	....	....	353	301	842	586	444	73
22....	78	3	....	....	....	....	280	89	1150	692	530	65
23....	68	3	....	....	....	....	145	38	1240	769	572	60
24....	66	3	....	....	....	....	82	44	1190	769	424	63
25....	65	3	....	....	....	....	71	48	1280	722	326	60
26....	63	3	....	....	....	....	81	49	1290	737	312	60
27....	48	3	....	....	....	....	90	52	1100	699	439	60
28....	53	3	....	....	....	....	86	54	921	714	439	60
29....	49	3	....	....	....	....	89	56	885	784	393	60
30....	35	3	....	....	....	....	106	59	714	817	376	60
31....	41	....	....	....	....	....	....	47	....	809	316	....
Total	2590	459	....	....	....	....	5967	6899	24796	20966	16594	3754
Mean.	83.5	15.3	3	3	3	3	199	222	826	676	535	125
Max..	190	....	....	....	....	....	....	662	1660	994	784	250
Min...	35	....	....	....	....	....	....	38	31	458	312	60
Acre-ft.	5130	910	184	184	172	184	11800	13600	49200	41600	32900	7440

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of Rio Grande River at Wason for Year Ending September 30, 1931.
Drainage Area, 700 Square Miles. Altitude, 8,591 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	345	169	....	....	....	....	80	450	1640	1070	375	199
2....	324	156	....	....	....	....	89	445	1730	803	324	221
3....	332	156	....	....	....	....	80	309	1770	752	309	191
4....	332	153	....	....	....	....	89	341	1680	980	286	176
5....	286	156	....	....	60	....	80	349	1420	687	282	172
6....	248	153	....	....	....	....	166	375	1130	585	362	176
7....	229	153	....	....	....	....	210	435	1340	535	370	176
8....	240	153	....	....	....	....	206	541	1640	488	388	176
9....	240	153	95	....	....	....	166	516	1620	440	379	162
10....	332	150	....	....	....	98	191	477	1260	415	324	166
11....	349	150	....	....	....	....	225	397	1080	397	297	191
12....	309	150	....	....	....	....	240	379	1040	375	282	214
13....	324	150	....	....	....	....	240	435	1230	366	267	210
14....	316	150	....	....	....	....	267	578	1480	375	244	214
15....	309	150	....	....	....	....	275	735	1610	375	233	244
16....	301	150	....	....	....	....	256	990	1720	397	205	248
17....	320	150	....	....	....	....	305	1110	1810	440	205	214
18....	366	150	....	....	....	....	358	1330	1750	450	245	214
19....	375	150	....	....	....	....	392	1290	1670	482	245	248
20....	388	150	....	....	88	....	410	848	1170	471	245	466
21....	362	146	....	....	....	....	406	592	902	420	200	379
22....	345	135	....	....	....	....	420	488	839	392	190	320
23....	337	125	....	47	....	....	388	634	839	388	188	294
24....	328	110	....	....	....	....	375	951	803	366	188	505
25....	353	110	....	....	....	....	353	1450	760	362	187	599
26....	349	115	....	....	....	....	362	1580	743	349	180	440
27....	256	110	....	....	....	79	499	1210	695	345	176	397
28....	221	110	....	....	....	....	477	893	760	358	172	353
29....	202	115	58	....	....	....	430	1010	718	384	172	341
30....	191	110	....	....	....	....	435	1230	990	388	169	320
31....	195	....	....	....	....	....	....	1490	....	384	172	....
Total	9404	4238	....	....	....	....	8452	23858	37839	15019	7861	8226
Mean.	303	141	82	50	72	95	282	770	1260	484	254	274
Max..	388	169	....	....	....	....	499	1580	1810	1070	388	599
Min...	191	....	....	....	....	....	....	309	695	345	169	162
Acre-ft.	18600	8390	5040	3070	4000	5840	16800	47300	75000	29800	15600	16300

Discharge of Rio Grande River at Wason for Year Ending September 30, 1932.
Drainage Area, 700 Square Miles. Altitude, 8,591 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	313	194	....	....	....	....	162	508	1600	1580	1760	722
2....	398	191	....	....	....	....	162	673	1600	1610	1670	646
3....	646	187	....	....	....	102	184	865	1660	1700	1720	607
4....	487	187	....	86	....	....	198	1070	1840	1700	1700	588
5....	441	176	....	....	....	....	231	1180	1600	1590	1660	565
6....	394	169	....	....	....	....	283	1220	1420	1600	1600	536
7....	355	169	....	....	....	....	262	1170	1450	1180	1460	536
8....	334	180	....	....	....	....	417	1230	1500	1070	1300	542
9....	321	173	....	....	....	....	431	1400	1540	1390	1410	536
10....	394	184	....	....	....	....	514	1450	1290	1480	1400	519
11....	367	176	....	....	88	....	588	1560	1640	1680	1380	471
12....	351	162	....	....	....	....	607	2000	2010	1850	1340	426
13....	330	150	....	....	....	....	646	2010	2480	1580	1300	417
14....	300	140	101	....	....	....	730	1650	3110	1320	1330	403
15....	288	140	....	....	....	....	775	2310	3110	1270	1380	389
16....	279	140	....	....	....	....	857	2370	2940	1170	1370	372
17....	262	140	....	....	....	....	848	2190	2760	1030	1450	355
18....	262	140	....	....	....	....	865	2320	2550	1020	1380	325
19....	279	140	....	....	....	....	944	2200	2350	1120	1330	317
20....	296	140	....	78	....	....	944	1720	2130	1040	1270	313
21....	296	135	....	....	....	....	865	2060	2060	1090	1220	304
22....	279	130	....	....	....	....	783	2330	2350	1180	1290	304
23....	262	120	....	....	....	....	576	2140	2680	1280	1240	304
24....	250	120	....	....	....	102	456	2120	2520	1330	1050	304
25....	246	120	....	....	....	....	403	2080	2500	1330	857	309
26....	239	110	....	....	....	....	441	1760	2490	1370	775	309
27....	220	110	....	....	....	....	456	1600	2300	1440	1200	309
28....	205	110	....	....	....	....	380	1660	2070	1530	1400	300
29....	205	110	....	....	....	....	389	1840	1940	1800	1130	288
30....	184	110	....	....	....	....	436	1940	1830	1910	988	288
31....	187	....	....	....	....	....	....	1660	....	1860	857	....
Total	9670	4453	....	....	....	....	15833	52286	63320	44100	41217	12604
Mean.	312	148	95	83	90	110	528	1690	2110	1420	1330	420
Max..	646	....	....	....	....	....	944	2370	3110	1910	1760	722
Min...	184	....	....	....	....	....	162	508	1420	1020	775	288
Acre-ft.	19200	8810	5840	5100	5180	6760	31400	104000	126000	87300	81800	25000

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of Rio Grande River Near Del Norte For Year Ending September 30, 1931.
Drainage Area, 1,320 Square Miles. Altitude, 7,868 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	470	247	....	....	....	....	270	658	2300	1240	430	200
2....	416	234	....	....	....	....	280	681	2310	1080	392	247
3....	404	234	....	....	....	....	290	557	2430	902	381	243
4....	404	226	220	....	....	....	300	571	2360	1140	370	207
5....	382	221	....	....	146	....	310	578	2150	920	335	188
6....	361	221	....	....	....	....	320	578	1830	778	402	196
7....	340	220	....	143	....	....	330	681	2270	688	449	226
8....	325	220	....	....	....	....	340	864	2140	613	436	211
9....	325	220	....	....	....	....	350	804	2190	550	474	192
10....	325	220	....	....	....	187	360	745	1930	511	419	160
11....	434	210	....	....	....	....	370	681	1560	486	381	154
12....	509	210	....	....	....	....	380	620	1440	467	350	234
13....	434	210	....	....	....	....	397	688	1580	436	325	243
14....	428	205	....	....	....	....	455	920	1740	424	286	255
15....	428	200	....	....	....	....	455	1200	2040	430	264	296
16....	410	190	....	....	....	....	518	1510	2030	443	255	330
17....	399	180	....	....	....	....	455	1620	2150	467	268	277
18....	452	190	....	....	....	....	518	2040	2040	531	301	259
19....	470	190	....	....	....	....	620	1960	1960	524	301	320
20....	464	200	....	....	200	....	737	1490	1580	564	282	804
21....	452	200	....	....	....	....	658	1030	1160	492	255	643
22....	440	220	....	....	....	....	658	830	1040	449	243	518
23....	440	220	....	121	....	....	658	978	1030	430	230	455
24....	428	220	....	....	....	....	585	1370	1030	419	222	753
25....	416	220	....	....	....	....	518	2060	1010	402	207	1030
26....	446	220	....	....	....	....	486	2270	998	397	200	745
27....	377	220	....	....	....	218	658	2030	939	408	211	673
28....	310	220	....	....	....	....	658	1580	930	402	207	578
29....	291	220	....	....	....	....	658	1650	911	402	196	524
30....	273	220	....	....	....	....	635	1820	1030	424	185	486
31....	277	....	....	....	....	....	....	2090	....	424	182	....
Total	12330	6428	....	....	....	....	14227	37154	50108	17843	9439	11647
Mean.	398	214	197	135	168	200	474	1200	1670	576	304	388
Max..	509	247	....	....	....	....	737	2270	2430	1240	474	1030
Min...	273	....	....	....	....	....	....	557	911	397	182	154
Acre-ft.	24500	12700	12100	8300	9330	12300	28200	73800	99400	35400	18700	23100

Discharge of Rio Grande River Near Del Norte for Year Ending September 30, 1932.
Drainage Area, 1,320 Square Miles. Altitude, 7,868 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	449	296	....	....	198	....	399	995	3550	3180	2350	1020
2....	613	291	....	....	....	....	400	1270	3550	3160	2170	916
3....	1080	286	....	....	....	....	500	1720	3670	3260	2220	896
4....	911	268	....	....	....	....	550	2090	3840	3260	2240	820
5....	745	255	....	....	....	....	650	2410	3280	3060	2120	773
6....	658	243	....	....	....	....	763	2460	2860	2680	2000	681
7....	585	230	....	....	....	....	717	2270	2890	2410	1870	663
8....	537	234	....	....	....	....	763	2350	2990	2170	1600	663
9....	524	259	....	....	....	....	906	2660	3180	2300	1740	645
10....	650	255	....	....	....	....	906	2710	2990	2570	1720	645
11....	599	255	....	....	....	....	1000	2680	3220	2690	1710	594
12....	571	268	....	174	....	....	1110	3280	3710	3060	1570	530
13....	524	226	....	....	....	....	1230	3860	4300	3080	1600	500
14....	474	215	....	....	....	....	1410	3280	5000	2520	1600	471
15....	424	192	....	....	194	256	1530	3880	5200	2330	1680	450
16....	408	211	....	....	....	....	1720	4570	5160	2110	1670	436
17....	413	222	....	....	....	....	1870	4490	4890	1920	1750	396
18....	413	185	....	....	....	....	1870	4870	4570	1810	1760	370
19....	424	192	....	....	....	....	1940	4960	4300	2030	1710	350
20....	430	218	200	....	....	....	2020	4070	3980	1790	1640	334
21....	430	180	....	....	....	....	1870	4240	3860	1710	1570	306
22....	413	170	....	....	....	....	1720	4980	4110	1760	1670	290
23....	386	150	....	....	....	....	1400	4850	4610	1880	1620	322
24....	375	140	....	....	....	....	1160	4660	4570	1870	1430	344
25....	365	120	....	....	....	....	945	4640	4470	1870	1260	370
26....	355	120	....	....	....	....	995	4050	4570	1810	1100	350
27....	335	120	....	....	....	....	995	3570	4240	1850	1890	339
28....	320	120	....	....	....	....	896	3840	4030	1920	1990	334
29....	325	120	....	....	....	....	849	4090	3710	2350	1590	328
30....	306	120	....	....	....	....	849	4400	3610	2450	1350	328
31....	301	....	189	....	....	....	....	3770	....	2520	1200	....
Total	15343	6161	....	....	....	....	33933	107965	118910	73380	53390	15464
Mean.	495	205	166	185	197	268	1120	3480	3960	2370	1720	515
Max..	1080	....	....	....	....	....	2020	4980	5200	3260	2350	1020
Min...	301	....	....	....	....	....	....	995	2860	1710	1100	290
Acre-ft.	30400	12200	10200	11400	11300	16500	66600	214000	236000	146000	106000	30600

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of Rio Grande River Near Monte Vista for Year Ending September 30, 1931.
Drainage Area,.... Square Miles. Altitude, 7,500 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept
1....	54	86	....	....	....	....	118	30	758	291	118	52
2....	107	128	....	....	....	....	100	67	758	342	82	67
3....	70	107	....	....	....	....	67	100	791	220	82	52
4....	70	107	....	....	....	....	82	118	791	243	82	52
5....	70	86	....	....	....	....	82	100	694	291	67	52
6....	70	107	....	....	....	....	67	67	570	137	82	52
7....	54	128	....	....	....	....	21	67	570	82	82	67
8....	43	128	....	....	....	....	13	100	726	41	67	67
9....	43	128	....	....	....	....	30	118	694	30	67	67
10....	32	128	....	....	....	....	21	100	601	30	67	52
11....	43	151	....	....	....	....	13	100	540	30	52	52
12....	151	151	....	....	....	....	21	100	510	82	52	52
13....	174	174	....	....	....	....	21	100	540	100	41	52
14....	128	174	....	....	....	....	13	118	601	100	30	52
15....	128	174	....	....	....	....	21	243	601	100	21	52
16....	128	197	....	....	....	....	30	481	570	118	21	52
17....	86	220	....	....	....	....	30	570	601	118	21	52
18....	86	220	....	....	....	....	21	663	481	156	13	41
19....	70	220	....	....	....	267	13	540	452	156	21	41
20....	54	220	....	....	....	291	41	481	396	137	21	118
21....	43	245	....	....	....	291	21	369	267	118	21	118
22....	32	220	....	....	....	267	21	243	197	118	21	41
23....	16	245	....	....	....	291	21	156	137	82	30	21
24....	16	270	....	....	....	291	21	342	137	67	41	30
25....	16	295	....	....	....	243	13	342	156	82	41	342
26....	16	295	....	....	....	243	8	726	156	118	41	197
27....	16	295	....	....	....	267	8	694	156	118	41	100
28....	7	295	....	....	....	176	21	510	137	100	41	52
29....	43	320	....	....	....	197	13	632	137	100	30	41
30....	32	347	....	....	....	197	13	758	118	100	30	41
31....	43	....	....	....	....	156	....	791	....	82	30	....
Total	1941	5861	....	....	....	....	985	9826	13843	3889	1456	2127
Mean.	62.6	195	....	....	....	....	32.8	317	461	125	47.0	70.9
Max..	174	347	....	....	....	....	118	791	791	342	118	342
Min..	7	86	....	....	....	....	8	30	118	30	13	21
Acre-ft.	3850	11600	....	....	....	....	1950	19500	27400	7690	2890	4220

Discharge of Rio Grande River Near Monte Vista for Year Ending September 30, 1932.
Drainage Area,.... Square Miles. Altitude, 7,500 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	41	22	....	....	....	....	62	110	800	1560	404	189
2....	30	22	....	....	....	....	125	265	686	1340	378	140
3....	342	52	....	....	....	....	140	550	723	1560	404	172
4....	369	30	....	....	....	....	156	686	840	1500	378	172
5....	220	30	....	....	....	....	172	760	840	1400	378	172
6....	137	22	....	....	....	....	225	723	519	885	330	140
7....	82	22	....	....	....	....	225	550	459	519	265	74
8....	52	22	....	....	....	....	189	616	459	189	156	52
9....	41	30	....	....	....	....	206	760	550	244	86	33
10....	30	41	....	....	....	....	189	723	519	583	62	24
11....	22	67	....	....	....	....	225	760	519	651	52	24
12....	22	67	....	....	....	....	244	800	840	980	52	24
13....	22	67	....	....	....	....	308	1030	1560	1030	33	16
14....	30	52	....	....	....	....	378	616	2310	800	62	8
15....	30	30	....	....	....	244	430	651	2840	583	74	8
16....	30	41	....	....	....	244	404	1400	2910	459	74	8
17....	22	137	....	....	....	244	354	1620	2700	430	74	16
18....	30	137	....	....	....	225	354	1740	2240	308	110	16
19....	22	176	....	....	....	244	404	1860	1860	404	172	24
20....	22	197	....	....	....	265	404	1230	1500	265	189	33
21....	22	197	....	....	....	286	404	980	1230	308	225	33
22....	22	176	....	....	....	244	430	2050	1340	430	286	33
23....	22	156	....	....	....	225	583	2180	2380	459	354	42
24....	22	156	....	....	....	206	723	1860	3190	430	330	52
25....	22	....	....	....	....	125	430	1920	2980	430	265	33
26....	22	....	....	....	....	125	172	1450	3260	354	189	33
27....	67	....	....	....	....	172	172	930	3120	286	140	33
28....	67	....	....	....	....	189	156	980	2840	286	616	33
29....	22	....	....	....	....	110	98	1080	2380	286	583	33
30....	22	....	....	....	....	86	86	1400	2120	459	378	33
31....	22	....	....	....	....	62	....	1080	....	459	265	....
Total	1928	....	....	....	....	....	8448	33360	50514	19877	7364	1703
Mean.	62.2	93	....	....	....	190	282	1080	1680	641	238	56.8
Max..	369	....	....	....	....	....	723	2180	3260	1560	616	189
Min..	22	....	....	....	....	....	62	110	459	189	33	8
Acre-ft.	3820	5530	....	....	....	....	11700	16800	66400	100000	39400	14600	3380

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of Rio Grande River at Alamosa for Year Ending September 30, 1931.
Drainage Area, ... Square Miles. Altitude ,7,536 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	16	28	....	....	....	....	168	18	90	47	40	18
2....	16	40	....	....	....	....	114	18	80	47	40	18
3....	16	114	....	....	163	....	90	18	70	47	34	18
4....	16	102	....	....	....	....	70	18	62	54	28	18
5....	16	114	....	....	....	....	70	18	54	54	28	18
6....	16	114	....	....	....	....	62	18	54	54	28	18
7....	16	114	....	....	....	....	54	18	47	54	28	18
8....	16	114	....	....	....	....	47	18	54	54	28	18
9....	16	114	....	....	....	....	40	18	90	47	28	18
10....	16	....	....	....	....	....	40	18	70	47	23	18
11....	16	....	....	....	....	....	34	18	54	40	23	18
12....	16	....	....	....	....	....	34	18	47	40	23	18
13....	16	....	....	....	....	259	34	28	47	40	23	18
14....	18	....	....	....	....	....	34	28	54	40	23	18
15....	18	....	....	....	....	....	28	34	54	40	23	18
16....	18	....	....	....	....	....	23	34	62	40	23	18
17....	18	....	....	....	....	....	23	40	54	40	23	18
18....	18	....	....	....	....	....	23	34	54	40	23	18
19....	23	....	....	....	....	....	23	40	54	54	23	18
20....	23	....	....	....	....	....	23	28	47	54	18	18
21....	40	....	....	....	....	312	23	23	47	47	18	18
22....	47	....	....	....	....	312	23	28	47	40	18	23
23....	40	....	....	....	....	312	18	28	54	40	18	23
24....	34	....	127	121	....	312	18	28	47	40	18	23
25....	34	....	....	....	....	312	18	28	47	47	18	23
26....	28	....	....	....	....	292	18	28	47	47	18	23
27....	28	....	....	....	....	253	18	34	47	47	18	23
28....	23	....	....	....	....	234	18	40	47	47	18	23
29....	23	....	....	....	....	216	18	34	47	47	18	23
30....	18	....	....	....	....	198	18	34	47	47	18	23
31....	40	....	....	....	....	183	....	62	....	54	18	....
Total	699	....	....	....	....	....	1224	849	1675	1436	728	585
Mean.	22.5	130	135	125	225	275	40.8	27.4	55.8	46.3	23.5	19.5
Max..	47	....	....	....	....	....	168	62	90	54	40	23
Min...	16	....	....	....	....	....	18	18	47	40	18	18
Acre-ft.	1380	7740	8300	7690	12500	16900	2430	1680	3320	2850	1450	1160

Discharge of Rio Grande River at Alamosa for Year Ending September 30, 1932.
Drainage Area.... Square Miles. Altitude, 7,536 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	18	7	170	....	....	420	100	34	462	1820	41	129
2....	18	7	170	....	....	....	82	34	312	1310	34	98
3....	18	7	170	....	....	....	100	28	233	1200	34	72
4....	18	7	170	....	162	....	100	41	233	1240	34	56
5....	18	14	170	....	....	....	64	89	312	1240	34	56
6....	18	28	170	....	....	....	48	80	278	942	34	48
7....	18	23	170	....	....	....	40	56	164	596	28	41
8....	18	23	170	....	....	....	40	34	118	312	28	41
9....	18	23	170	....	....	357	33	28	98	177	22	34
10....	18	23	180	....	....	357	33	34	89	140	22	28
11....	18	23	190	....	....	339	33	34	89	164	22	28
12....	18	18	185	171	....	339	33	34	80	248	22	22
13....	18	18	185	....	....	339	32	34	177	482	22	22
14....	18	23	185	....	....	305	32	129	620	572	22	22
15....	18	23	185	....	....	305	32	72	1600	384	22	22
16....	14	23	185	....	....	288	38	56	1960	263	22	22
17....	14	23	185	....	....	272	32	462	1780	177	22	22
18....	14	23	185	....	230	288	32	572	1390	152	22	22
19....	14	23	185	....	....	288	26	744	1170	98	22	16
20....	14	28	185	....	....	322	18	912	942	80	22	16
21....	14	34	185	....	....	339	18	548	669	72	28	16
22....	14	90	185	....	....	357	18	620	502	72	28	16
23....	14	170	185	....	....	305	24	1310	912	56	28	16
24....	14	170	185	....	....	242	145	1390	1960	48	28	16
25....	14	160	180	....	....	172	254	1200	2710	41	22	10
26....	14	145	180	....	....	133	112	1200	2760	41	22	10
27....	14	160	180	....	....	122	51	826	2980	41	22	10
28....	10	160	180	....	....	157	45	482	2820	34	22	10
29....	10	160	180	....	....	169	32	442	2600	34	164	10
30....	10	170	180	....	....	133	33	525	2100	56	218	10
31....	7	....	180	....	....	112	....	442	....	48	164	....
Total	475	1806	5565	....	....	....	1680	12492	32120	12140	1277	941
Mean.	15.3	60.2	180	171	217	298	56.0	403	1070	392	41.2	31.4
Max..	18	....	....	....	....	....	254	1390	2980	1820	218	129
Min...	7	....	....	....	....	....	18	28	80	34	22	10
Acre-ft.	941	3580	11100	10500	12500	18300	3330	24800	63700	24100	2530	1870

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of Rio Grande River Near Lobatos for Year Ending September 30, 1931.
Drainage Area, 7,700 Square Miles. Altitude, 7,440 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan	Feb.	Mar.	April	May	June	July	Aug.	Sept
1....	116	140	387	....	....	364	436	172	99	42	23	1(
2....	119	150	390	....	215	362	395	156	90	38	21	2:
3....	128	143	390	....	....	360	338	156	90	28	42	2.
4....	143	186	390	....	....	358	292	156	79	27	71	2:
5....	143	218	395	....	....	360	265	160	74	24	66	2:
6....	143	223	395	....	....	354	255	160	74	20	58	2'
7....	150	232	395	....	....	354	260	164	68	18	54	3:
8....	154	237	400	....	....	354	250	164	66	18	56	4(
9....	137	247	400	....	....	354	234	216	66	18	56	4(
10....	134	257	410	....	....	356	234	250	61	17	52	3:
11....	146	262	410	....	....	356	225	244	58	17	52	4(
12....	150	272	420	....	....	360	225	206	58	16	56	5-
13....	146	267	420	....	....	370	216	176	56	14	48	4:
14....	150	257	450	....	....	408	197	168	48	14	40	5(
15....	158	267	420	....	....	803	197	164	48	14	40	6]
16....	166	270	410	....	....	748	206	172	44	14	40	4:
17....	162	270	400	....	....	757	211	197	40	13	27	4:
18....	162	270	385	....	....	861	216	211	37	18	18	4:
19....	162	250	370	....	375	851	216	206	35	21	20	5(
20....	154	250	350	....	....	775	216	234	34	20	18	5(
21....	146	250	330	195	....	729	250	234	32	18	17	5(
22....	146	270	310	....	....	900	260	239	31	14	17	4-
23....	158	280	290	....	....	711	244	220	32	20	17	4-
24....	158	300	270	....	....	668	220	184	32	25	17	6]
25....	154	300	250	....	....	539	193	164	32	25	16	5:
26....	146	340	230	....	....	546	172	145	32	24	16	15:
27....	146	340	210	....	....	471	164	124	28	21	14	13:
28....	140	380	210	....	....	508	172	114	28	18	14	96
29....	137	380	205	....	....	450	164	108	25	16	14	84
30....	134	385	205	....	....	436	156	102	25	17	13	111
31....	131	....	205	....	....	422	....	114	....	23	14	....
Total	4519	7893	10702	....	....	16245	7079	5480	1522	632	1027	1638
Mean.	146	263	345	198	308	524	236	177	50.7	20.4	33.1	54.6
Max..	166	....	....	....	....	900	436	250	99	42	71	152
Min...	116	....	....	....	....	354	156	102	25	13	13	16
Acre-ft.	8980	15600	21200	12000	17100	32200	14000	10900	3020	1250	2040	3250

Discharge of Rio Grande River Near Lobatos for Year Ending September 30, 1932.
Drainage Area, 7,700 Square Miles. Altitude, 7,440 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	84	84	200	....	....	550	295	469	3420	4490	236	374
2....	79	84	200	....	....	550	280	430	2800	3900	255	301
3....	84	84	200	....	....	550	265	449	2480	3380	250	260
4....	87	87	200	....	....	560	265	647	2360	3120	232	227
5....	87	87	200	....	....	560	265	887	2250	3120	222	209
6....	96	84	200	....	....	560	241	1230	2130	2940	222	196
7....	108	93	200	234	....	560	255	1270	1790	2270	218	184
8....	108	108	225	....	....	560	285	1110	1510	1740	209	168
9....	124	114	225	....	....	560	280	1170	1480	1280	188	157
10....	128	102	300	....	....	570	250	1400	1520	1530	176	149
11....	114	111	314	....	....	570	245	1640	1540	950	157	146
12....	108	114	310	....	....	573	255	1620	1600	970	143	135
13....	99	111	300	....	....	615	255	1630	1700	1130	129	129
14....	93	108	280	....	....	615	260	1870	1970	1540	119	129
15....	90	111	275	....	....	573	285	2140	2540	1530	113	132
16....	87	117	280	....	350	573	416	2420	3180	1310	107	125
17....	87	121	300	....	....	573	573	2710	3500	1210	104	122
18....	93	131	310	....	....	531	711	3400	3310	1060	98	119
19....	96	121	310	....	....	545	651	3900	2950	970	98	116
20....	96	131	305	....	....	545	767	4680	2640	869	93	116
21....	102	193	310	....	....	559	801	5020	2400	759	122	113
22....	105	141	320	....	....	587	775	4320	2160	639	146	107
23....	99	108	320	....	....	601	809	4680	2100	545	139	110
24....	93	80	320	....	....	524	743	5670	2580	475	149	125
25....	93	70	300	....	....	475	809	5530	3700	404	157	122
26....	93	80	290	....	....	404	851	5100	4680	374	160	125
27....	87	140	290	....	....	386	735	4640	5420	323	172	125
28....	84	170	306	....	....	386	631	3840	5580	275	188	116
29....	87	200	330	....	....	410	580	3520	5490	250	227	113
30....	81	200	325	....	....	380	549	3540	5100	227	290	116
31....	84	....	300	....	....	317	....	3600	....	214	436	....
Total	2953	3485	8545	....	....	16322	14352	84532	85880	43794	5555	4666
Mean.	95.2	116	276	264	378	526	478	2730	2860	1410	179	156
Max..	128	....	....	....	....	615	851	5670	5580	4490	436	374
Min...	79	....	....	....	....	....	241	430	1480	214	93	107
Acre-ft.	5850	6900	17000	16200	21700	32300	28400	168000	170000	86700	11000	9280

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of North Clear Creek Below Continental Reservoir for Year Ending Sept. 30, 1931.
Drainage Area, 49 Square Miles. Altitude, ... Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	23	13	....	....	....	....	....	25	60	37	16	16
2....	24	14	....	....	....	....	....	33	58	28	14	15
3....	23	14	....	....	....	....	....	38	56	26	13	12
4....	24	14	....	....	....	....	....	38	54	30	13	11
5....	20	16	....	....	....	....	....	41	52	24	15	12
6....	17	16	....	....	....	....	....	47	52	21	16	13
7....	17	15	....	....	....	....	....	52	51	20	**16**	**12**
8....	17	16	....	....	....	....	....	56	50	19	16	12
9....	16	14	....	....	....	....	....	53	51	17	16	12
10....	16	14	....	....	....	....	....	43	51	17	14	10
11....	18	13	....	....	....	....	....	38	45	18	14	11
12....	18	14	....	....	....	....	....	38	41	17	14	11
13....	18	14	....	....	....	....	....	39	43	16	13	12
14....	20	13	....	....	....	....	....	39	43	16	12	12
15....	22	14	....	....	....	....	....	51	43	17	13	12
16....	21	15	....	....	....	....	....	64	41	17	13	12
17....	21	....	....	....	....	....	....	74	41	16	14	11
18....	22	....	....	....	....	....	....	95	36	19	16	11
19....	14	....	....	....	....	....	....	84	30	24	16	15
20....	16	....	....	....	....	....	....	40	31	18	13	16
21....	16	....	....	....	....	....	....	39	33	17	12	12
22....	17	....	....	....	....	....	....	43	35	16	13	12
23....	17	....	....	....	....	....	....	61	33	15	13	12
24....	17	....	....	....	....	....	....	74	26	15	12	13
25....	18	....	....	....	....	....	....	83	23	16	12	12
26....	18	....	....	....	....	....	....	87	22	16	13	12
27....	17	....	....	....	....	....	35	79	24	15	11	13
28....	17	....	....	....	....	....	36	33	29	16	10	12
29....	13	....	....	....	....	....	31	36	29	17	12	13
30....	13	....	....	....	....	....	26	56	29	16	13	13
31....	13	....	....	....	....	....	....	58	....	14	13	....
Total	547	....	....	....	....	....	....	1637	1212	590	421	372
Mean.	17.6	12	10	8	8	10	20	52.8	40.4	19.0	13.6	12.4
Max..	24	16	....	....	....	....	....	95	....	37	16	16
Min...	13	....	....	....	....	....	....	25	22	14	10	10
Acre-ft.	1080	714	615	492	444	615	1190	3250	2400	1170	836	738

Discharge of North Clear Creek Below Continental Reservoir for Year Ending Sept. 30, 1932.
Drainage Area, 49 Square Miles. Altitude, ... Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept
1....	12	12	....	....	....	....	....	34	143	49	122	16
2....	13	11	....	....	....	....	....	46	145	49	115	16
3....	16	11	....	....	....	....	....	61	145	51	110	21
4....	13	11	....	....	....	....	....	73	136	53	112	34
5....	11	11	....	....	....	....	....	84	124	53	111	29
6....	12	11	....	....	....	....	....	92	105	49	**103**	**27**
7....	12	11	....	....	....	....	....	96	90	43	96	28
8....	11	11	....	....	....	....	....	121	78	26	94	28
9....	11	11	....	....	....	....	....	147	75	29	100	29
10....	16	11	....	....	....	....	....	147	75	33	102	29
11....	13	11	....	....	....	....	....	156	75	33	102	26
12....	13	11	....	....	....	....	....	190	75	33	71	20
13....	13	11	....	....	....	....	....	152	75	43	31	18
14....	13	11	....	....	....	....	....	164	90	52	34	18
15....	13	11	....	....	....	....	....	213	100	53	42	19
16....	13	10	....	....	....	....	....	138	77	53	47	21
17....	13	....	....	....	....	....	....	69	67	47	51	23
18....	13	....	....	....	....	....	....	26	83	43	51	23
19....	13	....	....	....	....	....	....	26	81	56	48	23
20....	13	....	....	....	....	....	....	30	75	64	45	23
21....	13	10	....	....	....	....	....	28	75	58	42	23
22....	13	....	....	....	....	....	....	30	75	54	43	23
23....	13	....	....	....	....	....	....	30	75	75	39	23
24....	13	....	....	....	....	....	....	100	76	96	38	23
25....	13	....	....	....	....	....	....	125	90	92	33	23
26....	12	10	....	....	....	....	....	150	75	91	31	24
27....	12	....	....	....	....	....	....	150	56	96	38	23
28....	12	....	....	....	....	....	....	150	50	107	34	23
29....	12	....	....	....	....	....	....	153	50	112	22	25
30....	12	....	....	....	....	....	....	155	49	118	19	18
31....	12	....	....	....	....	....	....	147	....	119	16	....
Total	394	....	....	....	....	....	....	3283	2585	1930	1942	699
Mean.	12.7	10.5	10	8	8	8	20	106	86.2	62.3	62.6	23.3
Max..	16	....	....	....	....	....	....	213	145	119	122	34
Min...	11	....	....	....	....	....	....	....	49	26	16	16
Acre-ft.	781	625	615	492	460	492	1190	6520	5130	3830	3850	1390

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of Alamosa River at Jasper for Year Ending September 30, 1932.
Drainage Area, ... Square Miles. Altitude, ... Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	....	24	28	....	....	....	....	98	837	528	112	56
2....	....	25	30	....	....	....	....	128	828	507	115	53
3....	....	25	30	....	....	....	....	154	900	488	95	48
4....	....	27	30	....	....	....	....	185	738	476	85	43
5....	....	25	28	....	....	....	....	220	704	440	84	42
6....	....	22	28	....	....	....	....	210	556	400	84	41
7....	....	23	26	....	....	....	....	188	556	390	82	41
8....	....	24	24	....	....	....	....	202	626	395	78	35
9....	....	25	23	....	....	....	....	248	704	340	71	32
10....	....	21	23	....	....	....	....	241	765	355	64	31
11....	....	25	23	....	....	....	....	213	900	340	64	28
12....	106	25	23	....	....	....	....	227	920	336	60	26
13....	90	25	23	....	....	....	....	255	864	326	59	23
14....	79	24	22	....	....	....	....	287	855	313	54	22
15....	75	26	22	....	....	....	....	360	920	300	64	22
16....	69	31	22	....	....	....	....	395	950	295	81	21
17....	66	22	22	....	....	....	....	514	846	291	81	21
18....	66	21	22	....	....	....	....	664	747	263	81	20
19....	63	20	22	....	....	....	....	598	648	255	112	20
20....	58	21	22	....	....	....	....	430	672	234	108	19
21....	56	27	24	....	....	....	....	458	656	192	81	20
22....	51	22	24	....	....	....	....	656	688	170	75	19
23....	48	21	24	....	....	....	....	828	664	160	82	21
24....	45	23	24	....	....	....	....	792	680	157	78	22
25....	40	25	24	....	....	....	....	720	626	151	64	21
26....	40	30	23	....	....	....	....	626	672	154	59	21
27....	30	27	23	....	....	....	....	619	656	144	86	20
28....	30	27	23	....	....	....	....	864	591	138	81	18
29....	30	27	23	....	....	....	....	891	577	124	70	17
30....	24	26	23	....	....	....	....	873	528	128	64	17
31....	22	....	23	....	....	....	....	774	....	116	59	....
Total	1088	736	751	....	....	....	....	13918	21874	8906	2433	840
Mean.	54.4	24.5	24.2	....	....	....	....	449	727	287	78.5	28.0
Max..	106	31	30	....	....	....	....	891	950	528	115	56
Min...	22	20	....	....	....	....	....	98	528	116	54	17
Acre-ft.	2160	1460	1490	....	....	....	....	27600	43400	17600	4830	1670

Discharge of Alamosa River Below Terrace Reservoir for Year Ending September 30, 1931.
Drainage Area, 120 Square Miles. Altitude, 8,400 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	33	....	....	....	....	....	20	66	374	113	14	33
2....	33	....	....	....	....	....	20	66	388	113	14	33
3....	33	....	....	....	....	....	20	66	418	113	14	20
4....	33	....	....	....	....	....	20	84	374	113	12	20
5....	33	....	....	....	....	....	20	84	304	113	12	20
6....	33	....	....	....	....	....	20	84	304	84	20	20
7....	33	....	....	....	....	....	20	94	304	66	24	33
8....	33	....	....	....	....	....	20	113	304	66	58	38
9....	33	....	....	....	....	....	20	144	304	66	84	44
10....	33	....	....	....	....	....	20	144	278	50	75	44
11....	33	....	....	....	....	....	28	123	252	44	58	50
12....	33	....	....	....	....	....	38	66	239	44	75	50
13....	33	....	....	....	....	....	58	66	226	50	75	58
14....	33	....	....	....	....	....	58	113	214	58	75	75
15....	33	....	....	....	....	....	58	166	214	58	75	75
16....	33	....	....	....	....	....	58	214	214	58	75	75
17....	33	....	....	....	....	....	58	239	214	58	58	75
18....	33	....	....	....	....	....	58	291	214	66	58	75
19....	33	....	....	....	....	....	58	252	190	84	58	75
20....	33	....	....	....	....	....	58	265	123	75	50	75
21....	33	....	....	....	....	....	58	278	113	66	50	84
22....	33	....	....	....	....	....	75	239	144	66	50	94
23....	38	....	....	....	....	....	84	202	144	66	44	94
24....	38	....	....	....	....	....	84	144	123	44	44	144
25....	38	....	....	....	....	....	84	226	103	44	44	190
26....	38	....	....	....	....	....	50	304	113	38	45	190
27....	38	....	....	....	....	....	75	360	113	38	38	190
28....	38	....	....	....	....	....	66	360	103	38	38	190
29....	38	....	....	....	....	....	66	360	84	38	38	144
30....	38	....	....	....	....	....	66	360	103	38	38	144
31....	38	....	....	....	....	....	....	360	....	20	33	....
Total	1068	....	....	....	....	....	1438	5933	6595	1988	1446	2452
Mean.	34.5	20	20	20	20	20	47.9	191	220	64.1	46.6	81.7
Max..	38	....	....	....	....	....	84	360	418	113	84	190
Min...	33	....	....	....	....	....	20	66	84	20	12	20
Acre-ft.	2120	1190	1230	1230	1110	1230	2850	11700	13100	3940	2860	4860

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of Alamosa River Below Terrace Reservoir for Year Ending September 30, 1932. Drainage Area, 120 Square Miles. Altitude, 8,400 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	118	6	....	....	....	....	34	160	528	560	314	169
2....	118	....	....	....	....	....	34	160	480	496	314	116
3....	118	....	....	....	....	....	34	221	432	480	286	114
4....	118	....	....	....	....	....	34	273	448	480	260	114
5....	118	....	....	....	....	....	54	342	464	480	234	113
6....	118	....	....	....	....	....	61	342	464	496	260	113
7....	118	....	....	....	....	....	68	356	464	464	273	111
8....	118	....	....	....	....	....	92	356	464	416	273	92
9....	109	....	....	....	....	....	149	342	464	385	273	84
0....	109	....	....	....	....	....	182	370	464	356	273	82
1....	109	....	....	....	....	....	182	400	480	356	260	82
2....	109	....	....	....	....	....	208	400	496	370	260	81
3....	109	....	....	....	....	....	260	416	496	370	234	79
4....	109	....	....	....	....	....	286	432	512	370	221	79
5....	109	....	....	....	....	....	286	432	528	370	221	79
6....	100	....	....	....	....	....	286	448	560	328	182	64
7....	76	....	....	....	....	....	286	496	609	300	234	57
8....	54	....	....	....	....	....	314	496	660	300	234	57
9....	54	....	....	....	....	....	342	528	660	300	234	57
0....	54	....	....	....	....	....	342	528	660	300	234	57
1....	54	....	....	....	....	....	342	528	643	300	234	50
2....	54	....	....	....	....	....	342	480	643	247	234	50
3....	54	....	....	....	....	....	234	496	643	221	221	50
4....	47	....	....	....	....	....	171	464	643	221	182	50
5....	47	....	....	....	....	....	171	432	626	234	182	43
6....	47	....	....	....	....	....	171	464	643	260	182	43
7....	47	....	....	....	....	....	171	496	643	286	182	43
8....	47	....	....	....	....	28	160	496	609	300	182	43
9....	47	....	....	....	....	28	160	496	592	300	182	43
0....	28	....	....	....	....	28	160	512	592	300	182	43
1....	6	....	....	....	....	34	....	528	....	314	182	....
Total	2523	....	....	....	....	....	5616	12890	16610	10960	7219	2258
Mean.	81.4	15	15	15	15	15	187	416	554	354	233	75.3
Max..	....	....	....	....	....	....	342	528	660	560	314	169
Min...	6	....	....	....	....	....	34	160	432	221	182	43
Acre-ft.	5000	892	922	922	863	922	11100	25600	33000	21800	14300	4480

Discharge of La Jara Creek Near Capulin for Year Ending September 30, 1932. Drainage Area, 73 Square Miles. Altitude, ... Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	....	....	....	....	....	....	3	90	39	11	34	4
2....	....	....	....	....	....	....	8	134	33	11	19	4
3....	....	....	....	....	....	....	8	164	33	11	11	19
4....	....	....	....	....	....	....	8	196	33	8	8	24
5....	....	....	....	....	....	....	11	218	38	4	11	19
6....	....	....	....	....	....	....	11	185	32	3	8	24
7....	....	....	....	....	....	....	4	134	27	3	4	24
8....	....	....	....	....	....	....	15	116	21	2	3	24
9....	....	....	....	....	....	....	15	116	17	3	3	15
0....	....	....	....	....	....	....	15	116	13	2	15	11
1....	....	....	....	....	....	....	24	134	12	2	24	11
2....	....	....	....	....	....	....	29	134	12	2	29	11
3....	....	....	....	....	....	....	34	116	12	2	29	11
4....	....	....	....	....	....	....	46	116	8	2	29	11
5....	....	....	....	....	....	....	66	116	8	2	29	11
6....	....	....	....	....	....	....	90	116	8	2	34	11
7....	....	....	....	....	....	....	116	127	8	2	24	15
8....	....	....	....	....	....	....	134	129	4	2	52	19
9....	....	....	....	....	....	....	144	138	3	2	34	19
0....	....	....	....	....	....	....	154	130	3	2	29	19
1....	....	....	....	....	....	....	154	150	3	3	29	19
2....	....	....	....	....	....	....	144	114	3	2	34	15
3....	....	....	....	....	....	....	116	88	3	2	19	11
4....	....	....	....	....	....	....	82	82	3	2	15	11
5....	....	....	....	....	....	....	74	74	19	2	11	11
6....	....	....	....	....	....	....	98	66	15	2	8	11
7....	....	....	....	....	....	....	90	60	19	2	8	11
8....	....	....	....	....	....	....	80	60	15	2	8	11
9....	....	....	....	....	....	....	66	60	11	11	8	11
0....	....	....	....	....	....	....	66	46	11	29	11	11
1....	....	....	....	....	....	....	....	46	....	40	8	....
Total	....	....	....	....	....	....	1905	3571	466	175	588	428
Mean.	....	....	....	....	....	....	63.5	115	15.5	5.64	19.0	14.3
Max..	....	....	....	....	....	....	154	218	39	40	52	24
Min...	....	....	....	....	....	....	3	46	3	2	3	4
Acre-ft.	....	....	....	....	....	....	3780	7070	922	347	1170	851

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of La Jara Creek Near Mouth for Year Ending September 30, 1931.
Drainage Area, ... Square Miles. Altitude, ... Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sep
1....	21	....	....	....	....	....	....	10	0	0	0	
2....	21	....	45	....	....	....	....	10	0	0	0	
3....	21	....	....	....	20	....	....	10	0	0	0	
4....	55	....	....	....	....	....	....	10	0	0	0	
5....	60	....	....	....	....	....	....	10	0	0	0	
6....	69	....	....	....	....	....	....	8	0	0	0	
7....	55	....	....	....	....	....	....	8	0	0	0	
8....	46	....	....	....	....	....	....	8	0	0	0	
9....	42	....	....	27	....	....	....	8	0	0	0	
10....	44	....	....	....	....	....	....	8	0	0	0	
11....	42	....	....	....	....	....	....	5	0	0	0	
12....	42	....	....	....	....	46	....	5	0	0	0	
13....	42	....	....	....	....	....	....	5	0	0	0	
14....	52	....	....	....	....	....	....	5	0	0	0	
15....	57	....	....	....	....	....	....	5	0	0	0	
16....	57	....	....	....	....	....	....	0	0	0	0	
17....	50	....	....	....	....	....	....	0	0	0	0	
18....	48	....	....	....	....	....	....	0	0	0	0	
19....	42	....	....	....	....	....	....	0	0	0	0	
20....	35	....	....	....	....	....	....	0	0	0	0	
21....	29	....	....	....	....	....	....	0	0	0	0	
22....	25	....	....	....	....	....	....	0	0	0	0	
23....	25	....	....	....	....	....	....	0	0	0	0	
24....	25	....	....	....	....	....	....	0	0	0	0	
25....	25	....	....	....	....	....	18	0	0	0	0	
26....	25	....	....	....	....	....	....	0	0	0	0	
27....	25	....	....	....	....	....	....	0	0	0	0	
28....	25	....	....	....	....	....	....	0	0	0	0	
29....	25	....	....	....	....	....	....	0	0	0	0	
30....	25	....	....	....	....	....	....	0	0	0	0	
31....	25	....	....	....	....	....	....	0	....	0	0	...
Total	1180	....	....	....	....	....	....	115	....	....	....	...
Mean.	38	35	34	24	35	50	15	3.71	....	....	....	...
Max..	....	....	....	....	....	....	....	10	....	....	....	...
Min...	....	....	....	....	....	....	....	....	....	....	....	...
Acre-ft.	2340	2080	2090	1480	1940	3070	893	228	....	....	....	...

Discharge of La Jara Creek Near Mouth for Year Ending September 30, 1932.
Drainage Area, ... Square Miles. Altitude, ... Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept
1....	25	....	....	....	....	....	15	39	99	111	14	3
2....	25	....	....	....	....	....	15	37	87	108	16	3
3....	25	....	....	....	....	....	15	35	77	117	16	2
4....	25	....	....	....	....	....	15	47	62	120	14	2
5....	25	....	....	....	....	....	17	52	52	123	14	2
6....	25	....	....	....	....	....	37	54	52	114	12	2
7....	25	....	....	....	....	....	45	64	57	93	12	2
8....	23	....	....	....	....	....	55	67	62	77	11	2
9....	22	....	....	....	....	....	50	62	52	47	11	2
10....	22	....	....	....	....	....	39	62	43	37	11	2
11....	20	....	....	....	....	....	45	70	39	39	11	1
12....	20	....	....	....	....	....	55	77	45	45	11	1
13....	18	....	....	....	....	....	57	77	54	70	11	1
14....	18	....	....	....	....	....	57	82	74	82	11	1
15....	18	....	....	....	....	....	55	93	77	87	11	1
16....	20	....	....	....	....	....	45	111	45	93	11	1
17....	20	....	....	....	....	....	31	111	39	82	11	1
18....	20	....	....	....	....	....	39	114	47	74	11	1
19....	20	....	....	....	....	....	55	120	52	67	11	1
20....	20	....	....	....	....	....	60	126	62	62	11	1
21....	22	....	....	....	....	....	57	135	72	57	12	1
22....	20	....	....	....	....	....	55	148	54	45	16	1
23....	20	....	....	....	....	....	55	148	57	43	20	1
24....	18	....	....	....	....	....	55	148	67	39	23	1
25....	18	....	....	....	....	....	55	141	96	33	33	1
26....	18	....	....	....	....	....	55	111	111	29	35	1
27....	18	....	....	....	....	....	55	90	120	23	35	1
28....	18	....	....	....	....	....	52	96	129	20	37	1
29....	18	....	....	....	....	....	52	102	126	18	37	1
30....	18	....	....	....	....	....	45	108	117	14	50	1
31....	18	....	....	....	....	....	....	108	....	12	43	....
Total	642	....	....	....	....	....	1338	2835	2126	1981	582	56
Mean.	20.7	....	....	....	....	....	44.6	91.4	70.9	63.9	18.8	18.9
Max..	....	....	....	....	....	....	60	148	129	123	50	3
Min..	....	....	....	....	....	....	15	35	39	12	11	1
Acre-ft.	1270	....	....	....	....	....	2650	5620	4220	3930	1160	112

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of Trinchera Creek Below Smith Reservoir for Year Ending September 30, 1931.
Drainage Area, ... Square Miles. Altitude, ... Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	1	1	....	....	....	....	1	15	41	22	4	1
2....	1	1	....	....	....	....	1	15	42	22	4	1
3....	1	1	....	....	....	....	1	20	30	20	4	1
4....	1	1	....	....	....	....	1	38	22	18	4	1
5....	1	1	....	....	....	....	1	48	17	17	4	1
6....	1	1	....	....	....	....	1	52	15	17	4	1
7....	1	1	....	....	....	....	1	49	15	18	3	1
8....	1	1	....	....	....	....	1	57	17	22	4	1
9....	1	1	....	....	....	....	1	70	14	22	3	1
0....	1	1	....	....	....	....	8	70	12	20	2	1
1....	2	1	....	....	....	....	17	63	8	20	2	1
2....	2	1	....	....	....	....	29	56	6	20	2	1
3....	1	1	....	....	....	....	44	46	5	18	2	1
4....	1	1	....	....	....	....	60	35	7	19	2	1
5....	2	1	....	....	....	....	60	30	2	18	2	1
6....	1	1	....	....	....	....	62	39	2	16	2	1
7....	1	1	....	....	....	....	57	53	5	8	1	1
8....	2	1	....	....	....	....	55	66	13	8	1	1
9....	2	1	....	....	....	....	52	74	13	8	2	1
0....	1	1	....	....	....	....	65	82	16	6	2	1
1....	1	1	....	....	....	....	44	92	22	5	2	1
2....	1	1	....	....	....	....	42	25	22	5	6	1
3....	1	1	....	....	....	....	40	77	22	5	11	1
4....	1	1	....	....	....	....	32	69	22	4	6	1
5....	1	1	....	....	....	....	30	63	17	5	1	1
6....	1	1	....	....	....	....	29	52	20	4	1	1
7....	1	1	....	....	....	....	32	51	22	4	2	1
8....	1	1	....	....	....	....	30	59	22	4	1	1
9....	1	1	....	....	....	....	26	67	22	4	1	1
0....	1	1	....	....	....	....	18	52	22	4	1	2
1....	1	....	....	....	....	....	....	43	....	4	1	....
Total	36	30	....	....	....	....	841	1628	515	387	87	31
Mean.	1.16	1	1	1	1	1	28.0	52.5	17.2	12.5	2.81	1.03
Max..	2	1	....	....	....	....	65	92	42	22	11	2
Min...	1	1	....	....	....	....	1	15	2	4	1	1
Acre-ft.	71	60	61	61	56	61	1670	3230	1020	769	173	61

Discharge of Trinchera Creek Below Smith Reservoir for Year Ending September 30, 1932.
Drainage Area, ... Square Miles. Altitude, ... Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	1	1	....	....	....	1	30	129	56	10	20	13
2....	1	1	....	....	....	1	33	120	51	10	20	13
3....	1	1	....	....	....	10	41	114	41	10	21	13
4....	1	1	....	....	....	20	53	113	34	10	20	13
5....	1	1	....	....	....	25	61	111	30	10	20	13
6....	1	1	....	....	....	25	75	115	31	10	18	13
7....	1	1	....	....	....	25	86	119	22	10	15	13
8....	1	1	....	....	....	25	87	124	16	12	11	13
9....	1	1	....	....	....	25	89	128	11	14	9	13
0....	1	1	....	....	....	25	90	124	7	14	8	13
1....	1	1	....	....	....	25	90	114	5	18	6	13
2....	1	1	....	....	....	25	87	108	3	22	6	12
3....	1	....	....	....	....	25	93	106	4	22	6	12
4....	1	....	....	....	....	25	102	110	2	20	6	8
5....	1	....	....	....	....	25	117	132	2	19	4	2
6....	1	....	....	....	....	25	124	132	1	20	4	2
7....	1	....	....	....	....	25	128	136	1	20	4	2
8....	1	....	....	....	....	30	132	132	1	20	4	2
9....	1	....	....	....	....	31	136	132	1	21	4	2
0....	1	....	....	....	....	35	140	153	1	21	4	2
1....	1	....	....	....	....	39	145	160	1	21	4	2
2....	1	....	....	....	....	39	150	152	1	21	7	2
3....	1	....	....	....	....	38	155	154	1	22	11	2
4....	1	....	....	....	....	33	160	147	1	22	13	2
5....	1	....	....	....	....	34	165	128	3	22	13	2
6....	1	....	....	....	....	38	170	111	5	22	13	2
7....	1	....	....	....	....	32	170	96	6	22	13	2
8....	1	....	....	....	....	31	167	82	9	22	13	2
9....	1	....	....	....	....	30	159	77	10	22	13	2
0....	1	....	....	....	....	32	144	74	10	22	13	2
1....	1	....	....	....	....	30	....	66	....	22	13	....
Total	31	....	....	....	....	829	3379	3699	367	553	336	207
Mean.	1	1	....	....	....	26.7	113	119	12.2	17.8	10.8	6.90
Max..	....	....	....	....	....	....	....	160	56	22	21	13
Min...	....	....	....	....	....	....	....	66	1	10	4	2
Acre-ft.	61	60	....	....	....	1640	6720	7320	726	1090	664	411

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of Trinchera Creek Above Mountain Home Reservoir for Year Ending September 30, 1931.
Drainage Area, 61 Square Miles. Altitude .... Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1	20	10	....	....	....	....	....	....	48	33	16	6
2	19	10	....	....	....	....	....	....	46	26	16	7
3	18	10	....	....	....	....	....	....	46	24	15	7
4	16	10	....	....	....	....	....	....	48	25	15	7
5	16	9	....	....	....	....	....	....	51	24	16	7
6	13	9	....	....	....	....	....	....	47	21	16	7
7	13	9	....	....	....	....	....	....	43	19	16	7
8	12	9	....	....	....	....	....	....	47	20	16	7
9	12	9	....	....	....	....	....	....	49	20	16	7
10	12	....	....	....	....	....	....	....	56	19	15	7
11	15	....	....	....	....	....	....	....	54	20	15	7
12	14	....	....	....	....	....	....	....	51	19	15	7
13	13	....	....	....	....	....	....	....	49	18	14	7
14	15	....	....	....	....	....	....	....	51	18	13	8
15	15	....	....	....	....	....	....	....	47	19	13	9
16	13	....	....	....	....	....	....	....	44	18	12	10
17	13	....	....	....	....	....	....	....	43	18	11	10
18	14	....	....	....	....	....	....	....	39	19	11	9
19	12	....	....	....	....	....	....	....	34	18	12	13
20	11	....	....	....	....	....	....	36	35	17	11	14
21	12	....	....	....	....	....	....	33	38	16	11	12
22	12	....	....	....	....	....	....	29	37	15	11	11
23	12	....	....	....	....	....	....	30	37	13	10	12
24	12	....	....	....	....	....	....	31	34	13	10	11
25	12	....	....	....	....	....	....	38	30	15	9	11
26	10	....	....	....	....	....	....	39	30	15	9	12
27	9	....	....	....	....	....	....	54	27	15	9	12
28	9	....	....	....	....	....	....	53	25	15	7	12
29	9	....	....	....	....	....	....	48	25	13	6	14
30	9	....	....	....	....	....	....	49	28	13	6	16
31	9	....	....	....	....	....	....	49	....	14	6	....
Total	401	....	....	....	....	....	....	....	1239	572	378	286
Mean.	12.9	.9	....	....	....	....	10	28	41.3	18.4	12.2	9.53
Max.	20	....	....	....	....	....	....	....	56	33	16	16
Min.	9	....	....	....	....	....	....	....	25	13	6	6
Acre-ft.	793	536	....	....	....	....	595	1720	2460	1130	750	567

Discharge of Trinchera Creek Above Mountain Home Reservoir for Year Ending September 30, 1932.
Drainage Area, 61 Square Miles. Altitude .... Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1	14	11	....	....	....	....	11	28	97	39	15	1
2	14	11	....	....	....	....	13	32	90	41	14	1
3	15	10	....	....	....	....	14	44	84	39	14	1
4	15	11	....	....	....	....	15	53	87	35	13	1
5	15	10	....	....	....	....	16	53	87	31	12	1
6	15	9	....	....	....	....	16	45	78	28	12	1
7	15	10	....	....	....	....	17	40	74	25	13	1
8	15	9	....	....	....	....	17	40	76	25	13	
9	15	....	....	....	....	....	17	48	74	27	13	
10	15	....	....	....	....	....	17	51	74	27	11	
11	14	....	....	....	....	....	18	46	74	31	10	
12	12	....	....	....	....	....	19	50	73	31	10	
13	13	....	....	....	....	....	22	58	71	33	10	
14	12	....	....	....	....	....	26	70	71	29	10	
15	11	....	....	....	....	....	26	76	64	27	11	
16	11	....	....	....	....	....	29	84	59	25	12	
17	12	....	....	....	....	....	35	95	58	24	14	
18	11	....	....	....	....	....	38	108	58	23	13	
19	11	....	....	....	....	9	37	124	58	24	13	
20	11	....	....	....	....	8	41	129	56	23	13	
21	11	....	....	....	....	10	44	122	51	22	13	
22	11	....	....	....	....	10	46	132	50	21	17	
23	11	....	....	....	....	10	38	152	48	19	15	
24	11	....	....	....	....	11	47	155	48	16	14	
25	11	....	....	....	....	11	41	154	51	16	13	1
26	11	....	....	....	....	11	41	139	48	15	13	1
27	11	....	....	....	....	11	43	122	47	15	13	1
28	11	....	....	....	....	11	41	114	46	15	14	1
29	11	....	....	....	....	11	33	106	44	15	14	1
30	9	....	....	....	....	11	29	106	40	15	13	1
31	9	....	....	....	....	11	....	102	....	15	13	..
Total	383	....	....	....	....	....	847	2678	1936	771	398	2
Mean.	12.4	9.00	....	....	....	9.58	28.2	86.4	64.5	24.9	12.8	9.
Max.	15	....	....	....	....	....	47	155	97	41	17	
Min.	9	....	....	....	....	....	11	28	40	15	10	
Acre-ft.	762	536	....	....	....	589	1680	5310	3840	1530	787	5

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of Trinchera Creek Above Turner Ranch for Year Ending September 30, 1931.
Drainage Area, 45 Square Miles. Altitude, ... Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	16	10	....	....	....	....	10	14	64	35	14	10
2....	16	13	....	....	....	....	10	14	64	31	12	10
3....	16	13	....	....	....	....	8	17	71	31	10	10
4....	16	13	....	....	....	....	8	17	71	31	10	12
5....	16	13	....	....	....	....	8	20	64	27	12	10
6....	16	13	....	....	....	....	10	24	64	27	14	10
7....	16	13	....	....	....	....	10	27	64	27	14	10
8....	16	13	....	....	....	....	10	27	64	24	14	10
9....	16	13	....	....	....	....	10	27	64	24	14	10
0....	16	13	....	....	....	....	10	24	64	24	14	10
1....	16	13	....	....	....	....	12	20	71	24	14	10
2....	16	13	....	....	....	....	14	24	71	24	14	8
3....	13	19	....	....	....	....	14	27	64	24	14	8
4....	13	13	....	....	....	....	14	27	64	24	14	10
5....	13	13	....	....	....	....	14	31	56	24	12	12
6....	13	....	....	....	....	....	14	31	56	24	12	14
7....	13	....	....	....	....	....	14	44	56	20	12	14
8....	13	....	....	....	....	....	14	50	56	24	12	14
9....	13	....	....	....	....	....	14	44	50	20	10	17
0....	13	....	....	....	....	....	14	44	44	20	8	17
1....	13	....	....	....	....	....	14	40	44	20	8	14
2....	13	....	....	....	....	....	17	40	40	20	8	12
3....	13	....	....	....	....	8	17	44	40	17	8	12
4....	13	....	....	....	....	8	17	44	40	17	8	12
5....	13	....	....	....	....	8	14	64	40	17	8	12
6....	13	....	....	....	....	8	14	71	40	14	8	12
7....	10	....	....	....	....	8	14	71	40	14	10	12
8....	10	....	....	....	....	8	14	71	40	14	8	12
9....	10	....	....	....	....	8	14	71	35	12	8	12
0....	10	....	....	....	....	6	14	71	35	12	10	12
1....	10	....	....	....	....	8	....	71	....	12	8	....
Total	408	....	....	....	....	....	381	1211	1636	678	342	348
Mean.	13.2	11	....	....	....	6	12.7	39.1	54.5	21.9	11.0	11.6
Max..	16	....	....	....	....	....	17	71	71	35	14	17
Min...	10	....	....	....	....	....	8	14	35	12	8	8
Acre-ft.	812	654	....	....	....	369	756	2400	3240	1350	676	690

Discharge of Trinchera Creek Above Turner Ranch for Year Ending September 30, 1932.
Drainage Area, 45 Square Miles. Altitude, ... Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	12	12	....	....	....	....	9	35	108	50	24	15
2....	12	12	....	....	....	....	9	42	98	50	24	15
3....	18	12	....	....	....	....	12	52	....	50	24	15
4....	18	12	....	....	....	....	12	60	....	45	21	15
5....	18	12	....	....	....	....	15	60	....	40	21	15
6....	18	12	....	....	....	....	21	55	....	38	21	15
7....	18	12	....	....	....	....	21	53	98	34	21	15
8....	18	12	....	....	....	....	21	53	....	34	21	15
9....	18	....	....	....	....	....	21	53	....	36	21	15
10....	18	....	....	....	....	....	24	59	....	36	21	15
11....	18	....	....	....	....	....	24	59	....	40	21	15
12....	18	....	....	....	....	....	24	59	....	47	21	15
13....	18	....	....	....	....	....	28	66	....	42	21	15
14....	18	....	....	....	....	....	32	72	72	42	18	12
15....	18	....	....	....	....	....	37	72	....	47	18	12
16....	18	....	....	....	....	....	37	72	....	42	18	12
17....	18	....	....	....	....	....	47	80	....	37	21	12
18....	18	....	....	....	....	....	47	88	....	37	18	12
19....	18	....	....	....	....	....	47	98	....	37	18	12
20....	18	....	....	....	....	....	53	98	....	37	21	12
21....	18	....	....	....	....	....	59	108	80	37	21	12
22....	18	....	....	....	....	....	59	132	....	37	24	12
23....	18	....	....	....	....	....	47	198	....	37	18	12
24....	18	....	....	....	....	....	47	238	....	37	18	15
25....	12	....	....	....	....	....	42	218	....	32	18	15
26....	12	....	....	....	....	....	42	198	....	28	18	15
27....	12	....	....	....	....	....	37	180	....	28	18	15
28....	12	....	....	....	....	....	37	162	59	28	18	15
29....	12	....	....	....	....	....	35	132	....	28	18	15
30....	12	....	....	....	....	....	35	120	....	28	18	15
31....	12	....	....	....	....	....	....	108	....	28	15	....
Total	504	....	....	....	....	....	981	3080	....	1165	618	420
Mean.	16.2	12	....	....	....	....	32.7	99.4	80.5	37.6	19.9	14.0
Max..	18	....	....	....	....	....	....	....	....	....	24	15
Min...	12	....	....	....	....	....	....	....	....	....	15	12
Acre-ft.	996	714	....	....	....	....	1940	6100	4790	2310	1220	833

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of Sangre de Cristo Creek Near Fort Garland for Year Ending September 30, 1932.
Drainage Area, 187 Square Miles. Altitude .... Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	9	7	....	....	....	....	....	118	88	21	8	4
2....	9	6	....	....	....	....	....	117	88	23	8	4
3....	8	7	....	....	....	....	....	138	78	25	6	3
4....	8	7	....	....	....	....	....	151	72	20	5	3
5....	8	6	....	....	....	....	....	164	69	16	4	3
6....	9	6	....	....	....	....	....	171	62	14	4	2
7....	10	7	....	....	....	....	....	169	54	13	4	2
8....	9	....	....	....	....	....	....	158	54	13	4	2
9....	8	....	....	....	....	....	....	158	49	13	4	2
10....	5	....	....	....	....	....	....	162	44	14	4	1
11....	6	....	....	....	....	....	....	165	42	16	3	1
12....	7	....	....	....	....	....	81	159	39	18	7	1
13....	8	....	....	....	....	....	100	161	37	19	4	1
14....	8	....	....	....	....	....	122	170	35	15	4	1
15....	8	....	....	....	....	....	120	173	33	14	4	1
16....	8	....	....	....	....	....	138	175	30	12	4	1
17....	8	....	....	....	....	....	154	171	26	12	7	1
18....	8	....	....	....	....	....	152	168	25	10	6	1
19....	8	....	....	....	....	....	155	175	27	9	9	1
20....	8	....	....	....	....	....	163	184	29	8	10	1
21....	7	....	....	....	....	....	170	176	30	14	21	1
22....	7	....	....	....	....	....	181	172	29	13	26	1
23....	6	....	....	....	....	....	181	166	30	9	22	1
24....	7	....	....	....	....	....	160	154	33	10	19	1
25....	7	....	....	....	....	....	155	144	40	19	18	1
26....	7	....	....	....	....	....	149	136	42	14	18	1
27....	7	....	....	....	....	....	130	127	42	10	12	1
28....	7	....	....	....	....	....	126	117	35	9	10	1
29....	7	....	....	....	....	....	122	112	31	9	8	1
30....	6	....	....	....	....	....	120	107	24	9	7	1
31....	7	....	....	....	....	....	....	103	....	9	5	....
Total	235	....	....	....	....	....	3304	4721	1317	430	275	46
Mean.	7.58	6	....	....	....	....	110	152	43.9	13.9	8.87	1.53
Max..	10	....	....	....	....	....	....	184	88	25	26	4
Min...	5	....	....	....	....	....	....	103	24	8	3	1
Acre-ft.	466	357	....	....	....	....	6540	9350	2610	855	545	91

Discharge of Sangre de Cristo Creek Above Smith Reservoir for Year Ending Sept. 30, 1931.
Drainage Area, ... Square Miles. Altitude, ... Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	4	5	....	....	....	....	22	4	89	14	4	6
2....	3	5	....	....	....	....	24	11	59	9	5	6
3....	4	5	....	....	....	....	27	53	30	4	5	4
4....	4	5	....	....	....	....	25	64	26	18	6	4
5....	4	5	....	....	....	....	21	52	26	16	4	4
6....	5	5	....	....	....	....	25	51	26	6	4	4
7....	5	5	....	....	....	....	34	51	60	2	4	4
8....	4	5	....	....	....	....	52	93	35	2	4	4
9....	4	5	....	....	....	....	52	92	11	2	5	4
10....	4	5	....	....	....	....	48	87	12	2	6	4
11....	9	5	....	....	....	....	50	71	24	2	5	4
12....	7	5	....	....	....	....	73	51	20	2	5	4
13....	6	5	....	....	....	....	75	35	12	2	4	4
14....	6	5	....	....	....	....	74	24	8	2	4	5
15....	6	....	....	....	....	....	70	37	10	3	6	32
16....	8	....	....	....	....	....	63	38	5	3	5	20
17....	8	....	....	....	....	....	54	89	4	3	4	7
18....	10	....	....	....	....	....	46	108	1	3	5	5
19....	9	....	....	....	....	....	64	114	1	3	5	15
20....	8	....	....	....	....	....	58	132	1	3	5	27
21....	12	....	....	....	....	....	40	125	3	4	4	23
22....	11	....	....	....	....	....	27	105	3	4	5	14
23....	9	....	....	....	....	38	28	62	2	4	4	9
24....	7	....	....	....	....	....	16	93	2	4	4	18
25....	6	....	....	....	....	....	16	81	1	4	4	46
26....	5	....	....	....	....	....	36	78	1	4	4	24
27....	4	....	....	....	....	....	24	100	2	4	4	33
28....	5	....	....	....	....	....	5	109	2	4	4	26
29....	6	....	....	....	....	....	4	92	2	4	4	24
30....	6	....	....	....	....	....	2	69	1	4	4	22
31....	5	....	....	....	....	....	....	63	....	4	4	....
Totals	194	....	....	....	....	....	1155	2234	479	145	140	406
Mean	6.26	4	....	....	....	....	38.5	72.1	16.0	4.68	4.52	13.5
Max..	12	....	....	....	....	....	75	132	89	18	6	46
Min...	3	....	....	....	....	....	2	4	1	2	4	4
Acre-ft.	385	238	....	....	....	....	2290	4430	952	288	278	803

Unless otherwise noted, all discharges are in cubic feet per second

Discharge of Sangre de Cristo Creek Above Smith Reservoir for Year Ending Sept. 30, 1932.
Drainage Area .... Square Miles. Altitude .... Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	12	16	....	....	....	....	35	138	68	24	12	6
2....	8	12	....	....	....	....	43	139	59	28	9	6
3....	18	11	....	....	....	....	56	135	55	62	8	6
4....	22	12	....	....	....	....	64	142	52	55	8	6
5....	20	13	....	....	....	....	80	140	63	37	7	6
6....	16	14	....	....	....	....	96	147	51	14	7	5
7....	12	13	....	....	....	....	95	148	39	12	7	5
8....	7	13	....	....	....	....	92	161	38	11	8	5
9....	8	14	....	....	....	....	90	148	33	10	8	5
10....	27	16	....	....	....	....	87	135	30	19	6	5
11....	30	19	....	....	....	....	88	135	28	29	6	5
12....	24	19	....	....	....	....	91	132	43	50	6	5
13....	20	....	....	....	....	....	109	142	33	40	6	5
14....	20	....	....	....	....	....	137	151	21	28	6	5
15....	19	....	....	....	....	....	137	179	22	18	8	5
16....	18	....	....	....	....	....	138	172	18	16	6	5
17....	19	....	....	....	....	....	140	161	16	14	6	5
18....	18	....	....	....	....	....	142	155	15	13	6	5
19....	18	....	....	....	....	33	144	162	23	12	12	5
20....	18	....	....	....	....	41	146	185	19	12	9	5
21....	20	....	....	....	....	35	148	174	14	9	12	5
22....	20	....	....	....	....	33	150	176	14	17	20	5
23....	17	....	....	....	....	30	152	167	17	12	18	5
24....	18	....	....	....	....	32	154	153	15	14	16	5
25....	16	....	....	....	....	36	156	135	21	24	10	5
26....	16	....	....	....	....	32	158	118	33	15	8	5
27....	16	....	....	....	....	29	160	102	39	11	6	5
28....	16	....	....	....	....	29	160	88	37	10	8	5
29....	16	....	....	....	....	32	159	102	30	8	11	5
30....	14	....	....	....	....	31	144	86	25	8	9	5
31....	12	....	....	....	....	30	....	70	....	24	6	....
Total	535	....	....	....	....	....	3551	4378	981	656	275	155
Mean.	17.2	15	....	....	....	34.0	118	141	32.7	21.2	8.87	5.17
Max..	30	....	....	....	....	....	....	185	68	62	20	6
Min...	7	....	....	....	....	....	....	70	14	8	6	5
Acre-ft.	1060	892	....	....	....	2090	7020	8670	1950	1300	545	308

Discharge of Ute Creek Near Fort Garland for Year Ending Sept. 30, 1931.
Drainage Area 32 Square Miles. Altitude .... Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	22	9	....	....	....	....	14	25	110	71	15	8
2....	18	9	....	....	....	....	14	31	109	52	15	10
3....	16	10	....	....	....	....	14	35	108	43	15	8
4....	15	9	....	....	....	....	13	34	109	44	14	8
5....	12	9	....	....	....	....	15	34	105	39	14	7
6....	10	9	....	....	....	....	16	35	102	32	12	8
7....	9	9	....	....	....	....	20	39	103	27	12	7
8....	9	11	....	....	....	....	24	44	103	25	12	7
9....	9	10	....	....	....	....	20	44	91	22	14	8
10....	10	10	....	....	....	....	21	43	102	21	12	7
11....	24	10	....	....	....	....	25	39	77	21	10	7
12....	21	10	....	....	....	....	28	35	65	20	10	9
13....	24	10	....	....	....	....	28	39	60	18	9	10
14....	14	10	....	....	....	....	32	49	61	15	9	12
15....	13	10	....	....	....	....	28	66	73	18	10	50
16....	12	....	....	....	....	....	27	92	69	22	10	47
17....	8	....	....	....	....	....	30	93	80	20	9	33
18....	8	....	....	....	....	....	34	106	76	49	9	45
19....	7	....	....	....	....	....	36	110	69	33	9	58
20....	7	....	....	....	....	....	35	91	64	27	8	54
21....	7	....	....	....	....	....	31	80	63	31	9	39
22....	8	....	....	....	....	....	31	63	69	24	10	30
23....	7	....	....	....	....	....	27	58	68	18	10	32
24....	6	....	....	....	....	....	25	64	61	21	9	51
25....	7	....	....	....	....	....	22	87	56	21	10	51
26....	6	....	....	....	....	....	20	105	57	19	10	38
27....	5	....	....	....	....	....	19	108	54	14	7	30
28....	6	....	....	....	....	....	20	105	49	16	7	23
29....	7	....	....	....	....	....	25	105	47	18	7	21
30....	6	....	....	....	....	....	26	118	54	15	7	20
31....	10	....	....	....	....	....	....	114	....	15	7	....
Total	343	....	....	....	....	....	720	2091	2314	831	321	738
Mean.	11.0	9	....	....	....	....	24.0	67.4	77.1	26.8	10.4	24.6
Max..	24	....	....	....	....	....	36	118	110	71	15	58
Min...	5	....	....	....	....	....	13	25	47	14	7	7
Acre-ft.	676	536	....	....	....	....	1430	4140	4590	1650	640	1460

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of Ute Creek Near Fort Garland for Year Ending Sept. 30, 1932.
Drainage Area 32 Square Miles. Altitude .... Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1	14	15	....	....	....	....	14	60	88	85	37	18
2	17	15	....	....	....	....	18	61	94	90	34	15
3	28	17	....	....	....	....	23	64	92	79	30	14
4	24	16	....	....	....	....	26	71	88	71	27	14
5	21	15	....	....	....	....	31	70	77	62	24	14
6	18	14	....	....	....	....	39	73	65	54	20	12
7	16	16	....	....	....	....	36	73	66	52	16	12
8	14	15	....	....	....	....	36	72	68	43	15	13
9	16	17	....	....	....	....	37	78	71	47	15	15
10	32	18	....	....	....	....	38	82	64	54	11	14
11	23	21	....	....	....	....	41	78	68	79	16	14
12	20	18	....	....	....	....	49	73	76	146	18	15
13	20	17	....	....	....	....	62	82	77	109	13	16
14	17	....	....	....	....	....	74	104	73	78	11	14
15	17	....	....	....	....	....	77	108	76	68	15	14
16	17	....	....	....	....	....	87	114	87	62	22	13
17	14	....	....	....	....	....	111	111	78	66	39	12
18	14	....	....	....	....	....	99	112	74	61	42	12
19	15	....	....	....	....	10	97	171	71	66	70	12
20	16	....	....	....	....	12	105	158	71	53	44	11
21	16	....	....	....	....	12	111	136	70	55	70	11
22	16	....	....	....	....	14	122	146	73	45	53	11
23	17	....	....	....	....	14	117	167	95	50	52	12
24	16	....	....	....	....	14	108	155	77	70	48	16
25	16	....	....	....	....	14	97	141	97	83	36	18
26	16	....	....	....	....	14	85	125	101	60	32	18
27	16	....	....	....	....	16	76	102	105	53	34	17
28	16	....	....	....	....	13	65	105	97	47	39	17
29	16	....	....	....	....	12	65	104	91	43	29	16
30	16	....	....	....	....	12	61	104	82	43	22	14
31	16	....	....	....	....	12	....	90	....	40	18	....
Total	550	....	....	....	....	....	2007	3190	2412	2014	952	424
Mean	17.7	13	....	....	....	12	66.9	103	80.4	65.0	30.7	14.1
Max	32	....	....	....	....	....	122	171	105	146	70	18
Min	14	....	....	....	....	....	14	60	64	40	11	11
Acre-ft.	1090	774	....	....	....	738	3980	6330	4780	4000	1890	839

Discharge of Conejos River at Broyles Bridge Near Mogote for Year Ending Sept. 30, 1931.
Drainage Area 282 Square Miles. Altitude 8,300 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1	96	39	40	....	....	....	95	221	1190	285	161	64
2	102	35	40	....	....	....	105	249	1230	245	135	66
3	93	37	40	....	....	....	118	254	1280	304	129	66
4	75	37	40	....	....	....	107	262	1200	323	115	58
5	67	37	42	....	....	....	102	280	974	245	104	54
6	64	37	43	....	....	....	118	309	1010	206	323	68
7	61	35	44	....	....	29	132	375	1030	188	254	91
8	58	32	44	....	....	....	151	468	1040	171	267	76
9	56	30	44	34	....	....	148	416	897	161	349	60
10	56	30	44	....	....	....	142	380	835	154	280	52
11	70	28	44	....	....	....	158	349	708	151	240	60
12	87	26	44	....	....	....	178	359	708	138	213	93
13	78	22	44	....	....	....	191	422	728	132	181	95
14	75	22	44	....	....	....	217	561	672	135	158	107
15	72	26	44	....	....	....	228	728	672	129	142	158
16	64	24	40	....	....	....	232	815	655	132	129	158
17	58	24	40	....	....	....	213	746	646	135	138	126
18	58	25	40	....	....	....	221	952	578	181	135	154
19	58	20	35	28	35	....	271	897	536	154	151	240
20	56	20	35	....	....	....	328	638	475	148	145	410
21	56	25	30	....	....	55	314	544	428	148	115	299
22	53	30	30	....	....	84	290	461	404	121	102	276
23	53	30	30	....	....	86	290	475	428	104	102	245
24	50	30	28	....	....	89	245	680	422	102	89	775
25	46	30	25	....	....	91	217	1020	422	107	80	756
26	50	30	25	....	....	82	206	1050	354	97	76	496
27	46	30	25	....	....	80	213	985	262	89	70	410
28	43	35	25	....	....	82	213	941	285	97	68	344
29	43	35	25	....	....	84	217	1020	262	82	64	294
30	41	35	25	....	....	84	221	1150	249	82	64	249
31	41	....	25	....	....	84	....	1170	....	112	66	....
Total	1926	896	1124	....	....	....	5881	19177	20580	4858	4645	6400
Mean	62.1	29.9	36.2	30	32	50	196	619	686	157	150	213
Max	102	....	....	....	....	....	328	1170	1280	323	349	775
Min	41	....	....	....	....	....	....	221	249	82	64	52
Acre-ft.	3820	1780	2230	1840	1780	3070	11700	38100	40800	9650	9220	12700

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of Conejos River at Broyles Bridge Near Mogote for Year Ending Sept. 30, 1932.
Drainage Area, 282 Square Miles. Altitude, 8,300 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	221	84	....	....	....	....	121	434	1890	1560	440	244
2....	354	84	....	....	....	....	167	629	1920	1540	390	213
3....	654	82	....	....	....	....	206	886	2020	1420	345	192
4....	475	82	....	....	....	....	209	1050	1720	1620	336	174
5....	386	82	....	....	....	....	240	1230	1410	1470	209	157
6....	333	84	....	....	....	....	271	1110	1150	1290	284	154
7....	285	86	....	....	....	....	271	952	1160	1210	256	140
8....	258	86	....	....	....	....	299	1050	1340	1100	244	135
9....	240	91	....	....	....	....	309	1260	1530	1070	256	123
10....	354	89	76	....	....	....	304	1330	1740	1070	228	65
11....	267	91	....	60	....	....	333	1150	1900	1040	228	109
12....	249	89	....	....	....	....	410	1180	2000	971	228	103
13....	240	91	....	....	....	....	527	1410	2330	1010	196	97
14....	209	91	....	....	....	86	663	1500	2580	941	188	95
15....	181	89	....	....	....	....	708	1650	2400	831	202	91
16....	178	89	....	....	....	....	737	1940	2710	780	224	87
17....	164	84	....	....	49	....	919	2240	2350	735	284	81
18....	156	80	....	....	....	....	952	2470	2200	691	386	77
19....	156	84	....	....	....	....	930	2740	1980	698	368	75
20....	145	82	....	....	....	....	974	2440	2020	670	322	71
21....	135	80	....	....	....	....	919	2320	2100	628	358	69
22....	138	46	....	....	....	....	855	2720	2100	570	390	69
23....	121	38	70	....	....	....	690	2800	2350	551	376	75
24....	112	....	....	....	....	....	544	2560	1980	576	350	85
25....	107	....	....	....	....	....	480	2490	2180	524	296	89
26....	102	....	....	....	72	....	496	2100	2440	463	260	99
27....	95	....	....	....	....	....	468	1960	2250	418	276	91
28....	91	....	....	....	....	....	398	2220	2160	551	406	83
29....	91	....	....	....	....	....	364	2290	1920	524	428	81
30....	86	....	....	....	....	....	375	2420	1870	505	327	77
31....	86	....	....	....	....	73	....	1940	....	499	276	....
Total	6669	....	....	....	....	....	15148	54471	59700	27526	9357	3301
Mean.	215	72.0	70.0	52.0	53.2	82.8	505	1760	1990	888	302	110
Max..	654	....	....	....	....	....	974	2800	2710	1620	440	244
Min...	86	....	....	....	....	....	121	434	1150	418	188	65
Acre-ft.	13200	4280	4300	3200	3060	5090	30100	108000	118000	54600	18600	6540

Discharge of Conejos River at Mouth Near Las Sauses for Year Ending September 30, 1931.
Drainage Area, ... Square Miles. Altitude, ... Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	29	50	50	56	73	97	96	38	9	1	2	4
2....	26	50	52	56	74	93	90	38	9	1	2	7
3....	25	50	56	54	79	90	83	38	10	2	2	7
4....	25	53	54	55	83	109	82	38	10	2	2	6
5....	24	55	51	53	86	111	77	40	18	2	2	8
6....	27	54	53	52	86	94	76	41	12	2	3	8
7....	27	54	53	49	89	98	79	44	15	2	5	8
8....	28	55	52	53	93	90	76	66	13	2	11	8
9....	27	52	51	51	97	87	76	118	10	2	13	10
10....	28	50	54	52	102	90	76	97	10	2	15	9
11....	32	51	52	54	101	104	77	69	7	2	26	10
12....	31	53	50	54	102	109	76	61	5	2	16	13
13....	28	53	51	52	102	119	58	46	6	2	8	8
14....	28	52	57	56	99	123	46	76	6	2	6	9
15....	30	54	55	51	101	118	61	96	6	2	6	10
16....	28	54	60	54	94	118	61	113	5	2	3	12
17....	28	54	67	55	90	129	64	118	5	2	2	11
18....	28	68	60	55	88	150	60	113	4	2	2	11
19....	27	72	68	58	89	142	55	103	4	2	2	13
20....	27	68	66	57	101	116	83	84	4	2	2	13
21....	27	66	61	58	108	118	105	66	4	2	2	13
22....	27	67	69	58	109	116	93	51	4	2	2	16
23....	27	64	74	63	101	127	68	51	2	2	2	17
24....	31	61	60	64	101	132	58	44	2	1	2	19
25....	45	61	65	64	104	128	49	40	2	2	2	62
26....	45	52	63	64	104	114	42	34	2	2	2	124
27....	44	51	62	65	100	104	40	26	2	2	2	95
28....	45	49	60	67	109	104	41	21	2	2	2	65
29....	47	51	60	65	....	96	39	15	1	2	2	52
30....	47	51	60	65	....	96	49	12	1	1	2	43
31....	47	....	55	73	....	96	....	9	....	1	3	....
Total	985	1675	1801	1783	2665	3418	2036	1806	190	57	153	691
Mean.	31.8	55.8	58.1	57.5	95.2	110	67.9	58.3	6.33	1.84	4.93	23.0
Max..	47	72	74	73	109	150	105	118	18	2	26	124
Min...	24	49	50	49	73	87	39	9	1	1	2	4
Acre-ft.	1960	3320	3570	3540	5290	6760	4040	3580	377	113	303	1370

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of Conejos River at Mouth Near Las Sauses for Year Ending September 30, 1932.
Drainage Area, ... Square Miles. Altitude, ... Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	32	45	....	....	....	196	80	98	2310	1670	8	35
2....	32	45	....	....	....	195	78	118	2070	1580	6	49
3....	33	45	....	....	....	206	68	247	2000	1510	6	38
4....	38	49	....	....	....	204	59	475	1910	1420	6	39
5....	42	47	....	....	....	165	47	711	1790	1420	6	35
6....	42	44	....	....	....	154	46	971	1490	1220	7	38
7....	42	44	....	55	....	169	38	882	1310	992	7	40
8....	42	44	....	....	....	173	37	768	1170	829	7	30
9....	42	44	....	....	....	170	38	920	1220	723	6	29
10....	46	44	....	....	....	136	36	1200	1310	666	7	31
11....	48	44	55	....	....	151	33	1370	1380	621	8	31
12....	45	40	....	....	....	160	31	1290	1460	601	7	27
13....	47	40	....	....	....	156	29	1370	1640	699	6	29
14....	45	40	....	....	....	125	24	1660	1830	806	7	35
15....	46	40	....	....	....	150	102	1860	1880	691	7	33
16....	46	40	....	....	123	140	253	2070	1810	630	6	32
17....	49	40	....	....	122	140	419	2430	1890	622	7	31
18....	47	40	....	....	125	140	496	2780	1690	597	10	32
19....	46	40	....	....	132	138	516	3090	1590	540	13	30
20....	46	40	....	....	140	127	523	3480	1550	479	17	31
21....	46	40	....	63	136	127	526	3430	1450	372	16	31
22....	46	....	....	....	134	123	515	3220	1440	277	18	31
23....	46	....	....	....	148	110	482	3580	1480	205	12	35
24....	47	....	....	....	151	100	367	3610	1720	142	11	40
25....	46	....	....	....	154	106	292	3410	1740	102	7	39
26....	46	....	....	....	169	114	216	3210	1930	80	7	34
27....	46	....	....	....	167	110	192	2950	2130	43	13	34
28....	45	....	....	....	180	92	158	2700	2120	32	27	35
29....	45	....	....	....	196	92	157	2770	2000	23	33	34
30....	46	....	....	....	....	90	120	2750	1800	19	35	32
31....	46	....	....	....	....	86	....	2720	....	13	39	....
Total	1361	....	....	....	....	4345	5978	62140	51110	19624	372	1020
Mean.	43.9	45	56	59	116	140	199	2000	1700	633	12.0	34.0
Max..	49	....	....	....	....	206	526	3610	2310	1670	39	49
Min...	32	....	....	....	....	86	24	98	1170	13	6	27
Acre-ft.	2700	2680	3440	3630	6670	8610	11800	123000	101000	38900	738	2020

Discharge of San Antonio River Near Ortiz for Year Ending September 30, 1931.
Drainage Area, 110 Square Miles. Altitude, ... Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	5	....	....	....	....	....	....	90	6	1	5	0
2....	4	....	....	....	....	....	....	98	5	2	5	0
3....	3	....	....	....	....	....	....	105	4	2	6	0
4....	2	....	....	....	....	....	....	130	3	4	4	0
5....	2	....	....	....	....	....	....	136	3	3	3	0
6....	2	....	....	....	....	....	....	136	2	3	2	0
7....	2	....	....	....	....	....	....	216	1	2	2	0
8....	2	....	....	....	....	....	....	288	1	2	1	0
9....	2	....	....	....	....	....	....	182	1	1	0	0
10....	2	....	....	....	....	....	....	136	1	1	0	0
11....	3	....	....	....	....	....	....	98	1	0	0	0
12....	4	....	....	....	....	....	....	93	2	0	0	0
13....	5	....	....	....	....	....	....	105	0	0	0	0
14....	4	....	....	....	....	....	....	118	0	0	0	0
15....	4	....	....	....	....	....	....	90	0	0	0	0
16....	3	....	....	....	....	....	....	76	0	0	0	0
17....	2	....	....	....	....	....	....	60	0	0	0	0
18....	2	....	....	....	....	....	....	58	0	0	0	0
19....	2	....	....	....	....	....	....	44	0	0	0	0
20....	2	....	....	....	....	....	....	40	0	0	0	0
21....	2	....	....	....	....	....	....	36	0	0	0	0
22....	2	....	....	....	....	....	....	35	0	0	0	0
23....	2	....	....	....	....	....	....	27	0	0	0	0
24....	2	....	....	....	....	....	....	24	0	0	0	0
25....	2	....	....	....	....	....	....	21	0	0	0	0
26....	2	....	....	....	....	....	....	20	0	0	0	0
27....	2	....	....	....	....	....	....	17	0	0	0	0
28....	2	....	....	....	....	....	....	14	0	0	0	0
29....	2	....	....	....	....	....	....	11	0	0	0	3
30....	2	....	....	....	....	....	....	10	0	0	0	3
31....	2	....	....	....	....	....	....	7	....	0	0	....
Total	79	....	....	....	....	....	....	2521	30	21	28	6
Mean.	2.55	....	....	....	....	....	....	81.3	1.00	.677	.903	.20
Max...	5	....	....	....	....	....	....	288	6	4	6	3.0
Min...	2	....	....	....	....	....	....	7	0	0	0	0
Acre-ft.	157	....	....	....	....	....	....	5000	59	42	56	12

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of San Antonio River Near Ortiz for Year Ending September 30, 1932.
Drainage Area, 110 Square Miles. Altitude, ... Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	....	....	....	....	....	....	....	225	89	9	6	4
2....	....	....	....	....	....	....	....	275	78	8	5	4
3....	....	....	....	....	....	....	....	314	68	12	5	2
4....	....	....	....	....	....	....	....	379	65	9	4	1
5....	....	....	....	....	....	....	....	404	66	6	3	1
6....	....	....	....	....	....	....	....	324	53	5	2	1
7....	....	....	....	....	....	....	....	310	49	5	2	1
8....	....	....	....	....	....	....	....	300	46	5	2	1
9....	....	....	....	....	....	....	....	295	41	5	2	1
10....	....	....	....	....	....	....	....	290	38	5	2	1
11....	....	....	....	....	....	....	....	280	34	5	1	1
12....	....	....	....	....	....	....	....	272	32	11	3	1
13....	....	....	....	....	....	....	....	300	30	13	3	1
14....	....	....	....	....	....	....	....	362	27	10	2	1
15....	....	....	....	....	....	....	229	400	24	8	6	1
16....	....	....	....	....	....	....	270	410	23	6	6	1
17....	....	....	....	....	....	....	300	418	21	5	3	1
18....	....	....	....	....	....	....	320	422	20	5	2	1
19....	....	....	....	....	....	....	320	429	17	4	3	1
20....	....	....	....	....	....	....	320	440	17	3	6	1
21....	....	....	....	....	....	....	320	382	16	2	8	1
22....	....	....	....	....	....	....	308	407	14	2	7	1
23....	....	....	....	....	....	....	300	348	14	3	7	2
24....	....	....	....	....	....	....	280	276	14	4	7	3
25....	....	....	....	....	....	....	280	241	14	8	5	8
26....	....	....	....	....	....	....	280	211	14	8	4	7
27....	....	....	....	....	....	....	240	190	14	5	4	8
28....	....	....	....	....	....	....	185	174	13	4	4	5
29....	....	....	....	....	....	....	185	159	14	7	4	5
30....	....	....	....	....	....	....	185	136	10	8	4	4
31....	....	....	....	....	....	....	....	112	....	7	4	....
Total	....	....	....	....	....	....	....	9485	975	197	126	71
Mean.	....	....	....	....	....	....	270	306	32.5	6.35	4.06	2.37
Max..	....	....	....	....	....	....	....	440	89	13	8	8
Min...	....	....	....	....	....	....	....	112	10	2	1	1
Acre-ft.	....	....	....	....	....	....	1610	18800	1930	390	250	141

Discharge of San Antonio River at Mouth for Year Ending September 30, 1931.
Drainage Area .... Square Miles. Altitude .... Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	4	7	....	....	....	....	15	79	34	4	1	0
2....	3	8	2	....	7	....	14	94	33	3	1	....
3....	3	8	....	....	....	....	15	104	33	2	1	....
4....	3	8	....	....	....	....	15	112	38	5	1	....
5....	3	....	....	....	....	....	17	112	51	5	1	....
6....	3	....	....	....	....	....	16	126	50	5	1	....
7....	3	....	....	0	....	17	17	142	51	5	0	....
8....	4	....	....	....	....	....	20	233	49	5	1	....
9....	3	....	....	....	....	....	23	215	48	3	1	....
10....	3	....	....	....	....	....	25	175	43	1	1	....
11....	6	....	....	....	....	....	26	151	42	1	1	....
12....	7	....	....	....	....	....	32	135	35	1	0	....
13....	6	....	....	....	....	....	43	139	25	1	0	....
14....	7	....	....	....	....	....	65	159	20	3	0	....
15....	8	....	....	....	....	....	79	178	14	3	0	....
16....	7	....	....	....	....	....	86	196	8	3	0	....
17....	7	....	....	....	....	....	74	180	6	2	0	....
18....	8	....	....	....	....	....	65	200	5	2	0	....
19....	7	....	....	0	10	....	91	173	4	2	0	....
20....	6	....	....	....	....	....	125	133	4	2	0	....
21....	6	....	....	....	....	....	122	101	4	2	0	....
22....	6	....	....	....	....	32	101	84	4	2	0	....
23....	6	....	....	....	....	31	89	77	4	2	0	....
24....	6	....	....	....	....	30	78	72	4	1	0	....
25....	5	....	....	....	....	30	65	82	3	1	0	....
26....	7	....	....	....	....	30	61	83	1	1	0	....
27....	7	....	....	....	....	27	58	71	2	1	0	....
28....	7	....	....	....	....	....	67	61	2	1	0	....
29....	8	....	....	....	....	....	77	55	2	1	0	....
30....	8	....	....	....	....	....	79	48	3	1	0	0
31....	7	....	....	....	....	....	....	35	....	1	0	....
Total	174	....	....	....	....	....	1660	3805	622	72	10	0
Mean.	5.58	5	1	1	10	24	55.3	123	20.7	2.32	.323	0
Max...	8	....	....	....	....	....	125	233	51	5	1	0
Min...	3	....	....	....	....	....	14	35	1	1	0	0
Acre-ft.	343	298	61	61	555	1480	3290	7560	1230	143	20	0

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of San Antonio River at Mouth for Year Ending September 30, 1932.
Drainage Area .... Square Miles. Altitude .... Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	0	1	....	....	....	....	21	160	773	325	8	6
2....	0	1	....	....	....	....	23	234	713	319	8	3
3....	0	1	....	....	....	....	26	394	689	314	8	2
4....	0	1	....	....	....	....	28	575	645	284	8	1
5....	0	1	....	....	....	....	29	822	632	260	8	1
6....	0	1	....	....	....	....	29	879	557	232	4	1
7....	0	1	....	....	....	....	29	716	536	206	3	1
8....	0	1	....	....	....	....	27	702	515	183	3	1
9....	0	1	....	....	....	....	26	841	509	170	2	1
10....	0	1	....	....	....	....	26	936	512	160	2	1
11....	0	1	....	10	....	....	31	960	506	180	2	1
12....	0	1	....	....	....	....	38	940	497	190	2	1
13....	0	1	....	....	....	....	55	1040	527	220	2	1
14....	0	1	....	....	....	43	99	1140	536	218	2	1
15....	0	1	....	....	....	....	148	1190	515	183	2	1
16....	0	1	....	....	....	....	244	1250	533	165	1	1
17....	0	1	....	....	20	....	341	1310	512	145	1	1
18....	0	1	....	....	....	....	381	1360	472	120	1	1
19....	0	1	....	....	....	....	421	1400	441	110	1	1
20....	0	1	....	....	....	....	466	1450	416	105	1	1
21....	0	1	....	....	....	....	480	1500	363	73	1	1
22....	0	....	....	....	....	....	486	1550	353	54	1	1
23....	1	....	10	....	....	....	455	1550	394	34	1	1
24....	1	....	....	....	....	....	312	1550	418	29	1	1
25....	1	....	....	....	....	....	246	1300	466	26	1	1
26....	1	....	....	....	....	....	220	1110	483	25	5	1
27....	1	....	....	....	....	....	225	1030	458	16	2	1
28....	1	....	....	....	....	....	230	1020	435	8	1	1
29....	1	....	....	....	....	....	174	996	379	8	2	1
30....	1	1	....	....	....	....	166	976	341	8	4	1
31....	1	....	....	....	....	20	....	848	....	8	7	....
Total	9	....	....	....	....	....	5482	31729	15126	4378	95	38
Mean.	0.22	1.0	10	10	25	35	183	1020	504	141	3.06	1.27
Max..	....	....	....	....	....	....	486	....	773	325	8	6
Min...	0	....	....	....	....	....	21	160	341	8	1	1
Acre-ft.	14	60	615	615	1440	2150	10900	62700	30000	8670	188	76

Discharge of Los Pinos Creek Near Ortiz for Year Ending September 30, 1931.
Drainage Area, 167 Square Miles. Altitude, 8,100 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	36	....	....	....	....	....	48	144	248	48	36	9
2....	30	....	....	....	....	....	54	168	248	42	25	9
3....	25	....	....	....	....	....	42	168	248	42	20	9
4....	20	....	....	....	....	....	36	192	233	48	20	9
5....	20	....	....	....	....	....	30	218	218	42	20	9
6....	20	....	....	....	....	....	30	263	192	30	61	9
7....	20	....	....	....	....	....	36	380	192	30	30	9
8....	20	....	....	....	....	....	42	399	192	25	36	9
9....	20	....	....	....	....	....	48	294	180	25	36	9
10....	20	....	....	....	....	....	48	263	156	25	25	9
11....	25	....	....	....	....	....	54	263	144	25	20	9
12....	36	....	....	....	....	....	68	278	133	20	20	12
13....	30	....	....	....	....	....	93	344	122	20	16	9
14....	30	....	....	....	....	....	112	418	112	20	16	9
15....	30	....	....	....	....	....	144	456	102	20	12	30
16....	25	....	....	....	....	....	122	437	102	20	12	25
17....	20	....	....	....	....	....	102	476	84	16	12	16
18....	20	....	....	....	....	....	122	437	84	20	12	20
19....	20	....	....	....	....	....	218	344	76	20	12	30
20....	20	....	....	....	....	....	233	248	61	20	12	102
21....	20	....	....	....	....	....	218	233	61	20	12	54
22....	20	....	....	....	....	133	180	248	61	20	12	36
23....	20	....	....	....	....	102	156	218	54	16	12	25
24....	20	....	....	....	....	102	144	248	54	16	12	54
25....	20	....	....	....	....	76	122	278	54	16	12	42
26....	20	....	....	....	....	76	102	278	48	12	12	36
27....	20	....	....	....	....	76	112	263	42	12	12	36
28....	20	....	....	....	....	93	122	233	48	12	12	30
29....	20	....	....	....	....	54	122	233	54	12	9	25
30....	20	....	....	....	....	61	122	233	48	16	9	25
31....	20	....	....	....	....	61	....	248	....	25	9	....
Total	707	....	....	....	....	....	3082	8903	3651	1173	576	718
Mean	228	....	....	....	....	....	103	287	122	37.8	18.6	23.9
Max..	36	....	....	....	....	....	233	476	248	48	61	102
Min...	....	....	....	....	....	....	30	144	42	12	9	9
Acre-ft.	1400	....	....	....	....	....	6130	17600	7260	2320	1140	1420

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of Los Pinos Creek Near Ortiz for Year Ending September 30, 1932.
Drainage Area, 167 Square Miles. Altitude, 8,100 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	26	26	....	....	....	....	44	354	850	419	40	38
2....	32	26	....	....	....	....	50	484	800	419	40	32
3....	111	26	....	....	....	....	50	649	768	400	40	26
4....	63	26	....	....	....	....	50	823	746	364	40	26
5....	50	21	....	....	....	....	50	894	682	328	40	26
6....	44	21	....	....	....	....	100	823	661	294	40	26
7....	38	16	....	....	....	....	100	712	682	278	40	26
8....	32	16	....	....	....	....	100	800	703	278	40	21
9....	32	16	....	....	....	....	150	942	682	278	40	21
10....	63	12	....	....	....	....	150	942	682	278	40	21
11....	38	12	....	....	....	....	200	966	682	262	32	21
12....	32	12	....	....	....	....	200	1060	682	262	45	21
13....	32	12	....	....	....	....	250	1160	724	262	32	21
14....	32	12	....	....	....	....	300	1190	724	230	32	21
15....	26	12	....	....	....	....	356	1260	724	220	32	16
16....	26	12	....	....	....	70	450	1340	724	210	32	16
17....	21	12	....	....	....	70	565	1390	640	200	32	16
18....	21	12	....	....	....	70	628	1450	577	190	61	16
19....	26	12	....	....	....	70	649	1450	556	180	32	16
20....	26	12	....	....	....	70	649	1260	536	170	32	16
21....	38	12	....	....	....	70	649	1320	516	160	52	16
22....	32	....	....	....	....	86	607	1400	516	150	61	16
23....	32	....	....	....	....	111	484	1500	598	140	61	16
24....	32	....	....	....	....	70	390	1400	577	130	45	16
25....	32	....	....	....	....	56	390	1400	598	110	38	16
26....	32	....	....	....	....	56	390	1300	556	100	38	16
27....	26	....	....	....	....	78	372	1300	516	80	45	16
28....	26	....	....	....	....	63	304	1200	516	60	61	16
29....	26	....	....	....	....	56	304	1100	457	50	70	16
30....	26	....	....	....	....	63	304	1000	457	45	52	16
31....	26	....	....	....	....	56	....	900	....	45	38	....
Total	1099	....	....	....	....	....	9285	33769	19134	6592	1323	603
Mean.	35.4	15	....	....	....	70	310	1090	638	213	42.7	20.1
Max..	111	....	....	....	....	....	649	1500	850	419	70	38
Min...	21	....	....	....	....	....	44	354	457	45	32	16
Acre-ft.	2180	892	....	....	....	4300	18400	67000	38000	13100	2630	1200

Discharge of Culebra River Near San Luis for Year Ending September 30, 1931.
Drainage Area, ... Square Miles. Altitude, ... Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	58	27	....	....	....	....	....	27	206	184	60	21
2....	45	28	....	....	....	....	....	27	225	158	42	26
3....	39	29	....	....	....	....	....	27	247	22	41	25
4....	39	30	....	....	....	....	....	27	253	8	71	35
5....	38	30	....	....	....	....	....	27	233	7	80	31
6....	35	29	....	....	....	....	....	27	218	6	58	16
7....	36	28	....	....	....	....	....	27	206	25	46	15
8....	33	24	....	....	....	....	....	27	205	45	46	15
9....	29	16	....	....	....	....	....	27	205	53	35	15
10....	31	22	....	....	....	....	....	27	192	52	61	14
11....	38	25	....	....	....	....	....	35	157	62	87	15
12....	19	27	....	....	....	....	....	35	138	69	88	16
13....	30	25	....	....	....	....	....	35	129	118	72	11
14....	25	28	....	....	....	....	....	35	133	142	70	11
15....	26	29	....	....	....	....	....	35	144	166	63	18
16....	25	26	....	....	....	....	....	35	165	169	47	31
17....	24	....	....	....	....	....	....	35	190	190	39	21
18....	24	....	....	....	....	....	....	52	205	159	47	35
19....	18	....	....	....	....	....	....	62	205	121	39	40
20....	22	....	....	....	....	....	....	73	199	131	25	41
21....	22	....	....	....	....	....	....	73	196	137	25	31
22....	22	....	....	....	....	....	....	51	213	138	35	26
23....	20	....	....	....	....	....	....	54	228	156	26	26
24....	24	....	....	....	....	....	....	47	228	151	36	33
25....	25	....	....	....	....	....	....	76	225	103	42	31
26....	29	....	....	....	....	....	....	90	212	69	44	31
27....	29	....	....	....	....	....	....	111	210	107	42	28
28....	25	....	....	....	....	....	....	120	176	92	31	26
29....	22	....	....	....	....	....	....	164	171	89	31	28
30....	22	....	....	....	....	....	....	175	160	88	31	30
31....	24	....	....	....	....	....	....	171	....	89	31	....
Total	898	....	....	....	....	....	....	1834	5874	3106	1491	742
Mean.	29.0	27	25	25	25	25	25	59.2	196	100	48.1	24.7
Max..	58	30	....	....	....	....	....	175	253	190	88	41
Min...	18	....	....	....	....	....	....	....	129	6	25	11
Acre-ft.	1780	1610	1540	1540	1390	1540	1490	3640	11700	6150	2960	1470

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of Culebra River Near San Luis for Year Ending September 30, 1932.
Drainage Area, ... Square Miles. Altitude, ... Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	28	26	....	....	....	....	22	11	112	150	111	13
2....	31	25	....	....	....	....	21	18	119	127	127	21
3....	31	24	....	....	....	....	11	22	132	65	151	30
4....	30	21	....	....	....	....	24	23	150	50	142	28
5....	28	21	....	....	....	....	29	21	117	93	121	28
6....	26	26	....	....	....	....	33	22	102	145	120	34
7....	28	26	....	....	....	....	33	23	138	169	95	61
8....	26	26	....	....	....	....	33	11	142	167	128	65
9....	28	26	....	....	....	....	27	22	154	157	128	69
10....	25	26	....	....	....	....	17	23	128	142	159	63
11....	32	28	....	....	....	....	31	25	108	87	159	47
12....	28	28	....	....	....	....	41	23	91	85	157	53
13....	28	27	....	....	....	....	40	24	138	91	121	47
14....	27	26	....	....	....	....	37	26	157	70	90	46
15....	26	22	....	....	....	....	27	12	176	75	110	55
16....	26	25	....	....	....	....	18	28	181	75	124	53
17....	23	29	....	....	....	....	11	34	180	68	113	47
18....	11	21	....	....	....	....	18	53	176	110	97	35
19....	30	23	....	....	....	....	18	62	166	134	68	28
20....	30	11	....	....	....	....	24	51	174	156	68	28
21....	29	26	....	....	....	....	22	51	168	177	38	26
22....	25	25	....	....	....	....	23	47	192	184	28	23
23....	22	25	..	.....	....	....	9	47	182	165	37	26
24....	21	25	....	....	....	....	10	47	150	142	9	27
25....	26	25	....	....	....	....	25	63	104	139	45	14
26....	21	25	....	....	....	....	29	68	111	138	51	37
27....	21	25	....	....	....	....	28	64	103	149	63	27
28....	28	25	....	....	....	23	25	68	110	144	33	26
29....	25	25	....	....	....	23	25	58	121	133	28	30
30....	22	25	....	....	....	23	22	75	135	132	26	31
31....	26	....	....	....	....	22	....	99	....	92	22	....
Total	797	738	....	....	....	....	733	1221	4217	3811	2769	1118
Mean.	25.7	24.6	25	25	24	23	24.4	39.4	141	123	89.3	37.3
Max..	32	....	....	....	....	....	41	99	192	184	159	69
Min..	11	....	....	....	....	....	9	11	91	50	9	13
Acre-ft.	1580	1460	1540	1540	1380	1410	1450	2420	8390	7560	5490	2220

Discharge of La Garita Creek Near La Garita for Year Ending September 30, 1931.
Drainage Area, 61 Square Miles. Altitude, ... Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	12	....	....	....	....	....	9	13	16	14	4	4
2....	11	....	....	....	....	....	9	14	15	11	4	5
3....	10	....	....	....	....	....	9	12	14	11	4	4
4....	11	....	....	....	....	....	9	12	14	12	4	4
5....	10	....	....	....	....	....	9	11	14	10	4	4
6....	9	....	....	....	....	....	11	12	13	9	4	4
7....	9	....	....	....	....	....	11	13	13	9	4	4
8....	10	....	....	....	....	....	11	15	15	8	4	4
9....	10	....	....	....	....	....	11	12	15	8	5	4
10....	10	....	....	....	....	....	11	10	14	8	4	4
11....	12	....	....	....	....	....	15	9	12	8	4	3
12....	12	....	....	....	....	....	14	9	12	8	4	4
13....	10	....	....	....	....	....	14	11	11	8	4	4
14....	10	....	....	....	....	....	14	15	10	8	3	4
15....	10	....	....	....	....	....	16	24	10	8	3	4
16....	9	....	....	....	....	....	11	22	10	8	3	4
17....	9	....	....	....	....	....	9	21	9	11	3	4
18....	10	....	....	....	....	....	14	30	9	7	6	4
19....	9	....	....	....	....	....	16	19	9	5	6	5
20....	9	....	....	....	....	....	13	13	9	4	5	5
21....	11	....	....	....	....	....	16	13	9	4	4	3
22....	10	....	....	....	....	....	11	12	9	5	5	3
23....	9	....	....	....	....	....	11	17	10	4	5	3
24....	9	....	....	....	....	....	12	23	11	4	4	4
25....	8	....	....	....	....	....	11	24	9	4	4	4
26....	9	....	....	....	....	....	9	24	10	4	4	4
27....	10	....	....	....	....	....	9	19	9	4	4	4
28....	8	....	....	....	....	....	9	19	9	4	3	4
29....	9	....	....	....	....	....	11	17	9	4	4	4
30....	10	....	....	....	....	....	12	17	11	3	4	4
31....	10	....	....	....	....	....	....	17	....	3	4	....
Total	305	....	....	....	....	....	347	499	346	218	127	119
Mean.	9.84	....	....	....	....	....	11.6	16.1	11.5	7.03	4.10	3.97
Max..	12	....	....	....	....	....	16	30	16	14	6	5
Min..	8	....	....	....	....	....	....	9	9	3	3	3
Acre-ft.	605	....	....	....	....	....	713	990	684	432	252	236

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of La Garita Creek Near La Garita for Year Ending Sept. 30, 1932.
Drainage Area, 61 Square Miles. Altitude, ... Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	5	....	....	....	....	....	5	24	26	16	14	8
2....	5	....	....	....	....	....	5	30	24	16	13	7
3....	5	....	....	....	....	....	5	33	22	18	12	7
4....	5	....	....	....	....	....	5	40	23	16	12	7
5....	5	....	....	....	....	....	5	39	25	15	11	7
6....	5	....	....	....	....	....	6	40	22	13	11	7
7....	5	....	....	....	....	....	6	34	21	12	10	6
8....	5	....	....	....	....	....	6	32	20	12	10	6
9....	5	....	....	....	....	....	6	30	20	13	10	6
10....	7	....	....	....	....	....	6	30	20	15	10	6
11....	7	....	....	....	....	....	6	30	20	18	9	6
12....	6	....	....	....	....	....	7	30	20	25	9	6
13....	6	....	....	....	....	....	10	33	19	21	9	6
14....	6	....	....	....	....	....	13	40	20	16	12	5
15....	5	....	....	....	....	....	15	42	20	16	15	5
16....	5	....	....	....	....	....	18	39	18	15	10	4
17....	5	....	....	....	....	....	17	42	18	14	10	5
18....	5	....	....	....	....	....	15	40	17	14	12	5
19....	5	....	....	....	....	....	15	44	17	18	10	5
20....	5	....	....	....	....	....	16	40	20	15	9	5
21....	5	....	....	....	....	....	20	36	17	12	9	5
22....	6	....	....	....	....	....	21	40	16	12	9	5
23....	5	....	....	....	....	....	19	42	18	16	9	5
24....	5	....	....	....	....	....	15	37	21	15	9	5
25....	5	....	....	....	....	....	13	38	22	14	8	6
26....	5	....	....	....	....	....	18	34	20	13	8	5
27....	5	....	....	....	....	....	18	30	18	12	8	6
28....	6	....	....	....	....	....	19	30	18	12	8	6
29....	5	....	....	....	....	....	18	30	18	19	8	5
30....	4	....	....	....	....	....	18	29	16	16	8	5
31....	5	....	....	....	....	....	....	27	....	15	8	....
Total	163	....	....	....	....	....	366	1085	596	474	310	172
Mean.	5.26	....	....	....	....	....	12.2	35.0	19.9	15.3	10.0	5.73
Max..	7	....	....	....	....	....	....	44	26	25	....	....
Min...	4	....	....	....	....	....	....	24	16	12	....	....
Acre-ft.	323	....	....	....	....	....	726	2150	1180	941	615	340

Discharge of Carnero Creek Near La Garita for Year Ending September 30, 1931.
Drainage Area, 117 Square Miles. Altitude, ... Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	10	....	....	....	....	....	....	15	12	9	4	2
2....	10	....	....	....	....	....	....	15	12	9	4	2
3....	10	....	....	....	....	....	....	15	12	9	3	2
4....	10	....	....	....	....	....	....	20	12	9	2	2
5....	8	....	....	....	....	....	....	20	12	9	2	2
6....	8	....	....	....	....	....	....	20	12	9	2	2
7....	8	....	....	....	....	....	....	20	12	9	2	2
8....	8	....	....	....	....	....	....	20	9	9	2	2
9....	8	....	....	....	....	....	....	15	9	8	2	2
10....	8	....	....	....	....	....	....	15	9	8	2	2
11....	8	....	....	....	....	....	....	12	9	6	2	2
12....	8	....	....	....	....	....	....	12	9	5	2	2
13....	8	....	....	....	....	....	....	12	9	5	2	2
14....	8	....	....	....	....	....	....	12	9	5	2	2
15....	8	....	....	....	....	....	24	15	9	5	2	2
16....	8	....	....	....	....	....	24	15	8	5	2	2
17....	8	....	....	....	....	....	24	15	6	5	2	2
18....	8	....	....	....	....	....	24	24	6	5	2	2
19....	8	....	....	....	....	....	24	15	6	5	2	2
20....	8	....	....	....	....	....	20	15	6	5	2	2
21....	8	....	....	....	....	....	15	12	6	5	2	2
22....	8	....	....	....	....	....	15	12	6	5	2	2
23....	8	....	....	....	....	....	15	12	6	5	2	2
24....	8	....	....	....	....	....	15	12	8	5	2	2
25....	8	....	....	....	....	....	15	15	15	4	2	2
26....	8	....	....	....	....	....	12	15	12	4	2	2
27....	8	....	....	....	....	....	12	15	9	4	2	2
28....	8	....	....	....	....	....	12	15	9	4	2	2
29....	8	....	....	....	....	....	15	12	9	4	2	2
30....	8	....	....	....	....	....	15	12	9	4	2	2
31....	8	....	....	....	....	....	....	12	....	4	2	....
Total	256	....	....	....	....	....	....	466	277	187	68	60
Mean.	8.26	....	....	....	....	....	15	15.0	9.23	6.03	2.19	2
Max..	10	....	....	....	....	....	....	24	15	9	4	2
Min...	....	....	....	....	....	....	....	12	6	4	2	2
Acre-ft.	508	....	....	....	....	....	893	922	549	371	135	119

Unless otherwise noted, all discharges are in cubic feet per second

Discharge of Carnero Creek Near La Garita for Year Ending September 30, 1932.
Drainage Area, 117 Square Miles. Altitude, ... Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	2	....	....	....	....	....	....	12	22	9	14	4
2....	2	....	....	....	....	....	....	28	22	9	12	2
3....	2	....	....	....	....	....	....	22	18	9	9	2
4....	2	....	....	....	....	....	....	22	18	9	7	2
5....	2	....	....	....	....	....	....	22	18	9	7	2
6....	2	....	....	....	....	....	....	22	18	7	7	2
7....	3	....	....	....	....	....	....	22	18	7	5	2
8....	3	....	....	....	....	....	....	22	14	7	5	2
9....	3	....	....	....	....	....	....	22	14	5	5	2
10....	3	....	....	....	....	....	....	22	14	5	5	2
11....	3	....	....	....	....	....	9	22	14	9	5	2
12....	3	....	....	....	....	....	9	22	14	12	5	2
13....	3	....	....	....	....	....	12	22	14	14	5	2
14....	3	....	....	....	....	....	14	22	14	14	5	2
15....	3	....	....	....	....	....	14	22	14	14	5	2
16....	3	....	....	....	....	....	14	22	14	12	5	2
17....	3	....	....	....	....	....	14	28	14	22	5	2
18....	3	....	....	....	....	....	14	33	12	14	5	2
19....	3	....	....	....	....	....	14	33	12	18	5	2
20....	3	....	....	....	....	....	14	33	12	14	5	2
21....	3	....	....	....	....	....	12	28	12	12	9	2
22....	2	....	....	....	....	....	9	33	9	12	9	2
23....	2	....	....	....	....	....	9	40	9	12	7	2
24....	2	....	....	....	....	....	7	33	12	9	5	2
25....	2	....	....	....	....	....	9	33	12	9	5	2
26....	2	....	....	....	....	....	12	33	14	9	5	2
27....	2	....	....	....	....	....	12	33	14	7	5	2
28....	2	....	....	....	....	....	9	33	12	7	5	2
29....	2	....	....	....	....	....	9	28	9	9	5	2
30....	2	....	....	....	....	....	9	28	9	14	5	2
31....	2	....	....	....	....	....	....	28	....	14	5	....
Total	77	....	....	....	....	....	....	825	422	333	191	62
Mean.	2.48	....	....	....	....	....	9.83	26.6	14.1	10.7	6.16	2.07
Max..	3	....	....	....	....	....	....	40	22	22	14	4
Min..	2	....	....	....	....	....	....	12	9	5	5	2
Acre-ft.	152	....	....	....	....	....	585	1640	839	658	379	123

Discharge of Saguache Creek Near Saguache for Year Ending September 30, 1931.
Drainage Area, 595 Square Miles. Altitude, 7,800 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	51	....	....	....	....	....	....	60	114	114	40	32
2....	52	....	....	....	....	....	....	65	112	72	33	34
3....	49	....	....	....	....	....	....	68	95	62	29	27
4....	49	....	....	....	....	....	....	93	91	74	26	25
5....	51	....	....	....	....	....	....	74	120	54	28	25
6....	52	....	....	....	....	....	....	65	106	47	44	25
7....	49	....	....	....	....	....	....	93	95	39	51	26
8....	48	....	....	....	....	....	....	114	98	32	50	25
9....	46	....	....	....	....	....	....	82	104	25	47	25
10....	48	....	....	....	....	....	....	82	79	24	40	25
11....	52	....	....	....	....	....	....	82	72	23	34	24
12....	54	....	....	....	....	....	....	82	68	22	32	25
13....	50	....	....	....	....	....	....	82	68	22	30	27
14....	50	....	....	....	....	....	....	77	67	20	27	29
15....	49	....	....	....	....	....	....	104	67	17	25	27
16....	48	....	....	....	....	....	....	136	74	24	27	26
17....	47	....	....	....	....	....	....	158	70	29	42	26
18....	49	....	....	....	....	....	....	148	62	37	39	34
19....	45	....	....	....	....	....	....	164	56	42	36	34
20....	44	....	....	....	....	....	....	120	53	39	34	44
21....	43	....	....	....	....	....	65	104	51	36	28	40
22....	45	....	....	....	....	....	....	87	59	33	27	34
23....	45	....	....	....	....	....	....	77	60	33	26	32
24....	45	....	....	....	....	....	....	84	63	28	25	33
25....	46	....	....	....	....	....	....	120	53	47	25	37
26....	42	....	....	....	....	....	....	166	54	36	23	33
27....	42	....	....	....	....	....	....	150	54	36	23	29
28....	41	....	....	....	....	....	....	110	70	36	22	28
29....	39	....	....	....	....	....	....	100	62	37	22	27
30....	40	....	....	....	....	....	50	104	79	33	22	27
31....	41	....	....	....	....	....	....	116	....	39	24	....
Total	1452	....	....	....	....	....	....	3167	2276	1212	981	885
Mean.	46.8	....	....	....	....	....	55	102	75.9	39.1	31.6	29.5
Max..	54	....	....	....	....	....	....	166	120	114	51	44
Min..	39	....	....	....	....	....	....	60	51	17	22	24
Acre-ft.	2880	....	....	....	....	....	3270	6270	4520	2400	1940	1760

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of Saguache Creek Near Saguache for Year Ending September 30, 1932.
Drainage Area, 595 Square Miles. Altitude, 7,800 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	28	31	....	....	....	....	....	50	239	136	120	71
2....	28	....	....	....	....	....	....	61	239	136	90	66
3....	32	....	....	....	....	....	....	76	239	158	78	64
4....	33	....	....	....	....	....	....	85	227	116	80	60
5....	30	....	....	....	....	....	....	108	241	93	71	57
6....	30	....	....	....	....	....	....	102	204	80	65	58
7....	29	....	....	....	....	....	....	85	160	74	60	62
8....	29	....	....	....	....	....	....	86	150	78	57	56
9....	29	....	....	....	....	....	....	120	156	82	52	45
10....	32	....	....	....	....	....	....	130	156	83	52	36
11....	33	....	....	....	....	....	34	134	156	93	52	33
12....	34	....	....	....	....	....	41	165	163	144	50	34
13....	33	....	....	....	....	....	56	211	185	189	51	36
14....	32	....	....	....	....	....	62	224	204	176	52	38
15....	31	....	....	....	....	....	57	251	200	150	66	42
16....	30	....	....	....	....	....	58	285	185	106	72	44
17....	29	....	....	....	....	....	70	334	176	102	93	48
18....	30	....	....	....	....	....	58	430	171	120	136	47
19....	33	....	....	....	....	....	44	508	156	191	187	49
20....	33	....	....	....	....	....	45	576	148	178	122	48
21....	35	....	....	....	....	....	46	403	130	130	102	48
22....	35	....	....	....	....	....	46	452	142	108	98	48
23....	34	....	....	....	....	....	42	540	150	100	94	50
24....	32	....	....	....	....	....	41	476	191	114	78	51
25....	32	....	....	....	....	....	45	462	227	100	74	53
26....	32	....	....	....	....	....	47	403	244	80	74	49
27....	28	....	....	....	....	....	57	292	204	77	90	46
28....	26	....	....	....	....	....	65	278	160	88	128	44
29....	28	....	....	....	....	....	60	292	134	106	98	42
30....	27	....	....	....	....	....	45	319	136	160	85	41
31....	26	....	....	....	....	....	....	275	....	148	74	....
Total	953	....	....	....	....	....	....	8213	5473	3696	2601	1466
Mean.	30.7	25	....	....	....	....	50	265	182	119	83.9	48.9
Max..	35	....	....	....	....	....	....	576	244	191	187	71
Min..	26	....	....	....	....	....	....	50	130	74	50	33
Acre-ft.	1890	1490	....	....	....	....	2980	16300	10800	7320	5160	2910

Unless otherwise noted, all discharges are in cubic feet per second.

COLORADO RIVER DRAINAGE

COLORADO RIVER NEAR HOT SULPHUR SPRINGS

Location—At Thompson's Ranch one mile above the town of Hot Sulphur Springs, in Sec. 1, T. 1 N., R. 78 W.

Records Available—September 19, 1930, to September 30, 1932. Station maintained at town of Hot Sulphur Springs, from July 22, 1904, to September 30, 1909; September 23, 1910, to September 30, 1924; October 1, 1925, to September 19, 1930.

Gage—Automatic recording gage.

Accuracy—Records considered good.

COLORADO RIVER AT GLENWOOD SPRINGS

Location—In Glenwood Springs opposite D. & R. G. W. R. R. Depot.

Records Available—May 12, 1899, to September 30, 1932.

Gage—Automatic recording gage.

Accuracy—Records considered good.

Co-operation—Records furnished by the United States Geological Survey.

COLORADO RIVER NEAR PALISADE

Location—At highway bridge in Sec. 2, T. 11 S., R. 98 W., two miles above Palisade.

Records Available—April 9, 1902, to September 30, 1932.

Gage—Chain gage.

Accuracy—Records considered good.

Co-operation—Records furnished by the United States Reclamation Service.

COLORADO RIVER NEAR CISCO, UTAH

Location—Between Secs. 8 and 17, T. 23 S., R. 24 E., Salt Lake Meridian, fifteen miles south of Cisco. Dolores River enters one mile above station.

Records Available—November 10, 1914, to September 30, 1917; October 1, 1922, to September 30, 1932. From October 1, 1913, to November 10, 1914, a station was maintained at Moab, thirty-one miles below this station.

Gage—Automatic recording gage.

Accuracy—Records considered good.

Co-operation—Station maintained in co-operation with the United States Geological Survey and State of Utah.

COLORADO RIVER AT LEES FERRY, ARIZONA

Location—At Lees Ferry, Arizona, about one-half mile below ferry and one-half mile above mouth of Paria River.

Records Available—June 13, 1921, to September 30, 1932.

Gage—Automatic recording gage.

Accuracy—Records considered good.

Co-operation—Records furnished by the United States Geological Survey.

FRASER RIVER NEAR WEST PORTAL (Arrow)

Location—In Sec. 4, T. 2 S., R. 75 W., three-quarters of a mile down stream from D. & S. L. R. R. trestle and 150 yards east of railroad and highway crossing.

Records Available—September 23, 1910, to September 30, 1932.

Gage—Automatic recording gage.

Accuracy—Records considered good.

BLUE RIVER AT DILLON

Location—At Cemetery bridge in Sec. 18, T. 5 S., R. 77 W.. a short distance above the mouth of Snake River.

Records Available—October 15, 1910, to September 30, 1932.

Gage—Automatic recording gage.

Accuracy—Records considered good.

Co-operation—Station maintained in co-operation with the City of Denver and United States Geological Survey.

SNAKE RIVER AT DILLON

Location—At highway bridge 200 yards above mouth in Sec. 18, T. 5 S., R. 77 W.

Records Available—October 15, 1910, to September 30, 1919; December, 1929, to September 30, 1932.

Gage—Automatic recording gage.

Accuracy—Records considered good.

Co-operation—Station maintained in co-operation with the United States Geological Survey and the City of Denver.

TEN MILE CREEK AT DILLON

Location—At highway bridge in Dillon in Sec. 18, T. 5 S., R. 77 W.

Records Available—October 15, 1910, to September 30, 1919; April 13, 1930, to September 30, 1932.

Gage—Automatic recording gage.

Accuracy—Records considered good.

Co-operation—Station maintained in co-operation with the United States Geological Survey and the City of Denver.

ROARING FORK RIVER AT ASPEN

Location—In Sec. 7, T. 10 S., R. 84 W., at the bridge near the old power plant in Aspen, above Castle, Hunter and Maroon Creeks. Station re-established at old location in April, 1932.

Records Available—January 1, 1911, to September 30, 1921 and from April 24, 1932, to September 30, 1932.

Gage—Automatic recording gage.

Accuracy—Records considered good.

ROARING FORK AT GLENWOOD SPRINGS

Location—In Sec. 9, T. 6 S., R. 89 W., one-half mile above mouth.

Records Available—April 6, 1906, to September 30, 1909; September 21, 1910, to September 30, 1932.

Gage—Automatic recording gage.

Accuracy—Records considered good.

PLATEAU CREEK NEAR COLLBRAN

Location—In Sec. 23, T. 9 S., R. 94 W., on private bridge about seven miles east of Collbran.

Records Available—August 20, 1921, to September 30, 1932.

Gage—Automatic recording gage.

Accuracy—Records considered good.

BUZZARD CREEK NEAR COLLBRAN

Location—In Sec. 14, T. 9 S., R. 94 W., on highway bridge seven miles east of Collbran.

Records Available—August 18, 1921, to September 30, 1932.

Gage—Automatic recording gage.

Accuracy—Records considered good.

TAYLOR RIVER AT TAYLOR PARK

Location—In Sec. 7, T. 14 S., R. 82 W., at Bright's Ranch bridge.

Records Available—June 1, 1929, to September 30, 1932.

Gage—Automatic recording gage.

Accuracy—Records considered good.

TAYLOR RIVER AT ALMONT

Location—At highway bridge at Almont in Sec. 22, T. 51 N., R. 1 E., N. M. P. M. and 800 feet above junction with East River.

Records Available—July 27, 1910, to September 30, 1932.

Gage—Automatic recording gage.

Accuracy—Records considered good.

Co-operation—Station maintained in co-operation with Uncompahgre Valley Water Users Association.

TEXAS CREEK AT TAYLOR PARK

Location—In Sec. 8, T. 14 S., R. 82 W., at highway bridge on Dorchester Road.

Records Available—June 1, 1929, to September 30, 1932.

Gage—Automatic recording gage.

Accuracy—Records considered good.

WILLOW CREEK AT TAYLOR PARK

Location—At highway bridge on Tin Cup road near Ranger station in Sec. 22, T. 14 S., R. 82 W.

Records Available—June 1, 1929, to September 30, 1932.

Gage—Automatic recording gage.

Accuracy—Records considered good.

HENSON CREEK NEAR LAKE CITY

Location—In Sec. 33, T. 44 N., R. 4 W., one and two-tenths miles from Lake City Post Office and 125 feet below station maintained in 1929 and 1930.

Records Available—December, 1928, to July, 1930, and October 1, 1931, to September 30, 1932. From 1918 to 1919 station maintained one mile down stream.

Gage—Automatic recording gage.

Accuracy—Records considered good.

Co-operation—Station maintained in co-operation with the United States Geological Survey.

LAKE FORK AT LAKE CITY

Location—In Sec. 34, T. 44 N., R. 4 W., in Lake City south of Wade's Gulch and 600 feet above station previously maintained. Henson Creek enters one-half mile down stream.

Records Available—April, 1918, to September, 1924, December, 1928, to July, 1930, and October 1, 1931, to September 30, 1932.

Gage—Automatic recording gage.

Accuracy—Records considered good.

Co-operation—Station maintained in co-operation with the United States Geological Survey.

NORTH FORK OF GUNNISON RIVER NEAR PAONIA

Location—In Sec. 28, T. 13 S., R. 91 W., on highway bridge two miles northeast of Paonia.

Records Available—January 1, 1922, to September 30, 1932.

Gage—Automatic recording gage.

Accuracy—Records considered good.

SURFACE CREEK AT CEDAREDGE

Location—In Sec. 29, T. 13 S., R. 94 W., at Cedaredge on 32-foot weir.

Records Available—May 16, 1917, to September 30, 1932.

Gage—Automatic recording gage.

Accuracy—Records considered good.

UNCOMPAHGRE RIVER NEAR COLONA

Location—In Sec. 5, T. 46 N., R. 8 W., at highway bridge four miles south of Colona.

Records Available—April 6, 1917, to September 30, 1932.

Gage—Automatic recording gage.

Accuracy—Records considered good.

Co-operation—Records furnished by the United States Bureau of Reclamation.

UNCOMPAHGRE RIVER NEAR DELTA

Location—At railroad bridge in Sec. 13, T. 15 S., R. 96 W., one mile northwest of Delta.

Records Available—April 29, 1903, to September 30, 1931.

Gage—Automatic recording gage.

Accuracy—Records considered fair.

Co-operation—Station maintained in co-operation with United States Reclamation Service and United States Geological Survey.

KANNAH CREEK NEAR WHITEWATER

Location—In Sec. 34, T. 12 S., R. 97 W., below intake for water supply of Grand Junction.

Records Available—October 15, 1917, to September 30, 1921; August 17, 1922, to September 30, 1932. Flow of pipe line not included in estimate since September 30, 1930.

Gage—Staff gage. Automatic recording gage installed September 30, 1932.

Accuracy—Records considered good.

Co-operation—City of Grand Junction.

DOLORES RIVER AT DOLORES

Location—At highway bridge in Sec. 9, T. 37 S., R. 15 W., in the town of Dolores.

Records Available—June 24, 1895, to October 31, 1903; November 1, 1910, to November 30, 1912; April 11, 1922, to September 30, 1932.

Gage—Automatic recording gage.

Accuracy—Records considered good.

SAN MIGUEL RIVER NEAR PLACERVILLE

Location—In Sec. 34, T. 44 N., R. 11 W., at Estep Ranch bridge.

Records Available—September 13, 1910, to November 30, 1912; April 23, 1930, to September 30, 1932.

Gage—Automatic recording gage.

Accuracy—Records considered good.

PARIA RIVER AT LEES FERRY

Location—One mile above the mouth.

Records Available—November 22, 1924, to September 30, 1932.

Gage—Automatic recording gage.

Accuracy—Records considered fair.

Co-operation—Records furnished by the United States Geological Survey.

Discharge of Colorado River Near Hot Sulphur Springs for Year Ending September 30, 1931.
Drainage Area, 782 Square Miles. Altitude, 7,680 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	325	198	....	61	59	69	74	504	2110	1690	764	238
2....	320	181	....	49	57	74	69	462	2350	1450	621	266
3....	320	184	....	69	65	74	74	490	2540	1300	544	242
4....	320	187	....	61	61	79	69	518	2860	1170	428	206
5....	320	181	....	74	65	79	79	518	2680	1030	375	175
6....	306	181	....	49	63	74	79	532	2720	874	350	172
7....	298	166	....	53	55	84	113	586	2920	635	310	172
8....	286	160	....	59	59	79	236	628	3020	572	315	175
9....	274	163	....	41	55	74	245	544	2820	518	298	172
10....	274	163	....	65	63	74	300	506	2540	494	242	175
11....	290	163	....	61	65	76	355	458	2460	494	254	175
12....	315	160	....	69	74	72	355	452	2510	482	246	178
13....	315	163	....	69	74	72	560	524	2520	470	230	178
14....	306	158	....	76	79	76	500	740	2500	446	230	178
15....	298	166	....	59	84	67	462	1000	2540	400	230	181
16....	298	150	....	61	87	65	300	1400	2660	405	302	181
17....	270	172	....	69	72	69	355	1790	2530	410	370	181
18....	320	181	....	65	82	79	448	2130	2350	385	355	181
19....	302	178	....	72	77	79	686	1600	2260	370	330	194
20....	294	178	....	67	82	74	462	1230	2120	350	315	210
21....	282	184	....	69	79	76	300	946	2100	310	290	210
22....	250	....	....	57	84	86	291	804	2080	290	278	206
23....	234	....	....	63	74	86	263	829	1970	274	306	198
24....	214	....	....	59	69	92	254	1040	2060	266	298	298
25....	210	....	....	69	72	87	245	1350	2030	266	270	375
26....	234	....	....	57	72	79	272	1730	2210	262	250	302
27....	184	....	....	63	76	69	245	2050	2220	270	238	278
28....	226	....	....	59	72	69	322	1830	2100	246	222	254
29....	190	....	....	65	....	65	434	1960	1980	458	214	246
30....	206	....	....	53	....	74	448	1750	1850	400	214	234
31....	214	....	....	59	....	65	....	1720	....	440	210	....
Total	8495	....	....	1922	1976	2337	8885	32621	71610	17427	9999	6431
Mean.	274	159	68	62	70.6	75.4	296	1050	2390	562	322	214
Max..	325	198	....	76	87	92	686	2130	3020	1690	764	375
Min...	184	....	....	41	55	65	69	452	1850	246	210	172
Acre-ft.	16800	9460	4180	3810	3920	4640	17600	64600	142000	34600	19800	12700

Discharge of Colorado River Near Hot Sulphur Springs for Year Ending September 30, 1932.
Drainage Area, 782 Square Miles. Altitude, 7,680 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	196	192	80	44	87	106	110	583	2280	2290	688	264
2....	192	188	79	47	84	116	110	641	2220	2250	652	256
3....	204	180	79	47	94	110	184	1020	2320	2100	624	244
4....	212	178	78	48	97	106	188	1100	2320	1990	505	232
5....	204	174	78	50	92	92	254	1470	2320	1790	430	224
6....	204	176	77	55	87	84	218	1260	2390	1560	428	216
7....	208	164	77	60	92	84	176	1120	2450	1400	386	212
8....	208	170	76	70	94	84	168	1170	2630	1340	374	208
9....	200	176	76	75	92	86	176	1200	2620	1280	356	204
10....	192	158	76	80	92	86	168	1680	2440	1250	315	200
11....	196	158	70	89	97	86	168	1750	2290	1350	292	196
12....	196	174	65	113	97	84	139	1800	2280	1410	288	168
13....	192	158	60	92	92	92	414	2170	2340	1420	292	160
14....	184	156	55	94	87	92	511	2380	2390	1300	284	156
15....	176	156	50	100	92	86	695	2420	2640	1290	272	154
16....	174	158	50	103	97	94	722	2580	2910	1370	305	152
17....	174	164	50	110	94	100	749	2540	2890	1380	330	156
18....	174	174	55	97	94	103	749	2670	2680	1270	284	154
19....	176	168	40	110	94	103	578	2940	2470	1180	320	152
20....	176	162	40	106	97	103	632	3070	2540	1110	310	150
21....	224	155	40	106	94	92	1100	2830	2560	938	315	150
22....	240	150	40	113	100	92	1510	3290	2660	848	315	150
23....	216	145	40	125	100	84	1380	3690	2980	832	296	152
24....	208	140	40	116	100	76	511	3270	3010	736	280	174
25....	204	135	40	113	100	72	704	2970	2920	712	260	174
26....	208	130	40	128	94	72	776	2520	2940	624	260	172
27....	192	120	39	113	94	82	686	2190	2860	526	284	170
28....	192	110	38	97	91	76	659	2000	2940	505	315	166
29....	192	100	37	104	92	74	525	2010	2760	617	296	162
30....	176	90	36	104	....	74	525	2290	2550	652	276	162
31....	174	....	36	92	....	79	....	2250	....	720	264	....
Total	6064	4659	1737	2813	2717	2770	15485	64874	77600	38040	10896	5490
Mean.	196	155	56.0	90.7	93 8	89.4	516	2090	2590	1230	351	183
Max..	240	192	....	....	100	116	1510	3690	3010	2290	688	264
Min...	174	....	....	....	84	72	110	583	2220	505	260	150
Acre-ft.	12000	9220	3440	5580	5400	5500	30700	129000	154000	75600	21600	10900

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of Colorado River at Glenwood Springs for Year Ending September 30, 1931.
Drainage Area, 4,560 Square Miles. Altitude, 5,747 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	1400	1000	682	571	603	704	704	2300	6260	4660	1260	710
2....	1390	960	653	625	621	627	704	2300	7400	5140	1740	752
3....	1380	1030	688	632	561	633	843	2300	8000	3960	1740	745
4....	1400	1020	670	645	577	639	794	2450	8610	3520	1460	1040
5....	1440	1060	656	571	639	710	787	2450	8920	3120	1320	773
6....	1440	992	679	580	627	633	787	2300	8920	2760	1220	857
7....	1420	1020	691	559	627	645	892	2300	8920	2370	1190	857
8....	1370	936	768	565	684	633	1040	2520	9240	2160	1130	752
9....	1350	960	710	611	555	704	1190	2680	8720	1980	1100	704
0....	1290	899	681	610	645	652	1300	2450	7360	1860	1060	697
1....	1290	886	637	645	639	690	1420	2220	6280	1740	1040	658
2....	1330	892	647	579	606	697	1600	2000	5890	1620	947	787
3....	1360	881	677	567	652	697	1920	2000	6020	1570	899	678
4....	1390	873	718	603	645	704	2220	2450	6020	1460	960	710
5....	1340	911	715	575	697	704	2450	3280	6020	1380	822	704
6....	1270	968	717	613	658	704	2220	4880	6280	1360	857	752
7....	1270	804	749	605	633	697	2150	6400	6680	1270	878	697
8....	1260	876	719	652	621	697	2300	8300	6280	1360	1160	710
9....	1220	950	711	555	633	621	2600	8000	5640	1320	1160	752
20....	1200	862	657	525	476	1010	2600	5870	5140	1280	1190	1200
21....	1250	837	651	574	645	829	2300	4530	4540	1190	1150	1270
22....	1230	784	597	555	780	808	1930	3670	4180	1150	1050	1160
23....	1210	638	571	591	710	766	1800	3470	3850	1120	1020	1180
24....	1210	544	572	627	678	787	1660	4080	3630	1030	968	1180
25....	1190	564	604	591	652	815	1730	5740	3740	939	1060	1800
26....	1160	669	592	555	645	892	1540	7100	3850	915	1080	1860
27....	1130	680	609	573	522	697	1390	8150	4180	931	976	1730
28....	1120	741	604	515	704	759	1410	7700	4180	923	885	1330
29....	1090	726	580	597	....	759	1660	6670	4070	907	864	1280
30....	1000	671	578	599	....	704	1930	5870	4180	939	822	1070
31....	1060	....	590	561	....	752	....	5360	....	1210	836	....
Total	39460	25634	20373	18226	17735	22369	47871	131890	183000	57144	33844	29395
Mean.	1270	854	657	588	633	722	1600	4250	6100	1840	1090	980
Max..	1440	1060	768	652	780	1010	2600	8300	9240	5140	1740	1860
Min...	1000	544	571	515	476	621	704	2000	3630	907	822	658
Acre-ft.	78100	50800	40400	36200	35200	44400	95200	261000	363000	113000	67000	58300

Discharge of Colorado River at Glenwood Springs for Year Ending September 30, 1932.
Drainage Area, 4,560 Square Miles. Altitude, 5,747 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	1010	547	500	568	536	926	1040	2300	9550	8780	3340	1570
2....	1190	971	462	520	423	784	1090	2450	9320	8200	3300	1500
3....	980	664	436	446	574	657	1350	3220	9260	7880	3060	1450
4....	971	827	427	484	423	563	1740	4050	9880	7440	2800	1390
5....	944	699	446	489	563	531	1740	4480	10300	7150	2570	1320
6....	1000	692	432	489	574	614	1790	4870	10200	6660	2270	1240
7....	990	706	450	465	526	614	1850	4530	9750	5430	2120	1190
8....	899	792	427	494	446	579	1450	4310	10100	4970	2000	1170
9....	890	720	446	479	568	547	1340	4330	10800	4750	1880	1160
10....	944	845	520	479	574	590	1300	4820	10900	4570	1750	1070
11....	863	736	547	470	531	602	1250	6100	10200	4640	1640	1030
12....	881	836	568	474	563	526	1170	7690	9920	5000	1530	971
13....	800	728	515	484	494	505	1300	8680	10200	5070	1500	863
14....	818	800	338	460	515	574	2060	9880	10900	5100	1470	971
15....	792	706	396	455	446	614	2570	10900	11200	4660	1440	908
16....	752	644	376	465	596	692	2860	10500	12600	4330	1470	854
17....	602	632	396	436	671	671	3320	10500	13200	4440	1450	809
18....	836	614	418	436	455	632	3650	11000	12500	4640	1480	908
19....	809	579	455	455	460	836	3370	11900	11000	4310	1520	720
20....	776	568	515	465	614	1060	3120	12500	10600	3860	1500	720
21....	644	563	505	470	306	1120	3650	12500	10700	3460	1540	644
22....	579	620	446	465	465	917	4920	13000	10800	3320	1720	678
23....	700	526	563	474	465	890	4700	15000	11500	3140	1860	626
24....	800	446	515	436	474	863	3900	15800	11900	3000	1740	650
25....	971	450	470	414	602	863	2920	14800	12100	3000	1610	818
26....	872	396	432	450	596	800	2750	12900	12100	2880	1530	971
27....	650	432	620	460	620	720	2870	10800	11700	2720	1560	744
28....	650	563	531	460	692	706	2630	9040	10900	2560	1570	1070
29....	650	547	736	436	614	854	2660	8650	10500	2480	1740	800
30....	650	553	678	460	....	720	2440	9680	9490	2860	1740	744
31....	602	....	614	505	....	608	....	10100	....	3180	1680	....
Total	25515	19402	15180	14543	15386	22178	72800	271280	324070	144480	58380	29559
Mean.	824	647	490	469	531	715	2430	8750	10800	4660	1880	985
Max..	1190	971	736	568	692	1120	4920	15800	13200	8780	3340	1570
Min...	579	396	338	414	306	505	1040	2300	9260	2480	1440	626
Acre-ft.	50700	38500	30100	28800	30500	44000	145000	538000	643000	287000	116000	58600

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of Colorado River Near Palisade for Year Ending Sept. 30, 1931.
Drainage Area, 8,790 Square Miles. Altitude, 4,729 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept
1....	2320	1760	....	....	....	1240	965	2180	9260	5250	650	35(
2....	2120	1810	....	....	....	1240	965	2390	10600	6210	710	31[illegible]
3....	2120	2040	....	....	....	1240	1100	2620	12400	5720	790	28(
4....	2060	2040	....	....	....	1200	965	3120	13600	4920	770	45[illegible]
5....	2100	1980	....	....	....	1150	830	3120	14100	4390	650	45[illegible]
6....	2100	1810	....	....	....	1150	710	2940	14300	3580	635	28(
7....	2100	1760	....	....	....	1150	830	3120	14500	2700	670	20(
8....	2100	1760	....	....	....	1200	1100	3210	15200	2250	622	21(
9....	2040	1760	....	....	....	1150	1340	3120	14300	2180	590	20(
10....	1980	1700	....	....	....	1200	1340	3030	11700	1940	574	17[illegible]
11....	1980	1640	....	....	....	1240	1340	2780	9420	1700	526	20(
12....	2040	1640	....	....	....	1240	1590	2250	8640	1580	494	18[illegible]
13....	2040	1640	....	....	....	1150	1880	2620	8790	1370	414	19[illegible]
14....	2100	1640	....	....	....	1150	2000	2620	9260	1230	362	18[illegible]
15....	2100	1590	....	....	....	1150	2120	2860	9740	1110	362	31[illegible]
16....	1980	1540	....	....	....	1150	2120	4600	9900	1170	345	24[illegible]
17....	1920	1440	....	....	....	1150	1940	7300	9740	1060	362	28(
18....	1860	1440	....	....	....	1240	1940	10700	9260	965	414	49(
19....	1860	1490	....	....	....	1340	2180	10100	8940	1100	465	107(
20....	1860	1440	....	....	....	1240	2120	8640	7590	965	432	118(
21....	1860	1390	....	....	....	1150	2060	6340	6880	875	494	167(
22....	1860	1390	....	....	....	1150	1760	4700	6080	875	414	922
23....	1860	1290	....	....	....	1150	1940	5250	5600	790	432	114(
24....	1760	1240	....	....	....	1150	1880	7020	5030	670	414	139(
25....	1760	1340	....	....	....	1150	1880	8480	4810	590	345	216(
26....	1700	1440	....	....	....	1100	1940	9420	5140	470	345	196(
27....	1640	1540	....	....	....	1060	1640	11000	5250	470	380	177(
28....	1640	1540	....	....	....	1010	1480	10700	5600	470	310	192(
29....	1640	1540	....	....	....	965	1420	9580	5140	510	239	132(
30....	1700	1540	....	....	....	1010	1760	8790	5030	630	239	114(
31....	1760	....	....	....	....	1060	....	8480	....	830	239	....
Total	59960	48170	....	....	....	35925	47135	173080	275800	58570	14688	22657
Mean.	1930	1610	1250	1100	1080	1160	1570	5580	9190	1890	474	755
Max..	2320	2040	....	....	....	1340	2180	11000	15200	6210	790	2160
Min..	1640	1240	....	....	....	965	710	2180	4810	470	239	178
A-ft.	119000	95800	76900	67600	60000	71300	93400	343000	547000	116000	29100	44900

Discharge of Colorado River Near Palisade for Year Ending Sept. 30, 1932.
Drainage Area 8,790 Square Miles. Altitude 4,729 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	958	1030	....	....	....	1450	1450	4160	17400	19100	6250	2360
2....	1770	850	....	....	....	1450	1880	4480	17400	18000	5160	2120
3....	1370	850	....	....	....	1250	2120	5160	16900	16500	5160	2120
4....	1220	886	....	....	....	1010	2670	7010	17400	15400	4810	2120
5....	1220	994	....	....	....	1010	2120	10000	18000	14400	4480	1880
6....	1140	1140	....	....	....	1250	2940	10500	18000	12800	3810	1880
7....	1140	1320	....	....	....	1250	2360	10000	17400	11400	3510	1660
8....	1100	922	....	....	....	1250	2120	9090	16900	10500	2940	1660
9....	1100	1140	....	....	....	1250	1660	11000	19100	10000	2360	1450
10....	994	1180	....	....	....	1250	1880	11000	19700	9090	1880	1660
11....	1030	1220	....	....	....	1450	1880	12900	19100	9600	1880	1450
12....	1220	1180	....	....	....	1660	2120	16900	20300	10000	1880	1250
13....	1180	1270	....	....	....	1250	2360	19100	19700	10500	1660	1010
14....	1220	1320	....	....	....	1250	3220	20300	22000	9600	1450	690
15....	1140	1320	....	....	....	1250	3810	22600	21400	9090	1450	840
16....	1140	1320	....	....	....	1250	4160	24500	24500	8240	1250	550
17....	1070	1320	....	....	....	2120	3810	24500	25100	7830	1450	380
18....	991	1320	....	....	....	1880	4810	25800	22600	7420	1880	550
19....	958	1270	....	....	....	1880	6620	27700	20300	6620	1660	690
20....	1100	1220	....	....	....	2120	4810	26400	18500	6250	2120	690
21....	1140	1180	....	....	....	2120	7420	26400	20300	6250	2360	550
22....	1140	1140	....	....	....	2120	6620	28400	21400	5880	2120	690
23....	1140	1100	....	....	....	1660	8660	30800	23300	5520	1880	840
24....	1180	1070	....	....	....	1660	7420	30100	23900	5520	2120	690
25....	1140	1070	....	....	....	1660	6620	28400	25100	5160	3810	1250
26....	1100	1070	....	....	....	1660	5520	24500	25800	5520	4480	1250
27....	1070	1030	....	....	....	2120	4810	20300	24500	5160	5160	1010
28....	886	1030	....	....	....	1660	4160	17400	22600	5520	4480	1010
29....	742	1030	....	....	....	1250	4160	18500	20800	4820	3510	840
30....	706	1030	....	....	....	1250	4160	20300	20200	5520	2940	690
31....	706	....	....	....	....	2120	....	18500	....	6250	2670	....
Total	34014	33822	....	....	....	47810	118350	566700	619600	283460	92570	35830
Mean.	1100	1130	1000	950	1100	1540	3940	18300	20700	9140	2990	1190
Max..	1770	1320	....	....	....	2120	8660	30800	25800	19100	6250	2360
Min..	706	850	....	....	....	1010	1450	4160	16900	4820	1250	380
A-ft.	67600	67200	61500	58400	63300	94700	234000	1130000	1230000	562000	184000	70800

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of Colorado River Near Cisco, Utah, for Year Ending Sept. 30, 1931.
Drainage Area 24,100 Square Miles. Altitude 4,088 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	4580	2860	2680	2000	2800	2310	2280	4850	11700	7890	2950	1060
2....	6330	2940	2510	2000	2850	2330	2170	5340	13000	8290	2800	992
3....	4720	2880	2430	2000	2900	2310	2280	5790	14400	8640	2300	1080
4....	4450	2840	2490	2000	2900	2270	2250	6350	15500	8260	2380	1070
5....	4310	2940	2470	2000	2900	2300	2200	7140	16300	7400	2270	1030
6....	4200	3010	2540	2000	2900	2280	2050	7300	16300	6520	2840	1030
7....	4010	3010	2580	2000	2900	2310	1960	6690	16100	5440	2540	1140
8....	3920	2920	2590	2000	2900	2190	2020	6410	17000	4600	2110	1050
9....	3810	2920	2560	2000	2900	2160	2310	7000	17400	3870	1940	1060
10....	3630	2800	2580	2000	2900	2140	2580	7190	16300	3440	1920	1060
11....	3630	2770	2610	2300	2900	2170	2770	6330	13700	2950	1610	1030
12....	3700	2840	2590	2300	2900	2220	2700	5570	11700	2590	1530	1030
13....	4030	2710	2470	2300	2900	2300	3010	5000	10800	2380	1360	1040
14....	4060	2730	2630	2300	3090	2350	3480	4780	11200	2220	1210	1020
15....	3960	2840	2640	2300	3010	2410	4100	5470	11200	2050	1100	1120
16....	3870	2710	2540	2300	3030	2380	4500	7560	11300	1920	1060	1270
17....	3780	3070	2700	2300	2920	2440	4330	10200	12000	1810	1000	1320
18....	3630	3570	2660	2300	2800	2460	3850	13500	12400	1730	920	1340
19....	3610	3420	2540	2300	2630	2610	3920	15700	11500	1610	920	2010
20....	3590	3400	2190	2300	2580	2680	4550	15100	10200	1660	1040	2660
21....	3550	3220	2060	2300	2520	2640	5540	12000	9510	1650	1050	2170
22....	3460	3070	1950	2300	2440	2680	4900	9740	8640	1510	1090	2580
23....	3420	2860	1710	2300	2490	2490	4290	8000	7780	1410	1020	3090
24....	3380	2680	1640	2300	2460	2630	4080	7220	7360	1370	968	11200
25....	3280	2490	1840	2300	2460	2540	5340	8500	7080	1270	984	7330
26....	3240	2590	1980	2300	2330	2470	5680	11500	6690	1210	885	4430
27....	3200	2680	1940	2300	2310	2520	4720	13900	6880	1120	944	3960
28....	3140	2750	1950	2300	2360	2540	4310	14600	7250	1120	920	3850
29....	3090	2730	2000	2300	....	2280	4030	13600	7500	1250	920	3650
30....	3120	2800	2000	2300	....	2410	4200	12200	7440	1570	892	3110
31....	2990	....	2000	2300	....	2360	....	11600	....	2490	1040	....
Total	117690	87050	72070	68300	76980	74180	106400	276130	346130	101240	46513	69782
Mean.	3800	2900	2320	2200	2750	2390	3550	8910	11500	3270	1500	2330
A-ft.	234000	173000	143000	135000	153000	147000	211000	548000	684000	201000	92200	139000

Discharge of Colorado River Near Cisco, Utah, for Year Ending Sept. 30, 1932.
Drainage Area 24,100 Square Miles. Altitude 4,088 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	3030	2780	2530	1900	1900	3790	3400	14400	29000	23600	9600	4840
2....	4090	2950	2450	1950	2000	3790	3890	16300	26900	22800	9300	4620
3....	9000	2610	2220	2000	2000	3400	5620	18700	24800	21900	8700	4300
4....	5280	2950	2060	1950	1900	3040	6820	19900	24800	20700	7520	3890
5....	4400	2700	2060	1900	1800	2610	8400	22300	25200	19900	6540	3500
6....	3890	2780	2220	1950	1750	2700	9000	24800	25600	18700	5760	3310
7....	3790	2700	1990	2000	1800	2780	8400	24000	24400	15900	5060	2950
8....	3310	2700	2060	2100	2100	2950	7240	22800	23200	14100	4400	2610
9....	3310	3130	1990	2200	2800	3040	7240	21900	23600	13400	3990	2370
10....	3130	2860	2370	2250	3800	3040	6960	24000	25200	12300	3790	2290
11....	3040	2860	2700	2300	4500	2950	7240	26500	26500	13000	3600	2370
12....	3040	4620	2400	2300	4000	2860	8100	29400	26500	13700	3130	2290
13....	2950	3310	2000	2250	3300	2700	9920	34600	26500	14400	2860	2220
14....	2950	3130	1700	2200	3200	2450	12300	39500	28200	14100	2530	2140
15....	2860	3040	1500	2100	3100	2290	14400	42200	30700	13700	2450	1990
16....	2780	2950	1300	2000	3000	2530	15900	45900	29400	12600	2220	2060
17....	2780	2780	1400	1900	3000	2700	18300	45000	32900	11900	2220	1990
18....	2700	2860	1500	1800	3100	2860	19900	45000	31200	12300	2530	1840
19....	2700	2780	1600	1700	3200	2860	19900	46800	31200	11900	2610	1850
20....	3130	2780	1800	1700	3500	3130	19100	46800	32000	10900	2950	1820
21....	2780	2780	2000	1750	4200	3990	19500	43100	29900	9920	2860	1740
22....	3130	2780	2200	1800	4090	4400	19900	45900	27700	8700	3040	1770
23....	3310	2610	2300	1750	3790	3990	19100	46800	28200	7520	3310	1740
24....	3040	2530	2400	1700	3500	3500	16700	49600	30300	6820	3400	1920
25....	3220	2370	2450	1650	3600	3220	14100	46800	31200	6270	3310	2140
26....	3130	2140	2500	1600	3600	3220	12300	43100	33300	6010	2950	2290
27....	3040	2140	2550	1550	3790	3600	13700	36800	33700	5640	6270	2450
28....	2950	2370	2550	1600	3500	3500	15200	31200	31600	5170	11900	2530
29....	2950	2530	2550	1650	3600	3130	13000	26500	28600	4950	7660	2450
30....	2780	2530	2300	1700	....	3220	13000	28200	26400	6140	6010	2610
31....	2700	....	2000	1800	....	3690	....	30700	....	8100	5280	....
Total	105190	84050	65650	59000	89420	97930	368530	1039500	850400	387040	147750	76890
Mean.	3390	2800	2120	1900	3080	3160	12300	33500	28300	12500	4770	2560
A-ft.	208000	167000	130000	117000	177000	194000	732000	2060000	1680000	769000	293000	152000

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of Colorado River at Lees Ferry, Arizona, for Year Ending Sept. 30, 1931.
Drainage Area .... Square Miles. Altitude .... Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept
1....	8920	7900	4740	3220	5130	5750	8330	12300	25600	12700	4710	253
2....	8620	7790	5160	3280	5300	5720	7720	11400	24700	13000	4290	236
3....	10100	7720	5360	3500	6520	5720	7360	11200	24400	12800	5910	222
4....	10100	7500	5600	3700	6580	5780	6790	11500	25700	14200	8180	221
5....	10600	7260	5720	3700	6720	6000	6480	12000	27400	15500	6000	242
6....	10100	7230	5480	3800	6620	5880	6100	12800	29400	15800	5300	274
7....	9580	7160	5040	3900	6520	5880	6160	13600	30100	14000	4260	253
8....	9270	7160	5100	4100	6790	5970	6550	15000	29500	12500	3900	234
9....	8770	7260	5240	4300	6850	6060	6960	15700	30300	11100	4580	218
10....	8510	7260	5220	4200	6650	6260	6920	15500	31500	10200	4790	207
11....	8330	7160	5160	4200	6450	6450	7060	16400	31800	9150	5330	205
12....	8330	6990	5270	4200	6720	6480	7400	17800	30600	8220	5220	207
13....	8700	7060	5270	4100	6720	6260	7540	17200	28500	7130	4770	215
14....	8550	6790	5300	4200	6750	5880	7610	16000	26200	6520	4710	214
15....	8440	6650	5330	4400	7020	5880	7750	15300	24300	5970	4900	205
16....	8620	6680	5390	4500	7130	6060	8150	14800	23400	5360	4290	208
17....	9070	6520	5270	4600	7610	6260	9190	14300	23200	4960	3860	335
18....	8960	8580	5200	4500	8040	6990	10100	15100	22800	4600	3570	355
19....	8810	8960	5100	4500	7750	7300	10500	17900	23300	4390	3360	262
20....	8850	8080	5000	4500	7260	7230	11200	25100	23300	3950	3070	407
21....	8960	8220	4900	4400	6650	7330	11300	32100	22600	3660	2760	455
22....	9190	8110	4500	4300	6220	7440	11000	33500	20300	3420	2620	392
23....	9310	7720	4200	4400	6060	7580	11500	29500	18800	3050	2660	458
24....	9270	7580	3600	4600	6130	7860	12500	26000	17600	2950	2620	733
25....	8960	7230	3300	4500	6100	7930	13000	22500	16000	2990	2590	1020
26....	8620	6520	3400	4600	5910	7970	13200	19600	14600	2990	2640	1510
27....	8510	5720	3200	4660	5810	8360	13600	18700	13600	2790	2480	1300
28....	8290	5130	3100	4630	5840	9150	14000	20600	13100	2670	2510	1060
29....	8040	4630	3120	4740	....	9380	14800	25300	12800	2780	2590	855
30....	7970	4520	3240	4900	....	9380	13600	27100	12500	3200	2740	744
31....	7900	....	3220	5040	....	8850	....	26800	....	2960	2670	....
Total	276250	213090	144730	132170	183850	215040	284370	582600	697900	225510	123880	13500
Mean	8910	7100	4670	4260	6570	6940	9480	18800	23300	7270	4000	450
Ac.-ft	548000	423000	287000	262000	365000	427000	564000	1160000	1380000	447000	246000	268000

Discharge of Colorado River at Lees Ferry, Arizona, for Year Ending September 30, 1932
Drainage Area .... Square Miles. Altitude .... Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept
1....	6890	5420	3720	5800	3630	10200	12400	27300	68300	63700	15800	22300
2....	6750	5450	4240	5200	3660	10800	11700	26000	66400	61400	16000	17600
3....	10400	5630	4020	4900	4220	10800	12300	28000	60200	57400	19100	15100
4....	14900	5750	3990	4750	4740	11600	14400	30000	56900	55700	19200	13300
5....	16200	5540	4040	4700	4990	11100	16500	33700	57000	52800	17400	11700
6....	15700	5570	3550	4450	6190	10100	19300	40700	56400	49700	16500	11000
7....	11500	5540	3200	4150	5840	8960	23300	45100	55300	46800	15200	10300
8....	9270	5360	3280	4000	5720	8080	29100	46200	53700	44100	13600	9410
9....	8110	5510	3320	4350	13600	7640	28500	45700	51300	39300	12500	8880
10....	7440	5910	3550	4320	24100	7720	25800	43800	50100	34900	11700	8360
11....	7130	6220	3400	4450	20700	8880	24200	44000	51800	34900	10600	7640
12....	7400	6030	5020	4420	16400	10600	23800	45700	53500	29800	10100	7090
13....	7720	6520	5450	4790	17400	10600	22100	49500	54100	34100	9560	6450
14....	6680	9230	4900	4900	15000	9780	22200	54300	53900	36800	8440	6260
15....	5970	9380	4600	4790	11700	9340	21300	60900	55400	34300	7790	6000
16....	5840	8180	4150	4820	9110	8700	28400	69800	58900	32000	7160	5750
17....	5720	6850	3700	4650	8660	8260	30800	77100	63900	29100	6850	5420
18....	5600	6350	2800	4600	8440	8180	31200	80900	65000	26000	6480	5160
19....	5630	6160	2200	4400	8360	8330	31800	84800	66700	24800	6450	4900
20....	6450	5880	1800	4300	8400	8810	38800	87800	67100	24300	7260	4820
21....	12000	6060	2150	4100	8810	9580	38200	92300	64800	24400	7790	4680
22....	10800	5880	2400	4100	9040	11500	37700	92100	62400	23600	13700	4470
23....	9000	5910	2950	4200	8700	13000	39500	88200	62800	22100	16200	4370
24....	7260	5940	4200	4000	8700	16000	39200	90600	63200	20000	12600	4770
25....	6220	5810	4390	3750	8620	16300	37300	99800	63900	18000	11000	5880
26....	6030	5330	4710	3800	8730	15700	34100	98900	66800	16800	10500	8220
27....	6060	4470	5630	3950	8660	15400	31800	96500	67800	15800	11600	6850
28....	5910	3970	6000	4000	8700	14300	30800	93500	70800	14900	21200	5720
29....	5840	3680	6060	4200	9340	14100	32000	86200	69000	14600	40800	6260
30....	5630	3310	6190	4100	....	12700	30800	77600	66300	15300	49500	6030
31....	5600	....	6450	3600	....	12400	....	67300	....	19500	34200	....
Total	251650	176870	126060	136540	279860	338560	825300	2004300	1823700	1013900	466780	244690
Mean	8120	5900	4070	4400	9650	10900	27500	64700	60800	32700	15100	8160
Ac.-ft	499000	351000	250000	271000	555000	672000	1640000	3980000	3620000	2010000	926000	485000

Unless otherwise noted, all discharges are in cubic feet per second

Discharge of Fraser River Near West Portal for Year Ending September 30, 1931.
Drainage Area 27.6 Square Miles. Altitude 9500 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	21	12	10	8	9	7	8	16	156	92	45	21
2....	21	12	10	8	9	7	8	17	169	79	41	20
3....	22	12	10	8	9	7	8	17	178	74	38	20
4....	21	12	9	8	9	7	8	16	176	65	36	19
5....	21	12	9	8	9	7	9	17	169	61	34	18
6....	21	12	9	8	9	6	10	20	175	56	34	17
7....	20	12	9	8	9	6	11	25	169	52	33	18
8....	20	12	9	8	9	6	12	23	136	50	32	19
9....	19	16	9	8	9	6	12	20	116	49	31	19
0....	17	17	9	8	9	6	12	18	103	46	29	17
1....	17	16	9	8	8	6	12	19	99	45	26	16
2....	17	16	9	8	8	6	13	19	104	45	23	16
3....	14	16	9	8	8	6	14	30	104	44	23	15
4....	13	16	9	8	8	6	16	34	109	42	22	14
5....	12	15	9	8	8	6	17	38	120	42	32	14
6....	12	13	8	9	8	7	19	42	128	42	32	14
7....	20	13	8	8	8	7	20	39	128	40	36	14
8....	16	12	8	9	8	7	22	35	113	40	33	17
9....	20	12	8	8	8	7	22	30	102	38	31	20
0....	15	12	8	8	8	7	20	24	99	36	29	22
1....	14	11	8	9	7	7	19	96	96	35	27	19
2....	12	11	8	8	8	7	17	103	88	33	26	17
3....	12	11	8	8	7	7	15	111	86	32	28	15
4....	11	11	8	9	7	7	13	124	84	32	26	21
5....	12	11	8	8	7	8	14	142	84	34	22	18
6....	15	10	8	8	7	7	16	162	82	31	21	17
7....	12	10	8	9	7	7	14	163	86	30	20	16
8....	12	10	8	9	7	8	16	184	86	49	20	15
9....	11	9	8	9	....	8	16	169	84	38	19	15
0....	12	6	8	9	....	7	16	146	91	36	19	14
1....	12	....	8	9	....	7	....	145	....	47	18	....
Total	494	370	266	257	227	210	429	2044	3520	1435	886	517
Mean.	15.9	12.3	8.58	8.29	8.11	6.77	14.3	65.9	117	46.3	28.6	17.2
Max...	22	17	10	9	9	8	22	184	178	92	45	22
Min...	11	6	8	8	7	6	8	16	82	30	18	14
Acre-ft.	978	732	528	510	450	416	851	4050	6960	2850	1760	1020

Discharge of Fraser River Near West Portal for Year Ending September 30, 1932.
Drainage Area 27.6 Square Miles. Altitude 9500 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	16	15	8	7	5	8	7	13	128	130	65	25
2....	16	14	8	7	5	7	8	14	131	123	62	24
3....	16	13	8	6	5	7	8	18	138	122	53	24
4....	16	12	8	6	5	6	8	18	133	119	49	23
5....	16	12	8	6	5	6	9	16	136	109	46	22
6....	15	11	8	6	5	6	8	18	128	100	44	22
7....	15	11	8	6	5	6	8	24	144	95	43	21
8....	15	11	8	6	5	6	7	23	151	88	41	21
9....	15	11	8	6	6	6	7	23	144	85	40	20
10....	15	13	7	6	6	6	7	26	138	89	38	19
11....	15	13	7	6	6	6	8	47	138	90	36	20
12....	15	13	7	6	5	6	9	60	139	90	35	18
13....	14	12	7	6	5	5	11	63	139	88	34	18
14....	14	12	7	6	5	5	13	67	143	80	32	17
15....	14	12	7	6	5	5	16	70	163	80	32	17
16....	14	12	7	6	5	6	18	74	178	89	35	16
17....	14	11	7	6	5	6	15	74	170	74	32	16
18....	14	10	7	6	5	6	14	78	162	71	30	16
19....	14	10	7	6	5	6	19	78	149	68	29	16
20....	14	10	7	6	5	6	19	78	151	66	29	16
21....	15	9	7	6	5	7	20	117	151	64	29	16
22....	15	9	7	5	6	7	16	117	162	60	29	15
23....	15	9	7	5	6	7	14	124	165	58	29	15
24....	15	9	7	5	6	7	16	117	160	55	28	24
25....	14	9	7	5	7	7	18	103	167	50	28	18
26....	14	9	7	5	7	6	16	87	165	49	28	16
27....	14	9	7	5	7	6	14	82	165	47	28	16
28....	14	9	7	5	8	6	13	82	159	50	28	16
29....	15	8	7	5	8	7	13	147	152	64	26	15
30....	16	8	7	5	....	7	13	127	138	65	26	15
31....	16	....	7	5	....	7	....	127	....	66	26	....
Total	460	326	226	178	163	195	372	2112	4487	2484	1110	557
Mean.	14.8	10.9	7.29	5.74	5.62	6.29	12.4	68.1	150	80.1	35.8	18.6
Max...	16	15	8	7	8	8	20	147	178	130	65	25
Min...	14	8	7	5	5	5	7	13	128	47	26	15
Acre-ft.	910	649	448	353	323	387	738	4190	8920	4920	2200	1110

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of Blue River at Dillon for Year Ending September 30, 1931.
Drainage Area, 129 Square Miles. Altitude, 8,815 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	75	47	....	....	....	....	30	76	342	321	120	57
2....	75	48	....	....	....	....	30	78	364	356	131	55
3....	76	46	36	....	....	....	30	71	397	306	124	51
4....	78	44	....	....	....	....	30	73	425	254	111	51
5....	78	43	....	....	....	....	30	75	416	236	98	49
6....	76	43	....	....	....	....	40	71	456	219	96	48
7....	75	41	....	22	....	....	40	76	471	205	95	48
8....	72	41	....	....	....	....	40	88	493	192	95	49
9....	71	40	....	....	....	....	40	94	440	179	95	48
10....	71	40	....	....	....	....	40	86	387	169	95	47
11....	71	39	....	....	18	....	40	79	351	152	92	46
12....	76	41	....	....	....	....	40	78	333	148	86	45
13....	76	39	....	....	....	....	40	82	333	146	80	45
14....	73	36	....	....	....	....	44	103	333	140	72	44
15....	71	36	....	....	....	....	49	161	351	136	68	44
16....	69	35	....	....	....	....	54	208	397	132	72	46
17....	68	35	....	....	....	21	59	263	425	131	76	46
18....	64	35	....	....	....	....	64	325	392	131	86	47
19....	60	35	....	....	....	....	69	263	360	131	82	49
20....	59	35	....	....	....	....	67	208	333	120	82	51
21....	58	35	....	....	....	....	63	181	306	117	78	53
22....	57	35	....	....	....	....	57	156	294	109	75	55
23....	57	35	....	....	....	....	55	163	280	104	71	55
24....	56	35	....	....	....	....	51	224	277	103	71	54
25....	57	35	....	....	....	....	50	284	277	103	68	54
26....	56	35	....	....	....	....	56	356	277	103	67	52
27....	56	35	....	....	....	....	59	387	314	100	67	51
28....	51	35	....	....	....	....	64	364	321	100	67	51
29....	51	35	....	....	....	....	67	333	342	107	63	52
30....	50	35	....	....	....	....	72	287	325	119	59	50
31....	48	....	....	....	....	....	....	284	....	112	57	....
Total	2031	1149	930	620	504	620	1470	5577	10812	4981	2599	1493
Mean.	65.5	38.3	30	20	18	20	49.0	180	360	161	83.8	49.8
Max..	78	48	....	....	....	....	72	387	493	356	131	57
Min..	48	....	....	....	....	....	....	71	277	100	57	44
Acre-ft.	4030	2280	1840	1230	1000	1230	2920	11100	21400	9900	5150	2960

Discharge of Blue River at Dillon for Year Ending September 30, 1932.
Drainage Area, 129 Square Miles. Altitude, 8,815 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	51	30	....	....	....	....	30	51	357	336	215	91
2....	49	29	....	....	....	....	30	60	349	318	207	85
3....	49	29	....	....	....	....	30	70	340	307	184	78
4....	49	29	....	....	....	....	30	82	336	307	167	75
5....	49	29	....	....	....	....	30	92	336	294	155	75
6....	51	30	....	....	....	....	25	98	336	262	140	74
7....	51	30	....	....	....	....	25	94	344	241	130	74
8....	48	30	20	....	....	....	25	91	361	235	122	73
9....	46	30	....	....	....	....	25	97	365	230	115	69
10....	46	30	....	....	....	....	25	118	357	228	112	68
11....	46	30	....	....	....	....	40	151	349	244	108	68
12....	46	30	....	20	....	....	40	176	349	278	105	66
13....	44	30	....	....	....	....	40	202	361	340	102	65
14....	44	30	....	....	....	....	40	230	374	322	102	64
15....	42	28	....	....	....	23	40	265	396	262	100	62
16....	41	28	....	....	21	....	50	265	455	247	100	61
17....	42	28	....	....	....	....	56	265	440	268	103	57
18....	41	28	....	....	....	....	53	290	406	314	106	56
19....	41	28	....	....	....	....	53	353	374	271	108	54
20....	41	28	....	....	....	....	56	344	365	244	98	56
21....	41	22	....	....	....	....	64	311	370	222	106	56
22....	40	22	....	....	....	....	70	370	383	209	115	52
23....	38	22	....	....	....	....	66	466	415	191	122	53
24....	38	22	....	....	....	....	62	455	406	189	117	60
25....	38	22	....	....	....	....	57	434	396	186	108	61
26....	38	24	....	....	....	....	56	410	401	176	100	58
27....	38	24	....	....	....	....	56	353	410	162	98	54
28....	37	24	....	....	....	....	49	318	392	153	100	53
29....	37	24	....	....	....	....	48	344	370	151	102	53
30....	37	24	....	....	....	....	47	353	357	191	100	53
31....	35	....	....	....	....	....	....	353	....	225	96	....
Total	1334	814	682	589	638	744	1318	7561	11250	7603	3743	1924
Mean	43.0	27.1	22	19	22	24	43.9	244	375	245	121	64.1
Max..	51	30	....	....	....	....	70	466	455	340	215	91
Min..	35	....	....	....	....	....	....	51	336	151	96	52
Acre-ft.	2640	1610	1350	1170	1270	1480	2610	15000	22300	15100	7440	3810

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of Snake River at Dillon for Year Ending September 30, 1931
Drainage Area 92 Square Miles. Altitude 8815 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	17	14	....	....	....	....	....	29	220	211	32	14
2....	18	15	....	....	....	....	....	30	238	175	28	15
3....	20	17	12	....	....	....	25	24	268	166	27	15
4....	20	15	....	....	....	....	....	23	265	132	25	14
5....	16	13	....	....	....	....	....	21	259	116	30	14
6....	16	14	....	....	....	....	....	27	289	107	48	14
7....	15	13	....	11	....	....	....	28	323	92	29	13
8....	15	15	....	....	....	....	....	28	295	78	27	13
9....	14	15	....	....	....	....	40	22	244	70	23	13
10....	13	17	....	....	....	....	....	20	198	66	24	12
11....	14	16	....	....	20	....	....	22	195	64	22	12
12....	14	16	....	....	....	....	....	25	211	58	20	12
13....	14	15	....	....	....	....	....	32	200	51	20	12
14....	13	16	....	....	....	....	59	59	190	47	20	11
15....	13	12	....	....	....	18	48	86	214	40	20	11
16....	13	....	....	....	....	....	48	114	244	33	23	11
17....	14	....	....	....	....	....	58	190	223	34	37	11
18....	14	10	....	....	....	....	59	173	202	36	24	12
19....	13	....	....	....	....	....	55	86	180	33	23	13
20....	13	....	....	....	....	....	43	55	166	28	22	12
21....	12	....	....	....	....	....	41	39	163	26	22	12
22....	12	....	....	....	....	....	33	33	146	24	20	11
23....	12	....	....	....	....	....	21	57	144	22	20	11
24....	13	....	....	....	....	....	17	105	137	21	18	12
25....	14	12	....	....	....	....	19	114	137	21	17	12
26....	12	....	....	....	....	....	22	139	161	21	16	12
27....	14	....	....	....	....	....	24	99	144	22	16	11
28....	12	....	....	....	....	....	28	59	178	28	15	11
29....	14	....	....	....	....	....	29	57	161	42	14	11
30....	15	....	....	....	....	....	29	101	214	27	14	11
31....	15	....	....	....	....	....	....	175	....	28	14	....
Total	444	393	372	372	504	620	1078	2672	6209	1919	710	368
Mean.	14.3	13.1	12	12	18	20	35.9	66.8	207	61.9	22.9	12.3
Max...	20	17	....	....	....	....	59	190	323	211	48	15
Min...	12	....	....	....	....	....	17	20	137	21	14	11
Acre-ft.	879	780	738	738	1000	1230	2140	4110	12300	3810	1410	732

Discharge of Snake River at Dillon for Year Ending September 30, 1932.
Drainage Area 92 Square Miles. Altitude 8815 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	14	....	....	....	....	....	20	26	227	315	80	26
2....	15	....	....	....	....	....	20	39	231	320	65	24
3....	15	....	....	....	....	....	20	48	250	292	55	22
4....	15	....	....	....	....	....	20	50	239	284	49	22
5....	15	....	....	....	....	....	20	42	239	246	44	21
6....	15	....	....	....	....	....	18	31	246	190	40	21
7....	15	....	....	....	....	....	18	32	292	157	39	20
8....	13	....	7	....	....	....	18	35	306	144	38	20
9....	13	....	....	....	....	....	18	40	275	138	46	20
10....	13	....	....	....	....	....	18	51	263	141	35	19
11....	13	....	....	....	....	....	26	55	279	144	34	17
12....	13	....	....	7	....	....	26	62	310	180	33	16
13....	13	....	....	....	....	....	26	73	310	242	34	15
14....	12	....	....	....	....	....	26	105	358	163	33	15
15....	12	....	....	....	....	16	26	91	462	141	33	15
16....	12	....	....	....	14	....	35	91	489	144	33	14
17....	12	....	....	....	....	....	41	112	430	144	34	13
18....	12	....	....	....	....	....	31	138	378	130	34	13
19....	12	....	....	....	....	....	31	144	378	112	31	13
20....	12	....	....	....	....	....	40	130	398	107	31	13
21....	12	....	....	....	....	....	54	173	404	88	37	14
22....	12	....	....	....	....	....	59	267	462	78	37	15
23....	12	....	....	....	....	....	36	288	468	81	36	15
24....	12	....	....	....	....	....	36	263	451	80	34	15
25....	12	....	....	....	....	....	37	242	462	72	33	12
26....	12	....	....	....	....	....	34	183	473	66	33	11
27....	12	....	....	....	....	....	51	144	451	56	33	11
28....	12	....	....	....	....	....	30	130	398	59	36	11
29....	12	....	....	....	....	....	24	187	383	70	35	11
30....	10	....	....	....	....	....	24	227	333	105	30	11
31....	10	....	....	....	....	....	....	208	....	92	28	....
Total	394	270	248	217	406	465	863	3707	10645	4581	1193	485
Mean.	12.7	9	8	7	14	15	28.8	120	355	148	38.5	16.2
Max...	15	....	....	....	....	....	59	288	489	320	80	26
Min...	10	....	....	....	....	....	....	26	227	56	28	11
Acre-ft.	781	536	492	430	805	922	1710	7380	21100	9100	2370	964

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of Ten Mile Creek at Dillon for Year Ending September 30, 1931.
Drainage Area 113 Square Miles. Altitude 8815 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	70	47	....	....	....	....	....	112	514	215	118	36
2....	66	43	....	....	....	....	....	115	535	169	77	36
3....	63	38	27	....	....	....	....	107	584	156	63	34
4....	65	36	....	....	....	....	....	98	521	156	58	31
5....	63	35	....	....	....	....	....	82	521	129	52	30
6....	63	35	....	....	....	....	....	84	507	111	54	30
7....	62	33	....	22	....	....	....	118	535	100	58	31
8....	60	35	....	....	....	....	....	159	439	92	66	30
9....	57	42	....	....	....	....	....	96	340	86	56	29
10....	56	38	....	....	....	....	....	84	274	82	50	27
11....	58	38	....	....	....	....	....	60	274	80	45	33
12....	58	47	....	....	....	....	....	94	274	78	42	29
13....	54	38	....	....	....	....	....	192	282	75	40	29
14....	50	39	....	....	....	....	94	300	289	72	39	30
15....	48	40	....	....	....	....	....	389	314	70	36	29
16....	51	32	....	....	....	....	....	521	322	72	56	30
17....	47	32	....	....	....	20	....	750	293	73	66	33
18....	50	32	....	....	....	....	....	556	256	70	50	30
19....	52	32	....	....	....	....	....	309	240	68	48	43
20....	51	32	....	....	....	....	....	218	218	65	45	50
21....	47	32	....	....	....	....	....	178	192	60	42	47
22....	44	32	....	....	....	....	....	180	183	58	36	42
23....	42	32	....	....	....	....	....	327	180	56	38	38
24....	38	32	....	....	....	....	....	521	180	57	34	47
25....	40	32	....	....	....	....	....	640	167	57	33	47
26....	44	32	....	....	....	....	....	712	192	60	33	38
27....	35	32	....	....	....	....	....	549	197	60	33	35
28....	43	32	....	....	....	....	....	420	192	63	31	34
29....	36	32	....	....	....	....	....	300	180	78	31	33
30....	42	32	....	....	....	....	....	274	197	60	30	31
31....	44	....	....	....	....	....	....	389	....	75	29	....
Total	1599	1064	775	620	504	775	2700	8934	9392	2703	1489	1042
Mean.	51.6	35.5	25	20	18	25	90	288	313	87.2	48	34.7
Max...	70	47	....	....	....	....	....	750	584	215	118	50
Min...	35	....	....	....	....	....	....	60	167	56	29	27
Acre-ft.	3170	2110	1540	1230	1000	1540	5360	17700	18600	5360	2950	2060

Discharge of Ten Mile Creek at Dillon for Year Ending September 30, 1932.
Drainage Area 113 Square Miles. Altitude 8815 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	32	....	....	....	....	....	24	84	452	315	154	63
2....	35	....	....	....	....	....	24	84	488	298	137	61
3....	44	....	....	....	....	....	24	77	518	298	120	58
4....	44	....	....	....	....	....	24	86	512	287	109	56
5....	42	....	....	....	....	....	24	102	518	257	104	55
6....	40	....	....	....	....	....	18	104	470	222	93	54
7....	39	....	....	....	....	....	18	93	536	212	86	54
8....	38	....	16	....	....	....	18	98	574	206	82	53
9....	37	....	....	....	....	....	18	126	536	196	79	52
10....	38	....	....	....	....	....	18	158	482	218	77	50
11....	38	....	....	....	....	....	30	209	440	209	79	49
12....	38	....	....	11	....	....	30	253	524	225	75	49
13....	38	....	....	....	....	....	30	344	554	257	75	49
14....	36	....	....	....	....	....	30	390	554	199	68	48
15....	35	....	....	....	....	13	30	381	638	179	70	47
16....	35	....	....	....	15	....	36	372	630	176	72	46
17....	35	....	....	....	....	....	44	425	554	260	70	46
18....	34	....	....	....	....	....	55	506	482	206	70	46
19....	35	....	....	....	....	....	72	536	476	182	72	45
20....	35	....	....	....	....	....	80	395	482	163	68	45
21....	36	....	....	....	....	....	95	464	470	149	95	44
22....	36	....	....	....	....	....	94	758	512	140	98	45
23....	36	....	....	....	....	....	92	678	500	137	82	47
24....	36	....	....	....	....	....	90	616	488	140	74	53
25....	36	....	....	....	....	....	95	554	506	133	67	58
26....	37	....	....	....	....	....	107	420	470	124	65	50
27....	34	....	....	....	....	....	86	327	470	115	75	46
28....	34	....	....	....	....	....	82	340	420	115	79	46
29....	34	....	....	....	....	....	79	494	372	118	86	46
30....	36	....	....	....	....	....	67	548	344	140	74	46
31....	36	....	....	....	....	....	....	430	....	144	67	....
Total	1139	750	496	372	406	465	1534	10452	14972	6020	2622	1507
Mean.	36.7	25	16	12	14	15	51.1	337	499	194	84.6	50.2
Max...	44	....	....	....	....	....	107	758	638	315	154	63
Min...	32	....	....	....	....	....	....	77	344	115	65	44
Acre-ft.	2260	1490	984	738	805	922	3040	20700	29700	11900	5200	2990

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of Roaring Fork River at Aspen for Year Ending September 30, 1932.
Drainage Area 109 Square Miles. Altitude 7850 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	....	....	....	....	....	....	....	46	544	731	199	62
2....	....	....	....	....	....	....	....	64	564	662	152	60
3....	....	....	....	....	....	....	....	89	622	649	150	58
4....	....	....	....	....	....	....	....	112	622	626	147	60
5....	....	....	....	....	....	....	....	123	556	529	127	54
6....	....	....	....	....	....	....	....	120	476	462	117	51
7....	....	....	....	....	....	....	....	104	480	430	104	48
8....	....	....	....	....	....	....	....	111	572	417	95	44
9....	....	....	....	....	....	....	....	153	667	394	87	43
10....	....	....	....	....	....	....	....	207	722	437	81	37
11....	....	....	....	....	....	....	....	245	717	502	87	38
12....	....	....	....	....	....	....	....	304	750	430	82	36
13....	....	....	....	....	....	....	....	400	845	378	75	33
14....	....	....	....	....	....	....	....	444	881	347	73	31
15....	....	....	....	....	....	....	....	454	865	338	73	28
16....	....	....	....	....	....	....	....	458	949	329	74	24
17....	....	....	....	....	....	....	....	510	886	327	73	21
18....	....	....	....	....	....	....	....	601	840	281	72	21
19....	....	....	....	....	....	....	....	622	746	260	78	21
20....	....	....	....	....	....	....	....	448	785	241	74	21
21....	....	....	....	....	....	....	....	469	850	221	74	19
22....	....	....	....	....	....	....	....	662	907	203	108	19
23....	....	....	....	....	....	....	....	690	928	191	82	29
24....	....	....	....	....	....	....	55	680	881	203	73	47
25....	....	....	....	....	....	....	54	667	1040	187	68	52
26....	....	....	....	....	....	....	54	564	1100	169	61	49
27....	....	....	....	....	....	....	52	451	1000	160	85	44
28....	....	....	....	....	....	....	48	469	954	160	92	43
29....	....	....	....	....	....	....	47	614	835	219	89	45
30....	....	....	....	....	....	....	41	667	746	197	74	46
31....	....	....	....	....	....	....	....	548	....	197	68	....
Total	....	....	....	....	....	....	....	12096	23330	10877	2894	1182
Mean.	....	....	....	....	....	....	48	390	778	351	93.4	39.4
Max...	....	....	....	....	....	....	....	690	1100	731	199	62
Min...	....	....	....	....	....	....	....	46	476	160	61	19
Acre-ft.	....	....	....	....	....	....	2860	24000	46300	21600	5740	2340

Discharge of Roaring Fork River at Glenwood Springs for Year Ending September 30, 1931.
Drainage Area 1460 Square Miles. Altitude 5747 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	745	520	460	490	319	301	295	772	3040	2070	727	325
2....	781	520	475	543	319	307	207	772	2960	1690	683	338
3....	754	520	475	535	313	301	301	826	3700	1550	583	344
4....	754	520	505	475	307	301	283	908	3740	1890	528	325
5....	736	520	482	418	313	307	289	808	3310	1610	490	325
6....	649	520	498	453	319	295	307	736	3470	1410	505	332
7....	640	505	460	411	319	271	338	844	4150	1260	583	351
8....	624	490	468	446	313	283	384	994	4130	1160	615	351
9....	615	475	490	439	319	265	384	918	3510	1050	551	338
10....	624	475	468	404	319	307	384	817	2600	918	475	344
11....	658	468	446	390	307	307	404	700	2300	994	439	325
12....	700	460	425	404	325	319	446	640	2490	1010	390	313
13....	683	460	425	364	319	307	475	754	2840	994	377	313
14....	683	468	404	325	307	307	512	1070	2710	944	358	313
15....	658	490	400	338	307	313	512	1490	3310	895	351	325
16....	640	475	402	325	307	313	498	1910	3610	845	358	351
17....	632	490	405	351	301	325	505	2450	3360	795	364	351
18....	624	543	397	344	301	332	583	2700	2870	745	390	377
19....	607	528	358	312	307	344	692	1930	2700	683	390	658
20....	599	520	325	295	319	332	666	1470	2520	640	377	899
21....	591	512	370	338	313	313	583	1240	2360	591	358	763
22....	583	432	325	351	295	325	575	1070	2130	543	364	683
23....	559	390	289	325	277	319	543	1170	2070	490	364	658
24....	543	432	377	313	277	307	528	1620	1890	446	364	1290
25....	535	439	377	283	277	307	559	2390	1670	418	351	1170
26....	551	460	358	243	295	301	520	2680	2390	390	338	937
27....	543	475	418	289	307	289	512	2260	2260	404	313	844
28....	520	482	418	295	307	289	520	1840	1900	446	295	781
29....	512	482	432	295	....	307	551	1890	2000	599	295	763
30....	475	460	468	301	....	301	692	1620	2080	528	295	727
31....	505	....	475	313	....	301	....	2340	....	512	332	....
Total	19323	14531	13075	11408	8608	9496	14148	43629	84070	28520	13203	16214
Mean.	623	484	422	368	307	306	472	1410	2800	920	426	540
Max...	781	543	505	543	325	344	692	2700	4150	2070	727	1290
Min...	475	390	289	243	277	271	283	640	1670	390	295	313
Acre-ft.	38300	28800	25900	22600	17000	18800	28100	86700	167000	56600	26200	32100

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of Roaring Fork River at Glenwood Springs for Year Ending September 30, 1932
Drainage Area 1460 Square Miles. Altitude 5747 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	687	498	337	212	393	407	428	1090	4200	5950	2120	950
2....	671	491	351	264	365	351	498	1350	3930	5980	1990	905
3....	826	484	358	386	300	365	562	1630	4330	5570	1820	869
4....	834	477	330	414	235	351	555	1750	4520	5530	1590	818
5....	800	477	351	330	312	306	600	2000	4500	5110	1590	767
6....	767	477	306	324	351	372	615	2060	3870	4270	1570	743
7....	735	470	306	372	351	358	548	1940	3930	4100	1510	711
8....	703	463	365	393	344	337	548	2020	4370	4000	1420	695
9....	663	519	456	365	400	330	555	2280	4870	3784	1360	663
10....	639	491	477	379	400	344	533	2660	5200	3930	1330	647
11....	631	470	421	337	358	337	600	3240	5180	4480	1340	631
12....	615	491	358	344	330	344	679	3930	5420	4290	1280	631
13....	592	477	337	365	306	276	860	4630	5950	3750	1240	623
14....	570	442	282	337	337	337	1100	5090	6620	3550	1200	615
15....	555	435	294	318	365	372	1240	5270	6410	3330	1220	600
16....	548	463	318	337	351	330	1420	5270	7130	3350	1330	562
17....	608	449	407	324	318	337	1630	5380	6950	3550	1250	555
18....	526	470	449	306	312	330	1630	5830	6410	3230	1240	540
19....	540	477	470	306	318	379	1440	5860	5530	2880	1240	540
20....	526	414	442	365	337	456	1580	4940	6070	2710	1040	533
21....	623	456	470	393	337	442	1740	4850	6290	2540	986	533
22....	655	477	435	294	306	386	1810	6550	6620	2340	1110	526
23....	623	463	365	330	324	358	1530	6700	7180	2230	1050	519
24....	585	386	344	264	324	421	1320	6050	7020	2140	968	540
25....	570	300	312	235	344	428	1180	5860	7800	2140	914	623
26....	570	365	324	358	337	386	1190	4910	7910	2290	878	623
27....	555	456	306	393	330	351	1160	4080	7520	2280	1050	608
28....	519	435	351	456	351	393	1120	3950	7310	2240	1230	615
29....	540	435	318	379	407	428	1070	4410	6530	2290	1250	608
30....	512	372	300	330	....	393	1030	5400	5860	2190	1120	608
31....	491	....	229	400	....	407	....	4390	....	2170	1040	....
Total	19279	13580	11169	10610	9843	11412	30771	125370	175430	108194	40276	19401
Mean.	622	453	360	342	339	368	1020	4040	5850	3490	1300	647
Max...	834	519	477	456	407	456	1810	6700	7910	5980	2120	950
Min...	491	300	229	212	235	276	428	1090	3870	2140	878	519
Acre-ft.	38200	27000	22100	21000	19500	22600	60700	248000	348000	214000	79900	38400

Discharge of Plateau Creek Near Collbran for Year Ending September 30, 1931.
Drainage Area 88 Square Miles. Altitude .... Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	125	23	....	....	....	....	8	115	385	27	31	16
2....	103	24	....	....	....	....	8	111	371	23	19	15
3....	66	20	....	....	....	....	8	127	304	24	12	11
4....	56	20	....	....	....	....	8	125	234	70	11	11
5....	48	22	....	....	....	....	8	117	234	36	10	12
6....	38	19	....	....	....	....	6	156	207	31	15	12
7....	28	18	....	....	....	....	4	212	180	28	40	12
8....	26	26	....	....	....	....	7	231	160	28	38	12
9....	23	40	....	....	....	....	38	198	151	27	13	12
10....	20	29	....	....	....	....	32	182	131	22	9	13
11....	48	27	....	....	....	....	40	139	125	20	9	13
12....	45	28	....	....	....	....	61	148	109	20	9	13
13....	50	26	....	....	....	....	73	215	96	16	12	13
14....	50	....	....	....	....	....	89	404	89	16	9	12
15....	35	....	....	....	....	....	91	712	85	18	12	13
16....	42	....	....	....	....	....	77	566	78	19	14	20
17....	26	....	....	....	....	....	98	670	67	20	14	16
18....	27	....	....	....	....	....	127	638	56	26	13	20
19....	32	....	....	....	....	....	163	638	36	30	12	115
20....	31	....	....	....	....	....	163	275	31	26	12	73
21....	29	....	....	....	....	....	136	208	25	24	10	35
22....	29	....	....	....	....	....	133	223	25	24	11	25
23....	24	....	....	....	....	....	131	408	25	23	10	35
24....	22	....	....	....	....	....	113	575	28	23	9	288
25....	24	....	....	....	....	....	98	647	26	23	9	55
26....	19	....	....	....	....	....	92	602	26	23	10	24
27....	19	....	....	....	....	....	96	466	38	18	9	14
28....	19	....	....	....	....	....	91	357	33	20	9	14
29....	16	....	....	....	....	....	100	385	29	23	9	15
30....	16	....	....	....	....	....	101	462	36	15	9	13
31....	16	....	....	....	....	....	....	485	....	23	15	....
Total	1152	....	....	....	....	....	2200	10797	3420	766	424	952
Mean	37.2	24.8	....	....	....	....	73.3	348	114	24.7	13.7	31.7
Max..	125	....	....	....	....	....	163	712	385	70	40	288
Min.	16	....	....	....	....	....	4	111	25	15	9	11
Acre-ft.	2290	1480	....	....	....	....	4360	21400	6780	1520	842	1890

Unless otherwise noted, all discharges are in cubic feet per second

Discharge of Plateau Creek Near Collbran for Year Ending September 30, 1932
Drainage Area 88 Square Miles. Altitude .... Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	14	8	....	....	....	....	27	164	660	341	105	35
2....	69	7	....	....	....	....	28	230	675	330	56	17
3....	125	8	....	....	....	22	29	274	680	313	38	17
4....	47	6	....	....	....	....	27	294	700	261	22	17
5....	34	6	....	....	22	....	33	348	650	224	27	14
6....	25	8	....	....	....	....	32	320	565	203	23	14
7....	19	8	....	....	....	....	28	297	524	196	20	14
8....	14	9	....	18	....	....	29	324	595	180	19	14
9....	11	....	....	....	....	....	31	385	630	176	17	14
10....	11	....	....	....	....	....	31	479	635	155	17	14
11....	10	....	....	....	....	....	37	625	645	168	21	12
12....	8	....	....	....	....	....	58	735	660	203	26	12
13....	8	....	....	....	....	....	105	828	760	180	25	10
14....	9	....	....	....	....	....	141	840	650	138	25	11
15....	9	....	....	....	....	....	166	912	670	102	22	11
16....	8	....	22	....	....	....	208	930	640	82	22	10
17....	9	....	....	....	....	....	233	1000	570	77	22	10
18....	9	....	....	....	....	....	224	1080	492	68	22	9
19....	10	....	....	....	....	....	249	1010	446	62	24	8
20....	10	....	....	....	....	....	326	1000	446	53	25	8
21....	24	....	....	....	....	....	338	1130	450	47	21	8
22....	20	....	....	....	....	....	249	1230	454	42	23	9
23....	17	....	....	....	....	....	196	1100	492	40	22	9
24....	21	....	....	....	....	....	159	1040	466	38	22	12
25....	22	....	....	....	....	....	150	944	454	28	20	25
26....	21	....	....	....	....	....	164	810	442	26	17	20
27....	11	....	....	....	....	....	164	780	446	26	162	14
28....	11	....	....	....	....	....	123	816	385	32	103	13
29....	10	....	....	....	....	....	127	912	338	72	123	13
30....	5	....	....	....	....	....	141	800	327	103	49	12
31....	7	....	....	....	....	....	....	645	....	119	37	....
Total	628	....	....	....	....	....	3847	22282	16547	4085	1177	406
Mean.	20.2	....	21	18	20	22	128	719	552	132	38	13.5
Max...	125	....	....	....	....	....	338	1230	760	341	162	35
Min...	5	....	....	....	....	....	27	164	327	26	17	8
Acre-ft.	1240	....	1290	1110	1150	1350	7620	44200	32800	8120	2340	803

Discharge of Buzzard Creek Near Collbran for Year Ending September 30, 1931.
Drainage Area, 139 Square Miles. Altitude .... Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	....	....	....	....	....	....	15	196	103	6	1	1
2....	....	....	....	....	....	....	12	176	96	6	2	1
3....	....	....	....	....	....	....	18	192	82	6	1	3
4....	....	....	....	....	....	....	23	212	65	6	1	3
5....	....	....	....	....	....	....	22	164	64	6	1	3
6....	....	....	....	....	....	....	25	178	58	5	1	3
7....	....	....	....	....	....	....	41	242	51	4	1	3
8....	....	....	....	....	....	....	44	263	44	4	1	3
9....	....	....	....	....	....	....	37	184	42	3	1	2
10....	....	....	....	....	....	....	44	168	42	2	1	2
11....	....	....	....	....	....	....	57	134	42	2	1	2
12....	....	....	....	....	....	....	75	132	34	2	1	2
13....	....	....	....	....	....	....	71	172	29	2	1	2
14....	....	....	....	....	....	....	84	257	27	2	1	2
15....	....	....	....	....	....	....	86	342	20	2	1	10
16....	....	....	....	....	....	....	78	360	18	2	1	9
17....	....	....	....	....	....	....	91	363	17	2	1	9
18....	....	....	....	....	....	....	121	333	15	1	1	10
19....	....	....	....	....	....	....	155	198	13	1	1	11
20....	....	....	....	....	....	....	147	123	10	1	1	10
21....	....	....	....	....	....	....	123	104	9	1	1	10
22....	....	....	....	....	....	....	123	106	8	1	1	11
23....	....	....	....	....	....	....	132	118	8	1	1	12
24....	....	....	....	....	....	....	145	154	8	1	1	18
25....	....	....	....	....	....	....	133	188	8	1	1	22
26....	....	....	....	....	....	....	138	194	11	1	1	12
27....	....	....	....	....	....	....	172	148	9	1	1	9
28....	....	....	....	....	....	....	151	117	8	1	1	7
29....	....	....	....	....	....	....	164	103	7	1	1	7
30....	....	....	....	....	....	....	178	104	8	1	1	7
31....	....	....	....	....	....	....	....	110	....	1	1	....
Total	....	....	....	....	....	....	2703	5835	956	76	32	206
Mean.	....	....	....	....	....	....	90.1	188	31.9	2.45	1.03	6.87
Max...	....	....	....	....	....	....	178	363	103	6	2	22
Min...	....	....	....	....	....	....	12	103	7	1	1	1
Acre-ft.	....	....	....	....	....	....	5360	11600	1900	151	63	409

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of Buzzard Creek Near Collbran for Year Ending September 30, 1932.
Drainage Area 139 Square Miles. Altitude .... Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	7	2	....	....	....	....	56	182	320	49	28	9
2....	9	2	....	....	....	....	62	210	295	55	22	7
3....	13	....	....	....	....	18	73	425	250	28	16	3
4....	16	....	....	....	....	....	78	375	230	22	13	3
5....	15	....	....	....	16	....	78	553	190	22	11	3
6....	14	....	....	....	....	....	60	522	145	22	9	2
7....	13	....	....	....	....	....	42	525	145	22	8	2
8....	12	....	....	17	....	....	63	530	145	22	5	2
9....	10	....	....	....	....	....	75	540	138	24	4	2
10....	12	....	....	....	....	....	70	600	130	27	3	2
11....	9	....	....	....	....	....	92	650	130	30	3	2
12....	9	....	....	....	....	....	133	700	130	34	3	1
13....	7	....	....	....	....	....	175	750	124	26	2	1
14....	9	....	....	....	....	....	210	830	124	22	2	1
15....	8	....	....	....	....	....	246	1090	117	23	3	1
16....	8	....	16	....	....	....	266	955	111	23	2	1
17....	8	....	....	....	....	....	272	920	105	22	3	1
18....	9	....	....	....	....	....	198	865	103	22	2	1
19....	9	....	....	....	....	....	202	830	91	18	2	1
20....	9	....	....	....	....	....	268	710	83	15	2	1
21....	15	....	....	....	....	....	380	690	78	12	2	1
22....	12	....	....	....	....	....	242	855	76	11	3	1
23....	9	....	....	....	....	....	152	678	87	11	6	1
24....	5	....	....	....	....	....	115	595	83	11	6	2
25....	5	....	....	....	....	....	139	473	80	10	3	3
26....	4	....	....	....	....	....	148	340	78	9	8	2
27....	4	....	....	....	....	....	220	285	71	8	8	2
28....	3	....	....	....	....	....	124	305	65	8	14	3
29....	3	....	....	....	....	....	136	282	57	14	21	4
30....	3	....	....	....	....	....	158	318	53	33	19	4
31....	3	....	....	....	....	....	....	320	....	34	10	....
Total	272	....	....	....	....	....	4533	17903	3834	689	243	69
Mean.	8.77	....	....	....	....	....	151	578	128	22.2	7.84	2.3
Max...	16	....	....	....	....	....	380	1090	320	55	28	9
Min...	3	....	....	....	....	....	42	182	53	8	2	1
Acre-ft.	539	....	....	....	....	....	8980	35500	7620	1360	482	137

Discharge of Taylor River at Taylor Park for Year Ending September 30, 1931.
Drainage Area 121 Square Miles. Altitude .... Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	96	....	....	....	....	....	....	77	222	169	60	29
2....	82	....	....	....	....	....	....	77	212	120	57	30
3....	74	....	....	....	....	....	....	77	243	113	46	28
4....	77	....	....	....	....	....	....	83	226	139	46	27
5....	74	....	....	....	....	....	....	96	205	110	45	30
6....	74	....	....	....	....	....	....	120	215	94	48	31
7....	74	....	....	....	....	....	....	113	205	86	48	33
8....	72	....	....	....	....	....	....	81	209	86	50	38
9....	67	....	....	....	....	....	....	83	187	83	50	38
10....	65	....	....	....	....	....	....	79	155	77	44	33
11....	75	....	....	....	....	....	....	77	144	79	45	32
12....	72	....	....	....	....	....	....	85	150	77	51	35
13....	67	....	....	....	....	....	....	120	152	72	45	38
14....	70	....	....	....	....	....	....	164	139	74	44	38
15....	72	65	62	20	29	31	92	187	152	75	50	41
16....	68	....	....	....	....	....	....	187	164	74	48	37
17....	62	....	....	....	....	....	....	209	152	72	44	32
18....	68	....	....	....	....	....	....	229	137	75	46	29
19....	67	....	....	....	....	....	....	161	125	68	50	38
20....	63	....	....	....	....	....	....	127	120	63	44	60
21....	65	....	....	....	....	....	....	106	120	63	41	51
22....	68	....	....	....	....	....	....	96	125	62	44	46
23....	63	....	....	....	....	....	....	144	125	60	44	43
24....	60	....	....	....	....	....	....	202	120	60	43	57
25....	60	....	....	....	....	....	....	226	108	58	44	50
26....	60	....	....	....	....	....	....	205	108	58	45	44
27....	60	....	....	....	....	....	....	181	113	57	44	40
28....	60	....	....	....	....	....	....	147	108	63	41	38
29....	60	....	....	....	....	....	....	150	134	75	44	39
30....	60	....	....	....	....	....	....	172	164	60	30	40
31....	60	....	....	....	....	....	....	196	....	56	28	....
Total	2115	1920	1737	726	762	1207	2442	4257	4739	2478	1409	1145
Mean.	68.2	64	56	23.4	27.2	38.9	81.4	137	158	79.9	45.4	38.2
Max...	96	....	....	....	....	....	....	229	243	169	60	60
Min...	60	....	....	....	....	....	....	77	108	56	28	27
Acre-ft	4190	3810	3440	1440	1510	2390	4840	8420	9400	4910	2790	2270

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of Taylor River at Taylor Park for Year Ending September 30, 1932.
Drainage Area 121 Square Miles. Altitude .... Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	41	41	....	....	....	....	....	116	350	406	146	85
2....	42	....	....	....	....	....	....	126	324	396	132	70
3....	59	50	....	....	....	....	....	179	380	365	119	70
4....	52	....	....	....	....	....	....	176	380	324	114	60
5....	52	....	....	....	....	....	....	167	340	300	107	59
6....	51	....	....	....	....	....	....	132	304	276	102	62
7....	51	....	....	....	....	....	....	116	316	256	94	66
8....	45	....	....	....	....	....	....	135	375	236	85	64
9....	41	....	....	....	....	....	....	160	401	256	81	62
10....	51	....	....	....	....	....	....	190	428	276	81	59
11....	46	....	....	....	....	....	....	220	456	360	81	56
12....	46	....	....	....	....	....	....	245	495	304	79	56
13....	46	....	....	....	....	....	....	270	542	292	77	54
14....	46	....	49	....	....	....	....	300	554	252	75	54
15....	42	....	....	46	34	43	60	308	536	224	77	52
16....	39	....	....	....	....	....	....	332	578	228	89	52
17....	41	....	....	....	....	....	....	360	560	203	87	51
18....	44	....	....	....	....	....	....	406	512	192	87	51
19....	46	....	....	....	....	....	....	401	450	182	114	51
20....	49	....	....	....	....	....	....	308	489	173	98	54
21....	57	....	....	....	....	....	....	340	512	158	102	57
22....	57	....	....	....	....	....	....	495	548	152	121	59
23....	51	....	....	....	....	....	....	445	524	152	98	62
24....	49	....	....	....	....	....	....	428	500	164	85	66
25....	48	....	....	....	....	....	....	428	655	158	81	68
26....	46	....	....	....	....	....	....	340	634	132	81	60
27....	44	....	....	....	....	....	....	300	572	126	119	60
28....	49	....	....	....	....	....	....	312	536	126	121	59
29....	45	....	....	....	....	....	....	365	467	170	116	59
30....	39	....	....	....	....	....	....	390	418	167	104	57
31....	48	....	....	....	....	....	....	365	....	158	98	....
Total	1463	....	....	....	....	....	....	8855	14136	7164	3051	1795
Mean.	47.2	50	48	44	39	43	73	286	471	231	98.4	59.8
Max...	59	....	....	....	....	....	....	495	655	406	146	85
Min...	39	....	....	....	....	....	....	116	304	126	75	51
Acre-ft.	2900	2980	2950	2700	2240	2640	4340	17600	28000	14200	6050	3560

Discharge of Taylor River at Almont for Year Ending September 30, 1931.
Drainage Area 440 Square Miles. Altitude 8031 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	238	129	104	100	98	100	106	228	584	403	203	105
2....	207	124	104	100	98	100	106	233	536	271	161	106
3....	191	124	104	100	98	101	109	215	512	246	137	104
4....	195	113	104	100	98	102	109	197	512	298	124	103
5....	191	113	104	100	98	102	112	179	475	246	118	103
6....	187	118	104	100	98	98	111	207	512	207	132	104
7....	187	113	104	100	98	98	132	228	552	187	132	104
8....	183	113	104	100	98	98	164	238	512	172	140	105
9....	175	113	104	100	98	98	158	191	431	158	132	105
10....	175	121	104	100	98	102	183	183	339	150	121	103
11....	207	110	100	98	96	102	207	144	315	150	116	102
12....	203	110	100	98	96	102	233	168	327	144	113	104
13....	187	110	100	98	96	102	246	203	339	140	112	104
14....	183	110	100	98	96	102	260	315	315	137	110	104
15....	175	110	100	98	96	108	271	410	327	135	111	105
16....	172	105	100	98	96	102	288	460	345	137	113	105
17....	164	105	100	98	94	102	298	505	327	140	140	102
18....	175	105	100	98	93	105	315	617	288	158	140	100
19....	175	105	100	98	112	108	315	382	260	132	126	106
20....	172	105	100	98	100	109	310	271	256	137	121	154
21....	168	103	98	95	93	102	315	224	238	147	113	129
22....	168	103	98	95	94	102	179	215	224	129	113	116
23....	161	103	98	95	96	102	199	293	220	132	112	112
24....	147	103	98	95	97	102	183	417	215	137	112	113
25....	161	103	98	95	97	102	161	528	211	137	113	118
26....	168	103	98	95	100	102	154	536	220	124	112	121
27....	147	103	98	95	102	96	161	468	224	121	111	126
28....	154	103	98	95	101	94	168	339	215	135	111	154
29....	147	103	98	95	....	93	175	315	224	150	112	129
30....	137	103	98	95	....	100	147	389	282	126	104	121
31....	129	....	98	95	....	102	....	512	....	135	102	....
Total	5429	3286	3118	3025	2735	3138	5875	9810	10337	5221	3817	3367
Mean.	175	110	101	97.6	97.7	101	196	316	345	168	123	112
Max...	238	129	....	....	112	109	315	617	584	403	203	154
Min...	129	....	....	....	93	93	106	144	211	121	102	100
Acre-ft.	10800	6550	6210	6000	5430	6210	11700	19400	20500	10300	7560	6660

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of Taylor River at Almont for Year Ending September 30, 1932.
Drainage Area 440 Square Miles. Altitude 8031 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	130	111	....	....	....	....	....	228	942	901	374	220
2....	133	107	....	....	....	....	....	311	892	876	380	212
3....	165	107	....	....	....	....	....	431	1040	851	322	200
4....	158	102	....	....	....	....	....	470	942	757	300	188
5....	149	109	....	....	....	....	....	503	901	757	264	181
6....	152	109	....	....	....	....	....	418	810	662	250	181
7....	147	109	....	....	....	....	112	345	843	613	242	200
8....	147	109	137	....	....	....	....	418	983	592	228	200
9....	136	109	....	....	....	....	....	503	974	585	224	181
10....	152	109	....	....	....	....	....	558	1020	585	212	181
11....	147	109	....	....	....	....	....	670	1020	764	212	181
12....	144	109	....	....	....	....	....	691	1110	662	208	174
13....	136	111	....	....	....	....	....	764	1180	662	196	178
14....	130	109	....	....	....	....	....	802	1240	585	192	174
15....	125	107	....	....	....	....	....	868	1170	517	208	168
16....	125	111	....	....	....	....	....	942	1260	530	237	152
17....	125	109	....	122	....	....	....	1210	1180	477	237	152
18....	125	111	....	....	....	....	250	1420	1080	457	251	152
19....	130	120	....	....	....	....	279	1360	991	431	306	155
20....	138	109	....	....	....	....	334	1370	1110	399	255	155
21....	147	107	....	....	....	....	386	1380	1090	368	295	152
22....	144	111	....	....	....	....	368	1360	1110	357	328	149
23....	144	114	....	....	104	....	306	1370	1180	351	279	147
24....	136	114	....	....	....	....	224	1350	1110	363	246	158
25....	133	123	....	....	....	....	224	1300	1250	351	224	174
26....	125	114	....	....	....	....	224	1090	1220	334	224	155
27....	120	....	....	....	....	....	192	933	1130	300	311	155
28....	116	....	....	....	....	....	165	909	1030	306	357	152
29....	120	....	....	....	....	....	165	1020	1000	425	311	149
30....	109	....	....	....	....	....	178	1160	933	444	259	147
31....	109	....	....	....	....	....	....	942	....	497	242	....
Total	4197	....	....	....	....	....	....	27096	31741	16759	8174	5123
Mean.	135	111	131	122	110	....	202	874	1060	541	264	171
Max...	165	....	....	....	....	....	....	1420	1260	901	380	220
Min...	109	....	....	....	....	....	....	228	810	300	192	147
Acre-ft.	8300	6600	8060	7500	6330	....	12000	53700	63100	33300	16200	10200

Discharge of Texas Creek at Taylor Park for Year Ending Sept. 30, 1931.
Drainage Area, 36 Square Miles. Altitude .... Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	25	....	....	....	....	....	....	....	96	90	34	9
2....	22	....	....	....	....	....	....	....	96	54	25	9
3....	20	....	....	....	....	....	....	....	101	46	21	10
4....	21	....	....	....	....	....	....	....	98	50	20	10
5....	19	....	....	....	....	....	....	....	96	41	21	10
6....	20	....	....	....	....	....	....	....	89	36	24	10
7....	21	....	....	....	....	....	....	....	101	33	23	10
8....	22	....	....	....	....	....	....	....	89	31	24	12
9....	19	....	....	....	....	....	....	....	73	27	21	12
10....	19	....	....	....	....	....	....	....	62	25	19	11
11....	20	....	....	....	....	....	....	....	54	25	19	10
12....	19	....	....	....	....	....	....	....	57	24	19	12
13....	18	....	....	....	....	....	....	....	46	22	16	12
14....	19	....	....	....	....	....	....	....	46	22	16	11
15....	19	16	20	36	25	11	33	....	56	23	17	12
16....	17	....	....	....	....	....	....	....	66	24	17	13
17....	16	....	....	....	....	....	....	....	59	24	40	11
18....	17	....	....	....	....	....	....	....	51	30	29	11
19....	16	....	....	....	....	....	....	54	46	28	24	16
20....	14	....	....	....	....	....	....	54	41	24	21	22
21....	14	....	....	....	....	....	....	54	41	23	19	19
22....	16	....	....	....	....	....	....	54	41	21	19	21
23....	15	....	....	....	....	....	....	55	43	19	17	20
24....	14	....	....	....	....	....	....	55	48	19	16	25
25....	16	....	....	....	....	....	....	73	41	22	13	26
26....	16	....	....	....	....	....	....	82	39	22	12	22
27....	16	....	....	....	....	....	....	73	43	20	10	21
28....	16	....	....	....	....	....	....	59	44	20	10	18
29....	16	....	....	....	....	....	....	56	46	21	9	18
30....	16	....	....	....	....	....	....	64	60	18	10	18
31....	16	....	....	....	....	....	....	103	....	19	9	....
Total	554	....	....	....	....	....	....	1763	1869	903	594	441
Mean.	17.9	16.5	21.8	32.7	25.2	14.2	31.4	56.8	62.3	29.1	19.2	14.7
Max...	25	....	....	....	....	....	....	....	101	90	40	26
Min...	14	....	....	....	....	....	....	....	39	18	9	9
Acre-ft.	1100	982	1340	2010	1400	873	1870	3500	3710	1790	1180	875

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of Texas Creek at Taylor Park for Year Ending Sept. 30, 1932.
Drainage Area, 36 Square Miles. Altitude .... Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	16	13	....	....	....	....	....	....	132	172	87	39
2....	23	....	....	....	....	....	....	....	130	196	72	34
3....	24	....	....	....	....	....	....	....	165	175	67	30
4....	25	....	....	....	....	....	....	....	165	175	55	27
5....	18	....	....	....	....	....	....	....	143	150	48	25
6....	18	....	....	....	....	....	....	....	125	128	44	25
7....	19	....	....	....	....	....	....	....	136	119	43	25
8....	16	....	....	....	....	....	....	....	170	119	42	24
9....	16	....	....	....	....	....	....	....	180	116	41	22
10....	16	....	....	....	....	....	....	....	193	107	40	22
11....	16	....	....	....	....	....	....	....	178	119	37	22
12....	16	....	....	....	....	....	....	....	202	110	33	20
13....	16	....	....	....	....	....	....	....	241	107	32	19
14....	16	....	16	....	....	....	....	....	265	98	32	17
15....	15	15	....	16	16	16	7	112	256	85	31	16
16....	14	....	....	....	....	....	....	133	274	82	36	16
17....	14	....	....	....	....	....	....	139	235	103	40	15
18....	14	....	....	....	....	....	....	154	214	89	45	14
19....	14	....	....	....	....	....	....	172	199	79	54	14
20....	15	....	....	....	....	....	....	117	235	79	48	13
21....	19	....	....	....	....	....	....	143	235	67	57	14
22....	17	....	....	....	....	....	....	185	259	59	69	15
23....	16	....	....	....	....	....	....	178	256	59	51	17
24....	17	....	....	....	....	....	....	163	226	59	43	20
25....	17	....	....	....	....	....	....	199	268	55	38	21
26....	16	....	....	....	....	....	....	196	277	52	36	19
27....	17	....	....	....	....	....	....	196	244	50	52	19
28....	17	....	....	....	....	....	....	190	202	55	80	20
29....	14	....	....	....	....	....	....	121	214	85	57	19
30....	13	....	....	....	....	....	....	165	196	103	50	16
31....	17	....	....	....	....	....	....	136	....	121	43	....
Total	521	....	....	....	....	....	....	....	6215	3173	1503	619
Mean.	16.8	14.5	16	16	16	16	15.6	106	207	102	48.5	20.6
Max...	25	....	....	....	....	....	....	....	277	196	87	39
Min...	13	....	....	....	....	....	....	....	125	50	31	12
Acre-ft.	1030	863	984	984	920	984	928	6520	12300	6270	2980	1230

Discharge of Willow Creek at Taylor Park for Year Ending Sept. 30, 1931.
Drainage Area, 47 Square Miles. Altitude .... Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	30	....	....	....	....	....	....	15	44	35	21	24
2....	30	....	....	....	....	....	....	14	37	25	19	19
3....	28	....	....	....	....	....	....	14	33	24	16	18
4....	28	....	....	....	....	....	....	15	32	28	16	18
5....	28	....	....	....	....	....	....	17	40	24	16	18
6....	27	....	....	....	....	....	....	20	31	23	16	18
7....	28	....	....	....	....	....	....	16	31	21	17	18
8....	28	....	....	....	....	....	....	12	31	21	19	21
9....	26	....	....	....	....	....	....	11	31	18	19	21
10....	24	....	....	....	....	....	....	12	24	17	16	18
11....	30	....	....	....	....	....	....	14	22	17	16	17
12....	30	....	....	....	....	....	....	17	25	10	16	17
13....	27	....	....	....	....	....	....	21	25	6	14	20
14....	27	....	....	....	10	10	....	25	24	6	12	19
15....	28	20	18	11	....	....	....	30	25	6	12	21
16....	25	....	....	....	....	....	22	33	26	12	18	20
17....	21	....	....	....	....	....	....	33	24	14	21	18
18....	23	....	....	....	....	....	....	38	21	16	19	18
19....	23	....	....	....	....	....	....	29	20	21	18	21
20....	24	....	....	....	....	....	....	26	20	18	19	25
21....	24	....	....	....	....	....	....	33	20	18	17	23
22....	25	....	....	....	....	....	....	34	20	16	13	21
23....	24	....	....	....	....	....	....	34	20	10	15	21
24....	24	....	....	....	....	....	....	36	21	12	18	24
25....	24	....	....	....	....	....	....	38	20	17	14	21
26....	23	....	....	....	....	....	....	40	20	18	14	19
27....	23	....	....	....	....	....	....	42	20	16	14	20
28....	22	....	....	....	....	....	....	44	20	16	14	18
29....	22	....	....	....	....	....	....	42	20	17	14	18
30....	22	....	....	....	....	....	....	35	27	16	14	18
31....	22	....	....	....	....	....	....	36	....	16	14	....
Total	790	....	....	....	....	....	....	826	774	534	501	592
Mean.	25.5	20.4	17.8	12.3	10.0	11.4	18.8	26.6	25.8	17.2	16.2	19.7
Max..	30	....	....	....	....	....	....	44	44	35	21	25
Min...	21	....	....	....	....	....	....	11	20	6	12	17
Acre-ft.	1570	1210	1090	756	555	701	1120	1640	1540	1060	996	1170

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of Willow Creek at Taylor Park for Year Ending Sept. 30, 1932. Drainage Area, 47 Square Miles. Altitude .... Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1	14	....	....	....	....	....	....	....	72	57	36	20
2	14	....	....	....	....	....	....	....	73	65	35	19
3	18	....	....	....	....	....	....	....	76	59	33	20
4	18	....	....	....	....	....	....	....	72	52	32	18
5	16	....	....	....	....	....	....	....	74	48	28	17
6	16	....	....	....	....	....	....	....	65	45	25	18
7	16	....	....	....	....	....	....	....	65	42	24	19
8	15	....	....	....	....	....	....	....	70	41	21	18
9	15	....	....	....	....	....	....	....	70	45	16	17
10	16	....	....	....	....	....	....	....	69	46	16	18
11	16	....	....	....	....	....	....	....	70	45	20	18
12	16	....	....	....	....	....	....	....	72	46	23	18
13	16	....	....	....	....	....	....	....	79	54	17	18
14	16	....	....	12	9	....	10	....	79	49	16	18
15	14	....	12	....	....	....	....	68	78	42	16	17
16	14	12	....	....	....	8	....	62	79	41	20	17
17	14	....	....	....	....	....	....	64	71	40	20	16
18	14	....	....	....	....	....	....	73	70	38	20	16
19	14	....	....	....	....	....	....	73	64	36	21	18
20	14	....	....	....	....	....	....	59	69	37	23	18
21	15	....	....	....	....	....	....	66	68	34	30	18
22	14	....	....	....	....	....	....	89	69	33	28	19
23	13	....	....	....	....	....	....	88	70	34	25	19
24	14	....	....	....	....	....	....	85	67	34	24	20
25	14	....	....	....	....	....	....	87	81	31	21	21
26	14	....	....	....	....	....	....	70	72	30	21	21
27	15	....	....	....	....	....	....	60	68	30	30	21
28	15	....	....	....	....	....	....	65	65	31	34	20
29	15	....	....	....	....	....	....	78	63	38	28	20
30	15	....	....	....	....	....	....	83	60	42	25	20
31	14	....	....	....	....	....	....	69	....	42	24	....
Total	464	....	....	....	....	....	....	....	2110	1307	752	557
Mean	15.0	13.0	12.0	12.0	10	8	12	58.0	70.3	42.2	24.2	18.6
Max	18	....	....	....	....	....	....	....	81	65	36	....
Min	13	....	....	....	....	....	....	....	60	30	16	....
Acre-ft	922	774	738	738	575	492	714	3570	4180	2590	1490	1110

Discharge of Henson Creek Near Lake City for Year Ending Sept. 30, 1932. Drainage Area, 82 Square Miles. Altitude, 8,750 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1	43	26	22	19	20	17	25	72	443	575	243	87
2	43	24	22	19	20	17	25	118	495	522	208	82
3	43	24	22	19	20	17	25	144	495	552	185	77
4	42	24	22	19	20	17	25	171	427	602	166	74
5	42	22	22	19	20	17	25	190	363	530	152	71
6	42	22	23	19	12	15	22	164	319	462	142	70
7	42	22	23	19	12	15	22	144	303	422	132	66
8	45	23	23	19	12	15	22	162	411	402	125	63
9	45	22	23	19	14	15	22	196	491	394	120	60
10	43	21	23	19	16	15	22	217	503	414	115	57
11	42	22	22	19	14	13	35	190	551	426	111	55
12	38	23	22	18	14	13	35	230	634	422	108	54
13	35	23	22	21	14	13	35	391	750	438	103	52
14	32	23	22	21	14	13	35	463	755	362	99	51
15	31	23	22	21	14	13	35	443	768	343	98	50
16	30	23	22	24	14	16	80	479	678	340	96	48
17	30	23	22	24	14	16	106	531	647	386	96	47
18	31	23	22	24	14	16	91	584	611	343	95	47
19	31	23	22	24	14	16	91	511	588	321	98	47
20	32	23	22	25	14	18	104	383	652	283	91	46
21	32	21	24	19	16	16	88	507	701	253	131	45
22	33	21	25	19	16	16	70	598	710	216	113	44
23	33	21	13	19	16	16	56	539	706	203	95	44
24	34	21	30	19	16	16	48	535	827	208	85	49
25	32	21	23	19	16	16	46	491	958	198	87	47
26	32	21	23	22	18	17	53	403	863	176	87	42
27	27	21	23	22	18	17	48	339	761	168	152	40
28	28	21	23	22	18	17	42	459	701	176	154	39
29	28	21	23	22	18	17	40	507	696	216	129	39
30	24	21	23	21	....	17	43	503	647	267	110	38
31	26	....	23	19	....	18	....	423	....	237	98	....
Total	1091	669	698	634	458	490	1416	11087	18457	10857	3824	1631
Mean	35.2	22.3	22.5	20.5	15.8	15.8	47.2	358	615	350	123	54.4
Max	45	26	....	....	....	....	106	598	958	602	243	87
Min	24	....	....	....	....	....	....	72	303	168	85	38
Acre-ft	2160	1330	1380	1260	909	972	2810	22000	36600	21500	7560	3240

Unless otherwise noted, all discharges are in cubic feet per second

Discharge of Lake Fork at Lake City for Year Ending Sept. 30, 1932.
Drainage Area, 123 Square Miles. Altitude, 8,700 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	56	29	15	8	7	14	16	50	433	501	205	101
2....	56	29	15	8	7	14	16	59	463	450	185	91
3....	56	30	15	8	7	14	16	128	507	433	163	80
4....	56	30	15	8	7	14	16	172	463	463	144	76
5....	57	30	15	8	7	14	16	146	395	463	128	72
6....	57	28	12	9	8	14	20	139	334	405	116	67
7....	57	25	12	9	8	14	20	130	299	375	107	63
8....	58	24	12	9	8	14	20	132	334	368	96	60
9....	58	25	12	9	8	14	20	156	395	341	91	58
10....	57	25	12	9	9	6	21	180	467	348	83	52
11....	56	24	13	10	10	8	30	182	507	368	77	44
12....	56	24	14	12	10	8	30	192	552	375	69	41
13....	55	23	13	9	10	8	30	251	619	388	67	40
14....	53	23	12	9	10	8	30	361	658	354	66	38
15....	50	23	11	9	10	8	30	371	622	321	67	37
16....	46	22	12	9	12	12	50	395	633	292	69	37
17....	42	22	12	9	12	12	63	429	608	308	73	32
18....	41	22	12	9	12	12	69	511	597	315	73	33
19....	40	22	12	9	15	12	76	565	565	296	74	33
20....	41	22	12	10	12	10	79	473	590	267	73	31
21....	41	17	14	9	14	14	82	450	612	244	83	31
22....	40	17	14	9	14	14	82	601	604	217	103	30
23....	40	17	14	9	14	14	72	594	594	198	100	29
24....	39	17	14	9	14	14	63	579	572	226	94	29
25....	38	17	14	9	14	14	55	579	666	220	88	29
26....	36	15	12	7	14	14	52	490	680	198	85	31
27....	34	15	12	7	14	14	56	419	612	175	107	29
28....	33	15	12	7	14	14	51	456	558	168	168	29
29....	31	15	12	7	14	14	48	518	558	185	158	27
30....	30	15	12	7	....	8	48	552	518	192	136	25
31....	29	....	12	8	....	14	....	460	....	208	116	....
Total	1439	662	400	268	315	378	1277	10720	16015	9662	3264	1375
Mean.	46.4	22.1	12.9	8.6	10.9	12.2	42.6	346	534	312	105	45.8
Max...	58	30	....	....	....	....	82	601	680	501	205	101
Min...	29	....	....	....	....	....	....	50	299	168	66	25
Acre-ft.	2850	1320	793	529	627	750	2530	21300	31800	19200	6460	2730

Discharge of North Fork Gunnison River Near Paonia for Year Ending Sept. 30, 1932.
Drainage Area, 702 Square Miles. Altitude, 5,684 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	....	....	....	....	....	....	268	1230	2220	1140	266	22
2....	....	....	....	....	....	....	420	1870	2120	1070	214	10
3....	....	....	....	....	....	....	494	2780	2120	1020	174	7
4....	....	....	....	....	....	....	514	3280	2110	930	149	9
5....	....	....	....	....	....	....	610	3420	2070	794	147	8
6....	....	....	....	....	....	....	488	3140	2070	610	130	7
7....	....	....	....	....	....	....	380	2720	1900	547	120	8
8....	....	....	....	....	....	....	464	3220	1820	554	110	9
9....	....	....	....	....	....	....	501	3980	1750	540	100	13
10....	....	....	....	....	....	....	527	4480	1690	540	90	13
11....	....	....	....	....	....	....	690	5310	1620	561	80	13
12....	....	....	....	96	....	....	1010	6180	1620	575	23	12
13....	....	....	....	....	....	110	1440	6630	1750	508	20	12
14....	....	....	....	....	....	147	1740	5940	1820	475	20	11
15....	....	....	....	....	....	156	1980	6070	1900	420	21	11
16....	20	....	....	....	....	154	2560	6040	2040	375	34	10
17....	17	....	....	....	....	154	2660	5940	2000	337	7	10
18....	17	....	....	....	....	156	2280	6100	1760	305	6	9
19....	17	....	....	....	....	192	2360	5490	1710	279	5	29
20....	25	....	....	....	....	219	2700	4850	1660	251	5	15
21....	74	....	....	....	....	212	2820	5340	1660	249	5	8
22....	95	....	....	....	....	200	2280	5880	1700	227	5	9
23....	93	....	....	....	....	180	1610	5220	1780	203	22	9
24....	87	....	....	....	....	160	1310	4450	1700	203	9	25
25....	79	....	....	....	....	150	1160	4050	1750	192	9	53
26....	70	....	....	....	155	150	1220	3320	1880	179	13	36
27....	62	....	....	....	....	147	1140	2920	1620	182	29	25
28....	50	....	....	....	....	171	1030	2880	1350	182	112	30
29....	47	....	....	....	....	219	1010	3000	1250	197	120	50
30....	36	....	....	....	....	192	1020	3120	1200	251	79	65
31....	30	....	....	....	....	200	....	2360	....	293	43	....
Total	....	....	....	....	....	....	38686	131210	53640	14189	2167	548
Mean.	33.8	....	....	....	....	161	1290	4230	1790	458	69.9	18.3
Max...	....	....	....	....	....	....	2820	6630	2220	1140	266	65
Min...	....	....	....	....	....	....	268	1230	1200	179	5	7
Acre-ft.	2080	....	....	....	....	9900	76800	260000	107000	28200	4300	1090

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of Surface Creek at Cedaredge for Year Ending Sept. 30, 1931.
Drainage Area, 43 Square Miles. Altitude, 7,000 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	17	5	....	....	....	....	....	51	100	16	11	10
2....	16	5	....	....	....	....	....	53	92	15	13	9
3....	10	6	....	....	....	....	....	68	82	19	13	10
4....	11	6	....	....	....	....	....	58	89	24	11	10
5....	11	6	....	....	....	....	....	51	68	21	10	10
6....	11	6	....	....	....	....	....	58	53	20	14	9
7....	11	6	....	....	....	....	....	72	59	19	17	8
8....	11	6	....	....	....	....	....	64	58	20	14	9
9....	10	6	....	....	....	....	10	62	56	18	14	10
10....	11	6	....	....	....	....	15	59	46	20	10	10
11....	14	5	....	....	....	....	15	54	34	16	10	10
12....	14	5	....	....	....	....	20	61	34	13	10	10
13....	14	5	....	....	....	....	24	72	32	13	11	10
14....	15	4	....	....	....	....	21	80	33	20	13	10
15....	16	4	....	....	....	....	24	89	34	22	14	13
16....	16	....	....	....	....	....	29	94	31	18	12	9
17....	13	....	....	....	....	....	33	110	29	17	12	8
18....	13	....	....	....	....	....	43	97	24	14	12	9
19....	10	....	....	....	....	....	54	72	23	13	11	20
20....	8	....	....	....	....	....	48	74	23	10	13	17
21....	8	....	....	....	....	....	42	82	23	10	15	12
22....	7	....	....	....	....	....	37	82	23	9	14	12
23....	7	....	....	....	....	....	44	89	23	10	13	41
24....	7	....	....	....	....	....	36	80	22	12	11	34
25....	7	....	....	....	....	....	31	89	21	9	10	12
26....	7	....	....	....	....	....	30	97	21	10	11	14
27....	7	....	....	....	....	....	28	94	23	11	12	10
28....	7	....	....	....	....	....	28	92	14	14	11	12
29....	6	....	....	....	....	....	42	100	16	14	11	11
30....	6	....	....	....	....	....	50	102	23	11	9	10
31....	6	....	....	....	....	....	....	102	....	10	10	....
Total	327	....	....	....	....	....	....	2408	1209	468	372	379
Mean	10.5	4.70	....	....	....	....	26.1	77.7	40.3	15.1	12.0	12.6
Max...	17	....	....	....	....	....	....	110	100	24	17	41
Min...	6	....	....	....	....	....	....	51	14	9	9	8
Acre-ft.	646	280	....	....	....	....	1550	4780	2400	928	738	750

Discharge of Surface Creek at Cedaredge for Year Ending Sept. 30, 1932.
Drainage Area, 43 Square Miles. Altitude, 7,000 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	....	....	....	....	....	....	5	70	91	62	12	10
2....	....	....	....	....	....	....	5	68	82	62	14	10
3....	....	....	....	....	....	....	5	64	80	58	16	8
4....	....	....	....	....	....	....	4	67	70	53	14	8
5....	....	....	....	....	....	....	4	72	74	56	13	8
6....	....	....	....	....	....	....	4	59	65	56	14	11
7....	....	....	....	....	....	....	6	50	68	56	14	11
8....	....	....	....	....	....	....	14	89	75	58	16	13
9....	....	....	....	....	....	....	6	98	79	53	17	14
10....	....	....	....	....	....	....	8	100	77	50	19	12
11....	....	....	....	....	....	....	13	161	72	56	16	10
12....	....	....	....	....	....	....	24	279	74	62	15	14
13....	....	....	....	....	....	....	40	372	75	54	16	10
14....	....	....	....	....	....	....	50	272	80	46	24	8
15....	....	....	....	....	....	....	42	356	77	41	30	8
16....	....	....	....	....	....	....	65	430	79	36	34	5
17....	....	....	....	....	....	....	86	380	74	33	42	7
18....	....	....	....	....	....	....	70	390	80	30	42	6
19....	....	....	....	....	....	....	82	356	84	32	37	6
20....	....	....	....	....	....	....	84	258	91	32	37	7
21....	....	....	....	....	....	....	74	372	96	26	36	8
22....	....	....	....	....	....	....	56	380	96	25	32	8
23....	....	....	....	....	....	....	41	182	100	30	30	8
24....	....	....	....	....	....	....	33	230	91	47	21	8
25....	....	....	....	....	....	....	33	152	72	37	21	9
26....	....	....	....	....	....	....	41	125	65	36	17	8
27....	....	....	....	....	....	....	36	91	75	34	42	8
28....	....	....	....	....	....	....	27	100	79	40	22	8
29....	....	....	....	....	....	....	30	134	74	36	22	8
30....	....	....	....	....	....	....	56	112	67	38	11	8
31....	....	....	....	....	....	....	....	93	....	35	11	....
Total	....	....	....	....	....	....	1044	5962	2362	1370	707	267
Mean.	8.0	2.5	1.0	1.5	2.0	3.0	34.8	192	78.7	44.2	22.8	8.9
Max..	....	....	....	....	....	....	86	430	100	62	42	14
Min..	....	....	....	....	....	....	4	50	65	25	11	5
Acre-ft.	492	149	62	92	115	184	2070	11800	4680	2720	1400	530

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of Uncompahgre River Near Colona for Year Ending Sept. 30, 1931.
Drainage Area, 403 Square Miles. Altitude, 6,399 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	173	95	....	....	....	....	111	195	600	450	265	98
2....	152	95	....	....	....	....	111	195	580	380	180	84
3....	160	95	....	....	....	....	98	200	640	356	142	71
4....	136	97	....	....	....	....	102	200	640	330	115	73
5....	136	98	....	....	....	....	100	195	495	335	105	71
6....	133	97	....	....	....	....	116	190	550	297	170	69
7....	135	95	....	....	....	....	143	233	600	243	190	73
8....	141	97	....	....	....	....	155	230	570	210	204	73
9....	136	94	....	....	....	....	130	202	480	185	191	70
10....	130	88	....	....	....	....	134	180	335	160	156	73
11....	202	89	....	....	....	....	165	155	330	156	137	80
12....	170	88	....	....	....	....	185	158	450	140	124	75
13....	160	90	....	....	....	....	200	208	530	130	129	79
14....	150	95	....	....	....	121	187	280	515	125	117	78
15....	150	97	....	....	....	115	180	340	640	130	109	82
16....	145	91	....	....	....	120	155	460	660	135	109	80
17....	136	100	....	....	....	128	154	550	605	125	109	71
18....	141	103	....	....	....	130	201	530	505	145	100	83
19....	136	102	....	....	....	130	225	340	480	141	93	110
20....	135	92	....	....	....	106	175	225	410	125	87	141
21....	130	80	....	....	....	109	160	170	400	110	76	130
22....	130	....	....	....	....	119	167	150	360	100	69	120
23....	130	....	....	....	....	111	155	230	365	95	67	105
24....	110	....	....	....	....	102	154	320	345	90	63	252
25....	107	....	....	....	....	105	145	495	370	90	60	185
26....	115	....	....	....	....	95	134	490	400	100	58	162
27....	105	....	....	....	....	91	145	300	390	120	57	155
28....	101	....	....	....	....	91	155	250	370	110	56	151
29....	100	....	....	....	....	92	220	300	472	165	53	146
30....	100	....	....	....	....	86	205	425	693	255	52	140
31....	98	....	....	....	....	95	....	535	....	275	55	....
Total	4183	1978	....	....	....	1946	4667	8931	14780	6008	3498	3178
Mean.	135	....	....	....	....	....	156	288	493	194	113	106
Max...	202	....	....	....	....	....	225	550	693	530	265	252
Min...	98	....	....	....	....	....	98	150	330	90	52	69
Acre-ft.	8300	....	....	....	....	....	9280	17700	29300	11900	6950	6310

Discharge of Uncompahgre River Near Colona for Year Ending Sept. 30, 1932.
Drainage Area, 403 Square Miles. Altitude, 6,399 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	136	....	....	....	....	....	151	395	717	864	415	164
2....	145	....	....	....	....	....	196	571	748	830	368	145
3....	300	....	....	....	....	....	157	599	851	878	334	136
4....	220	....	....	....	....	....	203	627	858	980	317	120
5....	191	....	....	....	....	....	226	637	760	878	284	110
6....	190	....	....	....	....	....	205	548	627	686	239	104
7....	170	....	....	....	....	....	169	480	543	599	192	104
8....	168	....	....	....	....	....	183	500	673	571	153	102
9....	165	....	....	....	....	....	170	582	748	571	141	100
10....	175	....	....	....	....	....	151	610	760	599	130	98
11....	162	....	....	....	....	....	159	615	824	686	120	94
12....	150	....	....	....	....	....	226	791	899	779	110	82
13....	140	....	....	....	....	....	343	974	1220	810	100	82
14....	138	....	....	....	....	....	430	933	1300	627	96	82
15....	135	....	....	....	....	....	420	650	1150	627	98	82
16....	138	....	....	....	....	....	510	912	1140	627	100	79
17....	122	....	....	....	....	....	555	1030	1140	748	120	79
18....	128	....	....	....	....	....	460	1150	1060	686	110	81
19....	130	....	....	....	....	....	460	1120	927	627	110	77
20....	182	....	....	....	....	....	475	878	1080	543	112	71
21....	287	....	....	....	....	....	435	1040	1150	465	153	69
22....	178	....	....	....	....	....	376	1150	1280	415	179	71
23....	170	....	....	....	....	....	338	1150	1340	390	166	72
24....	160	....	....	....	....	....	305	1120	1120	376	147	77
25....	108	....	....	....	....	....	284	1080	1510	343	145	100
26....	110	....	....	....	....	....	338	748	1240	309	166	92
27....	110	....	....	....	....	....	355	697	1050	296	265	89
28....	112	....	....	....	....	....	313	748	878	296	396	76
29....	108	....	....	....	....	....	326	844	810	347	959	74
30....	108	....	....	....	....	....	338	946	779	440	199	71
31....	112	....	....	....	....	....	....	686	....	455	179	....
Total	4848	....	....	....	....	....	9257	24741	29482	18348	5819	2776
Mean.	156	....	....	....	....	....	309	798	983	592	187	92.5
Max...	300	....	....	....	....	....	555	1150	1510	980	415	164
Min...	108	....	....	....	....	....	151	395	543	296	96	69
Acre-ft.	9590	....	....	....	....	....	18400	49100	58500	36400	11500	5500

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of Uncompahgre River Near Delta for Year Ending Sept. 30, 1931.
Drainage Area, 1,110 Square Miles. Altitude, 4,970 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1	559	289	....	....	....	....	51	75	122	512	92	65
2	634	295	....	....	....	....	45	74	124	403	72	65
3	657	355	....	....	....	....	43	87	179	344	65	62
4	713	348	....	....	....	....	42	104	198	368	70	60
5	690	338	....	....	....	....	66	84	181	347	67	62
6	680	322	....	....	....	....	176	76	188	266	70	65
7	662	348	....	....	....	....	132	72	251	183	87	62
8	657	348	....	....	....	....	88	70	278	165	97	62
9	547	335	....	....	....	....	98	84	257	156	84	63
10	518	310	....	....	....	....	71	87	221	145	88	63
11	555	289	....	....	....	....	67	95	206	130	82	62
12	581	292	....	....	....	....	130	92	218	122	75	63
13	547	292	....	....	....	....	176	97	284	113	80	63
14	522	295	....	....	....	....	109	109	269	109	63	62
15	475	329	....	....	....	....	102	107	305	105	63	67
16	463	355	....	....	....	....	68	115	305	105	65	63
17	479	365	....	....	....	....	66	218	296	90	67	62
18	479	392	....	....	....	....	75	237	232	81	78	70
19	460	402	....	....	....	....	67	160	203	80	87	104
20	448	385	....	....	....	....	75	149	203	71	82	130
21	434	....	....	....	....	....	74	151	193	74	63	75
22	413	....	....	....	....	....	71	141	198	71	62	81
23	416	....	....	....	....	....	68	145	198	65	62	74
24	427	....	....	....	....	....	67	149	203	60	62	111
25	430	....	....	....	....	167	78	176	213	58	63	229
26	423	....	....	....	....	181	78	234	196	58	62	160
27	430	....	....	....	....	167	87	226	208	58	61	134
28	365	....	....	....	....	206	78	186	218	63	60	139
29	295	....	....	....	....	206	80	141	242	90	61	143
30	292	....	....	....	....	116	80	128	389	78	63	130
31	289	....	....	....	....	61	....	124	....	97	63	....
Total	15540	....	....	....	....	....	2508	3993	6778	4667	2216	2651
Mean.	501	....	....	....	....	....	83.6	129	226	151	71.5	88.4
Max...	713	....	....	....	....	....	176	237	389	512	97	229
Min...	289	....	....	....	....	....	42	70	122	58	60	60
Acre-ft.	30800	....	....	....	....	....	4970	7930	13400	9280	4400	5260

Discharge of Kannah Creek Near Whitewater for Year Ending Sept. 30, 1931.
Drainage Area, 38 Square Miles. Altitude .... Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1	32	10	....	....	....	6	6	46	202	32	23	7
2	29	10	....	....	....	6	6	49	180	29	12	7
3	25	10	....	....	....	6	6	67	126	36	10	5
4	25	10	....	....	....	6	5	59	98	36	10	3
5	25	10	....	....	....	6	5	52	88	27	22	4
6	21	10	....	....	....	5	7	59	73	30	23	4
7	21	10	....	....	....	5	7	72	62	32	23	4
8	21	10	....	....	....	5	7	77	56	32	18	3
9	20	10	....	....	....	5	7	85	55	32	15	3
10	19	10	....	....	....	4	7	73	51	36	11	3
11	20	9	....	....	....	4	14	65	47	35	7	3
12	19	9	....	....	....	8	17	75	44	34	8	3
13	17	8	....	....	....	5	19	116	41	32	8	3
14	18	8	....	....	....	6	21	171	36	25	18	5
15	20	9	....	....	....	6	21	212	34	54	17	8
16	20	10	....	....	....	6	21	270	30	52	24	4
17	19	10	....	....	....	6	32	466	29	54	23	4
18	19	10	....	....	....	6	36	302	26	46	23	15
19	19	9	....	....	....	6	40	189	24	42	23	20
20	18	8	....	....	....	6	35	141	23	31	20	11
21	17	8	....	....	....	5	32	116	23	28	19	8
22	15	8	....	....	....	6	32	152	21	26	16	6
23	15	8	....	....	....	6	40	202	19	26	15	6
24	16	8	....	....	....	6	34	350	19	24	8	40
25	14	9	....	....	....	6	30	375	23	18	10	16
26	13	9	....	....	....	4	34	270	29	16	10	11
27	13	9	....	....	....	5	40	177	23	19	10	9
28	10	8	....	....	....	8	46	152	24	19	9	9
29	9	8	....	....	....	5	51	195	28	29	7	9
30	10	8	....	....	....	5	46	230	35	20	8	8
31	10	....	....	....	....	6	....	223	....	35	7	....
Total	569	273	....	....	....	175	704	5088	1569	987	457	241
Mean.	18.4	9.10	6.0	3.0	4.0	5.64	23.5	164	52.3	31.8	14.7	8.03
Max...	32	10	....	....	....	8	51	466	202	54	24	40
Min...	9	8	....	....	....	4	5	46	19	16	7	3
Acre-ft.	1130	541	369	184	222	347	1400	10100	3110	1960	904	478

Unless otherwise noted, all discharges are in cubic feet per second

Discharge of Kannah Creek Near Whitewater for Year Ending Sept. 30, 1932.
Drainage Area, 38 Square Miles. Altitude .... Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	8	5	4	4	4	9	12	71	132	35	23	18
2....	35	5	4	4	4	8	14	83	142	35	23	18
3....	40	4	4	4	4	8	11	76	156	29	22	21
4....	23	4	4	4	4	8	12	73	156	26	16	23
5....	19	3	4	4	4	7	14	70	119	26	14	19
6....	13	3	4	4	4	7	9	65	105	26	12	18
7....	11	3	4	4	4	7	4	62	102	26	11	17
8....	10	3	4	4	4	6	6	70	102	25	10	16
9....	9	4	4	4	4	6	7	74	97	24	23	20
10....	9	4	4	4	4	6	6	83	102	48	28	18
11....	9	4	4	4	4	6	9	102	105	49	25	16
12....	8	3	4	4	4	6	17	131	97	64	18	16
13....	7	3	4	4	4	6	21	158	105	55	16	12
14....	15	3	4	4	4	6	21	190	102	49	31	14
15....	9	3	4	4	4	6	26	230	86	48	34	18
16....	8	3	4	4	9	6	26	248	84	43	33	17
17....	6	3	4	4	10	7	29	305	82	40	30	10
18....	6	3	4	4	11	7	31	326	71	39	31	6
19....	6	3	4	4	11	8	30	305	61	38	35	7
20....	6	3	4	4	11	8	41	305	54	38	33	8
21....	6	3	4	4	11	8	42	630	50	37	30	8
22....	5	3	4	4	11	10	34	590	50	34	28	10
23....	5	3	4	4	11	12	33	385	61	31	27	10
24....	5	3	4	4	11	7	26	392	51	29	14	14
25....	7	3	4	4	11	6	29	320	48	31	15	13
26....	11	3	4	4	10	21	35	284	47	30	18	11
27....	5	3	4	4	9	7	38	260	47	30	34	10
28....	5	2	4	4	9	16	35	240	41	28	28	10
29....	9	2	4	4	9	7	42	255	37	40	34	10
30....	5	2	4	4	....	4	54	190	35	31	23	10
31....	5	....	4	4	....	4	....	158	....	26	19	....
Total	325	96	124	124	204	240	714	6731	2527	1110	738	418
Mean.	10.5	3.20	4.00	4.00	7.03	7.74	23.8	217	84.2	35.8	23.8	13.9
Max...	40	5	4	4	11	21	54	630	156	64	35	23
Min...	5	2	4	4	4	4	4	62	35	24	10	6
Acre-ft.	646	190	246	246	404	476	1420	1330	5010	2200	1460	827

Discharge of Dolores River at Dolores for Year Ending Sept. 30, 1931.
Drainage Area, 524 Square Miles. Altitude, 6,954 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	124	43	....	....	....	....	74	384	895	406	266	25
2....	122	44	....	....	....	....	101	473	886	323	172	25
3....	106	48	....	....	....	....	88	539	886	291	137	23
4....	95	51	....	....	....	....	88	696	904	333	86	29
5....	92	54	....	....	....	....	90	619	904	275	84	32
6....	82	50	....	....	....	....	122	604	859	224	122	27
7....	81	46	....	....	....	....	134	712	832	200	160	56
8....	81	44	....	....	....	....	134	778	796	175	129	50
9....	74	46	....	....	....	....	124	720	752	155	115	37
10....	74	48	....	....	....	....	134	688	642	144	101	36
11....	110	50	....	....	....	....	160	575	575	134	86	39
12....	129	50	....	....	48	....	197	582	554	122	86	44
13....	108	46	....	....	....	....	210	728	568	110	88	47
14....	108	54	....	....	....	....	221	859	506	99	81	53
15....	101	51	37	....	....	....	224	904	499	88	68	88
16....	92	54	....	....	....	....	207	980	492	79	62	115
17....	84	54	....	....	....	....	200	1020	466	67	59	81
18....	77	54	....	....	....	88	217	1250	418	67	77	74
19....	77	53	....	....	....	92	279	1020	374	81	72	112
20....	74	52	....	....	....	103	304	805	342	88	62	190
21....	74	52	....	....	....	93	287	650	318	90	56	152
22....	72	51	....	....	....	103	328	582	304	74	51	115
23....	68	50	....	....	....	117	418	680	296	67	41	95
24....	64	50	....	....	....	95	406	736	251	67	37	103
25....	60	49	....	....	....	90	390	980	228	67	30	172
26....	60	48	....	....	....	70	352	1040	232	67	30	147
27....	57	48	....	....	....	88	338	805	262	70	30	160
28....	51	47	....	....	....	70	338	604	279	84	24	134
29....	47	47	....	....	....	70	338	590	304	97	24	127
30....	44	46	....	....	....	70	347	672	460	190	24	110
31....	44	....	....	....	....	79	....	778	....	217	23	....
Total	2532	1480	....	....	....	....	6850	23053	16084	4551	2483	2498
Mean.	81.7	49.3	40	40	48	75	228	744	536	147	80.1	83.3
Max...	129	....	....	....	....	....	418	1250	904	406	266	190
Min...	44	....	....	....	....	....	74	384	228	67	23	23
Acre-ft.	5020	2930	2460	2460	2670	4610	13600	45700	31900	9040	4930	4960

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of Dolores River at Dolores for Year Ending Sept. 30, 1932.
Drainage Area, 524 Square Miles. Altitude, 6,954 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	94	49	....	....	....	....	435	1400	2240	1100	311	246
2....	127	49	....	....	....	....	650	1770	2180	1260	240	217
3....	336	47	....	....	....	....	720	2070	2100	1070	217	205
4....	290	50	....	....	....	....	790	2460	1920	981	199	182
5....	225	49	....	....	....	....	920	2480	1730	866	177	163
6....	183	47	....	....	....	....	742	2140	1460	749	163	148
7....	158	46	....	....	....	....	571	1800	1390	642	148	153
8....	138	46	....	....	....	....	697	1840	1550	608	139	139
9....	122	74	....	....	....	....	742	1950	1820	567	139	126
10....	122	74	....	....	....	88	780	2360	1950	542	130	114
11....	122	80	....	....	....	....	1030	2460	1860	583	158	106
12....	110	78	....	....	....	....	1370	2860	2020	608	134	98
13....	103	78	....	....	....	98	1640	3280	2360	592	126	81
14....	92	74	....	....	....	112	1770	3120	2640	526	114	81
15....	88	52	....	....	....	112	1690	2930	2640	448	158	81
16....	82	....	....	....	....	117	2080	3560	2570	389	188	78
17....	78	....	....	....	....	117	2220	3800	2280	396	211	75
18....	73	....	....	....	....	143	1980	4330	2000	381	188	75
19....	76	....	....	....	....	164	2160	4160	1700	374	234	72
20....	108	....	....	....	....	254	2300	3380	1810	325	304	75
21....	122	....	64	56	....	225	2080	3280	1910	285	311	75
22....	112	....	....	....	....	218	1570	4110	2000	266	266	75
23....	98	....	....	....	....	122	1270	3890	2340	266	217	81
24....	98	....	....	....	....	127	1040	3720	2260	266	188	106
25....	90	....	....	....	....	130	1050	3550	2240	253	168	122
26....	84	....	....	....	....	130	1200	2780	1970	234	188	98
27....	82	81	....	....	....	180	1100	2320	1590	228	617	91
28....	65	....	....	....	....	....	920	2700	1400	266	777	88
29....	62	....	....	....	142	....	896	2940	1300	332	510	78
30....	55	....	....	....	....	....	1150	2980	1200	353	360	78
31....	49	....	....	....	....	....	....	2250	....	367	291	....
Total	3644	....	....	....	....	....	37563	88670	58430	16123	7571	3407
Mean.	118	65.5	64	56	100	140	1250	2860	1950	520	244	114
Max...	336	....	....	....	....	....	2300	4330	2640	1260	777	246
Min...	49	....	....	....	....	....	....	1400	1200	228	114	72
Acre-ft.	7260	3900	3940	3440	5750	8610	74400	176000	116000	32000	15000	6780

Discharge of San Miguel River Near Placerville for Year Ending Sept. 30, 1931.
Drainage Area, 304 Square Miles. Altitude, 7,300 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	104	74	....	....	....	....	....	118	447	435	250	102
2....	101	75	....	....	....	....	....	117	456	380	179	101
3....	101	78	....	....	....	....	....	113	506	346	152	87
4....	98	81	....	....	....	....	....	128	498	422	130	88
5....	96	80	....	....	....	....	....	120	418	336	132	84
6....	94	74	....	....	....	....	....	117	481	293	229	87
7....	94	88	....	....	....	....	....	128	524	250	200	87
8....	91	77	....	....	....	....	....	126	510	235	203	84
9....	90	75	....	....	....	....	....	124	460	209	187	82
10....	93	77	....	....	....	....	....	124	380	189	161	82
11....	113	75	....	....	....	....	....	115	315	184	142	93
12....	101	75	....	....	....	....	....	120	384	182	138	90
13....	99	....	....	....	....	....	....	147	426	164	134	94
14....	98	....	....	....	....	....	108	184	414	156	124	93
15....	94	....	....	....	....	....	102	198	506	152	108	111
16....	93	....	....	....	....	....	96	238	532	154	134	104
17....	93	....	....	....	....	....	104	350	506	152	130	101
18....	91	....	....	....	....	....	115	376	464	154	124	104
19....	85	....	....	....	....	....	113	302	439	142	126	142
20....	88	....	....	....	....	....	101	256	411	128	117	154
21....	85	....	....	....	....	....	94	223	369	118	111	126
22....	82	....	....	....	....	....	94	212	357	115	109	115
23....	81	....	....	....	....	....	99	244	369	111	108	126
24....	87	....	....	....	....	....	102	274	346	106	94	226
25....	81	....	....	....	....	....	94	357	369	104	91	200
26....	85	....	....	....	....	....	90	365	399	106	91	179
27....	84	....	....	....	....	....	96	296	384	122	90	169
28....	80	....	....	....	....	....	99	253	422	179	87	161
29....	81	....	....	....	....	....	142	268	532	212	85	152
30....	78	....	....	....	....	....	128	302	593	220	85	142
31....	80	....	....	....	....	....	....	373	....	235	93	....
Total	2821	....	....	....	....	....	....	6668	13217	6291	4144	3566
Mean.	91.0	75	....	....	....	....	104	215	441	203	134	119
Max...	113	....	....	....	....	....	....	376	593	435	250	226
Min...	78	....	....	....	....	....	....	113	315	104	85	82
Acre-ft.	5600	4460	....	....	....	....	6190	13200	26200	12500	8240	7080

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of San Miguel River Near Placerville for Year Ending Sept. 30, 1932.
Drainage Area, 304 Square Miles. Altitude, 7,300 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	129	78	....	....	....	....	....	440	697	805	448	204
2....	177	85	....	....	....	....	....	512	692	754	368	188
3....	256	83	....	....	....	....	....	504	688	763	332	188
4....	218	83	....	....	....	....	....	546	683	786	294	182
5....	193	80	....	....	....	....	....	517	650	739	274	163
6....	169	76	....	....	....	....	....	452	568	669	247	161
7....	129	72	....	....	....	....	....	420	546	599	236	156
8....	129	70	....	....	....	....	....	416	590	555	224	150
9....	129	75	....	....	....	....	....	448	645	622	236	138
10....	136	68	....	....	....	....	....	484	716	568	236	127
11....	127	69	....	....	....	....	....	492	725	655	227	107
12....	120	69	....	....	....	....	....	590	796	618	210	125
13....	111	68	....	....	....	....	....	683	912	622	188	120
14....	109	63	....	....	....	....	....	702	969	550	199	109
15....	105	....	....	....	....	....	....	754	996	508	236	103
16....	107	....	....	....	....	....	432	749	1030	484	207	100
17....	105	....	....	....	....	....	432	805	996	655	199	96
18....	96	....	....	....	....	....	413	872	948	476	201	98
19....	105	....	....	....	....	....	428	867	853	468	207	96
20....	105	....	....	....	....	....	460	796	938	452	238	96
21....	111	....	....	....	....	....	424	853	980	436	221	96
22....	105	....	....	....	....	....	332	1010	1000	390	201	98
23....	96	....	....	....	....	....	277	964	1070	379	190	100
24....	100	....	....	....	....	....	244	964	1110	394	185	111
25....	80	....	....	....	....	....	268	974	1170	343	182	118
26....	**91**	**....**	**....**	**....**	**....**	**....**	**311**	**815**	**1010**	**328**	**201**	**100**
27....	83	....	....	....	....	....	294	721	974	328	521	96
28....	**82**	**....**	**....**	**....**	**....**	**....**	**271**	**744**	**829**	**346**	**472**	**94**
29....	80	....	....	....	....	....	280	796	824	339	328	94
30....	79	....	....	....	....	....	339	848	815	468	256	96
31....	76	....	....	....	....	....	....	716	....	468	227	....
Total	3729	....	....	....	....	....	....	21454	25420	16567	7991	3710
Mean.	120	70	....	....	....	....	340	692	847	534	258	124
Max...	256	....	....	....	....	....	....	1010	1170	805	521	204
Min...	70	....	....	....	....	....	....	416	546	328	182	94
Acre-ft.	7380	4160	....	....	....	....	20200	42500	50400	32800	15900	7380

Discharge of Paria River at Lees Ferry, Arizona, for Year Ending Sept. 30, 1931.
Drainage Area .... Square Miles. Altitude .... Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	383	13	21	9	41	10	7	13	3	3	73	78
2....	53	13	18	9	46	9	8	11	4	3	21	48
3....	22	14	15	9	43	12	5	52	3	3	9	18
4....	19	14	19	9	41	13	5	61	4	2	5	8
5....	14	13	16	12	55	13	4	41	40	2	5	5
6....	15	13	16	7	59	11	4	19	20	2	4	5
7....	14	13	14	6	43	9	3	13	8	2	4	5
8....	12	13	9	6	33	12	3	8	4	24	4	5
9....	11	12	10	5	33	11	3	5	3	15	3	5
10....	12	14	9	4	35	14	3	4	3	5	3	5
11....	13	14	9	5	33	14	4	3	3	2	3	4
12....	14	15	5	5	32	15	3	3	2	2	2	4
13....	15	16	6	6	30	13	3	3	2	2	3	5
14....	16	16	9	5	28	13	3	3	2	2	3	6
15....	15	20	8	7	32	14	3	3	2	2	3	9
16....	13	21	5	6	59	12	3	3	2	3	73	28
17....	12	24	5	8	39	12	3	3	2	3	48	12
18....	13	412	4	12	28	13	3	2	3	3	53	7
19....	13	58	6	9	21	14	2	2	3	3	50	2
20....	13	14	5	9	20	15	2	3	3	21	26	3
21....	13	9	5	10	25	14	2	2	4	11	14	3
22....	13	6	5	7	15	9	2	2	3	9	9	4
23....	13	8	8	8	11	9	2	2	2	7	5	7
24....	12	15	9	7	11	8	2	2	2	4	28	183
25....	13	20	9	7	12	9	5	2	5	3	13	57
26....	13	23	9	7	13	19	18	2	5	3	7	28
27....	12	30	3	8	14	20	9	4	4	3	5	32
28....	12	23	3	10	14	9	28	6	2	3	3	27
29....	13	22	3	9	....	11	20	12	2	44	3	15
30....	13	20	5	9	....	10	15	5	2	74	20	12
31....	13	....	5	19	....	7	....	4	....	172	29	....
Total	832	918	273	249	866	374	177	298	147	437	531	630
Mean.	26.8	30.6	8.8	8.0	30.9	12.1	5.9	9.6	4.9	14.1	17.1	21.0
Acre-ft.	1650	1820	541	494	1720	742	351	591	292	867	1050	1250

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of Paria River at Lees Ferry, Arizona, for Year Ending Sept. 30, 1932.
Drainage Area .... Square Miles. Altitude .... Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	12	13	7	20	20	200	27	6	2	2	52	24
2....	17	13	6	14	20	85	40	5	2	66	22	24
3....	59	14	8	13	15	55	50	4	3	50	14	19
4....	36	12	8	10	19	49	46	4	4	15	11	15
5....	21	12	7	12	23	30	35	4	4	9	9	13
6....	22	13	5	20	25	36	34	6	4	5	8	12
7....	18	12	4	21	25	71	27	4	13	4	7	12
8....	13	10	9	18	55	103	21	42	16	2	5	10
9....	10	100	10	19	1370	113	20	21	10	2	75	10
10....	8	40	10	20	638	75	20	15	7	3	350	9
11....	8	20	9	18	371	54	19	13	5	35	38	8
12....	8	21	9	16	167	44	19	10	4	65	15	7
13....	8	23	3	20	78	39	19	10	3	1110	9	6
14....	9	20	2	19	73	31	18	10	2	81	8	5
15....	9	20	4	22	87	32	19	10	2	31	5	6
16....	9	19	5	21	54	38	19	9	2	33	5	6
17....	9	22	6	22	45	43	17	8	2	30	5	6
18....	9	22	6	22	45	53	13	6	2	42	4	6
19....	10	20	7	19	62	69	10	5	3	156	162	7
20....	143	12	8	10	94	125	7	4	3	47	52	7
21....	40	14	8	10	71	106	4	4	2	20	100	7
22....	25	16	10	8	56	46	10	3	2	11	414	8
23....	30	6	11	4	63	33	13	3	2	7	46	9
24....	18	3	14	6	75	28	12	4	2	6	66	54
25....	14	6	22	5	87	38	10	3	2	15	21	45
26....	14	7	19	7	121	55	7	2	2	12	18	23
27....	12	7	24	10	139	45	6	2	2	8	597	16
28....	12	15	22	9	182	25	7	2	2	6	4890	10
29....	12	22	22	9	205	31	8	2	2	7	248	26
30....	12	6	7	15	....	42	7	2	2	7	55	353
31....	14	....	5	29	....	28	....	2	....	132	35	....
Total	641	540	297	468	4285	1822	564	225	113	2019	7346	763
Mean.	20.7	18.0	9.6	15.1	148	58.8	18.8	7.3	3.8	65.1	237	25.4
Acre-ft.	1270	1070	589	928	8500	3610	1120	446	224	4000	14600	1510

Unless otherwise noted, all discharges are in cubic feet per second.

GREEN RIVER DRAINAGE

GREEN RIVER NEAR LINWOOD, UTAH

Location—In SW¼ Sec. 21, T. 3 N., R. 21 E., at Smith's Ferry, five miles southeast of Linwood.

Records Available—October 1, 1928, to September 30, 1932.

Gage—Automatic recording gage.

Accuracy—Records considered good.

Co-operation—Complete records furnished by the United States Geological Survey.

ELK RIVER AT CLARK

Location—In Sec. 28, T. 9 N., R. 85 W., on highway bridge at the Kinney Ranch.

Records Available—May 1, 1910, to September 30, 1922; April 23, 1930, to September 30, 1932.

Gage—Automatic recording gage.

Accuracy—Records considered good.

LITTLE SNAKE RIVER NEAR LILY

Location—In Sec. 20, T. 7 N., R. 98 W., sixteen miles west of Sunbeam and six miles above mouth, at highway bridge.

Records Available—May 1, 1922, to September 30, 1932.

Gage—Automatic recording gage.

Accuracy—Records considered good.

SLATER FORK NEAR SLATER

Location—At second highway bridge about one mile above mouth and one and one-half miles south of Slater Post Office.

Records Available—July 9, 1931, to September 30, 1932.

Gage—Automatic recording gage.

Accuracy—Records considered good.

WHITE RIVER NEAR MEEKER

Location—In Sec. 30, T. 1 N., R. 93 W., three and one-half miles east of Meeker at Russell Ranch bridge.

Records Available—May 7, 1910, to September 30, 1932. From April 12, 1904, to October 31, 1906, a station was maintained two and one-half miles below the present station.

Gage—Automatic recording gage.

Accuracy—Records considered good.

WHITE RIVER NEAR WATSON, UTAH

Location—In Sec. 1, T. 1 S., R. 105 W., at toll bridge on Vernal-Dragon highway.

Records Available—April 1 to October 31, 1906; April 1, 1923, to September 30, 1932; at Rangely, twenty miles above this station, April 15, 1904, to October 31, 1905, and May 20 to November 23, 1918.

Gage—Automatic recording gage.

Accuracy—Records considered fair.

YAMPA RIVER AT STEAMBOAT SPRINGS

Location—On First Street bridge in Steamboat Springs.

Records Available—May 3, 1904, to October 31, 1906; March 1, 1910, to September 30, 1932.

Gage—Automatic recording gage.

Accuracy—Records considered good.

YAMPA RIVER NEAR MAYBELL

Location—In Sec. 2, T. 6 N., R. 95 W., one-fourth mile below new highway bridge, three miles east of Maybell.

Records Available—April 24, 1916, to September 30, 1932. From April 17, 1904, to October 31, 1905, and June 12, 1910, to November 30, 1912, station was maintained nine miles below the present station.

Gage—Automatic recording gage.

Accuracy—Records considered good.

Discharge of Green River Near Linwood, Utah, for Year Ending Sept. 30, 1931.
Drainage Area, 14,300 Square Miles. Altitude .... Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	1000	1100	615	305	360	485	1200	723	1800	1600	664	475
2....	1300	1040	615	305	360	485	1220	772	1660	1550	626	457
3....	1800	1030	615	305	360	485	1250	855	1530	1450	675	439
4....	2100	1000	615	305	360	485	1289	930	1470	1340	717	466
5....	1800	1010	615	305	360	485	1210	855	1860	1240	729	458
6....	1480	980	615	305	360	485	1180	864	2230	1100	699	442
7....	1460	940	615	305	360	485	1230	920	2600	960	681	420
8....	1470	900	615	305	360	485	1310	846	2710	920	648	403
9....	1470	882	615	305	360	485	1380	788	2710	873	626	362
10....	1450	846	615	305	360	485	1560	780	2690	810	636	321
11....	1950	828	565	300	380	920	1620	846	2950	717	626	341
12....	2100	828	565	300	380	920	1900	950	3230	664	600	329
13....	2160	819	565	300	380	920	1920	873	3200	626	585	330
14....	2120	837	565	300	380	920	1760	795	2950	585	585	310
15....	2060	828	565	300	380	920	1710	729	2720	540	675	284
16....	1970	788	565	300	380	1160	1730	693	2530	535	735	313
17....	1900	795	565	300	380	1160	1640	855	2310	535	1000	313
18....	1830	717	565	300	380	1160	1460	1350	2150	530	1160	313
19....	1750	780	565	300	380	1160	1280	1730	2140	466	1120	313
20....	1660	680	565	300	380	1160	1180	1960	2270	430	1090	313
21....	1680	600	390	335	410	1160	1110	1920	2350	420	1010	313
22....	1630	460	390	335	410	1240	1080	1760	2260	405	864	313
23....	1590	480	390	335	410	1190	1000	1640	2010	400	780	313
24....	1550	530	390	335	410	1200	855	1510	1780	390	723	313
25....	1520	590	390	335	410	1280	900	1330	1640	390	670	333
26....	1450	670	390	335	410	1170	802	1180	1640	400	620	353
27....	1390	740	390	335	410	1100	780	1210	1780	410	580	361
28....	1380	710	390	335	410	705	742	1340	1430	420	580	390
29....	1350	660	390	335	....	855	742	1510	1510	570	570	410
30....	1300	630	390	335	....	1020	729	1680	1580	658	565	420
31....	1190	....	390	335	....	1040	....	1850	....	795	540	....
Total	50860	23698	16090	9735	10680	27210	37760	36044	65690	22729	22379	10921
Mean.	1640	790	519	314	381	878	1260	1160	2190	733	722	364
A.-ft.	101000	47000	31900	19300	21200	54000	75000	71300	130000	45100	44400	21700

Discharge of Green River Near Linwood, Utah, for Year Ending Sept. 30, 1932.
Drainage Area, 14,300 Square Miles. Altitude .... Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	350	458	....	....	....	1000	1810	2410	4700	10200	2090	1800
2....	350	441	....	....	....	1000	2080	2510	5060	9250	2040	1390
3....	353	424	....	....	....	1000	2460	2250	5020	8540	2050	1320
4....	360	440	....	....	....	1000	3300	2190	4850	7900	2080	1290
5....	350	470	....	....	266	1000	3090	2370	4430	7110	2070	1190
6....	346	465	....	....	....	800	2840	2400	4160	6400	2020	1120
7....	340	458	....	....	....	800	2480	2540	4350	5800	1870	1050
8....	345	460	....	242	....	800	2190	2820	5060	5200	1800	970
9....	353	460	....	....	....	860	2040	2760	5610	4430	1690	890
10....	360	450	....	....	....	800	1870	2600	5600	3970	1610	825
11....	380	450	....	....	....	550	1730	2600	5190	3600	1620	780
12....	400	450	....	....	....	550	1570	2820	4810	3480	1570	748
13....	437	445	....	....	....	550	1540	3160	4570	3460	1540	740
14....	460	441	....	....	....	550	1590	3480	4460	3620	1490	700
15....	445	400	....	....	....	550	1700	3860	4710	3910	1460	679
16....	430	360	....	....	....	1100	1840	4300	5010	4050	1480	651
17....	425	360	....	....	....	1100	1980	4780	5610	4010	1440	624
18....	420	360	....	....	....	1100	2030	4940	6820	3870	1420	604
19....	420	360	....	....	....	1100	2050	5040	7820	3740	1360	591
20....	400	360	....	....	....	1100	2260	5340	7900	3350	1400	591
21....	420	340	....	....	....	1650	2370	5730	7800	3110	1260	584
22....	708	340	....	....	....	1650	2380	6150	7700	2840	1220	584
23....	1040	340	....	....	....	1650	2380	6680	7620	2740	1170	584
24....	651	340	....	....	....	1650	2280	8030	7880	2720	1280	584
25....	630	340	....	....	....	1650	2060	9180	8620	2770	1270	578
26....	610	320	....	....	....	1600	1840	7980	9520	2620	1210	572
27....	572	320	....	....	....	1600	1620	7020	10100	2530	1140	572
28....	516	320	....	....	....	1600	1620	5960	10400	2370	1090	565
29....	496	320	....	....	....	1600	1650	5310	10600	2250	1130	565
30....	476	320	....	....	....	1600	2500	4140	10700	2190	1440	560
31....	480	....	....	....	....	1620	....	4500	....	2170	1860	....
Total	14323	11812	....	....	....	35120	63150	135850	196680	134200	48170	24301
Mean.	462	394	300	260	350	1139	2100	4380	6560	4330	1550	810
Max...	1040	470	....	....	....	1650	1540	9180	10700	10200	2090	1800
Min...	340	320	....	....	....	550	3300	2190	4160	2170	1090	560
Acre-ft.	28400	23400	18400	16000	20100	69500	125000	269000	390000	266000	95300	48200

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of Elk River at Clark, Colo., for Year Ending Sept. 30, 1931.
Drainage Area, 206 Square Miles. Altitude, 7,300 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1	....	....	....	....	....	....	....	....	1030	280	118	77
2	....	....	....	....	....	....	....	....	1180	262	84	70
3	....	....	....	....	....	....	....	....	1060	228	84	64
4	....	....	....	....	....	....	....	....	1180	228	77	58
5	....	....	....	....	....	....	....	....	1220	212	77	46
6	....	....	....	....	....	....	....	....	1180	184	70	40
7	....	....	....	....	....	....	....	....	1300	160	70	34
8	....	....	....	....	....	....	....	....	1260	149	70	34
9	....	....	....	....	....	....	....	....	1300	138	70	34
10	....	....	....	....	....	....	....	....	1340	128	64	34
11	....	....	....	....	....	....	....	....	1180	128	46	46
12	....	....	....	....	....	....	....	526	1100	118	46	34
13	....	....	....	....	....	....	....	654	988	109	46	29
14	....	....	....	....	....	....	....	950	1030	100	46	29
15	....	....	....	....	....	....	....	1180	950	100	46	34
16	....	....	....	....	....	....	....	1380	836	100	52	34
17	....	....	....	....	....	....	....	1300	874	100	58	40
18	....	....	....	....	....	....	....	1490	950	100	58	52
19	....	....	....	....	....	....	....	912	874	84	58	58
20	....	....	....	....	....	....	....	724	798	70	52	70
21	....	....	....	....	....	....	....	588	724	70	52	92
22	....	....	....	....	....	....	....	689	689	70	46	84
23	....	....	....	....	....	....	....	798	621	64	46	100
24	....	....	....	....	....	....	....	950	588	70	52	109
25	....	....	....	....	....	....	....	1260	497	77	46	84
26	....	....	....	....	....	....	....	1340	468	77	46	70
27	....	....	....	....	....	....	....	1100	441	77	46	77
28	....	....	....	....	....	....	....	1030	364	77	46	70
29	....	....	....	....	....	....	....	874	320	70	40	64
30	....	....	....	....	....	....	....	761	300	77	77	70
31	....	....	....	....	....	....	....	798	....	92	84	....
Total	....	....	....	....	....	....	....	....	26642	3799	1873	1731
Mean	....	....	....	....	....	....	....	836	888	122	60.4	57.7
Max	....	....	....	....	....	....	....	....	1340	280	118	109
Min	....	....	....	....	....	....	....	....	300	64	40	29
Acre-ft.	....	....	....	....	....	....	....	51400	52800	7500	3710	3430

Discharge of Elk River at Clark, Colo., for Year Ending Sept. 30, 1932.
Drainage Area, 206 Square Miles. Altitude, 7,300 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1	73	73	....	....	....	....	....	1100	1860	1740	655	129
2	73	73	....	....	....	....	....	1180	1820	1820	465	111
3	86	86	....	....	....	....	....	1380	1700	1700	415	102
4	86	80	....	....	....	....	....	1500	1660	1580	365	102
5	86	80	....	....	....	....	....	1660	1780	1340	342	102
6	86	66	....	....	....	....	....	1580	1700	1300	320	86
7	80	66	....	....	....	....	....	1780	1580	1100	300	80
8	73	66	....	....	....	....	....	1820	1460	908	280	80
9	60	66	....	....	....	....	....	1940	1540	870	262	73
10	60	73	....	....	....	....	....	2060	1580	832	262	73
11	73	66	....	....	....	....	....	2020	1700	945	262	73
12	73	60	....	....	....	....	....	2140	1660	908	210	73
13	80	73	....	....	....	....	....	2100	1700	725	172	66
14	86	60	....	....	....	....	....	1980	1820	655	160	66
15	86	60	....	....	....	....	....	2220	1980	690	160	66
16	86	66	....	....	....	....	....	2300	2140	365	160	66
17	86	86	....	....	....	....	....	2300	2100	655	160	60
18	94	86	....	....	....	....	....	2260	1860	620	138	60
19	86	80	....	....	....	....	....	2140	1780	585	138	60
20	86	80	....	....	....	....	....	2100	1820	555	138	60
21	86	....	....	....	....	....	....	1980	1860	495	138	60
22	86	....	....	....	....	....	....	2020	1900	495	138	60
23	86	....	....	....	....	....	....	1900	2140	465	129	60
24	102	....	....	....	....	....	....	1820	2060	465	120	60
25	86	....	....	....	....	....	....	1660	2140	440	111	66
26	86	....	....	....	....	....	....	1540	1900	365	111	66
27	94	....	....	....	....	....	....	1580	1940	365	183	66
28	86	....	....	....	....	....	....	1660	2060	390	149	60
29	80	....	....	....	....	....	....	1940	1820	465	129	60
30	86	....	....	....	....	....	....	1900	1780	495	129	60
31	66	....	....	....	....	....	....	1900	....	620	138	....
Total	2543	....	....	....	....	....	....	57460	54840	24953	6839	2206
Mean	82.0	74.0	....	....	....	....	....	1850	1830	805	221	73.5
Max	102	....	....	....	....	....	....	2300	2140	1820	655	129
Min	60	....	....	....	....	....	....	1100	1460	365	111	60
Acre-ft.	5040	4400	....	....	....	....	....	114000	109000	49500	13600	4370

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of Little Snake River Near Lily for Year Ending Sept. 30, 1931.
Drainage Area, 3,730 Square Miles. Altitude .... Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	185	....	....	....	....	....	1800	1780	2610	535	250	0
2....	115	....	....	....	....	....	1800	1840	2180	420	200	0
3....	50	....	....	....	....	....	1850	1900	1840	550	215	0
4....	39	....	....	....	....	....	1900	1840	1500	470	200	0
5....	65	....	....	....	....	....	1660	1480	1450	445	185	0
6....	39	....	....	....	....	....	1720	1840	1350	530	215	0
7....	50	....	....	....	....	....	1900	1720	2490	445	330	0
8....	50	....	....	....	....	....	1840	1660	2360	620	470	0
9....	115	....	....	....	....	....	1900	1550	2420	590	215	0
10....	172	....	....	....	....	....	1960	1780	2240	680	160	0
11....	185	....	....	....	....	....	1960	2080	2300	650	80	2
12....	290	....	....	....	....	....	1900	2180	2360	650	80	4
13....	250	....	....	....	....	....	1960	2490	2180	620	8	4
14....	290	....	....	....	....	....	1960	2550	1720	650	4	4
15....	350	....	....	....	....	....	2180	2610	1500	650	1	4
16....	232	....	....	....	....	....	2080	2920	1350	650	0	4
17....	185	....	....	....	....	....	2020	2990	1200	650	0	4
18....	128	....	....	....	....	....	2180	2800	1080	650	0	4
19....	50	....	....	....	....	....	2240	2680	1000	590	0	4
20....	28	....	....	....	....	....	2360	2490	1000	420	4	8
21....	39	....	....	....	....	....	2300	2020	880	370	4	16
22....	28	....	....	....	....	....	2420	1840	650	250	4	28
23....	22	....	....	....	....	....	2490	1660	560	270	2	28
24....	22	....	....	....	....	....	2420	2420	500	215	4	50
25....	28	....	....	....	....	....	2420	2300	420	250	0	80
26....	16	....	....	....	....	....	2360	2550	395	215	0	98
27....	16	....	....	....	....	....	2300	2610	330	215	0	50
28....	16	....	....	....	....	....	2080	2800	370	250	0	39
29....	22	....	....	....	....	....	2240	2920	370	250	0	16
30....	22	....	....	....	....	....	2020	2920	395	250	0	16
31....	22	....	....	....	....	....	....	2800	....	250	0	....
Total	3121	....	....	....	....	....	62220	70320	41000	14090	2631	463
Mean.	101	25	....	....	....	....	2070	2270	1370	455	84.9	15.4
Max...	350	....	....	....	....	....	....	2990	2610	680	470	98
Min...	16	....	....	....	....	....	....	1550	330	215	0	0
Acre-ft.	6210	1490	....	....	....	....	123000	140000	81500	28000	5220	916

Discharge of Little Snake River Near Lily for Year Ending Sept. 30, 1932.
Drainage Area, 3,730 Square Miles. Altitude .... Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	18	370	....	....	....	....	2470	3180	3650	1550	32	165
2....	32	395	....	....	....	....	2830	3020	3360	1080	140	202
3....	60	420	....	....	....	....	3120	2830	2650	1120	115	140
4....	46	395	....	....	....	....	3230	2310	2830	1080	60	115
5....	46	370	....	....	....	....	3650	2310	3020	1160	32	88
6....	60	370	....	....	....	....	2020	2240	3300	1040	18	60
7....	88	370	....	....	....	....	1960	3650	3500	1000	18	46
8....	60	395	....	....	....	....	1900	2470	3360	920	13	32
9....	88	370	....	....	....	....	2020	2650	3180	840	5	25
10....	115	445	....	....	....	....	2090	4250	3020	710	7	32
11....	138	420	....	....	....	....	2090	4630	3230	530	7	25
12....	140	420	....	....	....	....	2020	5000	3120	530	5	18
13....	88	445	....	....	....	....	2470	5320	3020	370	5	18
14....	138	420	....	....	....	....	2740	4400	3020	370	18	18
15....	140	370	....	....	....	....	1550	5160	3120	420	18	18
16....	140	310	....	....	....	....	1720	5700	3230	395	46	14
17....	140	202	....	....	....	....	1840	6300	3500	330	32	14
18....	152	140	....	....	....	....	1660	5320	3230	310	25	14
19....	165	152	....	....	....	....	1550	5600	3120	290	25	14
20....	190	140	....	....	....	....	1660	5900	3070	290	9	14
21....	215	115	....	....	....	....	2020	5900	3020	290	46	14
22....	232	115	....	....	....	....	2470	6100	2830	270	32	14
23....	250	115	....	....	....	....	2560	6400	2650	250	32	14
24....	290	115	....	....	....	....	2650	6900	2650	215	25	18
25....	270	88	....	....	....	....	2240	7100	2470	215	115	18
26....	330	115	....	....	....	....	2470	5700	2310	178	178	14
27....	370	46	....	....	....	....	2650	4400	2160	165	165	18
28....	395	46	....	....	....	....	2830	3950	2160	140	165	25
29....	330	60	....	....	....	....	2830	3800	2020	140	165	25
30....	350	60	....	....	....	....	3020	3650	1780	140	152	46
31....	370	....	....	....	....	....	....	3500	....	60	32	....
Total	5446	7794	....	....	....	....	70330	139640	87580	16398	1737	1278
Mean.	176	260	....	....	....	....	2340	4500	2920	529	56.0	42.6
Max...	395	445	....	....	....	....	3650	7100	3650	1550	178	202
Min...	18	46	....	....	....	....	1550	2240	780	60	5	14
Acre-ft.	10800	15500	....	....	....	....	139000	277000	174000	32500	3440	2530

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of Slater Fork Near Slater for Year Ending Sept. 30, 1931.
Drainage Area .... Square Miles. Altitude .... Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1	....	....	....	....	....	....	....	....	....	....	9	4
2	....	....	....	....	....	....	....	....	....	....	5	4
3	....	....	....	....	....	....	....	....	....	....	4	4
4	....	....	....	....	....	....	....	....	....	....	4	4
5	....	....	....	....	....	....	....	....	....	....	4	4
6	....	....	....	....	....	....	....	....	....	....	4	4
7	....	....	....	....	....	....	....	....	....	....	4	4
8	....	....	....	....	....	....	....	....	....	....	4	4
9	....	....	....	....	....	....	....	....	....	9	4	4
10	....	....	....	....	....	....	....	....	....	8	3	3
11	....	....	....	....	....	....	....	....	....	9	3	2
12	....	....	....	....	....	....	....	....	....	8	3	3
13	....	....	....	....	....	....	....	....	....	8	2	3
14	....	....	....	....	....	....	....	....	....	8	2	3
15	....	....	....	....	....	....	....	....	....	7	3	3
16	....	....	....	....	....	....	....	....	....	6	5	2
17	....	....	....	....	....	....	....	....	....	4	5	2
18	....	....	....	....	....	....	....	....	....	4	4	3
19	....	....	....	....	....	....	....	....	....	4	4	7
20	....	....	....	....	....	....	....	....	....	4	4	3
21	....	....	....	....	....	....	....	....	....	3	3	9
22	....	....	....	....	....	....	....	....	....	3	3	9
23	....	....	....	....	....	....	....	....	....	3	2	8
24	....	....	....	....	....	....	....	....	....	2	2	7
25	....	....	....	....	....	....	....	....	....	2	2	16
26	....	....	....	....	....	....	....	....	....	3	2	13
27	....	....	....	....	....	....	....	....	....	2	2	13
28	....	....	....	....	....	....	....	....	....	1	2	13
29	....	....	....	....	....	....	....	....	....	2	2	11
30	....	....	....	....	....	....	....	....	....	4	2	11
31	....	....	....	....	....	....	....	....	....	4	4	....
Total	....	....	....	....	....	....	....	....	....	....	106	180
Mean	....	....	....	....	....	....	....	....	....	5.97	3.42	6
Max	....	....	....	....	....	....	....	....	....	....	9	16
Min	....	....	....	....	....	....	....	....	....	....	2	2
Acre-ft	....	....	....	....	....	....	....	....	....	367	210	357

Discharge of Slater Fork Near Slater for Year Ending Sept. 30, 1932.
Drainage Area .... Square Miles. Altitude .... Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1	11	9	....	....	....	....	20	248	428	194	38	16
2	13	9	....	....	....	....	36	262	412	180	30	14
3	13	8	....	....	....	....	56	318	396	180	26	12
4	11	9	....	....	....	....	100	360	444	166	22	11
5	10	8	....	....	....	....	100	430	412	152	20	10
6	9	9	....	....	....	....	150	444	428	152	20	10
7	16	10	....	....	....	....	136	444	396	140	16	9
8	16	9	....	....	....	....	124	476	364	116	15	9
9	16	8	....	....	....	....	124	556	396	104	12	8
10	15	8	....	....	....	....	100	790	396	84	11	7
11	15	9	....	....	....	....	124	974	364	64	11	6
12	15	9	....	....	....	....	150	898	428	64	12	6
13	13	9	....	....	....	....	164	826	412	50	10	5
14	13	8	....	....	....	....	192	898	380	38	8	5
15	13	7	....	....	....	....	234	862	412	30	9	4
16	13	8	....	....	....	....	248	898	396	30	10	6
17	11	9	....	....	....	....	262	790	412	34	9	10
18	11	9	....	....	....	....	276	718	364	34	9	14
19	13	10	....	....	....	....	290	754	412	32	9	9
20	13	9	....	....	....	20	304	862	380	30	9	9
21	15	8	....	....	....	28	276	862	332	28	10	9
22	15	8	....	....	....	14	290	898	364	26	11	9
23	13	7	....	....	....	12	248	790	348	26	10	8
24	13	7	....	....	....	12	248	668	380	24	9	8
25	11	7	....	....	....	20	248	524	396	22	9	8
26	11	6	....	....	....	28	234	460	396	22	9	8
27	9	7	....	....	....	36	220	396	332	20	18	7
28	7	6	....	....	....	56	206	428	194	20	22	7
29	3	4	....	....	....	56	234	428	194	20	16	7
30	4	4	....	....	....	20	248	396	222	24	16	7
31	6	....	....	....	....	46	....	412	....	38	18	....
Total	367	238	....	....	....	....	5642	19070	11190	2144	454	258
Mean	11.8	7.93	....	....	....	20.6	188	615	373	69.2	14.6	8.60
Max	16	10	....	....	....	....	304	974	444	194	38	16
Min	3	4	....	....	....	....	20	248	194	20	8	4
Acre-ft	726	472	....	....	....	1270	11200	37800	22200	4250	898	512

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of White River Near Meeker for Year Ending Sept. 30, 1931.
Drainage Area, 634 Square Miles. Altitude, 6,182 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	445	445	....	....	....	....	433	740	1430	415	605	374
2....	445	445	....	....	....	....	445	758	1430	380	475	330
3....	445	445	....	....	....	....	445	848	1700	380	415	310
4....	445	445	....	....	....	....	457	876	1700	385	397	305
5....	445	445	....	....	....	....	469	800	1500	385	391	320
6....	445	433	....	....	....	....	475	758	1560	374	439	320
7....	445	421	....	....	....	....	475	895	1770	385	445	305
8....	433	439	....	....	....	....	487	990	1700	385	445	295
9....	415	445	....	....	....	....	433	876	1560	374	421	290
10....	421	433	....	....	....	....	433	848	1370	358	397	280
11....	457	427	....	....	....	....	475	758	1200	358	330	280
12....	493	427	....	....	....	....	518	758	1200	352	235	285
13....	487	421	....	....	....	....	557	895	1200	341	230	285
14....	481	433	....	....	....	....	591	1100	1100	336	212	290
15....	475	451	....	....	....	....	564	1310	1040	330	222	358
16....	475	427	....	....	....	....	557	1500	1100	325	222	358
17....	481	481	....	....	....	....	605	1630	990	341	262	300
18....	505	531	....	....	....	....	678	1840	848	330	320	330
19....	499	505	....	....	....	....	758	1370	758	320	330	415
20....	499	493	....	....	....	....	758	1100	700	315	290	421
21....	493	475	....	....	....	....	640	990	605	235	280	385
22....	493	493	....	....	....	....	626	848	605	212	280	363
23....	463	493	....	....	....	....	584	942	493	186	280	415
24....	457	481	....	....	....	....	605	1100	457	181	280	715
25....	475	450	....	....	....	....	619	1430	421	186	280	518
26....	481	450	....	....	....	....	544	1560	397	186	280	445
27....	445	450	....	....	....	....	570	1500	397	190	280	415
28....	457	450	....	....	....	....	577	1260	397	190	280	391
29....	433	450	....	....	....	....	640	1100	445	190	285	374
30....	415	450	....	....	....	....	715	1100	481	280	295	368
31....	415	....	....	....	....	....	....	1200	....	678	330	....
Total	14263	13634	....	....	....	....	16733	33680	30554	9883	10233	10840
Mean.	460	454	....	....	....	....	558	1090	1020	319	330	361
Max...	505	531	....	....	....	....	758	1840	1770	415	605	715
Min...	415	421	....	....	....	....	433	740	397	181	212	280
Acre-ft.	28300	27000	....	....	....	....	33200	67000	60700	19600	20300	21500

Discharge of White River Near Meeker for Year Ending Sept. 30, 1932.
Drainage Area, 634 Square Miles. Altitude, 6,182 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	345	360	....	....	....	....	....	685	1840	1980	780	533
2....	370	345	....	....	....	....	....	830	1700	1840	730	519
3....	454	345	....	....	....	....	....	980	1770	1770	685	484
4....	413	345	....	....	....	....	....	1030	1910	1700	584	472
5....	397	330	....	....	....	....	....	1080	2130	1510	592	466
6....	397	330	....	....	....	....	....	1080	1980	1340	560	460
7....	397	350	....	....	....	....	....	1130	1910	1230	546	460
8....	365	360	....	....	....	....	....	1130	1770	1180	519	442
9....	360	360	....	....	....	....	....	1230	1770	1130	505	424
10....	381	381	....	....	....	....	....	1450	1910	1030	505	436
11....	370	360	....	....	....	....	....	1840	1980	1030	498	442
12....	360	386	....	....	....	....	....	2060	2060	1080	484	436
13....	360	381	....	....	....	....	498	2200	2130	1030	466	436
14....	345	350	....	....	....	....	685	2290	2290	950	454	430
15....	330	370	....	....	....	....	712	2460	2290	880	454	430
16....	345	345	....	....	....	....	780	2460	2460	950	472	419
17....	345	360	....	....	....	....	930	2460	2460	880	484	424
18....	345	370	....	....	....	....	880	2630	2460	830	478	424
19....	335	370	....	....	....	....	780	2700	2200	830	484	424
20....	335	335	....	....	....	....	830	2540	2290	780	484	424
21....	370	312	....	....	....	....	1030	2700	2290	730	484	424
22....	381	330	....	....	....	....	980	2970	2460	685	491	419
23....	350	320	....	....	....	....	880	2880	2630	694	498	413
24....	360	325	....	....	....	....	730	2700	2540	694	519	454
25....	360	325	....	....	....	....	640	2540	2700	685	598	454
26....	345	312	....	....	....	....	685	2130	2700	685	519	424
27....	335	312	....	....	....	....	780	1910	2540	676	658	424
28....	345	330	....	....	....	....	658	1910	2290	640	640	436
29....	350	330	....	....	....	....	658	1980	2200	624	560	424
30....	320	320	....	....	....	....	685	2200	1980	685	560	419
31....	360	....	....	....	....	....	....	1980	...	685	584	....
Total	11225	10349	....	....	....	....	....	60165	65640	31433	16875	13276
Mean.	362	345	....	....	....	....	650	1940	2190	1010	544	442
Max...	454	386	....	....	....	....	....	2970	2700	1980	780	533
Min...	320	312	....	....	....	....	....	685	1700	624	454	413
Acre-ft.	22300	20500	....	....	....	....	38700	119000	130000	62100	33400	26300

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of White River Near Watson, Utah, for Year Ending Sept. 30, 1931.
Drainage Area .... Square Miles. Altitude .... Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	722	402	....	....	....	....	....	776	1370	440	475	380
2....	680	402	....	....	....	....	....	830	1350	420	340	360
3....	600	394	....	....	....	....	....	848	1420	402	230	352
4....	625	389	....	....	....	....	....	860	1510	389	180	332
5....	575	380	....	....	....	....	....	908	1640	372	180	316
6....	550	380	....	....	....	....	....	890	1540	356	1050	293
7....	525	394	....	....	....	....	....	860	1520	340	575	300
8....	525	380	....	....	....	....	....	848	1650	328	460	282
9....	515	372	....	....	....	....	....	908	1700	312	435	276
10....	495	380	....	....	....	....	664	938	1640	300	425	276
11....	505	380	....	....	....	....	722	920	1400	265	416	272
12....	500	380	....	....	....	....	722	878	1300	265	412	265
13....	480	368	....	....	....	....	710	812	1200	254	412	265
14....	485	402	....	....	....	....	669	830	1100	262	412	265
15....	485	407	....	....	....	....	652	902	1020	258	402	268
16....	485	412	....	....	....	....	652	1100	950	244	389	289
17....	465	407	....	....	....	....	610	1350	890	248	352	340
18....	460	407	....	....	....	....	615	1400	830	240	324	360
19....	459	402	....	....	....	....	669	1640	770	248	308	380
20....	450	389	....	....	....	....	728	1300	710	234	289	425
21....	440	380	....	....	....	....	770	1220	652	230	286	412
22....	435	380	....	....	....	....	728	1110	600	226	279	398
23....	425	389	....	....	....	....	698	1020	585	202	272	450
24....	425	389	....	....	....	....	664	932	555	195	265	1300
25....	416	384	....	....	....	....	664	932	555	195	251	402
26....	407	384	....	....	....	....	710	1100	525	183	248	248
27....	402	384	....	....	....	....	710	1300	515	183	240	500
28....	398	389	....	....	....	....	680	1320	495	237	240	475
29....	384	394	....	....	....	....	692	1220	475	282	240	440
30....	389	394	....	....	....	....	728	1100	460	320	244	430
31....	389	....	....	....	....	....	....	1350	....	380	254	....
Total	15087	11694	....	....	....	....	20307	32402	30927	8808	10885	11351
Mean.	487	390	....	....	....	....	677	1040	1030	284	351	378
Max...	722	412	....	....	....	....	....	1640	1700	440	1050	1300
Min...	384	368	....	....	....	....	....	776	460	183	180	265
Acre-ft.	29900	23200	....	....	....	....	40300	64000	61300	17500	21600	22500

Discharge of White River Near Watson, Utah, for Year Ending Sept. 30, 1932.
Drainage Area .... Square Miles. Altitude .... Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	407	380	....	....	....	....	....	1060	1750	1690	875	704
2....	394	380	....	....	....	....	....	1060	1640	1580	660	574
3....	416	364	....	....	....	....	....	1140	1590	1530	650	553
4....	500	364	....	....	....	....	....	1230	1540	1490	635	529
5....	525	364	....	....	....	....	....	1370	1590	1440	601	508
6....	525	360	....	....	....	....	....	1420	1820	1250	592	508
7....	465	356	....	....	....	....	....	1420	2060	1120	592	497
8....	425	360	....	....	....	....	1020	1370	1710	996	570	486
9....	435	360	....	....	....	....	588	1470	1600	959	529	448
10....	425	360	....	....	....	....	588	1680	1600	924	518	438
11....	425	360	....	....	....	....	588	1960	1550	896	518	441
12....	450	360	....	....	....	....	588	2200	1600	861	518	424
13....	440	368	....	....	....	....	610	2440	1610	803	504	424
14....	435	368	....	....	....	....	688	2640	1720	803	490	469
15....	416	389	....	....	....	....	745	2700	1890	794	490	455
16....	380	475	....	....	....	....	808	2760	1950	794	490	430
17....	380	450	....	....	....	....	808	2900	2190	794	688	424
18....	368	460	....	....	....	....	945	2960	2190	763	1020	444
19....	380	440	....	....	....	....	1020	2760	2010	769	682	452
20....	380	407	....	....	....	....	945	2700	1960	739	973	455
21....	380	402	....	....	....	....	945	2900	1900	739	541	444
22....	398	380	....	....	....	....	1100	3030	1960	739	529	452
23....	389	394	....	....	....	....	1100	2840	2080	710	529	448
24....	402	394	....	....	....	....	945	2580	2260	710	522	444
25....	449	394	....	....	....	....	875	2450	2260	710	522	430
26....	425	394	....	....	....	....	875	2390	2380	682	704	424
27....	402	394	....	....	....	....	910	2270	2390	682	1760	416
28....	402	394	....	....	....	....	1100	2090	2270	1010	1880	420
29....	394	425	....	....	....	....	1060	1800	2030	910	1450	420
30....	389	475	....	....	....	....	1230	1750	1850	1060	1170	420
31....	380	....	....	....	....	....	....	1920	....	1420	896	....
Total	12972	11771	....	....	....	....	....	65260	56950	30367	23098	13981
Mean.	418	392	....	....	....	....	796	2110	1900	980	745	466
Max...	525	475	....	....	....	....	....	3030	2390	1690	1880	704
Min...	368	356	....	....	....	....	....	1060	1540	682	490	416
Acre-ft.	25700	23300	....	....	....	....	47400	130000	113000	60300	45800	27700

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of Yampa River at Steamboat Springs for Year Ending Sept. 30, 1931.
Drainage Area, 500 Square Miles. Altitude, 6,680 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	171	164	152	130	....	....	200	841	1970	280	41	68
2....	164	171	....	....	....	....	200	880	1870	216	41	60
3....	159	176	....	....	....	....	200	960	1820	189	41	52
4....	148	176	....	....	....	....	200	1040	1670	194	41	46
5....	148	176	....	....	....	....	250	1080	1580	181	41	45
6....	145	176	141	....	....	....	250	1180	1540	162	40	44
7....	141	176	....	....	....	....	298	1260	1490	141	39	43
8....	141	176	....	....	....	....	406	1440	1620	122	38	41
9....	141	176	....	....	....	....	262	1490	1580	110	38	41
10....	141	176	....	....	....	....	240	1580	1490	107	38	41
11....	141	176	130	110	....	....	243	1770	1410	96	36	41
12....	148	176	....	....	....	....	249	1720	1400	88	36	41
13....	157	164	....	....	....	....	269	1920	1360	84	37	41
14....	152	164	....	....	....	....	318	2270	1310	81	37	41
15....	157	164	....	....	....	....	338	2320	1260	76	37	43
16....	164	164	....	....	....	....	360	2440	1180	72	37	43
17....	171	164	....	....	....	....	382	2440	1130	68	37	44
18....	176	164	....	....	....	....	406	2220	1130	68	37	42
19....	181	164	110	....	....	....	456	1540	1000	62	37	41
20....	189	164	....	....	....	....	456	1220	841	60	38	56
21....	171	164	....	....	....	....	568	1000	630	56	39	101
22....	164	164	....	....	....	....	630	920	611	52	39	152
23....	166	164	....	....	....	....	538	1220	556	52	39	164
24....	152	152	....	....	....	....	510	1720	440	46	39	202
25....	152	152	....	....	....	....	538	1820	373	45	39	216
26....	148	152	....	....	....	....	493	1970	347	44	39	152
27....	143	152	....	....	....	....	430	1870	287	41	40	141
28....	141	152	....	....	....	....	510	1490	249	41	40	110
29....	141	152	....	....	....	....	556	1360	262	41	41	96
30....	152	152	130	....	....	....	598	1260	318	41	56	93
31....	164	....	....	....	....	....	....	1670	....	41	76	....
Total	4829	4963	....	....	....	....	11354	47911	32754	2957	1254	2341
Mean.	156	165	128	117	....	....	378	1550	1090	95.4	40.4	78.0
Max...	189	176	....	....	....	....	....	2440	1970	280	76	216
Min...	141	152	....	....	....	....	....	841	249	41	36	41
Acre-ft.	9590	9820	7870	7190	....	....	22500	95300	64900	5860	2480	4640

Discharge of Yampa River at Steamboat Springs for Year Ending Sept. 30, 1932.
Drainage Area, 500 Square Miles. Altitude, 6,680 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	95	100	....	....	....	....	162	950	1890	1360	324	130
2....	92	95	....	....	....	....	175	1040	1690	1130	300	122
3....	102	95	....	....	....	....	245	1080	1790	950	316	118
4....	100	95	....	....	....	....	320	1130	1850	772	292	118
5....	98	90	....	....	....	....	364	1170	2000	667	276	116
6....	98	90	....	....	....	....	380	1110	2050	516	264	114
7....	98	96	....	....	....	....	300	1060	2110	410	251	112
8....	89	100	....	....	....	....	312	1190	2160	344	239	110
9....	88	100	....	....	....	....	280	1270	2210	340	227	112
10....	94	106	....	....	....	....	280	1500	2320	348	215	107
11....	90	107	....	....	....	....	312	1940	2420	340	203	106
12....	88	116	....	....	....	....	430	2040	2470	368	188	110
13....	88	114	....	....	....	....	660	2230	2700	445	180	107
14....	83	104	....	....	....	....	765	2330	2640	420	178	110
15....	95	110	....	....	....	....	910	2220	2590	372	175	108
16....	102	102	....	....	....	....	950	2310	2540	336	172	108
17....	102	107	....	....	....	....	910	2410	2490	400	172	108
18....	102	110	....	....	....	....	870	2570	2440	425	172	108
19....	102	110	....	....	....	....	835	2730	2400	380	168	108
20....	92	100	....	....	....	....	800	2900	2350	340	168	108
21....	95	92	....	....	....	....	730	3010	2150	340	172	108
22....	102	98	....	....	....	....	730	3180	2210	336	168	107
23....	106	95	....	....	....	....	800	3240	2210	328	170	110
24....	96	96	....	....	....	....	730	2790	2060	320	168	108
25....	100	96	....	....	....	....	765	2510	1920	316	165	107
26....	95	92	....	....	....	....	800	2360	1870	324	160	107
27....	92	92	....	....	....	....	835	2220	1870	316	165	107
28....	95	98	....	....	....	....	835	2070	1980	308	162	102
29....	96	98	....	....	....	....	910	1920	1730	304	162	98
30....	88	110	....	....	....	....	995	1830	1530	312	136	98
31....	100	....	....	....	....	....	....	1830	....	312	136	....
Total	2963	3014	....	....	....	....	18390	62140	64640	14179	6244	3292
Mean.	95.6	100	....	....	....	....	613	2000	2150	457	201	110
Max...	106	116	....	....	....	....	995	3240	2700	1360	324	130
Min...	83	90	....	....	....	....	162	950	1530	304	136	98
Acre-ft.	5880	5950	....	....	....	....	36500	123000	128000	28100	12400	6540

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of Yampa River Near Maybell for Year Ending Sept. 30, 1931.
Drainage Area, 3,670 Square Miles. Altitude, 5,900 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	730	640	....	....	....	....	2650	2570	3500	1010	493	108
2....	730	658	....	....	....	....	2820	2820	4110	950	415	102
3....	712	658	....	....	....	....	2820	2820	4740	890	314	99
4....	712	667	....	....	....	....	2900	3240	4920	780	319	99
5....	685	667	....	....	....	....	2990	3760	4920	703	314	105
6....	685	685	....	....	....	....	3240	3670	4470	667	310	90
7....	694	685	....	....	....	....	3500	3240	4380	618	302	87
8....	703	685	....	....	....	....	4110	3500	4740	588	292	81
9....	685	685	....	....	....	....	3420	3760	4920	554	244	72
10....	640	685	....	....	....	....	3670	3330	4470	529	236	69
11....	667	712	....	....	....	....	3760	2990	3930	504	217	66
12....	685	703	....	....	....	....	3240	2650	3670	493	201	63
13....	676	703	....	....	....	....	2900	2570	3500	488	183	60
14....	640	703	....	....	....	....	2260	2990	3420	425	154	57
15....	712	730	....	....	....	....	2330	3930	3160	400	154	55
16....	750	730	....	....	....	....	2490	4920	3080	386	134	55
17....	730	712	....	....	....	....	2410	5730	2990	363	127	55
18....	730	730	....	....	....	....	2330	6090	2900	332	114	52
19....	730	....	....	....	....	....	2650	6180	2490	310	111	55
20....	730	....	....	....	....	....	3080	4830	2180	292	111	57
21....	730	....	....	....	....	....	3500	3930	1880	272	120	72
22....	730	....	....	....	....	....	3240	3330	1670	248	114	90
23....	730	....	....	....	....	....	2570	2900	1530	228	111	154
24....	640	....	....	....	....	....	2330	3080	1330	213	114	721
25....	640	....	....	....	....	....	2120	3930	1210	198	114	460
26....	603	....	....	....	....	....	1880	4920	1120	183	111	341
27....	603	....	....	....	....	....	1780	5190	1050	183	111	332
28....	603	....	....	....	....	....	1630	5010	988	198	114	319
29....	603	....	....	....	....	....	1770	4380	975	209	108	302
30....	618	....	....	....	....	....	2100	4020	988	730	114	288
31....	618	....	....	....	....	....	....	3500	....	566	114	....
Total	21144	....	....	....	....	....	82490	119780	89231	14510	5990	4556
Mean.	682	691	....	....	....	....	2750	3860	2970	468	193	152
Max...	750	....	....	....	....	....	4110	6180	4920	1010	493	721
Min...	603	....	....	....	....	....	1630	2570	975	183	108	52
Acre-ft.	41900	41100	....	....	....	....	164000	237000	177000	28800	11900	9040

Discharge of Yampa River Near Maybell for Year Ending Sept. 30, 1932.
Drainage Area, 3,670 Square Miles. Altitude, 5,900 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	280	296	....	....	....	....	1500	3810	6110	5030	1070	458
2....	288	296	....	....	....	....	2160	3720	5930	4670	1250	410
3....	296	296	....	....	....	....	2640	4490	5480	4320	1380	398
4....	300	296	....	....	....	....	2960	5390	5390	4150	1170	360
5....	300	300	....	....	....	....	2640	5930	5930	3900	974	372
6....	304	300	....	....	....	....	2640	6290	6560	3380	873	348
7....	304	296	....	....	....	....	2400	6200	6470	2880	804	284
8....	304	296	....	179	....	....	1780	6290	6110	2560	759	272
9....	300	300	....	....	....	....	1780	6290	5660	2320	723	256
10....	300	300	....	....	....	....	1860	6920	5750	2160	714	252
11....	300	300	....	....	....	....	1640	7820	5840	2010	705	252
12....	300	300	....	....	....	....	1860	8960	6110	2010	660	244
13....	300	304	....	....	....	....	2400	10100	6290	2160	615	240
14....	300	304	....	....	....	....	3220	10800	6380	2010	588	232
15....	300	308	....	....	....	....	5810	11100	6560	1860	556	220
16....	300	308	....	....	....	....	4150	11400	6650	1710	528	216
17....	300	304	....	....	....	....	4760	11000	7190	1570	500	212
18....	296	300	....	....	....	....	5030	10600	7010	1500	476	206
19....	296	296	....	....	....	....	4670	10900	6290	1500	452	204
20....	296	296	....	....	....	....	4320	10900	5750	1380	434	197
21....	300	296	....	....	....	1780	4850	10800	6020	1310	416	194
22....	304	296	....	....	....	1860	5750	11600	6020	1250	398	194
23....	304	300	....	....	208	1570	5660	11700	6110	1130	376	194
24....	308	300	....	....	....	1440	4670	11900	6560	1070	380	204
25....	304	296	....	....	....	1380	3720	10600	6470	1010	372	210
26....	304	....	....	....	....	1380	3300	9050	6470	950	368	220
27....	304	....	....	....	....	1310	3810	7730	6020	950	364	232
28....	304	....	....	....	....	1310	3640	6380	6200	906	360	236
29....	304	....	....	....	....	1250	3560	5660	6200	862	386	228
30....	308	....	....	176	....	1150	3640	5840	5480	873	410	236
31....	300	....	....	....	....	1070	....	6560	....	873	500	....
Total	9308	....	....	....	....	....	100820	256730	185010	64264	19561	7781
Mean.	300	299	....	177	195	....	3360	8280	6170	2070	631	259
Max...	308	....	....	....	....	....	5750	11900	7190	5030	1380	458
Min...	280	....	....	....	....	....	1500	3810	5390	862	360	194
Acre-ft.	18400	17800	....	10900	11200	....	200000	509000	367000	127000	38800	15400

Unless otherwise noted, all discharges are in cubic feet per second.

SAN JUAN RIVER DRAINAGE

SAN JUAN RIVER AT ROSA, NEW MEXICO

Location—In Sec. 11, T. 32 N., R. 6 W., at highway bridge one-half mile north of Rosa, New Mexico.

Records Available—October 1, 1920, to September 30, 1932. From 1895 to 1899 and August 21, 1910, to September 30, 1920, a station was maintained at Arboles. The San Juan River at Arboles, plus the Piedra River at Arboles, gives the flow of the San Juan River at Rosa.

Gage—Automatic recording gage.

Accuracy—Records considered good.

Co-operation—Records furnished by the State Engineer of New Mexico.

SAN JUAN RIVER AT SHIPROCK, NEW MEXICO

Location—In Sec. 9, T. 12 N., R. 2 W., Navajo Meridian, at highway bridge one-fourth mile south of Shiprock Indian Agency and three miles below the mouth of Chaco River.

Records Available—February 15, 1930, to September 30, 1931.

Gage—Automatic recording gage.

Accuracy—Records considered fair.

Co-operation—Records furnished by State Engineer of New Mexico. Records for 1932 unreliable and not furnished.

SAN JUAN RIVER NEAR BLUFF, UTAH

Location—In Sec. 7, T. 42 S., R. 19 E., one-fourth mile below Gypsum Creek and twenty-five miles southwest of Bluff, Utah.

Records Available—October 30, 1914, to September 30, 1917 (See U. S. G. S. Water Supply papers); February 19, 1927, to September 30, 1932.

Gage—Automatic recording gage.

Accuracy—Records considered good.

Co-operation—Complete records furnished by the United States Geological Survey.

PINE RIVER NEAR BAYFIELD

Location—In Sec. 26, T. 36 N., R. 7 W., one-quarter mile below mouth of Red Creek.

Records Available—October 26, 1927, to September 30, 1932. From June 1, 1926, to June 24, 1927, a station was maintained three miles above this location.

Gage—Automatic recording gage.

Accuracy—Records considered good.

PINE RIVER NEAR IGNACIO

Location—In Sec. 8, T. 33 N., R. 7 W., at Southern Ute Indian Agency.

Records Available—April 22, 1899, to October 31, 1903; September 1, 1910, to November 30, 1912; March 10, 1913, to September 30, 1932.

Gage—Automatic recording gage.

Accuracy—Records considered good.

Co-operation—Records furnished by the State Engineer of New Mexico.

ANIMAS RIVER AT DURANGO

Location—At footbridge at the Western Colorado Power Company's power plant in Durango.

Records Available—June 20, 1895, to December 31, 1905; January 1, 1910, to September 30, 1932.

Gage—Automatic recording gage.

Accuracy—Records considered good.

CASCADE CREEK NEAR TACOMA

Location—In Sec. 11, T. 39 N., R. 9 W., near where the Durango-Silverton highway crosses Cascade Creek.

Records Available—January 1, 1915, to September 30, 1932.

Gage—Automatic recording gage.

Accuracy—Records considered good.

Co-operation—Complete record furnished by the Western Colorado Power Company.

FLORIDA RIVER NEAR DURANGO

Location—In Sec. 4, T. 35 N., R. 8 W., about eleven miles from Durango.

Records Available—May 21, 1899, to July 31, 1899; April 1, 1901, to October 5, 1903; September 8, 1910, to September 30, 1924; April 1, 1927, to September 30, 1932.

Gage—Automatic recording gage.

Accuracy—Records considered good.

LIGHTNER CREEK NEAR DURANGO

Location—In Sec. 26, T. 35 N., R. 10 W., three miles west of Durango at concrete highway bridge.

Records Available—July 1, 1927, to September 30, 1932.

Gage—Automatic recording gage.

Accuracy—Records considered good.

LA PLATA RIVER AT HESPERUS

Location—In Sec. 14, T. 35 N., R. 11 W., at weir one-fourth mile above highway at Hesperus.

Records Available—June 15, 1904, to August 11, 1904; April 1, 1906, to August 11, 1906; August 24, 1910, to December 31, 1910; May 25, 1917, to September 30, 1932.

Gage—Automatic recording gage.

Accuracy—Records considered good.

LA PLATA RIVER AT COLORADO-NEW MEXICO LINE

Location—Three hundred feet south of the Colorado-New Mexico line at Hill Ranch, three miles north of Pendleton, New Mexico.

Records Available—February 19, 1920, to September 30, 1932.

Gage—Automatic recording gage.

Accuracy—Records considered good.

CHERRY CREEK AT MOUTH NEAR RED MESA

Location—In Sec. 7, T. 33 N., R. 12 W., at bridge one-half mile above mouth.

Records Available—March 21, 1928, to September 30, 1932.

Gage—Automatic recording gage.

Accuracy—Records considered good.

MANCOS RIVER NEAR MANCOS

Location—In Sec. 23, T. 36 N., R. 13 W., N. M. P. M., just below the junction of the middle and west forks of Mancos River and two miles east of town of Mancos.

Records Available—October 1, 1931, to September 30, 1932.

Gage—Automatic recording gage.

Accuracy—Records considered good.

MANCOS RIVER NEAR TOWAOC

Location—At Mancos River Trading Post in Sec. 15, T. 32 S., R. 18 W. N. M. P. M.

Records Available—February 1, 1921, to September 30, 1932.

Gage—Automatic recording gage.

Accuracy—Records considered fair.

Discharge of San Juan River at Rosa, N. M., for Year Ending Sept. 30, 1931.
Drainage Area, 2,044 Square Miles. Altitude 6,000 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	347	176	120	120	140	137	437	1440	2830	1450	800	150
2....	305	171	120	120	150	128	661	1420	2670	1100	365	160
3....	245	171	120	120	180	137	814	1600	2910	900	329	170
4....	214	171	140	120	230	149	598	2280	2910	1200	353	170
5....	199	176	140	120	230	204	548	1980	2510	1100	460	160
6....	190	171	140	120	220	167	643	1740	2590	800	570	160
7....	181	162	140	120	200	204	935	1850	2670	600	680	150
8....	176	158	140	120	190	209	1130	2100	2750	500	598	150
9....	171	158	140	120	190	224	1110	1880	2510	450	616	160
10....	171	153	140	120	190	145	1050	1620	2210	410	625	170
11....	323	153	130	120	210	158	1180	1420	1840	398	572	170
12....	493	153	130	120	270	185	1310	1400	1870	378	516	170
13....	353	145	130	120	310	235	1280	1590	1980	347	430	180
14....	329	149	130	120	330	235	1260	1980	1910	305	360	350
15....	305	181	130	120	320	240	1210	2280	1830	266	330	500
16....	294	158	130	110	290	272	1130	2670	1800	261	310	600
17....	278	181	140	110	240	335	1050	2910	1740	294	323	560
18....	261	272	140	110	199	417	1050	3240	1520	347	372	530
19....	250	240	140	110	190	479	1210	3070	1370	410	372	800
20....	245	190	130	110	167	465	1350	2280	1150	400	384	1100
21....	240	180	130	100	171	437	1280	1830	970	320	323	1000
22....	235	170	130	100	158	493	1180	1520	900	250	230	940
23....	224	160	130	100	153	589	1280	1600	840	220	230	920
24....	224	150	130	100	141	493	1390	2020	820	210	150	1500
25....	214	150	130	100	137	532	1350	2590	780	200	130	1400
26....	204	150	130	109	145	451	1270	2750	740	210	120	1060
27....	199	150	130	110	141	391	1070	2510	680	240	120	979
28....	185	150	130	120	149	359	1300	2100	625	240	120	770
29....	185	150	130	120	....	378	1500	2120	589	240	120	730
30....	181	150	130	130	....	391	1500	2440	670	280	120	700
31....	176	....	130	130	....	365	....	2670	....	500	130	....
Total	7597	5049	4100	3569	5641	9604	33076	64900	51184	14826	11158	16559
Mean.	245	168	132	115	201	310	1100	2090	1710	478	360	552
Max...	493	272	....	....	330	589	1500	3240	2910	1450	800	1500
Min...	171	....	....	....	137	128	437	1400	589	200	120	150
Acre-ft.	15100	10000	8130	7080	11200	19000	65600	129000	102000	29400	22100	32800

Discharge of San Juan River at Rosa, N. M., for Year Ending Sept. 30, 1932.
Drainage Area, 2,044 Square Miles. Altitude 6,000 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept
1....	800	330	280	250	350	2400	3500	2700	5130	3460	1770	851
2....	1250	320	270	250	350	2400	4500	3620	5130	3540	1410	738
3....	1560	300	280	250	350	2400	6000	4300	5130	3380	1150	650
4....	1400	290	290	250	350	2400	5600	4750	4570	3300	990	575
5....	1250	270	300	250	350	2400	6000	4940	4120	3200	950	520
6....	1050	260	290	250	450	1300	5800	4840	3540	2980	820	494
7....	960	250	280	250	450	1300	4300	4040	3300	2600	740	494
8....	880	250	280	262	450	1300	4400	3960	3620	2400	660	501
9....	840	260	270	250	450	1300	4700	4480	4040	2300	620	457
10....	880	360	260	250	450	1300	4200	4480	4390	2300	580	451
11....	800	480	250	250	800	1300	4500	4840	4480	2500	554	420
12....	680	600	250	250	800	1300	5100	5330	4660	3060	508	390
13....	640	500	250	250	800	1300	6000	5960	5330	3140	463	360
14....	560	440	250	250	800	1300	6800	6410	5740	3060	445	330
15....	530	380	250	250	800	1300	5740	5740	5740	2040	494	300
16....	480	390	230	250	800	1300	6890	6650	5960	1970	527	270
17....	440	400	230	250	800	1300	7400	6650	5530	1770	650	260
18....	410	380	230	250	800	2800	6410	7140	5130	1640	642	250
19....	450	360	230	250	800	2800	6180	7930	4750	2040	642	250
20....	520	300	230	250	800	2800	6180	7930	4840	1600	806	245
21....	570	250	250	250	1200	2360	5130	6650	4840	1390	1340	240
22....	520	200	250	250	1200	1700	5130	7660	5130	1270	970	235
23....	490	220	250	250	1200	1700	4500	8200	5740	1220	1170	240
24....	450	250	250	250	1200	1700	4000	6890	5530	1130	806	290
25....	420	320	250	250	1200	2600	3500	6890	5130	1160	762	457
26....	400	400	220	250	1600	2600	3200	5960	4940	1030	603	445
27....	384	350	220	250	1600	1800	3000	5330	4570	950	1070	344
28....	370	300	220	250	1600	1800	2900	5530	4390	1100	2390	306
29....	360	290	220	250	1600	2100	3100	5960	3960	1900	2180	285
30....	340	280	220	250	....	2100	2800	6410	3780	2110	1310	270
31....	330	....	220	250	....	2100	....	5330	....	2390	1010	....
Total	20954	9980	7770	7762	24100	58560	147460	177500	143140	67930	29032	11918
Mean.	676	333	251	250	841	1890	4920	5730	4770	2190	937	397
Max...	1560	600	300	....	....	....	7400	8200	5960	3540	2390	851
Min...	330	200	....	....	....	....	2800	2700	3300	950	445	235
Acre-ft.	41600	19800	15400	15400	48400	116000	292000	352000	284000	135000	57600	23600

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of San Juan River at Shiprock, N. M., for Year Ending Sept. 30, 1931.
Drainage Area .... Square Miles. Altitude .... Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	500	530	610	500	600	535	920	2160	6230	6230	5000	90
2....	535	520	570	500	680	560	1200	2380	5840	5840	3650	140
3....	728	520	600	500	760	560	1350	2840	5650	6040	1270	180
4....	600	510	630	500	825	598	1300	3240	6040	3080	714	180
5....	570	550	640	500	962	700	1200	3420	5840	3710	660	130
6....	530	570	650	500	1110	622	1300	3850	4800	2500	3200	120
7....	500	560	660	500	754	580	1500	3700	5460	2000	3140	110
8....	480	540	687	500	687	535	1900	3750	5650	1700	1850	130
9....	470	530	610	500	660	524	2000	3850	5650	1650	1810	140
10....	550	530	530	500	640	687	1550	3910	4620	1400	1850	119
11....	600	520	530	500	570	648	1950	3840	4070	950	1690	86
12....	728	510	530	500	700	754	2100	3360	3270	900	1200	113
13....	1030	530	530	500	800	795	1850	3110	3710	750	994	149
14....	1080	550	530	500	915	795	2150	3240	3800	700	500	610
15....	810	570	530	500	994	840	1640	3610	3600	550	450	610
16....	754	570	530	500	945	782	1710	4420	3700	350	400	855
17....	700	600	530	500	795	750	1850	5020	3650	300	478	1620
18....	660	795	530	500	782	800	1830	6230	3350	470	360	1200
19....	630	825	530	500	660	1000	1780	5840	2900	600	728	994
20....	600	962	530	500	610	1050	1900	5650	2700	450	795	2130
21....	580	930	530	500	635	950	1950	4480	2300	350	610	3360
22....	600	687	530	500	660	900	2000	3520	2100	300	524	2130
23....	680	570	530	500	648	1100	1830	3680	2000	250	300	1810
24....	600	530	530	500	512	1250	2000	3710	1800	230	250	1350
25....	550	540	530	500	520	1350	2130	4520	1800	250	200	2490
26....	530	540	530	500	530	1400	2110	5280	1800	300	120	3240
27....	520	560	530	500	548	1250	1880	5650	1800	119	110	2580
28....	520	600	530	500	610	1000	1730	4210	1800	215	100	2490
29....	540	650	530	500	....	920	2270	3390	4380	390	100	2130
30....	550	660	530	500	....	930	2270	3490	4950	1800	100	2110
31....	540	....	530	500	....	940	....	4310	....	1700	100	....
Total	19265	18059	17317	15500	20112	26105	53150	123660	115260	46074	33253	33396
Mean.	621	602	559	500	718	842	1770	3990	3840	1490	1070	1110
Max...	1080	962	....	....	1110	1400	2270	6230	6230	6230	5000	3360
Min...	470	510	....	....	512	524	920	2160	1800	119	100	90
Acre-ft.	38200	35800	34300	30700	39900	51800	105000	245000	229000	91400	66000	66200

Discharge of San Juan River Near Bluff, Utah, for Year Ending Sept. 30, 1931.
Drainage Area .... Square Miles. Altitude .... Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	1190	460	652	300	1200	526	680	2590	3890	2070	2550	148
2....	715	449	659	300	1240	520	673	2350	4590	3020	3480	113
3....	427	438	638	300	1180	490	606	2530	5400	3610	3150	176
4....	508	432	593	300	995	466	659	2830	4820	4740	1170	117
5....	550	449	556	300	950	416	846	3150	5640	3340	680	82
6....	508	449	574	300	1090	427	959	3480	5560	3410	432	62
7....	484	460	574	300	1170	478	846	3080	4460	2350	1930	95
8....	484	490	562	300	1050	508	782	2770	4590	1740	1290	133
9....	484	484	562	300	822	508	806	2890	5240	1430	1160	88
10....	400	466	574	300	752	466	1010	3280	5560	1140	1050	161
11....	427	484	586	300	738	405	1190	3150	4440	918	1060	89
12....	438	460	586	300	673	416	1120	2770	3890	775	1120	66
13....	490	454	586	300	854	438	1080	2350	3220	619	822	82
14....	606	427	612	300	1010	478	1270	2180	3340	526	632	124
15....	775	466	574	300	1220	544	1390	2290	3410	460	508	1560
16....	673	454	568	350	1560	580	1430	2830	3220	380	454	2180
17....	645	514	520	350	1290	580	1410	4030	3220	258	680	918
18....	600	730	466	350	1040	568	1550	4820	3150	309	562	1820
19....	574	830	227	350	830	612	1440	4740	3020	380	606	3450
20....	593	806	173	350	708	680	1290	5400	2590	176	318	2120
21....	568	752	206	350	666	768	1300	5000	2240	213	632	1850
22....	556	673	170	350	659	745	1560	4100	1960	460	490	3340
23....	532	687	113	350	701	708	1670	3280	1856	314	514	2240
24....	544	632	150	350	652	659	1660	2710	1630	186	270	3960
25....	556	626	150	350	693	760	1820	2710	1500	143	176	2530
26....	496	606	150	350	532	1220	2020	3410	1490	104	153	2410
27....	496	580	150	350	526	968	2180	4520	1480	99	135	2890
28....	496	600	150	350	544	934	2350	5000	1360	83	128	2180
29....	484	612	175	400	....	708	2070	4240	1360	1020	111	2020
30....	484	638	200	450	....	738	2240	3340	1900	870	95	1690
31....	460	....	250	500	....	694	....	3220	....	910	108	....
Total	17243	16608	12706	10400	25345	19008	39907	105040	100020	36053	26466	38694
Mean.	556	554	410	335	905	613	1330	3390	3330	1160	854	1290
Acre-ft.	34200	33000	25200	20600	50300	37700	79100	208000	198000	71300	52500	76800

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of San Juan River Near Bluff, Utah, for Year Ending Sept. 30, 1932.
Drainage Area .... Square Miles. Altitude .... Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	1440	872	925	674	508	4230	5160	4680	11700	7500	4680	4230
2....	5800	850	720	469	649	4530	4530	4680	9350	7140	4680	3380
3....	6120	720	625	565	858	5320	6460	5000	9350	7140	3660	2860
4....	6120	707	344	668	1220	4230	8220	6120	9730	6460	2990	2490
5....	5160	707	249	595	1220	2920	8590	7320	9350	6120	2310	2080
6....	3520	700	220	583	850	2310	8970	8220	8040	6120	2030	1870
7....	2730	688	300	553	1060	1980	8970	8400	7140	5480	1720	1620
8....	2310	694	400	643	10500	1920	7680	7500	5960	4840	1480	1350
9....	1980	1100	553	776	15700	2310	6630	6460	5480	4230	1300	1300
10....	1720	1440	589	748	11900	3250	7320	6630	6120	3940	1220	1220
11....	3660	1100	1670	694	8220	3250	6970	7500	7140	3940	1010	1060
12....	2250	4080	1350	681	5480	2990	7140	8040	7860	3940	880	996
13....	1820	4380	902	835	3520	2250	8220	8780	8220	4680	769	932
14....	1620	2730	643	762	3060	2030	9350	10300	9540	5320	707	850
15....	1480	1580	480	583	2550	1820	10500	11500	11100	5160	655	805
16....	1350	1220	339	524	2490	1980	10100	11500	11700	4530	547	776
17....	1260	1020	294	571	2250	2490	10100	11700	11700	3940	688	734
18....	1220	940	228	458	2030	2920	11300	12900	11700	3660	940	707
19....	1870	988	298	513	1720	3250	11100	13700	10500	3520	1100	668
20....	6800	910	380	513	3520	4080	9920	15300	9730	3060	3180	619
21....	4849	940	447	480	2670	5800	10100	15300	9350	3250	8040	553
22....	3940	1020	607	535	2670	5800	9730	14700	9540	2800	9160	541
23....	1620	902	842	571	2430	4080	8780	14100	9540	2370	4680	910
24....	1260	688	980	607	2490	3120	8220	16100	9920	2140	3250	3380
25....	1140	245	1260	625	2430	2610	6630	15300	10900	1980	3060	4840
26....	1100	192	1220	625	2430	3120	5480	14500	10500	1980	2490	2310
27....	1060	217	1140	553	3060	4530	5480	13300	10500	2080	3520	2250
28....	996	269	1060	452	3380	3940	5480	10700	9730	1920	4230	1400
29....	964	812	1350	294	3660	3180	5160	9350	8780	1870	16500	1180
30....	902	1350	1480	145	....	3660	5000	10700	7860	4230	10900	948
31....	880	....	1060	425	....	4080	....	12500	....	3520	5800	....
Total	78932	34061	22955	17720	104525	103980	237290	322780	278030	128860	108176	48859
Mean.	2550	1140	740	572	3600	3350	7910	10400	9270	4160	3490	1630
A.-ft.	157000	67800	45500	35200	207000	206000	471000	640000	552000	256000	215000	97000

Discharge of Pine River Near Bayfield for Year Ending Sept. 30, 1931.
Drainage Area, 284 Square Miles. Altitude, 7,500 Feet Above Sea Level.

Day	Oct.	Nov.	Dec	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	158	90	84	....	....	56	76	295	1200	810	376	107
2....	153	87	83	....	....	56	84	329	1140	578	285	122
3....	138	85	75	....	....	56	87	335	1170	700	237	109
4....	137	85	....	....	....	57	85	373	1150	826	209	96
5....	128	85	....	....	....	56	93	379	992	569	194	96
6....	126	84	....	....	....	57	105	395	1090	466	292	104
7....	122	81	....	....	....	60	128	455	1140	395	269	112
8....	119	80	....	....	....	62	142	515	1160	349	298	107
9....	119	78	....	....	....	63	138	466	974	317	264	99
10....	119	78	....	....	....	61	140	408	866	292	234	98
11....	174	78	57	....	....	62	156	367	772	274	211	133
12....	164	77	57	....	....	61	174	367	878	254	192	131
13....	164	76	....	....	....	63	184	455	920	232	182	142
14....	158	81	....	....	....	64	186	612	843	209	164	156
15....	155	78	....	....	....	65	196	700	896	200	151	323
16....	151	76	....	....	....	65	196	890	890	207	149	285
17....	144	83	....	....	....	66	194	926	826	194	158	227
18....	142	85	....	....	....	67	200	1110	735	205	176	218
19....	138	76	....	....	....	71	239	896	662	252	160	312
20....	137	73	....	....	....	70	277	667	599	220	142	484
21....	129	72	....	....	....	72	269	531	561	192	135	373
22....	124	76	....	....	....	78	272	473	504	174	129	340
23....	121	71	....	....	....	80	279	626	523	165	124	303
24....	118	73	....	....	....	77	279	777	500	156	117	488
25....	110	76	....	....	....	81	266	962	500	153	109	496
26....	109	73	....	....	....	72	252	1000	488	165	101	382
27....	102	80	....	....	....	73	249	764	459	180	96	379
28....	101	80	....	....	....	73	249	617	766	176	90	338
29....	96	73	....	42	....	70	246	755	755	180	85	309
30....	93	80	....	....	....	67	254	950	832	239	91	282
31....	93	....	....	....	....	69	....	1080	....	441	91	....
Total	4042	2370	....	....	....	2050	5695	19472	24791	9770	5511	7152
Mean.	130	79.0	55	42	46	66.1	190	628	826	315	178	238
Max..	174	90	....	....	....	81	279	1110	1200	826	376	496
Min..	93	71	....	....	....	56	76	295	459	153	85	96
Acre-ft	7990	4700	3380	2580	2550	4060	11300	38600	49200	19400	10900	14200

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of Pine River Near Bayfield for Year Ending Sept. 30, 1932.
Drainage Area, 284 Square Miles. Altitude, 7,500 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	262	160	....	....	....	104	250	464	1680	1130	710	669
2....	434	146	....	....	....	104	345	612	1780	1100	588	526
3....	705	147	....	....	....	115	370	779	1800	1100	500	464
4....	544	140	....	....	....	120	390	931	1440	1090	433	408
5....	445	140	....	....	....	130	439	1030	1240	966	393	362
6....	379	137	....	....	....	130	380	1010	1060	914	448	328
7....	335	138	....	....	....	131	300	868	948	829	321	318
8....	301	135	....	....	....	124	340	880	1060	796	299	281
9....	282	119	....	....	....	123	380	1030	1260	790	275	242
10....	340	124	....	....	....	123	401	1040	1410	779	255	234
11....	301	109	....	....	....	124	441	1050	1520	891	242	218
12....	274	102	....	....	....	137	539	1250	1740	1120	236	206
13....	259	97	....	....	....	140	664	1550	1960	885	208	193
14....	266	104	....	....	....	130	768	1620	2000	846	206	184
15....	272	105	....	....	....	126	747	1540	1970	715	234	176
16....	269	93	....	....	....	130	891	1880	2020	669	226	165
17....	266	104	....	....	....	130	1040	2040	1880	635	231	159
18....	254	99	....	....	....	135	931	2330	1800	612	312	154
19....	230	104	....	....	....	155	966	2320	1650	758	362	150
20....	207	100	....	....	....	165	1020	1930	1740	597	880	146
21....	196	100	....	....	....	160	902	2060	1730	530	868	142
22....	192	100	116	....	....	145	801	2320	1710	500	752	141
23....	188	100	....	76	....	144	679	2440	1800	476	630	163
24....	186	100	....	....	....	144	593	2430	1720	522	548	174
25....	180	100	....	....	....	146	534	2360	1800	480	476	206
26....	176	100	....	....	....	148	513	1930	1690	408	437	184
27....	178	100	....	....	99	167	500	1830	1470	408	1730	165
28....	176	100	....	....	113	165	456	2020	1350	536	1300	154
29....	173	100	....	....	106	163	441	2170	1320	891	1100	146
30....	176	100	....	....	....	184	433	2170	1180	960	900	144
31....	169	....	....	....	....	188	....	1660	....	846	802	....
Total	8615	3403	....	....	....	4331	17448	49544	47728	23779	16802	7205
Mean.	278	113	108	96	90	140	582	1600	1590	767	542	240
Max...	705	160	....	....	....	188	1040	2440	2020	1130	1730	669
Min...	169	....	....	....	....	104	....	464	948	408	206	142
Acre-ft.	17100	6720	6640	5900	5180	8610	34600	98400	94600	47200	33300	14300

Discharge of Pine River Near Ignacio for Year Ending Sept. 30, 1931.
Drainage Area, 450 Square Miles. Altitude, 6,480 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	17	63	94	80	70	30	116	333	934	874	104	10
2....	21	62	94	80	70	26	132	374	792	468	34	10
3....	19	59	93	80	70	35	131	419	824	346	22	11
4....	15	58	100	80	70	50	122	538	857	840	17	9
5....	13	55	108	80	70	60	120	589	657	451	18	8
6....	24	53	112	80	70	69	127	502	760	268	27	10
7....	46	55	112	80	70	66	140	538	857	174	34	11
8....	46	56	110	80	70	64	159	615	925	122	38	10
9....	40	56	108	70	70	62	164	550	1160	91	42	9
10....	44	56	104	70	70	62	154	445	508	58	51	8
11....	69	58	102	70	80	65	152	369	346	49	44	12
12....	84	59	100	70	80	71	190	342	408	43	42	11
13....	71	58	98	70	80	76	211	374	484	39	33	15
14....	74	59	98	70	80	60	220	514	414	27	24	21
15....	76	62	98	70	80	72	226	602	434	19	21	58
16....	87	60	102	70	60	79	230	816	440	15	19	87
17....	89	66	108	60	60	86	237	832	403	15	18	46
18....	87	87	112	60	60	91	223	1090	316	14	22	38
19....	84	89	100	60	60	95	237	984	254	14	27	66
20....	82	86	100	60	60	93	284	678	193	15	25	280
21....	79	87	100	60	50	95	291	473	144	13	25	208
22....	80	91	100	60	50	98	291	342	104	10	22	171
23....	77	96	100	60	50	100	280	398	95	8	23	140
24....	63	96	100	60	50	96	337	570	82	8	23	220
25....	72	95	100	60	50	102	342	792	77	8	18	351
26....	76	93	90	48	50	98	320	840	76	9	15	217
27....	76	95	90	60	50	93	303	563	63	10	11	208
28....	69	95	90	60	50	86	312	333	247	11	11	171
29....	69	95	90	60	....	95	326	355	365	12	10	152
30....	68	94	90	60	....	93	308	520	596	15	9	129
31....	66	....	90	60	....	95	....	692	....	60	9	....
Total	1883	2194	3093	2088	1800	2363	6680	17382	13815	4106	838	2697
Mean.	60.7	73.1	99.8	67.4	64.3	76.2	223	561	460	132	27.0	89.9
Max...	89	96	....	....	....	102	342	1090	1160	874	104	351
Min...	13	53	....	....	....	26	116	333	63	8	9	8
Acre-ft.	3730	4350	6130	4140	3570	4690	13200	34500	27400	8140	1660	5350

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of Pine River Near Ignacio for Year Ending Sept. 30, 1932.
Drainage Area, 450 Square Miles. Altitude, 6,480 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	120	116	150	100	120	337	602	608	1480	857	93	520
2....	199	112	140	100	120	346	784	752	1590	832	77	398
3....	643	106	139	100	120	312	891	925	1670	857	71	324
4....	445	100	140	100	150	261	908	1110	1200	824	68	280
5....	365	95	150	100	150	214	993	1230	968	745	63	230
6....	337	93	140	100	150	226	916	1210	768	608	62	196
7....	287	91	130	100	150	233	730	1050	622	538	52	174
8....	247	89	120	99	150	265	784	993	650	484	40	152
9....	226	106	110	100	150	308	792	1090	792	434	37	138
10....	268	104	100	100	150	308	776	1090	1020	408	32	133
11....	257	122	100	100	150	268	808	1130	1140	450	27	116
12....	226	129	100	100	150	233	908	1190	1470	650	20	104
13....	211	118	100	100	150	230	1150	1590	1730	664	15	89
14....	193	114	100	100	150	281	1190	1730	1920	556	15	87
15....	188	100	100	100	150	291	1140	1510	1730	502	15	76
16....	190	95	80	100	150	337	1280	1920	1920	424	15	71
17....	177	98	80	100	150	393	1500	2040	1670	280	16	69
18....	169	87	80	100	150	456	1320	2390	1580	240	25	69
19....	180	82	80	100	150	608	1320	2460	1380	211	44	68
20....	196	87	80	100	150	722	1380	1980	1480	174	459	60
21....	196	80	100	100	150	526	1220	1920	1490	147	708	59
22....	188	70	100	100	159	408	1150	2540	1480	122	636	59
23....	177	80	100	100	160	303	1000	2690	1610	104	484	60
24....	166	90	100	100	159	329	866	2690	1590	104	393	79
25....	159	150	100	100	180	468	730	2690	1670	98	308	93
26....	147	200	80	100	200	502	730	2040	1730	93	265	82
27....	144	180	80	100	214	403	700	1790	1370	89	2170	72
28....	140	170	80	100	291	445	664	1980	1200	84	2690	69
29....	144	160	80	100	316	520	615	2180	1150	110	1370	65
30....	142	150	80	100	....	429	608	2320	950	120	1010	65
31....	122	....	80	100	....	473	....	1530	....	149	692	....
Total	6849	3374	3199	3099	4739	11415	28455	52358	41020	11958	11972	4057
Mean.	221	112	103	100	163	368	948	1690	1370	386	386	135
Max...	643	200	150	....	316	722	1500	2690	1920	857	2690	520
Min...	120	70	....	....	....	214	602	608	622	84	15	59
Acre-ft.	13600	6690	6350	6150	9400	22600	56400	104000	81400	23700	23700	8050

Discharge of Animas River at Durango for Year Ending Sept. 30, 1931.
Drainage Area, 694 Square Miles. Altitude, 6,550 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	363	226	174	....	131	132	151	408	1810	1440	694	214
2....	326	226	177	....	130	132	151	461	1720	1120	558	226
3....	296	217	177	....	130	138	152	485	1840	968	444	220
4....	276	220	172	....	130	138	154	539	1890	1000	392	214
5....	268	220	172	....	132	132	158	602	1480	840	354	220
6....	257	211	179	185	133	132	160	602	1590	715	527	211
7....	257	211	182	....	136	132	172	708	1770	641	602	202
8....	257	214	....	....	136	126	179	825	1840	564	564	202
9....	250	205	....	....	132	126	184	743	1550	521	539	205
10....	250	205	....	....	133	126	184	661	1380	467	473	208
11....	313	202	....	....	138	138	205	570	1110	439	439	208
12....	349	199	....	....	138	158	226	545	1230	408	408	220
13....	313	196	....	....	138	141	243	652	1480	378	368	236
14....	326	199	....	....	145	145	240	864	1350	335	326	253
15....	318	214	....	....	156	145	246	1020	1450	322	309	300
16....	300	208	....	....	141	145	253	1230	1570	300	284	423
17....	288	205	....	....	138	145	250	1280	1530	309	288	344
18....	280	236	....	....	138	145	257	1610	1310	313	309	313
19....	272	229	....	....	132	149	300	1340	1220	326	309	349
20....	268	205	....	....	138	138	335	1030	1140	322	280	496
21....	268	196	....	....	132	138	335	810	1080	300	264	467
22....	264	202	....	....	132	144	340	711	960	280	256	418
23....	260	196	....	....	128	141	354	880	984	260	250	402
24....	257	184	....	....	136	144	344	1020	992	250	233	450
25....	257	182	....	....	138	151	349	1490	936	243	223	622
26....	257	184	....	....	132	149	335	1590	968	246	220	539
27....	243	177	....	....	132	145	326	1260	960	284	217	552
28....	240	177	....	....	132	146	344	976	1090	284	214	490
29....	233	184	....	....	....	149	340	1000	1250	284	211	496
30....	223	184	....	....	....	146	354	1270	1570	392	208	456
31....	223	....	....	....	....	149	....	1550	....	615	205	....
Total	8552	6114	....	....	3787	4348	7621	28732	41050	15166	10968	10156
Mean.	276	204	170	158	135	140	254	927	1370	489	354	338
Max...	363	236	....	....	156	151	354	1610	1890	1440	694	622
Min...	223	177	....	....	128	126	151	408	936	243	205	202
Acre-ft.	17000	12100	10500	9720	7500	8610	15100	57000	81500	30100	21800	20100

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of Animas River at Durango for Year Ending Sept. 30, 1932.
Drainage Area, 694 Square Miles. Altitude, 6,550 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	467	223	....	....	....	316	535	1010	3150	2560	1450	1020
2....	479	220	....	....	....	316	762	1470	3300	2430	1240	851
3....	968	220	....	....	....	300	896	1850	3440	2280	1040	746
4....	856	220	....	....	....	277	959	2120	3040	2470	923	653
5....	701	214	....	....	....	268	1110	2230	2720	2390	842	582
6....	628	214	....	....	....	268	995	2050	2260	2060	762	548
7....	558	217	....	....	....	274	788	1810	1970	1850	690	548
8....	502	214	....	....	....	296	762	1700	2170	1760	646	497
9....	456	214	....	....	....	340	842	1880	2520	1650	589	448
10....	479	214	....	....	....	370	869	2000	2960	1700	542	430
11....	439	211	....	....	....	345	968	2050	3070	1900	516	408
12....	392	226	....	....	....	330	1180	2510	3450	2140	472	375
13....	368	223	....	....	....	308	1450	3180	3910	2030	442	370
14....	344	208	....	180	....	312	1700	3830	4370	1790	419	370
15....	318	191	....	....	....	325	1520	3180	4280	1610	430	350
16....	313	205	....	....	....	340	1740	3640	4260	1490	436	325
17....	309	214	....	....	....	340	2060	3910	4600	1470	436	316
18....	300	194	210	....	....	345	1840	4420	3760	1400	604	308
19....	304	186	....	....	....	419	1860	4560	3380	1420	616	292
20....	326	189	....	....	....	542	1980	3970	3520	1300	860	288
21....	322	205	....	....	....	510	1790	3830	3680	1170	941	274
22....	292	205	....	....	....	436	1560	4750	3720	1060	968	265
23....	276	186	....	....	....	386	1310	5040	3630	1050	824	265
24....	288	180	....	....	....	375	1130	4700	3520	1020	815	330
25....	284	170	....	....	207	468	986	4650	3940	959	860	345
26....	276	170	....	....	210	454	1010	3940	3920	878	815	320
27....	268	170	....	....	224	419	1050	3140	3300	815	2330	316
28....	250	170	....	....	250	408	968	3420	2840	1040	3480	312
29....	240	170	....	....	284	472	896	3910	2900	1130	2220	296
30....	236	170	....	....	....	478	860	4260	2610	1240	1720	280
31....	233	....	....	....	....	454	....	3360	....	1590	1270	....
Total	12472	6013	....	....	....	11431	36376	98370	99590	49652	30198	12728
Mean.	402	200	190	180	193	369	1210	3170	3320	1600	974	424
Max...	968	226	....	....	....	542	2060	5040	4370	2560	3480	1020
Min...	233	....	....	....	....	268	535	1010	1970	815	419	265
Acre-ft.	24700	11900	11700	11100	11100	22700	72000	196000	198000	98400	59900	25200

Discharge of Big Cascade Creek Near Tacoma for Year Ending Sept. 30, 1931.
Drainage Area, 26.8 Square Miles. Altitude, 8,853 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Aprii	May	June	July	Aug.	Sept
1....	17	12	9.3	8.2	8.2	8.2	8.2	18	180	71	36	18
2....	15	12	9.3	8.2	8.2	8.2	8.2	20	182	60	25	16
3....	12	12	9.3	8.2	8.2	8.2	8.2	20	184	56	20	15
4....	11	11	9.3	8.2	8.2	8.2	8.2	22	150	52	17	12
5....	10	10	9.3	8.2	8.2	8.2	8.2	23	148	39	26	14
6....	11	10	9.3	8.2	8.2	8.2	8.2	31	158	33	68	15
7....	16	10	9.3	8.2	8.2	8.2	8.2	50	158	31	56	13
8....	16	10	9.3	8.2	8.2	8.2	8.2	56	137	26	50	12
9....	14	10	9.3	8.2	8.2	8.2	8.2	44	131	24	39	12
10....	14	10	9.3	8.2	8.2	8.2	8.2	36	99	23	36	12
11....	16	10	9.3	8.2	8.2	8.2	15	32	101	21	28	17
12....	22	10	9.3	8.2	8.2	8.2	15	41	120	20	28	19
13....	18	10	9.3	8.2	8.2	8.2	15	66	107	19	24	20
14....	17	10	9.3	8.2	8.2	8.2	15	88	106	18	23	20
15....	17	10	9.3	8.2	8.2	8.2	15	100	123	18	21	53
16....	16	10	9.3	8.2	8.2	8.2	13	99	114	17	24	28
17....	16	10	9.3	8.2	8.2	8.2	12	110	95	17	27	24
18....	15	9.3	9.3	8.2	8.2	8.2	14	131	80	24	26	22
19....	14	9.3	9.3	8.2	8.2	8.2	20	110	74	21	22	45
20....	14	9.3	9.3	8.2	8.2	8.2	21	68	80	18	19	36
21....	14	9.3	9.3	8.2	8.2	8.2	23	56	60	16	17	27
22....	13	9.3	9.3	8.2	8.2	8.2	24	66	67	16	18	25
23....	13	9.3	9.3	8.2	8.2	8.2	20	95	69	15	16	39
24....	13	9.3	9.3	8.2	8.2	8.2	19	120	66	14	15	31
25....	13	9.3	9.3	8.2	8.2	8.2	15	146	66	14	15	27
26....	13	9.3	9.3	8.2	8.2	8.2	15	133	66	20	14	29
27....	13	9.3	9.3	8.2	8.2	8.2	12	95	60	24	14	25
28....	12	9.3	9.3	8.2	8.2	8.2	10	83	77	20	13	28
29....	12	9.3	9.3	8.2	....	8.2	11	103	72	18	12	25
30....	12	9.3	9.3	8.2	....	8.2	14	152	93	21	16	23
31....	12	....	9.3	8.2	....	8.2	....	176	....	43	18	....
Total	441	298	288	254	230	254	398	2390	3222	829	783	702
Mean.	14.2	9.93	9.3	8.2	8.2	8.2	13.3	77.1	107	26.7	25.2	23.4
Max..	22	12	9.3	8.2	8.2	8.2	24	176	184	71	68	53
Min...	10	9.3	9.3	8.2	8.2	8.2	8.2	18	60	14	12	12
Acre-ft.	873	591	572	504	455	504	791	4740	6370	1640	1550	1390

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of Big Cascade Creek Near Tacoma for Year Ending Sept. 30, 1932. Drainage Area, 26.8 Square Miles. Altitude, 8,853 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	21	13	5.5	5.5	5.5	5.5	5.5	37	250	150	26	24
2....	81	13	5.5	5.5	55.	5.5	5.5	50	250	112	28	22
3....	101	11	5.5	5.5	5.5	5.5	5.5	58	226	103	31	22
4....	71	11	5.5	5.5	5.5	5.5	5.5	69	164	103	31	22
5....	55	9.8	5.5	5.5	5.5	5.5	6.3	65	144	94	28	22
6....	44	9.8	5.5	5.5	5.5	5.5	6.3	61	118	78	28	22
7....	34	8.9	5.5	5.5	5.5	5.5	7.1	57	135	70	26	22
8....	33	8.9	5.5	5.5	5.5	5.5	20	56	166	70	26	29
9....	31	8.0	5.5	5.5	5.5	5.5	14	52	253	63	24	20
10....	31	8.0	5.5	5.5	5.5	5.5	33	64	314	55	24	20
11....	26	6.3	5.5	5.5	5.5	5.5	32	102	362	55	24	20
12....	22	7.1	5.5	5.5	5.5	5.5	38	194	413	66	22	18
13....	21	8.0	5.5	5.5	5.5	5.5	44	220	457	82	22	18
14....	18	8.9	5.5	5.5	5.5	5.5	38	196	444	70	22	18
15....	18	8.0	5.5	5.5	5.5	5.5	45	205	438	59	22	18
16....	17	8.0	5.5	5.5	5.5	5.5	58	238	407	44	22	18
17....	15	7.1	5.5	5.5	5.5	5.5	53	285	376	35	24	17
18....	17	7.1	5.5	5.5	5.5	5.5	55	301	370	32	24	17
19....	18	7.1	5.5	5.5	5.5	5.5	63	300	350	30	22	17
20....	18	7.1	5.5	5.5	5.5	5.5	61	308	357	30	29	17
21....	18	8.0	5.5	5.5	5.5	5.5	49	348	330	30	48	17
22....	17	6.3	5.5	5.5	5.5	5.5	34	367	308	27	45	16
23....	15	6.3	5.5	5.5	5.5	5.5	24	373	268	24	31	16
24....	15	6.3	5.5	5.5	5.5	5.5	24	386	259	24	26	16
25....	14	6.3	5.5	5.5	5.5	5.5	27	348	250	24	24	16
26....	14	6.3	5.5	5.5	5.5	5.5	25	300	226	22	24	14
27....	12	6.3	5.5	5.5	5.5	5.5	27	309	211	23	376	14
28....	11	6.3	5.5	5.5	5.5	5.5	22	378	192	26	189	14
29....	13	5.5	5.5	5.5	5.5	5.5	25	418	164	26	78	13
30....	12	5.5	5.5	5.5	....	5.5	27	377	154	103	30	13
31....	12	....	5.5	5.5	....	5.5	....	292	....	112	24	....
Total	845	239	170	170	160	170	880	6814	8356	1842	1400	543
Mean.	27.2	7.97	5.5	5.5	5.5	5.5	29.3	220	278	59.4	45.2	18.1
Max...	101	13	5.5	5.5	5.5	5.5	63	418	457	150	376	24
Min...	11	5.5	5.5	5.5	5.5	5.5	5.5	37	118	22	22	13
Acre-ft.	1670	474	338	338	316	338	1740	13500	16500	3650	2780	1080

Discharge of Florida River Near Durango for Year Ending September 30, 1931. Drainage Area, 96 Square Miles. Altitude, 7,300 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	26	15	....	....	....	....	16	57	395	220	89	28
2....	22	15	....	....	....	....	19	60	395	145	58	28
3....	20	13	....	....	....	....	22	67	408	183	47	25
4....	19	12	....	....	....	....	25	79	381	223	45	28
5....	18	12	....	....	....	....	25	77	347	147	50	26
6....	19	14	....	....	....	....	25	77	402	109	54	28
7....	19	13	....	....	....	....	25	87	415	84	50	34
8....	18	14	....	....	....	....	26	96	395	69	60	27
9....	17	14	....	....	....	....	25	98	334	58	62	25
10....	16	13	....	....	....	....	28	92	283	52	65	25
11....	30	12	....	....	....	....	31	87	277	48	61	32
12....	25	10	10	....	....	8	33	93	320	43	54	33
13....	23	10	....	....	....	....	35	118	306	40	47	33
14....	22	10	....	....	....	....	35	160	271	36	40	35
15....	20	10	....	....	....	....	35	183	262	33	35	69
16....	20	11	....	....	....	....	33	207	256	32	34	62
17....	18	10	....	....	....	....	37	207	223	32	38	49
18....	18	10	....	....	....	....	42	253	190	35	54	50
19....	18	10	....	....	....	....	43	234	165	41	42	68
20....	18	10	....	....	....	....	40	180	143	35	36	128
21....	16	10	....	....	....	....	40	143	128	32	37	92
22....	15	10	....	....	....	....	41	134	109	31	35	80
23....	16	10	....	....	....	....	51	207	105	29	33	74
24....	16	10	....	....	....	....	52	268	93	28	31	103
25....	18	10	....	....	....	....	53	340	98	29	28	98
26....	20	10	....	....	....	....	54	320	87	31	25	100
27....	19	10	....	....	....	....	53	256	81	31	23	114
28....	18	10	....	....	....	....	56	195	120	28	22	87
29....	18	10	....	3.0	....	....	57	236	160	28	20	77
30....	16	10	....	....	....	....	56	347	250	39	22	69
31....	15	....	....	....	....	....	....	398	....	76	23	....
Total	583	338	....	....	....	....	1113	5356	7399	2047	1320	1727
Mean.	18.8	11.3	8.0	5.0	5.0	9.0	37.1	173	247	66.0	42.6	57.6
Max...	26	15	....	....	....	....	57	398	415	223	89	128
Min...	15	....	....	....	....	....	16	57	81	28	20	25
Acre-ft.	1160	672	492	307	278	553	2210	10600	14700	4060	2620	3430

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of Florida River Near Durango for Year Ending September 30, 1932.
Drainage Area, 96 Square Miles. Altitude, 7,300 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept
1....	64	27	....	....	....	....	126	205	627	295	143	130
2....	119	24	....	....	....	....	169	254	658	295	115	105
3....	218	22	....	....	....	....	180	301	607	280	96	93
4....	171	22	....	....	....	....	185	351	464	251	79	83
5....	128	21	....	....	....	....	208	380	383	224	68	73
6....	105	21	....	....	....	....	176	351	314	192	59	68
7....	93	21	....	....	....	....	145	314	317	164	52	64
8....	82	20	....	....	....	....	156	295	418	147	49	57
9....	72	22	....	....	....	....	169	305	512	141	44	51
10....	86	20	....	....	....	....	169	324	540	143	43	49
11....	70	26	....	....	....	....	195	334	531	152	39	46
12....	62	26	....	....	....	....	243	358	632	202	34	42
13....	56	24	....	....	....	....	289	455	728	200	32	41
14....	51	21	....	....	....	....	305	481	767	169	30	42
15....	48	21	....	....	....	....	292	451	756	154	33	38
16....	46	23	....	....	....	41	327	559	723	141	40	35
17....	43	21	....	....	....	47	361	612	638	132	42	35
18....	40	20	....	....	....	59	330	723	583	117	56	33
19....	42	20	....	....	....	83	354	762	526	122	63	31
20....	51	20	....	....	....	99	372	632	550	105	143	32
21....	48	19	....	....	....	73	330	679	535	87	210	32
22....	42	19	....	....	....	67	283	860	535	96	178	30
23....	42	19	14	6	....	57	248	884	612	100	135	31
24....	40	18	....	....	....	62	215	896	598	87	143	51
25....	37	18	....	....	....	77	198	854	593	83	119	50
26....	34	18	....	....	....	83	208	648	504	77	115	41
27....	30	18	....	....	....	71	198	531	418	71	1340	38
28....	30	18	....	....	....	79	178	638	365	77	593	38
29....	28	18	....	....	....	92	174	723	351	119	351	35
30....	26	18	....	....	....	83	183	734	311	174	237	33
31....	28	....	....	....	....	90	....	573	....	192	169	....
Total	2032	625	....	....	....	....	6966	16467	16096	4789	4850	1527
Mean.	65.5	20.8	15.0	8.0	15.0	48.6	232	531	536	154	156	50.9
Max...	218	27	....	....	....	....	372	896	767	295	1340	130
Min...	26	....	....	....	....	....	126	205	311	71	30	30
Acre-ft.	4030	1240	922	492	863	2990	13800	32600	31900	9470	9590	3030

Discharge of Lightner Creek Near Durango for Year Ending September 30, 1931.
Drainage Area, 64 Square Miles. Altitude, 6,700 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	1	1	....	....	....	1	3	36	23	6	8	6
2....	1	1	....	....	....	1	5	40	23	6	6	5
3....	1	1	....	....	....	1	2	50	23	23	5	4
4....	1	1	....	....	....	2	2	52	23	12	4	4
5....	1	1	....	....	....	2	3	56	23	10	4	4
6....	1	1	....	....	....	2	3	56	21	10	7	4
7....	1	1	....	....	....	1	5	61	20	10	7	4
8....	1	1	....	....	....	1	6	61	20	9	7	4
9....	1	1	....	....	....	1	7	61	18	7	6	4
10....	1	1	....	....	....	1	9	52	16	7	5	3
11....	1	1	....	....	....	1	12	50	14	6	5	4
13....	2	1	....	....	....	2	14	47	12	5	7	4
13....	2	1	....	....	....	2	15	50	11	4	16	3
14....	2	1	....	....	....	2	14	53	10	3	14	4
15....	1	1	....	....	....	2	15	56	8	3	11	14
16....	1	1	....	....	....	3	14	50	7	2	11	6
17....	1	1	....	....	....	5	14	50	7	2	11	4
18....	1	1	....	....	....	4	14	50	7	2	9	5
19....	1	1	....	....	....	3	13	46	7	2	9	7
20....	1	1	....	....	....	2	14	38	7	2	9	10
21....	1	1	....	....	1	2	16	31	6	2	10	8
22....	1	1	....	....	1	2	16	27	6	2	9	7
23....	1	1	....	....	1	2	23	27	6	2	9	7
24....	1	1	....	....	1	3	27	31	6	2	8	7
25....	1	1	....	....	1	5	32	36	4	2	7	7
26....	1	1	....	....	1	3	29	36	4	2	7	7
27....	1	1	....	....	1	2	29	31	4	3	4	7
28....	1	1	....	....	1	2	31	25	4	4	4	6
29....	1	1	....	....	....	2	34	23	5	4	4	6
30....	1	1	....	....	....	2	34	23	6	7	4	6
31....	1	....	....	....	....	2	....	23	....	11	5	....
Total	34	30	....	....	....	66	455	1328	351	172	232	171
Mean.	1.09	1.00	1.00	1.00	1.00	2.13	15.2	42.9	11.7	5.55	7.49	5.70
Max...	2	1	....	....	....	5	34	61	23	23	16	14
Min...	1	1	....	....	....	1	2	23	4	2	4	3
Acre-ft.	67	60	61	61	56	131	904	2640	696	341	461	339

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of Lightner Creek Near Durango for Year Ending September 30, 1932.
Drainage Area, 64 Square Miles. Altitude, 6,700 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	5	4	....	....	....	23	187	78	44	14	6	22
2....	9	4	....	....	....	36	219	88	40	15	6	19
3....	12	4	....	....	....	36	216	99	40	15	5	17
4....	7	4	....	....	....	35	210	110	36	12	5	16
5....	5	4	....	....	....	35	216	110	30	12	4	14
6....	5	4	....	....	....	29	158	99	25	12	3	12
7....	5	4	....	....	....	44	123	88	23	10	3	12
8....	5	4	....	....	....	51	126	88	23	10	3	12
9....	5	4	....	....	....	57	126	88	23	9	3	11
10....	5	4	....	....	....	44	126	88	25	8	3	11
11....	5	5	....	....	....	34	139	88	25	12	3	10
12....	5	5	....	....	....	35	178	88	24	15	3	10
13....	5	5	....	....	....	36	203	99	26	12	3	10
14....	5	5	....	....	....	32	210	110	28	11	3	9
15....	5	3	....	....	....	35	190	110	27	9	3	7
16....	5	3	....	....	....	46	190	123	24	9	3	7
17....	5	4	....	....	....	68	194	123	23	8	3	7
18....	5	3	....	....	....	99	174	118	22	6	4	6
19....	5	4	....	....	....	136	181	110	21	6	5	6
20....	5	4	....	....	....	142	174	101	21	5	4	6
21....	5	3	....	....	....	110	139	106	21	4	3	5
22....	5	3	....	....	....	95	113	108	21	4	6	5
23....	5	3	....	....	....	84	101	99	25	4	6	5
24....	5	3	....	....	....	110	90	90	23	3	5	6
25....	4	3	....	....	....	168	84	80	23	3	5	7
26....	4	3	....	....	9	162	70	72	23	3	5	6
27....	4	3	....	....	12	158	70	66	19	3	103	5
28....	4	3	....	....	17	162	70	66	19	4	72	5
29....	4	3	....	....	20	165	70	65	15	4	51	4
30....	4	3	....	....	....	136	72	60	12	6	37	4
31....	4	....	....	....	....	162	....	51	....	6	27	....
Total	161	111	....	....	....	2565	4419	2869	751	254	395	276
Mean.	5.19	3.70	2.0	2.0	4.0	82.7	147	92.5	25.0	8.19	12.7	9.20
Max...	12	5	....	....	....	168	219	123	44	15	103	22
Min...	4	....	....	....	....	23	70	51	12	3	3	4
Acre-ft.	312	220	123	123	230	5080	8750	5690	1490	504	781	547

Discharge of La Plata River at Hesperus for Year Ending September 30, 1931.
Drainage Area, 37 Square Miles. Altitude, 8,100 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	10	6	7	....	....	....	7	31	100	45	64	7
2....	7	6	6	....	....	....	8	40	74	31	30	6
3....	6	6	6	....	....	....	12	47	70	38	20	6
4....	6	6	7	....	....	4	12	58	67	33	16	7
5....	6	6	6	...	4	....	12	60	52	26	15	7
6....	6	6	7	....	....	....	13	65	62	21	26	10
7....	6	6	7	....	....	....	14	95	65	18	18	22
8....	6	6	8	....	....	....	14	118	56	17	16	17
9....	7	6	6	....	....	....	14	92	43	16	14	14
10....	7	6	....	....	....	....	16	80	33	16	12	13
11....	7	6	....	....	....	....	16	67	33	16	12	14
12....	6	6	....	....	....	....	17	70	63	15	10	13
13....	6	6	....	....	....	....	21	95	58	13	7	12
14....	7	6	....	....	....	....	22	123	52	13	7	17
15....	7	6	....	....	....	....	22	123	54	13	7	63
16....	8	6	....	....	....	5	24	126	52	14	8	36
17....	8	7	....	....	....	....	27	123	45	14	13	28
18....	7	8	....	....	....	....	27	134	42	17	15	28
19....	6	6	....	....	....	....	31	110	42	23	13	38
20....	6	6	....	....	....	....	43	80	33	20	12	40
21....	6	6	....	....	....	....	42	56	36	16	12	31
22....	6	6	....	....	....	....	40	45	33	13	11	27
23....	6	6	....	....	....	....	45	82	36	12	10	27
24....	6	6	....	....	....	....	40	105	35	12	9	27
25....	6	6	....	....	....	....	36	137	36	12	9	26
26....	6	6	....	....	....	....	36	113	35	31	8	27
27....	6	7	....	....	....	....	33	90	30	42	7	28
28....	6	7	....	....	....	....	35	84	30	27	7	27
29....	6	6	....	....	....	....	33	90	35	24	8	24
30....	6	6	....	....	....	....	31	105	49	26	10	22
31....	6	....	....	....	....	....	....	115	....	63	9	....
Total	204	185	....	....	....	....	743	2759	1452	697	435	664
Mean	6.48	6.17	6.0	4.0	4.0	5.0	24.8	89.0	48.4	22.5	14.0	22.1
Max...	10	8	....	....	....	....	45	137	100	63	64	63
Min...	6	6	....	....	....	....	7	31	30	12	7	6
Acre-ft.	398	367	369	246	222	307	1480	5470	2880	1380	861	1320

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of La Plata River at Hesperus for Year Ending September 30, 1932. Drainage Area, 37 Square Miles. Altitude, 8,100 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	20	8	....	....	....	8	89	81	190	57	19	68
2....	41	8	....	....	....	8	128	106	166	86	15	57
3....	66	8	....	....	....	8	142	138	148	73	13	44
4....	50	10	....	....	....	9	152	170	109	68	12	39
5....	37	10	....	....	....	11	166	170	75	61	11	30
6....	30	11	....	....	....	11	131	159	57	48	11	22
7....	26	13	....	....	....	11	109	142	46	46	8	19
8....	22	15	....	....	....	11	109	145	68	44	9	19
9....	22	19	....	....	....	11	112	159	97	44	9	19
10....	22	19	....	....	....	11	152	170	131	44	10	19
11....	22	19	....	....	....	9	162	155	135	55	10	19
12....	20	19	....	....	....	11	198	170	155	66	9	19
13....	17	19	....	....	....	19	242	211	174	55	9	19
14....	16	10	....	....	....	14	270	228	166	46	8	19
15....	13	7	....	....	....	13	224	233	166	44	7	17
16....	13	6	....	....	....	14	246	348	152	44	7	16
17....	12	6	....	....	....	14	265	389	135	46	9	16
18....	11	6	....	....	....	15	211	406	128	41	24	16
19....	13	6	....	....	....	24	211	360	119	35	23	13
20....	17	6	....	....	....	17	220	256	112	30	27	12
21....	17	6	....	....	....	22	190	289	103	30	30	12
22....	16	6	....	9	....	24	155	448	103	26	34	12
23....	14	6	....	....	....	30	131	418	122	22	27	13
24....	14	6	....	....	....	29	100	466	106	19	27	13
25....	16	6	....	....	....	32	89	418	103	16	34	13
26....	17	6	8	....	....	29	92	237	84	14	30	12
27....	14	6	....	....	....	34	89	194	73	17	325	11
28....	13	6	....	....	....	39	81	206	66	26	194	11
29....	15	6	....	....	....	50	81	237	61	27	148	12
30....	9	6	....	....	....	48	81	237	57	23	112	13
31....	9	....	....	....	....	55	....	186	....	20	84	....
Total	644	285	....	....	....	641	4628	7532	3407	1273	1299	624
Mean.	20.8	9.50	7.0	9.0	9.0	20.7	154	243	114	41.1	41.9	20.8
Max...	66	19	....	....	....	55	270	466	190	86	325	68
Min...	9	....	....	....	....	8	81	81	46	14	7	11
Acre-ft.	1280	565	430	553	518	1270	9160	14900	6780	2530	2580	1240

Discharge of La Plata River at Colo.-New Mex. Line for Year Ending September 30, 1931. Drainage Area .... Square Miles. Altitude, 6,000 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	16	11	14	....	....	14	18	5	87	54	2	1
2....	14	11	13	....	....	14	18	5	8	31	2	1
3....	13	11	13	....	....	14	13	6	3	55	1	1
4....	11	11	13	....	....	14	12	7	3	9	5	1
5....	10	11	13	....	16	16	12	24	3	6	35	2
6....	10	11	12	....	....	14	12	40	3	5	35	1
7....	10	12	13	....	....	15	11	50	2	4	5	1
8....	10	14	12	....	....	14	10	79	2	6	4	1
9....	10	11	13	....	....	16	8	62	2	9	2	1
10....	11	11	13	....	....	14	7	45	2	6	2	1
11....	11	12	13	....	....	14	6	33	2	5	2	2
12....	10	12	13	....	....	18	5	28	6	5	2	1
13....	10	12	11	....	....	21	6	35	34	6	2	3
14....	10	13	....	....	....	19	5	47	34	6	2	3
15....	10	13	....	....	....	18	6	39	31	6	2	5
16....	10	13	....	....	....	24	5	49	30	5	3	2
17....	10	14	....	....	....	33	5	33	27	5	44	2
18....	10	20	....	....	....	34	5	44	20	6	5	2
19....	10	16	....	....	....	27	5	50	18	5	2	11
20....	11	16	....	....	....	18	5	34	16	5	2	5
21....	11	26	....	....	....	19	5	26	15	5	41	3
22....	11	22	....	....	....	18	5	19	14	5	6	2
23....	11	27	....	....	....	16	6	62	12	5	3	2
24....	12	27	....	....	....	14	6	84	14	4	2	2
25....	12	26	....	....	....	18	5	115	15	4	2	2
26....	11	24	....	....	....	15	5	104	14	4	1	2
27....	11	15	....	....	....	13	5	68	15	4	1	2
28....	11	14	....	....	....	18	5	80	24	4	1	2
29....	11	14	....	....	....	18	6	74	53	4	1	2
30....	11	14	13	....	....	15	5	88	53	24	1	2
31....	12	....	....	....	....	14	....	94	....	27	1	....
Total	341	464	....	....	....	549	227	1529	562	329	219	68
Mean.	11.0	15.5	13.0	15.0	16.0	17.7	7.57	49.3	18.7	10.6	7.06	2.27
Max...	16	27	....	....	....	34	18	115	87	55	44	11
Min...	10	11	....	....	....	13	5	5	2	4	1	1
Acre-ft.	676	922	799	922	889	1090	450	3030	1110	652	434	135

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of La Plata River at Colo.-New Mex. Line for Year Ending September 30, 1932.
Drainage Area .... Square Miles. Altitude, 6,000 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1	2	6	....	....	....	42	130	47	36	45	15	14
2	27	6	....	....	....	39	194	44	32	42	13	12
3	21	6	....	....	....	34	214	49	25	21	12	10
4	5	5	....	....	....	23	224	64	20	17	12	9
5	4	5	....	....	....	23	263	73	22	14	12	9
6	3	5	....	....	....	25	214	67	22	14	11	9
7	4	5	....	....	....	27	166	55	26	12	11	11
8	3	5	....	....	....	28	161	48	22	9	11	11
9	20	9	....	....	....	33	159	43	44	8	10	9
10	9	7	....	....	....	43	144	46	63	7	9	8
11	8	11	....	....	....	29	178	56	56	10	9	8
12	8	15	....	....	....	29	205	54	49	58	9	7
13	8	12	....	....	....	29	222	74	58	70	7	6
14	8	9	....	....	....	33	236	122	56	59	7	6
15	7	8	....	....	....	32	174	128	42	52	8	6
16	7	8	....	....	....	33	182	182	29	41	8	6
17	7	8	....	....	21	35	207	185	15	42	9	6
18	7	7	....	....	15	44	161	224	20	42	11	7
19	6	8	....	....	16	53	144	209	62	35	23	7
20	10	11	....	....	24	92	144	154	62	32	20	7
21	9	10	....	....	21	79	116	119	66	27	47	6
22	8	10	....	....	23	63	108	214	66	14	6	6
23	8	10	....	....	27	68	75	216	94	8	6	8
24	7	10	....	....	29	85	61	198	110	8	33	57
25	7	9	....	14	30	130	50	175	100	9	42	92
26	7	9	11	....	31	127	46	125	72	7	7	34
27	7	9	....	....	33	89	49	93	53	8	142	20
28	7	9	....	....	33	102	49	89	47	32	168	11
29	7	9	....	....	38	146	44	88	38	22	87	10
30	7	9	....	....	....	104	57	80	42	51	46	10
31	6	....	....	....	....	105	....	44	....	23	21	....
Total	254	250	....	....	....	1834	4377	3365	1449	839	832	422
Mean.	8.19	8.33	10.0	14.0	21.0	59.2	146	109	48.3	27.1	26.8	14.1
Max...	27	15	....	....	....	146	263	224	110	70	168	92
Min...	2	5	....	....	....	23	44	43	15	7	6	6
Acre-ft.	504	496	615	861	1210	3640	8690	6700	2870	1670	1650	839

Discharge of Cherry Creek at Mouth Near Red Mesa for Year Ending Sept. 30, 1931.
Drainage Area .... Square Miles. Altitude, 6,490 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1	4	1	....	....	....	2	3	1	1	0	0	0
2	1	1	....	....	....	2	6	1	1	0	0	0
3	1	1	....	....	....	2	4	1	1	0	0	0
4	1	....	....	....	....	2	3	1	1	0	0	0
5	1	....	....	....	....	2	2	6	1	0	0	0
6	1	....	....	....	....	3	2	8	0	0	0	0
7	1	....	....	....	....	9	3	6	0	0	0	0
8	1	....	....	....	....	7	4	8	0	0	0	0
9	1	....	....	....	....	6	4	6	0	0	0	0
10	1	....	....	....	....	3	3	7	0	0	0	0
11	1	....	....	....	....	2	3	8	0	0	0	0
12	1	....	....	....	....	3	3	8	0	0	0	0
13	1	....	....	....	....	6	3	8	0	0	0	0
14	1	....	....	....	....	6	3	8	0	0	0	0
15	1	....	....	....	....	7	2	7	0	0	0	0
16	1	....	....	....	....	16	1	7	0	0	0	0
17	1	....	....	....	....	20	1	6	0	0	4	0
18	1	....	....	....	....	22	1	6	0	0	0	0
19	1	....	....	....	....	15	1	6	0	0	0	0
20	1	....	....	....	....	7	1	4	0	0	0	0
21	1	....	....	....	....	9	1	3	0	0	0	0
22	1	....	....	....	....	8	1	2	0	0	0	0
23	1	....	....	....	....	5	1	2	0	0	0	0
24	1	....	....	....	....	4	1	3	0	0	0	0
25	1	....	....	....	....	5	1	3	0	0	0	0
26	1	....	....	....	....	4	1	3	0	0	0	0
27	1	....	....	....	....	5	1	3	0	0	0	0
28	1	....	....	....	....	2	1	3	0	0	0	0
29	1	....	....	....	....	3	1	2	1	0	0	0
30	1	....	....	....	....	2	1	2	1	2	0	0
31	1	....	....	....	....	2	....	2	....	1	0	0
Total	34	....	....	....	....	191	63	111	7	3	4	0
Mean	1.10	1.0	1.0	1.0	1.0	6.16	2.10	4.55	....	....	....	0
Max...	4	....	....	....	....	22	6	8	1	2	4	0
Min...	1	....	....	....	....	2	1	1	....	....	....	0
Acre-ft.	68	60	61	61	56	379	125	280	14	6	8	0

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of Cherry Creek at Mouth Near Red Mesa for Year Ending Sept. 30, 1932.
Drainage Area .... Square Miles. Altitude, 6,490 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	....	....	....	....	....	....	65	55	6	21	6	7
2....	....	....	....	....	....	....	90	52	6	22	4	7
3....	0.5	....	....	....	....	....	90	55	5	21	4	7
4....	....	....	....	....	....	....	90	61	5	20	4	7
5....	....	....	....	....	....	....	108	70	4	18	4	7
6....	....	....	....	....	....	....	85	70	4	18	3	4
7....	....	....	....	....	....	2	65	64	4	20	3	5
8....	....	....	....	....	....	....	61	52	4	18	3	5
9....	....	....	....	....	....	....	65	48	3	14	3	4
10....	....	....	....	....	....	....	61	48	3	13	2	4
11....	....	....	....	....	....	....	85	45	3	13	2	4
12....	....	....	....	....	....	....	83	45	3	15	2	4
13....	....	....	....	....	....	....	83	46	3	15	1	4
14....	....	....	....	....	....	....	102	47	4	14	1	4
15....	....	....	....	....	....	....	106	47	4	12	1	4
16....	....	....	....	....	....	....	96	48	4	10	1	4
17....	....	....	....	....	....	....	102	48	4	9	1	3
18....	....	....	....	....	....	....	99	52	4	9	1	3
19....	....	....	....	....	....	....	90	45	4	9	12	3
20....	....	2	....	..	....	...	90	40	4	8	3	3
21....	....	....	....	....	....	27	88	37	5	7	3	3
22....	....	....	....	....	....	28	88	30	5	4	3	3
23....	....	....	....	....	....	20	80	28	8	4	2	3
24....	....	....	....	....	....	23	70	28	21	4	2	6
25....	2.0	....	....	....	....	39	58	26	18	3	2	7
26....	....	....	....	....	....	27	58	24	18	3	2	13
27....	....	....	....	....	....	22	55	20	18	3	9	8
28....	....	....	....	....	....	36	45	14	16	3	20	4
29....	....	....	....	....	....	53	45	11	22	5	14	2
30....	....	....	....	....	....	39	64	6	24	7	9	2
31....	....	....	....	....	....	39	....	6	....	8	9	....
Total	....	....	....	....	....	....	2367	1268	236	350	136	144
Mean.	1.0	2.0	2.0	1.0	2.0	15	78.9	40.9	7.87	11.3	4.39	4.80
Max...	....	....	....	.. .	....	53	108	70	24	22	20	13
Min...	....	....	....	....	....	2	45	6	3	3	1	2
Acre-ft.	61	119	123	61	115	922	4690	2510	468	695	270	286

Discharge of Mancos River Near Mancos for Year Ending Sept. 30, 1932.
Drainage Area, 73 Square Miles. Altitude, 7,140 Feet Above Sea Level

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	12	7	....	....	....	....	113	149	153	98	24	34
2....	39	7	....	....	....	....	153	166	153	151	25	24
3....	72	7	....	....	....	....	164	186	144	118	23	19
4....	49	6	....	....	....	....	176	213	121	110	18	16
5....	35	5	....	....	....	....	176	236	98	98	16	19
6....	29	4	....	....	....	....	133	213	83	87	16	21
7....	28	5	....	....	....	....	108	188	87	76	14	19
8....	24	5	....	....	....	....	110	186	107	64	10	14
9....	20	6	....	....	....	....	115	196	128	58	9	12
10....	29	6	....	....	....	....	126	236	140	54	9	12
11....	25	6	....	....	....	....	149	243	142	59	8	10
12....	21	6	....	....	....	....	202	288	148	57	6	8
13....	19	5	....	....	....	....	246	329	166	53	5	7
14....	19	4	....	....	....	....	278	357	176	39	5	6
15....	16	3	....	....	....	....	248	393	176	35	6	6
16....	14	4	....	....	....	....	304	390	174	33	8	6
17....	14	4	....	....	....	....	318	340	164	38	16	6
18....	14	3	....	....	....	....	288	329	144	34	42	5
19....	15	3	....	....	....	24	304	307	135	34	47	4
20....	15	3	....	....	....	....	301	258	137	30	68	4
21....	17	3	4.5	....	....	....	258	270	139	22	54	3
22....	17	3	....	4.6	....	....	198	340	137	17	41	3
23....	16	3	....	....	6.2	....	166	309	168	19	31	7
24....	16	3	....	....	....	....	142	285	155	28	28	13
25....	14	4	....	....	....	....	135	272	153	20	32	12
26....	13	5	....	....	....	....	144	220	132	17	26	11
27....	12	7	....	....	....	....	128	180	116	17	207	10
28....	10	7	....	....	....	72	113	209	112	29	140	9
29....	10	7	....	....	....	72	118	222	102	37	87	7
30....	9	5	....	....	....	60	151	215	98	31	58	7
31....	8	....	....	....	....	96	....	157	....	28	45	....
Total	651	146	....	....	....	....	5563	7882	4088	1591	1124	334
Mean.	21.0	4.87	4.50	4.60	6.20	28.0	185	254	136	51.3	36.3	11.1
Max...	72	....	....	....	....	....	318	393	176	151	207	34
Min...	....	....	....	....	....	....	108	149	83	17	5	....
Acre-ft.	1290	290	277	283	357	1720	11000	15600	8090	3150	2230	660

Unless otherwise noted, all discharges are in cubic feet per second.

Discharge of Mancos River Near Towaoc for Year Ending Sept. 30, 1931.
Drainage Area .... Square Miles. Altitude, 6,000 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	2	3	7	....	....	14	15	21	2	5	6	0
2....	2	3	8	....	....	14	16	21	1	2	5	0
3....	2	3	8	....	....	14	15	31	0	2	0	0
4....	2	3	8	....	....	24	14	32	0	2	0	0
5....	2	3	8	....	....	22	14	38	0	1	0	0
6....	2	3	9	....	....	20	14	36	0	0	0	0
7....	2	3	11	....	....	13	14	34	0	0	0	2
8....	2	3	11	....	....	12	14	32	0	0	0	2
9....	2	4	14	....	....	11	15	32	0	0	0	2
10....	2	4	16	....	....	14	16	32	0	0	0	1
11....	2	4	21	....	....	15	17	32	0	0	0	5
12....	3	4	18	....	18	17	17	30	0	0	0	0
13....	3	4	18	....	20	18	18	28	0	0	0	0
14....	3	4	16	....	18	18	18	32	0	0	0	2
15....	3	4	16	....	22	16	18	33	0	0	0	106
16....	3	4	....	....	23	17	16	28	0	0	0	12
17....	3	5	....	....	18	20	18	30	0	0	0	6
18....	3	9	....	....	14	20	20	28	0	0	0	77
19....	3	10	....	....	16	21	21	30	0	0	2	14
20....	3	8	....	....	14	22	21	22	0	0	1	7
21....	3	6	....	....	14	18	22	15	0	0	0	6
22....	3	7	....	....	11	18	22	12	0	0	0	5
23....	3	6	....	....	11	17	21	10	0	0	0	4
24....	3	7	....	....	11	16	22	8	0	0	0	4
25....	3	6	....	....	12	20	20	7	0	0	0	3
26....	3	6	....	....	15	18	21	6	6	0	0	4
27....	3	8	....	....	15	15	20	5	2	0	0	3
28....	3	10	....	....	15	14	19	6	1	292	0	3
29....	3	7	....	....	....	15	20	6	....	581	0	3
30....	3	6	....	....	....	15	20	5	....	24	0	1
31....	3	....	....	....	....	14	....	5	....	15	0	....
Total	82	157	....	....	....	522	538	687	12	924	14	267
Mean.	2.64	5.23	12.0	12.0	15.0	16.8	17.9	22.2	....	29.8	0.452	8.90
Max...	3	10	....	....	....	24	22	38	6	581	6	106
Min...	2	3	....	....	....	11	14	5	0	0	0	0
Acre-ft.	162	311	738	738	833	1030	1060	1360	24	1830	28	530

Discharge of Mancos River Near Towaoc for Year Ending Sept. 30, 1932.
Drainage Area .... Square Miles. Altitude, 6,000 Feet Above Sea Level.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1....	2	4	....	....	....	....	132	262	147	60	17	60
2....	72	4	....	....	....	....	192	262	140	187	7	60
3....	52	4	....	....	....	....	224	256	128	126	4	57
4....	7	4	....	....	....	....	229	264	108	108	3	48
5....	4	4	....	....	....	....	251	278	106	99	2	43
6....	5	4	....	....	....	68	212	264	99	83	2	42
7....	5	4	....	....	220	....	165	232	79	68	2	38
8....	4	4	....	....	240	....	160	214	60	58	1	30
9....	4	9	....	....	202	....	171	206	56	48	1	28
10....	4	12	....	....	110	....	165	270	54	42	1	25
11....	4	21	....	....	76	....	187	301	58	45	1	20
12....	3	48	....	....	60	87	237	326	57	33	1	15
13....	3	17	....	....	54	....	290	385	54	32	1	12
14....	3	13	....	....	60	68	332	406	66	32	1	12
15....	3	8	....	....	60	68	281	409	68	25	1	10
16....	3	7	....	....	60	....	290	451	62	24	1	6
17....	4	6	....	....	47	....	332	460	65	18	19	4
18....	4	6	....	....	47	....	304	442	56	13	27	4
19....	180	6	....	....	54	132	304	421	52	6	52	2
20....	42	5	....	13	60	165	318	364	47	6	380	2
21....	9	5	8	....	60	132	306	332	47	5	71	2
22....	4	5	....	....	68	103	278	349	48	2	56	4
23....	3	5	....	....	60	99	237	355	47	2	30	8
24....	3	5	....	....	60	105	224	334	88	2	24	39
25....	3	5	....	....	68	145	197	323	88	2	11	45
26....	3	5	....	....	98	138	204	290	81	2	13	36
27....	3	5	....	....	98	108	194	237	81	2	30	20
28....	3	5	....	....	123	101	176	202	63	2	380	21
29....	4	5	....	....	137	136	185	204	57	126	160	14
30....	4	5	....	....	....	120	262	206	56	42	93	11
31....	4	....	....	....	....	105	....	185	....	35	69	....
Total	451	240	....	....	....	....	7039	9490	2218	1335	1461	718
Mean.	14.5	8.0	7	13	91	98	235	306	73.9	43.1	47.1	23.9
Max..	180	48	....	....	240	165	332	460	147	187	380	60
Min...	2	....	....	....	....	....	132	185	47	2	1	2
Acre-ft.	892	476	430	799	5230	6030	14000	18800	4400	2650	2900	1420

Unless otherwise noted, all discharges are in cubic feet per second.

CHAPTER VII

ANNUAL REPORTS

OF

IRRIGATION DIVISION ENGINEERS

FOR

1931-1932

ANNUAL REPORT OF IRRIGATION DIVISION NO. 1 FOR THE SEASON OF 1931

Denver, Colorado,
November 30, 1931.

M. C. Hinderlider,
State Engineer,
Capitol Building,
Denver, Colorado.

Dear Sir:

The past season in many respects was the most remarkable of which we have records. Anticipating the necessity of a full and detailed report, questionnaires were sent to all water commissioners requesting specific data in reference to their district.

As water was being diverted for direct irrigation in nearly all districts during the week ending November 21st, only two reports from the water commissioners in the Division have been received to date. Specific instructions were sent to the commissioners to include in their reports all diversions for direct irrigation.

The first use of water for direct irrigation was reported during the week ending April 11th, which compares with the average year; and the first demand for direct irrigation to supply a shortage was made on April 21st, to supply priority of date October 1, 1888, in District No. 1. To supply this demand, all storage was ordered stopped. However, due to low temperatures and storms, storage was again permitted on April 23d, and continued in some districts until May 14th; since which time no water has been available for storage until November 21st, when an order was issued to store in reservoirs senior to April 1, 1902.

So far as the writer has been able to determine, with one exception (1919) this is the only year when water was not available for storage during the June run-off, or at some time during the irrigation season, owing to precipitation during July and August. As above stated, first storage was permitted on November 21st, which is about 30 days later than in the average season.

Owing to the anticipated shortage for storage, the agreement among the various reservoir owners which has been followed the past few years, to permit storage in the upper reaches of the drainage, regardless of priority, has not been consummated, and so far this year orders are to store only in order of priority.

The order again issued this year, to supply all decreed demands for direct irrigation before permitting storage, brought the usual flood of complaints. Special investigation of each com-

plaint was made, to see that the water demanded was needed and beneficially applied. Owing to the dry weather, late irrigation was necessary, especially to alfalfa.

The amount of water in storage at the beginning of the season varied to some extent throughout the division. In Districts 1 and 2 the amount was slightly above normal, 105%; in District 3, 90%; District 4, 80%; District 5, 80%; District 6, 80%; Districts 7-8-9 and 23, about 90%; and in District 64, 90%.

The snowfall varied from 50% of normal in the Poudre drainage, to normal in the upper reaches of the Platte River.

Almost a total lack of rainfall during the growing season, together with excess in temperature, retarded the crops throughout the division. In Districts 1 and 2 there was practically no precipitation between June 10th and October 15th, with the exception of two hailstorms on June 24th and August 16th, which did considerable damage.

A comparison of the records shows a greater excess of temperature over a longer period during the growing season than for any year since 1881.

The normal amount of snowfall in the upper reaches of the Platte was reflected in the delivery of water to senior appropriations in Districts Nos. 8 and 2; while the deficiency on the tributary drainages, together with a lack of precipitation, was shown in the delivery to the most senior appropriators.

In District No. 23, South Park, for almost the first time, conflicts existed between senior and junior appropriators, i.e., the senior appropriators were shorted, due to juniors above diverting the supply. Some improvement in administration in this district is being made each year. However, a few years like the past, in which some users demand service, would be of material assistance. The hay crop was below normal, but of excellent quality.

In District No. 8, during September, demand was made for the City Ditch for water to supply its 1860 priority, which is No. 1 in the district, and the earliest priority in Districts 8-2-1 and 64. So far as the records disclose, this is the first time such demand has been made; that is, when there was not sufficient water in the river to supply this priority.

Districts Nos. 9 and 7, Bear Creek and Clear Creek, suffered less than any districts in the division through lack of water.

In nearly every season, water is passed from Clear Creek to supply senior appropriators on the Platte. However, this year the total supply was absorbed by senior appropriators, and no water was available at any time for Platte River priorities; except, of course, the return seepage.

In District No. 6 there was a shortage to supply No. 1 priority on Boulder Creek of date October 1, 1859, and for the first time priority No. 2 was closed to supply this demand. The water

commissioner hesitated to make this change, as it had never been done before, but was ordered to enforce the order by the writer.

In District No. 3, for a considerable period, there was only sufficient water to supply Priority No. 7, of date September 1, 1862. The present water commissioner reports this to be the lowest he has ever known.

In District No. 64, the lower end of the Platte River, there were five ditches usually supplied from return seepage, that did not receive any water after May 15th.

It is estimated that reservoir water saved at least 50% of the crops in the division. In one district this is estimated as high as 80%.

In some instances, under ditches without reservoir water, the crop yield was reduced 60%.

Respectfully submitted,

C. C. HEZMALHALCH,
Deputy State Engineer.

IRRIGATION DIVISION NO. 1
1931

AMOUNT OF WATER IN STORAGE IN ACRE FEET IN RESERVOIRS OF CAPACITY OF 1,000 ACRE FEET OR MORE ON THE FIRST OF EACH MONTH. FROM THE REPORTS OF WATER COMMISSIONERS

Dist. No.	Jan. 1	Feb. 1	Mar. 1	Apr. 1	May 1	June 1	July 1	Aug. 1	Sept. 1	Oct. 1	Nov. 1	Dec. 1
					10 Reservoirs Reported.							
1	85,412	116,718	121,639	124,889	126,581	118,290	91,060	43,589	8,873	260	80	18,015
					7 Reservoirs Reported.							
2	45,149	50,433	64,368	76,661	93,605	94,278	75,404	30,711	10,877	0	1,040	4,014
					33 Reservoirs Reported.							
3	62,798	66,185	72,039	79,152	87,296	95,756	90,711	47,132	7,671	5,929	9,172	11,471
					11 Reservoirs Reported.							
4	27,765	45,078	45,578	45,581	48,708	52,566	52,557	32,128	21,226	12,951	12,701	13,001
					9 Reservoirs Reported.							
5	13,736	14,049	14,408	15,621	17,724	21,435	21,139	11,020	6,454	4,326	4,113	4,278
					10 Reservoirs Reported.							
6	14,838	11,717	12,811	12,824	16,201	18,937	35,992	11,491	6,343	4,692	4,486	4,716
					6 Reservoirs Reported.							
7	370	340	480	1,250	1,800	4,345	3,800	2,850	1,500	800	800	800
					1 Reservoir Reported (Castlewood).							
8	2,000	2,300	2,900	3,434	3,434	3,298	1,955	746	392	350	305	305
					2 Reservoirs Reported (Harriman and Marston).							
9	15,549	15,888	17,112	17,584	18,448	18,533	15,970	14,708	15,209	15,037	16,983	15,098
					2 Reservoirs Reported (Cheesman and Antero).							
23	85,125	83,721	82,435	85,116	94,533	95,517	90,080	76,420	63,579	56,388	48,171	46,494
					3 Reservoirs Reported.							
64	58,830	71,070	81,759	93,407	100,499	84,935	54,312	33,515	7,705	1,345	5,418	14,834
Totals	411,572	477,499	515,529	555,519	608,829	607,890	532,980	304,320	149,829	102,078	103,269	133,026

IRRIGATION DIVISION NO. 1

TABULATED STATEMENT OF WATER COMMISSIONERS' ANNUAL CROP REPORTS FOR THE IRRIGATION SEASON OF 1931.
CROPS IRRIGATED FROM CANALS IN ACRES

District No.	Total No. of Acres That Can Be Irrigated (See Note) (1)	Alfalfa (2)	Natural Grasses (3)	Cereals (4)	Orchards (5)	Market Gardens (6)	Potatoes (7)
1	182,775	32,381	23,685	45,748	121	95	8,862
2	245,464	42,492	10,692	78,325	503	7,608	9,730
3	388,380	71,075	5,130	63,892	2,243	3,177	32,508
4	159,000	45,115	120	58,915	1,910	1,125	6,530
5	103,773	19,454	2,382	36,310	539	275	242
6	186,275	29,960	69,880	53,698	587	314	1,025
7	113,865	31,595	1,804	47,985	3,472	15,369	147
8	118,551	20,354	1,684	21,548	1,214	1,516	785
9	18,000	5,399	1,937	6,836	74	242	3
23			No Report Received.				
47			No Report Received.				
48	4,609	.....	*4,243	.....	.....	.....	.....
64	194,703	42,666	29,199	54,681	188	757	2,434
65	7,054	1,236	75	115	31	101	106
Totals	1,722,449	341,727	150,831	468,053	10,882	30,579	62,372

*From actual field survey by plane table during summer of 1931.

TABULATED STATEMENT OF WATER COMMISSIONERS' ANNUAL CROP REPORTS FOR THE IRRIGATION SEASON OF 1931.
CROPS IRRIGATED FROM CANALS IN ACRES

Dist. No.	(8) Sugar Beets	(9) Beans	(10) Peas	(11) Cabbage	(12) Lettuce	(13) Other Crops	(14) Total Irrigated
1	26,804	10,027	.....	40	.....	20,655	168,418
2	47,201	12,207	1,265	2,361	.....	5,094	217,478
3	60,661	3,675	1,450	1,391	.....	17,412	262,614
4	16,270	2,635	1,280	1,430	165	2,155	137,650
5	10,790	400	850	150	.....	2,050	73,442
6	10,240	1,171	987	221	.....	1,820	169,903
7	2,165	339	332	1,184	296	309	104,997
8	1,472	815	15	40	.....	1,171	50,614
9	247	40	.....	90	2	558	15,428
23			No Report Received.				
47			No Report Received.				
48	.....	.....	.....	.....	.....	.....	4,243
64	38,059	918	.....	205	.....	4,907	174,014
65	.....	16	.....	.....	.....	1,651	3,331
Totals	213,909	32,243	6,179	7,112	463	57,782	1,382,132

ANNUAL REPORT OF IRRIGATION DIVISION ENGINEER OF IRRIGATION DIVISION NO. 2 FOR 1931

Pueblo, Colorado, November 30, 1931.

M. C. Hinderlider,
State Engineer,
Denver, Colorado.

Dear Sir:

I herewith submit to you my annual report for the irrigation season of 1931.

Our farmers will date everything from the year 1931 as the most disastrous in the history of irrigated agriculture in the Arkansas Valley of Colorado.

The snowfall upon which so much depends for irrigation water during the months of May and June was below normal. The water content was 3.69 inches. The average water content for the past eighteen years is 4.19 inches. The difference between the average water content and the water content for the year 1931 does not truly represent the difference in runoff, owing to the location of the snow in the mountains. The higher mountains near Leadville, Mount Massive and others, were short of snow and the southern ranges from Salida south to Trinidad had an excess of snow which increased the water content but did not increase correspondingly the runoff to the Arkansas River.

The irrigation season opened favorably. Seasonable rains started crops off in good shape and up to June 1st everything gave promise of a good harvest. The month of June was short on rainfall and shorter on runoff from snow water. This was the first setback crops received. The months of July and August, which are the two months of heaviest rainfall, were short on rainfall and shorter on runoff. Temperatures were at normal or above. The lack of snow water runoff in June and of rainfall and runoff in July and August amounted to a drought and crops did not materialize.

For the month of June the daily average temperature was 3.2 degrees above the average. In July the average daily temperature was 0.8 degrees above the average and in August the daily temperature was slightly below normal.

The water in storage on May 1st amounted to 264,276 acre-feet. The average amount in storage on that date is 198,395 acre-feet. There was 65,833 acre-feet above the average in storage on May 1st of this year. The amount of irrigation water in storage on November 1st was 22,000 acre-feet and most of this could not be drawn off from the reservoirs. The supply of irrigation water was practically exhausted from the reservoirs on

November 1st. The average amount in storage on November 1st of each year, which is carried over to start crops in the following spring is 170,795 acre-feet. There was a shortage of 148,760 acre-feet of water on November 1st last.

Below I give a table showing the rainfall by months as compared with the average at the Pueblo station beginning with the month of November, 1930, and ending with October of the year following, 1931:

	Nov. 1930	Dec. 1930	Jan. 1931	Feb. 1931	Mar. 1931	Apr. 1931	May 1931	June 1931	July 1931	Aug. 1931	Sept. 1931	Oct. 1931
	0.44	0.13	0.12	1.11	0.41	1.02	2.58	0.60	0.86	0.83	0.72	0.13
Average	0.36	0.50	0.31	0.47	0.59	1.31	1.50	1.36	1.94	1.86	0.75	0.66

The quantities are given in inches.

The total precipitation for the past irrigation season at Pueblo station amounted to 8.95 inches. The total yearly average precipitation is 11.67 inches. The precipitation for 1931 was 2.72 inches short of the yearly average. During the growing months of June, July and August, which are the months of heaviest rainfall, the precipitation was short 2.87 inches. The high temperatures during the growing season, together with the lack of rainfall to cool down the atmosphere, had a deteriorating effect on crops and prevented the fertilization of the corn, alfalfa seed and other crops. Shortage of runoff goes with a shortage of rainfall. The total runoff at the Pueblo station of the Arkansas River for the past season amounted to 230,300 acre-feet after eliminating reservoir and trans-mountain water. The yearly average runoff over a period of thirty-six years is 567,000 acre-feet. The runoff for the 1931 season was 40% of the yearly average. The next lowest year was 1902 when the runoff amounted to 293,300 acre-feet. In 1902 there was no reservoir or trans-mountain water passed through Pueblo.

The shortage of water was felt keenly by many of the old ditches that had never been known to suffer before. During the past twenty years many of our canals have been bringing other lands under cultivation and when the water supply was curtailed the increased demand caused by the needs of the additional acreage was keenly felt.

It was necessary to close the Las Animas Town Ditch to supply the older decrees of the Keesee and the Lamar canals in Water District No. 67. This has been done only once before, which was in the spring of 1908. The Catlin canal was closed on July 11th and did not receive water again until October 23rd, except for one or two short runs of borrowed water. Reservoir water has again proved its worth but alone it is not sufficient. The hoped-for rains and irrigation water did not materialize after the reservoir water had carried the crops along for a considerable time.

There was a short first cutting of alfalfa and no second or third cutting except under one or two favored ditches. All other

crops were short in about like amounts. The pollen failed to fertilize the corn silk owing to the extreme dryness and heat. The sugar beet crop was short, being much below the average except under favored ditches. In many fields beets failed to mature properly with a resultant low sugar content and purity. Beets resembled parsnips in appearance and in some cases the beets would mould in the railroad cars on the way to the factory.

To add to the farmers' troubles a plague of grasshoppers appeared. The dry weather and a favorable season permitted about all the hoppers that hatched to reach maturity with a result that in many sections the hoppers destroyed crops and seriously injured the yield in other places. There has never been a year in the history of agriculture in the Arkansas Valley in which all the agencies of nature were so adverse to the farmer and to cap the climax prices dropped one-half. What the farmer was able to raise did not bring much cash returns.

Shortage of rainfall always affects ground water supplies. Wells on many farms went dry and in some cases stock had to be driven many miles to water or water hauled to the stock.

Only one municipality suffered from want of water. The town of Wiley in Prowers County depends upon the Fort Lyon canal for its water supply and this canal was unable to deliver the water to Wiley. The City of Rocky Ford was obliged to forego lawn sprinkling for a time. All other cities were able to get along without serious trouble.

Trans-mountain water comes in for favorable comment. It is a new source of wealth. I understand that a new trans-mountain diversion is in the process of construction and it is expected that it will be able to deliver water in 1932.

The trans-mountain ditches and mountain reservoirs require the time of a hydrographer to look after them during the irrigation season. We have been able to spare a hydrographer for this purpose during the irrigation season, thereby saving the expense formerly paid by private interests. This saving of time of the hydrographer was brought about by the installations of Parshall measuring flumes in the valley ditches. With a hydrographer stationed on the upper river we were able to give the running of reservoir and trans-mountain water close attention.

I wish to mention the fact that the mountain reservoir and trans-mountain water is charged for the use of the public stream as a carrier. This water accrues to the benefit of the older decrees. Last season the charge amounted to 2,000 acre-feet, quite an addition to the river supply at low stages.

The past season was comparatively free from hail. There was only one storm in which damage was done, and this did not cover much territory.

Demands for services are increasing each year and we are in need of more money to cover actual expenses. The running of reservoir and trans-mountain water require constant attention and close accounting to prevent errors in the diversion of the

water. It is necessary to make free use of the telephone to get the best results.

The past season has been a most trying one upon all connected with the distribution of irrigation water. It was painful to see crops suffer from lack of water, but there was none to be had and withal it is remarkable that the farmers stood the ordeal without more complaint. All realized that there was no water. The one agency that dispensed information and prevented ill feeling was the daily river reports which the Arkansas Valley Ditch Association issues each day with the assistance of the Water Commisioners and myself. This year the reports have been worth many times their cost in several ways.

Respectfully submitted,

C. W. BEACH,
Division Engineer of Irrigation Division No. 2.

DIVISION NO. 2

TABULATED STATEMENT OF WATER COMMISSIONERS' ANNUAL CROP REPORTS FOR SEASON OF 1931

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Number of Water District	Amount Appropriated in Cubic Feet per Second	Capacity of Ditches in Second Feet	Length of Main Ditches in Miles	Length of Laterals in Miles	First Day Water Was Diverted from Natural Stream	Last Day Water Was Diverted from Natural Stream	Maximum Number of Days Water Was Carried from Natural Stream	Maximum Number of Days Water Was Carried from Reservoir	Amount of Water Carried from Reservoir in Acre-Feet	Average Daily Amount Water Diverted from Natural Stream in Cu. Ft. per Sec.	Number of Acre-Feet Diverted During Season from Nat. Stream	Number of Acres That Can Be Irrigated
10....	597.55	700	133.25	....	Feb. 6	Oct. 31	210	168	5,190	261	55,579	27,645
11....	844.1	882.5	235.75	....	March 1	Oct. 31	245	99	19,642	519	212,264	24,048
12....	772.99	772.10	196.3	....	Nov. 1, 1930	Oct. 31	348	170	5,511	1,144.7	354,601	36,060
13....	482.73	....	248	....	April 1	Oct. 10	210	*70	2,768	346	45,946	21,556
14....	2,009.3	2,288	241	....	Nov. 1, 1930	Oct. 31	263	60	10,778	.....	.....	158,840
15....	228.5	273.9	89.55	....	March 15	Oct. 17	211	*30	660	133.65	39,507	13,521
16....	1,848.14	4,647.56	618.8	....	April 1	Sept. 30	166	*50	16,165	376.73	51,220.93	112,440
17....	5,824.98	853.5	544	....	March 1	Oct. 31	239	*60	64,128	898.9	231,355	222,435
18....	388.07	393.22	57.5	....	April 2	Aug. 29	7	10	1,130	79	5,480	8,496
19....	1,842.43	2,919.87	357.74	....	Nov. 1, 1930	Oct. 31, 1931	249	156	34,320	165.6	57,784	49,294
67....	1,715.40	1,756.0	228.5	....	Feb. 20	Oct. 31	230	...	65,730	410	83,539	71,965
	16,554.19	23,167.85	2,950.41						226,022	4,334.50	1,137,275.93	746,300

Number of Water District	(14) Alfalfa	(15) Natural Grasses	(16) Cereals	(17) Orchards	(18) Market Gardens	(19) Potatoes	(20) Sugar Beets	(21) Head Lettuce and Cauliflower	(22) Beans and Peas	(23) Other Crops	(24) Total Irrigated	Cost of Superintendence	Cost of Repairs	Cost of Improvements
10	5,029	4,287	4,025	273	398	...	1,516	....	....	4,964	20.487	$ 7,910.00	$ 300.00	$ 1,785.00
11	5,401	8,825	4,983	72	117	562	....	465	1,971	145	22,544	120.00	1,460.00	968.00
12	7,055	1,958	5,653	4,114	448	14	8	834	....	1,832	22,152	6,945.00	10,695.00	218.55
13	2,214	16,501	1,448	26	....	...	....	387	217	1,040	21,993	.....	388.70	.....
14	36,250	17,860	16,660	726	4,462	...	13,220	....	535	13,215	132,101	28,995.00	23,775.00	.....
15	4,358	1,271	2,915	26	....	4	145	5	87	73	8,557	.....	.....	6,595.00
16	23,572	3,133	12,408	161	259	...	1,718	565	1,833	....	49,004	5,237.00	14,859.00	4,208.00
17	57,982	2,645	54,511	303.5	920	127	19,970	144	3,117	24,560	164,274	23,467.00	9,600.00	2,200.00
18	3,908	783	737	4	....	10	....	....	510	400	5,981	200.00	.....	800.00
19	10,382	6,308	3,593	61	153	...	705	374	2,225	3,310	27,111	4,165.00	14,870.00	5,105.00
67	29,488	750	23,800	101	113	...	4,601	....	97	2,683	61,173	12,259.96	9,110.00	4,200.00
Totals	185,639	64,321	130,673	5,867.5	6,870	717	41,883	1,974	10,592	52,222	535,377	$89,298.96	$85,257.71	$26,079.56

TABULATION SHOWING AMOUNT OF WATER IN STORAGE OF THE MAJOR RESERVOIRS IRRIGATION DIVISION NO. 2—DECEMBER 1, 1930, TO NOVEMBER 1, 1931

EXPRESSED IN ACRE FEET

No. Dist.		Dec. 1 1930	Jan. 1, 1931	Feb. 1, 1931	Mar. 1, 1931	Apr. 1, 1931	May 1, 1931	June 1, 1931	July 1, 1931	Aug. 1, 1931	Sept. 1, 1931	Oct. 1, 1931	Nov. 1, 1931
10	Fountain Valley No. 2	1,622	3,428	4,898	4,898	4,898	4,898	4,898	3,214	1,496	249	151	151
10	Fountain Valley No. 3	50	46	57	223	223	223	223	104	57	36	0	0
10	Spring Run No. 2	207	223	207	207	207	105	192	181	9	105	74	10
10	Calahan	269	267	269	600	593	595	596	220	28	5	0	0
10	Cheyenne Mountain	13	13	28	69	69	69	69	95	105	13	0	0
10	Monument (State)	494	495	519	494	494	494	494	495	71	71	61	27
11	Sugar Loaf	7,961	7,810	8,104	8,103	8,013	6,067	2,965	3,805	2,002	1,302	1,267	1,302
11	Twin Lakes	12,831	13,523	14,224	13,453	13,403	13,453	9,397	9,244	6,519	5,723	5,491	5,756
11	Clear Creek	2,200	2,429	2,835	2,795	2,793	2,795	2,517	1,322	920	0	34	262
12	Skagway	2,318	1,563	770	297	82	435	989	2,101	2,196	2,169	2,295	1,769
12	Mt. Pisgah	739	1,091	1,240	1,384	1,384	1,254	1,074	204	8	8	16	8
12	Brush Hollow	4,002	3,780	3,699	4,127	4,127	4,079	4,070	2,778	1,188	478	159	0
12	City Colorado Springs	4,864	4,666	4,512	4,144	3,574	3,267	3,909	5,103	5,175	4,546	3,701	3,456
13	Deweese-Dye	1,009	1,955	2,768	2,768	2,768	2,768	2,676	2,365	1,315	165	0	0
14	Teller	2,875	2,875	1,939	1,849	1,745	1,645	1,715	1,217	1,043	806	802	802
14	Lake Henry	2,260	3,134	6,173	6,517	5,753	5,739	3,961	3,408	627	343	1,100	522
14	Lake Meredith	5,136	5,680	20,573	26,288	26,833	25,897	18,453	12,862	8,892	2,140	0	0
15	Beckwith	349	425	510	558	661	839	939	558	175	38	31	31
15	Minnequa	1,215	1,212	1,221	1,261	1,241	1,208	1,176	1,038	1,083	1,182	1,024	1,209
15	C. F. & I. Co. No. 2	2,413	2,774	2,353	2,407	2,701	2,674	2,651	2,630	2,612	2,641	2,649	2,664
15	C. F. & I. Co. No. 3	2,509	2,172	2,453	2,500	2,465	2,281	2,340	2,301	2,370	2,325	2,212	2,340
16	Coler	1,421	1,782	1,909	2,165	2,165	2,716	2,296	2,035	1,909	1,538	1,087	1,087

16	Cucharas	13,302	12,992	13,380	14,988	14,988	15,380	13,490	5,630	7,030	5,630	0	0
16	Bradford	0	0	0	0	0	0	0	0	0	0	0	0
16	Huerfano Valley	....	....	....	1,671	1,257	1,301	432	248	101	45	0	0
16	Crane-Holmes	154	154	154	154	154	191	191	154	....	....	0	0
16	Lindsley Lake	862	722	....	731	731	731	731	445	399	195	195	0
16	Holita	11	134	....	158	158	....	195	111	67	19	19	13
16	Valdez	0	0	....	0	0	3	3	2	0	0	0	0
16	Dotson	....	....	....	....	2,557	1,944	2,053	1,708	1,290	1,097	1,003	1,003
17	Dye	2,466	4,570	4,825	4,821	4,782	4,659	3,867	2,452	1,953	1,798	1,346	0
17	Holbrook	1,868	3,447	4,305	4,317	4,244	4,049	3,972	2,173	1,660	1,419	1,132	0
17	Horse Creek	12,379	14,153	15,512	16,108	15,909	12,833	9,200	3,865	0	0	0	0
17	Adobe	23,792	31,961	37,075	39,193	39,193	46,335	28,224	23,306	0	0	0	0
18	Seven Lakes	....	....	....	....	....	....	....	....	....	....	809	0
19	Model	11,571	12,789	13,307	13,517	14,603	14,385	15,141	11,775	7,390	5,105	3,757	4,164
19	Hermosa	431	431	431	489	1,354	1,354	1,354	....	552	431	124	124
19	North Lake	713	703	681	652	621	490	526	771	771	787	787	841
67 67 67	Nee No Shee Nee Gronda Nee Sopah	*51,655	52,469	53,019	55,112	55,553	54,561	53,735	49,932	2,355	1,460	3,587	3,403
67	Nee Skah or Queen	8,552	8,433	8,552	9,171	14,701	14,776	13,490	10,186	4,219	5,677	2,292	3,520
67	Two Buttes	5,596	5,364	5,364	5,456	5,828	5,457	1,963	2,166	1,761	2,303	137	2,160
67	Thurston	976	589	698	839	1,363	652	740	761	514	0	0	0

*One outlet for three reservoirs.

ANNUAL REPORT OF IRRIGATION DIVISION ENGINEER OF IRRIGATION DIVISION NO. 3 FOR 1931

Alamosa, Colorado, November 30, 1931.

Mr. M. C. Hinderlider,
State Engineer,
Denver, Colorado.

Dear Sir:

I herewith submit to you my report for the season of 1931.

The past season has been the worst of the fourteen seasons I have been in this office. At the beginning of the season there was practically no water in storage in our reservoirs. The Rio Grande Reservoir, with a capacity of 45,000 acre feet, stored only 7,700 acre feet, or 17% of its normal storage. The Santa Maria, with a capacity of 42,000 acre feet, stored only 12,196 acre feet, or 29% of its capacity. The Terrace Reservoir with a capacity of 17,700 acre feet, was only able to store 2,156 acre feet, or 12% of its normal storage. The other reservoirs in the division stored about the same per cent of normal.

The snowfall of last winter was 14⅔ feet, or 61% of normal. Practically all of last winter's snowfall fell after the first of February. These records were obtained from the government station at Cumbres, Colorado. The observer there being the station agent for the Denver & Rio Grande Western Railway Company. This station is at the altitude of 10,015 feet above sea level. This station has a record of snowfall since the winter of 1909-10. As this record may be of interest and value to the public, I have copied the same.

Report of snowfall for the years 1909-10 to 1931, inclusive:

Years	Total Feet of Snowfall	Years	Total Feet of Snowfall
1909-10	18⅚	1920-21	22½
1910-11	18¼	1921-22	28
1911-12	15 1/12	1922-23	21⅓
1912-13	17½	1923-24	15⅙
1913-14	15⅚	1924-25	23⅚
1914-15	19⅓	1925-26	23¼
1915-16	25⅚	1926-27	27
1916-17	27⅙	1927-28	16⅔
1917-18	14⅓	1928-29	30⅙
1918-19	25 7/12	1929-30	24 1/12
1919-20	25⅙	1930-31	14⅔

The rainfall during the season was not general over the Valley. The meager reports that we were able to gather together show that the rainfall between June 1st and November 1st varied from 6.23 inches near the Costilla lakes to 2.49 inches farther south and west, at the Spicer Ranch. Had there been rain gages installed in other parts of the valley, we believe that it would have shown a rainfall of less than one inch.

This has been the hottest summer that the writer has known during the forty-two years that he has spent in the San Luis Valley. The mean temperature for July, 1930, was 65 degrees, for July, 1931, 74.8 degrees, and for August, 1930, 64.3 degrees, for August, 1931, 68.4 degrees. These figures were obtained from the record of four daily readings of the government thermometer maintained by the Denver & Rio Grande Western Railway Company at their station in the City of Alamosa. These daily readings were made at 8:00 A. M., Noon, 6:00 P. M., and Midnight. The mean noonday temperature for July, 1930, was 70.2 degrees, and for July, 1931, 90 degrees, and for August, 1930, 73.4 degrees, and for August, 1931, 83.4.

The result of this extremely hot weather was a failure of the potato crop. It is estimated that from the acreage harvested there was only 25% of a normal yield, and if we include the acreage not harvested the yield would probably be 15 to 20% of normal.

There was practically no second cutting of the alfalfa owing to the dry weather. In this valley we have only two cuttings of alfalfa in a normal year. Cereals were also a partial loss.

The runoff in all the streams was very light. For instance, on the Rio Grande River 48.5% of normal. On the Conejos in District 22 after July 10th there was only enough water to supply the Guadalupe Main Ditch, Priority No. 1, of date of March 1, 1855, with a decree for 69.82 second feet. Some days during August we could supply Priority No. 2, which is the Heads Mill Ditch, whose priority dates back to June 1, 1855, with 6 or 8 feet of water, the decree calls for 117 second feet. Three 1855 priorities for 62.59 second feet, 11 1856 priorities for 176.22 second feet were practically without water for the balance of the season. Usually in this district in a dry year the Commissioner, when water is getting scarce, closes down to Priority No. 30, but this year we were obliged to close down to No. 2. Priority No. 30 is dated May 20, 1867. This season has again demonstrated the value of storage water. While we had a very small amount of storage there are two small communities that have marketed a total of one-quarter million dollars' worth of cauliflower, lettuce, and garden peas. One at La Jara under the La Jara Reservoir, which had only 1,000 acre feet of water in storage, and the other at San Luis, under the small Salazar Reservoir, and partly under the Sanchez.

The unusually dry season of 1931 is directly reflected in the discharge of the various drainage systems in the San Luis Valley. Many of these ditches were completely dry at the outlet due to the fall in the water table, re-use of drain water wherever possible and extensive checking in the man holes on the covered drain laterals.

The Rio Grande and the San Luis Valley Irrigation District drains are both dry above their outlet since the first of August until October. The Rio Grande Drain began to discharge again about the middle of October. The San Luis Valley Irrigation District Drain was still dry late in November, and will probably continue so until spring. Many of the outlets that did not dry up were discharging very small quantities of water during the months of August, September, and early October. In some instances the amount of water was too small for a practical measurement. Such a condition led to excessive growth of moss and aquatic plants in the channels. The early season discharge was in most cases less than usual, and the shortage in irrigation water made this difference greater as the season progressed. Following is a tabulation of water measurements, as prepared by Hydrographer Francis C. Hart.

The town of Del Norte owns a water right in Pinos Creek, which they use in supplying the town reservoir when water is available. They have also a pumping plant and well in the river bottom of the Rio Grande. The water commissioners notified the town officials that the water in the creek was falling rapidly, and that they should clean out their well, and get ready to pump their supply of water before he would be obliged to close the headgate of the town ditch. This was not done, and when the headgate was closed by the commissioner someone would open it. This row continued for some time, and then the town petitioned the district court, and obtained a writ compelling the water commissioner to open the headgate. We understand that the town has since dug a new well in the Rio Grande river bottom, and are now pumping their supply of water from the new well.

In conclusion I wish to express my thanks to Special Deputy State Engineer, Dan S. Jones, Jr., and Hydrographer Francis C. Hart for their courtesy and cooperation in the past season.

Respectfully submitted,

E. S. COUNSELOR,
Irrigation Division Engineer, Division 3, Colorado.

TABULATED STATEMENT OF WATER COMMISSIONERS' ANNUAL CROP REPORTS FOR THE IRRIGATION SEASON OF 1931

District Number	Number of Priorities Reported	Amount of Appropriations in Second Feet Reported
20	419	5,797.04
21	...	1,509.83
22	187	5,702.19
24	97	.....
25	...	711
26	115	547
27	77	111
35	...	933

District Number	First Day Water Was Diverted from Natural Streams for Irrigation	Last Day Water Was Diverted from Natural Streams for Irrigation	Max. No. of Days Water Was Diverted from Natural Streams for Irrigation	Max. No. of Days Water Carried from Reservoirs
20	March 20	Nov. 30	244	69
21	April 4	Sept. 9	138	103
22	April 15	Nov. 30	229	121
24	March 27	Oct. 27	235	124
25	March 23	Nov. 1	210	...
26	March 15	Nov. 15	220	...
27	April 1	Nov. 1	210	...
35	April 3	Oct. 30	158	106

District Number	Amount of Water Carried from Reservoirs Acre Feet	No. of Ac. Ft. Diverted by Ditches During Season from Natural Streams for Irrigation
20	19,290	529,544
21	3,385	30,837
22	.....	.....
24	12,794	30,951
25	.....	65,061
26	.....	.....
27	.....	65,528
35	4,889	31,466
	30,358	753,387

District Number	Total Number Acres That Can Be Irrigated	Alfalfa	Natural Grasses	Cereals	Potatoes
20	473,095	37,279	186,175	43,958	42,980
21	74,205	8,955	16,368	4,163	5,024
22	94,715	11,960	41,930	15,689	5,528
24	25,650	6,000	3,907	6,698	2,132
25	65,503	1,715	30,744	464	250
26	16,053	3,082	16,053	455	140
27	8,720	1,103	6,414	.....	383
35	71,120	4,491	23,237	2,155	913
	829,061	97,822	324,828	73,582	57,350

TABULATED STATEMENT OF WATER COMMISSIONERS' ANNUAL CROP REPORTS FOR THE IRRIGATION SEASON OF 1931

District Number	Market Gardens	Field Peas	Garden Peas	Lettuce	Sugar Beets
20	....	40,134	1,781	1,463	1,228
21	....	3,890	1,296	118	75
22	522	7,101	....	....	256
24	3,228	7,829	....	....	....
25	....	96	....	....	....
26	....	....	....	....	....
27	....	....	....	....	12
35	1,167	1,167	908	....	10
	4,917	60,714	3,985	1,581	1,581

District Number	Cauliflower	Beans	Cabbage	Sweet Clover	Summer Fallow	Other Crops
20	....	....	....	16,231	7,897	970
21	....	540	....	3,777	....	....
22	155	917	....	1,384	....	5,131
24	....	....	110	442	....	1,645
25	....	....	....	670	....	....
26	....	....	....	....	....	2,455
27	....	....	....	....	....	8,285
35	....	98	37	271	....	1,126
	155	1,555	147	22,775	7,897	19,562

District Number	Total Irrigated in Acres
20	380,096
21	44,361
22	90,585
24	33,423
25	33,954
26	22,265
27	8,285
35	39,830
	652,809

AMOUNT OF WATER IN STORAGE (ACRE FEET), IN RESERVOIRS, ON THE FIRST OF EACH MONTH FROM DECEMBER, 1930, TO NOVEMBER, 1931.

	Rio Grande	Santa Maria	Contl-nental	Sanches	Terrace	La Jara	Mt. Home	Smith
December	2,800	10,063	852	13,206	1,682	468	5,133	1,231
January	4,600	10,454	852	12,892	1,445	....	5,133	1,231
February	5,200	10,723	852	12,278	1,308	....	5,562	1,591
March	5,800	11,040	852	12,053	1,127	....	5,562	1,591
April	6,800	11,520	852	12,506	964	....	6,108	5,336
May	5,698	12,196	852	12,736	1,025	1,060	6,852	4,191
June	5,898	12,196	852	13,286	2,156	652	7,005	3,007
July	512	6,444	36	5,547	913	223	6,852	1,591
August	217	1,451	36	1,952	....	13	3,508	1,321
September	188	696	36	192	....	0	2,116	1,411
October	188	696	36	3,085	1,071	0	2,367	2,603
November	188	696	36	4,460	1,321	0	2,888	3,362

ANNUAL REPORT OF IRRIGATION DIVISION ENGINEER OF IRRIGATION DIVISION NO. 4 FOR 1931.

Nov. 30, 1931.

State Engineer,
Capitol Bldg.,
Denver, Colo.

Dear Sir:

I herewith submit my 21st annual report of Irrigation Division No. 4 for the year 1931.

The season of 1931 was a most extraordinary one. It was not like any previous season for the past 20 years. The snowfall ending March 31st, 1930, was much below normal, and the snowfall for the period ending 1931 was much below that of 1930. Last winter was very mild. Most of the mountain roads and passes in this Division were open all winter. The road over Grand Mesa could be traveled until very late in the season. The Million Dollar Highway from Ouray to Silverton was open practically the entire year. It is usual to have a number of snow slides on this road during the winter season, but last year there was not a slide of any importance. The roads over Cerro hill, Dallas divide and Cochetopa were open during the entire winter.

The above facts are given to show the lack of snowfall in the mountain regions. As a result of this lack of snow deposits, there was no high water during the spring runoff.

The water supply and the crops produced for the season are given in a portion of the report to follow, by Districts.

District No. 28

The principal streams in this District are the Tomichi, Cochetopa, Razor Creek and Quartz Creek. There are no storage reservoirs in this District. The snowfall in this region in 1929 averaged 35 inches in depth, and water content 10.78 inches. In 1930 the average depth was 29 inches and water content 6.6 inches. This year the snowfall averaged but 18 inches in depth and water content 3.39 inches. This gives a snow deposit of about 50% of normal, and water content of about 30% of normal. The runoff was much below normal during the irrigation season, the streams during July and August, also September running about 40% of normal.

The temperature was above normal, and evaporation was very great. Temperature conditions were favorable for growing crops. Native hay is the principal crop.

Priorities 15 and 16 on Tomichi, of date June 1st, 1880 and May 31st, 1881 respectively were short after July 15th.

Priority No. 3, the first right on Razor Creek, of date March 15th, 1878, was short after June 1st.

Priority No. 37, the first right on Hot Springs Creek, of date May 20th, 1878, was short July 1st.

Priority No. 32 on the Cochetopa, of date May 31st, 1877, was short July 10th.

Razor, Hot Springs, Owens and Needle Creeks were practically dry after July 10th. The result on tonnage was about 60% of a normal crop. Where water was available, the farmers turned water on their meadows as soon as the crop was removed. This is a procedure that seldom occurs—in fact it was never known to happen before, but the land was so dry and the farmers so afraid of another shortage of water next season, that they resorted to irrigation after the hay was removed.

Return and seepage waters were reduced 50%.

District No. 40.

The relative percentage of water in storage at the beginning of 1931 as compared with normal, is as follows:

Granby System	52%
Battlement	58%
Youngs Creek	85%
Surface Creek Ditch and Reservoir Company	56%
Park Basin	17½%
Marcott Park	38%
Bonita Creek	25%
Leroux Creek	100%
Overland Reservoir	100%
Monument Reservoir	100%
Fruitland	30%
Grand View Company	30%
Terror Creek	100%

The condition and quantity of snow deposit with respect to normal conditions were as follows:

George Creek	50%
Youngs Creek	50%
Alexander Lake	50%
Park Basin	20%
Cedar Mesa Basin	25%
Marcott Park	40%
Leroux Creek	60%
Elk Park	65%
Anthracite	60%
Smith Fork	30%

There was practically no rain in this District until Aug. 24th —the duration about 10 hours in the higher elevations. There was another rainfall on August 31st, duration about 12 hours.

Temperature conditions were above normal during the growing season. The alfalfa and fruit crops were considerably damaged by late frosts, and some loss was caused by insufficient irrigation during the season. This was particularly true of the hay crop, as many of the farmers let their hay crop go unirrigated so as to use the water on their orchards, grain and row crops. Temperature conditions were extremely favorable for corn.

The availability of water supply in the natural streams needful to satisfy seasonal demands, were as follows:

Smith Fork District,	about 40%
North Fork District	60%
Leroux Creek District	75%
Tongue Creek	about 60%
Surface Creek District	about 40%
Escalante District	about 70%

The most noted instances of water shortage and the more senior decrees that were short of water, were the following:

Alfalfa Ditch, Decree No. 1 for 20 feet from Surface Creek, of date Dec. 17th, 1881, had a supply of 50% from July 15th to Aug. 15th, and a supply of 40% from Aug. 15th to Sept. 1st, and during the month of September and the balance of the season, only 25% of the decree was available.

Shepherd Ditch, Decree No. 6 for 6.7 feet from Surface Creek, of date Oct. 25th, 1884, was without water after June 20th, 1931.

Fogg Ditch, Decree No. 10 for 6.1 feet from Surface Creek, of date April 2nd, 1885, was without water after June 17th, 1931.

The Buttes Ditch, Decree No. 12 for 6.75 feet from Surface Creek, of date Nov. 24th, 1885, was without water after June 11th.

Cedar Mesa Ditch, Decree No. 36 from Surface Creek, with a capacity of 50 feet had their decree only from May 15th to May 27th. From May 13th to May 25th inclusive, the Commissioner was able to give them a night run of about 12 hours in length for an amount of 15 feet. This was practically the only water this ditch had during the summer.

The Lone Pine Ditch, Decree No. 40 of date Sept. 15th, 1898, from Surface Creek, with a capacity of 70 feet had their decree only from May 16th to May 25th. The Commissioner also gave them a night run of 12 hours duration from the 13th to the 25th of May—approximately 20 feet.

The last two named ditches irrigate a vast amount of territory, and the water mentioned above was practically the only water available for the land under these two ditches.

The Minnesota Canal, Decree No. 20, under date of Sept. 1st, 1887, with a capacity of 50 feet from Minnesota Creek, had 50% of a head up to Aug. 15th, and no water after that date.

The Stewart Ditch, Decree No. 31, under date of Nov. 30th, 1895, for 50.75 feet from the North Fork River, had only 50% of their decree from Aug. 15th to Aug. 31st, and during September about 25% of their decree.

Fire Mountain Canal, Decree No. 33, of date Sept. 14th, 1896, with a decreed amount of 50 feet and capacity of 75 feet from the North Fork River, had a full head up to Aug. 15th. After Aug. 15th a system of rotation was attempted between the Fire Mountain Canal, the Stewart Ditch and the North Fork Farmers Ditch. This rotation was not very successful, as some water was obtained by cutting beaver dams, which increased the flow of the river considerably for a short time. This cutting of beaver dams resulted in a scarcity of water for the decrees later, as the beavers built the dams up again, and consequently stored water that should have come down the river to supply the decrees.

The shortage of water was extreme in this locality. It was necessary at times to carry water down the Fire Mountain Canal and turn it into Roatcap Gulch to supply ditches further down on the North Fork River—the river being so dry that the water evaporated when run down the bed of the stream. This carrying of water down the Fire Mountain Canal, instead of down the river bed, was a great saving of water to the farmers—making a saving of perhaps from 25 to 40% of the flow.

The Fruitland Reservoir, which is filled from Crystal Creek, had only 25% storage. The Fruitland Canal, with a capacity of 75 feet, had an average of 30 feet from May 9th to June 11th, and no water after that date.

The Crawford-Clipper Ditch, Decree No. 3, of date Oct. 19th, 1885, with a capacity of 75 second feet from Smith Fork, had an average of 30 second feet from May 9th to June 16th, and after June 16th and during July, an average of about 20 feet. This ditch had a trifle less than 50% of a normal supply. This is the principal ditch in the Crawford country and waters an immense acreage.

The Needle Rock Ditch, Decree No. 8 from Smith Fork, of date July 16th, 1888, had a 50% supply from April 27th to July 23rd, and no water after the latter date.

The Cedar Canon and Iron Springs Ditch, Decree No. 1 from Crystal Creek, of date Oct. 24th, 1883, decreed for 50 second feet, had an average run of only 12 feet.

The Lake Fork Ditch, Decrees Nos. 1 and 3 from Ward Creek, of date July 26th, 1886, decreed amount 14.5 feet, had their full decree only until June 30th, and during July there was only 60% of the decree available. From Aug. 1st to Oct. only 33⅓% of the decree was available.

The Childs Ditch, Decree No. 1 from Youngs Creek, of date

Dec. 23rd, 1885, had only 52% of their decree after July 7th, and this fell to 40% in August.

District No. 41.

There are no storage reservoirs in this District.

The snow deposits on the Gunnison drainage averaged a depth of about 19 inches, which is about 50% of normal, and the water content about 3.39 inches, which is about 30% of normal—normal being about 10.75 inches.

On the Uncompahgre drainage the snow deposits were about 55⅔% of normal. The rainfall in inches was as follows:

April, .68 of an inch, or .31 of an inch less than normal.
May, .21 of an inch, or .67 of an inch less than normal.
June, .35 of an inch, or .1 of an inch less than normal.
July, .85 of an inch, or .01 of an inch less than normal.
August, .68 of an inch, or .67 of an inch less than normal.
September, 1.46 inches, or .48 of an inch above normal.

Temperatures

April, 49.7 degrees, or 2.2 degrees above normal.
May, 56.1 degrees, which was normal.
June, 70 degrees, or 5 degrees above normal.
July, 76.1 degrees, or 5.5 degrees above normal.
August, 71.6 degrees, or 3.4 degrees above normal.
September, 65 degrees, or 4.1 degrees above normal.

The first crop of alfalfa and the fruit crop was damaged by late frosts. The second and third crops of alfalfa were generally good. Corn was especially good. Potatoes were poor except in Bostwick Park, a high mesa, where potatoes were good. The extremely warm and dry weather was undoubtedly the cause of potatoes not setting on well, causing excessive growth of vines. The weather conditions were very favorable for corn, and a splendid crop was raised. Evaporation was excessive.

The water supply was not enough to satisfy seasonal demands, being about 50% on both the Gunnison and Uncompahgre watersheds.

The Satsifaction Ditch, Priority No. 8, date Feb. 11, 1882, was without water on Aug. 26th, and there was no water available for this decree until Sept. 21st, when part of the decree was available.

The Loutsenhizer decree, Priority No. 9, date Feb. 23rd, 1882, was not available after the 1st day of August.

Spring Creek furnished no water for any decree later than Ross Bros., date Nov. 1st, 1882, and no water was avaliable for any decrees on Pelton gulch, Mexican gulch, Beaton creek or Dry creek.

The Uncompahgre Project or the Gunnison Tunnel, of date June 1st, 1901, from the Gunnison river, with a decree of 1,300 second feet, was short of water most of the season. Rotation of

water began in April and continued during most of May. For about three weeks in June the tunnel carried a full head. Water was turned from the tunnel on July 9th to supply earlier decrees in Delta county, and it was necessary to supply these decrees from the tunnel until about Oct. 1st. During the latter part of July and during August the tunnel was short of water, and at times not to exceed 350 feet was available for this decree. Water was rotated among the various canals and ditches during July, August and September, only about 60% of a head being available. As a result of this shortage of water, the water users are clamoring for construction of the Taylor Park reservoir.

The general effect of inadequate water supply on tonnage and quality was not so disastrous as the shortage might indicate. The Project has been using too much water, as the records show a headgate diversion of 6 or more acre feet per acre. The hay crop is probably from 15 to 20% short, but sugar beets, corn and onions are a full crop. Grain not more than 10% short. Hay is bringing better prices than it has for the last few years. Potatoes and grain are very low in price, but sugar beets and onions are bringing better prices.

The water table has been lowered considerably, and return and seepage water reduced about 40%.

On Jan. 1st, 1932, the Uncompahgre Water Users Association will take over the management of the Gunnison Tunnel Project. Mr. Chas. B. Elliott who has been for some years with the U. S. R. S. has been elected Superintendent of the Project.

District No. 42.

The principal streams in this District, are the Colorado, Gunnison rivers, Plateau, Leon, Big, Cottonwood, Bull, Coon, Mesa, Kimball, Buzzard and Kannah creeks. Besides the above mentioned streams there are many other small ones.

Storage conditions for the season as compared with normal are as follows:

Big Creek	45½%
Cottonwood	66%
Coon	20%
Bull	85%
Mesa	63%
Kannah	85%

The snow deposits, together with the water content averaged about 60% of normal.

The quantities of rainfall and seasonal occurrences of the same during the growing season in the vicinity of the Grand Valley were as follows:

April, 1.34 inches, being .51 of an inch above normal.
May, .44 of an inch, being .37 of an inch below normal.
June, .26 of an inch, being .14 of an inch below normal.
July, .74 of an inch, being .13 of an inch above normal.
August, .40 of an inch, being .77 of an inch below normal.
September, 1.87 inches, being .95 of an inch above normal.

The mean temperatures were as follows:

April, 53.6 degrees, being 1.2 degrees above normal.
May, 60.6 degrees, being 5 degrees below normal.
June, 75.7 degrees, being 4.3 degrees above normal.
July, 80.9 degrees, being 3.2 degrees above normal.
August, 77 degrees, being 1.8 degrees above normal.
September, 69 degrees, being 2.7 degrees above normal.

There were frosts on the 3rd, 4th and 9th of April, and light frosts on the 15th, 21st and 26th of April. In May there was light frosts on the 9th, 10th and 19th and a heavy frost on the 11th, but no really killing frosts. Early fruits were somewhat damaged by the frost, also the first crop of alfalfa. Otherwise, the effect of temperature on the growing crops was beneficial.

The availability of the water supply in the various streams was as follows:

Colorado River	69%
Gunnison	50%
Plateau Creek	85%
Big Creek	60%
Bull Creek	75%
Cottonwood Creek	70%
Mesa Creek	65%
Coon Creek	40%
Kannah Creek	85%

The Highline Project (U. S. R. S.) taking water from the Colorado river experienced no serious shortage. The first cutting of hay was 25% short in tonnage, owing to late frosts. The bean crop was 10 to 15% short. Corn was above the normal yield. Sugar beets produced from 11 to 12 tons per acre under the Project.

Redland Irrigation Company had about one-half supply of water, and production was lessened in about the same ratio. The Gunnison river did not furnish enough water for pumping purposes, and power had to be purchased from The Public Service Company. Their decree is of date July 31st, 1905, from the Gunnison River for 670 feet.

The Wild Cat Ditch, decree No. 3 of date Aug. 10th, 1888,

was without water on July 8th, and the Silver Grange Ditch, decree No. 4 of date Aug. 10th, 1888, was without water on June 17th.

On Cottonwood Creek, Mormon Mesa Ditch of date 1888, Priority No. 3 had but one-half of their decree by July 7th, and during August they had less than 1/10 of their decree.

On Kimball Creek, Newman Ditch, decree No. 4 of date April, 1886, was dry July 5th.

On Bull Creek, Pioneer of Plateau, decree No. 2 of date Oct. 1st, 1887, went dry July 5th.

On Mesa Creek, the Arkansas Ditch, decree No. 5 of date June 27th, 1884, went dry June 17th.

The Atwell and Enlargement on Coon Creek, Priority No. 4 of date May, 1903, went dry June 25th.

The West Side Ditch on Mesa Creek, decree No. 3 of date Sept., 1887, had only one-third of the amount of their decree after Aug. 1st.

The effect of reservoir water supplies was saving crops in most instances. Their value during excessively dry years is inestimable.

Tonnage was about 75% of normal production.

Springs and swamps were dried up and seepage and return was reduced about 50% of normal conditions.

District No. 59.

This District is in Gunnison County and has an ample water supply, especially where watered from the Gunnison river. The usual method is to turn water on the meadows in the spring and let it run until near haying time. Ohio Creek Valley, which is one of the most beautiful and most productive parts of Colorado, was short of the normal water supply. When the ranchmen realized that only the senior rights would have sufficient water for irrigation, they agreed on a system of rotation and disregarded priority rights.

The Water Commissioner was not called upon, but the ranchmen adopted such an excellent plan of water distribution that no one was short of water. The result was that Ohio Creek Valley has the best crop it has ever produced. They have proven that sometimes better crops are grown with less water. The Ohio Creek Valley ranchmen are to be congratulated upon the good judgment they displayed this season. Other portions of this division might profit by their success in an emergency.

District No. 60.

The Gurley reservoir contained at the beginning of the irrigation season about 50% of normal. The Cone reservoir about 40%.

Accurate measurements of snowfall on the watersheds are not available, but the consensus of opinion of experienced ob-

servers is that it was about 50%. The water content was normal. Much of the spring water which normally runs under the snow, froze into solid sheets of ice which held back a small quantity of water until later than was expected.

There was not enough rainfall in the early part of the season to sprout the sown crops. Scattered showers late in May and early in June benefitted certain areas at high altitudes which depend on rainfall for their moisture. Late in July and early in August there were spotted showers which reached cloudburst intensity in places. There were no general rains during these months, but in September (too late for field crops) there were good general rains which were of great benefit to the range and fall pastures.

The growing season was marked by a cold period during May, which is normal for this section, and by unusually high temperatures during the remainder of the growing season. These temperatures were accompanied by slightly more than the usual amount of wind.

	June	July	Aug.	Sept.
Mean Max. Temp.	83.13°	87.48°	82.49°	74.6°
Mean. Min. Temp.	53.3°	55.28°	51.77°	46.5°
Maximum	90°	98°	90°	88°
Minimum	42°	42°	42°	31°
Total precipitation	1.16 in.	1.40 in.	.5 in.	2.45 in.

Low temperatures early in the season retarded growth while there was still moisture in the ground. The high temperatures later in the season were responsible for reduced yields, even where there was a plentiful supply of irrigation water.

With few exceptions, all streams failed to supply the usual amount of water to ditches decreed from them. The San Miguel river proper supplied all its decrees but with none to spare. The Colorado Cooperative Co. was compelled to construct additional barriers across the river in order to divert their full carrying capacity of 70 cubic feet.

Unusual shortages occurred in all decrees except those from the San Miguel river proper. The following is a record of a number of the senior decrees:

Ditch	Stream	Date	Priority No.	Date of Shortage
Smuggler	Maverick Draw	1888	22	June 15th
Curtis-Stockdale	Naturita	1888	21	July 17th
Warner	Naturita	1884	5	July 10th
Naturita Canal	Beaver	1884	6	June 25th
Wagner	Turkey Creek	1889	89	July 10th
Carpenter	Cottonwood	1887	61	June 15th
Lone Cone	Naturita	1891	50	June 15th

The reservoir water was, of course, valuable to the extent that it kept crops alive for a period of perhaps twenty days after the natural streams ceased. Only in the case of winter wheat and early maturing crops was it sufficient to bring crops to maturity. In some cases it provided one irrigation for the second cutting of alfalfa, thereby preventing a total loss. Much of the reservoir's usefulness in this district is to store the runoff from the summer rains, thus supplementing the benefits of direct rainfall. The Gurley reservoir stores about one-third acre foot per acre, which is insufficient unless supplemented by flood waters from summer rains.

The tonnage yield of alfalfa, timothy and grain is estimated at from one-third to one-half normal. There was no damage to these crops during harvest, but the drouth affected the quality to the extent that the hay, although bright, is dry and much of the grain is shriveled.

The unusually dry condition of the soil caused the irrigation water to spread over a smaller area than normal. Seepage was reduced owing to the dry condition of the soil and the high rate of evaporation from excessive heat and wind. This condition applies to lands under the Naturita canal and Lone Cone systems and to lands on the high mesas close to the San Miguel headwaters, but not to lands under Colorado Cooperative ditch, where conditions were normal.

Maverick Draw, which is supplied from seepage, waste water and return water, was the lowest ever known, there being practically no return water.

The Town of Norwood was short of water in August and September.

District No. 61.

This District is located in the western part of Montrose County. West Paradox Creek and its tributaries being the source from which the decreed ditches are supplied. The main supply, however, comes from the LaSal mountains in Utah. The Buckeye reservoir furnishes the only storage. This reservoir is used to store the Utah water. The reservoir was practically dry at the beginning of the season, and the runoff from the LaSal mountains was not enough this year to store any considerable amount of water—the water being run directly through the reservoir and applied to the land. The supply was about one-third of the normal supply.

The rainfall was short during the growing season. There was a good rain on July 30th, also on Aug. 30th. The weather was the hottest ever experienced in the valley—the maximum being 110 degrees, which was 10% above normal. The extremely hot and dry weather caused a blight, the alfalfa leaves turning yellow, and grain was shriveled.

Huff Creek, which is fed by Astec and Arrowhead springs was the only stream that furnished a normal supply.

The Youngs decree of date 1887 was out of water April 25th.

Robinson decree of date 1886 was out of water June 19th.

Valentine-Woodworth, date 1885, was out of water Aug. 14th.

A system of rotation was tried out, but owing to the extreme shortage of water, most of the crops were failures. Seepage and return waters were about 20% of normal.

District No. 62.

The principal streams in this District are the Gunnison, Lake Fork of the Gunnison, Big and Little Cimarron, Big and Little Blue rivers, and Cebolla, Powderhorn and Henson Creeks and many small creeks.

There are no records given by the Weather Bureau for the greater part of this district, but the snow deposits and quality of snow was from 25% to 33½% below normal. There was practically no high water during the spring runoff.

There are no storage reservoirs for irrigation purposes.

The rainfall was below normal.

General temperature conditions during the growing season were favorable, if we except the extreme dry weather.

There was no shortage in the supply of the Gunnison, Lake Fork or Blue rivers nor on Cebolla and Powderhorn creeks.

The record of the senior decrees given below show the shortage on the other streams.

The Big and Little Cimarron rivers were 50% short during the latter part of July, August and September.

A prominent stockman and pioneer in the Lake City locality wrote me early in August that the only water in that vicinity was in Lake San Cristobal.

Priority No. 2 of date May 10th, 1878, from Willow Creek was exhausted May 21st, and no water was available after that date.

Priority No. 8 of date Sept. 1st, 1880, from Elk Creek was without water June 26th.

Priority No. 9, first right on Narrow Gage Creek, with date of Sept. 1, 1880, was out May 15th. Ordinarily this stream would run at least 15 second feet of water during May and June.

Priority No. 1 of date 1882 from Dwyer Creek went dry May 1st.

The Collin Ditch, Priority No. 2 on the Little Cimarron, of date Sept., 1889, was short of water the latter part of July and much of August and September.

The Cimarron Canal which takes water from the Big Cimarron, Decree of date Apr. 1, 1903, carried an average head of 85 second feet until July 15th, when the available supply fell to 20 second feet and so remained until Sept. 30th. This district seldom requires the services of a Water Commissioner, but this year the Water Commissioner and the Division Engineer were in almost constant demand after July 15th. The effect of this short-

age reduced the crop production on these streams 33⅓% as to quantity. The quality was not affected.

Seepage and return water were reduced 50%.

District No. 68.

There are no storage reservoirs in this District.

The condition and quantity of snow deposits were about 33⅓% less than normal.

There were no spring rains. There was some rains the latter part of June, July and August.

Weather for this locality was extremely dry.

The temperature was above normal, but crops grew faster and matured earlier where they had the moisture. There was enough water available on the main stream to meet seasonal demands. The shortage occurred mostly on the small streams.

The following senior rights were short this year:

Portland, May 1st, 1876, was short from July 15th.

Leopard Creek, Oct. 1st, 1877, was short all summer.

Mike Cuddigan, June 1st, 1879, was short in May.

Hyde-Sneva, Oct. 1st, 1880, was short in May.

Burkhart-Eddy, Nov. 15th, 1880, was short all summer.

Von-Hagen, Dec. 18th, 1880, was short all summer.

Climax, Oct. 1st, 1881, was short from July 1st on.

Springfield-Corrie, April 1st, 1882, was short after June 15th.

Babb, May 1st, 1882, was short June 1st.

Lew Creek, June 1st, 1882, was short June 25th.

Brown, Nov. 11th, 1882, was short July 1st.

West Side, May 1st, 1883, was short July 15th.

The first cutting of alfalfa was damaged more by late frosts than water shortage. The mixed hay and second cutting alfalfa were damaged by lack of water—about 1,900 tons of hay short. This being a shortage of about 25%. Grain and potatoes were about normal under irrigation.

There was very little waste, seepage or return flow this season. Most of the swamps dried up before the irrigation season started. Many springs dried up that always ran water before. All ditches depending upon waste water were short this season. The town of Ridgway had a shortage of water during July and August. All sprinkling was stopped and water for domestic use only was available, and this only by senior rights allowing enough water to flow in the Ridgway ditch to furnish domestic use.

The reservoirs on Grand Mesa have always filled, and in normal seasons most of them with the headgates open. They

were closed on Feb. 7th, 1931, and the entire storage of the Park basin amounted to only 17½%.

The runoff for this basin was measured at the Park Reservoir outlet and the entire runoff would not have filled the Park Reservoir to more than half capacity.

The growing season was prolonged until late in the fall, as the first frost occurred on Oct. 26th. The fall weather for harvesting crops was ideal.

The distribution of water for irrigation during a season like the past one is a very difficult matter. The Division Engineer and all the Water Commissioners and deputies did their utmost to make a fair and equitable distribution of the water. There were times when it seemed almost impossible to satisfy certain communities. The communities themselves were not to blame, as the water supply was so extremely short that it made conditions very bad indeed. We had conferences and meetings with citizens in all parts of the District—the number present being anywhere from 2 and 3 to 55 at a time. Notwithstanding the extreme conditions and the difficulties encountered, I think there was less complaint over the actions of the water officials than in any previous year. Some of the deputy Water Commissioners insisted upon resigning during the critical period, but later returned to their districts and rendered splendid service. One Water Commissioner in particular was in a very trying position. His telephone usually began ringing about 3 o'clock in the morning and continued unceasingly until 9 or 10 o'clock in the day. There were delegations of water users at his home nearly all the time.

In Districts 59 and 62 where the services of a Water Commissioner are seldom required, there was a great demand for him this year. These two districts were handled by a Water Commissioner at Large, and without his help it would have been impossible to have gotten by in these two districts.

Considerable work was done on the reservoirs on Grand Mesa during the season. The Granby Reservoir Company finished the dam on reservoir No. 11, and the State Engineer and myself visited this reservoir during the summer to inspect the work that was done.

The State Engineer also visited a number of other reservoirs on Grand Mesa, and ordered work done on the Big Eggleston reservoir belonging to the Surface Creek Ditch & Reservoir Company. He also ordered repairs on the Youngs Creek reservoirs and on one of the Mesa Creek reservoirs.

The following are the amounts expended by the various Reservoir Companies:

Surface Creek Ditch & Reservoir Company	$1,420.00
Battlement Ditch & Reservoir Company	100.00
Granby Ditch & Reservoir Company	1,403.00
Youngs Creek Ditch & Reservoir Company	125.00
Rockland Reservoir Co	500.00
Ryan Reservoir	100.00
Park Reservoir	150.00
Leon Lake Reservoir	400.00
Fire Mountain-Lost Lake	500.00
Cottonwood Lakes	136.00
Anderson & Libby	1,600.00
Mesa Lake	387.00
Big Creek	507.00

There are ten river stations being kept up by this office, and on Nov. 1st two more stations were added. Mr. L. T. Burgess, Chief Hydrographer, made two trips to this Division during the summer and went over the various stations.

Prospects for a splendid season next year are very flattering. On the 20th of this month snow began to fall in the afternoon and it snowed continuously from that time up to the evening of the 23rd. At this time there is more snow on Grand Mesa than there was during the whole of last season. The reports we have received at this time are about 18 inches of snow at Silverton, 18 inches at Telluride, 15 inches at Ouray, 3½ feet on Grand Mesa and 3½ feet on Red Mountain Pass.

Attached hereto is a summary of the Water Commissioners Ditch and Reservoir reports.

Yours very truly,

H. C. GETTY,

Irrigation Division Engineer No. 4.

IRRIGATION DIVISION NO. 4

TABULATED STATEMENT OF WATER COMMISSIONERS' ANNUAL DITCH REPORTS, 1931.

Dist. No.	Ditches Reported	No. of Priorities	Amount of Appropriation Cu. Ft. Per Sec.	Capacity of Canals and Ditches Cu. Ft. Per Second	Length of Canals or Ditches in Miles	First Day Water Was Used	Last Day Water Was Used
28.....	195	243	589	1,868	248	April 15	Aug. 1
40.....	396	331	2,212	2,996	759	March 20	Nov. 22
41.....	32	32	3,030	3,255	307	March 24	Nov. 7
42.....	266	259	4,465	5,236	948	Jan. 1	Dec. 31
59.....	90	127	519	1,017	170	May 1	Oct. 1
60.....	87	87	558	545	300	March 15	Oct. 15
61.....	29	35	69	84	47	March 1	Nov. 15
62.....	80	83	195	336	120	April 25	Nov. 1
68.....	170	180	728	780	236	April 15	Nov. 15
Totals	1,345	1,377	12,365	16,117	3,135		

IRRIGATION DIVISION NO. 4

TABULATED STATEMENT OF WATER COMMISSIONERS' ANNUAL DITCH REPORTS, 1931

Dist. No.	Average No. Days Water Was Used	Ave. Daily Amount in Sec. Ft.	No. Acre Feet Used	No. Acres Can Be Irrigated	Alfalfa	Natural Grasses	Orchard
28.....	82	387	65,413	30,172	20	26,734	.....
40.....	119	1,244	330,980	226,211	66,454	30,390	15,822
41.....	171	1,561	597,574	242,100	20,345	1,020	2,965
42.....	81	1,694	720,423	222,245	50,084	16,237	11,724
59.....	77	416	69,773	19,607	396	16,532	.....
60.....	89	255	62,704	39,805	17,365	2,315	110
61.....	161	20	6,247	6,360	894	.....	42
62.....	84	178	32,217	9,855	581	7,923	.....
68.....	57	298	50,662	26,325	4,218	7,675	31
Totals....	102	6,053	1,935,993	822,680	160,357	108,826	30,694

IRRIGATION DIVISION NO. 4

TABULATED STATEMENT OF WATER COMMISSIONERS' ANNUAL DITCH REPORTS, 1931

Dist. No.	Market Gardening	Potatoes	Cereals	Sugar Beets	Other Crops	Total Acres Irrigated
28	.....	23	54	.....	.....	26,831
40	1,030	3,504	20,832	5,134	8,022	151,188
41	2,980	7,835	21,921	472	12,289	69,827
42	189	1,525	6,044	.....	21,348	107,151
59	.....	94	111	.....	20	17,153
60	.....	.....	3,235	.....	.....	23,025
61	15	3	429	.....	154	1,537
62	.....	62	98	.....	100	8,764
68	34	238	1,895	13	24	14,128
Totals	4,248	13,284	54,619	5,619	41,957	419,604

IRRIGATION DIVISION NO. 4.

TABULATED STATEMENT OF WATER COMMISSIONERS' ANNUAL DITCH REPORTS, 1931

Dist. No.	Superintendence	Repairs	Improvements
28	.....	.....	.....
40	$ 11,984.00	$ 40,039.00	$ 7,238.00
41	23,195.00	26,835.00	11,350.00
42	28,692.00	57,886.00	684.00
59	550.00	3,110.00	250.00
60	2,950.00	8,850.00	.....
61	.....	805.00	50.00
62	.....	1,873.00	20.00
68	364.00	7,181.50	262.50
Totals	$ 67,735.00	$146,579.50	$ 19,854.50

TABULATED STATEMENT OF WATER COMMISSIONERS' ANNUAL RESERVOIR REPORT, 1931

Dist. No.	No. in District	Area of High Water Line, Acres	Capacity in Cubic Feet	Quantity of Water in Reservoir May 1	Quantity of Water in Reservoir Nov. 1 Cu. Ft.
40	110	3,267	1,808,224,261	1,061,284,172	950,400
42	56	2,030	743,075,889	.....	.....
60	2	....	223,748,000	60,000,000	.....
61	1	....	65,340,000	.....	.....
Totals	169	5,297	2,840,388,150	1,121,284,172	950,400

TABULATED STATEMENT OF WATER COMMISSIONERS' ANNUAL RESERVOIR REPORT, 1931

Dist. No.	First Day Water Was Used	Last Day Water Was Used	Average No. Days Water Was Used	Average Daily Amount in Sec. Ft.	No. Acre Ft. Carried
			Dist. No.		
40	June 1	Sept. 30	95	347	24,392
42	June 15	Sept. 20	34	92	8,389
60	.....	.....	..	..	.....
61	April 18	Oct. 15	52	15	2,072
Totals			60	454	34,853

TABULATED STATEMENT OF WATER COMMISSIONERS' ANNUAL RESERVOIR REPORT, 1931

Dist. No.	Superintendence	Repairs	Improvements
40	$ 2,300.00	$ 2,378.00	$ 1,920.00
42	.....	.....	.....
60	.....	.....	.....
61	200.00	500.00	.....
Totals	$ 2,500.00	$ 2,878.00	$ 1,920.00

ANNUAL REPORT OF IRRIGATION DIVISION ENGINEER OF IRRIGATION DIVISION NO. 5 FOR 1931.

Glenwood Springs, Colorado,
November 30th, 1931.

Mr. M. C. Hinderlider,
State Engineer,
Denver, Colorado.

Dear Sir:

I herewith tender my report as Irrigation Division Engineer for irrigation division No. 5, for the year 1931, decidedly the driest and most unfavorable season in my many years' experience in irrigation affairs.

The precipitation in the early part of the season was negligible—not sufficient to do any appreciable good, and the temperature in the growing months was somewhat above normal. For instance, the total precipitation at Glenwood Springs, according to the records of the U. S. weather bureau by months in inches was: May, .28; June, .51; July, 1.34; August, 1.43; September, 3.69 and October, 2.01, while at Rifle the record for the same months was as follows: May, .15; June, .15; July, 1.12; August, .28; September, 3.15; and October .33 inches. The total precipitation at Glenwood for the above six months this year was 9.26 inches, while for the same six months last year it was 11.31 inches.

The rains in the late summer were distributed over the months in such a manner as to be of very little benefit, other than to freshen the atmosphere, and reduce the temperature somewhat.

The rains in August and September, while by no means uniform throughout the district, were sufficient in quantity in most places to have done considerable good, were it not for the fact that they came too late. They had very little effect on alfalfa except to damage some of the crop that had already been cut. As to potatoes, the general effect was good. The added moisture, following an unusual dry spell, started the dormant potatoes to growing, but produced a great many rough specimens. On fertile, mesa soil, however, this defect was not so noticeable, and the crop, while not up to normal in quantity, was of very satisfactory quality.

The rains of October were very valuable to the farmers by way of putting their fields in good condition for fall plowing and seeding, which otherwise would have been impossible.

The weather conditions during the autumn of 1930 were not favorable for surface storage of moisture for the following year.

The first snows came late—after the ground had frozen, and were meager as to quantity. These were not followed up during the winter as usual, with the result that the snowfall during the winter, 1930-1931, was considerably below normal, both in quantity and also in water content. This not only had a disastrous effect upon stream flow, causing great shortage in direct irrigation water, but also very materially interfered with storage, some of the few reservoirs in this district storing little or no water, while others were filled to only about half their capacity. Very few were filled at the beginning of 1931 irrigation season.

This unusual shortage, both in stream flow and reservoir supply, made the season a very lively and anxious one for irrigation officers, bringing them in contact with many peculiar situations and causing them much trouble which they had never encountered before.

In the Snowmass, Sopris and Capitol creek areas, these streams, tributaries of the Roaring Fork river, which have scarcely ever before given us any trouble, made heavy demands on us this season, and called for the appointment of an extra deputy to look after this field and protect the rights of prior appropriators from junior rights higher up the stream. This is the first season we have had to resort to this action.

Furthermore, we have been brought face to face in this territory with the four year bar, Sec. 1785, C. L. 1921, p. 616. On account of the heretofore abundant supply of water in that territory, I doubt if the existence of this statute had been known to a single appropriator in that district, and much less has it been invoked. In other portions of the division, attacks have for the first time been made upon apparent senior rights, but which were adjudicated more than four years after the contesting decrees.

Another serious result of the very unfavorable conditions of the past season was that which threatened the domestic and stock supply, and for a time brought consternation to municipalities and range stockmen, who shuddered at the thought of what a distressing situation a week or a month might bring forth.

The town of Gypsum takes its supply of domestic water from Gypsum creek, by means of a pipeline and storage tanks, supplied by a rather inferior appropriation. Through a contract between the town officials and the farmers along the line of the town's water supply pipe, a number of these farmers were permitted to connect with this pipeline and use water from the same for their domestic household purposes. In consideration of this favor, each of these farmers, owning irrigation rights superior to the town appropriation, agreed that a portion of their superior rights might be supplied to the town, in case of shortage. The shortage came this year as never before, and the agreement was being carried out by the water commissioner, in the belief that he was acting in his legal right, so long as no one claimed to be injured by the arrangement.

Finally one resident of the community, who however, had no ditch or land available for irrigation, complained to the State Engineer. I had previously advised the water commissioner that if any valid appropriator could show injury by the arrangement, he must comply strictly with the law, even to shutting off the town's water supply, if that became necessary. I had also advised the town board as to what my attitude would be, in case a legal demand was made upon us for water under the early rights.

Notwithstanding the complainant made no demand or request, either on me or the water commissioner, under any sort of title, the town officials became uneasy and secured a loan from the owner of the first water right in the stream of 1.2 second feet of water for sixty days, and on August 6 applied for and received from the district court a mandamus order directing the State Engineer, the Division Engineer and the Water Commissioner to recognize said order. The action was not contested, and happily the threatened domestic water famine was averted.

The town of Rifle was threatened in like or rather similar fashion, except in this case no one was challenging the town's right to use all of its claimed water right, the real fear being that the entire stream would not supply enough water for the town's needs, or to fill its priority of 60 minute feet. The town was joint owner with a ranchman of 120 minute feet, in the first priority in the stream. This water was divided equally until on September 10 the entire flow of Beaver creek was only 38 minute feet. The farmer's portion would not then reach his farm and the entire supply of the stream was afterwards rotated daily between the town and the farm until September rains increased the flow of the stream. If it had not been for the fact that the town has a storage reservoir of considerable capacity, the situation would have been disastrous. Other towns that for a time were greatly concerned about their domestic supply were Eagle and New Castle, but fortunately they suffered no real trouble.

Not only were these threatened shortages of municipal water the cause of much anxiety, but stockmen grazing their herds on the forest reserve were greatly exercised because of the fear that stock water would be depleted, necessitating the moving of their stock to other ranges, provided such could be found.

In the Grand Mesa grazing area, draining into Cattle Creek, springs and water holes which had always heretofore furnished an abundance of stock water, dried up to such an extent that it was necessary to surround them with strong fences to prevent trampling by the cattle, and to drain the water to pools constructed outside, from which the stock might drink. This is a condition never before heard of in this country.

Many of the streams were so low for several weeks, owing to the heavy demands made upon them for irrigation water, that fish in them perished by the thousands. Not only was this con-

dition true as to small streams, but the Colorado and the Roaring Fork rivers both suffered in this particular.

Canon Creek, heretofore considered one of the best supplied streams in this section, was twice so low that appropriators from the same went to the flat tops at the head of the stream and cut the natural dyke, lowering the water surface of the large lake there several feet, until their rights in the stream had been supplied.

During the latter part of September, I was called to DeBeque by officers of the Bluestone Valley Ditch, who claimed the Colorado River was so low they were not able to get the water in the headgate of the ditch. I found their contention true, but the trouble was partially due to the manner in which the Public Service Company's power plant at Shoshone, eighty miles up the river from the trouble complained of. This condition, which would have been impossible in an ordinary season, was soon remedied, and I cite the circumstance only to show the abnormal conditions which confronted us the past few months.

As a result of the unusual conditions above described, during the season just ended the expense of administration has been greatly increased over former years, but the extra conditions called for extra service on the part of the commissioners and their deputies, and this extra service was well worth all it cost.

The crop outlook in the spring of 1931 was not encouraging, and in consequence, many farmers made no attempt to farm all their areas, but devoted their energies and what water they could secure, to their other fields. I predict therefore that when my annual reports are totalled, a considerably less crop acreage than usual will be shown.

Since the streams were somewhat replenished by the none too copious late showers, they proceeded to make good use of all water available for putting the very dry ground in good condition. As late as last week I saw farmers irrigating, while others were plowing, as the ground had not yet frozen.

Other than the Gypsum case, to which I have made reference, I have only been in court on one case this season. On October 30 I was served with an injunctive complaint and cited for contempt because I had directed the water commissioner of district No. 45 to recognize the decree of the Camp Bird ditch, the first right out of Cache creek, in preference to the domestic rights of two other ditches for 50 minute feet each, from October 1 in each year to May 1 of the following year. At the.....hearing, it was proven beyond any doubt that the defendants, the owners of the Camp Bird ditch needed the water and that they were using it beneficially but Judge Shumate held the division engineer, the water commissioner and all the defendants in contempt and fined them twenty-five dollars and costs, providing that they might be purged of contempt by returning the water to the domestic rights of inferior priority dates.

This raises the rather fine question as to who is to decide when water is wasted or is being beneficially applied, and who has the authority to ignore the first right on a stream and change it into the third right. The owners of the Camp Bird ditch need water for irrigation after the first of October and before the first of the next May. Whether the Camp Bird owners will appeal the case or start an action in their own behalf next spring, I am not advised, but I know there is a very deep feeling that the ruling sets aside the priority laws and deprives first appropriators of valuable vested rights.

Judge Shumate bases his ruling on the theory that the defendants, some of whom are comparatively recent settlers on the stream, have changed the conditions which the plaintiffs found to exist when they secured their decrees, and that by planting small fruits which call for late irrigation, the defendants have lengthened the irrigation season, to the damage of the domestic right owners.

One other case gave me some concern, and that was where I recognized a recently acquired absolute decree as against a conditional decree of earlier date. The owner of the conditional decree appealed to this office, and was sustained, under your interpretation of Sec. 1798 C. L. 1921. I hear rumors to the effect that next spring the loser will take some action, probably by way of mandamus, to compel me to recognize his absolute right.

The crops in Division No. 5 consist of alfalfa and wild hay, cereals, vegetables, fruit and sugar beets. Practically all the beets in the division are grown in Garfield county and the yield this year has been not quite, but almost, up to normal. In the high areas, the upper Colorado and the Blue river valleys, hay and grain are about the only crops attempted. In the Eagle river valley and Egeria park, head lettuce is raised in considerable volume, and I think at a very satisfactory profit. The Colorado Experiment Farm at Avon, in Eagle county, has for several years demonstrated high altitude farming, its chief products, besides the ordinary farm crops, being lettuce, celery, onions, cauliflower, green peas, string beans, Mexican beans and spinach. Perhaps the most outstanding crop produced on this farm has been the cauliflower which is produced in large quantity and of excellent quality.

The Carbondale country still continues as the center of potato production, the crop being cut short this year by a shortage of water. The quality is good—a little under normal, but unfortunately there is no demand and no price. One car was loaded out at Glenwood last week at 35 cents a hundred.

Perhaps the most satisfactory crop of the season is sugar beets. The tonnage has been almost up to normal, sugar content normal, and the best part of all is that the farmers are receiving per ton just what they expected to receive when they planted their crop.

The acreage of fruit in Division 5 is very small. The yield was good, but the prices very low.

Range cattle came down from the hills in splendid condition this fall, probably owing to the dry condition of the pastures, as a result of the dry season. The stockmen are complaining of the poor prices they are receiving on the market; but I believe the cattle business is still the most substantial industry we have, and that it offers the best outlook for the future.

The sheep business has suffered a very severe decline, and sheep men in my territory all complain that they have done business at a very heavy loss the past year.

I believe I have now covered the points in which you will be interested, and which will interest those who in the future may look to your office for information and suggestions. When I look back over the extremely hard year just closed, I have a feeling of relief to know that we finished the season with very little trouble, practically no litigation, and with such good results in the way of crop production.

I shall be pleased if we may have some discussion in the meeting on irrigation laws and practices, and the experiences of others on points that have given me some trouble, but I do not care to burden this report by enumerating them here.

Respectfully submitted,

A. J. DICKSON,
Division Engineer.

TABULATED STATEMENT OF WATER COMMISSIONERS' ANNUAL REPORT FOR SEASON OF 1931

District No.	4 Amount of Appropriation Cu. Ft. Per Sec.	5 Capacity of Canal	6 Length of Main Ditch in Miles	8 First Day Water Was Used from Natural Stream	9 Last Day Water Was Used from Natural Stream	10 No. of Days Water Carried from Natural Stream
37	1,015	943	308	May 15	Sept. 15	119
38	844	1,117	268	Apr. 1	Oct. 1	103
39	403	340	145	Mar. 10	Oct. 25	123
45	649	580	205	Apr. 1	Nov. 1	65
52	163	269	67	Apr. 10	Oct. 10	42
53	365	....	138	Apr. 1	Oct. 15	129
70	151	256	96	Apr. 1	Nov. 15	177
Totals	3,590	3,505	1,227	Mar. 10	Nov. 15	108

TABULATED STATEMENT OF WATER COMMISSIONERS' ANNUAL REPORT FOR SEASON OF 1931

District No.	11 Av. Daily Amt. Water During Season	12 No. Acre Feet Used	13 Total No. Acres Can Be Irrigated	14 Alfalfa	15 Natural Grasses	16 Cereals
37	397	93,218	25,975	10,380	2,239	3,131
38	647	160,772	32,496	16,737	5,773	5,113
39	242	53,010	24,973	9,729	1,858	2,215
45	211	30,835	28,051	14,225	3,934	4,296
52	128	12,373	11,502	1,565	2,791	290
53	234	66,488	18,657	3,935	10,057	385
70	120	45,638	16,060	6,610	45	925
Totals	1,979	462,334	157,714	63,181	26,697	16,355

TABULATED STATEMENT OF WATER COMMISSIONERS' ANNUAL REPORT FOR SEASON OF 1931

District No.	17 Orchards	18 Market Gardens	19 Potatoes	20 Sugar Beets	21 Beans	22 Peas
37	...	205	1,383	....	..	164
38	...	....	3,007	....	..	10
39	218	9	1,590	1,458	30	....
45	322	39	436	87	23	1
52	...	....	52	....	....	....
53	...	....	340	....	....	....
70	181	25	104	119	....	....
Totals	721	278	6,912	1,664	53	175

TABULATED STATEMENT OF WATER COMMISSIONERS' ANNUAL REPORT FOR SEASON OF 1931

District No.	24 Other Crops	25 Total Irrigated	26 Superintendence	27 Repairs	28 Improvements
37	11	17,513	.....	$ 18,809	.....
38	...	30,640	.....	.....	.....
39	317	17,424	$ 4,390	17,094	$ 1,925
45	249	23,612	1,179	3,390	205
52	...	4,698	.....	1,510	.....
53	160	14,877	.....	3,336	.....
70	138	8,147	.....	1,500	300
Totals	875	116,911	$ 5,569	$ 45,639	$ 2,430

ANNUAL REPORT OF IRRIGATION DIVISION ENGINEER OF IRRIGATION DIVISION NO. 6 FOR 1931.

Steamboat Springs, Colo.
November 30, 1931.

Mr. M. C. Hinderlider,
State Engineer,
Denver, Colorado.

Dear Sir:

In compliance with the provisions of the law I have the honor to transmit herewith my report for Irrigation Division No. 6 for the year ending November 30, 1931.

This is the second consecutive year of subnormal conditions with respect to snowfall, beneficial rains and water supply in general for irrigation, with above normal temperature almost entirely through the growing season together with other climatic conditions, which resulted in some advantages but mostly a disadvantage to growing crops.

The total, as well as the minimum flow in the natural streams is the lowest on record. The Little Snake River at Lily Park was dry or practically so from August 15th to September 12th. The Yampa River, at Maybell from July 20th to September 24th, average flow 75% below the normal flow for that period. The total runoff of all streams being less than 50% of normal. The heavy runoff was practically over and streams took a sudden drop the third week in May. This is anywhere from two to four weeks earlier than the normal. On April first computations were made from the U. S. Forest Service snow scale and it was estimated that the seasonal flow of the Yampa and White Rivers would be at least 85% of normal. The water content of the snow was calculated to be 80% of normal. These estimates were a trifle high as shown from the actual runoff records.

These dry conditions resulted in an early and late demand for irrigation water and a more continuous demand than normal throughout the season.

The climatic conditions were advantageous for the harvesting of crops, fall plowing and an increased production and a better quality of hay in a few instances, on some of the normal waterlogged river bottom areas. Also a better quality of potatoes in the normally wet ground of the higher altitudes.

The lettuce and vegetable crop in the Yampa Valley district was materially affected by lack of water and climatic conditions. The lettuce and vegetable shipments which include Yampa, Trappers and Toponas shipping points, was about 50% of normal on the average for the past three years. The acreage for these crops

was about 65% of that for the last year. The average price received for lettuce this year was an increase of about 25% over last year. It was estimated that approximately 60% of this year's lettuce crop was marketed.

Compiled acreage in lettuce Dstrict No. 58, 1700 acres, peas 50 acres, spinach 25 acres, carrots 10 acres. Lettuce shipped, 246 cars and movement by trucks estimated 20 cars, average price to growers, 90 cents per crate. Peas, 5 cars, spinach, 2 cars.

Mixed shipments of lettuce, peas and carrots, 10 cars, average price to growers, peas, 4½ cents per pound, spinach, 2½ cents per pound, and carrots, 1½ cents per pound.

First—The condition and relative percentage of water in storage at the beginning of 1931, as compared with normal years.

The total storage in reservoirs that have been used continually for irrigation purposes averaged 65% of normal at the beginning of 1931 irrigation season. In no instance is there a reservoir in this division on any of the larger tributaries or main streams, which accounts for the subnormal condition of storage. All reservoirs being on or situated near the head of the smaller tributaries, where the lack of precipitation and small drainage areas would materially affect them.

Reservoirs in general throughout the Division are not in very good condition, largely due to the fact that we never before had a really serious shortage and there are at least 15 individually-owned reservoirs that would have been a great benefit to the owners but were absolutely useless, caused by neglect in maintaining embankments and outlet works.

In District No. 43 only one reservoir was full on the first day of May, being the Baxter or Evacuation Creek Lake Reservoir, on Evacuation Creek in western Rio Blanco County. The balance of reservoirs in District No. 43 averaging only one-third full, which is estimated 50% less than the normal condition.

District No. 44 Water Commissioner reports there was approximately 70% of normal on an average stored in the reservoirs of his district, which included the rainfall of May and early June, based on averages for past five years.

District No. 58 stored water was 75% of normal in live reservoirs.

District No. 57 Water Commissioner reports show only two reservoirs full at the beginning of the season. The J. A. Temple on Dry Creek and the J. M. Yoast supplied by a feeder from Fish Creek. All other reservoirs averaging one-third full or 66% under normal.

Second—The condition and quantity of snow deposits with respect to normal conditions.

Snow scale readings the last of March in the Routt and White National Forest showed a marked decrease with respect to normal conditions. In the Routt National Forest, which includes the

headwaters of Snake River, Elk River and tributaries and tributaries of the Yampa River from Morrison Creek to Moffat County. Here the average reading was 33.7 inches with very little snow falling after April 1st. The snow was light and crystallized, giving a low density. The average for these scales for the past 12 years is 47 inches, for 1930, 40.6 inches and the 1931 reading 33.7 inches. Basing estimates on these figures the snow deposits for this season were less than 75% of normal.

The average snowfall for the past five years in the White National Forest, including the headwaters of the White River and tributaries, Roaring Fork of Yampa River and upper Yampa River tributaries. Also the Williams Fork and Trout Creek headwaters show an average of 32⅜ inches. The 1931 readings show an average of 23⅞ inches or approximately 66% of normal. The conditions of the snow deposits are similar to that in the Routt Forest as to density, etc.

Water Commissioner of District No. 43 reports the snowfall 1930-31 generally below normal and came rather late in the season, with exception of part of the divide lying west of Flag Creek, where an unusual snow storm deposited a great depth on the headwaters of Piceance Creek and all its tributaries, except Thurman Creek. This snow became well packed and held up well in the spring. This is an exception to the snow deposits covering the balance of the District.

The snowfall in the lower elevations of and in the western part of District No. 44 was above normal but this was of no benefit to irrigation and of little consequence to agricultural crops in the District.

Water Commissioner of District No. 58 reported snowfall 50 to 60% of normal. The ground froze early, before snow fell and little moisture went into the ground, causing early and quick runoff of water before the irrigation season. Early extremely cold weather in the fall of 1930 kept the snow from packing down so that the water content per foot of snow was much less than normal.

Water Commissioner of District No. 57 reports that there was not the usual wind during the winter, snow did not drift and melted off uniformly and being of light texture and about one-third the normal amount of snowfall for his district.

Third—Quantity of rainfall and general occurrences of same during the growing season.

In this respect it was more the general occurrences of rainfall rather than quantity, that was unbeneficial during the growing season. April and May the rainfall was below normal and no beneficial rains occurred from early in May until the later part of July. July third and fourth local heavy showers occurred in scattered areas and was of little benefit.

Heavy general rains occurred almost all over the entire divi-

sion the latter part of July, which was a great benefit to the irrigators but most too late for a general relief to the dry land farming. Heavy general rains again occurred on September 15, 18, 24 and 28th, too late to be of any materal benefit except to decrease forest fire hazards. The national forests were unusually dry and several fires occurred in scattered areas during the dry period. The rainfall for April, May, June, July and August was considerably below normal, while for September it was above normal.

Water Commissioner of District No. 43, the White River drainage, reports that no beneficial rains fell until late in July and were not much help to the growing wheat on dry lands, but in the irrigated districts helped the second cutting of alfalfa and the irrigated grain. Late rains in September were a wonderful help to the pastures and the range. All dry land crops were short, as the rains came too late to help.

Water Commissioner of District No. 44 states that rainfall in his district was not well distributed to be of any material benefit to growing crops.

District No. 58, no general rains during the growing season. Rains all local and only of trifling benefit. May 15th to June 30th claims 50% of normal. July and August 30% of normal. The last part of September and early October above normal.

District No. 57, there were two heavy rains for a few hours. One on June 23 and again on July 31st. It is considered these rains did more damage than good, being in the form of cloudbursts.

Fourth—General temperature conditions during the growing season and their reaction to normal.

The general temperature conditions were considerable above normal. The average for May, June, July, August and September being 2.1 degrees above normal for the entire division.

The range in the daily temperature records indicate that nights were not as cool as normal in the mountain areas. The greatest range in daily temperature occurring in the lower altitudes.

District No. 43 temperature during the early growing season was normal and the latter part of the season above normal, with above normal wind.

District No. 44 reports temperature conditions for the latter part of the growing season, that is, July, August and September, considerably above the average with considerable wind.

District No. 58. Nights not so cool during the growing season in the mountains. Days hot and dry for prolonged periods.

District No. 57. Hot and sultry for long periods during the growing season. Considerably above normal for this district.

Fifth—Effect of temperature conditions upon growing crops.

The effect of temperature conditions upon growing crops was varied. It was beneficial to the maturing of grain and hay on the

irrigated lands. On the other hand it was detrimental to the lettuce crops and dry land products. Where plenty of water was available the hay crop did exceptionally well; where water was short this crop was stunted and thin. Lack of moisture on the growing crops was the principal cause of shortage, temperature conditions were secondary. Higher temperature on the average would have been beneficial.

Practically all the dry land hay and grain was badly damaged by the extreme prolonged hot weather and no moisture. The ranges also were beginning to get very dry and burned. Water holes were drying up until the rains came the latter part of August, giving both temperature and moisture relief. Late unirrigated spring grain and pasturage was affected, mostly by temperature conditions in the lower altitudes.

In District No. 57 the water commissioners report that the temperature conditions affected the growing crops on irrigated land the same as on dry land. The hay and grain were very short and light, estimates a 50% production, claiming the shrinkage due more to temperature conditons rather than lack of moisture.

Sixth—Availability of water supplies in the natural streams, needful to satisfy seasonal demands.

Yampa River main stream from mouth of Hunt Creek to State Line, enough water to supply all demand. Average 80 c. f. s. passing the gaging station at Maybell during the shortest period of the season.

Elk River, the main feeder to Yampa River, had an excess throughout the season. The same was true with most of the tributaries of the Elk River, with the exception of Deep Creek and Sand Creek. The Little Snake River and all tributaries fell short of demand.

White River main stream more than sufficient to supply the demand.

Water Commissioner of District No. 43 reports that all ditches diverting water from White River suffered no ill effects from lack of water but nearly all of them could not or did not run their usual amounts on account of the fact that the low stage of the river made it very hard to get a full head into their ditches.

Coal Creek, Flag Creek, Little Beaver Creek and Thurman Creek were extremely short of water, most of these creeks falling below normal flow at least one month earlier than usual. Thurman Creek also included in this group.

District No. 44 reports show that Fortification and Elk Head Creeks were very little below their normal average supply. These creeks, however, every year are 75% short of the seasonal demands.

Morapas Creek, Milk Creek, Good Springs Creek were 40% below the average flow after June 15th and about 80% short of the demand. Williams River was approximately 25% below the

average for the entire season but filled all demand, with exception of some of its small tributaries.

District No. 54, Snake River, was 50% short of filling the demand, Willow Creek and Four Mile Creek were 90% short of the seasonal demand. The average of these creeks is approximately 50% short.

District No. 57 apparently has not a complaint of shortage on Yampa River or Trout Creek, although the records show that with but few exceptions the ditches were not carrying their usual supply.

Fish Creek tributaries of Trout Creek water supply was very short, supplying only about 5% of the demand. All other creeks in the district went dry about the middle of June.

District No. 58 reports show that upper Yampa River, above town of Yampa, the available supply was 83% short of the demand.

Old priorities call for over 50 c. f. s. at the lowest stage of the river, only 16.50 c. f. s. were delivered to headgates. Below Yampa the return flow and seepage provided just about enough to satisfy the decreed rights.

All tributaries to the Yampa River in the District were from 25% to 100% short of the demand.

Upper Yampa River tributaries, including Hunt Creek, Watson Creek, Chimney Creek, Oak Creek and all streams on the east side, were about 50% below normal and 75% short of demand.

Deep Creek, main tributary to Elk River, was practically dry from June 15th to the end of the season.

Seventh—General discussion concerning effect of shortage of water supplies on the more senior decrees, dates of such priorities and occurrences of such shortage.

This is the first season that some of the more senior decrees, especially on the main streams, have been cut off or reduced below their demand, owing to the shortage of water.

Every year it occurs on a number of the smaller streams that some senior rights thereon will suffer shortage due to lack of water in that particular stream, while some junior rights next door will be well supplied. In no instance this year was it necessary to close down junior rights on the tributaries to supply senior rights on the rivers.

On the upper Yampa River, shortage became evident about June 15th, junior decrees were cut off. June 15th there followed a gradual closing down of more senior decrees up to July 8th. All that remained supplied was the original decrees of 1891. From July 8th to 30th the first and second enlargement of the Mandell ditch Priorities No. 43 and 93, F. D. Hutchinson priority 100, the C. & A. Leighton priority No. 99. Action priority No. 75, Buckingham Mendall priority No. 62 of the decree of 1891, but junior

with respect to dates of construction were closed. These priorities continued short all through the balance of the season.

During the latter part of August and September some of the water was released by the senior decrees and returned to the river to be used by the next rights in line who had suffered through early closing.

The greatest effect on the more senior rights in District No. 44 was in the Axel Basin on lower Milk Creek, Good Spring Creek and Wilson Creek. The more senior rights, priorities No. 15, 16 and 18 on Good Spring Creek. Priorities No. 5 and 34 on Milk Creek and priorities No. 2 and 11 on Wilson Creek, from June 25th to end of the season were affected through lack of water supply in the streams.

In District No. 43 only on Coal Creek, Flag Creek and Little Beaver Creek were the effects of shortage particularly noticeable on the more senior decrees.

On Coal Creek all decrees thereon were short of water and the creek did not supply enough water to fill quota for the Coal Creek No. 1, date of May 14, 1883, and its first enlargement May 15, 1885, from and after about the date of June 6th.

In Little Beaver Creek the Little Beaver ditch and its first enlargement did not call for water and the next priority, the Val Verde ditch, could only be supplied with about one-fourth of its water, being all the water in the creek at its headgate. All other ditches above being closed after June sixth.

On Flag Creek there was only water available to supply the Melvin No. 47 with its first right and the Rooney No. 52 with 2.50 c. f. s. Melvin ditch dates to August 22, 1896 and the Rooney to September 29, 1886. Conditions on Flag Creek were helped materially by the purchase by the Melvin ditch of one and one-half shares in the Miller Creek ditch and its water, averaging 1.33 c. f. s. This was delivered to the Rooney ditch, which allowed the Melvin to draw 2.00 c. f. s. at its headgate instead of the .50 c. f. s. Flag Creek water. It also made available some water at the Howey ditches, from .90 to 1.16 c. f. s. These ditches are so located that return and waste water was available for the Howey ditches next priority in line. The Youch ditch, May 5th, 1887, and all junior ditches, were completely out of water after July 24th and they had only a small proportion of their water right previous to that date.

Deep Creek in District No. 58, all senior rights were without sufficient water after June 15th. Some ditches were affected that have not been previously affected in former years. The earliest rights, dating back to September 5, 1887.

The total adjudication on Deep Creek is 54.76 c. f. s. to 35 different ditches. After June 15th approximately 4 c. f. s. was being delivered to senior rights from July 15th to balance of the season. The creek was practically dry.

District No. 57 reports no more senior rights affected by shortage of water.

Eighth—General effect and value of reservoir water supplies during the season.

Reservoir water supplies are not nearly sufficient to make up for the stream shortage. All available reservoir storage was used up early during the season. The value of the reservoir water has been forcibly emphasized this season to the water users.

Reservoirs that have been practically abandoned for a number of years, some having no outlet, or outlet works, that were useless. Others that ownership was unknown and considered as lakes were claimed and affidavits of ownership presented and demand made for the water. In several instances dykes were trenched and the reservoirs drained in an attempt to save some crops. A number of the water users even going so far as to drain beaver dams, in order to temporarily increase the flow of streams. The draining of such beaver dams on a large scale was found detrimental to the more senior rights. It would increase the natural flow considerable for a few hours at a time.

The beaver, of course, would go to work immediately to repairing dams and the natural regular flow of the stream would be reduced for several days. Therefore, the junior rights would be the only ones benefited by such temporary increase.

The condition of the past season is the best thing that could happen to bring about the outstanding value of reservoir supply.

There is plenty of water available for the present demand in all streams in this division if storage reservoirs were available to store up the early runoff. All present reservoirs are small, cheaply constructed and poorly maintained and in most instances individually owned.

In District No. 58 the Stillwater ditch depends mostly on the water of the Gardner Park Reservoir. This priority from the direct flow of the Yampa River usually being shut down anywhere from June 1st to July 1st. There is a couple of thousand acres under the Stillwater ditch and the present reservoir's capacity is not sufficient only as an emergency crop saver. This holds true with the majority of reservoirs in this division.

A few outstanding instances of reservoir value.

The Wilson Reservoir, District No. 43, supplemental supply to the Nichols ditch, had about one-third capacity available and was used to considerable advantage to save a hay crop, which would have otherwise been an entire loss. It was not a sufficient quantity to save the entire crop as irrigation was completed early in June with what water was available.

The Tawney and Herons interest made valuable use of the waters stored in Evacuation Creek Lake Reservoir and crops under their ditches would have been a complete failure had it not been for this reservoir water.

The greatest number of reservoirs used for irrigation where natural flow for direct application is not available is in District No. 57, in the Sage, Grasse and Dry Creek Basins. None of these creeks carry water during the irrigation season and the users depend entirely upon the stored water. The crops under these various reservoirs this year are reported to be better than the average for the rest of the district.

In District No. 44 the reservoirs on a whole have been sadly neglected. There was considerable water stored in several reservoirs that was not available for the users. Eleven reservoirs storing 22,282,701 cubic feet of water were left idle on account of poor outlet or no ditch service to carry the discharge to the lands. Four reservoirs with total capacity of 5,584,400 cubic feet had the dykes washed out.

Seven reservoirs were used, however, to good advantage. These have a total storage capacity of 55,873,753 cubic feet or about 1,260 acre feet and it is estimated value to the users was about $7.50 per acre foot. The crops thereunder, principally hay, were saved from a total loss in each instance. Reservoir storage, if increased in the division, would be of almost unknown value. This can be accomplished to an advantage by combined effort, but the expense as an individual proposition to small ranchers is in most instances prohibitive.

Ninth—Character of crops produced, and the resulting effects of inadequate water supply as measured in tonnage and quality compared with normal conditions.

The inadequate water supply as a whole had more effect on crop shrinkage and decrease in tonnage, than temperature or climatic conditions. With but few exceptions the crops produced were far below normal in tonnage but the character and quality were not materially affected.

The hay crop on Piceance Creek was a little above normal, both in tonnage and quality, but below normal in both tonnage and quality for the alfalfa on first cutting, owing to the extreme cool weather the first part of the growing season.

In District No. 43, where water was available, hay and grain crops were about normal, with the exception of alfalfa.

The tonnage on all hay, with the exception of Piceance Creek, was below normal.

Dry land hay on Little Beaver, Coal Creek, Flag Creek and Thurman Creek was below normal. On Little Beaver and Coal Creek, not over one-half crop. The quality of hay in all instances with the exception of alfalfa, was above normal, contributed to the very favorable weather conditions during haying season.

In District No. 44 the hay crop is estimated to be about one-half tonnage of normal conditions. Grain crop very light of straw and grain small.

Hay is the principal crop in acreage in District No. 58, this on the average has fallen short about 25% in tonnage.

On some of the river bottom lands the production of hay was heavier and the quality considered above normal. This is on sub-irrigated ground, and the lack of surface irrigation on account of water shortage was an advantage to such tracts. Small grain in District No. 58 in some fields was a total loss. These were mostly on dry land areas for the entire district, about 50% short in weight.

Lettuce and similar crops about 50% of normal, the quality and character of some affected by inadequate water supply.

Grain short and small, hay dry and thin in areas where water was short.

All root crops had a fairly good yield. Tonnage, however, below normal. Character of same not affected by inadequate water supply, as they require little or no irrigation. The temperature and climatic conditions was a large factor in the reduced tonnage and character of potatoes, etc.

Conditions in District No. 57 were an exception to the rule in other localities. In a few places in this district the tonnage and character of hay was about normal, but the majority of acreage the tonnage was below normal and the quality poor, which was attributed more to temperature conditions rather than inadequate water supply.

Tenth—Effect on ground water supplies—Seepage and return flow.

Some noticeable decrease in ground water along the river bottom areas of the main streams. On practically all tributaries, however, all seepage dried up and springs went dry that have never been known to be dry before. In the irrigated areas the seepage and return flow is estimated as a general condition to be at least 75% of normal, attributed to dryness of soil and evaporation through excess heat and less water applied by irrigation.

During the normal and more permanent flow of the Yampa River, during the hottest weather, an accurate account was kept of the diversions from the river above the town of Yampa and it was found that there was a variation or a decrease of 20% in volume in the daytime where the average flow in the daytime was running around 25 c. f. s. the night flow would increase to 30 c. f. s.

The return flow to the Yampa River below Yampa and above the Maybell gaging station supplied all demands between these points, that is, to 32 ditches in District No. 58, diverting average of 115 c. f. s., 13 ditches in District No. 57 diverting average of 173 c. f. s. and 20 ditches in District No. 44 diverting average of 190 c. f. s. or a total of 478 c. f. s. being diverted on the average and only accounting for a direct supply by tributaries of less than

100 c. f. s. during this period there was an average of 80 c. f. s. passing the Maybell gage.

The present irrigation along the river between Yampa and Maybell is confined to river bottom land. Ditches well distributed, none being over a 42 c. f. s. demand and none materially interfering with the diversion of another.

This season the supply was a little short of the demand at a few of these headgates. The water was there for them in most instances but they could not get full head in ditches, due to the low stage of the river.

The effect of ground water supplies in District No. 57 was apparent by the drying up of springs and the lack of return flow and seepage along the small creeks.

Eleventh—Effect upon water supplies for towns, citing specific instances.

On July 12th the water supply from Soda Creek to the town of Steamboat Springs was cut off and water turned to supply the Soda Creek ditch, prior right on Soda Creek. The town has floodwater rights only from Soda Creek and no storage facilities but have heretofore each year diverted water continuously from Soda Creek through their Soda Creek supply ditch and during the irrigation season materially affect prior irrigation rights on Soda Creek.

The town's Spring Creek right was of no value this year, due to practical drying up of the creek. Their only supply, therefore, being from Fish Creek, where they have a good right to the direct flow to 2.80 c. f. s., with additional reservoir supply if needed from Long Lake Reservoir. The town's Fish Creek pipe line, however, will not carry more than 1.33 c. f. s. and in order to keep the small supply reservoir filled it was necessary to put the town on water regulations from July 15th to about October 1st. This is probably the first time in the history of the town that the citizens were restricted in the use of water.

The town of Meeker suffered no shortage of water as their diversion is direct from the White River, only that it was necessary to construct a dam across the river at the headworks in order to put enough head over the intake pipe to run the system to capacity.

The town of Hayden put on water regulations for about sixty days. Shortage being caused by insufficient diversion. Their water is piped by gravity from wells at the Yampa River bank to well at pump house in the town and on account of low stage of the river they had difficulty in keeping the water in the gravity flow line.

Craig experienced no shortage of water but were materially affected by the low stage of the river. Their system consists of a pumping plant at the banks of the Yampa River, pumping from wells almost the direct river water. During July and

August the shortage of water in all tributaries left only return flow and seepage in the river and its very shallow state caused an unsanitary condition, it was therefore necessary to treat their water during the summer.

The town of Yampa's water supply was kept up with difficulty and at times only through the courtesy of the irrigators, as the Yampa water system is junior to practically every right of the Yampa River above the town.

Oak Creek's supply was very short, their supply is furnished out of Oak Creek and junior to a number of irrigation rights. These rights permitted the town to have their water at times in order to keep the supply reservoir reasonably well filled. The town is, this fall, taking steps to get more water for next year by a diversion from Trout Creek.

Administration.

The administration of water was more difficult this year. The water commissioners were called upon to do 100% more work than under normal conditions. They, however, handled their work quite efficiently, under the circumstances.

One handicap was in not having a water commissioner for District No. 54. Mr. E. W. Leggett, former water commissioner, resigned about July 10th and no appointment was made to fill the vacancy. This office could not give the service to the water users of this district that they should have had.

James Kennedy, water commissioner for District No. 57 was granted a six months' leave of absence in May, on account of ill health. However, after being admitted to Fitzsimons Hospital he appointed A. R. Garee as his deputy on May 15th. The latter has taken care of the district in good shape. No complaints of any consequence from his district have reached this office.

There was some dissatisfaction and complaint regarding the actions of the water commissioner in District No. 58, regarding the administration of water on the upper Yampa River.

A complaint was registered at this office by water users under the Mandell and other senior rights, that water was being allowed in junior ditches and that senior appropriations were being injured thereby. I investigated and revealed that the water commissioner had allowed, at different times, junior rights to open their headgates temporarily to receive water that had been released by some senior rights or through an increase in flow due to the opening of beaver dams up the river and would pass over other senior rights in so doing. Without the entire consent of those concerned and allow some junior ditch to take water temporarily in order to save a lettuce crop.

The water commissioner would correct these errors in each instance upon receipt of orders from this office.

There is, however, still a lot of hard feelings against the water commissioner over this and other actions on his part, that

some of the users have considered personal matters entered into his actions.

Complaint was also made regarding the administration in District No. 44. Investigation in this instance revealed inefficiency on the part of the water commissioner, which is due largely to his increased age, forgetfulness and being hard of hearing has caused him no end of trouble.

During the season sixty-two Parshall measuring flumes of various sizes were placed and fifteen new headgates were built under direct supervision of this office, the water commissioners or their deputies.

Twenty-six Parshall flumes in District No. 58, twenty-five in District No. 43, four in District No. 57, and seven in District No. 44.

The total for all water commissioners bills in the division as presented for the season is $2,792.90. This includes four water commissioners and three deputies, one of which is acting in place of water commissioner in his district.

The average cost per acre for irrigated land under the ditches visited or under constant supervision of the water commissioners is .025 cents per acre. The above data includes administration to 386 ditches out of approximately 1,100 ditches in the division. In Districts No. 43, 44, 57, 58 the water commissioners for the 386 ditches averaged thirty visits during the season to each ditch or fifteen ditches visited daily by each commissioner during the period of employment. In addition to the above enough data was obtained to complete their annual reports.

A thorough inspection, examination and reports were made by division engineer on the Simons Mutual Reservoir (Kosho Lake) and the Hughes Chapman Reservoir in District No. 58, also the Grimes-Brooks Reservoir, District No. 53. During October a loose rock rip-rap strip was placed on the Long Lake Reservoir dam, owned by the town of Steamboat Springs. This strip of rip-rap extends to about one foot above high water line and three feet below high water line. The erosion of the dam at high water line was taking place rapidly and endangering the safety of the dam.

Early and heavy snow deposits during the weeks of November 9th to 21st this year are promising for a good increase in water supply and better conditions for next season.

Attached hereto is a tabulation of the annual reports of the water commissioners.

Respectfully submitted,

B. T. CHASE,
Irrigation Division Engineer Division No. 6.

TABULATED STATEMENT OF WATER COMMISSIONERS' ANNUAL CROP REPORTS FOR THE IRRIGATION SEASON OF 1931

(Ditches)

Dist. No.	No. of Priorities	Complete No. Ditches Reported	Amount of Appropriation Sec. Ft.	Capacity of Ditches Sec. Ft.
43	373	316	946.30	2,266.66
44	133	150	529.02	686.00
54	No report			
55	No report			
56	No report			
57	106	76	354.71	698.16
58	307	274	904.23	1,333.62
Totals	919	816	2,734.26	4,984.44

Dist. No.	Length of Main Ditches in Miles	Length of Laterals in Miles	First Day Water Was Used	Last Day Water Was Used
43	434.22	.....	April 5	Oct. 4
44	207.50	120.75	May 2	Sept. 15
54	No Report			
55	No Report			
56	No Report			
57	190.25	13.75	April 20	Nov. 11
58	359.05	.....	April 1	Nov. 11
Totals	1,191.02	134.50	April 1	Nov. 11

Dist. No.	Average No. Days Water Was Carried	Average Daily Amount Carried in Sec. Ft.	No. of Acre Feet Used	No. of Acres That Can Be Irrigated
43	53	884.19	207,317.00	41,957
44	39	318.17	39,418.00	25,177
54	No Report			
55	No Report			
56	No Report			
57	41	217.66	26,687.42	17,700
58	82	693.54	122,683.64	54,732
Totals	54	2,113.56	396,105.06	139,566

Dist. No.	Alfalfa	Natural Grass, Timothy and Clover	Cereals	Orchards
43	18,031	11,975	3,683	..
44	11,783	6,732	2,570	3
54	No Report			
55	No Report			
56	No Report			
57	638	11,164	397	..
58	8,812	38,059	....	67
Totals	38,664	67,930	6,650	70

Dist. No.	Lettuce	Potatoes	Sugar Beets	Beans	Peas	Other Crops	Total Irrigated
43	....	...	...	...	...	379	34,068
44	....	107	...	...	...	256	21,454
54			No Report				
55			No Report				
56			No Report				
57	....	...	...	...	...	...	12,199
58	1,700	36	...	...	31	...	48,105
Totals	1,700	143	...	...	31	635	115,826

Dist. No.	Superintendence	Repairs	Improvements	Remarks
43	$5,180.00	$ 7,566.50	$2,490.00	100% of ditches in District reported
44	.....	5,159.00	1,944.00	About 75% of the ditches included in report
54	No Report			No water commissioner
55	No Report			No water commissioner
56	No Report			No water commissioner
57	.....	2,085.00	.....	100% of ditches in District reported
58	.....	10,000.00	2,262.00	All adjudicated ditches contained in report
Totals.	$5,180.00	$24,810.50	$6,696.00	80% of ditches in Division contained in reports

TABULATED STATEMENT OF WATER COMMISSIONERS' ANNUAL RESERVOIR REPORTS FOR IRRIGATION SEASON OF 1931

Dist. No.	No. of Adjudications Reported	Area of High Water Line—Acres	Total Capacity Cu. Ft.	No. of Reservoirs Reported
43	10	263.4	45,839,495	10
44	23	.....	90,889,710	8
54	No Report			
55	No Report			
56	No Report			
57	29	894.0	152,971,243	10
58	40	476.0	105,662,013	23
Totals	102	1,633.4	395,362,461	51

Dist. No.	Quantity of Water in Reservoir May 1 Cubic Feet	Quantity of Water in Reservoir Nov. 1 Cubic Feet	First Day Water Was Used
43	22,817,599	1,596,038	April 24
44	35,521,228	.....	June 1
54	No Report		
55	No Report		
56	No Report		
57	57,159,583	1,500,640	June 1
58	48,624,546	.....	April 1
Totals	164,122,956	3,096,678	April 1

Dist. No.	Last Day Water Was Used	Average No. of Days Water Was Carried	Average Daily Amount Carried Cubic Feet	No. of Acre-Feet Reservoir Water Carried
43	Sept. 15	21	10.00	604.89
44	July 30	24	14.00	825.00
54		No Report		
55		No Report		
56		No Report		
57	Sept. 20	65	12.54	267.98
58	Aug. 20	50	66.57	1,567.10
Totals	Sept. 20	40	103.11	3,264.97

Dist. No.	Alfalfa	Cereals	Potatoes	Natural Grasses
43	215	30	4	20
44	280	30	3	385
54	No Report			
55	No Report			
56	No Report			
57	320	..	..	300
58	Supplemental supply to various crops			
Totals	815	60	7	705

Dist No.	Lettuce and Vegetables	Other Crops	Total Irrigated	Repairs	Improvements	Remarks
43	...	....	269	...	...	Unused water in McHatten Reservoir Nov. 1, 1,596,038
44	...	....	698	...	...	All available storage was used
54	No Report					
55	No Report					
56	No Report					
57	...	....	520	...	...	J. C. Temple Reservoir left 1,500,640 cu. ft. remain for stock purposes
58	920	1,000	1,920	...	...	All available water used
Totals	920	1,000	3,407	Considerable spent for repairs but not reported by Water Commissioners.		

ANNUAL REPORT OF IRRIGATION DIVISION ENGINEER IRRIGATION DIVISION NO. 7 FOR 1931

Durango, Colorado, November 23, 1931.

Mr. M. C. Hinderlider,
State Engineer,
Denver, Colorado.

Dear Sir:

This is to submit the annual report, for 1931, covering the administration of water rights, hydrographic studies and related activities and tabulations of the water commissioners' ditch and reservoir reports, as follows:

Administration

The measurements of stream flow to determine the amounts of available supply and the measurement and regulation of flow in ditches demanded more work and attention than during any previous year of my experience.

More complaints were registered by the water users against water commissioners, charging failure to properly distribute the water, than usual. Some of such complaints were found to be justified. Charges of incompetency and neglect were threatened to be filed against the water commissioner of District No. 34. An investigation of ditch diversions and headgate regulations in that district in June disclosed that the charges were well founded. The charges were not pressed after proper regulations were made. Difficulties also arose over the actions or failure of water commissioners to act in Districts No. 29 and 33.

There was no administration of decrees in District No. 69 as the vacancy in office of water commissioner caused by the death of J. W. Westcott in January was not filled until August, when an appointment was made by Governor Adams. At that time the streams in that district were nearly dry so there was no work performed and no report made.

The water commissioner of District No. 29 is still inactive. It was necessary for the division engineer to make headgate regulations in that district upon the request of water users who reported that no action could be obtained by the water commissioner. There is no report from District No. 29.

Water rights in Districts No. 31, 32 and 34 are still in the process of adjudication. On Pine River in District No. 31, the U. S. Indian Service has obtained a decree through the United States District Court granting the use of two hundred twelve second feet. This water is to supply Indian allotment lands in accordance with a treaty made in 1868 with the Southern Ute Indians. The

administration of this decree when the total amount can be beneficially applied will have the effect of depriving present users of considerable water and will no doubt bring about the construction of storage reservoirs. It has already been determined that sites are available for storage at a reasonable cost per acre-foot.

Administration of the La Plata River Compact became increasingly difficult in proportion to the deficiency of water supply. A separate report covers this activity.

Activities and Development.

During the year repairs were made to dams and outlet works of the Summit Reservoir in district 34 and the Pastorius Reservoir in district 30 in accordance with orders from the State Engineer.

The Red Mesa Ward Reservoir dam was raised four feet in height and concrete spillway constructed to provide safety. On account of the inadequate water supply the owners of this project were unable to store sufficient water to realize any benefit from the work done this year.

A survey and investigation was made of the Fort Lewis Reservoir Number 1 which is situated on Parrott Creek near the old Parrott City site. It is proposed to store water for supplemental use on the lands owned by the Fort Lewis school.

Several new Parshall flumes were installed, one of timber construction in district 29, five in district 34, aside from those installed under canal systems and one of concrete on the Freed Ditch in district 33.

An automatic recorder was installed on Mancos River at a point about three miles east of the town of Mancos and just above the principal diversions. This station is to be maintained for the purpose of providing the water commissioner with a rating on the stream and a record of supply, all to bring about more efficient and proper distribution of the available supply.

Water Supply.

Water in storage at the beginning of the year was seventy per cent of normal, varying from fifty per cent in district 33 and the same per cent in some of the reservoirs in district 34 to ninety per cent n the Narraguinepp Reservoir and in the Pastorius Reservoir.

The snow deposits on March 31, 1931, were reported by the U. S. Weather Bureau to be of sufficient quantity as to cause a prediction of seventy-eight per cent of normal runoff in the San Juan and Dolores watersheds.

The visible snow supply on that date was not a true picture, however, of the conditions as just a few days prior to the reading of the depths of snow at the different elevations, there was a moderate fall of snow which gave depths of snow at low stations

of about normal, while a few days later this low snow was practically gone.

The month of March was the eighth consecutive month of deficient precipitation in the San Juan watershed. The result of this prolonged deficiency was a decided lowering of the ground water table as well as the visible supply.

At higher elevations the snow depth on March 31st, in the La Platas was thirty-three per cent, on the San Juan thirty-three per cent and on the Dolores sixty per cent of normal. The water equivalent of the snow was below the average.

The rainfall during the growing season, from April 1 to September 30, as measured at four weather bureau stations having ten or more years of comparable records averaged 9.58 inches or eighty-eight per cent of normal. The monthly amounts and percentage of normal is shown by the following table:

Month	Average Rainfall in Inches at Four Stations	Departure from Normal (Inches)	Per Cent of Normal
April	1.40	—0.07	95
May	0.80	—0.31	72
June	1.42	+0.31	128
July	2.38	—0.05	98
August	1.15	—1.26	48
September	2.46	+0.35	114

The months of April and May registering below normal made a total of ten months with deficient moisture.

Although rainfall in June was above normal the rain did not occur until the last few days of the month and was the first rain generally since the 5th day of May.

The temperature was generally in excess of normal, the departure being as follows:

Dep. from Normal	April	May	June	July	Aug.	Sept.
Degrees	+1.8	—0.6	+2.1	+1.4	+1.1	+2.1

Although the records show a very slight sub-normal temperature during May, it appeared to the water commissioners and to the writer to be a very backward spring. From May 10th to the 29th, at elevations around seven thousand feet, the fields being irrigated were covered with ice nearly every morning. Growing crops were retarded and apparently made no growth during the period mentioned. Alfalfa started and was later frozen. The latter part of the season was too hot and dry for the growing of hay and potatoes but the excess temperature was favorable for growing small grain crops.

The natural water supply was low and on several streams was not sufficient at any time to supply all decreed rights. The percentage of flow in relation to normal is shown by the following table:

MONTHLY RUNOFF IN ACRE-FEET

Name of Stream	Yrs. Rec.	April 1931	April Mean	%	May 1931	May Mean	%	June 1931	June Mean	%
Dolores	19	13,600	49,800	27	45,700	118,000	39	31,900	81,900	39
La Plata	15	1,480	5,390	27	5,470	13,100	42	2,880	9,530	30
Florida	16	2,210	8,130	27	10,600	26,900	39	14,700	31,200	47
Pine	4	11,300	19,100	59	38,600	59,600	65	49,200	74,100	66
Animas	30	15,100	61,400	25	57,000	164,000	35	81,500	193,000	42

MONTHLY RUNOFF IN ACRE-FEET

Name of Stream	Yrs. Rec.	July 1931	July Mean	%	August 1931	August Mean	%	September 1931	September Mean	%
Dolores	20	9,040	25,400	36	4,930	13,200	37	4,960	13,100	38
La Plata	15	1,380	2,450	56	861	1,750	49	1,320	1,570	84
Florida	16	4,060	9,920	41	2,620	5,520	47	3,430	4,800	71
Pine	5	19,400	29,400	66	10,900	23,500	46	14,200	15,900	89
Animas	31	30,100	80,900	37	21,800	40,500	54	20,100	35,200	57

Comparative records as shown in the above tables were made at following measuring stations: Dolores River at Dolores, La Plata River at Hesperus, Florida River near Durango, Pine River above Bayfield and Animas River at Durango. The percentage shown is the relation of flow in 1931 to the mean for the period.

SUMMATION FOR PERIOD APRIL 1ST TO SEPTEMBER 30TH

Name of Stream	Total Runoff Acre-Feet 1931	Normal Runoff in Acre-Feet	Percentage of 1931 Runoff in Relation to Normal
Dolores	110,130	301,400	37
La Plata	*13,391	*32,790	41
Florida	37,620	86,470	43
Pine	143,600	221,600	65
Animas	225,600	575,000	39

*Does not include diversions above the gaging station at Hesperus.

Prior to this season the lowest runoff of record occurred in 1902. A comparison of the 1931 with 1902 runoff in acre-feet is given in the following table for the period of the growing season on the Animas River at Durango and the Dolores River at Dolores which are the only streams in this division having complete records of both years.

Stream
Dolores at Dolores

Year	April	Month May	June	Total 3 Mos.
1902	29,600	52,700	20,400	102,700
1931	13,600	45,700	31,900	91,200
1931 % of 1902	45	86	157	89

Stream
Dolores at Dolores

Year	July	Month August	September	Total 6 Mos.
1902	3,440	5,660	3,690	115,490
1931	9,040	4,930	4,960	110,150
1931 % of 1902	262	87	134	95

Stream
Animas at Durango

Year	Month April	May	June	Total 3 Mos.
1902	26,500	105,000	70,200	201,700
1931	15,100	57,000	81,500	153,600
1931 % of 1902	57	54	116	76

Stream
Animas at Durango

Year	Month July	August	September	Total 6 Mos.
1902	16,700	16,800	17,800	253,000
1931	30,100	21,800	20,100	225,600
1931 % of 1902	180	130	112	89

For the first three months the 1931 runoff was much less than in 1902 but was in excess of 1902 during the last three months. For the total period, the year 1931 goes into the record as the lowest in acre-foot runoff of streams in the San Juan and Dolores drainage.

Extreme Low Daily Flow.

The lowest daily flow in second feet occurred on the various streams as follows: Dolores, 23 s. f. on Aug. 31st, La Plata, 6 s. f. on Sept. 2, 3 and other dates; Florida, 22 s. f. on Aug. 29th.

The same are all time records for low stage of flow during the growing season.

Effect of Low Supply.

The deficiency of water for irrigation purposes was disastrous in effect upon the most junior appropriators and was also noticeable upon practically all decrees. Instances of necessary regulations which affected the old rights were: In water district No. 34 all rights junior to 1875 were closed in order to supply priorities number one, two and three. Rights dated 1877 were closed. This is reported to be the second time in history that such action has been necessary. The other time being in 1902.

On the La Plata there was only sufficient water during one period to supply priorities numbered one and two, dated 1880 and 1886, respectively. The two rights total six second feet.

In water district No. 30, a decree on the Florida River dated 1888 was shut down to supply more senior rights.

It is reported from New Mexico that upper ditches on the Animas River had to be closed on two occasions to supply water for the lower and older rights and that this is the second time in history that such action has been necessary.

Value of Storage Water.

Storage water in this division is generally inadequate to furnish sufficient supplemental water in a dry year. The reservoir supplies which were available, however, during the past season proved to be of immense value. The Red Mesa Reservoir in district 33 was able to store only 280 effective acre-feet. This water furnished domestic and garden heads for approximately 100 families living on Red Mesa and will prove the means of

sustenance for a large number during the ensuing months. Diversions through ditches from the natural flow of the stream was negligible in this section.

In water district 34 it has been estimated by the water users that the use of reservoir water raised the crops from a prospective twenty per cent to forty per cent of normal in addition to furnishing domestic and garden water of unestimated value.

The general effect of stored water was the growing and harvest of partial crops at least on some acreage that would otherwise have had almost an entire crop failure. From individual reports it is estimated that an acre-foot of reservoir water during the past summer was worth from six to ten dollars.

Ground Water.

Due to the deficiency in precipitation, lack of application of water to the land and to excess temperature conditions the ground water tables lowered noticeably in all localities except the areas tributary to the Florida River. Springs became dry for the first time in years. Wells went dry. Return water and seepage flow reached new low points. The La Plata areas were more visibly affected in this respect than other sections.

Municipal Water Supply.

The water supply for towns and municipalities was not affected for the reason that the towns in this section of the state have acquired the most senior rights.

Crops.

The crops produced in this division are principally hay, small grain, potatoes, fruits, beans and garden products.

The result of the short water supply for irrigation as measured in crop yield, varied. The yields ranged from complete failures to sixty-five per cent of the average.

The quality of harvested crops was good.

The failure of crops has in some localities been disastrous, causing the marketing of livestock at unfavorable prices. The conditions in some sections are comparable with the poverty, drouth-stricken areas of 1930.

Prices for farm products are the lowest in twenty-five years. Wheat has sold at the mills for 65c per cwt., delivered. Apples at 25c to 40c per bu., cattle, hogs, sheep, potatoes are selling at prices under the cost of production.

It looks to be a hard winter for the farmer and stockman but prospects are better for water next year as we now have more snow on the ground than fell during the entire winter of last year.

Respectfully submitted,

J. R. WILLIAMS,
Special Deputy State Engineer
In Charge Irrigation Div. No. 7.

IRRIGATION DIVISION NO. 7.

TABULATED STATEMENT OF WATER COMMISSIONERS' ANNUAL DITCH REPORTS FOR THE IRRIGATION SEASON OF 1931

Dist. No.	No. Ditches Reported	No. of Priorities	Amount Appropriated Cu. Ft.	Cap. of Canals Cu. Ft.	Length of Canals, Miles	First Day Water Was Used	Last Day Water Was Used from Nat. Stream
29	...	*220	*530	....	...	.....	.....
30	173	228	590	750	228	Mar. 1	Nov. 15
33	41	46	606	391	50	Mar. 14	Nov. 8
34	53	53	1,786	1,155	83	Apr. 1	Sept. 30
69	14	14	17	47	22	.....	.....
Totals	281	561	3,529	2,343	383	Mar. 1	Nov. 15

*Estimated by Division Engineer.

Dist. No.	Max. No. Days Water Used	Average Number Days Water Used	Average Daily Amount Diverted in S. F.	Number Ac. Ft. Used from Natural Stream	Number Acres That Can Be Irrigated	Acres Irrigated: Alfalfa	Natural Grasses	Cereals
29	...	...	...	*75,000	*43,000	.....	.....	.....
30	255	93	570	106,292	57,820	11,192	5,401	9,884
31	...	...	...	*94,000	*124,000	.....	.....	.....
32	...	...	...	*9,000	*70,000	.....	.....	.....
33	230	36	192	13,862	44,793	5,626	40	3,095
34	180	88	641	112,834	52,760	13,710	1,375	22,137
69	...	...	...	*1,600	*1,950	.....	.....	.....
Totals	255	...	...	412,588	394,310	30,528	6,816	35,116

*Estimated by Division Engineer.

TABULATED STATEMENT OF WATER COMMISSIONERS' ANNUAL DITCH REPORTS FOR THE IRRIGATION SEASON OF 1931

Dist. No.	Orchards	Market Gardens	Potatoes	Beans	Other Crops	Total Acres Irrigated
29	....	....	....	....	....	*25,000
30	576	81	732	....	500	28,366
31	....	....	....	....	....	47,000
32	....	....	....	....	....	*3,000
33	141	7	528	200	55	**9,692
34	3,105	....	3,336	....	4,955	48,618
69	....	....	....	....	....	*841
Totals	3,822	88	4,596	200	5,500	165,517

*Estimated by Division Engineer. **Includes 400 acres irrigated under seepage ditches not included in ditch report.

Dist. No.	Superintendence	Cost of Maintenance: Repairs	Cost of Maintenance: Improvements
30	$4,400	$13,305	$2,000
33	575	355	75
34	....	1,095	....
Totals	$4,975	$24,755	$2,075

TABULATED STATEMENT OF WATER COMMISSIONERS' ANNUAL RESERVOIR REPORTS FOR THE IRRIGATION SEASON OF 1931

Dist. No.	No. Reservoirs in District	Area High Water Line Acres	Capacity in Cu. Ft.	Quantity of Water in Storage May 1, 1931 Cu. Ft.	Quantity of Water in Storage Nov. 1, 1931 Cu. Ft.	First Day Water Used	Last Day Water Used
30	3	869	1,089,238,417	603,316,800	845,537,600	Nov. 1	Oct. 30
33	1	30	26,136,000	15,158,880	.....	June 12	Aug. 30
34	5	909	519,211,988	493,790,000	40,120,000	May 1	Oct. 1
Totals.	9	1,808	1,634,586,405	1,112,265,680	885,657,600		

Dist. No.	Number Days Water Used from Storage	Average Daily Amount Used in S. F.	Number Acre-Feet Used	Number Acres Irrigated	Cost, Dollars: Repairs	Cost, Dollars: Improvements
30	365	18	13,542	No Report	...	....
33	21	7	280	130	...	3,000
34	150	70	21,100	10,475	510	No Report
Totals	...	...	33,922	10,605	510	3,000

ANNUAL REPORT IRRIGATION DIVISION NO. 1, 1932

Denver, Colorado, November 30, 1932.

M. C. Hinderlider,
State Engineer,
Denver, Colorado.

Dear Sir:

Following is a brief report covering the administration of Irrigation Division No. 1 for the season of 1932.

Owing to the extreme drought in 1931, practically all storage for irrigation was exhausted, with no carry-over storage as is usually the case. In a number of cases outlet channels of reservoirs were dredged to make every foot of water available.

Towns and individuals were in desperate need of water for domestic and stock-watering purposes, and the office was deluged with urgent requests to supply the demands. The City of Denver was faced with a serious situation, anticipating a low runoff in 1933. Storage in Cheesman Lake was the lowest since the reservoir was first filled.

Irrigation was continued late in the fall of 1931, and owing to these demands, storage was not permitted until November 21st.

The recognition by the water officials of demands for direct irrigation, as against demands for storage, has developed a number of strenuous complaints. This matter is now before the Supreme Court in an appeal from the District Court of Delta County.

Barr Lake's first appropriation was satisfied on January 11th, and storage permitted in Cheesman Lake. Owing to extreme low flow, but a small amount was available for storage.

On March 29th, first demand for water for direct irrigation was made in District No. 1 for the Lower Platte and Beaver Canal; and on April 4th demand was made for direct irrigation in Water District No. 1.

Storage was stopped in all Districts on April 12th, but permitted again on April 25th, until April 29th, after which no water was available for storage until November 19th.

On September 6th, District No. 2 was short, to supply priority of date April 1, 1864, being the low water of the year.

As nearly all storage was exhausted, unless excess precipitation occurs, a serious drouth confronts the Platte Valley District.

Crops in the division were of good quality, and of nearly average yield.

Respectfully yours,

C. C. HEZMALHALCH,
Deputy.

IRRIGATION DIVISION NO. 1—1932

TABULATED STATEMENT OF WATER COMMISSIONERS' ANNUAL CROP REPORTS FOR THE IRRIGATION SEASON OF 1932. CROPS IRRIGATED FROM CANALS IN ACRES.

Dist. No.	Total No. of Acres that can be irrigated	Alfalfa	Natural Grasses	Cereals	Orchards	Market Gardens	Potatoes
		(2)	(3)	(4)	(5)	(6)	(7)
1	172,815	32,156	25,430	50,305	123	309	8,110
2	243,564	45,069	10,862	91,204	492	7,307	7,809
3	388,250	69,665	5,130	60,387	2,171	3,307	26,404
4	141,377	44,905	120	56,870	2,080	1,125	6,255
5	103,773	20,044	2,322	36,170	539	294	250
6	192,975	30,690	69,580	58,600	589	336	740
7	130,662	24,910	1,614	35,296	3,477	13,749	165
8	117,090	18,966	972	21,929	1,273	1,468	750
9	18,000	5,416	2,712	5,805	83	228	.....
23			No Report				
47			No Report				
48	4,609	.....	4,243	.....	.....	.....	.....
64	195,000	40,916	29,725	50,350	187	435	2,764
65	7,064	1,049	55	298	55	83	124
Totals..	1,715,179	333,786	152,765	467,214	11,069	28,641	53,371

District Number	(8) Sugar Beets	(9) Beans	(10) Peas	(11) Cabbage	(12) Lettuce	(13) Other Crops	(14) Total Irrigated
1	22,457	6,466	.....	350	.....	28,121	173,827
2	34,109	9,628	2,300	2,461	.....	6,180	217,421
3	55,345	3,801	1,490	1,239	.....	34,333	263,272
4	15,135	2,380	1,230	1,330	.....	2,175	133,605
5	6,105	400	850	160	.....	1,888	69,022
6	6,315	1,083	739	261	.....	2,010	170,943
7	2,017	309	235	971	284	383	83,410
8	1,191	780	.....	40	.....	1,123	48,492
9	99	40	.....	108	.....	289	14,780
23			No Report				
47			No Report				
48	.....	.....	.....	.....	.....	.....	4,243
64	30,277	373	.....	349	.....	10,671	166,047
65	.....	.....	.....	.....	.....	1,704	3,368
Totals.	173,050	25,260	6,844	7,269	284	88,877	1,348,430

IRRIGATION DIVISION NO. 1—1932

AMOUNT OF WATER IN STORAGE IN ACRE-FEET IN RESERVOIRS OF CAPACITY OF 1,000 ACRE-FEET OR MORE ON THE FIRST OF EACH MONTH. COMPILED FROM REPORTS OF WATER COMMISSIONERS

Dist. No.	Jan. 1	Feb. 1	Mar. 1	Apr. 1	May 1	June 1	July 1	Aug. 1	Sept. 1	Oct. 1	Nov. 1	Dec. 1
10 Reservoirs Reported.												
1	46,538	.....	93,392	110,890	103,264	91,109	68,469	35,747	9,810	4,892	4,452	2,626
7 Reservoirs Reported.												
2	13,472	17,465	19,942	29,272	29,192	26,087	20,191	8,328	4,323	1,140	2,277	4,699
33 Reservoirs Reported.												
3	18,188	21,971	26,059	31,805	39,172	47,353	60,927	46,860	17,342	8,654	9,678	15,063
11 Reservoirs Reported.												
4	12,500	12,631	13,550	14,900	16,350	16,507	20,472	18,400	9,150	7,600	7,600	5,350
9 Reservoirs Reported.												
5	4,401	4,691	5,557	5,557	6,446	5,464	5,112	4,189	1,733	503	503	803
10 Reservoirs Reported.												
6	5,776	6,206	6,864	7,761	.....	9,926	9,394	9,184	5,653	4,884	4,884	5,241
6 Reservoirs Reported.												
7	800	800	800	1,440	1,975	1,550	760	700	390	330	75	725
1 Reservoir Reported (Castlewood).												
8	305	305	540	1,365	1,528	1,080	1,170	1,069	1,069	1,069	1,069	1,069
1 Reservoir Reported (Marston).												
9	13,342	11,590	12,810	13,193	13,134	13,431	14,154	13,490	10,433	9,439	12,550	16,990
2 Reservoirs Reported (Antero and Cheesman).												
23	46,488	45,334	43,207	44,195	49,608	43,990	37,222	29,135	24,558	20,768	13,552	8,706
64	33,863	40,711	51,438	68,948	66,563	61,606	42,143	22,466	7,703	1,817	3,907	19,082

ANNUAL REPORT OF IRRIGATION DIVISION ENGINEER IRRIGATION DIVISION NO. 2 FOR 1932.

Nov. 26th, 1932.

M. C. Hinderlider,
State Engineer,
Denver, Colorado.

Dear Sir:

I herewith submit to you my annual report for the year 1932.

Irrigated agriculture suffered during the season of 1932 from the drought of 1931. The ground water was nearly exhausted and it required considerable extra moisture to get crops started and grown to the time when irrigation water was available. We have had a series of dry years. Since the season of 1923 we have had only one year that the precipitation was above normal. In another year the rainfall during the growing season was below normal but excessive rains during October brought the annual precipitation up to the normal amount. Eight of the past nine years have had a subnormal precipitation during the growing season. The result of this series of dry years is that the water table under the irrigation canals and in the mountains has been lowered considerable and in many places wells and springs have gone dry. It will require a large amount of moisture to put the water content of the soil back to normal conditions.

The snowfall, upon which so much depends for late spring and early summer irrigation, was above normal. The water content amounted to 6.16 inches. The average water content of the snow during the past nineteen years is 4.29 inches. The snow increased the run of irrigation water during the month of June very materially.

Under some of the junior canals it was hard to get seeds sprouted on account of lack of moisture in the soil and of irrigation water. The flow of the river at Pueblo for the past year amounted to sixty-eight per cent of the average. In 1931 the flow was forty per cent of the yearly average. The increase in flow was not enough to reach all the canals for any great period of time. The result was that under some of the canals having old decrees, crops were better than in 1931, while under some junior canals, conditions were worse than last year.

We did not have the grasshopper pest that was so prevalent in 1931, but instead web or army worms were numerous in many places. The worms are unlike grasshoppers in that the life of

the worm is much shorter. The worms last two or three weeks but the hoppers stay all summer.

Canals depending upon reservoir water to start and grow crops were unfortunate in that no reservoir water was captured in the summer of 1931. The winter of 1931-1932 was mild and open, which permitted of winter irrigation during much of the time so that there was but little storage of water.

The amount of water in storage in this Irrigation Division on May 1st amounted to 57,557 acre-feet. Of this stored water 9,679 acre-feet was for manufacturing and municipal purposes. The average amount in storage on May 1st is 198,395 acre-feet. The amount in storage on November 1st was 35,132 acre-feet. Of this amount 11,619 acre-feet was for manufacturing and municipal purposes. The average amount in storage on November 1st is 170,795 acre-feet.

The total precipitation during the past season for the Pueblo station amounted to 8.76 inches, which is 2.89 inches below normal. The three growing months of June, July and August had a total precipitation of 4.59 inches, which is 0.54 inches below the average. This is in contrast to the season of 1931 in which the shortage of precipitation for the three months above mentioned was 2.87 inches. The season of 1932 was a better growing one than the year 1931.

The only municipality that was seriously affected in 1932 was the city of Colorado Springs. The citizens were obliged to forego lawn sprinkling to one hour each day.

The trans-mountain ditches continue to contribute their mite to the water supply of the Arkansas river. A total of 10,551 acre-feet of water was brought over and used by canals in this Irrigation Division.

The total amount of trans-mountain and reservoir water passed down the Arkansas river and used by canals around Pueblo and east amounted to 14,981 acre-feet. Of this amount 1,498 acre-feet was charged for carriage which went to supply other canals.

The past season was comparatively free from hail and other injurious storms. The growing season was hot and climatic conditions were not of the best. Plant life did not develop to normal proportions in many localities. It was thought that this was due to the heat and dryness of the atmosphere.

Shortage of crops coupled with extreme low prices make farming unprofitable. Expenses and taxes will have to be reduced in proportion.

We have continued to use one hydrographer in the mountain districts much of his time looking after reservoirs and trans-mountain water. This is a very important duty and the cost is

well repaid in securing accuracy in the handling of this water and keeping everyone posted as to conditions. We are still using Parshall flumes and getting more installed each year. The water commissioners of Districts No. 12, 14, 17, second 67, together with myself are assisting in the publication of the daily reports of the Arkansas river. These reports are worth many times their cost and increase in value as the years go by.

Respectfully submitted,

C. W. BEACH,
Division Engineer of Irrigation Division No. 2.

TABULATED STATEMENT OF WATER COMMISSIONERS' ANNUAL REPORTS FOR THE SEASON OF 1932

1	2	3	4	5	6	7	8	9	10	11	12	13
Number of Water District	Amount Appropriated in Cubic Feet Per Second	Capacity of Ditches in Second Feet	Length of Main Ditches in Miles	Length of Laterals in Miles	First Day Water Was Diverted from Natural Stream	Last Day Water Was Diverted from Natural Stream	Maximum Number of Days Water Was Diverted from Natural Stream	Maximum Number of Days Water Carried from Reservoir	Amount of Water Carried from Reservoirs, Acre-Feet	Average Daily Amount of Water Diverted from Natural Stream	Number of Acre-Feet Diverted During Season from Natural Stream	Number of Acres That Can Be Irrigated
10....	597.55	.....	133.25	....	Nov. 25, 1931	Oct. 31, 1932	206	177	2,825	196.75	37,955	26,377
11....	922.67	956.1	272.75	....	Mar. 1	Nov. 1, 1932	220	59	11,695	597.7	255,936	26,169
12....	1,179.2	728.90	172.60	....	Nov. 1, 1931	Oct. 31, 1932	361	155	5,361	335.58	133,126	34,962
13....	472.77	.....	278.45	....	Feb. 6	Oct. 1	236	159	2,609	377.76	47,899	21,936
14....	2,008.2	2,379.0	240.0	....	Nov. 1, 1931	Oct. 31	343	59	.....	406.0	.....	143,135
15....	228.5	273.9	89.5	....	Apr. 1	Oct. 19	259	...	.....	84.63	16,279	14,223
16....	2,005.3	4,682.55	633.09	....	Mar. 30	Oct. 20	202	14	3,300	318.99	40,063	112,320
17....	5,903.48	8,604	514	....	Nov. 1, 1931	Oct. 31, 1932	212	31	5,555	1,245	312,439	204,778
18....	744.51	.....	.....	....	Apr. 8	Aug. 19	8	0	0	73	450	8,461
19....	.....	.....	.....	....		.....	...	...	.....	.....	.....	.....
67....	1,772.18	1,901	219.0	....	Jan. 9	Oct. 31	258	26	3,750	429.95	141,216	72,000
Total	17,429.21	17,814.45	6,909.56	....			2,606	1,045	42,157	4,168.16	1,021,363	714,174

Number of Water District	14 Alfalfa	15 Natural Grasses	16 Cereals	17 Orchards	18 Market Gardens	19 Potatoes	20 Sugar Beets	21 Head Lettuce, Cabbage and Cauliflower	22 Beans and Peas	23 Other Crops	24 Total Irrigated	Cost of Superintendence	Cost of Repairs	Cost of Improvements
10	3,042	3,175	1,562	107	422	...	647	....	....	4,269	12,757	$ 5,650.00	$ 16,000.00	$ 1,410.00
11	5,533	9,124	5,281	77	248	616	1	1,430	1,800	187	23,417	.....	2,218.00	480.00
12	5,997	2,222	5,030	4,065	567	27	19	257	193	1,853	20,320	.....	16,985.00	.....
13	2,032	16,999	1,046	17	9	86	....	264	559	924	21,936	.....	351.00	.....
14	35,800	16,780	16,615	651	5,005	...	22,790	....	125	16,830	119,935	16,900.00	29,500.00	400.00
15	2,584	937	1,534	21	17	2	122	2	1,485	54	6,271	.....	.....	3,270.00
16	24,097	4,353	11,023	266	156	1	299	1	103	1,183	37,579	6,963.97	23,588.71	16,975.00
17	59,785	3,181	56,472	270	972	118	16,955	136	2,754	22,886	163,572	31,603.00	16,262.00	10,104.00
18	3,222	608	1,175	5	...	4	....	....	100	60	5,184	.....	.....	.....
19	....	4,524	4,781	87	222	106	1,053	147	2,511	2,177	22,362	3,265.00	9,387.50	3,090.00
67	25,806	817	12,751	146	261	...	3,139	....	210	23,867	66,908	15,932.36	12,479.31	1,300.00
Totals	174,178	62,720	117,270	5,712	7,879	960	45,025	2,237	9,840	74,290	500,241	$ 80,314.33	$126,771.44	$ 20,225.75

Number of District	Name of Reservoir	Amt. in Storage Dec. 1, 1931	Amt. in Storage Jan. 1, 1932	Amt. in Storage Feb. 1, 1932	Amt. in Storage March 1, 1932	Amt. in Storage April 1, 1932	Amt. in Storage May 1, 1932	Amt. in Storage June 1, 1932	Amt. in Storage July 1, 1932	Amt. in Storage Aug. 1, 1932	Amt. in Storage Sept. 1, 1932	Amt. in Storage Oct. 1, 1932	Amt. in Storage Nov. 1, 1932
10	Fountain Valley No. 2	151	1,622	2,571	3,428	3,428	3,214	2,785	2,076	1,180	1,180	810	708
10	Fountain Valley No. 3	0	0	0	0	0	0	0	0	1	1	0	0
10	Spring Run No. 2	0	95	95	192	192	151	95	0	3	0	0	3
10	Calahan	0	0	0	0	0	0	0	0	2	600	449	15
10	Cheyenne Mountain	0	0	0	0	0	0	0	0	28	28	0	0
10	Monument	28	38	38	102	178	363	447	447	225	447	404	404
11	Sugar Loaf	1,302	1,488	1,621	1,621	1,621	1,868	288	5,772	3,339	2,693	2,286	2,565
11	Twin Lakes	5,308	5,490	6,470	6,470	6,470	5,856	10,687	16,885	9,920	7,056	5,823	5,707
11	Clear Creek	262	770	1,025	1,025	1,025	1,113	1,344	6,238	2,675	1,552	1,552	1,605
12	Skagway	977	603	603	263	38	224	494	318	197	540	587	958
12	Mount Pisgah	0	80	232	415	415	132	60	0	0	55	0	36
12	Brush Hollow	94	801	801	1,644	2,394	2,095	1,180	238	17	0	0	13
12	City of Colorado Springs	2,512	2,374	2,534	2,110	1,809	1,596	1,713	1,486	1,694	1,852	1,729	993
13	Deweese-Dye	0	1,509	2,003	1,523	2,967	2,858	1,918	2,145	1,433	1,052	506	358
14	Teller	754	890	890	801	801	801	464	1,505	1,217	1,076	1,076	802

14	Lake Henry	0	2,217	6,209	5,912	5,736	5,321	1,858	1,787	1,121	758	758	0
14	Lake Meredith	0	0	2,617	4,591	3,573	2,498	0	0	0	0	0	0
15	Beckwith	153	252	386	386	425	425	198	0	0	0	0	0
15	Minnequa	1,209	1,202	1,209	1,228	1,222	1,221	1,189	1,261	1,206	1,190	1,115	1,224
15	C. F. & I. Res. No. 2	2,638	2,572	2,522	2,670	2,608	2,649	2,614	2,628	2,602	2,591	2,664	2,628
15	C. F. & I. Res. No. 3	2,112	2,422	821	2,310	2,442	2,345	1,720	2,003	2,197	2,439	2,391	2,453
16	Coler	1,087	1,087	1,087	1,087	1,087	1,087	877	877	681	497	497	497
16	Cucharas	0	0	0	1,880	1,880	1,880	1,640	4,760	1,250	3,080	1,940	1,940
16	Bradford	0	0	0	0	0	0	0	0	0	0	0	0
16	Huerfano Valley	0	411	646	....	....	951	370	0	0	0	0	0
16	Crane-Holmes No. 1	0	0	0	0	0	0	0	0	0	0	0	0
16	Lindsley Lake	0	0	0	0	0	0	0	0	0	0	0	0
16	Holita	13	19	19	19	19	19	19	13	13	0	0	0
16	Valdez	0	0	0	0	0	0	0	0	0	0	0	0
16	Dotson	0	0	....	....	....	....	....	1,608	1,163	1,752	695	0
17	Dye	0	951	2,118	2,009	1,939	1,851	0	817	1,371	0	0	0
17	Holbrook No. 1	3	3,643	4,342	4,342	4,088	3,905	657	626	350	0	0	0
17	Horse Creek	0	0	0	0	0	0	0	495	0	0	0	0
17	Adobe Creek	0	0	0	0	0	0	0	0	0	0	0	0
18	Seven Lakes	....	....	0	0	0	0	....	0	0	0	0	0
19	Model	4,430	5,522	6,684	6,684	6,684	6,352	5,339	5,393	3,384	0	40	727
19	Hermosa	124	150	283	283	283	283	283	283	283	160	160	160
19	North Lake	820	766	681	621	557	750	798	798	798	798	798	798
67	Nee No Shee Nee Gronda Nee Sopah	2,602	2,602	3,587	2,725	2,704	2,530	2,006	1,657	817	490	0	0
67	Nee Skak or Queen	3,532	3,532	0	0	0	0	0	0	0	0	0	0
67	Two Buttes	2,193	2,640	1,963	2,987	3,260	3,260	3,123	7,615	4,622	3,205	2,987	3,894
67	Thurston	0	29	144	155	144	159	173	144	0	0	0	0

ANNUAL REPORT DIVISION ENGINEER, IRRIGATION DIVISION NO. 3 FOR 1932

Alamosa, Colorado, November 28, 1932.

Mr. M. C. Hinderlider,
State Engineer,
Denver, Colorado.

Dear Sir:

As provided by statutes, I submit herewith my annual report as Irrigation Division Engineer, Division No. 3, for the calendar year ending November 30th, 1932.

Owing to the abundance of snow on the east and west ranges surrounding this Division, the supply of water for direct irrigation and for storage has been above the average.

Early in the season, the ranchmen and townspeople along the Rio Grande and Conejos rivers were much concerned over the anticipated floods which they had reason to believe would come with the warm days of May and June as the snow on the lower foothills was from four to six feet deep. However, the snow water was absorbed by the extremely dry condition of the soil and the rivers never at any time assumed flood proportions.

The Water Commissioners in this Division have handled their work in a very satisfactory manner and have been loyal to this office as well as courteous to the water users and as a result there has been no friction in the Division this season.

I appreciate, very much, the spirit of helpfulness and patience extended to me from the State Engineer's office, in my first year as Division Engineer.

I am also much indebted to Dan S. Jones, Jr., for his advice and help in handling the problems which were all new to me. It has made my work much easier.

Respectfully submitted,

WALTER D. CARROLL,
Irrigation Division Engineer, Division No. 3.

TABULATED STATEMENT OF WATER COMMISSIONERS' ANNUAL REPORTS FOR 1932

District No.	No. of Priorities Reported	Amount of Appropriation in Second Feet	First Day Water Was Diverted from Natural Stream for Irrigation	Last Day Water Was Diverted from Natural Stream for Irrigation	Maximum No. of Days Water Was Diverted from Natural Streams
20	419	5,797.04	March 23	November 1	234
21	76	1,509.83	March 1	August 26	179
22	187	5,702.19	March 1	October 20	244
24	97	303	April 1	November 1	214
25	96	711	April 8	November 1	206
26	115	547	April 1	November 14	238
27	77	111	March 9	November 1	247
35	70	933	April 15	October 31	189

District No.	No. Acre Feet Used by Ditches and Canals from Natural Streams	Total No. of Acres That Can Be Irrigated	Alfalfa	Natural Grasses	Cereals	Pasture
20	745,428	460,436	38,020	55,123	57,168	154,341
21	105,327	148,826	14,985	17,090	7,936	.....
22	170,274	124,660	11,951	28,790	22,677	.....
24	35,426	33,883	4,821	3,195	7,012	.....
25	77,865	55,229	1,920	44,310	414	.....
26	36,442	49,274	3,587	22,913	610	.....
27	11,832	6,312	816	2,447	.....	1,165
35	40,727	57,348	4,730	19,131	2,015	.....
Totals	1,223,321	946,695	80,830	192,999	97,832	155,506

District No.	Market Garden Peas	Market Garden Potatoes	Sugar Beets	Lettuce	Field Peas	Beans
20	2,274	48,644	649	2,112	33,504	.....
21	2,052	8,139	.....	98	4,044	497
22	2,618	7,125	30	47	7,324	917
24	3,580	1,994	.....	.....	5,697	501
25	625	329	.....	.....	80	.....
26	.....	187	.....	.....	.....	.....
27	.....	361	.....	23	545	77
35	2,299	736	.....	.....	1,767	158
Totals	13,448	67,515	679	2,280	52,961	2,150

District No.	Cauliflower	Cabbage, Orchards, Carrots	Sweet Clover	Other Crops	Total Irrigated
20	.....	.....	12,863	8,284	412,984
21	236	48	1,757	315	57,297
22	140	.....	2,156	3,359	87,104
24	1,460	97	.....	2,528	30,886
25	.....	5	.....	62	47,116
26	.....	.....	.....	3,621	30,918
27	.....	.....	.....	318	5,752
35	.....	163	.....	2,731	33 730
Totals	1,863	313	16,773	21,218	705.787

District No.	Superintendence	Repairs	Improvements
20	$5,932.50	$ 746.37	$2,226.50
21	.....	.....	.....
22	1,450.00	1,315.00	1,000.00
24	2,215.00	.....	.....
25	.....	.....	.....
26	.....	.....	1,437.00
27	.....	630.00	.....
35	.....	.....	.....
Totals	$9,597.50	$2,691.30	$4,063.50

Cost of administration:

Cost of administration of this Division for the year 1932 was $11,616.00. This includes salaries of all Commissioners and their Deputies. 705,787 acres were irrigated at cost of .016 per acre.

20	412,984 acres irrigated at a cost of:	Commissioner	$1,800	Deputy $360
21	57,297 acres irrigated at a cost of:	Commissioner	1,374	
22	87,104 acres irrigated at a cost of:	Commissioner	900	Deputy $400
24	30,886 acres irrigated at a cost of:	Commissioner	1,388	
25	47,116 acres irrigated at a cost of:	Commissioner	1,296	
26	30,918 acres irrigated at a cost of:	Commissioner	1,392	
27	5,752 acres irrigated at a cost of:	Commissioner	1,350	
35	33,730 acres irrigated at a cost of:	Commissioner	1,356	
	705,787		$11,616	

WATER COMMISSIONERS' RESERVOIR REPORTS

District No.	Capacity in Acre Feet in All Reservoirs	Quantity of Water in Reservoir May 1, 1932	Quantity of Water in Reservoir Nov. 1, 1932	First Day Water Used from Res	Last Day Water Used from Res.	No. Days Water Carried from Res.
20	130,228	10,673	23,680	Apr. 9	Oct. 25	485
21	31,752	4,240	3,015	Mar. 27	Sept. 30	227
22	9,710	1,270	161	Apr. 20	Nov. 1	190
24	110,749	12,397	10,355	Apr. 15	Nov. 1	445
35	14,483	12,908	5,000	May 1	Oct. 8	247
Totals	297,122	41,488	42,211			1,594

AMOUNT OF WATER IN STORAGE (ACRE-FEET) IN RESERVOIRS ON THE FIRST OF EACH MONTH FROM DECEMBER, 1931, TO NOVEMBER, 1932.

	Rio Grande	Santa Maria	Continental	Sanchez	Terrace
December, 1931	1,767	1,311	36	4,990	1,869
January, 1932	3,934	2,198	36	5,431	2,488
February, 1932	5,322	3,043	36	5,867	2,811
March, 1932	7,043	3,875	36	5,995	3,543
April, 1932	8,411	4,729	36	6,931	4,078
May, 1932	2,656	4,765	36	10,173	1,909
June, 1932	38,202	11,983	10,500	19,399	11,418
July, 1932	51,488	20,162	11,365	16,839	15,970
August, 1932	36,713	19,240	10,075	12,315	14,937
September, 1932	17,928	2,686	6,784	10,108	4,556
October, 1932	17,220	2,686	6,120	9,509	2,092
November, 1932	11,972	2,686	6,120	9,758	665

Note: On account of defective installation of valves in the Terrace Reservoir, 2,000 acre-feet of water was lost. Work on the valves is now being done so that storage will be continued.

	La Jara	Mountain Home	Smith	Cove Lake
December, 1931	No Report	3,140	3,362	No Report
January, 1932	No Report	3,393	3,362	No Report
February, 1932	No Report	3,646	5,336	No Report
March, 1932	No Report	3,899	5,336	No Report
April, 1932	No Report	5,099	5,336	732
May, 1932	3,331	7,572	5,336	1,270
June, 1932	5,433	7,390	5,336	7,930
July, 1932	5,433	11,200	4,869	5,160
August, 1932	4,673	9,460	4,814	2,420
September, 1932	3,647	5,562	2,606	1,270
October, 1932	3,221	5,049	1,996	384
November, 1932	2,319	4,629	2,500	161

	Salazar	Archuleta	Hunters Lake	Spruce Lake No. 1	Spruce Lake No. 2
April 21, 1932	No Report	No Report	No Report	No Report	No Report
May 1, 1932	140	40	20	40	40
June 1, 1932	No Report	No Report	No Report	No Report	No Report
July 1, 1932	No Report	No Report	No Report	No Report	No Report
Aug. 1, 1932	No Report	No Report	No Report	No Report	No Report
Sept. 1, 1932	No Report	No Report	No Report	No Report	63
Oct. 1, 1932	No Report	No Report	No Report	No Report	No Report
Nov. 1, 1932	97	0	0	0	0

	S/D Dude Ranch	Road Canon	Poage	Lost Lakes	Shaw
April, 1932	No Report	No Report	No Report	No Report	No Report
May, 1932	50	1,526	100	400	No Report
June, 1932	No Report	No Report	No Report	No Report	No Report
July, 1932	No Report	No Report	No Report	No Report	No Report
August, 1932	No Report	No Report	No Report	No Report	No Report
September, 1932	No Report	No Report	No Report	No Report	No Report
October, 1932	No Report	No Report	No Report	No Report	No Report
November, 1932	125	1,526	261	190	495

	Bristol Head No. 1	Bristol Head No. 2	San Luis Valley	Regan	Beaver Park
April, 1932	No Report	No Report	No Report	No Report	No Report
May, 1932	0	0	400	400	No Report
June, 1932	No Report	No Report	No Report	No Report	No Report
July, 1932	No Report	No Report	No Report	No Report	No Report
August, 1932	No Report	No Report	No Report	No Report	No Report
September, 1932	No Report	No Report	No Report	No Report	No Report
October, 1932	No Report	No Report	No Report	No Report	No Report
November, 1932	0	0	0	800	No Report

	Eastdale No. 1	Eastdale No. 2
April, 1932	No Report	No Report
May, 1932	1,330	634
June, 1932	No Report	No Report
July, 1932	No Report	No Report
August, 1932	No Report	No Report
September, 1932	No Report	No Report
October, 1932	No Report	No Report
November, 1932	500	0

District No.	No. of Acre-Feet of Water Carried from Reservoir During Season
20	65,051
21	17,289
22	4,000
24	30,309
35	30,458
Totals	147,107

ANNUAL REPORT OF DIVISION ENGINEER, IRRIGATION DIVISION NO. 4, FOR 1932

Montrose, Colorado, Nov. 28, 1932.

M. C. Hinderlider, State Engineer,
Capitol Bldg.,
Denver, Colo.

Dear Sir:

Herewith I am submitting my report for the season 1932, this being my 22nd annual report.

The early snow in the mountains last winter and the abundance of precipitation portended an excellent supply of water for the season, but owing to the fact that the season of 1931 was extremely dry, the past season's supply of water was about normal. There was no extreme shortage of water in any portion of this division and the crops were exceptionally good.

Outside of the regular routine office work and keeping up the thirteen or fourteen river stations, there is little to report. Among the accomplishments for the year was the installing of fifteen additional Parshall flumes.

We also attended the water users' meetings whenever possible to do so.

On April 5th the Civil Service Commission held an examination for Deputy Water Commissioners at Grand Junction and requested us to be present, which we were glad to do.

During the early part of the season the Division Engineer did considerable work in the way of ratings for the Redlands Power Canal and Public Service Company at Grand Junction.

A new self-recording register was installed on Kannah Creek this season.

Early in the season we made an examination of the new Fruita Reservoir located some 25 miles from the city of Grand Junction.

Notwithstanding the depression, considerable reservoir work was done in this division. Some of the reservoirs which were repaired are the Youngs Creek, Cedar Mesa, Overland, Surface Creek Ditch and Reservoir, Mesa Creek Reservoir as well as several others. Much of this work was the result of a visit by the State Engineer who made a thorough inspection of the various reservoirs in this division. Mr. L. T. Burgess, Chief Hydrographer made several trips over the division in the interest of the hydrographic work.

If the statute providing for a Water Commissioner-at-large were somewhat amended, it would lessen the amount of taxes re-

quired to meet the bills of Water Commissioners, as a Water Commissioner-at-large would be able to cover, in many instances, more than one district.

The Uncompahgre Project, which was formerly operated by the U. S. Reclamation Service, was operated this year by the Water Users Association, and Mr. Chas. Elliott, formerly assistant project manager, is manager of the Project under the Water Users' Association. Mr. Elliott was very successful in the operation of the Project this season, and comparing the cost of operation and maintenance for the year 1932 with the average cost of operation for the five years previous, the Project was saved the sum of $25,400.00. The assessments for the year 1933 have been cut a little over 23%.

Attached hereto are tabulated statements of Water Commissioners' ditch and reservoir reports.

Yours very truly,

H. C. GETTY,
I. D. E. No. 4.

IRRIGATION DIVISION NO. 4

TABULATED STATEMENT OF WATER COMMISSIONERS' ANNUAL DITCH REPORTS, 1932

Dist. No.	Ditches Reported	No. of Priorities	Amt. of Appropriation Cubic Feet Per Second	Capacity of Canals and Ditches Cubic Feet Per Second	Length of Canals or Ditches in Miles	First Day Water Was Used	Last Day Water Was Used
28	188	240	634	2,106	235	Apr. 1	July 1
40	375	330	2,204	7,485	753	Apr. 1	Sept. 31
41	30	28	1,948	3,333	309	Mar. 1	Oct. 31
42	268	258	4,448	5,237	614	Jan. 1	Dec. 31
59	136	151	1,258	947	179	Apr. 20	Oct. 15
60	79	84	493	496	276	Apr. 1	Oct. 15
61	30	34	69	105	32	Mar. 1	Nov. 15
62	30	32	83	165	42	May 1	Oct. 10
68	172	181	670	799	235	Apr. 7	Nov. 1
Totals	1,308	1,338	11,807	20,673	2,675		

IRRIGATION DIVISION NO. 4

TABULATED STATEMENT OF WATER COMMISSIONERS' ANNUAL DITCH REPORTS, 1932

Dist. No.	Average No. Days Water Was Used	Average Daily Amount in Sec. Feet	No. Acre Feet Used	No. Acres Can Be Irrigated	Alfalfa	Natural Grasses	Cereals
28	83	619	105,014	31,761	27	27,496	45
40	174	1,583	551,167	229,310	67,201	30,270	22,547
41	147	1,737	728,976	154,250	19,365	4,405	16,790
42	103	1,797	650,228	198,062	51,898	16,346	6,581
59	91	580	110,194	21,636	345	18,979	187
60	89	282	52,159	28,873	17,708	2,205	2,912
61	149	28	8,086	6,209	1,641	.....	792
62	92	82	14,924	4,000	.....	3,023	.5
68	64	385	64,175	26,436	4,213.5	8,058.25	1,851
Totals	110	7,093	2,284,923	700,537	162,398.5	110,782.25	51,705.5

IRRIGATION DIVISION NO. 4

TABULATED STATEMENT OF WATER COMMISSIONERS' ANNUAL DITCH REPORTS, 1932

Dist. No.	Orchards	Market Gardening	Potatoes	Sugar Beets	Other Crops	Total
28	....	46	6	....	....	27,620
40	13,975	969	3,572	5,379	8,020	151,933
41	2,775	3,580	5,825	3,640	12,790	69,170
42	7,839	4,227	1,539	20	21,185	109,635
59	.....	300	76	....	....	19,887
60	10	....	....	....	....	22,835
61	39	....	....	....	206	2,678
62	....	....	12.5	....	....	3,036
68	33.5	31.50	257.5	....	28	14,473.25
Totals	24,671.5	9,153.5	11,288	9,039	42,229	421,267.25

Dist. No.	Superintendence	Repairs	Improvements
28	.....	.....	.....
40	$11,175.00	$34,060.00	$ 450.00
41	.....	.....	.....
42	23,950.00	5,998.00	895.00
59	400.00	3,360.00	385.00
60	2,800.00	1,686.00	.....
61	405.00	1,150.00	220.00
62	.....	615.00	.....
68	302.00	7,403.85	535.24
Totals	$39,032.00	$54,272.85	$ 2,485.24

TABULATED STATEMENT OF WATER COMMISSIONERS' ANNUAL RESERVOIR REPORTS, 1932

Dist. No.	No. in District	Area of High Water Line, Acres	Capacity in Cubic Feet	Quantity of Water in Reservoir May 1st	Quantity of Water in Reservoir Nov. 1st Cubic Feet
40	122	2,701	1,744,439,891	1,744,439,891	129,567,120
42	55	1,890	663,633,339	.....	.....
60	2	.....	223,748,000	140,000,000	.....
61	1	.....	52,272,000	.....	.....
Totals	180	4,591	2,684,093,230	1,884,439,891	129,567,120

TABULATED STATEMENT OF WATER COMMISSIONERS' ANNUAL RESERVOIR REPORTS, 1932

Dist. No.	First Day Water Was Used	Last Day Water Was Used	Average No. Days Water Was Used	Av. Daily Amount in Sec. Feet	No. Acre-Feet Carried	Superintendence	Repairs
40	June 22	Sept. 28	68	.....	37,055	$3,822.50	$3,100.00
42	June 7	Oct. 9	36	114	10,806	.....	.....
60	May 10	Sept. 6	97	.....	.....	.....	.....
61	Apr 17	Oct. 15	95	30	6,645	400.00	730.00
Totals			74	144	54,506	$4,222.50	$3,830.00

ANNUAL REPORT OF DIVISION ENGINEER, IRRIGATION DIVISION NO. 5 FOR 1932

Glenwood Springs, Colorado,
November 26, 1932.

Mr. M. C. Hinderlider,
State Engineer,
Denver, Colorado

Dear Sir:

In accordance with the law, I submit herewith my annual report of the irrigation activities of Irrigation Division No. 5 for the year 1932.

The year has been uneventful from an irrigation viewpoint, with a normal water supply and average crop yields. The extremely unfavorable conditions of 1931 left the ground so very dry that normal or almost normal snowfall of last winter did not seem to have the beneficial effect that had been expected.

Last year I reported the total precipitation at Glenwood Springs for the month of May to October, inclusive, at 9.26 inches, as against 11.31 inches for the same months of 1930, but this year for the same period the record shows a rainfall of only 7.96 inches, while at Rifle it was only 4.76 inches.

Despite the light summer precipitation, the snowfall last winter was sufficient to make the crop conditions fairly satisfactory, but in some sections the sub-normal rainfall reduced the crop yield to a considerable degree.

Alfalfa made a fairly good crop, but potatoes and grain fell a little below normal yield in most places. Sugar beets were grown only on a comparatively small area, from New Castle to Grand Valley, the principal acreage being in the Silt-Rifle district. I think this crop made the most satisfactory yield of any produced in the division, although I have not been able to secure the data as to tonnage or sugar content, but I know that those who planted their major acreage to beets this year are regarded as our most prosperous farmers.

Prices on all farm products, including livestock, have been so low this year, with such a meager demand, that our farmers feel that their labors of the past season have been almost in vain. However, they are facing the future resolutely and making their usual plans for next year's activities, notwithstanding the extreme dryness of the soil this fall has made fall plowing almost impossible.

The range conditions, chiefly due to the lack of excess precipitation, have been exceptionally good this year and cattle and sheep of excellent quality have been marketed from the grazing areas of the forest reserves.

The building of the 41-mile stretch of railroad, known as the Dotsero cutoff, work on which was started last week, will furnish better transportation to a considerable area of the division, but I do not think it will result in the cultivation of very much additional land, as the most of the land along the line is already under private ownership and is being occupied and utilized by stockmen.

There has been no construction work along irrigation lines in the division, worthy of record, this year and the expenditures for maintenance and repairs have been very light. In fact the farmers feel so poor that we have had great difficulty in getting them to install Parshall flumes and other equipment that was positively necessary.

A contemplated trans-mountain diversion project is that which is now being considered by the Twin Lakes Reservoir and Canal Company, which proposes to tap the Roaring Fork river about fifteen miles above Aspen, carry the water through a tunnel in the Continental Divide and store the same in the Twin Lakes, near Leadville, later carrying this stored water down the Arkansas river to supplement the present supply on farms in the Fowler and Ordway areas in Division No. 2. If a loan which has been requested from the Reconstruction Finance Corporation is honored, it is said that work on this project will probably start this winter.

I have not been interested this season, either as a witness or defendant in any water litigation, although the injunction issued against me last year, to which my 1931 report makes reference is still in effect, and has, consistent with the service due the appropriators, caused me considerable trouble this year.

In view of the prevalent economic conditions, I have used the greatest care which I thought possible in the administration of the division, and yet in spite of my efforts toward economy, the cost seems excessive to the county commissioners, who are called upon to pay the bills, and they are now asking me to pare closer and make a further reduction in the cost of the service. I am considering some plans, looking to that end, upon which I would be pleased to have your advice, before the beginning of the next season.

Yours very truly,

A. J. DICKSON,
Division Engineer, Division No. 5.

District No.	Amount of Appropriation Cu. Ft. Per Sec.	Capacity of Canal	Length of Main Ditch in Miles	No. of Days Water Carried from Natural Stream	Av. Daily Amt. of Water During Season (Cu. Ft. Per. Sec.) from Natural Stream
	4	5	6	10	11
37	1,205	933	315	108	432
38	945	1,153	280	....	714
39	580	557	196	125	374
45	539	668	244	80	313
52	130	306	38	51	113
53	353	353	141	128	285
70	165	277	79	159	151
Totals	3,917	4,270	1,295	108	2,382

District No.	No. of Acre-Feet Used by Canal for Season from Natural Stream	Total No. of Acres That Can Be Irrigated	Alfalfa	Natural Grasses	Cereals
	12	13	14	15	16
37	100,069	26,850	11,061	7,076	3,399
38	240,376	36,920	16,653	8,123	5,885
39	50,070	25,294	12,118	3,152	2,893
45	58,626	35,339	15,293	4,729	4,988
52	13,368	11,177	1,990	2,258	291
53	76,366	18,880	3,940	9,792	735
70	52,078	15,160	5,456	113	1,028
Totals	590,953	169,620	66,511	35,243	19,219

District No.	Orchards	Market Gardens	Potatoes	Sugar Beets	Beans	Peas
	17	18	19	20	21	22
37	....	263	1,377	....	....	213
38	4	....	3,001	....	....	10
39	595	80	1,163	1,959	....	....
45	456	102	323	163	19	....
52	....	2	36	....	....	....
53	....	....	320	20	....	....
70	151	3	293	....	146	33
Totals	1,206	450	6,513	2,142	155	256

District No.	Cabbage	Other Crops	Total Irrigated	Superintendence	Repairs	Improvements
	23	24	25	26	27	28
37	...	20	23,454	.....	$19,232.00	.....
38	20	...	33,696	.....	.....	.....
39	...	324	22,284	$ 2,244.00	14,364.00	.....
45	4	375	26,452	.....	1,827.00	.....
52	...	2	4,579	1,544.00	120.00	$ 125.00
53	...	165	15,047	.....	3,207.00	.....
70	...	112	7,335	.....	1,976.00	188.00
Totals	24	998	132,847	$ 3,788.00	$40,720.00	$ 313.00

ANNUAL REPORT DIVISION ENGINEER, IRRIGATION DIVISION NO. 6 FOR 1932

Steamboat Springs, Colorado.
November 30, 1932.

Mr. M. C. Hinderlider,
State Engineer,
Denver, Colorado.

Dear Sir:

In compliance with the provisions of the law, I have the honor to transmit herewith my annual report for Irrigation Division No. 6, for the year ending November 30th, 1932.

Conditions were very much improved over last year, with respect to seasonal snow fall, beneficial rains during the growing season. The average temperature conditions were more favorable to produce better results in the maturing of crops—although a hard freeze occurred on July 4th and 5th, damaging the grain and potato crops in particular, some damage to gardens.

Another killing frost occurred again on August 31st, that in some sections was damaging to the grain and again caught the potatoes.

Freezing temperatures were recorded throughout the Division for each month of the year, while the mean temperature was slightly above normal.

Snow scale readings the last of March, 1932, on the headwaters of the White, Yampa and Little Snake Rivers, on all but a couple of the locations showed a depth above normal.

The above normal depths were probably due to the heavy snowfall the latter part of February and early March followed by extreme cold weather, allowing fresh snow deposits little chance to settle or pack before the readings were taken.

The heavy runoff from these snow deposits was fifteen days earlier than the average year.

High water stage in the streams was from the 10th to the 25th of May. The streams were below their normal flow during the latter part of the irrigation season. There was a general tendency, however, among the water users to apply water earlier this spring, which practice assured a good hay crop, even though there was a shortage in some instances later in the season.

July, August and September were exceptionally dry. October was to the extreme the other way, especially the latter part. Harvesting, however, was nearly all completed before the bad weather.

The seasonal occurrence of rainfall on the other hand was sufficient to produce the desired results to growing crops on the irrigated lands, some dry farm crops, however, suffered through the lack of rain at the proper time.

The total precipitation from April to August, inclusive, that is, during the growing season, is 30% above the same period for last season.

Timothy and clover, the prevailing hay crop, is especially good both in quality and production. In District No. 58 about 80% of the entire irrigated area is in this crop. About 80,000 tons or approximately one-half of the crop in District No. 58 is tied up under the quarantine for alfalfa weevil, which I understand was found in a couple of small fields of alfalfa. This will prohibit the baling and shipment of this crop in the quarantine area.

Grain crops were damaged, as formerly stated, by two freezes, conservative estimate places a probable loss of 35% on the total acreage, taking into consideration the loss both in yield and quality.

Potatoes were hit the hardest by the July freeze, this together with another freeze in August probably reduced the total yield 30 to 35%.

Following is a special statement relative to lettuce and vegetable crops in the Yampa District.

Acreage Planted				
Lettuce	Peas	Spinach	Cauliflower	Total
2,400	75	175	10	2,660

Cars Shipped				
Lettuce	Peas	Spinach	Cauliflower	Total
90	0	2	15	116

The best estimates available, about 25 carloads of lettuce, peas and spinach moved out by trucks and would be classed as mixed vegetables.

There was an increase of about 900 acres planted over the 1931 crop and a decrease in shipments of about 150 cars less than last year. There was no variation in price on these crops this season. It held at 35 cents per packed out crate for lettuce, one cent per pound for spinach and peas.

Conservative estimate is that about 500 cars of all varieties of the crop remained untouched in the fields.

About 500 acres of potatoes were grown in the Yampa district, none have been shipped to date.

The Water Commissioners' reports show that all used reservoirs were well filled at the beginning of the season.

Some progress was made in the work of completing the Simon Reservoir No. 1 (Kosho Lake), in District No. 58, about 1,450 cubic yards of earth was placed on the west dam. This leaves yet approimately 2,700 cubic yards to be placed to complete this section. There is about 3,500 cubic yards yet to be placed to complete the east dam.

Some work was also done on the Heart Lake Reservoir, District No. 58, in raising the dam to the required height, this work was not completed this year.

Some repairs were made to some long standing washouts in the Bull Park dams.

The Burnt Mesa Reservoir filled this year and the water got away from them, causing some damage, estimated around several hundred dollars to farms along the water course. Last year the dyke in this dam was trenched in order to utilize the water stored therein, the outlet being out of order. Instead of placing new outlet works and backfilling cut in proper shape, the cut was filled carelessly with improper material, which of course did not hold.

Repair work was started this fall on the D. D. & E. Reservoir in District No. 44. This reservoir will require a new outlet pipe and valve, raising and strengthening of dam and provide adequate spillway.

Repairing was made on the Lunny Reservoir in District No. 43, consisting of draining and placing new outlet works.

Installation of Parshall measuring flumes, repairing and building new headgates was pushed during the season.

Hydrographic Data

Measurements of flow and discharge computations were made through the year on Yampa River at Steamboat Springs and Maybell; White River at Meeker and Watson, Utah, Little Snake River at Lily Park, Elk River at Clark, and Slater Creek at Slater.

All data in connection with the hydrographic work is being turned in separate from this report.

Maintenance cost for the season for most of the ditches has been very small and but little improvements on the average ditch. There has been, however, several quite important old ditches rebuilt this year, some that have not been used for several years. This work has had the advantage of low cost of labor and material and while the expense was comparatively low, the rebuilding ranks far above the average. This office has given every assistance possible to help in this work.

Among the more important ditches that have made considerable improvements, some of which were entirely rebuilt, are the Highline, Wisconsin, Juniper Mountain and Lily Park, in District No. 44; Walton Creek, Simon, Baxter and Burnt Mesa Ditch in District No. 58; Rich, Gibraltar, Last Chance, District No. 57; Riley Live Stock Co's. Perkins Irrigation, District No. 54.

The combined acreage under these ditches alone that have been guaranteed water by the improvements and repairing same total about 14,200 acres. About one-half of this acreage has been practically idle for the past several years.

This office has been called upon within the past season to make several rulings with respect to certain priorities and administration of the water. More important of these are the Riley Live Stock Co. and Perkins & Fox Decrees, District No. 54, distribution of water under priorities in District No. 44 out of tributaries to Williams River, controversy between Sheridan Ditch No. 3 and

the Proctor Reservoir in District No. 43. Copies of these controversies and rulings on the same have been previously forwarded to your office.

Inquiries, filing, correspondence and other general routine office matters have been increasing each year in this office to the extent that, at times, proper care can not be given to such clerical work during the season when most of the time is taken up by necessary administrative duties in connection with the office and hydrographic work, which both together call for a large part of the time in the field, and office work in connection with the same.

The records, however, in this office are in such shape, that I believe any inquiry or complaint can be taken care of and the necessary and reliable information obtained therefrom to warrant the efforts expended in compiling the same. These we hope to improve upon each year, as time will allow.

All annual reports from the water commissioners actively engaged have been received and the customary tabulation of the Commissioners' annual reports is attached hereto.

Respectfully,

B. T. CHASE.

Irrigation Division Engineer, Division No. 6.

TABULATED STATEMENT OF WATER COMMISSIONERS' ANNUAL DITCH REPORTS FOR THE IRRIGATION SEASON OF 1932

Dist. No.	No. of Ditches Reported	Amount of Appropriation Second Feet	Capacity of Canals Second Feet	Length of Main Ditches in Miles
43	305	936.38	2,152.45	420.01
44	175	514.55	703.66	132.00
54	No Report	.....	.....	.....
55	No Report	.....	.....	.....
56	No Report	.....	.....	.....
57	64	558.29	868.30	253.22
58	271	887.27	1,357.62	358.00
Totals	818	2,896.49	5,082.03	1,122.89

Dist. No.	First Day Water Was Used	Last Day Water Was Used	Average No. Days Water Carried	Average Daily Amount Carried in Second Feet	No. of Acre-Feet Used
43	4-10	9-20	67	948.75	204,277
44	5- 2	10- 4	47	394.02	48,726
54	No Report		..	.....	.....
55	No Report		..	.....	.....
56	No Report		..	.....	.....
57	4-18	9-23	46	269.96	41,220.77
58	4- 1	9-20	97	882.76	165,048.75
Totals	4- 1	10- 4	64	2,493.48	459,272.52

Dist. No.	No. of Acres That Can Be Irrigated	Alfalfa	Natural Grass Timothy and Clover	Cereals	Orchards and Berries
43	43,814	17,612	11,217	3,623	...
44	29,364	8,642	13,964	2,877	...
54	No Report	.....	.....	.....	...
55	No Report	.....	.....	.....	...
56	No Report	.....	.....	.....	...
57	17,307	1,160	10,091	39	...
					Berries
58	54,758	40	37,946.5	0	84.5
Totals	145,243	27,454	72,218.5	6,539	84.5

Dist. No.	Lettuce and Vegetables	Potatoes	Market Gardens	Peas, Spinach and Cabbage	Other Crops	Total Irrigated
43	...	...	6	...	623	.....
44	...	126	5	2	200	25,826
54	No Report	...	...	...	...	.....
55	No Report	...	...	...	...	.....
56	...	...	...	...	...	.....
57	...	30	...	...	...	11,320
58	1,064	256	...	36	...	39,422
Totals	1,064	412	11	38	823	109,649

Dist. No.	Superintendence	Repairs	Improvements	Remarks
43	$ 4,980.00	.....	.....	
44	.....	$ 5,977.00	$ 2,133.50	Very complete report on all ditches.
54	No Report	.....	.....	No Water Commissioner.
55	No Report	.....	.....	No Water Commissioner.
56	No Report	.....	.....	No Water Commissioner.
57	.....	2,385.00	.....	Improvements included with repairs.
58	.....	9,895.00	1,786.00	Repairs estimated at 25c per acre.
Totals	$ 4,980.00	$20,207.82	$ 5,594.50	

TABULATED STATEMENT OF WATER COMMISSIONERS' ANNUAL RESERVOIR REPORTS FOR IRRIGATION SEASON OF 1932

Dist. No.	No. of Reservoirs Reported	Area of High Water Line, Acres	Total Capacity Cubic Feet	Quantity of Water in Reservoir May 1, Cu. Ft.	Quantity of Water in Reservoir Nov. 1, Cu. Ft.
43	3	Reservoirs reported acreage on Ditch Report.			
44	9	158	47,890,254	43,272,154	6,460,000
54		No Report	.....	.....	.....
55		No Report	.....	.....	.....
56		No Report	.....	.....	.....
57	28	358	169,480,443	85,824,052	1,524,600
58	44	520	121,036,140	75,555,292	40,277,920
Totals	84	1,036	338,406,837	204,646,498	48,262,520

Dist. No.	First Day Water Was Used	Last Day Water Was Used	Average No. of Days Water Was Carried	Average Daily Amount Carried Cubic Feet	No. of Acre-Feet Reservoir Water Carried
43	.....	.....	....	....	.....
44	June 5	Aug. 20	19	11.50	814
54	No Report		....	....	.....
55	No Report		....	....	.....
56	No Report		....	....	.....
57	May 4	Sept. 29	30	16.36	6,132.16
58	June 29	Aug. 8	6	24.50	539
Totals	May 4	Sept. 29	18	52.36	7,485.16

Dist. No.	Alfalfa	Natural Grass	Cereals	Potatoes	Lettuce and Vegetables	Other Crops
43	...	....	....	....	....	....
44	575	315	120	2	....	15
54	No Report		....	....	....	....
55	No Report		....	....	....	....
56	No Report		....	....	....	....
57	460	365	....	....	....	....
58	...	880	....	....	....	....
Totals	1,035	1,560	120	2	....	15

Dist No.	Total Irrigated	Repairs	Improvements	Remarks
43	...	$ 900.00	.....	No complete report made.
44	1,027	210.00	.....	Only used reservoirs reported.
54	3 reservoirs in this District			No water commissioner.
55	No reservoirs in this District			No water commissioner.
56	1 reservoir in this District			No water commissioner.
57	825	25.00	.....	Only 10 reservoirs used, 1932.
58	880	400.00	$ 1,150.00	
Totals	2,735	$ 1,535.00	$ 1,150.00	

ANNUAL REPORT OF IRRIGATION ENGINEER, IRRIGATION DIVISION NUMBER 7, 1932

Durango, Colorado, Nov. 22, 1932.

Mr. M. C. Hinderlider,
State Engineer,
Denver, Colorado.

Dear Sir:

This is to submit a report of the administration of water rights, hydrographic work and other activities for the year 1932, and including tabulations of water commissioners' annual ditch and reservoir reports.

Administration.

The determination of the amount of water supply in the streams and the correct measurement of flow in canals is an important phase of the administration of water rights. During the past season the necessary measurements of stream flow and canal diversions were made, rating tables were furnished the water commissioners in their respective districts. Frequent inspections were made of the activities of water commissioners in respect to the distribution of water in accordance with decrees. No serious discrepancies were found.

Another important part of administration is the correct interpretation of the statutes and decrees in relation to the diversions of water for domestic, irrigation and other purposes.

It was necessary to stop diversions of water for domestic purposes in several instances in order to supply decreed rights for irrigation. In Water District No. 34 the owner of a ditch was arrested and fined in the Justice Court for opening the wastegate after the headgate and wastegate had been closed and posted by the water commissioner. It developed that the owner was seeking to maintain a right to the use of about one-half second foot of domestic water. It was his belief that he was entitled to domestic water and that the water commissioner had no authority over it. As a basis for such claim he asserted that a former State Engineer had ruled in his favor during a previous controversy in the same matter and that the interpretation of the law changed with each succeeding state engineer. The supreme court decision was cited which held that domestic water does not have preference although it is stated in the articles of the constitution that it shall have preference in use.

Development.

Aside from the necessary maintenance of existing systems there has been no development nor improvements during the last

year. The total amount of money expended for repair of canals and structures in 1932 was $9,474.00, which was $15,280.00 less than was expended in 1931. Only $100.00 was expended in repair or improvement of reservoir structures compared with an expenditure of $26,830.00 during 1931.

Several Parshall flumes were installed and a large number of orders were given for such installations, but owing to the distressed financial condition of most ditch owners such orders were objected to and arrangements were made to carry through the past season with minor repairs to existing flumes and headgates.

Water Supply.

Stream flow exceeded the average for the greater part of the season as a result of the heavy snowfall during the winter on the San Juan and Dolores watersheds. The first heavy snow started Nov. 8th, and continued through the 12th, and was followed by another severe storm on Nov. 21st and 22nd. The early snowfall was nearly as heavy on the lower mesas as at higher elevations and caused enormous livestock losses.

The accumulated snowfall on March 31st at 9,000 ft. elevation on the San Juan was 52 inches, and the water equivalent 15.6 inches. On the Dolores on the same date and at same elevation the relative snow depth and water content was 50 and 12.5 inches; on the La Plata 42 and 12.6; on the Animas 60 and 20. All in excess of normal. The total 1931-32 snowfall at Cascade on the Animas was 288 inches, exceeding the previous records of 1906-07 and 1908-09 by 13 inches.

Precipitation and temperatures were both slightly above normal during the summer months.

All reservoirs were filled to capacity by May 1st.

In a year of excess stream flow the necessity of storage water to complete plant growth was again demonstrated. On the La Plata under the Red Mesa Reservoir three crops of alfalfa were made while lands not having storage water made on the average one and one-half crops. Owners of the Red Mesa Project estimate that the gross return from storage water this year was 30% of the principal investment, as measured in crop yield at present low prices.

The benefits of a plentiful water supply have been reflected in heavy crop production. Low prices have, however, offset the advantages of abundant crops.

Respectfully,

J. R. WILLIAMS,
Special Deputy State Engineer
In Charge of Irrigation Division 7.

IRRIGATION DIVISION NO. 7

TABULATED STATEMENT OF WATER COMMISSIONERS' ANNUAL REPORTS FOR THE IRRIGATION SEASON OF 1932

Dist. No.	Number of Ditches Reported	Number of Priorities	Amount Appropriated in Sec. Ft.	Capacity of Canals in Sec. Ft.	Length of Canals (Miles)
30	171	222	607	776	233
33	40	65	538	397	59
34	40	85	1,476	919	87
69	12	14	22	59	14
Totals	263	386	2,643	2,151	393

Dist. No.	First Day Water Was Used from Natural Stream	Last Day Water Was Used from Natural Stream	Number of Days Water Was Used	Average Daily Amt. Diverted in Sec. Ft.	Number of Acre-Feet Used
30	Mar. 1	Nov. 15	229	245	112,303
33	Apr. 4	Sept. 16	166	103	34,353
34	May 1	Oct. 30	180	375	135,198
69	Apr. 20	Sept. 8	141	15	4,184
Totals	Mar. 1	Nov. 15	229	625	286,038

Dist. No.	Number of Acres That Can Be Irrigated	Acres Irrigated				
		Alfalfa	Natural Grasses	Cereals	Orchards	Market Gardens
30	58,178	11,906	5,460	9,553	740	80
33	42,995	8,238	40	4,390	141	7
34	52,860	14,020	3,151	16,277	2,061	0
69	1,876	815	197	515	16	0
Totals	155,909	34,979	8,848	30,735	2,958	87

Dist. No.	Acres Irrigated: Potatoes	Beans	Other Crops	Total Acres Irrigated	Cost: Superintendence	Repairs	Improvements
30	667	....	501	28,907	3,756	9,474	4,727
33	733	294	315	*14,678	650	.....	550
34	1,409	....	2,932	39,850	1,110	.....	.....
69	...	....	15	1,558	0	875	225
Totals	2,809	294	3,763	84,993	5,516	10,349	5,502

*Includes 500 acres irrigated under ditches having no decree.
No report for Water Districts No. 29, 31 and 32.

TABULATED STATEMENT OF WATER COMMISSIONERS' ANNUAL RESERVOIR REPORTS FOR THE SEASON OF 1932

Dist. No.	No. Reservoirs in District	Area of High Water Line, Acres	Capacity in Cubic Feet	Amount in Storage May 1, Cu. Ft.	Amount in Storage Nov. 1, Cu. Ft.	First Day Water Was Used
30	3	899.4	1,080,751,050	747,747,200	917,937,600	11- 1
33	1	37	25,102,541	25,102,541	0	7-12
34	5	908.6	407,406,600	406,583,000	2,012,000	5- 1
Totals	9	1,845	1,513,260,190	1,179,432,741	919,949,600	

Dist. No.	Last Day Water Was Used	Number Days Water Was Used	Average Daily Amount Used, S. F.	Number Acre-Feet Used	Number Acres Irrigated	Cost: Superintendence	Repairs	Improvements
30	10-31	366	28.6	20,977	4,130	No Report		
33	8-14	29	13.1	598	398	25	...	10
34	10-30	180	69.6	25,080	8,200	2,720	100	...
Totals				46,655	12,728	2,745	100	10

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