

1967

Water Resources Data for Colorado

Part 1. Surface Water Records



**UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY**

**Prepared in cooperation with the State of Colorado
and with other agencies**

United States Department of the Interior
Geological Survey - Water Resources Division

Water Resources Data
for
Colorado
1967

Part 1: Surface Water Records

Prepared in cooperation with

Colorado Water Conservation Board
Office of the State Engineer
Southeastern Colorado Water Conservancy District
Arkansas River Compact Administration
Colorado River Water Conservation District
City and County of Denver, Board of Water Commisssioners
City of Colorado Springs, Department of Public Utilities
Bureau of Reclamation, U.S. Department of the Interior
Corps of Engineers, U.S. Department of the Army

Copies of this report may be obtained from
District Chief, Water Resources Division
U.S. Geological Survey
Denver Federal Center
Denver, Colorado 80225

Water resources records, 1967, for Colorado are
in the following reports of the U.S. Geological Survey:

1. Water Resources Data for Colorado
Part 1: Surface Water Records
2. Water Resources Data for Colorado
Part 2: Water Quality Records

CALENDAR FOR WATER YEAR 1967

OCTOBER 1966

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FEBRUARY 1967

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AUGUST 1967

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SEPTEMBER 1967

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Water Resources Data for Colorado, 1967

Part 1: Surface Water Records

INTRODUCTION

The surface-water records for the 1967 water year for gaging stations, partial-record stations, and miscellaneous sites within the State of Colorado are given in this report. For convenience there are also included records for a few pertinent gaging stations in bordering states. The records were collected and computed by the Water Resources Division of the U.S. Geological Survey, under the direction of E. A. Moulder, district chief.

Through September 30, 1960, the records of discharge and stage of streams and contents and stage of lakes and reservoirs were published in an annual series of U.S. Geological Survey water-supply papers entitled "Surface Water Supply of the United States." Since 1951 there have been 20 volumes in the series; each volume covered an area whose boundaries coincided with those of certain natural drainage areas. The records in Colorado were contained in Parts 6B, 7, 8, and 9 of that series.

Beginning with the 1961 water year, streamflow records and related data have been released by the Geological Survey in annual reports on a State-boundary basis. Distribution of these basic-data reports is limited and primarily for local needs. Records will be published in Geological Survey water-supply papers at 5-year intervals.

COOPERATION

Cooperative agreements between the U.S. Geological Survey and organizations of the State of Colorado for the systematic collection of streamflow records began in 1895. Organizations that supplied data are acknowledged in station descriptions. Organizations that assisted in collecting data through cooperative agreements with the Survey are:

Colorado Water Conservation Board, F. L. Sparks, director.

Office of the State Engineer, A. R. Owens.

Southeastern Colorado Water Conservancy District,

C. L. Thomson, general manager.

Arkansas River Compact Administration, F. M. Bell, chairman, succeeded by W. L. Heckler.

Colorado River Water Conservation District, P. P. Smith, secretary-engineer.

City and County of Denver, Board of Water Commissioners,

R. S. Shannon, Jr., president, succeeded by Gerald L. Stapp.

City of Colorado Springs, Department of Public Utilities, R. D. Nixon, director.

Financial assistance was also provided by Corps of Engineers, U. S. Department of the Army and Bureau of Reclamation, U. S. Department of the Interior.

Records for six gaging stations published in this report were furnished by the following U.S. Geological Survey districts: New Mexico district, five stations; Wyoming district, one station.

DEFINITION OF TERMS AND ABBREVIATIONS

The terms of streamflow and other hydrologic data, as used in this report, are defined as follows:

Gaging station is a particular site on a stream, canal, lake, or reservoir where systematic observations of gage height or discharge are obtained. When used in connection with a discharge record, the term is applied only to those gage stations where a continuous record of discharge is obtained.

Hydrologic bench-mark station is one that provides hydrologic data for a basin in which the hydrologic regimes will likely be governed solely by natural conditions. Data collected at a bench-mark station may be used to separate effects of natural from manmade changes in other basins which have been developed and in which the physiography, climate, and geology are similar to those in the undeveloped bench-mark basin.

Partial-record station is a particular site where limited streamflow data are collected systematically over a period of years for use in hydrologic analyses.

Cubic foot per second (cfs) is the rate of discharge of a stream whose channel is 1 square foot in cross-sectional area and whose average velocity is 1 foot per second.

Acre-foot (ac-ft) is the quantity of water required to cover an acre to the depth of 1 foot and is equivalent to 43,560 cubic feet.

Cfs-day is the volume of water represented by a flow of 1 cubic foot per second for 24 hours. It is equivalent to 86,400 cubic feet, 1.983471 acre-feet, or 646,317 gallons, and represents a runoff of 0.0372 inch from 1 square mile.

Stage-discharge relation is the relation between gage height and the amount of water flowing in a channel, expressed as volume per unit of time.

Control designates a feature downstream from the gage that determines the stage-discharge relation at the gage. This feature may be a natural constriction of the channel, a long reach of the channel, or an artificial structure.

Contents is the volume of water in a reservoir or lake. Unless otherwise indicated, volume is computed on the basis of a level pool and does not include bank storage.

The drainage area of a stream at a specified location is that area, measured in a horizontal plane, which is so enclosed by a topographic divide that direct surface runoff from precipitation normally would drain by gravity into the river above the specified point. Figures of drainage area given herein include all closed basins, or noncontributing areas, within the area unless otherwise noted.

WSP is used as an abbreviation for "Water-Supply Paper" in references to previously published reports.

DOWNSTREAM ORDER AND STATION NUMBERS

Stations are listed in the same downstream order used in the water-supply papers. Records are listed in a downstream direction along the main stem with all stations on a tributary entering above a main-stem station listed before that station. If a tributary enters between two main-stem stations, it is listed between them.

A similar order is followed listing stations on first rank, second rank, and other ranks of tributaries. To indicate the rank of any tributary on which a gaging station is situated and the stream to which it is immediately tributary, each indentation in the listing of gaging stations in the table of contents of this report represents one rank. This downstream order and system of indentation shows which gaging stations are on tributaries between any two stations on a main stem and the rank of the tributary on which each gaging station is situated.

As an added means of identification, each gaging station has been assigned a station number. The numbers have been assigned in the same downstream order used in the annual series of water-supply papers. In assigning station numbers, no distinction is made between partial-record stations and continuous-record gaging stations, so that the station number for a partial-record station indicates downstream order position in a list made up of both types of stations. Gaps are left in the numbers to allow for new stations that may be established; hence the numbers are not consecutive.

The complete 8-digit number for each station, such as 07-0830.00, includes the part number "7" plus a six-digit number. In this report, the nonessential zeros are not shown. For example, the complete number 07-0830.00 appears as 7-0830, just to the left of the station name. In this report, the records are listed in downstream order by parts. All records for a drainage basin encompassing more than one State could be arranged in downstream order by assembling pages from the various State reports by station number to include all records in the basin.

EXPLANATION OF DATA

The base data collected at gaging stations consist of records of stage and measurements of discharge. In addition, observations of factors affecting the stage-discharge relation, weather records, and other information are used to supplement base data in determining the daily flow. Records of stage are obtained from a water-stage recorder that gives a continuous chart of fluctuations (for digital recorders, a tape punched at 15-, 30-, or 60-minute intervals) or from direct readings on a nonrecording gage. Measurements of discharge are made with a current meter by the general methods adopted by the Geological Survey on the basis of experience in stream gaging since 1888. These methods are described in Water-Supply Paper 888 and are also outlined in standard textbooks on the measurement of stream discharge.

Rating tables giving the discharge for any stage are prepared from stage-discharge relation curves defined by discharge measurements. If extensions to the rating curves are necessary to define the extremes of discharge, they are made on the basis of indirect measurements of peak

discharge (such as slope-area or contracted-opening measurements, or computation of flow over dams or weirs), velocity-area studies, and logarithmic plotting. The application of the daily mean gage height to those rating tables gives the daily mean discharge, from which the monthly and the yearly mean discharge are computed. If the stage-discharge relation is subject to change because of frequent or continual change in the physical features that form the control, the daily mean discharge is determined by the shifting-control method, in which correction factors based on individual discharge measurements and notes by engineers and observers are used in applying the gage heights to the rating tables. If the stage-discharge relation for a station is temporarily changed by the presence of aquatic growth or debris on the control, the daily mean discharge is computed by what is in effect the shifting-control method.

At some gaging stations the stage-discharge relation is affected by ice during the winter, and it becomes impossible to compute the discharge in the usual manner. Discharge for periods of ice effect is computed on the basis of the gage-height record and occasional winter discharge measurements, consideration being given to the available information on temperature and precipitation, notes by gage observers and engineers, and comparable records of discharge for other stations in the same or nearby basins.

For some gaging stations there are periods when no gage-height record is obtained or the recorded gage height is so faulty that it cannot be used to compute the daily discharge. This happens when the recorder stops or otherwise fails to operate properly, intakes are plugged, float is frozen in the well, or for various other reasons. For such periods the daily discharges are estimated on the basis of recorded range in stage, adjoining good record, discharge measurements, weather records, and comparison with other station records from the same or nearby basins.

The data in this report generally comprise a description of the station and a table showing the daily, monthly, and yearly discharge of the stream. Records are published for the water year which begins on October 1 and ends on September 30. A calendar for the 1967 water year is shown on page III to facilitate finding the day of the week for any date.

The description of the station gives the location, drainage area, records available, type and history of gages, average discharge, extremes of discharge, and general remarks. The location of the gaging station and the drainage area are obtained from the most accurate maps available. Under "Records available" are given periods for which there are published records for the present station or for stations generally equivalent to the present one. Under "Gage" are given the type of gage currently in

use and the datum of the gage above mean sea level, and a condensed history of the types, locations, and datums of previous gages used during the period of records available. The references to "datum of 1929" and adjustments of other years are to the datum and adjustments of the U. S. Coast and Geodetic Survey. Under "Average discharge" is given the average discharge for the number of years indicated. It is not given for stations having fewer than five complete years of record or for stations where changes in water development during the period of record cause the figure to have little significance. Under "Extremes" are given the maximum discharge and gage height; the minimum discharge if there is little or no regulation; the minimum daily discharge if there is extensive regulation (also the minimum discharge if useful); and the minimum gage height if it is significant. In the first paragraph, the data given are for the complete current water year unless otherwise specified. In the second paragraph, the data given are for the periods of record within the calendar year dates in the heading (not necessarily those for the complete years indicated by the heading dates). Reliable information concerning major floods that have occurred outside the period of record are given in the third or last paragraph under "Extremes." Unless otherwise qualified, the maximum discharge corresponds to the crest stage obtained by use of a water-stage recorder, a crest-stage indicator, or a nonrecording gage read at the time of the crest. If the maximum gage height did not occur at the same time as the maximum discharge, it is given separately. Information pertaining to the accuracy of the records and to conditions which affect the natural flow at the gaging station is given under "Remarks."

The daily table gives the discharge corresponding to the daily mean gage height unless there are large or rapid changes in discharge during the day. For days having large or rapid changes, discharge for the day is computed by averaging the mean discharges for several parts of a day. For digital recorders, the daily mean discharge is always the average of the discharges at each punched reading. For stations equipped with non-recording gages, the daily discharge corresponds to once-daily readings of the gage or to the mean of twice-daily readings; but for periods of rapidly changing stage the discharge is determined from a gage-height graph based on gage readings.

In the monthly summary below the daily table, the line headed "Total" gives the sum of the daily figures; it is the total cfs-days for the month. The line headed "Mean" gives the average flow in cubic feet per second during the month. Discharge for the month is expressed in acre-feet (line headed "Ac-ft"). The maximum and minimum daily discharges for each month are also given in the lines headed "Max" and "Min."

In the yearly summary below the monthly summary, the figures of maximum are the maximum daily discharges, not the momentary discharges when the water was at crest stage. Likewise, the minimums in this summary are the minimum daily discharges.

Peak discharges and the times of their occurrence and corresponding gage heights for most stations are listed below the table of daily and monthly discharge. All independent peaks above the selected bases are given. The base discharge, which is given in parentheses, is selected so that an average of about three peaks a year can be presented. Peak discharges are not published for any stream for which the peaks are subject to substantial control by man. Time of day is expressed in 24-hour local standard time; for example, 12:30 a.m. is 0030, 1:30 p.m. is 1330.

In a general footnote, introduced by the word "Note," certain periods are indicated for which the discharge is computed or estimated by special methods because of no gage-height record, backwater from various sources, or other unusual conditions. Periods of no gage-height record are indicated if the period is continuous for a month or more or includes the maximum discharge for the year. Periods of backwater from an unusual source, of indefinite stage-discharge relation, or of any other unusual condition at the gage are indicated only if they are a month or more in length and the accuracy of the records is affected. Days on which the stage-discharge relation is affected by ice are not indicated. The methods used in computing discharge for various unusual conditions have been explained in preceding paragraphs.

For most gaging stations on lakes and reservoirs, the data presented comprise a description of the station, a monthly summary table of stage and contents. For some reservoirs a table showing daily contents or stage is given. A skeleton table of capacity at given stages is published each year for all reservoirs for which records are published on a daily basis, but it is not published for reservoirs for which only monthly data are given.

ACCURACY OF FIELD DATA AND COMPUTED RESULTS

The accuracy of streamflow data depends primarily on (1) the stability of the stage-discharge relation or, if the control is unstable, the frequency of discharge measurements, and (2) the accuracy of observations of stage, measurements of discharge, and interpretation of records.

The station description under "Remarks" states the degree of accuracy of the records. "Excellent" means that about 95 percent of the daily discharges are within 5 percent; "good," within 10 percent; and "fair," within 15 percent. "Poor" means that daily discharges have less than "fair" accuracy.

The figures of mean daily discharge are shown to the nearest hundredth of a cfs for discharges less than 1 cfs. This has been done to maintain uniformity with computer-processed digital recorder data and should not be construed to indicate an accuracy greater than that used in the past.

Discharge at some stations, as indicated by the monthly mean, may vary widely from natural runoff, owing to diversion, consumption, regulation by storage, increase or decrease in evaporation due to artificial causes, or to other factors. For a few such stations, monthly and annual figures are adjusted for diversions or storage above station. Evaporation from a reservoir is not included in the adjustments for changes in reservoir contents, unless it is so stated. Even at those stations where adjustments are made, large errors in computed runoff may occur when relatively large negative adjustments are made or when evaporation is large in comparison with the observed discharge.

OTHER DATA AVAILABLE

Data collected at partial-record stations and at miscellaneous sites are given at the end of this report. Data for partial-record stations are presented in two tables. The first is a table of discharge measurements at low-flow partial-record stations, and the second is a table of annual maximum stage and discharge at crest-stage stations. Discharge measurements at miscellaneous sites are given in a third table.

Information of a more detailed nature than that published for most of the gaging stations is on file in the district office, such as discharge measurements and recorder charts or nonrecording-gage readings. Some gaging-station records in the State through 1957 have been analyzed with an electronic computer to give: (1) the number of days in each year that the daily discharge was between selected limits (duration tables); (2) the lowest mean discharge for selected numbers of consecutive days in each year; and (3) the highest mean discharge for selected numbers of consecutive days in each year.

At or near some gaging stations, water-quality records also are collected. Data are obtained on the chemical quality of the stream water, on water temperature, on suspended-sediment concentration, and on the particle-size distribution of suspended sediment and bed material. These data are given in Part 2 of this report. Under the "Remarks" paragraph of the gaging-station description, reference is made to water-quality records collected on a regular basis.

RECORDS OF DISCHARGE COLLECTED BY AGENCIES OTHER THAN THE
GEOLOGICAL SURVEY

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The table below contains a list of gaging stations at which records of discharge were collected during the water year October 1966 to September 1967 by the Colorado Springs Water Department. The records of these stations are not contained in publications of the Geological Survey.

Stream	Location	Period
Bear Creek.....	Near Colorado Springs, Colo....	1918-67*
Boehmer Creek.....	Near Pikes Peak, Colo.....	1909-67*
Cabin Creek.....	Near Halfway, Colo.....	1906-67*
Crystal Creek.....	Below reservoir near Green Mountain Falls, Colo.	1935-67
Do.....	Near Green Mountain Falls, Colo.	1935-67
French Creek.....	Near Cascade, Colo.....	1935-67
Lion Creek.....	Near Halfway, Colo.....	1908-67*†
Little Beaver Creek..	Near Pikes Peak, Colo.....	1909-67*†
North Cascade Creek..	At Cascade, Colo.....	1935-67
North Catamount Creek	Above reservoir near Green Mountain Falls, Colo.	1960-67
Do.....	Near Green Mountain Falls, Colo.	1935-67 †
North Cheyenne Creek	At Broadmoor, Colo.....	1966-67
Ruxton Creek	Above Lake Moraine, Colo.....	1918-67
Do.....	Above Lion Creek at Midway, Colo.	1935-67
Do.....	At Manitou Springs, Colo.....	1925-67
Do.....	Below St. John tunnel near Pikes Peak, Colo.	1925-67
Sackett Creek.....	Near Pikes Peak, Colo.....	1909-67*†
Sheep Creek.....	Near Halfway, Colo.....	1908-67*†
South Cascade Creek..	At Cascade, Colo.....	1935-67 †
South Catamount Creek	Below reservoir near Green Mountain Falls, Colo.	1935-67
Do.....	Near Green Mountain Falls, Colo.	1935-67
South Cheyenne Creek	At Broadmoor, Colo.....	1966-67
South Fork of West Monument Creek	Near Pikeview, Colo.....	1965-67
South Ruxton Creek..	Above Big Tooth Reservoir near Midway, Colo.	1925-67
Willow Creek.....	Near Midway, Colo.....	1925-67

* Records prior to 1931 are contained in water-supply papers published by the Geological Survey.

† Records prior to 1951 published WSP 1311.

PLATTE RIVER BASIN

6-6160. North Fork Michigan River near Gould, Colo.

Location.--Lat 40°32'58", long 106°01'14", in SE¼NW¼ sec.27, T.7 N., R.77 W., on left bank 25 ft upstream from county road bridge, 0.7 mile downstream from dam on recreation lake, 1.6 miles north of Gould, 2.8 miles upstream from mouth, and 19 miles southeast of Walden.

Drainage area.--21.2 sq mi.

Records available.--October 1950 to September 1967.

Gage.--Water-stage recorder. Datum of gage is 8,793 ft above mean sea level, unadjusted. Prior to Oct. 6, 1964, at site 0.6 mile upstream at datum 55.00 ft higher. Oct. 6, 1964, to Aug. 10, 1965, at site a quarter of a mile upstream at different datum.

Average discharge.--17 years, 17.0 cfs (12,310 acre-ft per year).

Extremes.--Maximum discharge during year, 177 cfs May 25 (gage height, 4.31 ft); minimum daily, 2.3 cfs Nov. 28, Jan. 22.

1950-67: Maximum discharge, 290 cfs May 25, 1961 (gage height, 3.15 ft, site and datum then in use), from rating curve extended above 160 cfs; maximum gage height recorded, 3.96 ft Apr. 17, 1962 (backwater from ice), site and datum then in use; no flow Dec. 11, 1963, to Apr. 30, 1964, caused by filling recreation lake upstream.

Remarks.--Records good except those for winter period, which are poor. One small diversion above station to Canadian River drainage. Slight natural regulation by recreation lake (capacity, 1,250 acre-ft) since Dec. 11, 1963.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3.1	4.3	3.1	2.6	2.6	3.1	4.3	25	109	43	11	7.9
2	3.7	3.6	3.1	2.9	2.7	3.1	4.3	20	113	42	10	7.6
3	7.9	3.7	3.3	2.8	2.7	3.1	5.7	16	116	38	9.8	6.4
4	6.4	3.9	3.4	2.6	2.7	3.1	5.2	15	111	41	9.8	6.1
5	6.1	3.6	3.3	2.6	2.6	3.1	6.4	14	110	39	9.5	5.9
6	7.3	3.6	3.6	2.9	2.6	2.7	7.9	14	109	32	9.5	5.9
7	7.6	3.6	3.7	2.9	2.6	2.8	8.5	15	101	32	9.5	5.9
8	7.3	3.7	3.1	2.8	2.5	2.9	9.1	31	90	36	10	5.9
9	6.7	3.7	4.3	2.6	2.5	3.0	11	61	85	29	9.5	6.1
10	5.9	3.7	2.5	2.5	2.5	2.9	12	67	77	25	8.8	6.6
11	5.2	3.7	2.9	2.5	2.9	2.8	12	62	80	23	8.2	8.2
12	5.2	3.7	2.9	2.5	3.0	2.8	15	55	80	24	7.3	8.6
13	5.2	3.7	2.8	2.5	3.0	2.8	17	47	74	22	7.0	8.4
14	6.7	3.6	2.9	3.4	3.0	2.8	13	33	76	21	6.7	7.3
15	6.4	3.6	2.6	3.4	3.0	2.8	11	26	79	21	6.7	6.4
16	5.9	3.6	2.4	3.1	3.0	3.1	11	27	74	22	7.3	6.7
17	5.7	3.6	2.6	3.1	3.0	3.1	10	53	67	21	6.7	7.9
18	5.4	3.7	2.8	2.8	3.0	3.4	11	81	63	26	6.7	8.2
19	5.0	3.7	2.9	2.8	3.0	3.4	14	84	64	21	6.4	11
20	5.2	3.6	3.0	2.6	3.0	3.5	18	79	79	18	6.1	12
21	5.2	3.7	2.9	2.5	3.0	3.6	16	88	84	16	6.1	11
22	5.0	3.6	2.9	2.3	3.1	3.5	13	111	85	16	6.4	8.8
23	5.0	3.6	2.5	2.5	3.2	3.5	11	133	79	16	6.4	7.6
24	4.8	3.4	2.4	2.6	3.2	3.4	11	141	71	15	6.1	7.0
25	5.0	2.9	2.5	2.8	3.0	3.4	9.8	144	63	14	5.9	7.9
26	5.0	2.9	2.6	2.9	3.0	3.5	10	147	58	13	5.7	9.8
27	5.2	2.6	2.6	2.6	3.2	3.7	11	120	54	12	5.7	10
28	5.2	2.3	2.6	2.5	3.1	3.7	12	112	54	12	5.7	8.5
29	5.0	2.5	2.6	2.5	-	3.7	24	109	54	11	5.9	7.6
30	4.8	2.8	2.6	2.5	- - - -	4.0	36	106	46	11	6.4	7.0
31	4.6	- - - -	2.8	2.6	- - - -	4.2	- - - -	102	- - - -	11	7.3	- - - -
Total	172.7	104.2	90.2	84.2	80.7	100.5	360.2	2,138	2,405	723	234.1	234.2
Mean	5.57	3.47	2.91	2.72	2.88	3.24	12.0	69.0	80.2	23.3	7.55	7.81
Max	7.9	4.3	4.3	3.4	3.2	4.2	36	147	116	43	11	12
Min	3.1	2.3	2.4	2.3	2.5	2.7	4.3	14	46	11	5.7	5.9
Ac-ft	343	207	179	167	160	199	714	4,240	4,770	1,430	464	465

Cal yr 1966: Total 3,919.0 Mean 10.7 Max 89 Min 2.3 Ac-ft 7,770
 Wtr yr 1967: Total 6,727.0 Mean 18.4 Max 147 Min 2.3 Ac-ft 13,340

Peak discharge (base, 100 cfs).--May 25 (2400) 177 cfs (4.31 ft); June 3 (0100) 127 cfs (3.79 ft).

6-6200. North Platte River near Northgate, Colo.

Location.--Lat 40°56'10", long 106°20'21", in SW¼SE¼ sec.11, T.11 N., R.80 W., on right bank 350 ft downstream from bridge on State Highway 125, 0.8 mile upstream from Camp Creek, 4.2 miles northwest of Northgate, and 4.4 miles south of Colorado-Wyoming State line.

Drainage area.--1,431 sq mi.

Records available.--May to November 1904 (published as "near Pinkhampton"), May 1915 to September 1967. Monthly discharge only for some periods, published in WSP 1310.

Gage.--Water-stage recorder. Datum of gage is 7,810.39 ft above mean sea level, adjustment of 1912. May 11 to Nov. 9, 1904, staff gage 0.8 mile downstream at different datum. Apr. 30, 1915, to May 12, 1916, staff gage, May 13, 1916, to Sept. 17, 1917, chain gage, Sept. 18, 1917, to Apr. 7, 1918, staff gage, and Apr. 8, 1918, to Aug. 21, 1961, water-stage recorder, at site 0.8 mile downstream at datum 3.36 ft lower.

Average discharge.--52 years, 430 cfs (311,300 acre-ft per year).

Extremes.--Maximum discharge during year, 2,420 cfs June 22 (gage height, 5.16 ft); maximum gage height, 5.31 ft Mar. 30 (backwater from ice); minimum daily discharge, 50 cfs Jan. 6. 1904, 1915-67: Maximum discharge, 6,720 cfs June 11, 1923 (gage height, 6.24 ft, site and datum then in use); maximum gage height recorded, 8.84 ft Apr. 9, 1962 (ice jam); minimum daily discharge, 19 cfs July 17-19, 1934.

Remarks.--Records good except those for winter period, which are poor. Diversions for irrigation of about 130,000 acres of hay meadows above station. Transbasin diversions above station to Cache la Poudre River basin (see elsewhere in this report). Records of chemical analyses and water temperatures for the water year 1967 are published in Part 2 of this report.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	55	92	80	54	74	90	640	511	1,440	1,320	328	181
2	57	85	76	54	72	96	740	439	1,310	1,230	303	178
3	90	85	72	56	70	100	860	400	1,000	1,180	291	164
4	159	83	76	60	72	96	1,040	370	955	1,220	291	146
5	164	81	70	52	74	84	1,050	356	1,110	1,260	287	130
6	151	85	70	50	76	80	1,050	351	1,210	1,220	267	121
7	128	90	68	54	76	86	919	370	1,220	1,180	264	114
8	116	90	66	56	78	90	846	370	1,220	1,450	295	116
9	109	70	64	60	80	100	750	405	1,270	1,420	320	130
10	102	72	62	62	80	108	635	505	1,220	1,170	311	126
11	94	80	60	66	80	102	579	586	1,190	1,000	283	130
12	92	90	62	68	80	120	600	614	1,240	937	260	148
13	94	86	62	72	80	120	614	530	1,240	854	264	186
14	94	82	64	74	80	110	511	462	1,240	774	241	186
15	102	80	64	74	78	110	456	395	1,370	854	227	167
16	107	80	64	74	80	140	499	333	1,750	1,040	220	167
17	112	82	64	74	80	190	480	291	1,520	1,020	213	220
18	107	82	62	76	80	230	445	283	1,270	1,140	200	230
19	105	82	62	76	80	280	468	320	1,220	1,170	186	279
20	96	78	60	76	80	270	462	346	1,480	991	172	299
21	96	78	60	80	80	250	451	390	1,940	854	170	271
22	81	82	58	76	80	280	390	400	2,370	710	167	237
23	92	82	58	72	80	310	351	427	2,290	635	167	217
24	92	76	60	70	80	360	320	468	2,170	649	159	197
25	87	70	60	68	80	400	324	518	1,890	649	148	195
26	90	70	58	68	78	370	320	663	1,600	572	138	227
27	98	74	56	70	80	410	338	937	1,500	487	138	227
28	102	80	56	70	82	460	416	1,210	1,570	433	136	206
29	102	84	56	72	-	540	390	1,140	1,880	395	138	192
30	96	84	54	74	- - - - -	660	462	1,040	1,650	360	146	178
31	94	- - - - -	54	76	- - - - -	620	- - - - -	1,050	- - - - -	338	164	- - - - -
Total	3,164	2,435	1,958	2,084	2,190	7,262	17,406	16,480	44,335	28,512	6,894	5,565
Mean	102	81.2	63.2	67.2	78.2	234	580	532	1,478	920	222	186
Max	164	92	80	80	82	660	1,050	1,210	2,370	1,450	328	299
Min	55	70	54	50	70	80	320	283	955	338	136	114
Ac-ft	6,280	4,830	3,880	4,130	4,340	14,400	34,520	32,690	87,940	56,550	13,670	11,040

Cal yr 1966: Total 66,567 Mean 182 Max 1,100 Min 41 Ac-ft 132,000
 Wtr yr 1967: Total 138,285 Mean 379 Max 2,370 Min 50 Ac-ft 274,300

PLATTE RIVER BASIN

6-6575. Laramie River near Glendevey, Colo.

Location.--Lat 40°48'00", long 105°52'40", in NW¼ sec.25, T.10 N., R.76 W., on left bank just upstream from Stub Creek, 180 ft downstream from bridge on county road, 250 ft downstream from Nunn Creek, and 1½ miles north of Glendevey Post Office.

Drainage area.--101 sq mi.

Records available.--June 1904 to October 1905, August 1910 to September 1967. Monthly discharge only for some periods, published in WSP 1310. Published as "at Glendevey" 1905, 1910-18.

Gage.--Water-stage recorder. Altitude of gage is 8,230 ft (from topographic map). Prior to Nov. 7, 1910, staff gage. Prior to Sept. 21, 1922, at datum 1.22 ft higher, Sept. 21, 1922, to Sept. 26, 1923, at datum 1.94 ft higher, July 9, 1929, to July 22, 1931, at datum 2.73 ft higher, and July 23, 1931, to Sept. 19, 1935, at datum 2.09 ft higher; all at site 180 ft upstream. Sept. 27, 1923, to July 8, 1929, at site 140 ft upstream at datum 1.35 ft higher.

Average discharge.--58 years, 73.1 cfs (52,920 acre-ft per year).

Extremes.--Maximum discharge during year, 696 cfs June 21 (gage height, 3.61 ft); minimum daily, 12 cfs Jan. 12, 17, Mar. 6. 1904-5, 1910-67: Maximum discharge, 2,240 cfs June 9, 1923 (gage height, 4.55 ft, site and datum then in use, from floodmarks), from rating curve extended above 1,400 cfs; minimum daily recorded, 5 cfs Feb. 14, 15, 1911, but may have been less during winter periods of no gage-height record.

Remarks.--Records good. Diversions for irrigation of about 700 acres of hay meadows above station. Transbasin diversions above station to Cache la Poudre River and tributaries (see elsewhere in this report).

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	24	20	16	15	14	13	23	41	235	474	45	41
2	25	22	16	14	13	13	25	35	265	438	40	32
3	41	22	16	14	14	13	30	31	280	408	37	30
4	37	20	17	14	13	13	36	30	298	387	36	27
5	36	21	16	13	14	13	37	30	303	387	32	25
6	42	19	16	13	14	12	32	35	314	356	31	24
7	41	18	15	13	14	13	31	36	298	353	31	24
8	35	18	14	14	14	14	35	44	258	405	36	26
9	31	18	13	15	14	13	35	66	226	350	30	33
10	27	17	15	14	14	13	31	88	205	311	29	29
11	26	18	15	13	14	13	34	92	205	275	26	27
12	28	18	16	12	14	13	37	87	300	246	25	45
13	29	18	17	13	14	14	30	76	367	235	24	33
14	31	18	17	14	14	14	35	65	373	224	23	27
15	31	18	16	13	14	16	36	58	376	241	24	25
16	33	18	17	13	14	14	35	56	345	250	24	29
17	30	18	17	12	14	17	31	65	370	230	24	35
18	30	18	17	14	14	18	37	93	396	268	22	40
19	27	18	15	14	14	18	44	110	474	215	22	54
20	30	18	16	14	14	18	40	110	594	199	21	46
21	28	18	15	14	14	18	32	127	644	187	20	36
22	24	18	14	13	15	18	28	161	594	176	20	32
23	23	18	14	14	15	18	28	224	580	114	22	29
24	23	17	15	14	15	20	26	260	536	99	20	28
25	24	17	15	13	14	23	27	302	480	86	20	31
26	24	16	15	14	14	20	27	328	477	73	20	34
27	25	16	15	14	13	20	31	252	477	73	20	34
28	24	17	15	14	13	20	35	248	533	74	20	31
29	24	17	16	13	-	25	42	250	526	55	24	38
30	23	17	15	13	- - - -	26	47	248	474	49	38	49
31	23	- - - -	15	14	- - - -	24	- - - -	230	- - - -	46	38	- - - -
Total	899	546	481	421	391	517	997	3,878	11,803	7,284	844	994
Mean	29.0	18.2	15.5	13.6	14.0	16.7	33.2	125	393	235	27.2	33.1
Max	42	22	17	15	15	26	47	328	644	474	45	54
Min	23	16	13	12	13	12	23	30	205	46	20	24
Ac-ft	1,780	1,080	954	835	776	1,030	1,980	7,690	23,410	14,450	1,670	1,970

Cal yr 1966: Total 13,749 Mean 37.7 Max 189 Min 13 Ac-ft 27,270
Wtr yr 1967: Total 29,055 Mean 79.6 Max 644 Min 12 Ac-ft 57,630

6-6585. Laramie River near Jelm, Wyo.

Location.--Lat 41°00'08", long 106°00'51", in SE¼SE¼ sec.15, T.12 N., R.77 W., on right bank 35 ft downstream from road bridge, a quarter of a mile north of Colorado-Wyoming State line, half a mile upstream from Johnson Creek, and 4 miles south of Jelm, Wyo.

Drainage area.--294 sq mi.

Records available.--June 1904 to October 1905, October 1910 to September 1967. Monthly discharge only for some periods, published in WSP 1310.

Gage.--Digital water-stage recorder. Datum of gage is 7,683.36 ft above mean sea level, datum of 1929. June 22, 1904, to Oct. 31, 1905, staff gage at site three-quarters of a mile upstream at different datum. May 7 to July 13, 1911, staff gage and July 14, 1911, to Sept. 3, 1921, graphic water-stage recorder, on downstream side of bridge 35 ft upstream at present datum. Sept. 4, 1921, to Dec. 2, 1965, graphic water-stage recorder at present site and datum.

Average discharge.--58 years, 159 cfs (115,100 acre-ft per year).

Extremes.--Maximum discharge during year, 1,240 cfs June 21 (gage height, 2.92 ft); minimum daily discharge, 20 cfs Dec. 28-30. 1904-5, 1910-67: Maximum discharge, 4,200 cfs June 9, 1923 (gage height, 4.15 ft); minimum recorded, 5.6 cfs Dec. 2, 1933.

Remarks.--Records good except those for winter months, which are poor. Diversions for irrigation of about 4,600 acres of hay meadows above station. Transbasin diversions above station to Cache la Poudre River and tributaries (see elsewhere in this report).

Cooperation.--Records furnished by Wyoming district.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	43	34	41	24	31	33	65	70	580	742	89	62
2	48	34	42	24	31	34	68	66	670	688	90	55
3	52	33	43	25	32	34	51	59	760	625	86	47
4	54	30	40	26	33	33	59	53	751	607	83	43
5	50	33	39	26	30	32	60	51	769	589	79	40
6	48	35	37	25	29	30	58	58	769	508	77	38
7	54	35	35	24	28	29	51	61	787	500	78	37
8	53	34	32	25	28	30	54	59	706	589	80	44
9	50	30	30	26	29	31	57	79	634	532	80	53
10	46	31	30	26	28	35	54	119	556	428	79	51
11	44	32	33	27	28	38	53	141	564	378	70	47
12	44	34	37	27	29	41	59	135	625	371	64	63
13	46	36	37	26	31	43	61	125	787	317	62	68
14	53	38	35	25	30	43	49	114	760	313	60	51
15	46	40	35	24	28	41	65	104	778	371	61	46
16	57	41	36	23	28	44	64	103	697	406	60	47
17	54	40	37	23	28	50	53	108	697	328	58	54
18	52	42	37	23	29	56	57	163	715	484	53	69
19	45	41	37	25	27	58	65	311	796	304	50	96
20	48	40	38	30	26	59	68	385	913	265	47	87
21	48	40	36	32	27	64	63	413	1,150	247	45	69
22	44	41	31	33	27	66	56	468	1,060	222	45	55
23	44	40	25	31	27	74	53	580	1,010	183	46	50
24	42	40	25	30	28	76	49	661	931	159	44	47
25	40	41	22	29	31	76	52	742	823	136	40	49
26	40	39	22	28	29	74	49	913	787	121	39	57
27	42	37	21	29	29	74	57	661	778	115	38	58
28	41	39	20	31	30	76	59	616	850	111	37	52
29	40	40	20	32	-	78	63	679	976	95	36	46
30	38	41	20	32	- - - -	70	73	670	787	86	46	52
31	38	- - - -	21	33	- - - -	65	- - - -	625	- - - -	85	60	- - - -
Total	1,444	1,111	994	844	811	1,587	1,745	9,392	23,466	10,905	1,882	1,633
Mean	46.6	37.0	32.1	27.2	29.0	51.2	58.2	303	782	352	60.7	54.4
Max	57	42	43	33	33	78	73	913	1,150	742	90	96
Min	38	30	20	23	26	29	49	51	556	85	36	37
Ac-ft	2,860	2,200	1,970	1,670	1,610	3,150	3,460	18,630	46,540	21,630	3,730	3,240

Cal yr 1966 : Total 28,814 Mean 78.9 Max 455 Min 20 Ac-ft 57,150
 Wtr yr 1967 : Total 55,814 Mean 153 Max 1,150 Min 20 Ac-ft 110,700

PLATTE RIVER BASIN

6-6950. South Platte River above Elevenmile Canyon Reservoir, near Hartsel, Colo.

Location.--Lat 38°58'03", long 105°34'51", in NE¼ sec.32, T.12 S., R.73 W., on left bank 200 ft downstream from highway bridge, 2.5 miles upstream from water line of Elevenmile Canyon Reservoir at elevation 8,561 ft, and 13 miles southeast of Hartsel.

Drainage area.--880 sq mi.

Records available.--June 1933 to September 1967 (no winter records prior to 1940). Monthly discharge only for some periods, published in WSP 1310.

Gage.--Water-stage recorder and Parshall flume. Datum of gage is 8,612.83 ft above mean sea level (datum of Denver Board of Water Commissioners). Prior to May 27, 1939, water-stage recorder near present site at different datum. May 27, 1939, to Nov. 4, 1961, at datum 0.46 ft lower.

Average discharge.--28 years (1939-67), 79.0 cfs (57,190 acre-ft per year).

Extremes.--Maximum discharge during year, 284 cfs Aug. 10 (gage height, 1.89 ft); minimum daily, 6.8 cfs Apr. 10.

1933-67: Maximum discharge recorded, 1,290 cfs June 19, 1949; maximum gage height, 4.76 ft (present datum) July 22, 1957; minimum daily discharge recorded, 0.9 cfs Apr. 22, 1940.

Remarks.--Records good except those for winter period, which are poor. Flow regulated by Antero Reservoir (capacity, 22,300 acre-ft). Many small diversions above station for irrigation of about 24,000 acres.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	13	27					25	11	43	34	50	238
2	13	30					21	16	39	30	48	187
3	13	30					24	13	35	30	56	132
4	13	29					18	14	33	30	84	107
5	15	25					13	14	38	39	72	95
6	16	25					8.6	15	43	52	66	86
7	15	27					8.0	14	34	60	66	80
8	16	27					7.6	13	29	56	80	74
9	16	24					7.2	14	25	56	132	80
10	16	32					6.8	13	23	42	249	81
11	16	35					7.6	13	30	36	176	75
12	16	31					7.6	13	31	40	127	81
13	15	38					11	13	29	39	122	107
14	18	35					12	16	24	39	102	104
15	27	38					18	16	23	39	111	87
16	32		22	12	16	24	16	15	28	81	207	82
17	32						14	13	32	134	187	81
18	30						16	13	27	147	136	78
19	32						13	13	29	105	111	80
20	34						13	13	40	69	86	77
21	30						13	13	56	129	76	74
22	27						13	14	56	120	89	71
23	25	34					13	13	44	86	74	68
24	26						13	14	36	98	64	64
25	25						13	20	33	189	56	62
26	26						13	38	32	158	51	59
27	25						13	70	33	105	50	60
28	27						12	57	35	82	61	62
29	26						12	43	41	66	75	52
30	26						10	34	38	62	160	47
31	27							34		52	214	
Total	688	963	682	372	448	744	392.4	625	1,039	2,305	3,238	2,631
Mean	22.2	32.1	22	12	16	24	13.1	20.2	34.6	74.4	104	87.7
Max	34	38	-	-	-	-	25	70	56	189	249	238
Min	13	-	-	-	-	-	6.8	11	23	30	48	47
Ac-ft	1,360	1,910	1,350	738	889	1,480	778	1,240	2,060	4,570	6,420	5,220

Cal yr 1966: Total 14,453 Mean 39.6 Max 178 Min - Ac-ft 28,670
 Wtr yr 1967: Total 14,127.4 Mean 38.7 Max 249 Min 6.8 Ac-ft 28,020

Note.--No gage-height record Nov. 16 to Mar. 31.

6-6960. South Platte River near Lake George, Colo.

Location.--Lat 38°54'19", long 105°28'22", in SW¼ sec.20, T.13 S., R.72 W., on left bank 700 ft downstream from Elevenmile Canyon Reservoir and 8.2 miles southwest of town of Lake George.

Drainage area.--963 sq mi.

Records available.--October 1929 to September 1967. Monthly discharge only for some periods, published in WSP 1310.

Gage.--Water-stage recorder and Parshall flume. Altitude of gage is 8,458 ft (from topographic map). Prior to Oct. 26, 1940, at site 1 mile downstream at datum 8,423.95 ft above mean sea level, adjustment of 1912.

Average discharge.--38 years, 68.7 cfs (49,740 acre-ft per year).

Extremes.--Maximum discharge during year, 258 cfs Sept. 2 (gage height, 2.50 ft); minimum daily, 7.2 cfs Apr. 27 to May 9. 1929-67: Maximum discharge, 990 cfs Aug. 15, 1930, from rating curve extended above 600 cfs; maximum gage height, 5.85 ft June 20, 1949; no flow at times in January 1930, February 1931, November 1935.

Remarks.--Records good. Natural flow of stream affected by transmountain diversions through East and West Hoosier ditches at Hoosier Pass prior to 1941, storage in Elevenmile Canyon Reservoir (see elsewhere in this report) and Antero Reservoir (capacity, 22,300 acre-ft), diversions for irrigation, and return flow from irrigated areas.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	9.5	10	10	9.5	9.5	9.0	9.0	7.2	20	22	46	240
2	9.5	10	10	9.5	8.5	9.0	9.0	7.2	20	22	31	258
3	9.5	10	10	9.5	8.5	9.0	9.0	7.2	20	22	19	258
4	10	10	10	9.5	8.5	9.0	9.0	7.2	20	22	19	172
5	10	10	10	9.5	8.5	9.0	12	7.2	22	22	31	104
6	10	10	10	9.5	8.5	9.0	18	7.2	27	22	32	80
7	10	10	10	9.5	8.5	9.0	15	7.2	32	28	36	80
8	10	10	10	9.5	9.0	9.0	11	7.2	34	33	48	80
9	10	10	10	10	9.0	9.0	10	7.2	34	39	82	80
10	10	10	10	10	9.0	9.0	10	80	35	47	193	91
11	10	10	10	10	9.0	9.0	10	9.5	24	51	165	93
12	10	10	10	10	9.0	9.0	10	9.5	19	51	104	93
13	10	10	10	10	9.0	9.0	10	9.5	17	52	135	114
14	10	10	10	10	9.0	9.0	10	10	12	38	120	122
15	10	10	9.5	10	9.0	9.0	10	10	10	31	85	91
16	10	10	9.5	10	9.0	9.0	10	10	10	31	105	80
17	10	10	9.5	10	9.0	9.0	10	10	10	43	148	80
18	10	10	9.5	10	9.0	9.0	10	10	9.0	70	155	80
19	10	10	9.5	10	9.0	9.0	10	10	9.5	85	137	80
20	10	10	9.5	10	9.0	9.0	10	10	19	90	88	80
21	10	10	9.5	10	9.0	9.0	10	10	32	96	51	89
22	10	10	9.5	10	9.0	9.0	10	10	44	117	27	92
23	10	10	9.5	10	9.0	9.0	10	10	52	128	44	102
24	10	10	9.5	10	9.0	9.0	9.5	10	54	100	67	90
25	10	10	9.5	10	9.0	9.0	9.5	10	55	107	78	61
26	10	10	9.5	10	9.0	9.0	80	10	54	155	76	52
27	10	10	9.5	10	9.0	9.0	7.2	10	38	115	68	51
28	10	10	9.5	10	9.0	9.0	7.2	14	25	94	64	41
29	10	10	9.5	10	-	9.0	7.2	20	22	74	64	42
30	10	10	9.5	10	- - - -	9.0	7.2	20	22	64	111	48
31	10	- - - -	9.5	10	- - - -	9.0	- - - -	20	- - - -	52	186	- - - -
Total	308.5	300	301.5	306.0	249.5	279.0	297.8	315.3	801.5	1,923	2,615	3,024
Mean	9.95	10.0	9.73	9.87	8.91	9.00	9.93	10.2	26.7	62.0	84.4	101
Max	10	10	10	10	9.5	9.0	18	20	55	155	193	258
Min	9.5	10	9.5	9.5	8.5	9.0	7.2	7.2	9.0	22	19	41
Ac-ft	612	595	598	607	495	553	591	625	1,590	3,810	5,190	6,000

Cal yr 1966: Total 8,842.5 Mean 24.2 Max 236 Min 9.0 Ac-ft 17,540
 Wtr yr 1967: Total 10,721.1 Mean 29.4 Max 258 Min 7.2 Ac-ft 21,260

PLATTE RIVER BASIN

6-7005. Goose Creek above Cheesman Lake, Colo.
(Known also as Lost Park Creek)

Location.--Lat 39°12'32", long 105°18'11", in sec.2, T.10 S., R.71 W., on right bank 1 mile upstream from water line of Cheesman Lake at elevation 6,842 ft and 1.7 miles west of Cheesman Dam.

Drainage area.--86.6 sq mi.

Records available.--August to December 1899, October 1924 to September 1967 (no winter records in some years). Monthly discharge only for some periods, published in WSP 1310. Published as "at Lake Cheesman" 1899.

Gage.--Water-stage recorder and compound rectangular weir. Altitude of gage is 6,910 ft (from topographic map). Aug. 1 to Dec. 31, 1899, staff gage at site about 2 miles downstream at different datum.

Average discharge.--30 years (1924-30, 1935-36, 1939-41, 1943-47, 1950-67), 26.5 cfs (19,190 acre-ft per year).

Extremes.--Maximum discharge during year, 117 cfs Aug. 30 (gage height, 2.10 ft); minimum not determined.
1924-67: Maximum discharge, 487 cfs June 9, 1957, from rating curve extended above 170 cfs; maximum gage height, 4.57 ft May 30, 1942; minimum discharge not determined.

Remarks.--Records poor. Small diversions above station for irrigation of about 100 acres.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	9.8	9.2	8.9				11	15	32	12	22	55
2	9.5	13	8.0				12	9.8	32	10	23	43
3	9.5	9.2	7.2				12	9.5	28	9.8	31	36
4	10	9.2	7.0				13	9.2	27	9.2	39	31
5	10	8.0	6.2				15	9.5	26	8.9	30	30
6	9.8	8.0				4.0						
7	10	8.0					14	11	28	9.5	28	28
8	9.8	7.8					13	16	25	10	44	28
9	9.8	6.8					13	25	21	23	36	28
10	9.2	7.0					13	24	19	24	48	29
							12	23	18	12	52	29
11	8.9	7.4					11	18	22	9.8	38	28
12	8.3	7.3					13	15	34	21	30	28
13	8.9	7.2					12	14	27	18	54	28
14	11	7.6					14	15	22	11	46	26
15	12	7.2					15	13	21	16	30	27
16	11	7.6		4.0	3.5	5.0	19	14	22	41	34	28
17	13	7.8					17	15	22	33	30	28
18	13	7.6	5.5				18	15	20	28	32	27
19	11	7.0					27	15	17	23	38	34
20	11	8.0					37	15	18	19	34	43
21	11	10					28	14	21	32	28	28
22	9.5	12					19	13	23	28	26	25
23	8.9	14				7.0	15	12	19	21	28	24
24	8.9	13					15	11	18	24	25	23
25	9.2	12					16	11	15	32	23	23
26	9.2	11					14	22	13	30	25	34
27	8.9	11					15	36	13	24	24	58
28	8.9	12				13	23	37	12	20	30	36
29	8.9	11					24	30	15	18	38	28
30	8.9	8.6					22	25	16	17	81	25
31	8.0	- - - -					- - - -	26	- - - -	17	71	- - - -
Total	305.8	275.5	180.3	124.0	98.0	203.0	502	538.0	646	611.2	1,118	938
Mean	9.86	9.18	5.82	4.0	3.5	6.55	16.7	17.4	21.5	19.7	36.1	31.3
Max	13	14	8.9	-	-	-	37	37	34	41	81	58
Min	8.0	6.8	-	-	-	-	11	9.2	12	8.9	22	23
Ac-ft	607	546	358	246	194	403	996	1,070	1,280	1,210	2,220	1,860

Cal yr 1966: Total 4,967.6 Mean 13.6 Max 67 Min - Ac-ft 9,850
Wtr yr 1967: Total 5,539.8 Mean 15.2 Max 81 Min - Ac-ft 10,990

Note.--No gage-height record Dec. 6 to Apr. 4.

6-7015. South Platte River below Cheesman Lake, Colo.

Location.--Lat 39°12'33", long 105°16'02", in SE¼NW¼ sec.6, T.10 S., R.70 W., on left bank 1,400 ft downstream from toe of Cheesman Dam and 4 miles southwest of Deckers.

Drainage area.--1,752 sq mi.

Records available.--October 1924 to September 1967. Monthly discharge only for some periods, published in WSP 1310.

Gage.--Water-stage recorder and Parshall flume. Datum of gage is 6,609.29 ft above mean sea level, datum of 1929. Prior to May 14, 1956, at site 370 ft upstream at datum 0.50 ft higher.

Average discharge.--43 years, 152 cfs (110,000 acre-ft per year).

Extremes.--Maximum discharge during year, 462 cfs Sept. 4 (gage height, 2.41 ft); minimum daily, 7.8 cfs Jan. 3, 4, June 21.

1924-67: Maximum discharge, 3,020 cfs Apr. 23, 1942 (gage height, 8.46 ft, site and datum then in use), from rating curve extended above 1,800 cfs; minimum daily determined, 1.6 cfs Apr. 8-14, 1957.

Remarks.--Records excellent. Natural flow of stream affected by minor transmountain diversion from Colorado River basin through Boreas Pass ditch (see elsewhere in this report), Elevenmile Canyon Reservoir and Cheesman Lake (see elsewhere in this report), diversions for irrigation of about 40,000 acres, and return flow from irrigated areas.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	22	21	76	8.4	82	13	18	17	13	14	134	379
2	21	21	76	8.4	82	13	18	17	42	14	172	435
3	21	21	65	7.8	82	13	31	17	110	14	172	459
4	16	21	42	7.8	66	14	39	17	111	14	172	405
5	13	21	32	9.0	51	14	45	17	113	14	156	303
6	12	21	32	14	22	14	58	17	111	14	146	216
7	12	21	34	14	10	14	73	16	104	14	158	187
8	12	21	35	14	11	14	68	16	104	14	198	176
9	12	21	24	14	13	13	52	20	104	14	181	166
10	12	22	15	14	15	13	42	27	104	14	210	185
11	12	36	15	14	15	13	27	27	103	14	274	194
12	12	73	14	14	15	13	26	28	103	14	282	139
13	13	73	14	30	15	13	45	30	103	14	214	166
14	22	73	14	58	15	13	76	31	103	14	235	156
15	31	73	17	62	15	13	21	31	103	15	231	172
16	31	103	26	60	15	13	17	28	103	15	174	160
17	31	160	26	60	15	14	11	56	103	15	210	130
18	30	183	25	62	15	14	11	149	103	15	282	128
19	30	142	25	62	15	14	39	158	104	15	295	104
20	24	140	25	62	15	11	63	151	79	14	292	42
21	19	140	25	62	15	13	48	132	7.8	21	305	42
22	19	138	17	62	15	19	25	132	13	34	354	42
23	19	138	13	62	14	19	24	181	13	34	340	42
24	19	136	13	62	14	16	24	181	13	52	321	42
25	19	119	13	63	13	14	24	196	14	66	349	44
26	19	79	13	63	13	14	21	196	15	189	394	44
27	19	74	9.7	63	13	14	17	104	16	282	399	44
28	20	74	8.4	74	13	15	17	106	16	238	340	44
29	20	76	8.4	84	-	16	17	108	15	160	360	44
30	21	76	8.4	84	- - - -	17	17	108	15	189	377	44
31	21	- - - -	8.4	82	- - - -	18	- - - -	57	- - - -	110	417	- - - -
Total	604	2,317	769.3	1,356.4	694	441	1,014	2,371	2,060.8	1,660	8,144	4,734
Mean	19.5	77.2	24.8	43.8	24.8	14.2	33.8	76.5	68.7	53.5	263	158
Max	31	183	76	84	82	19	76	196	113	282	417	459
Min	12	21	8.4	7.8	10	11	11	16	7.8	14	134	42
Ac-ft	1,200	4,600	1,530	2,690	1,380	875	2,010	4,700	4,090	3,290	16,150	9,390
Cal yr 1966: Total	44,447.3		Mean	122	Max	558	Min	8.4	Ac-ft	88,160		
Wtr yr 1967: Total	26,165.5		Mean	71.7	Max	459	Min	7.8	Ac-ft	51,900		

PLATTE RIVER BASIN

6-7060. North Fork South Platte River below Geneva Creek, at Grant, Colo.

Location.--Lat 39°27'28", long 105°39'28", in NW¼ sec.10, T.7 S., R.74 W., on left bank at Grant, 1,600 ft downstream from Geneva Creek and 1.3 miles downstream from east portal of Harold D. Roberts tunnel.

Drainage area.--127 sq mi.

Records available.--July 1908 to November 1913 (published as "at Cassells"), June 1942 to September 1967. Monthly discharge only for some periods, published in WSP 1310. December 1913 to March 1918 equivalent records may be obtained by summation of flow of North Fork South Platte River at Grant (above Geneva Creek) and Geneva Creek at Grant.

Gage.--Water-stage recorder. Datum of gage is 8,558.60 ft above mean sea level (Bureau of Reclamation bench mark). July 4 to Dec. 13, 1908, and May 23 to Nov. 30, 1913, staff gages at site 185 ft downstream from bridge at Santa Maria (formerly Cassells) about 2 miles downstream at various datums. Dec. 14, 1908, to May 22, 1913, chain gage on bridge at Santa Maria about 2 miles downstream at different datum. June 19, 1942, to Mar. 15, 1948, staff gage at site 1,200 ft upstream from present site at datum 13.07 ft higher. Mar. 16 to July 22, 1948, staff gage at site 400 ft upstream from present site at datum 6.35 ft higher than present datum.

Average discharge.--30 years, 72.0 cfs (52,130 acre-ft per year), adjusted for inflow from Harold D. Roberts tunnel since 1964.

Extremes.--Maximum discharge during year, 297 cfs May 22 (gage height, 3.63 ft); maximum gage height, 3.97 ft, Nov. 9 (backwater from ice); minimum daily discharge, 16 cfs Nov. 9.

1908-13, 1942-67: Maximum discharge observed, 990 cfs June 7, 8, 1912 (gage height, 3.30 ft, site and datum then in use), from rating curve extended above 530 cfs by logarithmic plotting; maximum gage height, 4.72 ft, present site, Feb. 11, 1952 (backwater from ice); minimum daily discharge, 6.5 cfs Nov. 27, 1958.

Remarks.--Records good except those for winter period, which are poor. Small diversions above station for irrigation of about 200 acres. Transmountain diversions from Colorado River basin to North Fork South Platte River above station through Harold D. Roberts tunnel (see elsewhere in this report).

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	185	38	26	70	62	62	135	132	179	155	203	203
2	185	41	26	70	61	64	135	135	191	150	200	197
3	182	44	49	68	61	64	128	161	203	170	200	191
4	182	43	56	70	61	64	138	176	212	185	194	191
5	182	41	58	72	62	64	164	164	229	185	194	200
6	182	39	72	70	62	62	161	101	243	182	194	206
7	182	38	72	68	62	64	164	61	229	188	194	206
8	182	23	66	66	62	64	173	62	197	191	200	209
9	179	16	67	68	62	64	176	118	191	176	218	215
10	179	29	67	70	62	66	179	194	191	170	209	209
11	175	49	72	70	64	66	191	197	185	170	200	206
12	172	67	71	68	62	67	209	197	194	176	206	226
13	172	66	71	67	64	67	185	125	191	161	200	212
14	137	66	71	66	66	66	62	95	188	155	203	209
15	73	55	69	66	67	66	142	93	188	182	206	212
16	76	37	69	66	67	66	140	97	158	145	200	212
17	76	37	69	66	67	67	155	112	164	120	194	209
18	74	36	70	64	67	71	145	158	176	105	194	212
19	74	32	70	64	67	71	173	182	179	101	194	222
20	74	34	72	64	64	69	206	191	182	108	191	215
21	54	34	70	64	61	69	200	206	182	103	200	209
22	44	31	69	64	62	69	197	222	176	97	203	206
23	45	29	68	64	62	72	194	200	173	115	203	206
24	45	28	67	62	62	74	194	197	173	179	197	206
25	45	25	66	62	62	72	194	206	168	185	194	206
26	45	25	65	62	62	72	167	197	164	182	197	215
27	46	22	64	62	62	72	135	176	167	182	194	218
28	44	30	66	61	62	72	135	179	167	185	206	209
29	43	29	68	61	-	78	138	173	150	194	215	206
30	43	22	70	62	- - - -	89	138	173	152	191	218	206
31	41	- - - -	70	62	- - - -	122	- - - -	179	- - - -	194	222	- - - -
Total	3,418	1,106	2,006	2,039	1,767	2,175	4,853	4,859	5,542	4,982	6,243	6,249
Mean	110	36.9	64.7	65.8	63.1	70.2	162	157	185	161	201	208
Max	185	67	72	72	67	122	209	222	243	194	222	226
Min	41	16	26	61	61	62	62	61	150	97	191	191
Ac-ft	6,780	2,190	3,980	4,040	3,500	4,310	9,630	9,640	10,990	9,880	12,380	12,390
Cal yr 1966: Total	31,482		Mean	86.3	Max	222	Min	-	Ac-ft	62,440		
Wtr yr 1967: Total	45,239		Mean	124	Max	243	Min	16	Ac-ft	89,730		

6-7070. North Fork South Platte River at South Platte, Colo.

Location.--Lat 39°24'30", long 105°10'30", in SW¼ sec.25, T.7 S., R.70 W., on left bank 0.2 mile west of South Platte and 0.3 mile upstream from mouth.

Drainage area.--479 sq mi.

Records available.--June 1909 to September 1910, April 1913 to September 1967. Monthly discharge only for some periods, published in WSP 1310.

Gage.--Water-stage recorder. Datum of gage is 6,090.55 ft above mean sea level, adjustment of 1912. Prior to May 13, 1925, staff gage at same site and datum.

Average discharge.--55 years, 152 cfs (110,000 acre-ft per year), adjusted for inflow from Harold D. Roberts tunnel since 1964.

Extremes.--Maximum discharge during year, 440 cfs Aug. 31 (gage height, 3.17 ft); minimum daily, 33 cfs Nov. 28.

1909-10, 1913-67: Maximum discharge, 2,050 cfs June 13, 1949 (gage height, 6.30 ft); minimum observed, 4.0 cfs Dec. 8, 1932 (discharge measurement).

Remarks.--Records good except those for winter period, which are poor. Small diversions above station for irrigation of about 2,000 acres. Transmountain diversions from Colorado River basin to North Fork South Platte River above station through Harold D. Roberts tunnel (see elsewhere in this report).

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	226	72					163	139	300	189	282	326
2	226	61					160	139	286	189	282	304
3	226	78					166	150	308	192	295	282
4	226	78					175	196	313	230	313	272
5	210	67					218	200	318	226	290	277
6	206	74				72	230	186	372	234	304	286
7	206	70					226	166	367	264	308	282
8	206	63					230	101	259	354	290	282
9	203	47					234	112	277	277	372	300
10	214	38					230	210	277	246	380	295
11	203	59				72	234	254	272	234	326	295
12	196	67				74	246	246	282	304	322	304
13	200	78				72	290	222	268	254	336	300
14	222	78				74	153	142	246	230	331	272
15	125	86				84	160	134	259	290	336	272
16	112	74	60	70	74	90	200	130	246	367	331	268
17	112	64				91	175	137	214	259	313	272
18	112	63				101	186	160	234	234	318	264
19	103	55				105	203	218	238	192	331	282
20	107	51				99	254	238	259	196	313	286
21	103	61				99	250	234	290	206	313	268
22	78	59				99	230	250	268	182	322	254
23	74	49				103	234	259	246	182	318	254
24	75	44				101	230	234	234	242	295	246
25	77	38				105	230	250	242	313	282	254
26	75	40				99	218	295	234	290	290	286
27	78	36				105	166	259	222	277	286	326
28	78	33				110	150	277	222	264	282	295
29	75	36			-	116	150	268	206	272	322	272
30	75	42			- - - - -	120	153	250	192	268	367	264
31	74	- - - - -			- - - - -	120	- - - - -	264	- - - - -	264	395	- - - - -
Total	4,503	1,761	1,860	2,170	2,072	2,759	6,144	6,320	7,951	7,721	9,845	8,440
Mean	145	58.7	60	70	74	89.0	205	204	265	249	318	281
Max	226	86	-	-	-	120	290	295	372	367	395	326
Min	74	33	-	-	-	-	150	101	192	182	282	246
Ac-ft	8,930	3,490	3,690	4,300	4,110	5,470	12,190	12,540	15,770	15,310	19,530	16,740

Cal yr 1966: Total 43,702 Mean 120 Max 344 Min - Ac-ft 86,680
Wtr yr 1967: Total 61,546 Mean 169 Max 395 Min 33 Ac-ft 122,100

Note.--No gage-height record Dec. 16 to Mar. 12.

PLATTE RIVER BASIN

6-7075. South Platte River at South Platte, Colo.

Location.--Lat 39°24'20", long 105°10'10", in SE¼ sec.25, T.7 S., R.70 W., on left bank at South Platte, 200 ft downstream from bridge on State Highway 75 and 400 ft downstream from North Fork.

Drainage area.--2,579 sq mi.

Records available.--July 1887 to September 1891, May to October 1892, October 1895 to September 1897, October 1898 to June 1900, October 1900 to September 1967. Monthly discharge only for some periods, published in WSP 1310. Published as "at" or "near Deansbury," "at Deansbury and Platte Canyon," "at" or "near Platte Canyon," prior to 1901, and as "below North Fork, at South Platte" 1914.

Gage.--Water-stage recorder. Datum of gage is 6,078.43 ft above mean sea level, adjustment of 1912. Prior to Mar. 28, 1902, staff gages or water-stage recorder at several sites less than 9 miles downstream at various datums. Mar. 28, 1902, to May 6, 1905, staff gage at bridge 200 ft upstream at different datum. May 7, 1905, to Mar. 13, 1910, staff gage at present site and datum.

Extremes.--Maximum discharge during year, 848 cfs Aug. 31 (gage height, 3.65 ft); maximum gage height, 3.94 ft Jan. 9 (backwater from ice; minimum daily discharge, 74 cfs Nov. 10.
1887-92, 1895-97, 1898-1967: Maximum discharge, 6,320 cfs June 8, 1921 (gage height, 8.95 ft), from rating curve extended above 3,500 cfs; minimum daily determined, 10 cfs Dec. 5, 1899.

Remarks.--Records good except those for winter period, which are poor. Natural flow of stream affected by transmountain diversions through Boreas Pass ditch and Harold D. Roberts tunnel (see elsewhere in this report), Elevenmile Canyon Reservoir and Cheesman Lake (see elsewhere in this report), diversions above station for irrigation of about 45,000 acres, and return flow from irrigated areas.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	253	106	130	125	135	120	195	220	405	247	401	700
2	253	96	134			125	192	220	397	247	465	710
3	253	111	144			130	198	232	465	244	492	732
4	250	111	156			130	226	268	478	274	515	690
5	244	101	128			130	271	271	483	274	474	605
6	244	104	149			105	290	256	530	271	470	501
7	241	104	147			110	304	171	510	290	478	457
8	241	101	130			110	308	147	449	385	501	449
9	238	84	118			125	308	161	429	318	585	449
10	244	74	99			132	284	271	421	290	595	445
11	241	101	128	125	135	130	277	322	417	277	605	465
12	244	130	132			128	290	308	433	343	640	465
13	238	176	128			126	340	287	417	294	580	465
14	262	171	142			117	290	209	397	274	570	441
15	182	174	142			118	271	198	409	326	595	461
16	167	161	125			120	294	195	405	382	540	470
17	170	206	130			124	259	200	371	304	496	433
18	170	265	130			134	268	315	385	287	590	421
19	167	223	130			140	290	413	393	256	645	437
20	170	209	130			132	389	433	401	256	615	382
21	154	214	125	125	135	134	382	417	378	256	615	343
22	126	220	136			130	343	425	336	244	680	329
23	117	212	128			132	329	470	332	247	680	322
24	111	200	117			134	322	465	322	324	630	315
25	109	192	122			140	315	483	315	401	625	318
26	108	149	132			132	308	595	301	371	665	350
27	108	128	125			136	277	483	287	550	695	374
28	109	118	105			142	235	470	290	550	635	346
29	106	156	90			149	235	465	277	457	650	332
30	104	152	100			149	238	445	259	474	743	322
31	102	- - - - -	110			166	- - - - -	437	- - - - -	445	798	- - - - -
Total	5,726	4,549	3,942	3,875	3,780	4,030	8,528	10,252	11,692	10,158	18,268	13,529
Mean	185	152	127	125	135	130	284	331	390	328	589	451
Max	262	265	156	-	-	166	389	595	530	550	798	732
Min	102	74	90	-	-	105	192	147	259	244	401	315
Ac-ft	11,360	9,020	7,820	7,690	7,500	7,990	16,920	20,330	23,190	20,150	36,230	26,830
Cal yr 1966 : Total	93,961			Mean 257	Max 690	Min 61	Ac-ft 186,400					
Wtr yr 1967 : Total	98,329			Mean 269	Max 798	Min 74	Ac-ft 195,000					

6-7080. South Platte River at Waterton, Colo.

Location.--Lat 39°29'18", long 105°05'32", in NE¼ sec.34, T.6 S., R.69 W., on left bank 168 ft downstream from bridge on State Highway 221, half a mile east of Waterton, 5 miles west of Louviers, and 6 miles upstream from Plum Creek.

Drainage area.--2,621 sq mi.

Records available.--May 1926 to September 1967. Monthly discharge only prior to 1934, published in WSP 1310.

Gage.--Water-stage recorder. Datum of gage is 5,484.43 ft above mean sea level, adjustment of 1912.

Average discharge.--41 years, 169 cfs (122,400 acre-ft per year).

Extremes.--Maximum discharge during year, 640 cfs June 20 (gage height, 2.10 ft); minimum daily, 4.8 cfs Feb. 28, Mar. 2-4, 11-16, 21-23. 1926-67: Maximum discharge, 5,700 cfs Apr. 23, 1942 (gage height, 5.68 ft); minimum daily, 0.1 cfs Mar. 6, 7, 1933, Feb. 28 to Mar. 2, Mar. 20, 1938.

Remarks.--Records fair. Natural flow of stream affected by transmountain diversions (see elsewhere in this report), Elevenmile Canyon Reservoir and Cheesman Lake (see elsewhere in this report), diversions for irrigation of about 55,000 acres and municipal use, and return flow from irrigated areas.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	48	94	19	35	20	6.6	15	75	54	26	199	512
2	46	72	17	40	22	4.8	17	64	34	26	217	524
3	44	67	22	42	17	4.8	20	59	84	26	241	414
4	46	94	22	42	14	4.8	29	59	124	26	271	327
5	44	33	22	42	12	6.6	48	54	124	26	241	246
6	44	27	22	40	14	8.4	54	42	128	23	226	241
7	46	106	20	37	14	9.3	62	34	131	21	241	226
8	48	86	20	35	15	5.7	62	32	131	30	255	217
9	48	82	22	33	11	4.8	72	40	128	23	339	203
10	46	44	24	31	10	6.6	64	81	128	23	345	199
11	46	33	20	31	10	4.8	59	86	128	26	427	222
12	46	24	20	29	10	4.8	49	78	128	26	453	226
13	46	22	20	20	10	4.8	98	66	124	21	394	231
14	50	22	20	15	10	4.8	86	49	121	18	363	199
15	37	20	24	14	11	4.8	56	36	131	20	382	217
16	42	20	22	12	11	4.8	52	34	128	36	339	226
17	40	24	20	10	10	5.7	21	28	121	21	250	165
18	35	48	20	14	10	6.6	20	133	121	21	321	86
19	33	40	20	16	9.3	5.7	42	226	128	18	394	92
20	35	24	19	20	8.4	5.7	98	260	192	18	369	105
21	27	22	20	22	7.5	4.8	101	131	146	18	363	89
22	24	20	26	20	7.5	4.8	89	173	54	30	246	75
23	26	17	29	20	6.6	4.8	75	276	32	36	199	75
24	24	12	29	26	7.5	7.5	62	288	30	36	190	75
25	24	14	27	22	7.5	15	56	271	30	56	195	75
26	24	15	26	26	7.5	15	56	282	28	124	199	89
27	24	15	26	22	8.4	15	78	139	30	394	241	124
28	22	15	29	20	4.8	15	72	128	32	420	186	95
29	22	20	29	19	-	14	78	131	32	327	173	78
30	22	22	29	20	- - - -	15	81	131	30	282	298	75
31	50	- - - -	31	20	- - - -	17	- - - -	131	- - - -	250	420	- - - -
Total	1,159	1,154	716	795	3,060	2,428	1,772	3,617	2,832	2,448	8,977	5,728
Mean	37.4	38.5	23.1	25.6	10.9	7.83	59.1	117	94.4	79.0	290	191
Max	50	106	31	42	22	17	101	288	192	420	453	524
Min	22	12	17	10	4.8	4.8	15	28	28	18	173	75
Ac-ft	2,300	2,290	1,420	1,580	607	482	3,510	7,170	5,620	4,860	17,810	11,360

Cal yr 1966 : Total 30,618.3 Mean 83.9 Max 603 Min 3.9 Ac-ft 60,730
Wtr yr 1967 : Total 29,746.8 Mean 81.5 Max 524 Min 4.8 Ac-ft 59,000

PLATTE RIVER BASIN

6-7095. Plum Creek near Louviers, Colo.

Location.--Lat 39°29'04", long 105°00'07", in SE¼ sec.33, T.6 S., R.68 W., on downstream side of bridge on county road from U. S. Highway 85 to Louviers, three-quarters of a mile northeast of Louviers, 1½ miles downstream from Indian Creek, and 7½ miles upstream from mouth. From Nov. 7, 1965, to Aug. 6, 1966, at site 2½ miles downstream.

Drainage area.--302 sq mi.

Records available.--October 1947 to September 1967.

Gage.--Water-stage recorder. Altitude of gage is 5,585 ft (from topographic map). Prior to Feb. 12, 1957, at site 2½ miles downstream and Nov. 7, 1965, to Aug. 6, 1966, at site 2½ miles downstream at different datum. Feb. 12, 1957, to Nov. 6, 1965, at present site at about present datum.

Average discharge.--20 years, 22.6 cfs (16,360 acre-ft per year).

Extremes.--Maximum discharge during year, 610 cfs July 7 (gage height, 3.40 ft); minimum daily, 0.38 cfs Oct. 9, 10.

1947-67: Maximum discharge, 154,000 cfs June 16, 1965 (gage height, 22.4 ft, from floodmarks), by slope-area measurement of peak flow; no flow at times in 1951-52, 1956-60, 1963-64.

Revisions.--The gage height of the maximum discharge for water year 1965 has been revised to 22.4 ft, superseding figure previously published.

Remarks.--Records poor. Diversions above station for irrigation.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.5	6.4	2.0	5.6	11	5.5	1.2	12	89	41	18	2.2
2	.95	6.4	4.5	5.8	12	4.7	1.3	13	61	42	14	1.3
3	.84	6.4	7.0	5.8	9.2	5.0	1.3	16	45	48	17	1.1
4	.75	7.0	7.4	6.2	8.0	5.0	1.2	13	47	61	17	1.1
5	.57	6.0	6.7	6.6	8.0	4.5	1.0	19	56	56	15	1.1
6	.53	6.0	6.4	6.0	9.0	8.7	1.2	26	54	42	16	.95
7	.43	5.5	6.4	5.0	9.0	9.0	1.5	14	47	79	15	.73
8	.43	5.0	5.2	5.6	6.0	11	1.3	12	47	78	14	.95
9	.38	6.0	4.4	7.0	6.4	12	2.0	9.5	45	54	16	.95
10	.38	6.4	5.0	8.0	5.4	8.0	2.3	7.7	42	40	14	1.6
11	.48	5.7	5.4	8.0	6.2	5.2	2.0	7.0	40	45	11	1.6
12	.53	5.2	5.8	6.6	7.0	4.0	2.2	9.0	40	70	10	1.5
13	1.5	5.0	5.8	6.6	7.2	3.5	11	17	40	44	9.5	1.5
14	7.7	4.7	7.0	7.0	6.8	3.1	41	29	38	37	8.3	1.5
15	16	4.5	5.8	7.0	6.0	3.5	45	18	50	53	9.0	1.7
16	13	3.5	4.0	6.0	6.0	4.5	58	13	50	64	7.7	2.5
17	13	2.2	5.4	5.2	8.0	4.7	31	12	45	53	7.4	2.2
18	11	1.6	6.0	5.0	7.6	5.5	27	11	40	59	15	2.3
19	8.0	2.2	8.0	5.0	7.6	5.0	31	11	40	125	8.7	3.8
20	8.3	2.8	6.2	6.0	6.0	4.3	35	20	120	68	7.0	3.3
21	8.3	3.1	5.6	7.0	5.0	3.1	28	11	110	38	5.7	2.3
22	7.7	2.5	5.0	8.0	6.0	3.3	24	8.7	89	33	4.3	2.3
23	6.4	2.2	5.4	9.0	6.8	3.0	26	7.7	78	31	3.5	2.5
24	4.7	2.5	6.6	8.6	8.3	3.1	19	7.0	68	33	2.5	2.5
25	5.5	2.5	6.2	8.2	9.5	3.3	20	6.7	59	27	2.0	2.5
26	5.2	2.6	5.8	6.0	8.3	3.3	17	38	52	27	1.7	7.7
27	5.2	2.6	5.4	7.0	7.7	2.7	14	70	50	23	1.7	6.7
28	4.7	2.8	5.0	7.2	6.7	2.5	14	78	45	22	1.6	5.7
29	4.3	3.3	5.2	7.2	-	1.5	13	103	58	22	1.3	5.0
30	4.3	2.0	5.4	8.8	- - - - -	1.2	13	114	50	22	2.3	4.7
31	4.0	- - - - -	5.4	9.8	- - - - -	1.2	- - - - -	117	- - - - -	21	3.1	- - - - -
Total	146.55	124.6	175.4	210.8	210.7	144.9	485.5	850.3	1,695	1,458	279.3	75.78
Mean	4.73	4.15	5.66	6.80	7.52	4.67	16.2	27.4	56.5	47.0	9.01	2.53
Max	16	7.0	8.0	9.8	12	12	58	117	120	125	18	7.7
Min	0.38	1.6	2.0	5.0	5.0	1.2	1.0	6.7	38	21	1.3	0.73
Ac-ft	291	247	348	418	418	287	963	1,690	3,360	2,890	554	150

Cal yr 1966: Total 4,476.45 Mean 12.3 Max 256 Min 0.30 Ac-ft 8,880

Wtr yr 1967: Total 5,856.83 Mean 16.0 Max 125 Min 0.38 Ac-ft 11,620

Peak discharge (base, 220 cfs).--July 7 (1945) 610 cfs (3.40 ft); July 19 (0045) 360 cfs (3.12 ft).

Note.--No gage-height record Dec. 9 to Feb. 23.

6-7100. South Platte River at Littleton, Colo.

Location.--Lat 39°37'10", long 105°01'10", in NE¼ sec.17, T.5 S., R.68 W., on left bank 200 ft downstream from Crestline Avenue (formerly Hazard Street) Bridge at Littleton and 3.1 miles upstream from Bear Creek.

Drainage area.--3,069 sq mi.

Records available.--July 1941 to September 1967.

Gage.--Water-stage recorder. Datum of gage is 5,304.36 ft above mean sea level, datum of 1929 (levels by Corps of Engineers). Prior to Nov. 23, 1948, wire-weight gage on bridge 200 ft upstream at datum 1.00 ft higher. Nov. 23, 1948, to Sept. 30, 1951, water-stage recorder at present site at datum 1.00 ft higher.

Average discharge.--26 years, 215 cfs (155,700 acre-ft per year).

Extremes.--Maximum discharge during year, 1,190 cfs June 20 (gage height, 4.90 ft); minimum daily, 15 cfs Mar. 23.

1941-67: Maximum discharge, about 110,000 cfs June 16, 1965 (gage height, 15.45 ft, from floodmark), estimated from contracted-opening and flow-over-road measurement of peak flow at point 1.6 miles downstream and slope-area measurement of peak flow on Plum Creek at point 12.7 miles upstream; minimum daily, 7.2 cfs Oct. 2, 1956.

Maximum stage known since at least 1894, that of June 16, 1965.

Remarks.--Records good. Natural flow of stream affected by transmountain diversions, storage reservoirs, power developments, diversions for irrigation and municipal use, and return flow from irrigated areas.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	38	119	50	46	47	24	26	85	229	53	213	444
2	38	102	49	48	46	23	26	70	123	51	201	462
3	38	109	49	50	40	23	29	68	138	64	218	396
4	38	104	47	54	44	24	35	66	211	102	263	308
5	40	80	47	58	41	25	46	66	239	62	231	229
6	40	55	47	53	38	26	40	84	226	46	211	191
7	40	104	42	48	34	28	44	51	194	51	231	229
8	38	116	42	45	34	34	53	39	186	194	229	203
9	36	112	42	50	34	38	57	34	186	85	290	198
10	40	96	42	54	34	33	59	60	182	74	323	196
11	50	71	44	58	35	29	45	78	173	70	341	216
12	60	65	44	54	36	24	34	78	177	73	382	216
13	68	65	45	54	35	24	124	75	169	59	350	231
14	73	59	45	48	35	24	170	81	166	47	311	206
15	69	61	45	48	36	23	178	56	216	54	341	213
16	69	62	41	46	36	23	147	48	213	93	317	234
17	69	59	40	69	33	22	111	40	189	60	224	211
18	69	70	41	62	33	23	66	80	177	62	287	84
19	60	84	40	66	39	23	74	203	173	199	406	88
20	60	61	41	64	35	22	119	242	359	74	344	98
21	60	59	38	50	33	22	125	136	333	61	326	96
22	52	59	39	54	34	19	121	127	162	48	247	73
23	46	59	39	56	34	15	112	226	112	47	175	69
24	40	46	42	57	30	19	85	250	107	56	173	61
25	36	45	47	51	31	29	88	242	109	77	171	61
26	34	50	42	45	31	29	78	275	99	86	171	91
27	30	49	38	50	31	27	93	266	82	341	213	129
28	28	50	36	50	30	26	87	186	71	402	180	101
29	27	54	39	50	-	24	87	216	91	344	150	71
30	32	55	42	49	- - - - -	26	90	234	64	305	250	66
31	51	- - - - -	44	51	- - - - -	27	- - - - -	278	- - - - -	275	360	- - - - -
Total	1,469	2,180	1,329	1,638	999	778	2,449	4,040	5,156	3,615	8,129	5,471
Mean	47.4	72.7	42.9	52.8	35.7	25.1	81.6	130	172	117	262	182
Max	73	119	50	69	47	38	178	278	359	402	406	462
Min	27	45	36	45	30	15	26	34	64	46	150	61
Ac-ft	2,910	4,320	2,640	3,250	1,980	1,540	4,860	8,010	10,230	7,170	16,120	10,850
Cal yr 1966: Total	33,499		Mean	91.8	Max	556	Min	27	Ac-ft	66,440		
Wtr yr 1967: Total	37,253		Mean	102	Max	462	Min	15	Ac-ft	73,890		

PLATTE RIVER BASIN

6-7105. Bear Creek at Morrison, Colo.

Location.--Lat 39°39'11", long 105°11'43", in SE¼SW¼ sec.35, T.4 S., R.70 W., on left bank at Morrison, 180 ft upstream from bridge on U. S. Highway 285 and a quarter of a mile upstream from Mount Vernon Creek.

Drainage area.--164 sq mi.

Records available.--September 1887 to September 1891, May 1895 to December 1901, February 1902 (gage heights only), October 1919 to September 1967. No winter records for water years 1888-90, 1896, 1898, 1900. Monthly discharge only for some periods, published in WSP 1310. Published as "near Morrison" 1900-1902, as "at Starbuck" 1919-28, and as "at Idledale" 1929-34.

Gage.--Water-stage recorder. Datum of gage is 5,780.43 ft above mean sea level, datum of 1929. Prior to Apr. 1, 1899, staff gage at site a quarter of a mile downstream at different datum. Apr. 1, 1899, to Feb. 28, 1902, staff gage at site a quarter of a mile upstream at different datum. Oct. 1, 1919, to Feb. 28, 1921, staff gage and Mar. 1, 1921, to Sept. 30, 1934, water-stage recorder, at Idledale 4 miles upstream at different datum. Oct. 1, 1934, to Oct. 10, 1961, water-stage recorder at site 80 ft downstream at same datum.

Average discharge.--52 years (1890-91, 1896-97, 1898-99, 1900-1901, 1919-67), 52.6 cfs (38,080 acre-ft per year).

Extremes.--Maximum discharge during year, 155 cfs July 18 (gage height, 4.28 ft); minimum daily, 3.0 cfs Dec. 9, 10.

1887-91, 1895-1901, 1919-67: Maximum discharge, 8,600 cfs (estimated) July 24, 1896; minimum daily, 0.8 cfs Nov. 26, 1939, result of freezeup.

Remarks.--Records good except those for winter period, which are poor. Small diversions for irrigation of about 1,000 acres above station.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	20	18	12		10	10	11	18	79	66	59	62
2	20	14	12		9.5	11	12	14	80	64	52	50
3	18	23	17		9.0	11	13	15	83	62	53	44
4	18	21	14		8.5	10	14	16	80	59	63	41
5	18	14	12		8.0	10	16	18	86	56	51	41
6	17	17	16		9.0	9.6	15	23	86	50	52	38
7	16	17	13		10	9.0	13	26	77	62	59	38
8	14	17	8.0		11	10	12	24	71	103	51	37
9	14	16	3.0		10	10	12	28	70	72	64	39
10	13	13	3.0		7.6	10	14	31	64	62	79	39
11	13	20	6.8		8.5	10	13	30	66	58	61	37
12	13	17	10		8.0	10	12	29	62	76	56	38
13	13	17	9.5		8.2	10	26	27	64	64	63	38
14	23	15	9.0		8.0	10	22	26	63	58	58	34
15	17	16	9.0		9.5	10	26	26	84	68	57	36
16	20	16			9.5	10	26	26	86	112	55	37
17	21	16			10	10	22	27	104	93	51	38
18	21	16			11	10	23	30	96	90	55	35
19	18	14			8.5	10	25	33	90	82	56	38
20	20	12			9.5	12	24	37	92	77	55	38
21	21	17		11	10	14	21	34	112	75	50	34
22	17	14		11	9.0	12	17	33	100	71	48	31
23	17	12		10	10	12	18	38	92	70	48	30
24	16	12		10	8.0	14	17	36	90	79	44	30
25	18	11		11	6.8	16	18	34	89	77	42	30
26	18	8.5		11	7.6	14	18	51	84	77	42	43
27	18	10		12	9.0	14	17	67	79	68	42	53
28	18	6.4		9.5	10	14	19	61	76	63	43	40
29	18	17		10	-	15	20	58	79	58	49	35
30	18	17		10	- - - -	18	21	59	71	55	53	34
31	17	- - - -		10	- - - -	11	- - - -	67	- - - -	55	66	- - - -
Total	543	453.9	290.3	265.5	253.7	356.6	537	1,042	2,455	2,182	1,677	1,158
Mean	17.5	15.1	9.36	8.56	9.06	11.5	17.9	33.6	81.8	70.4	54.1	38.6
Max	21	23	17	12	11	18	26	67	112	112	79	60
Min	13	6.4	3.0	-	6.8	9.0	11	14	62	50	42	30
Ac-ft	1,080	900	576	527	503	707	1,070	2,070	4,870	4,330	3,330	2,300
Cal yr 1966 Total	7,548.2		Mean	20.7	Max	70	Min	3.0	Ac-ft	14,970		
Wtr yr 1967 Total	11,214.0		Mean	30.7	Max	112	Min	3.0	Ac-ft	22,240		

Peak discharge (base, 250 cfs).--No peak above base.

Note.--No gage-height record Dec. 12 to Jan. 22.

6-7115. Bear Creek at mouth, at Sheridan, Colo.

Location.--Lat 39°39'08", long 105°01'57", in NW¼ sec.5, T.5 S., R.68 W., on left bank just downstream from bridge on road to Fort Logan Mental Health Center, at Highway Department maintenance building at northwest city limits of Sheridan, 1.3 miles upstream from mouth and 2.1 miles west of city hall in Englewood.

Drainage area.--260 sq mi.

Records available.--April to November 1914, March 1927 to September 1967. Monthly discharge only prior to October 1933, published in WSP 1310. Published as "at Sheridan Junction" 1934-41.

Gage.--Water-stage recorder. Altitude of gage is 5,295 ft (from topographic map). Apr. 1 to Nov. 30, 1914, staff gage and Feb. 23, 1927, to June 18, 1931, water-stage recorder, at site 1 mile downstream at different datums. June 19, 1931, to Oct. 8, 1953, water-stage recorder at site 0.8 mile downstream at datum 5,282.72 ft above mean sea level, datum of 1929, prior to June 6, 1949, and at datum 5,280.72 ft thereafter.

Average discharge.--40 years (1927-67), 33.2 cfs (24,040 acre-ft per year).

Extremes.--Maximum discharge during year, 248 cfs July 8 (gage height, 4.21 ft); minimum daily, 0.40 cfs Mar. 30.

1914, 1927-67: Maximum discharge, 3,000 cfs July 7, 1933 (gage height, 6.95 ft, site and datum then in use), from rating curve extended above 1,100 cfs on basis of slope-area measurement of peak flow; no flow July 13, 1954.

Remarks.--Records poor. Storage and diversions above station for irrigation of about 12,000 acres.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	12	14	13	13	11	9.8	5.2	7.4	38	56	29	23
2	8.6	9.0	13	11	11	10	10	7.8	33	46	26	20
3	5.8	8.6	13	12	10	12	10	7.8	33	54	22	16
4	7.0	13	13	13	11	9.0	9.4	7.8	27	58	26	16
5	7.0	13	14	13	11	11	7.8	12	23	52	26	12
6	6.4	13	15	12	9.8	12	9.0	13	23	48	23	8.6
7	7.4	13	14	11	11	13	8.6	12	18	82	27	8.6
8	7.0	13	13	13	9.8	14	7.8	11	20	162	33	7.4
9	7.0	15	11	14	10	14	9.4	9.4	20	128	34	6.4
10	7.0	13	12	15	11	13	6.1	9.8	20	75	48	8.2
11	7.4	16	13	15	11	9.8	2.8	9.8	20	44	39	6.4
12	7.0	16	14	12	11	9.0	2.4	9.8	17	46	31	5.8
13	7.8	16	15	12	11	9.4	50	13	18	57	30	6.1
14	21	13	15	12	12	9.4	52	12	17	43	29	5.8
15	18	12	12	11	13	11	29	11	38	35	19	6.4
16	20	12	11	12	12	11	21	9.4	50	79	18	7.0
17	20	12	12	9.8	11	12	20	9.8	83	72	13	8.2
18	20	12	11	10	11	13	15	9.4	58	67	9.4	8.6
19	20	14	12	11	12	12	13	9.4	48	100	18	11
20	20	14	14	12	12	12	8.2	9.4	52	74	8.2	11
21	20	14	12	11	11	12	7.4	9.0	88	57	4.9	9.8
22	17	13	11	11	11	12	8.2	15	79	50	4.9	9.4
23	16	13	10	11	11	12	7.8	6.7	68	45	4.9	9.8
24	16	13	12	15	12	12	7.8	4.6	68	51	6.7	9.8
25	16	13	12	14	12	12	9.8	2.4	77	58	7.4	10
26	16	13	12	12	9.4	12	9.8	22	67	57	8.2	19
27	16	12	12	12	9.4	11	7.0	34	56	54	8.6	15
28	16	12	12	12	9.4	3.4	6.1	23	54	41	8.6	12
29	15	13	12	11	-	1.0	6.4	14	60	37	8.6	13
30	14	13	12	11	- - - - -	4.0	6.1	18	62	35	12	15
31	15	- - - - -	12	11	- - - - -	6.1	- - - - -	30	- - - - -	30	20	- - - - -
Total	413.4	390.6	389	374.8	306.8	320.30	373.1	379.7	1,335	1,893	603.4	325.3
Mean	13.3	13.0	12.5	12.1	11.0	10.3	12.4	12.2	44.5	61.1	19.5	10.8
Max	21	16	15	15	13	14	52	34	88	162	48	23
Min	5.8	8.6	10	9.8	9.4	0.40	2.4	2.4	17	30	4.9	5.8
Ac-ft	820	775	772	743	609	635	740	753	2,650	3,750	1,200	645

Cal yr 1966: Total 4,687.3 Mean 12.8 Max 59 Min 0.20 Ac-ft 9,300
 Wtr yr 1967: Total 7,104.4 Mean 19.5 Max 162 Min 0.40 Ac-ft 14,090

PLATTE RIVER BASIN

6-7120. Cherry Creek near Franktown, Colo.

Location.--Lat 39°21'21" (revised), long 104°45'46", in NE¼ sec.15, T.8 S., R.66 W., on right bank 1½ miles upstream from Russellville Gulch and 2¼ miles south of Franktown.

Drainage area.--169 sq mi.

Records available.--November 1939 to September 1967.

Gage.--Water-stage recorder. Altitude of gage is 6,150 ft (from topographic map). Prior to Oct. 1, 1953, at site 1,000 ft downstream, at datum 6,149.53 ft above mean sea level (unadjusted) prior to Apr. 13, 1942, and at datum 6,147.53 ft above mean sea level Apr. 13, 1942, to Sept. 30, 1953.

Average discharge.--27 years (1940-67), 9.01 cfs (6,520 acre-ft per year).

Extremes.--Maximum discharge during year, 492 cfs July 3 (gage height, 5.19 ft); minimum daily, 1.2 cfs Oct. 10, 13, Dec. 29.

1939-67: Maximum discharge, 9,170 cfs Aug. 5, 1945 (gage height, 4.91 ft, site and datum then in use), by float measurement; minimum daily, 0.2 cfs July 13, 1946, Sept. 30, Oct. 1, 1950.

Highest flood known occurred Aug. 3, 1933, when Castlewood Dam failed.

Remarks.--Records good. Many small diversions above station for irrigation of about 800 acres.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.7	2.4	2.9	1.4	3.3	3.9	2.1	4.3	16	11	2.4	1.6
2	1.6	2.4	2.8	1.5	3.0	4.0	2.1	4.2	12	9.8	2.2	1.6
3	1.6	2.4	2.7	1.7	3.4	3.8	2.0	3.9	9.6	37	2.2	1.5
4	1.4	2.5	3.0	1.9	3.4	3.4	2.2	3.9	14	15	2.2	1.5
5	1.4	2.5	2.9	2.1	2.7	3.2	2.1	4.7	6.4	13	2.0	1.6
6	1.4	2.4	2.9	1.9	3.3	3.4	2.1	5.8	7.2	8.9	2.0	1.4
7	1.3	2.5	2.8	1.7	2.7	3.0	2.2	4.8	6.3	50	2.2	1.4
8	1.3	2.6	2.3	2.0	2.4	3.6	2.1	4.2	5.5	34	3.4	1.4
9	1.4	2.7	1.5	2.2	3.1	3.7	2.1	3.9	6.6	12	2.9	1.4
10	1.2	2.7	1.8	2.5	2.7	4.4	2.2	3.4	7.3	8.1	5.1	1.4
11	1.3	2.6	1.9	2.7	2.9	3.9	2.2	3.4	10	42	2.2	1.4
12	1.3	2.4	2.2	2.4	3.4	3.4	2.2	3.3	22	33	2.2	1.4
13	1.2	2.4	2.4	2.2	4.0	3.1	4.7	3.8	7.3	13	2.2	1.4
14	3.0	2.4	2.2	2.4	4.1	2.6	11	6.6	6.4	8.5	2.2	1.4
15	8.2	2.4	2.2	2.4	3.6	2.4	11	5.6	9.2	19	2.2	1.4
16	7.0	2.4	2.6	2.2	3.1	2.4	16	4.4	9.2	20	2.0	1.4
17	6.2	2.4	2.4	2.0	3.3	2.2	21	3.3	8.0	13	1.8	1.4
18	4.7	2.4	2.2	2.1	3.7	2.2	24	3.0	8.7	9.6	1.8	1.5
19	4.2	2.2	2.2	2.3	3.1	2.1	23	2.9	14	8.1	1.6	1.6
20	4.5	2.2	2.2	2.6	3.2	2.0	15	2.9	12	6.6	1.6	1.4
21	4.5	2.2	2.0	3.1	3.7	2.0	13	2.5	58	7.5	1.6	1.3
22	3.8	2.2	1.7	3.4	3.9	2.0	9.9	2.5	28	6.0	1.5	1.4
23	2.7	2.2	1.6	3.2	3.2	1.9	12	2.4	21	5.1	1.5	1.3
24	2.6	2.1	1.8	3.1	3.4	2.0	12	2.4	16	4.9	1.4	1.3
25	2.6	2.0	1.8	2.6	2.9	2.0	8.7	2.5	9.0	9.0	1.4	1.3
26	2.4	2.3	1.6	2.9	3.8	2.0	7.2	8.0	8.0	5.5	1.4	1.6
27	2.3	2.3	1.4	3.0	3.8	2.0	6.1	21	6.2	4.7	1.4	1.5
28	2.3	2.3	1.4	2.7	3.8	2.0	5.1	21	21	3.9	1.4	1.4
29	2.4	2.4	1.2	3.0	-	2.0	4.6	16	6.6	4.0	1.5	1.4
30	2.3	2.5	1.4	3.3	- - - - -	2.0	4.5	11	5.9	6.1	1.6	1.4
31	2.4	- - - - -	1.4	3.8	- - - - -	2.0	- - - - -	12	- - - - -	3.2	1.8	- - - - -
Total	86.2	71.4	65.4	76.3	92.9	84.6	234.4	183.6	377.4	431.5	62.9	43.0
Mean	2.78	2.38	2.11	2.46	3.32	2.73	7.81	5.92	12.6	13.9	2.03	1.43
Max	8.2	2.7	3.0	3.8	4.1	4.4	24	21	58	50	5.1	1.6
Min	1.2	2.0	1.2	1.4	2.4	1.9	2.0	2.4	5.5	3.2	1.4	1.3
Ac-ft	171	142	130	151	184	168	465	364	749	856	125	85

Cal yr 1966: Total 1,407.1 Mean 3.86 Max 166 Min 0.60 Ac-ft 2,790
 Wtr yr 1967: Total 1,809.6 Mean 4.96 Max 58 Min 1.2 Ac-ft 3,590

Peak discharge (base, 200 cfs)

Date	Time	Gage height	Discharge	Date	Time	Gage height	Discharge
7- 3	1930	5.19	492	7-11	1700	5.10	460
7- 7	1630	4.81	364				

6-7125. Cherry Creek near Melvin, Colo.

Location.--Lat 39°35'42", long 104°48'44", in SE¼SE¼ sec.19, T.5 S., R.66 W., near right bank on downstream side of Arapahoe Road bridge, 0.9 mile upstream from Piney (South Cherry) Creek, 2.3 miles southeast of former site of Melvin, 5½ miles upstream from Cherry Creek Dam, and 6.0 miles northwest of Parker.

Drainage area.--336 sq mi.

Records available.--October 1939 to September 1967.

Gage.--Water-stage recorder. Datum of gage is 5,625.81 ft above mean sea level, datum of 1929. Prior to Oct. 1, 1960, at site 1 mile downstream at datum 17.60 ft lower.

Average discharge.--28 years, 12.4 cfs (8,980 acre-ft per year).

Extremes.--Maximum discharge during year, 1,850 cfs July 11 (gage height, 2.30 ft); no flow for many days.

1939-67: Maximum discharge, 39,900 cfs June 16, 1965 (gage height, 13 ft, from floodmarks), by contracted-opening and flow-over-road measurement of peak flow; no flow at times in most years.

Maximum stage known, that of June 16, 1965. Flood of Aug. 3, 1933, reached a stage of 9.72 ft, former site and datum, from floodmarks (discharge, 34,000 cfs, by slope-area measurement of peak flow at Kenwood damsite 6 miles downstream), caused by failure of Castlewood Dam.

Remarks.--Records poor. Diversions above station for irrigation of about 1,800 acres.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1							0	0	11	0.61	3.1	
2							0	0	11	5.4	0	
3							0	0	2.0	20	0	
4							0	0	2.0	5.0	.02	
5							0	0	3.3	4.0	0	
6							0	4.5	16	3.0	2.2	
7							0	2.5	8.0	60	.61	
8							0	1.0	3.0	20	0	
9							0	0	2.0	15	0	
10							0	0	2.0	11	0	
11							0	0	1.0	85	0	
12							0	0	0	34	0	
13							0	0	6.0	8.8	0	
14							26	6.0	4.0	50	0	
15							37	3.0	5.0	39	0	
16							20	1.0	6.2	18	0	
17							25	0	4.2	15	0	
18							21	0	4.0	10	0	
19							23	0	3.0	7.0	0	
20							17	0	34	6.2	0	
21							11	0	6.2	8.8	0	
22							7.9	0	18	5.4	0	
23							6.2	0	10	2.8	0	
24							5.4	0	10	7.0	0	
25							4.8	0	7.9	6.2	0	
26							4.0	2.2	4.8	3.7	0	
27							3.0	25	2.5	1.0	0	
28							2.5	16	1.5	0	0	
29							1.0	12	7.0	0	0	
30							0	10	1.2	0	0	
31		-----			-----		-----	9.8	-----	2.0	0	-----
Total	0	0	0	0	0	0	214.8	93.0	226.5	453.91	5.93	0
Mean	0	0	0	0	0	0	7.16	3.00	7.55	14.6	0.191	0
Max	0	0	0	0	0	0	37	25	34	85	3.1	0
Min	0	0	0	0	0	0	0	0	0	0	0	0
Ac-ft	0	0	0	0	0	0	426	184	449	900	12	0

Cal yr 1966: Total 785.9 Mean 2.15 Max 91 Min 0 Ac-ft 1,560

Wtr yr 1967: Total 994.14 Mean 2.72 Max 85 Min 0 Ac-ft 1,970

Peak discharge (base, 1,400 cfs).--July 3 or 7 (time unknown) 1,680 cfs (2.21 ft); July 11 (1815) 1,850 cfs (2.30 ft).

PLATTE RIVER BASIN

6-7130. Cherry Creek below Cherry Creek Reservoir, Colo.

Location.--Lat 39°39'10", long 104°51'40", in SW¼SW¼ sec.35, T.4 S., R.67 W., on right bank 2,000 ft downstream from Cherry Creek Dam, 2 miles southeast of Sullivan, 9 miles southeast of Civic Center in Denver, and 11 miles upstream from mouth.

Drainage area.--385 sq mi.

Records available.--June 1950 to September 1967.

Gage.--Water-stage recorder and concrete control. Datum of gage is 5,490.51 ft above mean sea level, datum of 1929 (Corps of Engineers bench mark).

Average discharge.--17 years, 3.99 cfs (2,890 acre-ft per year), unadjusted.

Extremes.--No flow during the water year.

1950-67: Maximum discharge, 1,440 cfs July 31, 1956 (gage height, 6.07 ft); no flow for many days in 1957-67.

Maximum flood known, 34,000 cfs Aug. 3, 1933, by slope-area measurement near present site (Castlewood Dam failure).

Remarks.--No flow since Apr. 27, 1966. Records excellent. Flow regulated by Cherry Creek Reservoir (capacity, 95,960 acre-ft). Reservoir was completed in June 1950. Permanent storage started May 15, 1957. Diversions above station for irrigation of about 1,800 acres.

Month	Cfs-days	Maximum	Minimum	Mean	Runoff in acre-feet
Calendar year 1966	585	270	0	1.60	1,160

Month-end total contents, in acre-feet, in Cherry Creek Reservoir

Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
12,480	12,410	12,360	12,380	12,360	12,320	12,480	12,550	12,970	14,520	14,140	13,820

Note.--Records furnished by Corps of Engineers. Contents on Sept. 30, 1966, 12,670 acre-ft.

6-7135. Cherry Creek at Denver, Colo.

Location.--Lat 39°44'58", long 105°00'08", in NE¼ sec.33, T.3 S., R.68 W., on right bank on downstream side of Wazee Street Bridge in Denver, 0.5 mile upstream from mouth.

Drainage area.--409 sq mi.

Records available.--August 1942 to September 1967.

Gage.--Digital water-stage recorder. Datum of gage is 5,175.48 ft above mean sea level, datum of 1929, supplementary adjustment of 1960. Prior to Jan. 23, 1945, wire-weight gage at Broadway Bridge 1.8 miles upstream at datum 57.29 ft higher. Jan. 23 to Feb. 26, 1945, wire-weight gage at Downing Street Bridge 2.8 miles upstream from present site at different datum. Feb. 27, 1945, to Sept. 30, 1947, wire-weight gages at Washington Street Bridge 2.4 miles upstream from present site at datum 72.31 ft higher and Oct. 1, 1947, to Sept. 30, 1949, at datum 71.31 ft higher than present datum. Oct. 1, 1949, to July 15, 1951, wire-weight gage at Market Street Bridge 0.1 mile upstream from present site at datum 8.49 ft higher. July 16, 1951, to Sept. 30, 1964, graphic water-stage recorder at present site and datum.

Average discharge.--25 years, 16.4 cfs (11,870 acre-ft per year).

Extremes.--Maximum discharge during year, 1,880 cfs June 20 (gage height, 6.59 ft); minimum daily discharge, 3.8 cfs Feb. 22.

1942-67: Maximum discharge observed, 3,120 cfs Aug. 5, 1945 (gage height, 5.25 ft, site and datum then in use); maximum gage height, 11.91 ft June 17, 1965 (backwater from South Platte River); minimum daily discharge, 0.4 cfs June 16-18, 1948.

Flood of July 26, 1885, reached a discharge of 20,000 cfs, by float measurement. Flood of May 19, 20, 1864, reached a somewhat higher stage. Flood of Aug. 3, 1933, reached a discharge of about 15,000 cfs, as determined by rise of South Platte River at Denver.

Remarks.--Records good. Several diversions above station for irrigation of about 1,900 acres. Flood flow regulated by Cherry Creek Reservoir 11 miles upstream (capacity, 95,960 acre-ft).

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	11	9.3	4.9	4.5	5.9	4.5	6.2	14	13	32	8.4	12
2	11	6.4	6.0	4.6	5.9	4.7	5.9	13	8.4	12	8.2	10
3	15	6.6	5.8	5.0	5.3	6.7	5.9	14	8.4	23	10	8.6
4	12	6.5	5.8	6.5	4.7	8.0	6.6	17	15	48	9.0	8.2
5	11	5.2	6.0	5.9	5.0	15	6.4	42	17	14	8.8	8.0
6	6.7	5.2	11	5.5	4.6	9.4	7.3	24	16	12	11	8.0
7	7.8	5.8	7.0	5.3	5.4	9.1	6.6	6.3	14	100	12	8.0
8	7.1	6.0	6.0	5.1	5.2	13	7.1	8.6	13	51	11	8.4
9	7.6	16	5.7	5.5	4.9	5.5	18	11	12	15	19	10
10	14	7.6	5.6	5.6	6.4	4.6	9.5	9.0	13	9.6	10	9.0
11	12	5.0	5.1	5.7	5.2	5.0	7.2	11	26	30	9.9	9.2
12	11	5.4	5.4	5.6	4.5	4.9	6.8	10	19	35	9.6	9.8
13	16	5.3	5.7	5.0	4.6	4.8	180	17	12	11	11	11
14	58	6.3	5.7	6.7	4.4	5.6	57	7.2	13	26	12	12
15	8.2	6.2	5.3	8.9	6.6	5.8	20	6.5	47	80	11	13
16	5.9	6.3	5.2	8.9	4.2	5.9	9.8	11	50	29	11	9.1
17	6.6	6.2	5.3	4.9	4.7	22	7.8	9.7	24	12	9.6	8.8
18	6.7	7.3	4.3	5.0	5.7	14	7.1	9.4	7.7	14	9.8	10
19	5.7	14	4.9	5.6	7.6	5.8	6.8	12	7.4	48	13	11
20	7.6	13	5.1	7.3	5.3	5.3	7.6	14	150	14	13	12
21	9.1	18	5.1	6.4	4.1	12	8.1	11	45	12	10	14
22	6.8	19	4.9	5.3	3.8	19	6.8	13	100	33	11	10
23	10	7.7	4.8	5.5	4.1	18	7.5	11	21	16	12	8.4
24	12	6.3	4.7	5.7	4.1	10	8.6	8.2	11	12	11	10
25	6.6	6.0	4.5	5.8	4.0	5.0	17	11	9.4	13	14	10
26	13	5.8	4.7	8.8	4.0	4.4	8.6	61	11	30	15	32
27	15	5.6	4.8	16	4.0	9.1	10	15	14	20	13	10
28	15	5.7	4.8	6.9	4.2	6.1	12	12	14	13	8.6	12
29	7.7	5.4	5.9	5.2	-	6.1	13	18	14	10	9.3	9.2
30	7.0	4.5	5.4	5.7	- - - -	6.1	14	65	12	90	8.2	7.3
31	12	- - - -	5.1	5.6	- - - -	6.1	- - - -	53	- - - -	8.6	11	- - - -
Total	355.1	233.6	170.5	194.0	138.4	261.5	495.2	544.9	737.3	792.2	340.4	319.0
Mean	11.5	7.79	5.50	6.26	4.94	8.44	16.5	17.6	24.6	25.6	11.0	10.6
Max	58	19	11	16	7.6	22	180	65	150	100	19	32
Min	5.7	4.5	4.3	4.5	3.8	4.4	5.9	6.3	7.4	8.6	8.2	7.3
Ac-ft	704	463	338	385	275	519	982	1,080	1,460	1,570	675	633
Cal yr 1966: Total	4,182.2		Mean 11.5	Max 228	Min 3.5	Ac-ft 8,300						
Wtr yr 1967: Total	4,582.1		Mean 12.6	Max 180	Min 3.8	Ac-ft 9,090						

PLATTE RIVER BASIN

6-7140. South Platte River at Denver, Colo.

Location.--Lat 39°45'35", long 105°00'10", in NW¼SE¼ sec.28, T.3 S., R.68 W., on right bank 90 ft upstream from Nineteenth Street Bridge in Denver and 0.4 mile downstream from Cherry Creek.

Drainage area.--3,804 sq mi.

Records available.--May to October 1889, June to October 1890, July 1895 to September 1967. Monthly discharge only for some periods, published in WSP 1310.

Gage.--Water-stage recorder. Datum of gage is 5,157.64 ft above mean sea level, datum of 1929, supplementary adjustment of 1960. Prior to Aug. 12, 1909, staff gages and Aug. 12, 1909, to Aug. 28, 1931, water-stage recorder, at several sites within half a mile of present site at various datums. Aug. 29, 1931, to June 28, 1965, water-stage recorder at site 70 ft downstream at datum 3.66 ft higher. June 29, 1965, to Mar. 18, 1966, water-stage recorder at site 70 ft downstream at present datum.

Average discharge.--72 years, 334 cfs (241,800 acre-ft per year).

Extremes.--Maximum discharge during year, 5,460 cfs July 7 (gage height, 6.63 ft), from rating curve extended above 520 cfs; minimum daily, 38 cfs Mar. 25.

1889-90, 1895-1967: Maximum discharge, 40,300 cfs June 17, 1965 (gage height, 18.66 ft, from floodmarks, present datum), from rating curve extended above 2,700 cfs on basis of contracted-opening measurement of peak flow; minimum daily, 8.8 cfs Mar. 25, 1951.

Remarks.--Records fair. Natural flow of stream affected by transmountain diversions, storage reservoirs, power developments, ground-water withdrawals, and diversions for irrigation of about 79,000 acres and municipal use, and return flow from irrigated areas.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	98	131	79	67	77	58	50	123	410	184	270	474
2	77	131	72	72	68	50	46	109	232	148	232	501
3	81	136	74	68	68	54	46	103	200	219	254	488
4	88	127	74	79	61	53	46	106	254	396	300	342
5	86	131	70	81	67	70	50	180	300	180	276	276
6	79	95	81	84	59	65	59	210	288	127	242	205
7	77	86	72	70	61	74	58	106	242	861	270	242
8	74	148	70	63	54	86	61	93	232	819	276	220
9	70	175	70	70	61	74	72	77	248	348	354	215
10	74	136	68	79	61	72	98	70	226	195	410	226
11	77	106	72	84	61	54	70	101	270	226	410	232
12	77	95	77	84	58	48	50	109	254	242	436	226
13	79	88	79	77	63	46	1,140	144	220	180	436	237
14	318	95	84	81	65	48	481	140	210	180	378	226
15	120	86	77	74	79	47	270	106	533	513	384	215
16	103	93	74	81	68	48	161	90	497	259	378	226
17	109	90	77	74	72	53	152	86	427	195	294	232
18	101	93	77	84	65	74	115	67	264	190	270	152
19	98	120	77	84	77	47	100	170	237	462	448	136
20	93	106	84	106	74	47	110	270	522	259	390	131
21	86	101	81	95	59	48	135	220	812	175	360	140
22	81	93	74	84	61	50	140	161	390	136	330	117
23	74	90	72	86	63	50	125	205	232	117	220	93
24	74	79	65	88	63	43	112	270	195	235	195	93
25	72	70	68	90	65	38	152	294	200	205	200	90
26	72	70	68	81	58	44	115	650	200	190	205	220
27	72	74	70	101	59	44	109	514	180	324	220	170
28	74	77	63	81	59	46	115	288	152	481	226	144
29	74	79	63	77	-	47	112	306	175	422	180	117
30	72	79	68	77	- - - - -	44	112	537	148	354	232	103
31	84	- - - - -	72	77	- - - - -	46	- - - - -	622	- - - - -	330	278	- - - - -
Total	2,814	3,080	2,272	2,499	1,806	1,668	4,462	6,527	8,750	9,152	9,354	6,489
Mean	90.8	103	73.3	80.6	64.5	53.8	149	211	292	295	302	216
Max	318	175	84	106	79	86	1,140	650	812	861	448	501
Min	70	70	63	63	54	38	46	67	148	117	180	90
Ac-ft	5,580	6,110	4,510	4,960	3,580	3,310	8,850	12,950	17,360	18,150	18,550	12,870
Cal yr 1966: Total	49,084		Mean 134	Max 630	Min 41	Ac-ft 97,360						
Wtr yr 1967: Total	58,873		Mean 161	Max 1,140	Min 38	Ac-ft 116,800						

6-7165. Clear Creek near Lawson, Colo.

Location.--Lat 39°45'40", long 105°39'06", in SE 1/4 sec. 27, T.3 S., R.74 W., on right bank 500 ft north of U. S. Highway 6 and 40, relocated, 0.4 mile downstream from West Fork Clear Creek, and 1 mile west of Lawson.

Drainage area.--145 sq mi.

Records available.--March 1946 to September 1967. Records prior to 1959 include inflow from August P. Gumlick Tunnel (formerly Jones Pass tunnel).

Gage.--Water-stage recorder. Datum of gage is 8,193.72 ft above mean sea level (State Highway Department bench mark).

Average discharge.--21 years, 135 cfs (97,740 acre-ft per year), adjusted for inflow from August P. Gumlick Tunnel prior to 1959.

Extremes.--Maximum discharge during year, 772 cfs June 24 (gage height, 4.76 ft); minimum daily, 21 cfs Jan. 7.

1946-67: Maximum discharge, 6,130 cfs June 4, 1956 (gage height, 7.41 ft), from rating curve extended above 1,600 cfs on basis of computation of peak flow over dam, caused by failure of Georgetown Dam on White Reservoir about 3 miles upstream; minimum daily, 13 cfs Feb. 20, 1955.

Remarks.--Records good. Natural flow affected by minor transmountain diversion from Colorado River basin through Berthoud Pass ditch (see elsewhere in this report). No diversion above station.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	40	35	29	24	24	24	30	40	230	536	156	90
2	41	39	30	24	23	24	31	45	277	518	147	80
3	42	40	29	24	24	24	32	40	339	488	156	76
4	42	39	29	24	24	24	35	38	384	465	150	74
5	46	36	29	24	23	23	34	40	414	446	136	74
6	44	39	31	23	22	22	35	39	465	432	136	74
7	44	39	30	21	22	22	34	37	460	427	136	74
8	44	37	27	22	22	22	38	44	460	409	131	69
9	42	33	26	23	22	23	40	55	456	384	142	74
10	41	39	25	23	23	24	36	69	432	353	144	74
11	42	39	26	23	22	24	37	61	401	342	126	71
12	42	37	26	23	22	24	38	59	361	336	118	130
13	40	36	26	23	23	24	36	69	342	313	113	95
14	38	36	27	23	23	24	38	62	323	301	110	80
15	36	36	27	24	23	24	39	55	313	316	110	76
16	39	35	27	24	24	24	38	55	329	313	110	74
17	39	35	27	23	24	26	32	67	357	301	102	71
18	35	34	27	23	22	27	36	95	432	286	98	71
19	36	32	27	24	22	27	39	115	456	256	92	76
20	38	33	26	25	22	26	38	120	512	250	90	74
21	39	33	27	26	22	26	37	139	530	244	88	64
22	34	32	26	26	23	26	36	192	562	233	88	59
23	39	31	26	25	23	27	35	265	576	250	80	61
24	37	29	26	25	23	28	34	295	608	238	80	62
25	39	26	26	25	23	30	35	336	608	227	76	64
26	39	29	25	25	23	28	34	372	582	209	80	80
27	40	29	24	24	23	30	36	304	582	195	80	85
28	40	30	23	24	24	29	38	301	543	186	80	76
29	40	29	23	24	-	30	44	280	524	175	92	64
30	40	29	24	24	- - - - -	28	47	247	536	164	98	67
31	40	- - - - -	24	24	- - - - -	27	- - - - -	230	- - - - -	161	102	- - - - -
Total	1,238	1,026	825	739	640	791	1,092	4,166	13,394	9,754	3,447	2,259
Mean	39.9	34.2	26.6	23.8	22.9	25.5	36.4	134	446	315	111	75.3
Max	46	40	31	26	24	30	47	372	608	536	156	130
Min	34	26	23	21	22	22	30	37	230	161	76	59
Ac-ft	2,460	2,040	1,640	1,470	1,270	1,570	2,170	8,260	26,570	19,350	6,840	4,480

Cal yr 1966: Total 28,764 Mean 78.8 Max 277 Min 23 Ac-ft 57,050
Wtr yr 1967: Total 39,371 Mean 108 Max 608 Min 21 Ac-ft 78,090

Peak discharge (base, 600 cfs).--June 24 (2120) 772 cfs (4.76 ft).

PLATTE RIVER BASIN

6-7195. Clear Creek near Golden, Colo.

Location.--Lat 39°45'02", long 105°14'54", in NE¼ sec.32, T.3 S., R.70 W., on left bank 0.2 mile upstream from headgate of Church ditch, 0.7 mile downstream from headgate of Welch ditch, 1.0 mile west of Golden, and 12½ miles downstream from North Clear Creek.

Drainage area.--399 sq mi.

Records available.--October 1908 to December 1909, June 1911 to September 1967. Monthly discharge only for some periods, published in WSP 1310. Records for 1940-58 include inflow from August P. Gumlick Tunnel.

Gage.--Water-stage recorder. Datum of gage is 5,735.27 ft above mean sea level (State Highway Department bench mark). Prior to May 15, 1919, at site half a mile upstream at different datum. May 15, 1919, to Mar. 16, 1934, at present site at datum 3.13 ft higher. Mar. 17, 1934, to Aug. 29, 1941, at present site at datum 4.00 ft higher. Aug. 30, 1941, to Apr. 16, 1942, at present site at datum 2.00 ft higher. Apr. 17, 1942, to Jan. 20, 1943, at site 600 ft downstream at datum 7.50 ft lower.

Average discharge.--57 years, 227 cfs (164,300 acre-ft per year), adjusted for inflow from August P. Gumlick Tunnel and Berthoud Pass ditch 1940-58.

Extremes.--Maximum discharge during year, 950 cfs June 21 (gage height, 5.10 ft); maximum gage height, 5.46 ft Feb. 8 (backwater from ice); minimum daily discharge, 16 cfs Dec. 10.

1908-9, 1911-67: Maximum discharge, 5,890 cfs Sept. 9, 1933 (gage height, 11.57 ft, present datum, from floodmarks), from rating curve extended above 2,200 cfs on basis of slope-area measurement of peak flow; minimum daily recorded, 10 cfs Mar. 4, 1966.

Maximum discharge known, 8,700 cfs Aug. 1, 1888, from reports of State engineer of Colorado for stations 5½ miles upstream.

Remarks.--Records good except those for winter period, which are poor. Natural flow of stream affected by minor transmountain diversion from Colorado River basin through Berthoud Pass ditch (see elsewhere in this report) and several small reservoirs above station. Diversion 0.7 mile above station by Welch ditch for irrigation of about 1,000 acres below station.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	89	50	54				49	66	347	648	226	154
2	85	48	53				44	72	370	622	208	141
3	85	54	52				45	70	469	574	214	126
4	87	54	50				50	69	542	558	229	118
5	87	41	50				56	72	582	535	196	116
6	83	53	57			36	53	78	622	512	190	113
7	80	49	57				50	72	648	542	199	111
8	74	48	36				53	76	630	535	187	109
9	69	53	33				60	93	614	490	199	111
10	66	57	16				57	123	614	469	232	111
11	62	64				36	58	126	550	427	190	106
12	63	63				38	57	113	512	445	180	161
13	63	62				38	80	120	475	410	180	154
14	69	56				38	53	118	457	390	169	118
15	54	58				35	76	109	463	421	172	113
16	69	52		40	38	39	66	104	469	445	167	109
17	64	47				42	49	116	520	400	159	109
18	62	44				45	63	151	598	385	156	95
19	52	39				49	66	185	657	352	159	100
20	57	39				44	66	205	684	334	138	102
21	52	42				43	58	211	742	329	133	89
22	44	40				41	54	257	711	313	128	85
23	50	34				44	58	342	720	334	123	82
24	52	38				48	54	395	742	329	109	83
25	54	30				52	62	445	742	334	106	85
26	54	35				47	53	582	702	296	109	106
27	54	38				48	54	439	693	268	123	136
28	54	48				45	64	433	675	257	123	109
29	54	58				43	76	415	630	235	130	95
30	53	56				50	87	370	639	226	135	87
31	54	- - - -				36	- - - -	347	- - - -	217	155	- - - -
Total	1,995	1,450	1,130	1,240	1,064	1,261	1,771	6,374	17,819	12,632	5,124	3,334
Mean	64.4	48.3	36.5	40	38	40.7	59.0	206	594	407	165	111
Max	89	64	57	-	-	52	87	582	742	648	229	161
Min	44	30	16	-	-	-	44	66	347	217	106	82
Ac-ft	3,960	2,880	2,240	2,460	2,110	2,500	3,510	12,640	35,340	25,060	10,160	6,610

Cal yr 1966: Total 43,611 Mean 119 Max 365 Min 10 Ac-ft 86,500
Wtr yr 1967: Total 55,194 Mean 151 Max 742 Min 16 Ac-ft 109,500

Peak discharge (base, 1,100 cfs).--No peak above base.

6-7200. Clear Creek at mouth, near Derby, Colo.

Location.--Lat 39°49'42", long 104°57'30", in SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.36, T.2 S., R.68 W., on right bank 210 ft downstream from York Street bridge, 0.6 mile upstream from mouth, and 2 $\frac{1}{2}$ miles west of Derby.

Drainage area.--575 sq mi.

Records available.--April to November 1914, March 1927 to September 1967. Prior to October 1933 monthly discharge only, published in WSP 1310.

Gage.--Water-stage recorder. Altitude of gage is 5,110 ft (from topographic map). Apr. 1 to Nov. 30, 1914, chain gage at bridge 210 ft upstream at different datum. Feb. 25, 1927, to June 7, 1942, water-stage recorder at several sites within 1,000 ft of present site at various datums. June 8, 1942, to May 30, 1948, water-stage recorder at site 210 ft upstream at datum 5.56 ft higher, May 31, 1948, to Aug. 27, 1956, at datum 3.56 ft higher, and Aug. 28, 1956, to Nov. 14, 1957, at datum 2.56 ft higher. Nov. 15, 1957, to July 15, 1958, water-stage recorder at site 50 ft upstream at datum 2.56 ft higher. July 16, 1958, to Sept. 20, 1965, water-stage recorder at site 50 ft upstream at datum 1.56 ft higher.

Average discharge.--40 years (1927-67), 89.7 cfs (64,940 acre-ft per year).

Extremes.--Maximum discharge during year, 1,990 cfs May 30 (gage height, 6.29 ft), from rating curve extended above 430 cfs; minimum daily, 3.5 cfs Nov. 28. 1914, 1927-67: Maximum discharge, 5,070 cfs July 24, 1965 (gage height, 8.97 ft, present datum); minimum daily, 0.4 cfs Mar. 11, 1943.

Remarks.--Records fair except those for winter period, which are poor. Natural flow of stream affected by transmountain diversions (see elsewhere in this report), storage reservoirs, diversions for irrigation of about 75,000 acres above station, and return flow from irrigated areas.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	8.6	31	4.3	18	25	22	5.2	14	158	106	28	20
2	8.6	17	3.9	18	20	17	5.5	9.0	65	94	25	18
3	20	20	4.9	15	21	33	5.8	15	93	51	26	17
4	13	14	18	21	18	29	5.8	16	127	83	42	15
5	12	14	20	20	15	18	5.2	16	201	63	28	13
6	12	9.4	24	20	18	18	4.6	50	225	122	25	12
7	12	11	28	20	16	19	4.3	20	201	418	29	11
8	9.8	22	26	15	18	23	4.3	9.6	154	645	32	12
9	9.8	63	28	15	15	20	3.7	9.0	113	596	47	11
10	9.8	37	28	15	15	19	5.8	10	133	344	65	13
11	10	29	20	16	19	18	4.9	30	86	348	28	13
12	9.8	29	20	16	16	8.6	4.6	18	73	398	25	11
13	11	29	23	16	16	8.6	479	14	42	292	25	30
14	52	24	25	16	18	9.0	144	19	37	327	25	25
15	58	24	23	14	23	8.6	35	6.6	129	513	25	26
16	48	21	28	15	23	7.4	24	9.6	154	494	25	24
17	35	16	21	14	23	7.8	18	9.6	116	418	25	22
18	30	9.0	21	15	21	8.6	16	11	87	446	24	20
19	25	7.0	20	16	21	8.6	14	52	109	394	51	18
20	20	5.0	25	17	22	11	13	56	163	285	24	16
21	16	4.1	22	19	19	12	12	29	369	267	21	15
22	14	4.0	26	20	23	11	11	40	338	213	18	14
23	13	4.0	28	19	20	11	10	76	316	131	18	11
24	12	3.9	25	19	22	11	8.4	176	330	176	16	11
25	12	5.5	18	19	19	11	35	206	288	249	14	11
26	11	3.8	18	16	18	9.0	38	519	276	126	15	15
27	12	3.6	18	15	17	13	24	174	171	71	15	21
28	12	3.5	17	18	19	11	20	21	133	24	16	21
29	13	4.6	17	17	-	9.0	10	17	127	21	18	18
30	12	5.2	16	17	- - - - -	8.6	7.2	408	69	26	35	16
31	24	- - - - -	17	18	- - - - -	7.4	- - - - -	178	- - - - -	25	93	- - - - -
Total	565.4	473.6	633.1	529	540	428.2	978.3	2,238.4	4,883	7,766	903	500
Mean	18.2	15.8	20.4	17.1	19.3	13.8	32.6	72.2	163	251	29.1	16.7
Max	58	63	28	21	25	33	479	519	369	645	93	30
Min	8.6	3.5	3.9	14	15	7.4	3.7	6.6	37	21	14	11
Ac-ft	1,120	939	1,260	1,050	1,070	849	1,940	4,440	9,690	15,400	1,790	992
Cal yr 1966 : Total	12,961.2		Mean	35.5	Max	276	Min	3.5	Ac-ft	25,710		
Wtr yr 1967 : Total	20,438.0		Mean	56.0	Max	645	Min	3.5	Ac-ft	40,540		

PLATTE RIVER BASIN

6-7205. South Platte River at Henderson, Colo.

Location.--Lat 39°55'12", long 104°52'18", in NW¼SE¼ sec.34, T.1 S., R.67 W., on left bank 1,200 ft upstream from bridge on State Highway 22 and 0.3 mile west of Henderson.

Drainage area.--4,713 sq mi.

Records available.--May 1926 to September 1967. Prior to October 1933 monthly discharge only, published in WSP 1310.

Gage.--Water-stage recorder. Datum of gage is 5,005.12 ft above mean sea level, datum of 1929. Prior to Apr. 17, 1956, at site 1,240 ft downstream. May 1, 1926, to Apr. 19, 1942, at datum 3.00 ft higher, Apr. 20, 1942, to Sept. 30, 1953, at datum 1.00 ft higher, and Oct. 1, 1953, to Apr. 16, 1956, at present datum. Apr. 17, 1956, to May 31, 1960, at site 840 ft downstream at present datum.

Average discharge.--41 years, 323 cfs (233,800 acre-ft per year).

Extremes.--Maximum discharge during year, 3,700 cfs Apr. 13 (gage height, 5.94 ft); minimum daily, 104 cfs Apr. 12.
1926-67: Maximum discharge, 29,600 cfs June 17, 1965 (gage height, 12.93 ft), from rating curve extended above 9,000 cfs; minimum daily, 4.4 cfs Apr. 1, 1950.

Remarks.--Records fair. Natural flow of stream affected by transmountain diversions, storage reservoirs, ground-water withdrawals, diversions for irrigation of about 253,000 acres, and return flow from irrigated areas. Records of chemical analyses for the water year 1967 are published in Part 2 of this report.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	183	221	191	179	191	201	145	213	656	265	408	399
2	164	200	193	176	188	206	143	210	370	306	366	426
3	176	198	188	188	196	221	150	186	350	158	362	354
4	191	196	183	193	186	216	152	198	334	544	422	269
5	193	191	191	191	169	203	150	298	422	260	378	240
6	176	183	203	186	186	216	145	465	417	226	330	208
7	132	181	198	174	186	200	155	162	382	829	358	245
8	137	206	193	171	183	213	155	137	382	1,370	374	245
9	141	242	196	181	193	198	147	114	382	1,030	450	242
10	132	232	183	183	191	186	268	141	289	596	515	242
11	141	210	176	183	183	186	150	213	338	632	457	263
12	164	208	186	183	176	167	104	254	314	964	444	289
13	159	198	181	183	193	179	1,520	242	282	767	448	300
14	518	200	193	183	193	171	1,160	216	263	852	444	266
15	232	200	188	171	198	167	386	167	474	1,440	404	257
16	186	203	191	188	191	167	260	159	444	1,240	404	269
17	157	200	188	181	191	181	240	157	610	922	370	286
18	193	198	183	176	193	200	213	139	318	894	318	269
19	208	193	191	179	191	176	191	203	366	1,170	426	237
20	196	186	193	183	200	188	203	330	856	791	399	232
21	198	193	193	186	145	196	266	242	1,290	647	382	198
22	169	196	191	176	169	196	269	176	618	510	362	126
23	139	196	196	188	186	186	248	216	510	350	286	116
24	150	186	181	191	198	186	237	390	466	491	269	124
25	164	181	169	183	188	181	296	435	471	699	251	124
26	174	188	169	176	183	169	275	966	500	422	248	327
27	181	179	181	200	196	188	242	744	426	417	242	289
28	176	188	176	196	196	159	226	229	386	545	266	196
29	183	191	186	176	-	116	196	213	366	505	240	174
30	179	193	193	188	- - - -	118	186	951	242	444	245	155
31	193	- - - -	188	193	- - - -	143	- - - -	915	- - - -	448	404	- - - -
Total	5,685	5,937	5,812	5,685	5,239	5,680	8,478	9,681	13,524	20,734	11,272	7,367
Mean	183	198	187	183	187	183	283	312	451	669	364	246
Max	518	242	203	200	200	221	1,520	966	1,290	1,440	515	426
Min	132	179	169	171	145	116	104	114	242	158	240	116
Ac-ft	11,280	11,780	11,530	11,280	10,390	11,270	16,820	19,200	26,820	41,130	22,360	14,610

Cal yr 1966: Total 73,799 Mean 202 Max 840 Min 60 Ac-ft 146,400
Wtr yr 1967: Total 105,094 Mean 288 Max 1,520 Min 104 Ac-ft 208,500

6-7225. South St. Vrain Creek near Ward, Colo.

Location.--Lat 40°05'27", long 105°30'50", in NE¼SW¼ sec.36, T.2 N., R.73 W., on left bank at downstream side of bridge, 1.3 miles north of Ward and 3½ miles downstream from Brainard Lake.

Drainage area.--14.4 sq mi.

Records available.--October 1925 to September 1927, October 1928 to September 1931, September 1954 to September 1967. Monthly discharge only for some periods, published in WSP 1310.

Gage.--Water-stage recorder. Altitude of gage is 9,372 ft (from topographic map). May 29, 1926, to Sept. 30, 1927, and May 21, 1929, to Sept. 30, 1931, at site 600 ft downstream at datum 24.37 ft lower.

Average discharge.--18 years, 27.9 cfs (20,200 acre-ft per year).

Extremes.--Maximum discharge during year, 203 cfs July 8 (gage height, 3.62 ft); minimum daily, 1.2 cfs Jan. 8, 9. 1925-27, 1928-31, 1954-67: Maximum discharge, 462 cfs June 29, 1957; maximum gage height, 4.11 ft June 27, 1957; minimum daily discharge determined, 1 cfs Mar. 20, 1930.

Remarks.--Records good except those for winter period, which are poor. No diversion above station. Slight regulation by several small lakes above station.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	9.8	4.8	3.9	1.8	2.2	1.9	3.3	8.4	40	113	31	37
2	9.8	4.6	3.9	1.8	2.2	1.8	3.4	5.4	46	110	32	30
3	12	4.5	3.9	1.7	2.2	1.8	3.8	4.8	66	99	30	27
4	12	4.5	3.9	1.6	2.1	1.8	4.3	4.4	83	91	28	25
5	12	4.5	3.9	1.5	2.0	1.8	5.0	4.1	93	96	26	23
6	11	4.4	3.9	1.4	2.0	1.9	5.1	4.2	107	96	25	21
7	11	4.3	3.9	1.3	1.9	1.8	4.5	4.4	110	107	28	20
8	9.8	4.2	3.8	1.2	2.0	1.9	5.1	7.2	102	167	28	19
9	8.4	3.9	3.7	1.2	2.0	2.0	5.0	12	93	110	28	20
10	7.4	3.8	3.6	1.3	2.0	2.2	4.6	17	81	88	30	19
11	7.9	3.8	3.5	1.4	2.0	2.3	4.6	13	77	77	30	18
12	7.9	3.8	3.5	1.4	2.0	2.3	4.8	9.8	77	81	31	28
13	7.2	3.8	3.6	1.5	2.0	2.3	4.2	8.4	79	72	32	24
14	7.2	3.8	3.6	1.6	2.0	2.4	4.5	7.7	74	63	29	18
15	7.0	3.8	3.4	1.7	2.0	2.5	4.3	6.7	68	62	29	17
16	7.0	3.8	3.1	1.9	2.0	2.7	4.1	7.7	74	63	27	17
17	7.2	3.7	2.9	1.9	2.0	2.8	4.2	15	72	54	23	17
18	7.4	3.7	2.6	1.9	1.9	2.9	4.3	20	93	60	24	17
19	7.0	3.6	2.6	2.0	1.8	2.8	5.4	25	117	61	25	20
20	6.5	3.5	2.5	2.1	1.8	2.7	5.6	28	132	56	22	17
21	6.0	3.6	2.5	2.1	1.8	2.7	4.4	29	139	52	21	14
22	5.8	3.5	2.4	2.2	1.8	2.8	4.2	38	124	50	20	14
23	5.6	3.6	2.3	2.2	1.8	2.8	4.1	52	132	49	19	12
24	5.4	3.6	2.1	2.2	1.8	2.8	3.8	62	107	49	18	13
25	5.2	3.6	2.0	2.0	1.9	2.7	3.7	68	107	48	17	14
26	5.2	3.6	1.9	2.1	1.9	2.7	3.7	79	110	45	17	17
27	5.2	3.7	1.9	2.1	1.9	2.8	4.1	63	110	43	17	20
28	5.0	3.8	2.0	2.2	1.8	3.1	5.1	61	107	39	18	18
29	5.0	3.9	2.0	2.2	-	3.4	7.4	57	117	35	24	17
30	4.8	3.9	1.9	2.2	- - - - -	3.7	9.3	51	113	34	34	15
31	4.8	- - - - -	1.9	2.2	- - - - -	3.4	- - - - -	44	- - - - -	32	46	- - - - -
Total	233.5	117.6	92.6	55.9	54.8	77.5	139.9	817.2	2,850	2,202	809	588
Mean	7.53	3.92	2.99	1.80	1.96	2.50	4.66	26.4	95.0	71.0	26.1	19.6
Max	12	4.8	3.9	2.2	2.2	3.7	9.3	79	139	167	46	37
Min	4.8	3.5	1.9	1.2	1.8	1.8	3.3	4.1	40	32	17	12
Ac-ft	463	233	184	111	109	154	277	1,620	5,650	4,370	1,600	1,170

Cal yr 1966: Total 5,443.5 Mean 14.9 Max 70 Min 1.4 Ac-ft 10,800
 Wtr yr 1967: Total 8,038.0 Mean 22.0 Max 167 Min 1.2 Ac-ft 15,940

Peak discharge (base, 170 cfs).--June 20 (2200) 172 cfs (3.55 ft); July 8 (0100) 203 cfs (3.62 ft).

Note.--No gage-height record Dec. 12 to Mar. 28.

PLATTE RIVER BASIN

6-7240. St. Vrain Creek at Lyons, Colo.

Location--Lat 40°13'05", long 105°15'34", in NW¼NW¼ sec.20, T.3 N., R.70 W., on left bank 75 ft southwest of State Highways 7 and 66 at southeast edge of Lyons, 400 ft upstream from St. Vrain Supply Canal, and 0.4 mile downstream from confluence of North and South St. Vrain Creeks.

Drainage area--212 sq mi.

Records available--August 1887 to September 1891, June 1895 to September 1967. Monthly discharge only for some periods, published in WSP 1310. Published as "near Lyons" 1901, 1903.

Gage--Water-stage recorder. Altitude of gage is 5,292 ft (from topographic map). Prior to Apr. 6/1923, staff gages near present site at different datums. Apr. 6, 1923, to Sept. 30, 1956, water-stage recorder at same site at datum 1.00 ft higher.

Average discharge--76 years, 129 cfs (93,390 acre-ft per year).

Extremes--Maximum discharge during year, 2,010 cfs Aug. 30 (gage height, 5.80 ft), from rating curve extended above 1,300 cfs; minimum daily, 1.8 cfs Jan. 3.

1887-91, 1895-1967: Maximum discharge, 10,500 cfs June 22, 1941 (gage height, 8.06 ft, from floodmark), from rating curve extended above 2,100 cfs on basis of slope-area measurement at gage height 7.90 ft; no flow Jan. 19, 20, 1922, Jan. 12, 13, 1950.

Outstanding floods occurred in June 1864 and May 1876. Flood in May or June 1894 reached a stage of 9.13 ft, from information by local resident (discharge, about 9,800 cfs). For discussion of these floods, see WSP 997.

Remarks--Records good. Diversions above station for irrigation of about 20,000 acres. Flow partly regulated by small reservoirs above station.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	14	12	14	2.9	9.0	7.7	11	26	336	594	145	376
2	12	9.5	14	2.3	8.5	7.4	10	19	262	564	137	200
3	15	19	18	1.8	9.5	7.1	10	12	304	520	132	161
4	19	18	20	2.6	8.0	6.5	12	12	332	500	132	135
5	16	13	18	3.5	7.4	4.7	16	12	346	500	118	120
6	16	17	19	3.8	6.5	4.7	12	14	366	470	113	106
7	15	15	19	4.7	8.0	3.8	10	14	382	495	113	98
8	16	14	12	4.7	7.4	6.2	7.1	12	362	804	115	96
9	20	11	4.4	5.3	11	6.5	8.0	19	343	642	127	94
10	19	10	3.5	5.0	12	6.5	12	50	336	530	132	84
11	19	16	9.0	5.6	11	6.8	12	55	329	480	115	75
12	18	17	16	5.6	9.5	6.5	12	48	301	490	115	108
13	17	16	19	6.2	12	5.9	16	57	326	435	115	96
14	18	15	16	6.5	12	6.2	16	63	326	386	101	79
15	17	18	14	7.1	10	6.5	14	57	332	395	101	72
16	17	18	11	7.4	5.9	5.9	18	53	515	386	98	72
17	17	17	12	7.4	7.1	7.7	14	53	455	322	89	79
18	16	16	13	7.7	9.0	9.5	12	66	525	329	94	82
19	16	14	13	7.7	8.5	10	17	91	612	336	98	96
20	16	14	12	7.7	5.0	11	22	135	663	298	84	82
21	16	16	10	8.0	4.1	9.5	20	145	875	273	77	66
22	14	14	8.0	10	5.6	8.5	16	153	690	248	77	42
23	16	14	5.0	9.5	2.9	8.5	19	214	708	234	77	30
24	15	13	3.8	8.5	3.5	9.5	20	294	678	238	75	32
25	15	13	2.6	8.0	5.0	14	22	315	630	284	70	26
26	15	7.7	2.6	8.0	6.2	13	20	450	612	256	72	30
27	16	4.1	4.1	10	5.9	12	16	358	594	228	72	32
28	14	5.3	6.5	9.0	6.5	10	16	304	618	187	72	17
29	14	19	5.6	9.5	-	9.5	20	290	642	168	126	14
30	14	24	5.6	10	-	13	32	280	600	153	661	12
31	14	-	3.8	9.5	-	10	-	280	-	145	465	-
Total	496	429.6	334.5	205.5	217.0	254.6	462.1	3,951	14,400	11,890	4,118	2,612
Mean	16.0	14.3	10.8	6.63	7.75	8.21	15.4	127	480	384	133	87.1
Max	20	24	20	10	12	14	32	450	875	804	661	376
Min	12	4.1	2.6	1.8	2.9	3.8	7.1	12	262	145	70	12
Ac-ft	984	852	663	408	430	505	917	7,840	28,560	23,580	8,170	5,180
Cal yr 1966: Total	18,570.8		Mean	50.9	Max	262	Min	2.6	Ac-ft	36,830		
Wtr yr 1967: Total	39,370.3		Mean	108	Max	875	Min	1.8	Ac-ft	78,090		

6-7251. St. Vrain Creek near Longmont, Colo.

Location.--Lat 40°09'07", long 105°03'10", in NW¼SW¼ sec.7, T.2 N., R.68 W., on right bank 630 ft downstream from county line bridge, 2.0 miles downstream from Lefthand Creek, and 3.0 miles southeast of Longmont. Prior to Dec. 2, 1966, gage on left bank.

Drainage area.--370 sq mi.

Records available.--October 1964 to September 1967.

Gage.--Water-stage recorder. Altitude of gage is 4,890 ft (from topographic map).

Extremes.--Maximum discharge during year, 1,570 cfs Aug. 30 (gage height, 4.25 ft); minimum daily, 12 cfs Apr. 8.
1964-67: Maximum discharge, 1,810 cfs June 17, 1965 (gage height, 4.90 ft); minimum daily, that of Apr. 8, 1967.

Remarks.--Records good except those for winter period, which are poor. Natural flow of stream affected by storage reservoirs, diversions for irrigation, and return flow from irrigated areas.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	35	26	24	22	20	17	17	27	92	465	64	122
2	36	28	22	22	19	18	19	25	65	480	47	88
3	34	24	22	22	19	18	17	26	56	430	51	74
4	34	24	22	20	19	18	14	25	50	495	57	67
5	31	24	24	22	19	18	14	32	52	505	50	65
6	31	28	26	24	19	19	15	29	52	430	48	64
7	30	26	26	22	19	16	13	24	52	475	49	63
8	29	24	24	22	19	19	12	22	55	934	49	57
9	27	24	22	22	19	18	13	21	77	790	51	59
10	24	24	22	22	19	17	24	20	99	670	57	61
11	27	24	22	22	19	16	20	20	85	646	56	62
12	30	24	22	23	19	16	18	22	87	625	57	59
13	31	26	24	24	19	16	53	24	82	525	59	59
14	32	28	24	24	19	17	43	24	83	425	55	61
15	30	30	24	21	19	17	32	24	139	475	51	57
16	28	30	22	23	19	17	30	22	442	465	48	51
17	31	30	22	21	18	17	27	22	320	346	43	53
18	30	30	22	19	19	17	25	21	299	326	46	53
19	31	28	24	19	21	16	24	25	426	346	61	55
20	32	28	26	22	20	18	24	27	531	270	54	50
21	32	28	23	20	20	19	22	24	1,170	217	50	46
22	28	30	22	19	20	19	22	23	796	165	48	45
23	27	26	20	20	18	19	26	23	760	128	50	41
24	27	24	18	19	18	19	25	30	694	98	51	42
25	27	24	18	19	18	19	32	40	615	74	46	44
26	27	24	20	19	18	19	31	53	565	68	46	48
27	28	24	18	22	18	18	30	50	530	65	49	47
28	30	26	18	21	17	18	30	40	520	58	50	42
29	28	28	18	19	-	17	28	39	525	52	57	39
30	26	26	18	19	- - - -	16	27	52	485	48	386	39
31	26	- - - -	18	21	- - - -	16	- - - -	74	- - - -	56	376	- - - -
Total	919	790	677	656	530	544	727	930	9,804	11,152	2,262	1,713
Mean	29.6	26.3	21.8	21.2	18.9	17.5	24.2	30.0	327	360	73.0	57.1
Max	36	30	26	24	21	19	53	74	1,170	934	386	122
Min	24	24	18	19	17	16	12	20	50	48	43	39
Ac-ft	1,820	1,570	1,340	1,300	1,050	1,080	1,440	1,840	19,450	22,120	4,490	3,400
Cal yr 1966: Total	12,159			Mean 33.3	Max 181	Min 14	Ac-ft 24,120					
Wtr yr 1967: Total	30,704			Mean 84.1	Max 1,170	Min 12	Ac-ft 60,900					

Note.--No gage-height record Oct. 27 to Jan. 9.

PLATTE RIVER BASIN

6-7255. Middle Boulder Creek at Nederland, Colo.

Location.--Lat 39°57'42", long 105°30'14", in NE¼SE¼ sec.13, T.1 S., R.73 W., on left bank at Nederland just downstream from North Beaver Creek, 1,000 ft upstream from Barker Reservoir.

Drainage area.--36.2 sq mi.

Records available.--June 1907 to September 1967. Monthly discharge only for some periods, published in WSP 1310.

Gage.--Water-stage recorder and compound sharp-crested weir. Datum of gage is 8,186.0 ft above mean sea level (Public Service Co. bench mark). Prior to Mar. 18, 1909, at datum 4.0 ft lower. Mar. 18, 1909, to Apr. 23, 1952, at datum 2.5 ft lower than present datum.

Average discharge.--60 years, 53.6 cfs (38,800 acre-ft per year).

Extremes.--Maximum discharge during year, 392 cfs June 20 (gage height, 2.97 ft); minimum daily, 2.0 cfs Jan. 1, 2.

1907-67: Maximum discharge, 811 cfs June 2, 1914 (gage height, 5.37 ft, datum then in use), by computation of peak flow over compound weir; minimum daily, 0.8 cfs Jan. 14, 1908.

Remarks.--Records fair. No diversion above station. Flow regulated at times by Jasper Lake (capacity, 326 acre-ft). North Beaver Creek entered Middle Boulder Creek downstream from station June 1 to Dec. 31, 1907, March 1911 to Dec. 31, 1916.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	17	6.0	6.5	2.0	4.5	5.3	6.9	30	128	228	57	28
2	17	7.0	7.1	2.0	4.5	5.5	8.1	30	156	216	54	26
3	19	9.0	7.1	3.0	4.5	5.5	10	24	214	192	53	24
4	19	7.9	6.7	3.1	4.5	5.1	14	22	243	188	50	24
5	19	6.1	6.9	3.5	4.3	4.9	17	22	241	188	46	22
6	17	7.1	7.3	3.5	4.3	4.9	17	22	250	186	47	22
7	17	6.9	6.9	3.5	4.3	4.7	16	22	246	194	49	21
8	15	6.3	7.1	3.0	4.3	5.1	20	30	222	212	49	21
9	13	5.3	4.0	3.0	4.3	4.9	22	45	212	190	49	20
10	11	7.5	4.0	3.5	4.3	4.9	18	57	192	164	44	20
11	12	7.9	4.5	3.7	4.7	5.5	18	50	188	150	39	19
12	12	8.3	5.3	3.9	4.9	5.5	20	44	192	166	36	40
13	11	7.9	5.5	4.1	4.5	5.7	18	42	190	146	36	28
14	12	7.7	5.5	4.3	4.7	5.7	17	39	170	130	33	26
15	15	7.9	5.1	4.3	4.3	5.3	17	33	168	128	34	27
16	15	7.9	4.9	4.3	4.7	5.9	16	33	190	120	34	35
17	13	7.5	5.1	4.3	4.3	6.5	14	46	184	108	32	36
18	10	7.1	5.1	4.5	4.5	7.5	16	69	235	134	33	34
19	10	6.9	4.9	4.3	4.3	7.9	20	83	241	112	30	36
20	11	6.3	4.9	4.5	4.1	6.9	21	101	278	105	26	33
21	11	6.9	4.7	4.5	4.3	6.7	17	108	283	98	26	32
22	9.8	6.5	4.3	4.5	4.1	6.9	15	150	285	94	24	31
23	9.1	5.1	3.9	4.5	4.1	7.1	16	206	268	94	22	30
24	9.1	5.3	3.7	4.3	4.3	7.5	15	224	246	96	21	30
25	9.2	3.1	3.9	4.3	4.9	8.7	15	230	243	103	21	29
26	9.2	5.3	4.3	4.3	4.7	6.7	14	252	232	85	22	38
27	9.2	6.3	3.7	4.5	4.7	6.5	18	198	235	81	22	33
28	9.0	6.1	3.3	4.5	5.1	6.9	25	198	220	74	24	28
29	9.0	6.1	2.8	4.5	-	8.1	33	190	216	66	26	25
30	9.0	6.1	2.2	4.5	- - - - -	7.7	36	164	226	63	30	21
31	9.0	- - - - -	2.2	4.5	- - - - -	7.1	- - - - -	140	- - - - -	60	31	- - - - -
Total	387.6	201.3	153.4	121.2	125.0	193.1	530.0	2,904	6,594	4,171	1,100	839
Mean	12.5	6.71	4.95	3.91	4.46	6.23	17.7	93.7	220	135	35.5	28.0
Max	19	9.0	7.3	4.5	5.1	8.7	36	252	285	228	57	40
Min	9.0	3.1	2.2	2.0	4.1	4.7	6.9	22	128	60	21	19
Ac-ft	769	399	304	240	248	383	1,050	5,760	13,080	8,270	2,180	1,660

Cal yr 1966 : Total 10,537.9 Mean 28.9 Max 134 Min 2.2 Ac-ft 20,900
Wtr yr 1967 : Total 17,319.6 Mean 47.5 Max 285 Min 2.0 Ac-ft 34,350

Peak discharge (base, 280 cfs)

Date	Time	Gage height	Discharge	Date	Time	Gage height	Discharge
6- 6	2200	2.52	297	7- 7	2130	2.60	292
6-20	2000	2.97	392				

6-7270. Boulder Creek near Orodell, Colo.

Location.--Lat 40°00'23", long 105°19'49", in NE¼SW¼ sec.34, T.1 N., R.71 W., on left bank along State Highway 119, 0.7 mile southwest of old Orodell, 1 mile upstream from Fourmile Creek, and 3 miles southwest of courthouse in Boulder.

Drainage area.--102 sq mi.

Records available.--August to October 1887, April to October 1888, October 1906 to November 1914, March 1916 to September 1967. Monthly discharge only for some periods, published in WSP 1310. Figures of daily discharge for Feb. 3-10, 17-25, 1912, published in WSP 326, have been found to be unreliable and should not be used. Published as North Boulder Creek, Colorado 1887-88 and as "at Orodell" March 1907 to December 1916.

Gage.--Water-stage recorder. Altitude of gage is 5,826 ft (from topographic map). Prior to Sept. 1, 1907, staff gage and Sept. 1, 1907, to May 11, 1917, water-stage recorder, at sites 1 mile downstream, just upstream from Fourmile Creek, at different datums.

Average discharge.--59 years (1906-14, 1916-67), 90.5 cfs (65,520 acre-ft per year).

Extremes.--Maximum discharge during year, 594 cfs June 23 (gage height, 3.32 ft); minimum daily, 1.1 cfs Jan. 21. 1887-88, 1906-13, 1916-67: Maximum discharge, 2,500 cfs June 6, 1921 (gage height, 4.31 ft), from rating curve extended above 1,200 cfs; minimum daily, 1 cfs Jan. 29, Feb. 1-3, 16-24, 1933.

Remarks.--Records good. Flow regulated by Barker Reservoir (capacity, 11,500 acre-ft). Low flow during nonirrigation season regulated by Orodell powerplant 1,500 ft upstream from station.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	25	3.8	6.9	8.6	8.8	9.5	9.3	24	102	418	77	48
2	20	4.0	6.4	8.7	8.1	9.2	12	19	66	436	81	39
3	21	9.0	8.1	11	8.8	9.4	11	24	50	412	88	32
4	26	16	7.5	10	8.6	8.2	11	26	54	360	90	28
5	26	18	7.7	9.0	5.5	9.4	28	24	54	341	90	25
6	26	18	7.3	9.0	7.3	9.4	29	24	61	328	79	23
7	24	12	7.5	8.0	8.0	13	10	25	66	328	67	23
8	23	11	7.4	8.0	7.8	18	22	32	96	385	66	23
9	19	13	7.5	7.9	8.2	4.0	23	45	119	360	69	23
10	16	11	6.8	8.4	7.3	4.0	20	57	124	319	79	27
11	14	16	7.3	10	8.7	8.8	18	79	100	259	83	32
12	14	14	8.8	6.6	8.9	11	25	81	83	252	67	32
13	14	7.1	9.6	7.9	7.6	7.7	28	53	88	248	66	57
14	16	11	13	4.6	5.8	8.4	26	43	106	217	63	55
15	16	9.9	8.9	5.3	7.5	7.2	27	36	134	208	57	43
16	16	12	8.5	9.3	8.5	8.4	26	32	160	208	58	26
17	20	8.0	12	5.6	8.9	9.1	16	33	149	195	46	26
18	22	9.8	4.1	5.7	6.7	8.0	14	58	168	195	40	25
19	18	4.5	7.4	4.4	8.5	9.8	17	90	198	192	45	26
20	18	6.7	7.2	2.0	9.2	12	25	122	328	177	48	26
21	16	10	4.7	1.1	9.5	12	24	129	509	163	40	24
22	14	10	6.6	1.5	11	10	20	144	495	149	34	21
23	14	7.6	5.1	4.9	8.4	10	18	177	562	149	28	20
24	14	8.2	6.0	7.1	8.4	10	18	192	530	157	26	20
25	14	5.8	8.6	9.6	8.8	10	16	180	454	174	24	20
26	12	5.8	16	6.8	6.5	9.8	14	192	390	157	24	21
27	12	5.2	18	10	7.9	13	16	141	395	136	29	33
28	9.0	7.7	9.7	9.5	13	9.6	26	134	406	122	26	27
29	14	7.3	20	9.1	-	14	30	149	412	106	27	24
30	17	8.3	8.1	8.9	- - - - -	14	30	134	400	96	50	26
31	8.6	- - - - -	7.3	6.8	- - - - -	11	- - - - -	113	- - - - -	72	74	- - - - -
Total	538.6	290.7	270.0	225.3	232.2	307.9	609.3	2,612	6,859	7,319	1,741	875
Mean	17.4	9.69	8.71	7.27	8.29	9.93	20.3	84.3	229	236	56.2	29.2
Max	26	18	20	11	13	18	30	192	562	436	90	57
Min	8.6	3.8	4.1	1.1	5.5	4.0	9.3	19	50	72	24	20
Ac-ft	1,070	577	536	447	461	611	1,210	5,180	13,600	14,520	3,450	1,740

Cal yr 1966: Total 15,279.3 Mean 41.9 Max 155 Min 3.8 Ac-ft 30,310
 Wtr yr 1967: Total 21,880.0 Mean 59.9 Max 562 Min 1.1 Ac-ft 43,400

PLATTE RIVER BASIN

6-7295. South Boulder Creek near Eldorado Springs, Colo.

Location.--Lat 39°55'52", long 105°17'43", in SE¼ sec.26, T.1 S., R.71 W., on left bank 0.2 mile downstream from South Draw, 1 mile west of Eldorado Springs, 1.8 miles downstream from South Boulder diversion canal, 5 miles south of Boulder, and 6.7 miles downstream from Gross Reservoir.

Drainage area.--109 sq mi.

Records available.--April 1888 to October 1892, May 1895 to September 1901, August 1904 to September 1967. No winter records for water years 1889-92, 1900. Monthly discharge only for some periods, published in WSP 1310. Prior to January 1911, published as "at" or "near Marshall;" January 1911 to December 1913 as "at Eldorado Springs." Records for periods June 1900 to September 1901, August 1904 to September 1908, October 1909 to September 1911 are not adjusted for diversions by Community ditch and South Boulder and Coal Creek ditch, all other records contain flow in these ditches.

Gage.--Water-stage recorder. Altitude of gage is 6,080 ft (from topographic map). Prior to Sept. 25, 1929, staff gage or water-stage recorder at sites 1 mile downstream at different datums. Sept. 25, 1929, to May 2, 1934, water-stage recorder at site a quarter of a mile downstream at different datum. May 3, 1934, to Sept. 3, 1938, water-stage recorder at site 250 ft upstream at datum 4.00 ft higher than present datum. Sept. 4, 1938, to May 9, 1940, staff gages at site about 300 ft upstream or water-stage recorder at site half a mile downstream at different datums.

Average discharge.--61 years (1895-99, 1908-9, 1911-67), 75.7 cfs (54,800 acre-ft per year), adjusted for storage and diversions.

Extremes.--Maximum discharge during year, 469 cfs June 6 (gage height, 4.22 ft); minimum daily, 0.8 cfs Mar. 27.

1888-92, 1895-1901, 1904-67: Maximum discharge, 7,390 cfs Sept. 2, 1938 (gage height, 9.24 ft, from floodmarks, site and datum then in use), from rating curve extended above 600 cfs on basis of slope-area measurement of peak flow; no flow Oct. 15, 1932.

Remarks.--Records poor. Many small diversions above station for irrigation. Water is imported above Gross Reservoir from Colorado River basin through Moffat water tunnel (see elsewhere in this report). Flow regulated since May 1, 1955, by Gross Reservoir (capacity, 43,060 acre-ft), 6.7 miles above station. City of Denver diverts water 1.8 miles above station.

Cooperation.--Contents of Gross Reservoir and diversion by City of Denver furnished by State engineer of Colorado.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	12	3.5	4.4				1.8	24	224	183	45	21
2	12	5.6	4.7				1.4	24	180	186	45	20
3	12	5.6	4.7				1.4	24	180	158	45	20
4	13	5.8	4.6				1.3	24	180	108	45	19
5	13	5.6	5.6				2.7	24	183	130	44	22
6	13	6.2	20				3.8	24	375	138	44	24
7	9.7	6.2	28		3.0	3.5	3.8	24	460	118	36	23
8	5.4	7.0	27				64	24	339	118	34	23
9	5.6	7.0	27				82	23	292	158	34	23
10	5.6	7.0	28				58	24	292	125	40	23
11	6.4	7.0	28				51	24	295	113	42	23
12	6.6	7.0	28				48	24	292	130	42	21
13	9.4	7.0	27				54	24	253	108	42	21
14	16	7.0	27				50	24	239	100	42	20
15	9.4	7.0	27			2.7	47	24	246	102	42	19
16	8.2	7.0	27	2.5		2.8	47	35	260	115	41	19
17	7.3	7.0	27			31	45	42	264	97	38	20
18	6.8	6.8	27			12	26	42	256	89	38	20
19	6.4	6.4	28			13	20	58	256	82	38	20
20	5.8	6.0	28			17	20	66	375	69	38	20
21	5.0	5.0	29		13	18	20	66	451	61	32	21
22	11	4.8	29			13	23	66	446	51	31	21
23	14	4.8	22			29	25	95	391	45	31	22
24	14	4.7	16			47	25	152	363	45	27	23
25	14	4.4	16			48	26	213	363	71	27	26
26	14	4.4	16			11	25	295	225	111	27	24
27	21	4.8	16			80	24	311	180	78	27	23
28	23	4.8	10			2.0	24	343	171	63	22	22
29	23	4.7	7.0			3.6	24	363	192	63	19	22
30	23	4.6	9.0			2.7	24	355	183	63	22	22
31	6.8	- - - -	9.0			2.1	- - - -	355	- - - -	52	29	- - - -
Total	352.4	174.7	607.0	77.5	225.0	304.70	972.6	3,216	8,406	3,130	1,109	647
Mean	11.4	5.82	19.6	2.5	8.04	9.83	32.4	104	280	101	35.8	21.6
Max	23	7.0	29	-	-	48	82	363	460	186	45	26
Min	5.0	3.5	4.4	-	-	0.8	1.4	23	171	45	19	19
Ac-ft	699	347	1,200	154	446	604	1,930	6,380	16,670	6,210	2,200	1,280

Adjusted for storage in Gross Reservoir, diversions to City of Denver and imports by Moffat tunnel.

Mean	13.2	10.1	9.24	6.94	5.65	13.0	20.3	96.3	298	129	33.7	23.3
Ac-ft	813	602	563	427	313	800	1,210	5,910	17,760	7,960	2,070	1,380

Observed										Adjusted			
Cal yr 1966: Total	12,484.3	Mean	34.2	Max	178	Min	3.5	Ac-ft	24,760	Mean	32.7	Ac-ft	23,650
Wtr yr 1967: Total	19,221.9	Mean	52.7	Max	460	Min	0.8	Ac-ft	38,130	Mean	55.0	Ac-ft	39,820

6-7303. Coal Creek near Plainview, Colo.

Location.--Lat 39°52'40", long 105°16'36", in SE 1/4 sec. 13, T.2 S., R.71 W., on left bank 100 ft upstream from culvert on State Highway 72, 1 1/2 miles south of Plainview, 5 miles downstream from Beaver Creek, and 9 miles north of Golden.

Drainage area.--15.1 sq mi.

Records available.--August 1959 to September 1967.

Gage.--Water-stage recorder and concrete control. Altitude of gage is 6,540 ft (from topographic map). Prior to June 17, 1964, water-stage recorder at site 60 ft downstream at datum 4.49 ft lower.

Average discharge.--8 years, 3.39 cfs (2,450 acre-ft per year).

Extremes.--Maximum discharge during year, 46 cfs June 21 (gage height, 1.38 ft), from rating curve extended above 24 cfs; no flow Oct. 1 to Nov. 3.

1959-67: Maximum discharge, 195 cfs June 16, 1963 (gage height, 2.44 ft, site and datum then in use), by contracted-opening measurement of peak flow; no flow for many days in each year.

Remarks.--Records fair except those for winter period, which are poor. No diversion above station.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1		0	0.10	0.10	0.10	0.20	0.20	2.3	30	8.5	2.7	2.4
2		0	.10	.10	.10	.20	.20	2.2	26	8.2	2.3	1.8
3		0	.10	.10	.10	.20	.20	2.2	21	7.2	2.5	1.3
4		.10	.10	.10	.10	.20	.30	2.2	18	6.6	2.6	1.2
5		.10	.10	.10	.10	.20	.30	2.4	17	5.4	2.0	1.1
6		.10	.10	.10	.20	.20	.30	3.6	14	4.6	2.0	1.0
7		.10	.10	.10	.20	.30	.20	4.3	11	4.8	1.6	.80
8		.10	.10	.10	.20	.20	.20	3.5	8.8	8.2	1.4	.80
9		.10	.10	.10	.20	.20	.30	3.2	8.2	7.2	2.2	.80
10		.10	.20	.10	.20	.20	.30	2.9	7.2	5.9	2.3	.80
11		.10	.10	.10	.20	.30	.30	3.0	6.9	6.2	1.6	.80
12		.10	.10	.10	.20	.30	.30	3.0	7.2	8.2	1.3	.80
13		.10	.10	.10	.20	.30	1.5	3.2	6.6	6.6	1.3	.70
14		.10	.10	.10	.20	.30	3.0	3.5	7.2	7.5	1.1	.60
15		.10	.10	.10	.20	.30	5.2	3.7	24	10	1.3	.60
16		.10	.10	.10	.20	.30	5.4	3.5	44	15	1.1	1.0
17		.10	.10	.10	.20	.40	3.9	3.2	42	14	.80	1.2
18		.10	.10	.10	.10	.40	3.9	3.0	37	12	.90	1.0
19		.10	.10	.10	.10	.40	3.9	3.0	32	11	1.1	1.3
20		.10	.10	.10	.10	.30	3.6	3.5	30	8.8	.80	1.0
21		.10	.10	.10	.10	.30	3.0	3.1	40	7.5	.70	.80
22		.10	.10	.10	.20	.30	2.8	2.9	37	6.2	.60	.60
23		.10	.10	.10	.20	.30	2.7	2.5	32	5.6	.60	.60
24		.10	.10	.10	.10	.30	2.3	2.4	27	6.2	.40	.60
25		.10	.10	.10	.20	.40	2.9	2.3	22	7.2	.30	.60
26		.10	.10	.10	.20	.30	2.9	11	19	5.4	.40	1.7
27		.10	.10	.10	.20	.30	2.9	15	16	4.6	.40	1.9
28		.10	.10	.10	.20	.20	2.6	13	16	5.2	.70	1.4
29		.10	.10	.10	-	.30	2.5	14	15	3.9	.80	1.0
30		.10	.10	.10	- - - -	.40	2.5	15	11	3.5	3.2	.80
31	- - - -	- - - -	.10	.10	- - - -	.20	- - - -	19	- - - -	3.0	4.1	- - - -
Total	0	2.70	3.20	3.10	4.60	8.70	60.60	161.6	633.1	224.2	45.10	31.00
Mean	0	0.090	0.10	0.10	0.16	0.28	2.02	5.21	21.1	7.23	1.45	1.03
Max	0	0.10	0.20	0.10	0.20	0.40	5.4	19	44	15	4.1	2.4
Min	0	0	0.10	0.10	0.10	0.20	0.20	2.2	6.6	3.0	0.30	0.60
Ac-ft	0	5.4	6.3	6.1	9.1	17	120	321	1,260	445	89	61

Cal yr 1966: Total 142.90 Mean 0.39 Max 1.9 Min 0 Ac-ft 283
 Wtr yr 1967: Total 1,177.90 Mean 3.23 Max 44 Min 0 Ac-ft 2,340

Peak discharge (base, 25 cfs)

Date	Time	Gage height	Discharge	Date	Time	Gage height	Discharge
6-1	0100	1.24	32	6-21	0830	1.38	46
6-15	2230	1.37	45				

6-7310. St. Vrain Creek at mouth, near Platteville, Colo.

Location--Lat 40°15'29", long 104°52'45", in SE¼NW¼ sec.3, T.3 N., R.67 W., on right bank 140 ft downstream from bridge on county road, 1.3 miles upstream from mouth, and 4 miles northwest of Platteville.

Drainage area--976 sq mi.

Records available--July 1904 to December 1906, April to December 1915, March 1927 to September 1967. Prior to October 1933 monthly discharge only, published in WSP 1310.

Gage--Water-stage recorder. Altitude of gage is 4,740 ft (from topographic map). July 1, 1904, to Dec. 31, 1906, and Apr. 1 to Dec. 31, 1915, staff gage at bridge 140 ft upstream at different datums. Feb. 24, 1927, to June 10, 1939, water-stage recorder at bridge 140 ft upstream and June 11, 1939, to Apr. 24, 1960, water-stage recorder at site 180 ft upstream at different datum.

Average discharge--42 years (1904-6, 1927-67), 193 cfs (139,700 acre-ft per year).

Extremes--Maximum discharge during year, about 2,400 cfs June 21; minimum daily, 36 cfs Apr. 9.

1904-6, 1915, 1927-67: Maximum discharge, 11,300 cfs Sept. 3, 1938 (gage height, 8.93 ft, site and datum then in use), from rating curve extended above 4,700 cfs; minimum daily, 12 cfs Apr. 23, 1935.

Remarks--Records fair. Diversions above station for irrigation of about 177,000 acres. Flow partly regulated by many small reservoirs above station. Records of chemical analyses for the water year 1967 are published in Part 2 of this report.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	121	91	80	80	100	60	48	63	392	1,220	124	532
2	126	91	78	80	91	56	47	62	331	1,290	151	354
3	124	91	78	80	85	53	47	58	223	1,280	148	259
4	124	89	80	78	85	53	46	63	167	1,260	172	217
5	138	91	83	78	89	47	44	65	151	1,250	167	192
6	121	93	87	87	80	52	40	85	148	1,120	164	172
7	109	85	89	74	89	48	37	87	154	1,040	170	164
8	105	85	83	72	78	47	37	70	141	1,690	172	151
9	98	87	72	74	76	58	36	63	161	1,920	175	141
10	98	89	74	74	72	55	44	63	344	1,610	206	143
11	91	89	76	78	68	50	48	56	386	1,360	189	141
12	98	91	74	80	68	47	42	74	398	1,640	200	141
13	100	93	74	85	67	47	166	87	268	1,240	256	161
14	114	93	74	89	70	47	670	74	247	1,140	262	154
15	121	85	72	87	68	47	289	72	420	1,020	256	151
16	119	83	72	85	68	47	200	63	1,320	1,070	268	138
17	107	83	74	85	68	47	161	56	1,200	916	271	143
18	98	80	74	83	70	48	146	56	766	796	265	151
19	93	80	74	80	72	50	126	50	886	868	262	167
20	89	83	74	87	70	50	107	56	880	838	271	175
21	91	80	72	91	70	50	96	65	1,590	725	244	159
22	87	80	70	91	68	50	85	63	1,930	532	232	146
23	89	80	72	93	67	52	76	48	1,540	414	229	143
24	88	80	72	93	67	53	78	46	1,630	344	226	151
25	89	78	74	89	70	52	87	65	1,530	235	223	148
26	93	76	72	76	72	53	98	80	1,430	175	206	151
27	93	74	67	83	68	52	87	268	1,280	156	203	203
28	91	76	72	98	68	52	76	238	1,210	126	195	223
29	91	78	83	100	-	52	68	126	1,370	105	192	212
30	89	80	89	98	- - - -	52	65	138	1,240	109	289	203
31	87	- - - -	89	102	- - - -	48	- - - -	241	- - - -	114	1,200	- - - -
Total	3,182	2,534	2,374	2,630	2,084	1,575	3,197	2,701	23,733	27,603	7,588	5,586
Mean	103	84.5	76.6	84.8	74.4	50.8	107	87.1	791	890	245	186
Max	138	93	89	102	100	60	670	268	1,930	1,920	1,200	532
Min	87	74	67	72	67	47	36	46	141	105	124	138
Ac-ft	6,310	5,030	4,710	5,220	4,130	3,120	6,340	5,360	47,070	54,730	15,050	11,080
Cal yr 1966: Total	41,353		Mean	113	Max	903	Min	42	Ac-ft	82,020		
Wtr yr 1967: Total	84,787		Mean	232	Max	1,930	Min	36	Ac-ft	168,200		

Note--No gage-height record June 21, 22.

6-7330. Big Thompson River at Estes Park, Colo.

Location.--Lat 40°22'42", long 105°30'48", in NW¼ sec. 30, T.5 N., R.72 W., on right bank in Estes Park, 600 ft downstream from bridge on State Highways 7 and 66, 900 ft downstream from Black Canyon Creek, and 0.3 mile northwest of Estes powerplant. Station is upstream from Lake Estes.

Drainage area.--137 sq mi.

Records available.--October 1946 to September 1967. Prior to October 1947, published as Thompson River at Estes Park.

Gage.--Water-stage recorder and Parshall flume with overflow weirs. Datum of gage is 7,492.5 ft above mean sea level (levels by Bureau of Reclamation). Prior to May 18, 1949, at site 740 ft downstream at different datum. May 18, 1949, to Mar. 22, 1951, at site 60 ft upstream at datum 1.2 ft higher.

Average discharge.--21 years, 125 cfs (90,500 acre-ft per year), adjusted for inflow from Alva B. Adams tunnel Aug. 10, 1947, to Aug. 2, 1950.

Extremes.--Maximum discharge during years, 864 cfs June 21 (gage height, 5.33 ft); minimum daily, 7.0 cfs Dec. 29, Jan. 7, 8, 16, 27, Feb. 21.

1946-67: Maximum discharge, 1,660 cfs June 18, 1949 (gage height, 3.16 ft, site and datum then in use); maximum gage height, 6.89 ft June 17, 1965, minimum discharge not determined.

Remarks.--Records good except those for winter period, which are fair. Diversion from Colorado River basin to Big Thompson River basin above station through Alva B. Adams tunnel began Aug. 10, 1947, and ended Aug. 2, 1950. Small power development and small diversions for irrigation and municipal use above station. Diversions above station from Wind River to Lake Estes (bypassing this station) were 356 acre-ft during water year 1967.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	42	28	18	8.0	9.0	11	20	43	277	542	161	126
2	41	28	17	8.0	9.0	13	17	40	309	533	160	106
3	72	28	17	8.0	8.0	12	17	36	427	485	157	95
4	60	26	17	8.0	9.0	12	21	33	471	467	148	87
5	53	24	17	8.0	9.0	11	24	34	540	489	133	84
6	55	24	21	8.0	8.0	11	24	34	583	441	133	78
7	56	23	24	7.0	8.0	9.9	22	30	535	444	136	74
8	53	23	18	7.0	8.0	9.9	22	33	441	643	140	82
9	49	23	14	8.0	9.0	9.9	26	55	413	510	146	80
10	44	24	15	8.0	9.0	11	26	88	390	423	143	77
11	42	24	18	8.0	9.0	13	26	84	387	385	129	75
12	42	24	16	9.0	8.0	14	28	70	342	392	126	123
13	41	24	17	8.0	9.0	14	32	65	355	370	113	108
14	42	24	16	8.0	9.0	14	31	57	352	355	109	89
15	37	22	13	8.0	9.0	15	31	51	346	342	111	80
16	44	22	13	7.0	8.0	17	31	51	377	314	105	77
17	41	22	14	8.0	8.0	17	29	64	421	304	95	82
18	39	21	14	8.0	8.0	19	30	104	481	350	101	81
19	34	20	13	8.0	8.0	18	33	140	538	323	91	107
20	37	20	13	8.0	8.0	16	38	163	626	285	83	96
21	35	20	13	8.0	7.0	14	35	178	698	270	80	92
22	30	20	10	8.0	8.0	12	31	230	572	262	80	84
23	33	20	9.4	8.0	8.0	14	31	335	635	259	75	77
24	30	19	9.9	9.0	9.0	14	30	387	592	257	69	75
25	30	19	10	8.0	9.0	17	30	449	546	277	69	73
26	30	18	9.4	8.0	9.0	15	28	546	544	254	70	95
27	30	18	9.0	7.0	10	14	26	402	516	225	72	106
28	29	18	8.0	8.0	11	14	30	372	544	212	78	91
29	29	19	7.0	8.0	-	19	42	372	512	190	88	83
30	27	19	8.0	9.0	- - - - -	22	55	332	527	175	129	75
31	27	- - - - -	8.0	9.0	- - - - -	20	- - - - -	305	- - - - -	164	139	- - - - -
Total	1,254	664	426.7	248.0	241.0	442.7	866	5,183	14,297	10,942	3,469	2,658
Mean	40.5	22.1	13.8	8.00	8.61	14.3	28.9	167	477	353	112	88.6
Max	72	28	24	9.0	11	22	55	546	698	643	161	126
Min	27	18	7.0	7.0	7.0	9.9	17	30	277	164	69	73
Ac-ft	2,490	1,320	846	492	478	878	1,720	10,280	28,360	21,700	6,880	5,270

Cal yr 1966: Total 28,378.5 Mean 77.7 Max 368 Min 7.0 Ac-ft 56,290
 Wtr yr 1967: Total 40,691.4 Mean 111 Max 698 Min 7.0 Ac-ft 80,710

Peak discharge (base, 600 cfs)

Date	Time	Gage height	Discharge	Date	Time	Gage height	Discharge
6-6	0200	4.58	660	7-8	0230	5.25	836
6-21	0430	5.33	864				

Note.--No gage-height record Dec. 27 to Feb. 28.

PLATTE RIVER BASIN

6-7355. Big Thompson River near Estes Park, Colo.

Location.--Lat 40°22'35", long 105°29'06", in NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec.29, T.5 N., R.72 W., on right bank 100 ft upstream from Dry Creek, 600 ft downstream from Olympus Dam, and 2.0 miles east of Estes Park.

Drainage area.--156 sq mi.

Records available.--July 1930 to September 1967. Prior to October 1933 monthly discharge only, published in WSP 1310. Published as Thompson River near Estes Park 1934-47.

Gage.--Water-stage recorder and Parshall flume. Datum of gage is 7,422.5 ft above mean sea level (levels by Bureau of Reclamation). Prior to Jan. 29, 1934, staff gage on highway bridge $1\frac{1}{2}$ miles downstream at different datum. Jan. 29, 1934, to Mar. 21, 1951, water-stage recorder at site 0.4 mile downstream at datum 10.5 ft lower.

Extremes.--Maximum discharge during year, 447 cfs June 21 (gage height, 3.59 ft); minimum daily, 8.4 cfs Jan. 8, 9, 11, 21-23, 27, Feb. 1.
1930-67: Maximum discharge observed, 2,800 cfs June 20, 1933 (gage height, 4.0 ft, site and datum then in use), from rating curve extended above 460 cfs; minimum daily, 4.4 cfs Dec. 12, 1940, but may have been less during periods of no gage-height record.

Remarks.--Records excellent. Low flow regulated by Lake Estes since Nov. 30, 1948. Diversion from Colorado River to Big Thompson River basin above station through Alva B. Adams tunnel began Aug. 10, 1947 (see sta. 9-0130 for diversion during water year 1967); since Apr. 15, 1953, this imported water has been diverted from Lake Estes through Olympus tunnel bypassing this station. Since May 17, 1955, part of the natural flow of Big Thompson River (39,770 acre-ft in 1967) has also been diverted through Olympus tunnel and returned to the river below the station at mouth of canyon, near Drake. Small power developments and small diversions for irrigation and municipal use above station.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	44	30	19	9.9	8.4	9.9	18	47	131	125	114	130
2	43	31	19	9.9	8.9	11	16	45	166	125	113	108
3	73	30	20	9.9	9.9	13	17	40	212	125	109	97
4	62	28	19	9.9	10	12	21	37	176	125	101	90
5	55	27	19	9.4	10	11	24	38	176	117	101	87
6	57	27	23	8.9	10	11	26	39	170	111	104	82
7	58	25	27	9.9	10	11	26	34	142	111	107	76
8	55	25	25	8.4	10	11	26	37	131	111	113	84
9	51	26	27	8.4	10	9.9	30	59	143	111	118	82
10	46	26	27	8.9	10	11	31	91	140	111	115	80
11	44	26	27	8.4	10	13	30	89	142	111	113	77
12	45	26	24	8.9	10	14	33	75	119	111	114	125
13	44	26	22	8.9	10	15	36	70	142	111	102	111
14	45	26	22	8.9	10	16	35	64	136	111	107	91
15	40	24	22	9.4	10	14	34	56	130	111	113	83
16	46	24	22	9.4	10	18	34	56	148	111	108	80
17	43	23	22	9.4	10	17	33	69	166	111	98	85
18	42	23	22	9.4	10	19	34	108	196	111	105	84
19	37	22	22	9.4	10	18	37	149	191	134	96	111
20	39	22	21	9.4	10	16	43	175	218	117	88	98
21	37	22	21	8.4	9.4	14	40	191	213	117	84	96
22	32	22	17	8.4	10	14	36	186	157	123	83	86
23	34	22	12	8.4	9.9	15	36	196	178	123	77	81
24	33	22	13	8.9	9.9	14	34	178	152	120	71	78
25	32	22	14	8.9	9.9	18	35	186	146	143	70	75
26	31	21	13	8.9	10	16	33	236	159	124	72	97
27	31	21	13	8.4	10	16	30	142	156	115	73	108
28	30	22	13	8.9	9.9	15	34	147	173	111	80	94
29	32	21	12	8.9	-	19	46	129	113	105	90	85
30	30	21	10	8.9	- - - - -	21	60	126	125	112	131	77
31	30	- - - - -	9.9	8.9	- - - - -	16	- - - - -	144	- - - - -	114	140	- - - - -
Total	1,321	733	598.9	280.9	276.2	448.8	968	3,239	4,747	3,618	3,110	2,738
Mean	42.6	24.4	19.3	9.06	9.86	14.5	32.3	104	158	117	100	91.3
Max	73	31	27	9.9	10	21	60	236	218	143	140	130
Min	30	21	9.9	8.4	8.4	9.9	16	34	113	105	70	75
Ac-ft	2,620	1,450	1,190	557	548	890	1,920	6,420	9,420	7,180	6,170	5,430

Cal yr 1966: Total 20,737.2 Mean 56.8 Max 168 Min 9.4 Ac-ft 41,130
Wtr yr 1967: Total 22,078.8 Mean 60.5 Max 236 Min 8.4 Ac-ft 43,790

6-7380. Big Thompson River at mouth of canyon, near Drake, Colo.

Location.--Lat 40°25'18", long 105°13'34", in SW¼SW¼ sec.3, T.5 N., R.70 W., on right bank at mouth of canyon, 400 ft upstream from Handy Ditch diversion dam and 6.0 miles east of Drake.

Drainage area.--304 sq mi.

Records available.--August 1887 to September 1892, May 1895 to September 1903, October 1926 to September 1933 (no winter records prior to October 1932, except water years 1927-28), April 1938 to September 1949, March 1951 to September 1967. Monthly discharge only for some periods, published in WSP 1310. Published as Big Thompson Creek at Arkins 1887-92, Big Thompson Creek near Arkins 1901-3, and as Thompson River at mouth of canyon, near Drake 1927-30, 1938-47.

Gage.--Water-stage recorder. Datum of gage is 5,297.47 ft above mean sea level (Bureau of Reclamation bench mark). Aug. 25, 1887, to Sept. 30, 1892, and Apr. 1, 1899, to Sept. 21, 1903, staff gages at sites within half a mile downstream below Handy Ditch diversion dam at different datums. May 9, 1895, to Mar. 31, 1899, staff gage at site 1½ miles downstream and 600 ft downstream from Home Supply Ditch diversion dam at different datum. Oct. 1 to Dec. 31, 1926, staff gage at site 6½ miles upstream at different datum. Jan. 1, 1927, to Sept. 30, 1933, water-stage recorder at site 1 mile upstream at different datum. Apr. 19, 1938, to Sept. 30, 1949, water-stage recorder at site 50 ft downstream at datum 1.45 ft lower.

Extremes.--Maximum discharge during year, 544 cfs June 21 (gage height, 3.06 ft); minimum not determined.

1887-92, 1895-1903, 1926-33, 1938-49, 1951-67: Maximum discharge, 7,600 cfs July 19, 1945 (gage height, 7.55 ft, site and datum then in use), from rating curve extended above 2,200 cfs; minimum daily recorded, 3.2 cfs Nov. 12, 1959.

Remarks.--Records good except those for winter period, which are poor. Diversions above station for irrigation. Diversion from Colorado River to Big Thompson River basin above station through Alva B. Adams tunnel began Aug. 10, 1947 (see sta. 9-0130 for diversion for water year 1967); since Apr. 15, 1953, this imported water has been diverted through Olympus tunnel bypassing this station. Part of the natural flow of Big Thompson River has also been diverted through Olympus tunnel since May 17, 1955 (39,770 acre-ft in 1967), and Dille tunnel since Apr. 20, 1959 (15,300 acre-ft in 1967), and returned to the river just below this station.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	57	35	26		16	19	25	60	174	61	101	192
2	53	33	21		12	19	25	56	138	54	108	164
3	70	38	20		14	20	23	56	194	46	103	141
4	80	36	25		16	20	23	51	171	44	136	131
5	69	30	22		16	19	28	51	221	39	141	126
6	69	35	26		14	15	31	53	251	50	144	121
7	67	33	28		16	17	31	49	227	60	141	108
8	66	32	15		13	16	31	44	184	82	141	110
9	64	31	14		15	16	32	57	166	63	151	114
10	58	30	14		14	19	39	88	158	57	166	108
11	53	33			15	19	35	103	164	60	138	108
12	51	35			13	23	35	93	141	53	138	136
13	53	34			15	22	48	88	156	39	131	146
14	53	32			17	23	43	80	138	37	134	124
15	50	33			15	21	39	72	128	49	146	112
16	53	29			12	26	38	69	161	50	146	108
17	54	31			14	24	39	75	168	46	134	112
18	53	31			16	28	38	108	187	54	136	108
19	48	28			16	27	44	148	251	63	138	144
20	50	26			13	26	40	189	276	46	121	131
21	45	30			14	23	44	197	364	48	114	124
22	43	27			14	21	42	179	230	63	114	114
23	37	27			13	22	40	171	233	64	110	106
24	36	28			15	22	38	164	110	70	101	106
25	39	26			16	26	40	164	60	95	97	101
26	37	23			16	26	40	221	57	88	99	114
27	36	24			15	23	37	161	54	74	99	141
28	37	20			18	22	37	128	141	86	110	110
29	36	35			-	22	45	141	75	78	112	97
30	36	31			- - - -	30	60	114	77	78	210	103
31	35	- - - -			- - - -	22	- - - -	154	- - - -	82	219	- - - -
Total	1,588	916	715	434	413	678	1,110	3,384	5,055	1,879	4,079	3,660
Mean	51.2	30.5	23.1	14	14.8	21.9	37.0	109	168	60.6	132	122
Max	80	38	28	-	18	30	60	221	364	95	219	192
Min	35	20	-	-	12	15	23	44	54	37	97	97
Ac-ft	3,150	1,820	1,420	861	819	1,340	2,200	6,710	10,030	3,730	8,090	7,260
Cal yr 1966: Total	24,739			Mean 67.8	Max 219	Min -	Ac-ft 49,070					
Wtr yr 1967: Total	23,911			Mean 65.5	Max 364	Min -	Ac-ft 47,430					

PLATTE RIVER BASIN

Reservoirs in South Platte River basin

6-6955. Elevenmile Canyon Reservoir near Lake George.--Lat 38°54'19", long 105°28'30", in N½SW¼ sec.20, T.13 S., R.72 W., at north end of dam on South Platte River, 8 miles southwest of Lake George. Records available, October 1932 to September 1967. Prior to September 1938, published in WSP 1310. Gage is mercury manometer. Prior to May 12, 1964, twice daily staff gage readings. Datum of gage is at mean sea level (datum of Denver Board of Water Commissioners). Maximum contents observed during year, 92,470 acre-ft Sept. 1-3 (elevation, 8,595.40 ft); minimum observed, 89,900 acre-ft Oct. 25 to Nov. 5 (elevation, 8,594.60 ft). Maximum contents observed during period 1932-67, 103,400 acre-ft Mar. 29, 1960 (elevation, 8,598.62 ft); no contents at times in 1935.

Reservoir is formed by concrete arch dam completed by Denver Board of Water Commissioners in November 1932. Spillway built 5.00 ft higher Aug. 1, 1957. Storage began in October 1932. Capacity, 97,780 acre-ft between elevations 8,488.25 (invert of outlet pipe) and 8,597.00 ft (crest of spillway). Dead storage is negligible. Records given herein represent total contents. Water is for municipal use by city of Denver. Records furnished by Denver Board of Water Commissioners.

6-7010. Cheesman Lake near Deckers.--Lat 39°12'26", long 105°16'18", in NW¼SW¼ sec.6, T.10 S., R.70 W., at dam on South Platte River, 4 miles southwest of Deckers. Records available, September 1900 to December 1901, September 1902 to September 1967. Prior to October 1938, published in WSP 1310. Published as Lake Cheesman Reservoir prior to 1947. Staff gage read twice daily. Datum of gage is 6,622.91 ft above mean sea level (datum of Denver Board of Water Commissioners). Maximum contents observed during year, 35,090 acre-ft July 29 (gage height, 149.18 ft); minimum observed, 28,850 acre-ft June 20 (gage height, 136.90 ft). Maximum contents observed during 1900-1901, 1902-67, 80,820 acre-ft June 23, 1918, and June 7, 1921 (gage height, 214.00 ft); minimum observed since appreciable storage was attained, 3,650 acre-ft Apr. 20, 1933 (gage height, 55.02 ft).

Reservoir is formed by masonry dam completed about October 1902. Capacity, 79,060 acre-ft at gage height 212 ft (spillway crest) above sill of lowest gate. No dead storage. Records given herein represent total contents. Water is for municipal use by city of Denver. Records furnished by Denver Board of Water Commissioners.

6-7375. Horsetooth Reservoir near Fort Collins.--Lat 40°36'00", long 105°10'06", in NW¼SW¼ sec.6, T.7 N., R.69 W., on right bank near abutment of Horsetooth Dam on tributaries of Cache la Poudre River, 4.8 miles west of city hall in Fort Collins. Records available, April 1951 to September 1967. Staff gage read at irregular intervals varying from 1 to 10 days. Datum of gage is 5,270.00 ft above mean sea level (levels by Bureau of Reclamation). Gage readings have been reduced to elevations above mean sea level. Maximum contents observed during year, 132,300 acre-ft July 21 (elevation, 5,423.99 ft); minimum contents, 31,860 acre-ft Oct. 24 (elevation, 5,350.45 ft). Maximum contents observed during period 1951-67, 141,100 acre-ft June 23, 25, 1961 (elevation, 5,428.75 ft); minimum observed, 3,040 acre-ft Sept. 23, 1954 (elevation, 5,302.20 ft); no storage prior to Apr. 18, 1951.

Reservoir is formed by earth- and rock-fill dike and dams closing openings in a subsequent valley between hogbacks. Dams completed July 21, 1949; storage began Jan. 10, 1951; dead storage pools filled Apr. 18, 1951. Usable capacity, 143,500 acre-ft above elevations 5,320 ft (invert of channel from Spring Canyon Dam), 5,310 ft (invert of channel from Dixon Canyon Dam), 5,270 ft (trashrack sill of outlet at Soldier Canyon Dam), and below maximum water surface elevation 5,430 ft (6 ft below crest of Satanka Dike). Dead storage, 8,270 acre-ft. Reservoir is used for storage of water diverted from Colorado River basin through Alva B. Adams tunnel for supplemental irrigation supply to Cache la Poudre River basin as part of the Colorado-Big Thompson project. Figures given herein represent usable contents. Records furnished by Bureau of Reclamation.

6-7425. Carter Lake near Berthoud.--Lat 40°19'28", long 105°12'41", in SE¼ sec.10, T.4 N., R.70 W., in hoist house 293 ft from right abutment of Carter Lake Dam on Dry Creek, 7.0 miles west of Berthoud, and 8.9 miles upstream from mouth. Records available, March 1954 to September 1967. Electric tape gage read at irregular intervals varying from 1 to 13 days. Datum of gage is 5,618.00 ft above mean sea level (levels by Bureau of Reclamation). Gage readings have been reduced to elevations above mean sea level. Maximum contents observed during year, 108,000 acre-ft July 24 (elevation, 5,758.20 ft); minimum observed, 17,370 acre-ft Oct. 13 (elevation, 5,657.98 ft). Maximum contents observed during period 1954-67, 108,900 acre-ft June 27, 1962 (elevation, 5,758.94 ft); minimum observed since appreciable storage was attained, 960 acre-ft Oct. 25, 1954 (elevation, 5,621.40 ft).

Reservoir is formed by earth- and rock-fill dam and dikes enlarging the natural basin of Carter Lake. Storage began in February 1954 and dead storage pool was filled Mar. 5, 1954. Usable capacity, 113,500 acre-ft between elevations 5,618.00 (trashrack sill at Carter Lake Dam outlet) and 5,763.00 ft (maximum water surface, 6 ft below crest of dam). Dead storage, 3,310 acre-ft. Water diverted from Colorado River basin through Alva B. Adams tunnel is pumped from Flatiron Reservoir into Carter Lake for supplemental irrigation supply to Little Thompson River, St. Vrain Creek, and Boulder Creek basins. Water above elevation 5,620 ft may be released for return to Flatiron Reservoir where pump turbines can operate in reverse to generate power and water can be used for irrigation in Big Thompson or Cache la Poudre River basins. It is part of the Colorado-Big Thompson project. Figures given herein represent usable contents. Records furnished by Bureau of Reclamation.

Reservoirs in South Platte River basin--Continued

Month-end elevation and contents, water year October 1966 to September 1967

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)	Gage height (feet)†	Contents (acre-feet)	Change in contents (acre-feet)
Elevenmile Canyon Reservoir				Cheesman Lake		
Sept. 30.....	8,595.00	91,170	-	148.80	34,890	-
Oct. 31.....	8,594.60	89,900	-1,270	148.80	34,890	0
Nov. 30.....	8,594.70	90,220	+320	143.38	32,060	-2,830
Dec. 31.....	8,594.80	90,530	+310	142.53	31,620	-440
Calendar year 1966...	-	-	+3,790	-	-	-47,630
Jan. 31.....	8,594.67	90,120	-410	139.12	29,930	-1,690
Feb. 28.....	8,594.74	90,340	+220	138.30	29,530	-400
Mar. 31.....	8,595.00	91,170	+830	140.96	30,840	+1,310
Apr. 30.....	8,594.96	91,040	-130	143.30	32,020	+1,180
May 31.....	8,594.98	91,100	+60	138.96	29,850	-2,170
June 30.....	8,595.03	91,260	+160	139.90	30,310	+460
July 31.....	8,595.23	91,920	+660	149.06	35,030	+4,720
Aug. 31.....	8,595.38	92,400	+480	138.12	29,440	-5,590
Sept. 30.....	8,595.37	92,370	-30	141.74	31,230	+1,790
Water year 1966-67	-	-	+1,200	-	-	-3,660
Horsetooth Reservoir				Carter Lake		
Sept. 30.....	5,352.90	34,190	-	5,663.60	20,900	-
Oct. 31.....	5,351.20	32,570	-1,620	5,666.13	22,570	+1,670
Nov. 30.....	5,362.15	43,610	+11,040	5,686.75	37,770	+15,200
Dec. 31.....	-	a57,990	+14,380	-	a52,660	+14,890
Calendar year 1966...	-	-	-9,940	-	-	-42,340
Jan. 31.....	5,383.80	69,570	+11,580	5,718.95	66,440	+13,780
Feb. 28.....	5,394.10	83,810	+14,240	5,730.35	77,790	+11,350
Mar. 31.....	5,407.05	103,500	+19,690	5,741.45	89,480	+11,690
Apr. 30.....	5,415.05	116,700	+13,200	5,747.02	95,520	+6,040
May 31.....	5,420.48	126,100	+9,400	5,751.08	100,000	+4,480
June 30.....	5,421.98	128,700	+2,600	5,750.98	99,880	-120
July 31.....	5,422.00	128,800	+100	5,756.59	106,200	+6,320
Aug. 31.....	5,393.91	83,540	-45,260	5,729.14	76,600	-29,600
Sept. 30.....	-	a59,280	-24,260	-	a65,910	-10,690
Water year 1966-67...	-	-	+25,090	-	-	+45,010

† Elevation or gage height at 1700.

a No elevation record; contents estimated.

PLATTE RIVER BASIN

6-7440. Big Thompson River at mouth, near La Salle, Colo.

Location.--Lat 40°21'00", long 104°47'04", in SW¼SE¼ sec.33, T.5 N., R.66 W., on left bank just southeast of gage on Evans Town ditch, 0.7 mile upstream from highway bridge, 1.6 miles upstream from mouth, and 4 miles west of La Salle.

Drainage area.--828 sq mi.

Records available.--April 1914 to October 1915, March 1927 to September 1967. Prior to October 1933 monthly discharge only, published in WSP 1310. Published as Thompson River at mouth, near La Salle 1934-47.

Gage.--Water-stage recorder. Altitude of gage is 4,680 ft (from topographic map). Apr. 1, 1914, to Oct. 31, 1915, staff gage and Mar. 1, 1927, to Sept. 30, 1951, water-stage recorder, at bridge 0.7 mile downstream at different datums. Datum lowered 0.50 ft May 21, 1962.

Extremes.--Maximum discharge during year, 570 cfs May 30 (gage height, 3.66 ft); minimum daily, 0.60 cfs May 18, 19. 1914-15, 1927-67: Maximum discharge, 6,100 cfs Aug. 4, 1951 (gage height, 7.80 ft, site and datum then in use), from rating curve extended above 4,500 cfs; maximum gage height, 8.72 ft May 9, 1957, present datum; no flow at times in 1934-35, 1948.

Remarks.--Records good. Natural flow of stream affected by transmountain diversions, storage reservoirs, power developments, diversions for irrigation of about 95,000 acres above station, and return flow from irrigated areas.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	50	82	70	60	53	42	38	12	77	161	48	105
2	51	80	70	58	49	44	40	12	56	139	49	66
3	46	77	72	56	48	45	40	13	48	127	51	64
4	56	74	72	54	48	48	39	15	42	112	50	53
5	66	74	70	56	46	46	36	14	40	118	46	42
6	51	74	72	54	40	43	32	13	48	94	48	33
7	43	72	74	48	43	40	18	17	53	75	45	34
8	45	72	72	54	36	43	11	14	54	129	46	33
9	48	72	67	57	42	49	12	12	61	208	53	28
10	42	72	60	58	42	48	31	5.0	112	167	56	31
11	48	72	66	57	38	45	14	3.5	100	78	56	30
12	53	74	64	58	37	43	4.7	1.6	91	279	49	34
13	46	70	66	57	36	38	32	4.7	85	127	46	51
14	54	72	67	57	36	37	254	11	100	107	44	74
15	63	72	66	60	37	36	69	11	96	107	84	69
16	66	72	67	61	42	38	40	8.0	84	153	103	61
17	67	74	64	57	49	38	33	1.8	84	153	98	67
18	69	72	66	57	42	38	26	.60	70	133	98	70
19	72	72	67	54	48	42	21	.60	63	149	109	82
20	74	72	67	61	44	45	8.5	1.6	61	143	98	75
21	74	72	67	64	44	42	80	3.2	155	72	124	69
22	70	72	64	63	38	40	6.0	1.8	139	56	135	67
23	69	70	57	63	44	40	12	1.8	77	46	135	70
24	72	70	60	58	45	40	12	1.8	66	37	137	70
25	72	69	63	57	48	40	14	2.3	54	25	133	66
26	74	69	61	51	49	42	15	1.5	48	17	141	64
27	75	69	61	50	49	40	14	126	39	17	143	75
28	72	70	60	54	42	42	14	34	27	15	175	82
29	74	70	57	54	-	42	13	24	214	15	171	80
30	75	70	63	56	- - - - -	38	13	238	185	14	169	74
31	78	- - - - -	61	56	- - - - -	38	- - - - -	141	- - - - -	27	218	- - - - -
Total	1,915	2,172	2,033	1,760	1,215	1,292	913.00	760.30	2,429	3,100	2,958	1,819
Mean	61.8	72.4	65.6	56.8	43.4	41.7	30.4	24.5	81.0	100	95.4	60.6
Max	78	82	74	64	53	49	254	238	214	279	218	105
Min	42	69	57	48	36	36	0.80	0.60	27	14	44	28
Ac-ft	3,800	4,310	4,030	3,490	2,410	2,560	1,810	1,510	4,820	6,150	5,870	3,610
Cal yr 1966: Total	18,531.8	Mean	50.8	Max	139	Min	2.0	Ac-ft	36,760			
Wtr yr 1967: Total	22,366.30	Mean	61.3	Max	279	Min	0.60	Ac-ft	44,360			

6-7475. Cache la Poudre River near Rustic, Colo.

Location.--Lat 40°41'44", long 105°41'23", in NW¼NE¼ sec.4, T.8 N., R.74 W., on right bank 20 ft downstream from trail bridge, 500 ft south of State Highway 14, 800 ft downstream from unnamed tributary, 5.8 miles west of Rustic, 8½ miles downstream from outlet of Laramie-Poudre tunnel, and 33 miles west of Fort Collins.

Drainage area.--199 sq mi.

Records available.--August 1956 to September 1967.

Gage.--Water-stage recorder. Altitude of gage is 7,610 ft (from topographic map).

Average discharge.--11 years, 248 cfs (179,500 acre-ft per year).

Extremes.--Maximum discharge during year, 1,770 cfs June 22 (gage height, 5.32 ft); minimum daily, 8.8 cfs Nov. 26.

1956-67: Maximum discharge, 3,610 cfs June 29, 1957 (gage height, 7.12 ft); minimum daily, 8.0 cfs Jan. 12, 1963.

Remarks.--Records good except those for winter period, which are poor. Natural flow of stream affected by transbasin and transmountain diversions (see elsewhere in this report), storage reservoirs, and a few small diversions for irrigation.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	40	17	13	13	13	11	15	36	938	978	282	337
2	39	15	14	12	14	11	16	38	1,070	938	278	304
3	58	19	13	12	14	11	17	34	1,180	902	278	221
4	54	21	13	12	14	11	19	32	1,220	970	237	230
5	52	15	13	12	13	11	21	32	1,240	888	224	244
6	57	16	14	13	12	11	21	31	1,270	700	221	233
7	62	18	15	13	12	10	20	29	1,230	654	221	233
8	56	17	15	11	12	11	20	41	1,310	632	230	240
9	51	12	13	10	13	11	22	65	1,250	595	230	244
10	46	15	12	11	12	11	22	92	1,190	545	250	264
11	44	21	13	12	12	11	20	94	1,200	510	221	257
12	44	19	16	12	12	11	22	96	1,090	520	212	326
13	44	18	16	12	12	11	23	88	1,040	485	200	318
14	45	16	15	12	12	11	20	73	1,010	490	190	318
15	34	17	14	13	12	12	22	66	962	490	164	261
16	47	17	15	13	12	12	23	66	938	485	157	268
17	41	16	15	13	12	11	19	90	1,020	475	155	212
18	42	16	15	12	12	13	19	190	1,070	520	230	218
19	25	15	14	12	12	14	22	237	1,250	465	221	271
20	29	16	14	12	12	12	25	261	1,420	429	203	282
21	27	16	14	13	12	13	27	333	1,550	345	212	264
22	19	15	13	13	12	13	23	480	1,560	333	224	160
23	25	15	12	13	11	13	23	712	1,520	456	221	143
24	22	14	12	13	11	13	23	867	1,400	510	212	129
25	23	11	13	12	11	13	22	978	1,280	495	200	132
26	23	8.8	13	11	10	13	22	978	1,150	465	190	160
27	24	13	13	12	10	13	21	1,060	1,070	402	203	155
28	25	13	12	12	11	13	22	940	1,080	375	141	123
29	23	14	13	13	-	13	26	980	1,090	364	152	92
30	22	14	14	13	- - - -	14	34	920	1,010	345	326	84
31	21	- - - -	13	13	- - - -	16	- - - -	930	- - - -	296	330	- - - -
Total	1,164	469.8	424	380	337	374	651	10,869	35,608	17,057	6,815	6,723
Mean	37.5	15.7	13.7	12.3	12.0	12.1	21.7	351	1,190	550	220	224
Max	62	21	16	13	14	16	34	1,060	1,560	978	330	337
Min	19	8.8	12	10	10	10	15	29	938	296	141	84
Ac-ft	2,310	932	841	754	668	742	1,290	21,560	70,630	33,830	13,520	13,330

Cal yr 1966: Total 60,562.8 Mean 166 Max 1,070 Min 8.8 Ac-ft 120,100
Wtr yr 1967: Total 80,871.8 Mean 222 Max 1,560 Min 8.8 Ac-ft 160,400

Note.--No gage-height record Dec. 24 to Apr. 10.

PLATTE RIVER BASIN

6-7482. Fall Creek near Rustic, Colo.

Location.--Lat 40°33'06", long 105°37'35", in NW¼ sec.30, at line of sec.19, T.7 N., R.73 W., on left bank on upstream side of bridge, 1.5 miles upstream from mouth, 11 miles southwest of Rustic, and 29 miles west of Fort Collins.

Drainage area.--3.64 sq mi.

Records available.--October 1960 to September 1967.

Gage.--Water-stage recorder. Altitude of gage is 9,765 ft (from topographic map).

Average discharge.--7 years, 6.01 cfs (4,350 acre-ft per year).

Extremes.--Maximum discharge during year, 46 cfs June 22 (gage height, 2.40 ft); minimum daily, 0.14 cfs Jan. 9, 10.
1960-67: Maximum discharge, 108 cfs June 16, 1965 (gage height, 3.41 ft), from rating curve extended above 59 cfs; minimum daily, 0.10 cfs Jan. 11-13, 19, 20, 23, 24, 1963.

Remarks.--Records good. No diversion above station.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3.3	1.7	0.75	0.21	0.40	0.34	0.55	1.2	11	30	9.9	5.9
2	4.2	1.7	.75	.20	.40	.34	.55	.80	17	29	10	5.3
3	4.8	1.7	.75	.19	.44	.34	.55	.70	20	26	10	4.8
4	3.8	1.7	.75	.18	.40	.34	.55	.70	22	27	9.0	4.8
5	3.6	1.6	.75	.17	.40	.37	.55	.65	24	27	8.7	4.5
6	3.6	1.5	.74	.16	.37	.35	.55	.60	28	25	8.7	4.3
7	3.5	1.5	.70	.16	.37	.35	.55	.92	26	24	8.8	4.4
8	3.3	1.5	.72	.16	.37	.35	.55	1.4	23	26	8.8	5.0
9	3.0	1.5	.68	.14	.37	.40	.62	2.1	22	24	10	4.7
10	2.9	1.5	.73	.14	.37	.40	.58	2.7	21	23	9.4	4.8
11	2.9	1.5	.74	.18	.37	.40	.63	2.0	20	23	8.3	5.0
12	2.8	1.5	.74	.20	.40	.40	.70	1.6	20	21	8.2	6.3
13	2.7	1.5	.74	.20	.37	.40	.54	1.7	20	20	7.6	5.3
14	2.6	1.4	.73	.20	.37	.41	.58	1.6	19	19	7.4	4.7
15	2.7	1.4	.62	.22	.40	.43	.62	1.4	19	19	7.6	4.4
16	2.7	1.4	.56	.26	.40	.43	.65	1.8	20	19	6.8	4.6
17	2.5	1.3	.56	.26	.37	.50	.60	2.9	22	19	6.5	4.5
18	2.3	1.3	.56	.26	.37	.54	.70	5.0	26	20	6.4	4.7
19	2.4	1.3	.54	.37	.34	.50	.98	5.8	28	19	6.2	5.5
20	2.4	1.3	.50	.37	.34	.47	.98	6.0	36	17	5.9	4.8
21	2.2	1.3	.48	.37	.34	.44	.75	8.0	34	16	5.8	4.6
22	2.4	1.3	.44	.40	.34	.48	.60	12	36	15	5.4	4.4
23	2.2	1.1	.41	.40	.34	.46	.51	17	34	15	5.2	4.2
24	2.2	1.1	.38	.40	.34	.49	.51	18	32	15	4.8	4.4
25	2.2	1.0	.35	.40	.34	.46	.55	20	30	15	5.0	4.3
26	2.2	.92	.32	.37	.34	.47	.60	19	30	13	5.0	5.2
27	2.2	.86	.30	.37	.34	.46	.60	14	30	13	5.0	4.8
28	2.2	.80	.26	.40	.37	.53	.92	15	30	12	5.1	4.4
29	2.2	.80	.26	.40	-	.64	1.5	15	32	12	5.4	4.2
30	2.0	.75	.26	.40	- - - -	.59	1.7	14	30	11	6.2	4.0
31	1.9	- - - -	.22	.40	- - - -	.56	- - - -	11	- - - -	11	6.0	- - - -
Total	85.9	39.73	17.29	8.54	10.37	13.64	20.82	204.57	762	605	223.1	142.8
Mean	2.77	1.32	0.558	0.275	0.370	0.440	0.694	6.60	25.4	19.5	7.20	4.76
Max	4.8	1.7	0.75	0.40	0.44	0.64	1.7	20	36	30	10	6.3
Min	1.9	0.75	0.22	0.14	0.34	0.34	0.51	0.60	11	11	4.8	4.0
Ac-ft	170	79	34	17	21	27	41	406	1,510	1,200	443	283

Cal yr 1966: Total 1,531.62 Mean 4.20 Max 19 Min 0.22 Ac-ft 3,040
Wtr yr 1967: Total 2,133.76 Mean 5.85 Max 36 Min 0.14 Ac-ft 4,230

Peak discharge (base, 30 cfs).--June 6 (1800) 34 cfs (2.21 ft); June 22 (1800) 46 cfs (2.40 ft).

Note.--No gage-height record Dec. 5 to Jan. 5, Mar. 6 to Apr. 15.

6-7485.1. Little Beaver Creek near Idylwilde, Colo.

Location.--Lat 40°38'20", long 105°39'40", in NW¼ sec.26, T.8 N., R.74 W., on left bank 4.5 miles south of Idylwilde and 8 miles upstream from mouth.

Drainage area.--0.89 sq mi.

Records available.--October 1960 to September 1967.

Gage.--Water-stage recorder and Parshall flume or V-notch sharp-crested weir. Altitude of gage is 10,000 ft (from topographic map).

Average discharge.--7 years, 1.01 cfs (731 acre-ft per year).

Extremes.--Maximum discharge during year, 14 cfs June 20 (gage height, 1.67 ft); minimum daily, 0.06 cfs Apr. 6 to May 5.

1960-67: Maximum discharge, 19 cfs June 17, 1965 (gage height, 1.92 ft); minimum daily, 0.01 cfs Apr. 25 to May 14, 1961.

Remarks.--Records excellent.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.26	0.22	0.12	0.09	0.08	0.07	0.07	0.06	1.3	6.2	1.1	0.50
2	.28	.22	.12	.09	.08	.07	.07	.06	2.6	5.9	1.1	.47
3	.30	.21	.12	.08	.08	.07	.07	.06	4.6	5.2	1.1	.44
4	.28	.20	.12	.08	.08	.07	.07	.06	3.9	5.5	1.0	.44
5	.28	.22	.12	.08	.07	.07	.07	.06	5.0	5.0	.98	.44
6	.28	.22	.12	.08	.07	.07	.06	.07	6.5	4.3	.93	.41
7	.28	.20	.13	.07	.07	.07	.06	.07	5.6	4.0	.93	.38
8	.28	.18	.13	.08	.07	.07	.06	.09	5.1	3.8	.93	.38
9	.28	.18	.13	.08	.07	.07	.06	.11	5.2	3.5	1.1	.38
10	.28	.20	.13	.09	.07	.07	.06	.12	4.7	3.2	.93	.41
11	.28	.22	.13	.09	.07	.07	.06	.11	4.7	3.1	.88	.44
12	.28	.22	.12	.09	.07	.07	.06	.09	5.1	2.9	.84	.47
13	.26	.22	.12	.09	.07	.07	.06	.08	5.1	2.7	.80	.41
14	.26	.20	.12	.09	.07	.07	.06	.08	4.8	2.6	.75	.44
15	.28	.20	.12	.09	.07	.07	.06	.08	4.8	2.6	.80	.41
16	.28	.18	.11	.09	.07	.07	.06	.08	5.0	2.4	.71	.38
17	.26	.18	.11	.09	.07	.07	.06	.12	5.6	2.3	.67	.44
18	.26	.18	.11	.09	.07	.07	.06	.16	7.7	2.2	.67	.44
19	.24	.16	.11	.09	.07	.07	.06	.16	7.3	2.0	.64	.47
20	.24	.16	.11	.09	.07	.07	.06	.15	10	1.9	.60	.44
21	.24	.16	.11	.09	.07	.07	.06	.20	9.1	1.8	.60	.44
22	.22	.16	.11	.09	.07	.07	.06	.41	8.9	1.6	.56	.44
23	.22	.15	.11	.09	.07	.07	.06	.88	9.4	1.7	.56	.41
24	.22	.15	.11	.08	.07	.07	.06	1.6	8.0	1.6	.53	.38
25	.22	.15	.11	.08	.07	.07	.06	2.2	8.0	1.6	.53	.47
26	.22	.15	.11	.08	.07	.07	.06	2.6	8.2	1.5	.56	.47
27	.22	.14	.11	.08	.07	.07	.06	1.5	7.8	1.4	.53	.41
28	.22	.13	.10	.08	.07	.07	.06	1.4	7.2	1.3	.60	.38
29	.22	.12	.10	.08	-	.07	.06	2.0	7.0	1.2	.53	.38
30	.22	.12	.09	.08	- - - -	.07	.06	2.0	6.8	1.2	.56	.38
31	.22	- - - -	.09	.08	- - - -	.07	- - - -	1.5	- - - -	1.2	.53	- - - -
Total	7.88	5.40	3.55	2.63	2.00	2.17	1.85	18.16	185.0	87.4	23.55	12.75
Mean	0.254	0.180	0.115	0.085	0.071	0.070	0.062	0.586	6.17	2.82	0.760	0.425
Max	0.30	0.22	0.13	0.09	0.08	0.07	0.07	2.6	10	6.2	1.1	0.50
Min	0.22	0.12	0.09	0.07	0.07	0.07	0.06	0.06	1.3	1.2	0.53	0.38
Ac-ft	16	11	7.0	5.2	4.0	4.3	3.7	36	367	173	47	25

Cal yr 1966: Total	264.09	Mean	0.724	Max	4.7	Min	0.09	Ac-ft	524
Wtr yr 1967: Total	352.34	Mean	0.965	Max	10	Min	0.06	Ac-ft	699

Peak discharge (base, 10 cfs).--June 20 (1600) 14 cfs (1.67 ft).

PLATTE RIVER BASIN

6-7485.3. Little Beaver Creek near Rustic, Colo.

Location.--Lat 40°37'23", long 105°33'52", in N½ sec.34, T.8 N., R.73 W., on left bank 2.6 miles upstream from mouth and 5.5 miles south of Rustic.

Drainage area.--11.4 sq mi.

Records available.--October 1960 to September 1967.

Gage.--Water-stage recorder and concrete control. Altitude of gage is 8,350 ft (from topographic map).

Average discharge.--7 years, 6.83 cfs (4,940 acre-ft per year).

Extremes.--Maximum discharge during year, 84 cfs June 21 (gage height, 1.46 ft); minimum daily, 0.96 cfs Dec. 29-31, Jan. 3, 4, 9, 10, 1960-67; Maximum discharge, 187 cfs June 17, 1965 (gage height, 1.89 ft), from rating curve extended above 94 cfs; minimum daily, 0.9 cfs Feb. 19 to Mar. 4, Mar. 9, 10, Nov. 12, 1964.

Remarks.--Records excellent. No diversion above station.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.2	1.2	1.8	1.1	1.4	1.1	1.4	2.0	18	26	5.8	3.2
2	2.4	1.8	1.8	1.0	1.4	1.1	1.4	2.0	21	24	5.5	2.6
3	3.4	2.1	1.8	.96	1.4	1.1	1.4	1.8	27	23	5.5	2.6
4	2.4	1.8	2.0	.96	1.4	1.1	1.4	1.8	28	23	5.5	2.2
5	2.2	2.0	1.8	1.0	1.4	1.0	1.4	1.6	31	22	5.0	2.4
6	2.4	2.1	1.8	1.1	1.4	1.0	1.4	1.8	44	20	4.8	2.4
7	2.4	2.0	1.6	1.2	1.4	1.0	1.4	2.1	37	19	5.0	2.2
8	2.1	1.8	1.8	1.0	1.3	1.0	1.4	3.2	30	19	6.0	2.2
9	2.0	1.6	1.6	.96	1.3	1.0	1.6	4.1	30	17	7.2	2.4
10	1.8	2.0	1.8	.96	1.4	1.1	1.5	4.5	28	16	6.3	2.6
11	2.1	2.0	1.8	1.1	1.4	1.1	1.6	4.1	27	15	5.0	2.6
12	2.0	2.0	1.8	1.2	1.4	1.1	1.8	3.2	27	14	4.8	4.1
13	2.0	2.0	1.8	1.2	1.4	1.1	1.4	3.0	28	13	4.5	2.8
14	2.0	2.0	1.8	1.2	1.4	1.1	1.5	2.7	28	12	4.1	2.7
15	2.0	2.0	1.6	1.2	1.4	1.1	1.6	2.8	27	13	3.9	2.7
16	2.1	2.1	1.5	1.3	1.3	1.3	1.8	3.4	28	14	3.7	2.8
17	2.0	2.1	1.6	1.3	1.3	1.4	1.5	4.1	28	12	3.2	3.0
18	2.1	2.1	1.6	1.3	1.3	1.4	1.6	5.2	35	11	2.8	3.9
19	2.2	2.1	1.6	1.3	1.3	1.3	2.2	6.0	39	11	2.8	5.2
20	2.2	2.2	1.6	1.3	1.3	1.2	2.1	5.8	46	9.6	2.7	4.1
21	2.2	2.2	1.5	1.3	1.2	1.2	1.8	6.0	54	8.8	2.6	3.7
22	1.8	2.2	1.4	1.3	1.2	1.3	1.6	8.4	46	8.4	2.6	3.4
23	2.1	2.2	1.2	1.3	1.2	1.2	1.8	12	44	8.0	2.7	3.0
24	2.1	1.8	1.2	1.3	1.1	1.3	1.6	15	39	7.7	2.4	2.7
25	2.1	1.5	1.2	1.3	1.1	1.2	1.8	18	35	8.0	2.4	2.8
26	2.1	1.8	1.2	1.4	1.1	1.2	1.8	21	36	6.9	2.6	4.3
27	2.1	1.6	1.1	1.4	1.1	1.2	2.0	17	35	6.6	2.4	3.9
28	2.1	2.1	1.1	1.4	1.1	1.3	2.4	18	35	6.0	3.2	3.0
29	2.0	2.1	.96	1.4	-	1.8	2.6	19	31	5.8	3.4	2.8
30	2.0	2.0	.96	1.4	- - - -	1.5	2.8	19	28	5.8	3.2	2.7
31	2.0	- - - -	.96	1.4	- - - -	1.4	- - - -	17	- - - -	6.0	3.7	- - - -
Total	66.6	58.5	47.28	37.54	36.4	37.2	51.6	235.6	990	411.6	125.3	91.0
Mean	2.15	1.95	1.53	1.21	1.30	1.20	1.72	7.60	33.0	13.3	4.04	3.03
Max	3.4	2.2	2.0	1.4	1.4	1.8	2.8	21	54	26	7.2	5.2
Min	1.8	1.2	0.96	0.96	1.1	1.0	1.4	1.6	18	5.8	2.4	2.2
Ac-ft	132	116	94	74	72	74	102	467	1,960	816	249	180

Cal yr 1966: Total 1,451.98 Mean 3.98 Max 22 Min 0.96 Ac-ft 2,880
 Wtr yr 1967: Total 2,188.62 Mean 6.00 Max 54 Min 0.96 Ac-ft 4,340

Peak discharge (base, 40 cfs).--June 6 (2230) 58 cfs (1.27 ft); June 21 (0415) 84 cfs (1.46 ft).

6-7486. South Fork Cache la Poudre River near Rustic, Colo.

Location.--Lat 40°38'30", long 105°29'30", in SW¼ sec.20, T.8 N., R.72 W., on left bank 5.7 miles upstream from mouth, 6 miles south-east of Rustic, and 22 miles west of Fort Collins.

Drainage area.--90.3 sq mi.

Records available.--August 1956 to September 1967.

Gage.--Water-stage recorder. Datum of gage is 7,596.86 ft above mean sea level (Bureau of Reclamation bench mark).

Average discharge.--11 years, 61.1 cfs (44,230 acre-ft per year).

Extremes.--Maximum discharge during year, 363 cfs June 22 (gage height, 3.43 ft); minimum daily, 3.6 cfs Jan. 8.

1956-67: Maximum discharge, 1,260 cfs June 17, 1965 (gage height, 5.05 ft), from rating curve extended above 780 cfs; minimum not determined.

Remarks.--Records good except those for winter period, which are poor. No diversion above station. Slight regulation by small reservoirs and lakes.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	20	12	8.2	4.9	6.0	5.8	10	17	108	262	77	46
2	19	16	8.2	4.6	6.0	5.8	11	15	106	224	75	37
3	29	17	8.2	4.6	6.0	6.0	11	15	140	218	75	35
4	24	13	9.6	4.6	6.0	6.2	12	14	149	185	72	33
5	22	15	9.2	4.4	6.0	6.0	14	14	179	152	69	32
6	22	13	8.6	4.4	5.8	6.0	12	14	209	165	69	31
7	22	13	8.4	4.0	5.8	5.8	11	14	185	191	78	29
8	21	10	8.8	3.6	5.4	5.8	12	16	165	197	100	31
9	21	9.0	8.4	3.8	5.2	5.8	12	19	149	173	119	30
10	19	12	8.0	4.0	6.0	6.1	12	25	142	157	131	31
11	19	11	8.2	4.4	6.0	6.2	12	29	134	154	125	30
12	19	11	8.2	4.7	6.0	6.4	13	24	131	147	119	40
13	19	12	8.2	4.7	6.0	6.7	14	23	134	138	112	34
14	19	12	8.0	4.8	6.0	7.0	16	21	131	129	104	31
15	18	12	7.6	5.0	6.0	7.2	14	19	134	127	100	29
16	19	12	7.0	5.2	5.6	7.7	15	19	136	129	106	29
17	19	12	7.0	5.0	5.6	8.1	12	20	138	134	92	32
18	18	11	7.2	5.0	5.6	9.2	14	29	138	138	45	33
19	19	10	7.2	5.0	5.6	9.7	16	38	160	129	41	45
20	19	10	7.2	5.2	5.6	9.2	17	43	188	121	37	40
21	17	9.9	6.8	5.4	5.4	8.6	16	44	304	119	37	38
22	16	9.6	6.0	5.4	5.2	8.4	15	55	318	112	36	36
23	17	9.0	5.8	5.4	5.0	8.4	14	100	314	112	35	34
24	16	8.0	5.2	5.4	4.9	8.6	14	140	290	115	34	33
25	16	7.0	5.6	5.4	4.8	8.6	14	162	265	129	34	34
26	14	8.0	5.6	5.0	4.8	8.8	14	206	258	121	35	42
27	17	7.6	5.6	5.2	4.8	9.0	16	170	258	108	35	41
28	16	9.0	5.4	5.6	5.3	9.2	17	147	279	100	36	36
29	14	9.0	5.4	5.8	-	9.4	18	154	300	81	43	34
30	14	8.4	5.2	5.8	- - - - -	10	21	149	290	78	45	32
31	14	- - - - -	5.2	5.8	- - - - -	11	- - - - -	127	- - - - -	78	48	- - - - -
Total	578	328.5	223.2	152.1	156.4	236.7	419	1,882	5,832	4,423	2,164	1,038
Mean	18.6	11.0	7.20	4.91	5.59	7.64	14.0	60.7	194	143	69.8	34.6
Max	29	17	9.6	5.8	6.0	11	21	206	318	262	131	46
Min	14	7.0	5.2	3.6	4.8	5.8	10	14	106	78	34	29
Ac-ft	1,150	652	443	302	310	469	831	3,730	11,570	8,770	4,290	2,060

Cal yr 1966: Total 12,629.1 Mean 34.6 Max 194 Min 5.2 Ac-ft 25,050
 Wtr yr 1967: Total 17,432.9 Mean 47.8 Max 318 Min 3.6 Ac-ft 34,580

Peak discharge (base, 250 cfs).--June 22 (1130) 363 cfs (3.43 ft).

Note.--No gage-height record Dec. 13 to Apr. 4.

PLATTE RIVER BASIN

Transbasin diversions from North Platte River basin to
Cache la Poudre River basin in Colorado

The following seven diversions, which are equipped with water-stage recorders, divert water from tributaries of the North Platte River to the Cache la Poudre River or its tributaries. Records furnished by State engineer.

6-7455. Cameron Pass ditch diverts water from tributaries of Michigan River in sec.10, T.6 N., R.76 W., to Joe Wright Creek (tributary to Cache la Poudre River) in sec.2, T.6 N., R.76 W.

6-7460. Michigan ditch diverts water from Michigan River, headgate in sec.12, T.6 N., R.76 W., and many small tributaries and Agnes Creek (tributary to Michigan River), headgate in sec.15, T.6 N., R.76 W., to Joe Wright Creek (tributary to Cache la Poudre River) in sec.2, T.6 N., R.76 W.

6-7465. Skyline ditch diverts water from West Branch Laramie River (tributary to Laramie River), headgate in sec.14, T.8 N., R.76 W., to Chambers Lake (tributary to Cache la Poudre River) in sec.31, T.8 N., R.75 W.

6-7470. Laramie-Poudre tunnel diverts water from Laramie River in sec.7, T.8 N., R.75 W., and Rawah Creek (tributary to Laramie River) in sec.14, T.9 N., R.76 W., to Cache la Poudre River in sec.9, T.8 N., R.75 W.

6-7472. Bob Creek ditch diverts water from Nunn Creek (tributary to Laramie River) in sec.9, T.9 N., R.75 W., to Roaring Creek (tributary to Cache la Poudre River) in sec.11, T.9 N., R.75 W.

6-7500. Columbine ditch diverts water from Nunn Creek (tributary to Laramie River) in sec.3, T.9 N., R.75 W., to North Fork Cache la Poudre River (tributary to Cache la Poudre River) in sec.25, T.10 N., R.75 W.

6-7505. Wilson supply ditch diverts water from Sand Creek in sec.22, T.11 N., R.75 W., and at times includes water diverted from tributaries of Deadman Creek in sec.9, T.10 N., R.75 W. Diversion is from the Laramie River basin to Sheep Creek (tributary to North Fork Cache la Poudre River) in sec.13, T.11 N., R.75 W., in the Cache la Poudre River basin. Records herein represent total flow diverted from the Laramie River basin by Wilson supply ditch.

Diversions, in acre-feet, water year October 1966 to September 1967

Month	6-7455 Cameron Pass ditch	6-7460 Michigan ditch	6-7465 Skyline ditch	6-7470 Laramie- Poudre tunnel	6-7472 Bob Creek ditch	6-7500 Columbine ditch	6-7505 Wilson supply ditch	Total
October.....	0	0	0	0	0	0	0	0
November.....	0	0	0	0	0	0	0	0
December.....	0	0	0	0	0	0	0	0
January.....	0	0	0	0	0	0	0	0
February.....	0	0	0	0	0	0	0	0
March.....	0	0	0	0	0	0	0	0
April.....	0	0	0	0	0	0	0	0
May.....	0	0	530	2,520	0	0	986	4,040
June.....	0	0	968	2,540	0	0	1,410	4,920
July.....	0	0	0	1,710	0	0	0	1,710
August.....	0	0	0	2,760	0	0	0	2,760
September.....	0	0	0	1,210	0	0	0	1,210
Water year 1966-67.....	0	0	1,500	10,740	0	0	2,390	14,630

6-7520. Cache la Poudre River at mouth of canyon, near Fort Collins, Colo.

Location.--Lat 40°39'52", long 105°13'26", in NW¼ sec.15, T.8 N., R.70 W., on left bank at mouth of canyon, 0.5 mile downstream from headgate of Poudre Valley Canal, 1.2 miles upstream from Lewstone Creek, and 9.3 miles northwest of court house in Fort Collins.

Drainage area.--1,055 sq mi.

Records available.--June to August 1881, May to July 1883, October 1883 to September 1967. Monthly discharge only for some periods, published in WSP 1310. Records for Mar. 23 to Apr. 30 and July 4 to Aug. 20, 1883, published in WSP 9, have been found to be unreliable and should not be used. Prior to 1902, published as Cache la Poudre Creek or River at or near Fort Collins.

Gage.--Water-stage recorder. Altitude of gage is 5,220 ft (from topographic map).

Extremes.--Maximum discharge during year, 2,210 cfs June 23 (gage height, 4.63 ft); minimum daily, 7.1 cfs Nov. 27, 28. 1881, 1883-1967: Maximum discharge not determined, occurred May 20, 1904; maximum discharge determined, 21,000 cfs June 9, 1891 (from reports of State Engineer of Colorado), caused by failure of Chambers Lake Dam; minimum daily discharge, 1.6 cfs Nov. 20, 28, 1948, caused by diversion of Poudre Valley Canal half a mile upstream.

Remarks.--Records good except those for winter period, which are poor. Natural flow of stream affected by transbasin and transmountain diversions (see elsewhere in this report), diversions above station for irrigation of about 50,000 acres, most of which is below station (98,790 acre-ft in water year 1967), and diversions for municipal use (7,590 acre-ft in water year 1967).

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	71	66				17	14	57	1,120	1,100	270	182
2	71	46				17	24	44	1,020	1,120	234	178
3	76	21				16	18	51	1,070	1,070	230	96
4	75	22				17	18	46	1,260	1,100	160	47
5	50	26				14	25	47	1,470	1,080	88	47
6	55	26				11	35	50	1,540	840	82	39
7	57	25				10	36	44	1,510	928	86	24
8	61	24				14	24	40	1,540	928	90	19
9	54	24				19	22	45	1,500	808	117	24
10	54	20				14	37	76	1,420	736	157	34
11	46	19				16	29	108	1,390	808	144	55
12	45	18				17	22	120	1,020	816	103	73
13	47	19				17	36	125	896	744	96	133
14	47	22			10	18	44	117	880	744	68	139
15	53	25				17	36	100	1,010	612	70	130
16	44	37	13	12		16	39	92	896	605	64	125
17	54	30				19	40	94	976	591	33	112
18	50	28				23	32	144	960	656	35	63
19	50	28				25	32	248	1,020	612	263	147
20	39	24				23	27	300	1,030	538	240	108
21	38	27				19	36	330	1,510	404	142	66
22	35	26				18	40	428	1,810	428	144	32
23	26	26				16	36	720	1,930	544	150	25
24	33	26				18	36	984	1,800	612	147	27
25	35	22				20	36	1,190	1,540	626	84	25
26	29	13				22	40	1,390	1,350	626	13	26
27	26	7.1				22	25	1,100	1,180	544	8.4	24
28	25	7.1			16	20	23	1,130	1,170	472	19	19
29	25	12			-	19	34	1,340	1,290	428	21	17
30	26	12			- - - - -	18	42	1,380	1,140	398	83	71
31	38	- - - - -			- - - - -	20	- - - - -	1,320	- - - - -	358	164	- - - - -
Total	1,435	728.2	403	372	286	552	938	13,260	38,248	21,876	3,605.4	2,107
Mean	46.3	24.3	13	12	10.2	17.8	31.3	428	1,275	706	116	70.2
Max	76	66	-	-	-	25	44	1,390	1,930	1,120	270	182
Min	25	7.1	-	-	-	10	14	40	880	358	8.4	17
Ac-ft	2,850	1,440	799	738	567	1,090	1,860	26,300	75,860	43,390	7,150	4,180
Cal yr 1966: Total	48,904.2		Mean 134		Max 1,030	Min 7.1	Ac-ft 97,000					
Wtr yr 1967: Total	83,810.6		Mean 230		Max 1,930	Min 7.1	Ac-ft 166,200					

Note.--No gage-height record Dec. 1 to Feb. 28.

PLATTE RIVER BASIN

6-7525. Cache la Poudre River near Greeley, Colo.

Location.--Lat 40°25'04", long 104°38'22", in NW¼ sec.11, T.5 N., R.65 W., on right bank 25 ft downstream from highway bridge, 3 miles east of courthouse in Greeley, and 3 miles upstream from mouth.

Drainage area.--1,877 sq mi.

Records available.--March to October 1903, August to November 1904, January 1914 to December 1919, June 1924 to September 1967. Monthly discharge only for some periods, published in WSP 1310.

Gage.--Water-stage recorder. Altitude of gage is 4,610 ft (from topographic map). Prior to Apr. 4, 1916, staff gage and Apr. 4, 1916, to Dec. 17, 1919, water-stage recorder, at sites within 2 miles downstream at different datums. May 27, 1924, to Dec. 13, 1933, at present site at datum 0.51 ft higher.

Average discharge.--48 years (1914-19, 1924-67), 96.7 cfs (70,010 acre-ft per year).

Extremes.--Maximum discharge during year, 2,040 cfs June 24 (gage height, 7.13 ft); minimum daily, 7.0 cfs Oct. 11. 1903-4, 1914-19, 1924-67: Maximum daily discharge, 4,220 cfs June 24, 26, 1917; minimum daily, 0.8 cfs Oct. 3, 1946.

Remarks.--Records good. Natural flow of stream affected by transmountain and transbasin diversions, storage reservoirs, power developments, diversion for municipal supply, diversions above station for irrigation of about 250,000 acres, and return flow from irrigated areas.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	12	66	83	70	58	58	59	38	202	925	31	63
2	15	64	79	72	55	57	60	24	139	826	27	51
3	13	62	80	66	55	57	59	26	112	754	25	45
4	9.5	62	81	76	55	59	43	26	99	601	27	39
5	18	63	83	76	55	60	45	28	104	605	21	38
6	12	62	79	67	54	60	42	32	132	459	19	44
7	11	53	79	57	55	63	24	25	165	270	21	44
8	10	47	79	65	49	60	15	21	105	403	34	45
9	9.5	51	76	67	57	70	15	16	98	332	40	47
10	7.8	51	76	67	60	67	26	12	93	234	44	45
11	7.0	49	76	63	59	63	40	10	98	154	33	48
12	12	48	77	63	58	62	23	12	113	161	32	54
13	25	48	76	62	59	60	54	19	116	115	31	53
14	54	53	76	60	59	62	222	36	81	69	27	58
15	54	57	76	60	58	60	98	32	88	58	28	48
16	51	57	76	62	58	62	55	37	77	72	26	47
17	52	58	74	59	58	62	37	30	206	79	27	46
18	55	57	74	62	54	62	28	25	599	104	36	49
19	84	53	77	57	60	62	21	21	681	136	59	53
20	102	52	77	60	62	66	18	21	710	108	39	48
21	97	76	79	63	57	69	21	21	865	74	32	43
22	82	86	77	62	53	63	19	16	1,370	51	22	46
23	84	86	73	65	55	63	23	12	1,700	31	23	44
24	82	83	69	60	55	65	24	11	1,950	28	24	35
25	80	86	72	59	59	58	58	12	1,850	21	26	34
26	82	86	72	57	59	59	59	20	1,620	22	25	43
27	84	83	73	58	60	62	49	34	1,430	23	27	40
28	80	84	70	60	59	62	52	39	1,150	25	23	32
29	80	84	70	57	-	60	45	45	1,060	22	28	35
30	70	84	70	58	- - - - -	59	49	84	1,120	21	43	43
31	64	- - - - -	70	58	- - - - -	58	- - - - -	228	- - - - -	22	60	- - - - -
Total	1,498.8	1,951	2,349	1,948	1,595	1,910	1,383	1,013	18,133	6,805	960	1,360
Mean	48.3	65.0	75.8	62.8	57.0	61.6	46.1	32.7	604	220	31.0	45.3
Max	102	86	83	76	62	70	222	228	1,950	925	60	63
Min	7.0	47	69	57	49	57	15	10	77	21	19	32
Ac-ft	2,970	3,870	4,660	3,860	3,160	3,790	2,740	2,010	35,970	13,500	1,900	2,700
Cal yr 1966: Total	22,468.4			Mean 61.6	Max 327	Min 7.0	Ac-ft 44,570					
Wtr yr 1967: Total	40,905.8			Mean 112	Max 1,950	Min 7.0	Ac-ft 81,140					

6-7540. South Platte River near Kersey, Colo.

Location.--Lat 40°24'44", long 104°33'46", in NW¼SW¼ sec.9, T.5 N., R.64 W., on downstream side of bridge on State Highway 37, 1.9 miles north of railroad in Kersey, and 2½ miles downstream from Cache la Poudre River.

Drainage area.--9,598 sq mi.

Records available.--May 1901 to December 1903, March 1905 to September 1967. Monthly discharge only for some periods, published in WSP 1310. Published as "at Kersey" 1901-3.

Gage.--Water-stage recorder since July 8, 1919. Datum of gage is 4,575.77 ft above mean sea level, datum of 1929. Prior to July 8, 1919, staff or chain gages at former bridge 150 ft downstream at different datum. July 8, 1919, to Sept. 7, 1921, at site 450 ft downstream from present site at different datum. Sept. 8, 1921, to Sept. 12, 1923, at site 750 ft downstream from present site at different datum. Sept. 13, 1923, to July 2, 1935, at site 200 ft downstream from present site at present datum.

Average discharge.--64 years, 726 cfs (525,600 acre-ft per year).

Extremes.--Maximum discharge during year, 6,630 cfs June 22 (gage height, 6.75 ft); minimum daily, 82 cfs May 26.

1901-3, 1905-67: Maximum daily discharge, 31,000 cfs June 7, 1921, from rating curve extended above 17,000 cfs by logarithmic plotting; minimum daily, 28 cfs Apr. 30, 1955.

Remarks.--Records good. Natural flow of stream affected by transmountain and transbasin diversions, storage reservoirs, power developments, ground-water withdrawals and diversions for irrigation of about 888,000 acres, and return flow from irrigated areas. Records of chemical analyses for the water year 1967 are published in Part 2 of this report.

Discharge, in cubic feet per-second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	204	416	540	444	534	488	255	194	1,810	3,230	153	1,090
2	231	416	534	465	522	482	235	174	1,460	2,920	150	707
3	231	411	534	485	510	482	223	165	904	3,000	162	570
4	227	385	540	505	510	488	162	159	667	2,730	159	504
5	247	355	552	534	504	510	145	156	488	3,230	159	422
6	247	350	552	528	499	504	132	187	576	2,370	150	350
7	204	365	590	522	488	504	120	433	735	1,450	156	291
8	204	365	583	522	494	510	102	320	616	2,350	165	296
9	201	370	552	522	494	516	86	187	590	4,090	180	273
10	194	390	528	522	499	522	96	130	735	3,230	187	264
11	198	395	528	528	499	494	98	105	1,280	1,870	180	264
12	198	428	522	528	494	477	84	102	1,210	3,420	187	260
13	204	488	516	546	488	455	131	112	1,150	3,500	184	278
14	231	540	522	546	488	433	2,300	142	994	2,320	208	291
15	406	576	522	546	494	433	2,180	148	1,040	1,920	231	305
16	609	534	522	546	488	433	846	187	1,630	3,480	264	300
17	540	540	534	546	482	428	499	162	2,820	3,120	268	335
18	494	546	510	540	477	433	330	140	2,590	2,280	278	385
19	616	528	510	540	494	450	227	122	2,210	2,160	325	411
20	609	499	510	540	494	450	171	132	2,300	2,500	291	411
21	583	504	516	576	482	450	159	130	3,270	1,720	291	406
22	552	499	558	583	477	450	145	120	6,400	1,210	291	385
23	552	510	540	590	472	455	140	105	5,640	818	286	345
24	546	516	528	558	460	450	150	96	5,710	576	291	315
25	540	522	510	558	477	444	174	88	5,230	390	291	305
26	540	504	499	532	482	444	296	82	4,620	444	291	305
27	534	499	494	504	482	422	286	351	4,180	255	300	345
28	522	499	494	522	477	385	255	786	3,500	208	305	472
29	455	510	494	546	-	390	215	390	3,820	171	305	444
30	422	534	482	546	- - - -	340	198	366	3,960	153	350	411
31	411	- - - -	472	528	- - - -	310	- - - -	1,290	- - - -	150	790	- - - -
Total	11,952	13,994	16,288	16,498	13,761	14,032	10,440	7,261	72,135	61,265	7,828	11,740
Mean	386	466	525	532	491	453	348	234	2,404	1,976	253	391
Max	616	576	590	590	534	522	2,300	1,290	6,400	4,090	790	1,090
Min	194	350	472	444	460	310	84	82	488	150	150	260
Ac-ft	23,710	27,760	32,310	32,720	27,290	27,830	20,710	14,400	143,100	121,500	15,530	23,290

Cal yr 1966: Total 128,801 Mean 353 Max 1,480 Min 52 Ac-ft 255,500

Wtr yr 1967: Total 257,194 Mean 705 Max 6,400 Min 82 Ac-ft 510,100

6-7585. South Platte River near Weldona, Colo.

Location.--Lat 40°19'20", long 103°55'15", in SW¼SW¼ sec.7, T.4 N., R.58 W., on left bank 400 ft downstream from bridge on State Highway 144, 2.8 miles southeast of Weldona, and 4.2 miles upstream from Bijou Creek.

Drainage area.--13,245 sq mi.

Records available.--October 1952 to September 1967.

Gage.--Water-stage recorder. Datum of gage is 4,307.80 ft above mean sea level, datum of 1929.

Average discharge.--15 years, 432 cfs (312,800 acre-ft per year).

Extremes.--Maximum discharge during year, 3,540 cfs June 26 (gage height, 6.44 ft); minimum daily, 56 cfs Sept. 6.
1952-67: Maximum discharge, 18,800 cfs June 19, 1965 (gage height, 10.33 ft); from rating curve extended above 6,300 cfs; minimum daily, 43 cfs Dec. 9, 1952.

Remarks.--Records good. Natural flow of stream affected by transmountain and transbasin diversions, storage reservoirs, power developments, ground-water withdrawals and diversions for irrigation, and return flow from irrigated areas.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	187	119	95	165	215	206	236	136	206	2,710	206	498
2	190	116	95	165	215	206	240	136	219	2,180	187	525
3	211	116	95	160	215	202	232	136	142	2,130	198	365
4	236	119	98	165	206	198	179	132	154	2,090	198	300
5	240	122	98	165	202	198	101	128	190	1,920	190	217
6	255	122	107	160	202	202	57	156	168	1,960	190	56
7	202	122	113	170	206	202	125	142	156	1,470	175	114
8	179	125	132	170	215	202	107	245	150	1,030	168	202
9	142	125	92	175	223	206	119	206	146	1,530	175	198
10	122	125	92	190	232	183	260	150	171	2,120	227	211
11	132	125	85	235	240	156	290	95	236	1,500	250	227
12	119	128	85	245	240	150	270	107	240	1,190	245	190
13	119	125	82	245	240	142	175	125	164	1,840	270	175
14	132	119	80	260	245	136	183	128	153	1,580	270	136
15	179	119	80	232	236	82	924	132	194	1,150	280	85
16	227	125	78	206	240	80	1,020	160	223	1,050	305	78
17	370	116	92	194	240	92	603	146	329	1,520	275	68
18	380	104	110	185	236	101	300	116	808	1,280	300	68
19	370	98	113	190	217	101	139	107	954	986	285	95
20	380	95	113	190	223	104	88	113	922	898	295	168
21	325	95	113	153	219	107	150	101	1,100	852	280	179
22	245	95	113	153	219	113	142	107	1,770	621	240	187
23	223	98	110	156	215	219	146	57	3,000	395	202	175
24	223	101	116	139	215	245	132	57	3,230	260	219	150
25	187	104	125	128	219	211	125	57	3,430	330	219	116
26	160	101	128	194	211	215	128	95	3,470	227	280	110
27	146	95	142	198	206	183	168	142	3,230	211	295	110
28	136	95	156	202	206	146	194	142	2,920	280	300	122
29	128	95	142	206	-	136	183	223	2,520	227	300	187
30	125	98	145	215	- - - -	104	156	187	2,650	187	315	198
31	125	- - - -	155	219	- - - -	128	- - - -	245	- - - -	190	355	- - - -
Total	6,395	3,342	3,380	5,830	6,198	4,956	7,172	4,209	33,245	35,914	7,694	5,510
Mean	206	111	109	188	221	160	239	136	1,108	1,159	248	184
Max	380	128	156	260	245	245	1,020	245	3,470	2,710	355	525
Min	119	95	78	128	202	80	57	57	142	187	168	56
Ac-ft	12,680	6,630	6,700	11,560	12,290	9,830	14,230	8,350	65,940	71,230	15,260	10,930
Cal yr	1966: Total	90,363	Mean	248	Max	815	Min	44	Ac-ft	179,200		
Wtr yr	1967: Total	123,845	Mean	339	Max	3,470	Min	56	Ac-ft	245,600		

6-7600. South Platte River at Balzac, Colo.

Location.--Lat 40°24'24", long 103°27'58", in NE¼NE¼ sec.13, T.5 N., R.55 W., on right bank just upstream from highway bridge on Balzac siding, 2.8 miles northeast of Union and 7.0 miles downstream from Beaver Creek.

Drainage area.--16,852 sq mi.

Records available.--October 1916 to September 1967. Prior to October 1933 monthly discharge only, published in WSP 1310.

Gage.--Water-stage recorder. Datum of gage is 4,091.06 ft above mean sea level, datum of 1929. Prior to Oct. 18, 1935, chain gage or water-stage recorder at various sites near present site at different datums. Oct. 18 to Dec. 16, 1935, staff gage and Dec. 17, 1935, to Aug. 20, 1947, water-stage recorder, at site 250 ft upstream at present datum. Since Oct. 1, 1936, supplementary water-stage recorder on secondary channel 600 ft to the left at datum 1.69 ft lower.

Average discharge.--51 years, 361 cfs (261,400 acre-ft per year).

Extremes.--Maximum discharge during year, 4,660 cfs May 31; minimum daily, 5.6 cfs Oct. 28, 29.

1916-67: Maximum discharge, 123,000 cfs June 18, 1965 (gage height, 13.32 ft), from rating curve extended above 6,400 cfs on basis of contracted-opening measurement of peak flow; minimum daily, 1.3 cfs Jan. 25, 1947.

Remarks.--Records fair. Natural flow of stream affected by transmountain and transbasin diversions, storage reservoirs, power developments, ground-water withdrawals, diversions above station for irrigation of about 1,065,000 acres, and return flow from irrigated areas. Records of chemical analyses for water year 1967 are published in Part 2 of this report.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	103	7.2	9.6	18	10	8.1	253	100	2,460	2,300	206	228
2	113	6.9	9.6	17	10	7.9	337	93	698	1,930	201	189
3	122	6.4	9.6	17	10	8.1	305	95	502	1,660	165	122
4	149	6.9	10	13	9.6	7.7	215	93	469	1,720	147	90
5	123	7.1	9.6	14	9.6	8.4	163	93	443	2,190	130	85
6	51	6.8	10	17	11	8.8	133	107	395	2,260	122	81
7	51	7.2	12	17	9.2	12	100	118	262	1,870	117	77
8	40	6.8	12	18	9.6	12	130	110	163	1,450	91	100
9	31	7.7	9.6	13	9.2	9.7	115	121	136	1,470	80	157
10	28	7.2	8.6	14	8.3	9.2	140	124	527	1,910	103	179
11	33	7.2	7.4	16	8.3	8.8	217	110	473	1,910	97	192
12	32	7.6	8.2	16	8.3	9.7	252	94	83	1,850	87	201
13	40	7.2	8.0	15	8.3	10	267	92	77	1,930	94	127
14	38	7.2	7.5	14	8.3	10	248	105	51	1,820	120	63
15	52	8.0	7.5	13	9.6	9.2	220	116	27	1,380	118	46
16	30	8.0	8.0	11	9.6	8.1	949	118	108	1,040	99	35
17	36	9.2	8.4	11	9.2	8.5	683	144	302	966	106	32
18	63	8.4	8.0	12	9.2	8.7	339	146	216	1,150	103	28
19	22	9.2	8.4	12	8.8	8.7	150	142	707	752	120	27
20	18	9.2	8.4	11	8.3	8.7	100	115	570	503	114	29
21	16	9.7	8.8	13	8.8	8.7	83	12	533	409	123	39
22	9.4	9.7	8.8	13	9.2	8.7	86	8.9	702	336	127	34
23	6.4	8.4	9.8	13	9.2	13	89	8.0	1,900	223	116	37
24	5.9	8.1	10	11	8.8	39	115	8.7	2,550	154	108	61
25	6.8	8.9	13	10	8.8	30	118	46	2,530	153	102	101
26	6.4	8.8	13	10	8.3	29	102	103	2,620	125	103	159
27	6.6	9.6	10	10	8.3	171	98	39	2,610	102	124	165
28	5.6	9.2	9.6	10	8.1	223	106	22	2,500	100	144	164
29	5.6	9.6	9.0	10	-	199	112	34	2,720	174	165	174
30	5.8	9.6	6.8	10	- - - - -	185	100	581	2,430	205	202	210
31	7.2	- - - - -	7.7	10	- - - - -	211	- - - - -	2,640	- - - - -	207	234	- - - - -
Total	1,256.7	243.0	286.9	409	253.9	1,299.7	6,325	5,738.6	29,764	34,249	3,968	3,232
Mean	40.5	8.10	9.25	13.2	9.07	41.9	211	185	992	1,105	128	108
Max	149	9.7	13	18	11	223	949	2,640	2,720	2,300	234	228
Min	5.6	6.4	6.8	10	8.1	7.7	83	8.0	27	100	80	27
Ac-ft	2,490	482	569	811	504	2,580	12,550	11,380	59,040	67,930	7,870	6,410
Cal yr 1966: Total	73,712.6		Mean	202	Max	1,600	Min	5.6	Ac-ft	146,200		
Wtr yr 1967: Total	87,025.8		Mean	238	Max	2,720	Min	5.6	Ac-ft	172,600		

6-7640. South Platte River at Julesburg, Colo.

Location.--Lat 40°58'46", long 102°15'15", in NW¼NE¼ and SE¼NE¼ (two channels) sec.33, T.12 N., R.44 W., on left bank of channel no. 4 (left channel) 215 ft downstream from bridge, and on right bank of channel no. 2 800 ft downstream from bridge, on U. S. Highway 385, 0.9 mile southeast of Julesburg, 3 miles upstream from Colorado-Nebraska State line, and 8 miles downstream from Lodgepole Creek.

Drainage area.--23,138 sq mi.

Records available.--April 1902 to September 1967. Monthly discharge only for some periods, published in WSP 1310. Published as "near Julesburg" 1903-8, 1915-16 and as "at Ovid" 1922-24.

Gage.--Two water-stage recorders. Datum of gages is 3,446.76 ft above mean sea level, datum of 1929. Apr. 1, 1902, to May 10, 1922, and Oct. 1, 1924, to Sept. 30, 1956, staff gages, chain gages, or water-stage recorders on four to six channels at several sites within 1,800 ft of present sites at various datums. May 11, 1922, to Sept. 30, 1924, water-stage recorder and supplemental chain gages at site about 8½ miles upstream at Ovid at different datum. Since Oct. 1, 1956, water-stage recorders on channels nos. 2 and 4. Channel no. 2: Oct. 1, 1956, to Sept. 22, 1965, at site 300 ft downstream at present datum. Channel no. 4: Oct. 1, 1956, to Dec. 10, 1958, at site 135 ft downstream at present datum.

Average discharge.--65 years, 458 cfs (331,600 acre-ft per year).

Extremes.--Maximum discharge during year, 3,060 cfs July 1; minimum daily, 28 cfs Aug. 23, 25.

1902-67: Maximum discharge, 37,600 cfs June 20, 1965 (gage height, 10.44 ft, from floodmark in gage well); no flow Aug. 18-20, 1902, July 25 to Aug. 7, 1903.

Remarks.--Records good. Natural flow of stream affected by transmountain diversions, storage reservoirs, power developments, ground-water withdrawals, diversions for irrigation of about 1,220,000 acres above station, and return flow from irrigated areas. Records of chemical analyses and water temperatures for the water year 1967 are published in Part 2 of this report.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	173	121	245	188	250	165	64	57	432	2,910	96	35
2	173	121	248	211	249	139	63	61	1,670	2,840	87	33
3	175	117	250	220	247	126	62	54	2,050	2,620	82	32
4	192	118	251	223	245	122	62	64	1,170	2,350	75	33
5	185	122	270	225	249	121	42	67	1,240	2,200	66	34
6	161	123	270	256	239	121	45	82	1,020	2,360	75	32
7	156	121	276	238	239	115	42	73	839	2,480	76	31
8	143	121	260	197	228	121	41	53	833	2,350	78	32
9	142	116	254	178	228	169	41	45	1,620	2,090	62	39
10	147	120	241	174	233	158	40	46	1,090	1,710	56	43
11	141	135	250	200	233	150	36	48	964	1,670	50	44
12	141	133	256	230	228	144	40	44	1,270	2,150	47	43
13	139	130	257	252	230	148	43	49	1,270	1,900	48	40
14	150	142	263	272	232	147	38	62	1,280	1,970	47	36
15	143	201	258	278	227	147	33	68	999	2,050	46	36
16	141	221	255	278	223	155	32	56	979	1,870	43	35
17	140	237	255	252	227	154	31	42	824	1,520	38	37
18	134	230	251	224	227	150	30	48	967	1,300	38	38
19	131	239	252	201	237	147	30	45	1,680	1,200	33	42
20	136	246	251	198	231	145	30	68	1,120	1,050	33	55
21	125	253	246	214	226	145	31	82	895	769	33	60
22	114	253	246	258	216	143	31	77	1,690	524	31	49
23	116	260	230	289	216	137	32	82	1,980	379	28	41
24	116	257	195	278	214	124	35	89	1,670	263	29	41
25	117	261	185	268	223	127	42	89	2,240	184	28	42
26	119	261	180	249	212	117	49	92	2,630	155	29	40
27	114	253	164	247	210	105	46	114	2,730	135	29	40
28	111	251	134	270	199	115	46	140	2,880	132	29	39
29	109	256	124	260	-	101	40	198	2,900	126	29	43
30	112	254	129	253	- - - - -	79	41	223	2,840	113	29	51
31	118	- - - - -	148	252	- - - - -	69	- - - - -	251	- - - - -	101	35	- - - - -
Total	4,314	5,673	7,094	7,333	6,418	4,106	1,238	2,569	45,772	43,471	1,505	1,196
Mean	139	189	229	237	229	132	41.3	82.9	1,526	1,402	48.5	39.9
Max	192	261	276	289	250	169	64	251	2,900	2,910	96	60
Min	109	116	124	174	199	69	30	42	432	101	28	31
Ac-ft	8,560	11,250	14,070	14,540	12,730	8,140	2,460	5,100	90,790	86,220	2,990	2,370
Cal yr 1966: Total	111,542		Mean	306	Max	1,180	Min	26	Ac-ft	221,200.		
Wtr yr 1967: Total	130,689		Mean	358	Max	2,910	Min	28	Ac-ft	259,200		

6-8250. South Fork Republican River near Idalia, Colo.

Location.--Lat 39°37'00", long 102°14'30", in SE¼SW¼ sec.13, T.5 S., R.44 W., on left bank 0.7 mile east of U. S. Highway 385, 1½ miles upstream from Landsman Creek, 4 miles upstream from Bonny Dam, and 6½ miles southeast of Idalia.

Drainage area.--1,300 sq mi, approximately.

Records available.--May 1950 to September 1967.

Gage.--Water-stage recorder. Prior to Aug. 10, 1951, at site 4 miles upstream at different datum. Aug. 10, 1951, to Sept. 30, 1955, at site 2½ miles upstream at different datum.

Average discharge.--17 years, 32.8 cfs (23,750 acre-ft per year).

Extremes.--Maximum discharge during year, 3,030 cfs June 10 (gage height, 9.68 ft); no flow Aug. 1, 8-13, 17-30. 1950-67: Maximum discharge, 14,300 cfs May 16, 1957; maximum gage height, 10.25 ft June 17, 1965; no flow at times in 1952-54, 1959-61, 1963-67.

Maximum flood known since at least 1865, 103,000 cfs May 31, 1935, by slope-area measurement three-quarters of a mile upstream.

Remarks.--Records poor. Diversions above station for irrigation.

Cooperation.--Five discharge measurements furnished by Bureau of Reclamation.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	18	28	27	25	32	34	37	19	38	21	0	6.7
2	19	28	30	25	33	33	35	21	36	23	2.2	3.6
3	18	28	26	25	31	33	33	24	33	25	.05	1.2
4	20	29	26	26	30	32	32	23	31	28	.02	2.4
5	21	29	30	25	30	31	31	33	31	28	.25	3.6
6	21	29	31	24	27	31	30	42	73	26	1.1	5.2
7	20	29	31	23	28	32	31	34	35	47	1.2	6.0
8	20	27	29	24	28	32	32	34	32	228	0	7.4
9	21	27	28	25	27	32	29	24	33	29	0	7.4
10	22	27	30	27	29	34	32	24	342	26	0	7.4
11	23	28	31	29	29	34	32	26	321	26	0	8.1
12	22	29	30	32	29	34	32	34	31	42	0	11
13	22	29	30	35	30	33	44	37	26	31	0	8.1
14	31	30	30	34	31	35	32	39	28	30	5.2	8.1
15	31	29	29	33	29	36	31	32	26	32	.24	7.4
16	31	29	28	33	29	34	30	31	27	31	3.1	15
17	31	30	28	35	29	34	30	30	26	29	0	9.5
18	32	30	28	36	30	34	24	27	23	34	0	9.5
19	31	31	28	37	31	35	26	27	21	32	0	12
20	31	31	27	39	31	36	22	47	22	29	0	12
21	30	31	26	38	30	33	19	35	23	26	0	12
22	29	32	27	34	31	33	21	30	19	26	0	8.8
23	30	31	26	31	32	32	22	27	21	20	0	8.8
24	30	30	25	29	33	33	22	26	22	26	0	11
25	30	31	24	27	34	34	25	23	21	26	0	12
26	30	30	25	28	35	34	23	26	23	15	0	15
27	30	31	24	30	34	34	14	42	24	3.6	0	17
28	31	29	24	34	34	35	11	36	23	.15	0	18
29	30	28	24	34	-	35	11	37	25	.15	0	15
30	31	29	24	33	- - - -	33	12	42	22	.05	0	15
31	35	- - - -	25	32	- - - -	34	- - - -	42	- - - -	.05	4.4	- - - -
Total	821	879	851	942	856	1,039	805	974	1,458	940.00	17.76	284.2
Mean	26.5	29.3	27.5	30.4	30.6	33.5	26.8	31.4	48.6	30.3	0.573	9.47
Max	35	32	31	39	35	36	44	47	342	228	5.2	18
Min	18	27	24	23	27	31	11	19	19	0.05	0	1.2
Ac-ft	1,630	1,740	1,690	1,870	1,700	2,060	1,600	1,930	2,890	1,860	35	564

Cal yr 1966: Total 8,770.5 Mean 24.0 Max 175 Min 0 Ac-ft 17,400

Wtr yr 1967: Total 9,866.96 Mean 27.0 Max 342 Min 0 Ac-ft 19,570

Peak discharge (base, 1,000 cfs).--June 10 (2245) 3,030 cfs (9.68 ft); July 8 (0015) 2,050 cfs (9.40 ft).

KANSAS RIVER BASIN

6-8255. Landsman Creek near Hale, Colo.

Location.--Lat 39°34'30", long 102°15'10", in SE¼ sec.35, T.5 S., R.44 W., on right bank 900 ft upstream from bridge on U. S. Highway 385, 3.2 miles upstream from mouth, 5.2 miles southwest of Bonny Dam, and 7 miles southwest of Hale.

Drainage area.--268 sq mi.

Records available.--May 1950 to September 1967.

Gage.--Water-stage recorder and concrete control. Altitude of gage is 3,720 ft (from topographic map). Prior to Aug. 3, 1965,--at site 1,200 ft downstream; at datum 0.68 ft lower prior to Oct. 21, 1950, and June 6 to Aug. 10, 1951; at datum 0.79 ft higher Oct. 21, 1950, to June 5, 1951; and at present datum subsequent to Aug. 10, 1951.

Average discharge.--17 years, 4.53 cfs (3,280 acre-ft per year).

Extremes.--Maximum discharge during year, 1,340 cfs June 20 (gage height, 10.72 ft); minimum daily, 0.07 cfs July 30.

1950-67: Maximum discharge, 4,570 cfs July 24, 1957 (gage height, 8.84 ft, site then in use), from rating curve extended above 940 cfs on basis of slope-area measurement at gage height 7.69 ft; maximum gage height, that of June 20, 1967; no flow for several days in 1955, 1965.

Maximum stage known, about 10 ft May 30, 31, 1935 (at former site, present datum), from information by local resident.

Remarks.--Records poor. Small diversions above station for irrigation.

Cooperation.--Three discharge measurements furnished by Bureau of Reclamation.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.13	0.64	0.78	0.60	1.1	1.2	1.2	0.51	1.1	2.5	0.08	0.20
2	.11	.60	.64	.69	1.0	1.1	1.2	.55	1.1	2.0	.08	.17
3	.14	.51	.55	.60	1.1	1.1	1.0	.64	1.1	1.7	.09	.14
4	.14	.55	.55	.69	1.1	1.1	1.0	.69	.97	1.6	.09	.17
5	.14	.60	.97	.87	1.0	1.1	.87	1.3	.87	1.5	.09	.17
6	.14	.69	.92	.87	1.0	1.0	.83	1.7	1.1	1.2	.10	.14
7	.14	.83	.92	.74	1.1	.78	.83	1.1	1.0	1.2	.10	.14
8	.14	.70	.78	.60	.87	1.3	.87	.92	1.5	1.8	.09	.11
9	.17	.80	.64	.55	1.1	1.3	.83	.92	1.8	.97	.11	.11
10	.17	.90	.64	.74	1.2	1.3	.83	.74	7.0	.64	.11	.11
11	.20	.80	.69	1.2	.97	1.2	.92	.64	2.8	.46	.13	.09
12	.17	.80	.87	1.2	1.1	1.2	.92	.78	1.5	.74	.13	.10
13	.20	.80	.87	1.3	1.1	1.2	1.7	.87	1.0	.42	.14	.13
14	.69	.90	.87	1.3	1.2	1.2	1.1	1.1	.55	.42	.14	.13
15	.42	.80	.83	1.2	.87	1.2	.97	.87	.33	.37	.20	.14
16	.27	.83	.78	1.3	1.0	1.1	.87	.87	.37	.33	.20	.20
17	.20	.87	.87	1.0	1.1	1.1	.83	.74	.46	.27	.17	.20
18	.20	.87	.92	.97	1.1	1.3	.78	.51	.51	.69	.23	.17
19	.23	.87	1.0	1.1	.97	1.5	.74	.69	.55	.42	.23	.23
20	.23	.87	.97	1.3	.87	1.3	.69	1.7	160	.20	.23	.20
21	.27	.87	1.1	1.3	1.0	1.2	.69	1.0	32	.14	.20	.17
22	.33	.87	1.1	1.3	.92	1.2	.74	.83	4.5	.11	.20	.17
23	.33	.92	.42	1.3	.92	1.1	.74	1.2	3.7	.10	.23	.14
24	.33	.92	.46	1.3	1.1	1.1	.83	1.8	3.3	.09	.20	.14
25	.33	.92	.60	.92	1.1	1.1	.83	1.9	2.9	.09	.20	.13
26	.33	1.0	.51	.87	1.1	1.1	.78	2.1	12	.09	.23	.20
27	.37	1.0	.55	1.2	1.0	1.1	.69	3.6	3.8	.08	.23	.20
28	.37	1.0	.55	1.2	1.1	1.0	.51	2.2	33	.08	.20	.20
29	.37	1.1	.46	1.2	-	.97	.42	1.5	144	.08	.20	.17
30	.42	1.1	.46	1.2	- - - -	.87	.42	1.3	3.8	.07	.27	.14
31	.55	- - - -	.51	1.2	- - - -	.92	- - - -	1.3	- - - -	.08	.27	- - - -
Total	8.23	24.93	22.78	31.81	29.09	35.24	25.63	36.57	428.61	20.44	5.17	4.71
Mean	0.265	0.831	0.735	1.03	1.04	1.14	0.854	1.18	14.3	0.659	0.167	0.157
Max	0.69	1.1	1.1	1.3	1.2	1.5	1.7	3.6	160	2.5	0.27	0.23
Min	0.11	0.51	0.42	0.55	0.87	0.78	0.42	0.51	0.33	0.07	0.08	0.09
Ac-ft	16	49	45	63	58	70	51	73	850	41	10	9.3

Cal yr 1966: Total 873.44 Mean 2.39 Max 281 Min 0.1 Ac-ft 1,730

Wtr yr 1967: Total 673.21 Mean 1.84 Max 160 Min 0.07 Ac-ft 1,340

Peak discharge (base, 350 cfs).--June 20 (2200) 1,340 cfs (10.72 ft); June 28 (2350) 855 cfs (9.84 ft).

6-8260. Bonny Reservoir near Hale, Colo.

Location.--Lat 39°38'00", long 102°10'40", in SE¼SE¼ sec.9, T.5 S., R.43 W., in stair well to outlet conduit of Bonny Dam on South Fork Republican River, 2 miles west of Hale and 3 miles downstream from Landsman Creek.

Records available.--October 1950 to September 1967.

Gage.--Mercury manometer gage. Datum of gege is at mean sea level (levels by Bureau of Reclamation).

Extremes.--Maximum contents observed during year, 42,720 acre-ft Apr. 13 (elevation 3,672.67 ft); minimum observed, 34,670 acre-ft Oct. 9-11 (elevation, 3,668.55 ft).

1950-67: Maximum contents observed, 55,030 acre-ft May 17, 1957 (elevation, 3,678.10 ft); minimum observed since appreciable contents was attained, 22,520 acre-ft Oct. 6-14, 1952 (elevation, 3,661.20 ft).

Remarks.--Reservoir is formed by earth-fill dam. Storage began July 6, 1950; dam completed May 4, 1951. Capacity of reservoir, 170,200 acre-ft below elevation 3,710 ft (crest of spillway) of which 128,800 acre-ft is for flood control and 39,900 acre-ft for irrigation. Dead storage, 1,420 acre-ft below elevation 3,635.50 ft (sill of trashrack et outlet conduit). Figures given herein represent total contents.

Cooperation.--Records furnished by Bureau of Reclamation.

Capacity table (elevation, in feet, and total contents, in acre-ft)
(Furnished by Bureau of Reclamation)

3,665.0	28,460
3,670.0	37,390
3,675.0	47,760

Contents, in acre-feet, between 0500 and 0700, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	34,740	35,540	36,890	38,020	40,000	41,070	42,390	39,130	37,540	37,470	36,820	35,260
2	34,740	35,620	36,910	38,270	40,020	41,130	42,390	38,820	37,540	37,310	36,740	35,250
3	34,740	35,710	36,930	38,290	40,060	41,130	42,410	38,600	37,520	37,330	36,760	35,190
4	34,710	35,760	36,950	38,370	40,120	41,170	42,450	38,370	37,540	37,330	36,730	35,150
5	34,690	35,780	36,960	38,410	40,140	41,190	42,530	38,390	37,520	37,300	36,670	35,110
6	34,690	35,840	37,020	38,460	40,180	41,240	42,550	38,040	37,520	37,330	36,610	35,060
7	34,720	35,950	37,080	38,480	40,200	41,260	42,550	37,940	37,540	37,330	36,610	35,040
8	34,690	35,970	37,140	38,500	40,200	41,300	42,590	37,830	37,500	37,600	36,560	35,010
9	34,670	35,970	37,200	38,560	40,280	41,380	42,590	37,640	37,430	37,790	36,460	34,970
10	34,670	35,980	37,220	38,620	40,320	41,500	42,590	37,450	37,350	37,750	36,400	34,930
11	34,670	36,020	37,260	38,680	40,360	41,580	42,630	37,310	37,920	37,620	36,330	34,910
12	34,690	36,020	37,300	38,820	40,400	41,580	42,650	37,300	38,040	37,490	36,270	34,890
13	34,710	36,100	37,330	38,840	40,440	41,600	42,720	37,300	37,940	37,430	36,230	34,890
14	34,720	36,160	37,430	38,930	40,520	41,650	42,680	37,350	37,830	37,300	36,210	34,870
15	34,720	36,230	37,470	38,950	40,540	41,670	42,650	37,350	37,680	37,300	36,140	34,870
16	34,860	36,350	37,540	39,030	40,560	41,730	42,610	37,390	37,540	37,280	36,080	34,930
17	34,970	36,380	37,600	39,090	40,630	41,730	42,470	37,390	37,370	37,280	36,000	35,010
18	35,020	36,380	37,660	39,110	40,650	41,830	42,290	37,370	37,350	37,220	35,950	34,990
19	35,040	36,380	37,710	39,150	40,690	41,870	42,040	37,350	37,330	37,240	35,910	35,060
20	35,080	36,420	37,770	39,210	40,710	41,950	41,870	37,410	37,330	37,240	35,870	35,040
21	35,150	36,480	37,790	39,290	40,750	42,040	41,630	37,540	37,660	37,240	35,840	35,040
22	35,150	36,540	37,830	39,410	40,770	42,100	41,360	37,520	37,620	37,220	35,800	35,020
23	35,190	36,590	37,850	39,550	40,770	42,180	41,030	37,490	37,470	37,220	35,740	34,950
24	35,210	36,710	37,870	39,570	40,810	42,200	40,790	37,430	37,310	37,120	35,690	34,930
25	35,250	36,740	37,900	39,590	40,870	42,200	40,600	37,350	37,310	37,080	35,650	34,910
26	35,300	36,780	37,940	39,590	40,930	42,220	40,360	37,330	37,300	37,040	35,500	34,840
27	35,300	36,800	37,980	39,640	40,970	42,250	40,160	37,390	37,330	37,060	35,460	34,840
28	35,380	36,780	38,060	39,720	41,010	42,310	39,900	37,450	37,330	37,000	35,410	34,840
29	35,410	36,840	38,080	39,820	-	42,370	39,660	37,500	37,390	36,980	35,380	34,840
30	35,430	36,880	38,110	39,900	-	42,390	39,410	37,540	37,580	36,950	35,320	34,840
31	35,480	-	38,150	39,980	-	42,390	-	37,520	-	36,930	35,320	-
Max	35,480	36,880	38,150	39,980	41,010	42,390	42,720	39,130	38,040	37,790	36,820	35,260
Min	34,670	35,540	36,890	38,020	40,000	41,070	39,410	37,300	37,300	36,930	35,320	34,840
†	3,668.99	3,669.73	3,670.40	3,671.33	3,671.84	3,672.51	3,671.04	3,670.70	3,669.76	3,668.90	3,668.64	3,668.64
‡	+700	+1,400	+1,270	+1,830	+1,030	+1,380	-2,980	-1,890	+60	-650	-1,610	-480

Calendar year 1966.....# +700
Water year 1967.....# +60

† Elevation, in feet, at end of month.

‡ Change in contents, in acre-ft.

KANSAS RIVER BASIN

6-8265. South Fork Republican River near Hale, Colo.

Location.--Lat 39°37'25", long 102°09'45", in SW¼NE¼ sec.15, T.5 S., R.43 W., on right bank half a mile downstream from Bonny Dam and 1 mile west of Hale.

Records available.--October 1946 to September 1948, May 1951 to September 1967.

Gage.--Water-stage recorder and concrete control. Altitude of gage is 3,610 ft (from topographic map). Oct. 1, 1946, to Sept. 30, 1948, at site 4 miles downstream at different datum.

Average discharge.--16 years (1951-67), 25.3 cfs (18,320 acre-ft per year).

Extremes.--Maximum discharge during year, 121 cfs Apr. 19 (gage height, 4.69 ft); minimum daily, 5.2 cfs Dec. 10, Aug. 27-29, Sept. 13, 14, 1946-48, 1951-67: Maximum discharge, 3,790 cfs May 28, 1947; maximum gage height, 4.87 ft Apr. 28, 1947, site and datum then in use; no flow Aug. 11-13, 1947.

Greatest flood known occurred May 31, 1935, stage and discharge not determined. A discharge of 103,000 cfs was determined at a site near Newton, 5½ miles upstream, with a drainage area of approximately 1,270 sq mi.

Remarks.--Records excellent. Flow regulated by Bonny Reservoir since July 6, 1950 (see sta. 6-8260). Many diversions above station for irrigation. Water diverted by Hale ditch from Bonny Reservoir bypasses station (2,980 acre-ft diverted in 1967).

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	6.2	6.5	6.2	5.5	6.2	6.2	7.0	112	34	68	5.5	5.5
2	6.2	6.2	6.2	5.5	6.2	6.2	6.5	109	34	26	5.8	5.8
3	6.2	6.2	6.2	5.5	6.2	6.5	6.5	109	34	10	5.5	5.5
4	6.2	6.2	6.2	5.8	6.2	6.5	6.5	109	34	11	5.5	5.5
5	6.2	5.8	6.2	5.8	6.2	6.5	6.5	112	34	10	5.5	5.5
6	6.2	5.8	5.8	6.2	6.2	6.5	6.5	112	34	10	5.5	5.5
7	6.2	5.8	6.2	6.2	6.2	6.5	7.0	112	34	11	5.5	5.5
8	6.2	5.8	5.8	6.2	6.2	5.8	7.0	112	34	11	5.5	5.5
9	6.2	5.8	5.5	6.2	6.2	5.8	6.5	117	35	32	6.2	5.5
10	6.2	5.8	5.2	6.2	6.2	5.8	7.0	75	22	66	6.2	5.5
11	6.5	5.8	5.5	6.2	6.2	5.8	7.0	18	18	75	5.8	5.5
12	6.5	5.8	5.5	6.2	6.2	5.8	15	6.5	54	75	5.8	5.8
13	6.5	5.8	5.5	6.2	6.2	5.8	46	6.5	68	75	5.8	5.2
14	7.0	5.8	5.5	6.2	6.2	5.8	41	6.5	70	22	5.8	5.2
15	6.2	5.8	5.5	6.2	6.5	5.5	41	6.2	70	11	5.8	5.8
16	6.2	5.8	5.5	6.2	6.2	5.5	41	12	70	11	5.8	6.2
17	6.2	6.2	5.5	6.2	6.2	5.5	80	16	27	11	6.2	5.8
18	6.2	6.2	5.5	6.5	6.2	5.8	117	16	11	7.6	6.2	5.8
19	6.5	6.2	5.8	6.5	6.2	5.8	117	16	11	5.8	6.2	5.8
20	6.2	6.2	5.8	6.5	6.2	5.5	117	19	11	5.8	5.8	5.8
21	6.5	6.2	5.5	6.5	6.2	5.5	117	37	40	5.8	5.8	5.8
22	6.2	6.2	5.5	6.5	6.2	5.8	117	48	70	5.8	5.8	5.8
23	6.2	6.2	5.8	6.5	6.2	5.8	117	50	70	5.8	5.8	5.8
24	6.2	6.2	5.5	6.5	6.2	5.8	112	50	28	5.8	5.5	5.8
25	6.5	6.2	5.5	6.5	6.2	5.8	112	19	11	5.8	5.5	6.2
26	6.5	6.5	5.5	6.2	6.2	6.2	112	11	11	5.8	5.5	6.2
27	6.5	6.2	5.8	6.2	6.2	6.2	112	12	11	5.8	5.2	6.2
28	6.5	6.2	5.5	6.2	6.2	6.2	112	11	11	5.8	5.2	6.2
29	6.5	6.2	5.5	6.2	-	6.2	112	16	11	5.5	5.2	6.2
30	6.5	6.2	5.5	6.2	- - - -	6.5	112	28	40	5.5	5.5	6.2
31	6.5	- - - -	5.5	6.2	- - - -	6.5	- - - -	35	- - - -	5.8	5.5	- - - -
Total	196.6	181.8	176.2	191.7	173.9	185.6	1824.0	1518.7	1042	617.4	176.4	172.6
Mean	6.34	6.06	5.68	6.18	6.21	5.99	60.8	49.0	34.7	19.9	5.69	5.75
Max	7.0	6.5	6.2	6.5	6.5	6.5	117	117	70	75	6.2	6.2
Min	6.2	5.8	5.2	5.5	6.2	5.5	6.5	6.2	11	5.5	5.2	5.2
Ac-ft	390	361	349	380	345	368	3,620	3,010	2,070	1,220	350	342
Cal yr 1966: Total	6,068.9		Mean	16.6	Max	130	Min	5.2	Ac-ft	12,040		
Wtr yr 1967: Total	6,456.9		Mean	17.7	Max	117	Min	5.2	Ac-ft	12,810		

7-0820. Lake Fork above Sugar Loaf Reservoir, Colo.

Location.--Lat 39°16'11", long 106°23'40", in NW¼ sec.13, T.9 S., R.81 W., on left bank 1,000 ft upstream from water line of Sugar Loaf Reservoir (Turquoise Lake) at elevation 9,780 ft and 5.7 miles west of Leadville.

Drainage area.--23.9 sq mi.

Records available.--May 1946 to September 1967 (discontinued). Monthly discharge only for some periods, published in WSP 1241 and 1311.

Gage.--Water-stage recorder. Altitude of gage is 9,800 ft (from topographic map).

Average discharge.--21 years, 42.3 cfs (30,620 acre-ft per year).

Extremes.--Maximum discharge during year, 397 cfs June 7 (gage height, 3.76 ft); minimum not determined.

1946-67: Maximum discharge, 841 cfs June 28, 1957 (gage height, 5.22 ft), from rating curve extended above 500 cfs; minimum daily recorded, 1.0 cfs Sept. 10-15, 1959.

Remarks.--Records fair except those for periods of no gage-height record, which are poor. No diversion above station. Transmountain diversions from Colorado River basin to Busk Creek above station through Busk-Ivanhoe tunnel (see elsewhere in this report).

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	7.8	4.8						19	120	172	40	40
2	8.1	4.6						19	162	115	40	21
3	9.8	5.2						21	230	107	37	19
4	11	4.8						20	271	104	33	18
5	11	4.4						18	298	100	32	17
6	11	4.4						17	330	95	31	15
7	11	4.4						15	332	85	35	11
8	9.4	4.8						16	305	82	61	10
9	9.0	5.2						22	324	76	144	9.6
10	7.8	5.0						32	318	74	103	10
11	9.0	5.2						45	296	82	75	20
12	9.8	5.0						66	271	80	71	112
13	9.4	5.0						71	253	76	56	120
14	8.7	4.8						61	246	74	43	125
15	9.8	4.8						54	249	75	40	80
16	9.4	4.6						46	228	82	39	30
17	9.0	4.4						67	238	76	25	15
18	7.8	4.2						97	276	74	22	10
19	7.5	4.0						116	305	70	21	9.6
20	7.8	3.9						115	291	66	21	9.4
21	7.8	3.9						133	300	56	20	9.2
22	6.6	3.8						174	273	43	20	9.0
23	6.6	3.8						238	282	51	19	9.0
24	6.0	3.7						282	273	69	19	8.8
25	6.3	3.5						269	257	53	18	8.6
26	6.3	3.5						244	246	46	18	8.6
27	6.3	3.5						176	238	47	18	8.4
28	5.8	3.5						167	223	43	50	8.4
29	5.8	3.5						146	199	41	70	8.2
30	5.2	3.5						140	190	41	90	8.0
31	5.2	---						126	---	40	70	---
Total	252.0	129.7	139.5	139.5	140.0	186.0	330	3,032	7,824	2,295	1,381	787.8
Mean	8.13	4.32	4.5	4.5	5.0	6.0	11	97.8	261	74.0	44.5	26.3
Max	11	52	-	-	-	-	-	282	332	172	144	125
Min	5.2	35	-	-	-	-	-	15	120	40	18	8.0
Ac-ft	500	257	277	277	278	369	655	6,010	15,520	4,550	2,740	1,560

Cal yr 1966: Total 10,288.5 Mean 28.2 Max 188 Min - Ac-ft 20,410
 Wtr yr 1967: Total 16,636.5 Mean 45.6 Max 332 Min - Ac-ft 33,000

Note.--No gage-height record Nov. 24 to May 11, Aug. 19 to Sept. 30.

ARKANSAS RIVER BASIN

7-0830. Halfmoon Creek near Malta, Colo.

(Hydrologic bench-mark station)

Location.--Lat 39°10'20", long 106°23'20", in SE¼SE¼ sec.13, T.10 S., R.81 W., on right bank 1.4 miles upstream from culvert, 3.3 miles upstream from mouth, and 4.3 miles southwest of Malta. Prior to Oct. 19, 1966, at site 1.4 miles downstream.

Drainage area.--23.6 sq mi. Area at site used prior to Oct. 19, 1966, 24.5 sq mi (revised).

Records available.--July 1946 to September 1967.

Gage.--Water-stage recorder. Altitude of gage is 9,830 ft (from topographic map). Prior to Oct. 19, 1966, at sites 1.4 miles downstream at different datums.

Average discharge.--21 years, 28.9 cfs (20,920 acre-ft per year).

Extremes.--Maximum discharge during year, 132 cfs June 22 (gage height, 3.12 ft), from rating curve extended above 74 cfs; minimum daily, 2.6 cfs Mar. 7, 8.

1946-67: Maximum discharge, 450 cfs June 30, 1957 (gage height, 3.48 ft, site and datum then in use); minimum not determined.

Remarks.--Records good except those for winter period, which are poor. No regulation or diversion above station. Records of chemical analyses and water temperatures for the water year 1967 are published in Part 2 of this report.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	6.0	4.9	4.6	3.7	3.0	2.9	4.9	8.2	52	94	26	28
2	6.0	5.6	4.7	3.5	3.0	2.9	4.9	7.5	71	91	26	25
3	8.5	6.4	4.6	3.5	3.1	2.9	6.0	6.7	80	88	24	23
4	8.0	4.9	4.5	3.5	3.1	2.8	7.2	6.4	89	85	23	22
5	8.5	4.1	4.6	3.6	3.0	2.8	8.5	6.9	93	83	22	21
6	8.0	4.9	4.6	3.6	3.0	2.7	7.5	6.4	94	80	22	19
7	7.5	5.1	4.0	3.5	3.0	2.6	7.5	6.1	92	75	22	19
8	7.5	5.5	3.6	3.3	2.9	2.6	8.8	7.5	95	75	26	22
9	7.5	5.6	3.4	3.4	3.0	2.7	8.8	13	97	71	38	24
10	6.5	4.5	3.5	3.5	3.0	2.8	7.2	18	91	65	34	22
11	7.5	4.6	3.6	3.6	3.0	2.9	7.8	16	79	60	29	22
12	8.5	4.7	3.8	3.5	3.0	2.9	8.8	19	76	57	27	34
13	8.0	4.8	4.0	3.5	2.9	2.9	7.2	22	67	55	25	28
14	7.0	5.0	4.1	3.5	2.9	2.7	7.5	16	57	54	24	24
15	9.0	5.0	4.1	3.5	2.9	2.7	6.9	14	54	54	26	23
16	8.5	5.0	4.1	3.7	2.9	2.9	6.9	16	57	53	25	22
17	8.5	4.9	4.1	3.7	2.9	3.7	6.0	26	71	51	22	21
18	7.0	4.9	3.9	3.7	2.8	3.9	6.7	42	94	50	21	21
19	8.5	4.9	3.9	3.7	2.8	4.1	7.8	48	100	46	20	22
20	7.8	5.0	3.9	3.7	2.7	3.7	7.5	45	99	44	19	21
21	7.5	5.0	3.7	3.5	2.7	3.7	6.9	52	94	42	18	19
22	6.7	5.0	3.7	3.5	2.8	4.1	6.4	72	100	40	17	18
23	7.2	4.8	3.3	3.3	2.9	4.4	6.4	92	108	42	16	16
24	6.9	4.6	3.5	3.2	2.9	4.9	6.0	105	107	57	15	16
25	7.2	4.4	4.4	3.1	3.0	5.5	6.1	101	101	44	15	16
26	6.9	4.2	3.7	3.0	2.9	4.6	5.1	85	97	39	16	19
27	7.2	4.3	3.5	3.1	2.7	5.1	6.4	64	97	37	16	18
28	6.9	4.5	3.7	3.1	2.8	5.1	8.2	59	94	36	20	16
29	6.9	4.6	3.5	3.1	-	5.1	9.5	54	92	38	25	15
30	6.7	4.5	3.5	3.1	- - - - -	4.6	10	54	97	31	26	15
31	6.7	- - - - -	4.1	3.0	- - - - -	4.1	- - - - -	49	- - - - -	28	30	- - - - -
Total	231.1	146.2	122.2	106.2	81.6	111.3	215.4	1,137.7	2,595	1,765	715	631
Mean	7.45	4.87	3.94	3.43	2.91	3.59	7.18	36.7	86.5	56.9	23.1	21.0
Max	9.0	6.4	4.7	3.7	3.1	5.5	10	105	108	94	38	34
Min	6.0	4.1	3.3	3.0	2.7	2.6	4.9	6.1	52	28	15	15
Ac-ft	458	290	242	211	162	221	427	2,260	5,150	3,500	1,420	1,250

Cal yr 1966: Total 8,660.3 Mean 23.7 Max 140 Min 3.3 Ac-ft 17,180
 Wtr yr 1967: Total 7,857.7 Mean 21.5 Max 108 Min 2.6 Ac-ft 15,590

Peak discharge (base, 150 cfs).--No peak above base.

Note.--No gage-height record Nov. 10 to Dec. 14, Jan. 23 to Mar. 14.

7-0837. Arkansas River near Malta, Colo.

Location.--Lat 39°10'05", long 106°19'25", in NW¼ sec.22, T.10 S., R.80 W., on left bank 56 ft downstream from bridge on U. S. Highway 24, 3 miles downstream from Halfmoon Creek, 4.2 miles south of Malta, and 5.8 miles south of Leadville.

Drainage area.--228 sq mi.

Records available.--October 1964 to September 1967 (discontinued).

Gage.--Water-stage recorder. Altitude of gage is 9,300 ft (from topographic map).

Extremes.--Maximum discharge during year, 706 cfs May 26 (gage height, 3.67 ft); maximum gage height, 4.27 ft Jan. 28 (backwater from ice); minimum daily discharge, 54 cfs Jan. 8.

1964-67: Maximum discharge, 1,300 cfs June 16, 1965 (gage height, 4.44 ft); minimum daily, 43 cfs Mar. 17, 1965.

Remarks.--Records good except those for winter period, which are fair. Diversions for irrigation above station of about 5,600 acres. Sugar Loaf Reservoir is on tributary above this station (capacity, 17,400 acre-ft). Transmountain diversions from Colorado River basin to Arkansas River basin enter above this station (see elsewhere in this report).

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	64	64	60	64	62	61	72	77	303	540	207	172
2	65	66	61	64	64	58	77	101	359	530	132	148
3	68	65	61	66	66	59	90	99	440	505	148	130
4	68	64	59	74	74	58	113	93	540	550	150	119
5	68	65	58	74	70	57	128	94	600	540	140	115
6	68	65	61	62	68	55	120	94	635	525	148	108
7	78	64	61	56	68	57	109	77	651	530	148	97
8	109	66	59	54	65	55	109	69	600	545	158	91
9	91	64	57	56	68	56	109	79	600	520	219	108
10	67	68	58	66	70	56	104	117	555	500	210	97
11	69	67	62	68	72	57	109	138	530	505	189	94
12	73	67	62	64	74	57	108	142	550	500	178	135
13	70	66	64	62	73	58	104	162	450	480	168	117
14	70	67	66	62	67	58	104	175	386	470	168	104
15	68	68	66	62	65	57	109	109	408	485	204	97
16	70	68	66	62	69	61	106	108	455	505	195	94
17	71	68	66	60	67	74	96	122	460	485	165	93
18	68	67	66	58	67	78	91	165	510	465	160	93
19	67	64	66	60	65	78	78	228	560	436	145	101
20	67	64	66	62	64	76	75	286	540	400	124	97
21	68	66	62	64	63	74	74	338	560	364	124	96
22	68	64	60	66	64	76	72	364	530	342	122	93
23	68	63	62	62	68	79	74	450	540	346	117	90
24	67	62	62	60	64	86	84	595	550	400	115	88
25	67	61	62	60	64	75	84	646	520	326	122	91
26	67	61	62	58	64	71	101	662	540	292	135	101
27	67	60	60	60	63	72	84	525	595	275	122	102
28	68	62	58	62	63	76	71	386	550	258	122	91
29	67	61	56	64	-	75	73	330	500	272	140	88
30	66	61	60	64	- - - -	71	77	386	525	258	155	86
31	66	- - - -	64	62	- - - -	67	- - - -	338	- - - -	225	178	- - - -
Total	2,178	1,938	1,913	1,938	1,871	2,048	2,805	7,555	15,542	13,374	4,808	3,136
Mean	70.3	64.6	61.7	62.5	66.8	66.1	93.5	244	518	431	155	105
Max	109	68	66	74	74	86	128	662	651	550	219	172
Min	64	60	56	54	62	55	71	69	303	225	115	86
Ac-ft	4,320	3,840	3,790	3,840	3,710	4,060	5,560	14,990	30,830	26,530	9,540	6,220
Cal yr 1966 : Total	51,218		Mean	140	Max	550	Min	52	Ac-ft	101,600		
Wtr yr 1967 : Total	59,106		Mean	162	Max	662	Min	54	Ac-ft	117,200		

7-0845. Lake Creek above Twin Lakes Reservoir, Colo.

Location.--Lat 39°03'45", long 106°24'20", in SE¼ sec.26, T.11 S., R.81 W., on left bank 1.6 miles upstream from water line of Twin Lakes Reservoir at elevation 9,190 ft and 1.8 miles southwest of village of Twin Lakes.

Drainage area.--75 sq mi.

Records available.--April 1946 to September 1962, October 1963 to September 1967. Monthly discharge only for some periods, published in WSP 1241, 1311, and 1731.

Gage.--Water-stage recorder. Altitude of gage is 9,280 ft (from topographic map). Prior to May 20, 1950, at site 190 ft downstream at different datum. May 20, 1950, to Apr. 7, 1953, at site 10 ft upstream at present datum.

Average discharge.--20 years, 165 cfs (119,500 acre-ft per year).

Extremes.--Maximum discharge during year, 1,700 cfs June 22; maximum gage height, 4.62 ft May 22; minimum discharge not determined. 1946-62, 1963-67: Maximum discharge, 3,150 cfs June 10, 1952 (gage height, 5.74 ft), from rating curve extended above 1,400 cfs; minimum not determined.

Remarks.--Records good except those for period of no gage-height record, which are poor. No diversion above station. Records include inflow from Roaring Fork River in Colorado River basin through Twin Lakes tunnel (see elsewhere in this report).

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	26	28						58	385	1,110	146	170
2	27	26						58	457	1,040	134	113
3	30	18						62	571	960	127	101
4	28	18						57	826	844	125	99
5	30	16						54	1,020	817	119	85
6	27	19						51	1,230	736	117	62
7	26	19						45	1,350	676	121	57
8	26	19						48	1,350	636	130	64
9	26	20						66	1,320	592	170	73
10	24						30	109	1,270	520	162	65
11	24							143	1,100	457	168	70
12	26							180	950	454	160	113
13	26							195	684	490	141	89
14	22							185	490	440	127	82
15	48							160	435	454	125	76
16	95		23	21	20	25		172	440	405	119	70
17	75							225	520	416	113	69
18	31						32	324	880	440	105	73
19	53						34	416	1,170	395	85	89
20	26	25					34	454	1,190	367	57	90
21	27						32	496	1,190	328	56	85
22	25						34	745	1,300	292	60	79
23	30						36	1,190	1,420	300	70	73
24	27						36	1,200	1,410	332	72	69
25	28						32	1,180	1,300	276	67	67
26	29						37	980	1,180	250	70	82
27	33						46	727	1,190	225	74	79
28	53						53	652	1,100	204	76	72
29	42						65	454	1,080	178	94	67
30	20						69	415	1,090	165	113	67
31	20	- - - -			- - - -		- - - -	362	- - - -	155	158	- - - -
Total	1,030	708	713	651	560	775	1,050	11,463	29,898	14,954	3,461	2,450
Mean	33.2	23.6	23	21	20	25	35.0	370	997	482	112	81.7
Max	95	-	-	-	-	-	69	1,200	1,420	1,110	168	170
Min	20	-	-	-	-	-	-	45	385	155	56	57
Ac-ft	2,040	1,400	1,410	1,290	1,110	1,540	2,080	22,740	59,300	29,660	6,860	4,860

Cal yr 1966: Total 54,778 Mean 150 Max 911 Min 13 Ac-ft 108,700

Wtr yr 1967: Total 67,713 Mean 186 Max 1,420 Min - Ac-ft 134,300

Note.--No gage-height record Nov. 10 to Apr. 17.

7-0860. Arkansas River at Granite, Colo.

Location.--Lat 39°02'38", long 106°15'55", in SW¼ sec.31, T.11 S., R.79 W., on right bank at Granite, 100 ft east of U. S. Highway 24, 100 ft downstream from county bridge, and 200 ft upstream from Cache Creek.

Drainage area.--427 sq mi.

Records available.--April to October 1895, May to December 1897, August to September 1898, March to October 1899, April to May 1901 (gage heights and discharge measurements only in 1895, 1899, and 1901), April 1910 to September 1967. Monthly discharge only for some periods, published in WSP 1311.

Gage.--Water-stage recorder. Datum of gage is 8,914.86 ft above mean sea level, datum of 1929. Prior to Apr. 6, 1910, staff gages near present site at different datums. Apr. 6, 1910, to Oct. 25, 1917, water-stage recorder or staff gage at site 832 ft upstream at different datum. Oct. 26, 1917, to Oct. 26, 1960, water-stage recorder at site 168 ft downstream at present datum.

Average discharge.--57 years (1910-67), 354 cfs (256,300 acre-ft per year).

Extremes.--Maximum discharge during year, 2,080 cfs May 26 (gage height, 4.52 ft); minimum daily, not determined. 1895, 1897-99, 1910-67: Maximum discharge, 5,360 cfs June 28, 1957 (gage height, 7.20 ft); minimum not determined.

Remarks.--Records good except those for winter period, which are poor. Diversions above station for irrigation of about 6,700 acres. Sugar Loaf and Twin Lakes Reservoirs are on tributaries above station (combined capacity, 70,680 acre-ft). Transmountain diversions from Colorado River basin to Arkansas River basin enter above this station (see elsewhere in this report).

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	103	96	82	100			100	118	957	858	580	876
2	103	90	84				105	136	930	831	524	769
3	107	87	85				105	145	840	750	531	325
4	109	85	82				110	136	1,050	732	538	305
5	112	82	81				140	138	1,230	678	612	305
6	120	84	88	100			175	140	1,300	660	636	278
7	125	85	88				170	127	1,320	1,050	644	247
8	162	88	84				165	111	1,250	1,070	669	229
9	152	88					165	127	1,190	1,000	777	250
10	120	93					170	165	1,110	966	768	232
11	120	90	100	105	90		155	214	984	930	768	229
12	129	88					145	241	939	912	759	282
13	123	90					150	278	867	894	687	286
14	125	88					146	310	732	885	687	266
15	118	92					165	238	678	885	741	254
16	120	92	100	80			165	214	741	930	732	241
17	123	92					160	281	741	848	402	241
18	116	93					160	644	858	492	254	241
19	112	88					157	903	1,060	462	247	244
20	112	87					150	1,050	1,100	426	220	244
21	114	92	100	80			148	1,060	1,180	385	196	244
22	114	88					148	1,110	1,070	360	196	241
23	116	87					148	1,400	1,160	350	190	241
24	111	85					148	1,810	1,150	444	182	238
25	111	81					148	2,020	1,140	370	193	223
26	111	81	100	80			155	2,040	1,040	438	428	244
27	111	95					148	1,810	912	402	669	258
28	107	90					118	1,380	813	320	732	217
29	102	84					118	1,160	822	286	768	193
30	96	85					123	1,130	921	509	831	190
31	96	---	---	---	---	---	---	957	---	580	876	---
Total	3,600	2,646	2,974	2,780	2,940	2,790	4,360	21,593	30,085	20,703	17,037	8,633
Mean	116	88.2	95.9	89.7	105	90	145	697	1,003	668	550	288
Max	162	96	-	-	-	-	175	2,040	1,320	1,070	876	876
Min	96	81	81	-	-	-	100	111	678	286	182	190
Ac-ft	7,140	5,250	5,900	5,510	5,830	5,530	8,650	42,830	59,670	41,060	33,790	17,120

Cal yr 1966: Total 130,573 Mean 358 Max 1,310 Min 74 Ac-ft 259,000
Wtr yr 1967: Total 120,141 Mean 329 Max 2,040 Min - Ac-ft 238,300

Note.--No gage-height record Dec. 9 to Apr. 13.

ARKANSAS RIVER BASIN

7-0865. Clear Creek above Clear Creek Reservoir, Colo.

Location.--Lat 39°01'05", Long 106°16'40", in SE¼ sec.12, T.12 S., R.80 W., on right bank 0.5 mile upstream from water line of Clear Creek Reservoir at elevation 8,878 ft, 0.4 mile downstream from unnamed tributary, and 1.9 miles southwest of Granite.

Drainage area.--59 sq mi.

Records available.--May 1946 to September 1967. Monthly discharge only for some periods, published in WSP 1241 and 1311.

Gage.--Water-stage recorder. Altitude of gage is 8,890 ft (from topographic map). May 7, 1946, to Apr. 20, 1954, water-stage recorder at site 133 ft upstream at different datum. Apr. 21, 1954, to May 28, 1958, water-stage recorder 333 ft upstream at different datum. Datum raised 2.19 ft Apr. 21, 1954.

Average discharge.--21 years, 70.8 cfs (51,260 acre-ft per year).

Extremes.--Maximum discharge during year, 549 cfs June 23 (gage height, 2.85 ft); minimum daily, not determined.

1946-67: Maximum daily discharge, 1,300 cfs June 29, 1957; maximum gage height recorded, 4.34 ft (site and datum then in use) June 16, 1952; minimum discharge not determined.

Remarks.--Records good except those for period of no gage-height record, which are poor. Diversions for irrigation of about 250 acres above station.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	26	21						37	122	366	71	75
2	26	20						32	128	338	64	67
3	32	21						30	149	290	63	61
4	29	21						29	191	268	61	61
5	28	21						30	265	284	59	53
6	27	21					17	28	302	262	55	52
7	27	21						29	305	245	55	49
8	26	20						34	302	254	58	52
9	26	21						46	287	231	63	61
10	26	21						55	293	198	61	60
11	26	21					18	55	256	184	59	63
12	27	21					18	56	259	167	53	98
13	26	20					19	66	231	158	52	89
14	27	20					18	55	196	142	48	75
15	26	20	19	17	15	16	17	53	172	147	48	71
16	22	20					18	55	170	147	49	66
17	21	20					17	80	203	130	42	63
18	22	20					19	120	296	126	40	63
19	22	20					20	165	390	115	39	68
20	22	20					22	184	414	104	39	66
21	22	20					21	216	414	96	38	64
22	22	20					21	302	408	92	39	66
23	22	19					22	390	433	94	37	67
24	22	19					21	390	422	99	35	67
25	22						22	383	418	92	34	67
26	23						21	348	386	84	34	71
27	23	19					22	248	372	80	35	71
28	23						28	216	362	77	46	64
29	22						33	179	334	71	47	60
30	22						41	160	366	70	54	58
31	21							140		68	70	
Total	758	602	589	527	420	496	608	4,211	8,846	5,079	1,548	1,968
Mean	24.5	20.1	19	17	15	16	20.3	136	295	164	49.9	65.6
Max	32	-	-	-	-	-	41	390	433	366	71	98
Min	21	-	-	-	-	-	-	28	122	68	34	49
Ac-ft	1,500	1,190	1,170	1,050	833	984	1,210	8,350	17,550	10,070	3,070	3,900

Cal yr 1966: Total 21,168 Mean 58.0 Max 259 Min 13 Ac-ft 41,990

Wtr yr 1967: Total 25,652 Mean 70.3 Max 433 Min - Ac-ft 50,880

Peak discharge (base, 400 cfs)--May 24 (0100) 465 cfs (2.72 ft); June 23 (0100) 549 cfs (2.85 ft).

Note.--No gage-height record Nov. 25 to Apr. 10.

7-0872. Arkansas River at Buena Vista, Colo.

Location.--Lat 38°50'55", long 106°07'25", in NW¼ sec.9, T.14 S., R.78 W., on right bank at northeast corner of Buena Vista city limits and 1.8 miles upstream from Cottonwood Creek.

Drainage area.--611 sq mi.

Records available.--October 1964 to September 1967.

Gage.--Water-stage recorder. Altitude of gage is 7,920 ft (from topographic map).

Extremes.--Maximum discharge during year, 2,450 cfs May 25 (gage height, 5.20 ft); minimum daily, 90 cfs Jan. 18.
1964-67: Maximum discharge, 3,540 cfs July 13, 1965 (gage height, 6.32 ft); minimum daily, that of Jan. 18, 1967.

Remarks.--Records good except those for winter period, which are fair. Natural flow of stream affected by transmountain diversions (see elsewhere in this report), storage reservoirs (combined capacity, 81,890 acre-ft), diversions above station for irrigation of 7,400 acres, and return flow from irrigated areas.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	145	121	114	130	96	120	114	142	1,070	1,340	694	958
2	145	116	118	130	100	120	120	170	1,080	1,320	637	903
3	158	124	117	136	120	120	130	199	939	1,230	637	477
4	163	121	116	130	140	114	155	182	1,190	1,180	658	437
5	163	117	114	124	140	110	189	188	1,460	1,090	717	418
6	173	116	126	120	130	110	228	189	1,650	1,030	744	388
7	176	121	133	110	124	104	202	176	1,720	1,420	748	380
8	212	123	133	118	120	106	199	147	1,630	1,460	753	350
9	222	121	126	130	120	110	202	151	1,550	1,400	852	384
10	176	117	136	120	120	110	186	195	1,440	1,340	841	384
11	166	123	121	110	120	114	173	278	1,300	1,270	830	396
12	176	121	123	100	120	114	170	324	1,290	1,260	836	461
13	173	123	118	104	120	120	166	365	1,190	1,210	762	473
14	186	128	118	104	120	114	160	407	978	1,180	753	380
15	173	126	124	99	110	120	192	354	841	1,170	762	361
16	182	126	118	99	116	130	189	299	836	1,200	795	324
17	182	126	114	98	118	136	160	331	885	1,170	557	309
18	173	124	116	90	118	130	179	762	1,040	753	354	317
19	160	121	117	103	118	120	160	1,020	1,420	708	350	339
20	170	121	120	95	110	116	156	1,330	1,690	668	313	342
21	163	126	114	95	116	110	156	1,450	1,760	613	281	331
22	158	123	110	95	120	110	149	1,530	1,640	561	278	320
23	163	120	120	95	120	110	147	1,830	1,730	513	274	313
24	158	123	126	96	120	114	156	2,220	1,780	605	250	309
25	160	116	120	94	120	114	170	2,410	1,740	577	228	299
26	160	114	124	93	120	100	179	2,410	1,630	641	424	306
27	151	112	120	96	120	106	192	2,130	1,490	601	744	339
28	149	114	120	91	120	110	149	1,650	1,320	537	717	320
29	140	117	130	100	-	106	142	1,340	1,300	485	785	299
30	135	116	122	93	- - - -	100	147	1,300	1,400	605	841	270
31	126	- - - -	120	98	- - - -	110	- - - -	1,080	- - - -	704	927	- - - -
Total	5,137	3,617	3,748	3,296	3,336	3,528	5,017	26,559	40,989	29,841	19,342	11,887
Mean	166	121	121	106	119	114	167	857	1,366	963	624	396
Max	222	128	136	136	140	136	228	2,410	1,780	1,460	927	958
Min	126	112	110	90	96	100	114	142	836	485	228	270
Ac-ft	10,190	7,170	7,430	6,540	6,620	7,000	9,950	52,680	81,300	59,190	38,360	23,580
Cal yr 1966: Total	156,858			430		1,580	110			311,100		
Wtr yr 1967: Total	156,297			428		2,410	90			310,000		

Note.--No gage-height record Feb. 1 to Apr. 4.

ARKANSAS RIVER BASIN

7-0890. Cottonwood Creek below Hot Springs, near Buena Vista, Colo.

Location.--Lat 38°48'46", long 106°13'18", in SE¼SE¼ sec.21, T.14 S., R.79 W., on left bank a quarter of a mile downstream from Cottonwood Hot Springs, 1 mile downstream from confluence of Middle Cottonwood and South Cottonwood Creeks, 3 miles upstream from North Cottonwood Creek, and 5½ miles southwest of Buena Vista.

Drainage area.--65 sq mi.

Records available.--October 1910 to September 1923, August 1949 to September 1967. Monthly discharge only for some periods, published in WSP 1311.

Gage.--Water-stage recorder. Datum of gage is 8,532 ft (river-profile survey). Prior to Oct. 1, 1923, staff gage near present site at different datum.

Average discharge.--31 years, 58.2 cfs (42,140 acre-ft per year).

Extremes.--Maximum discharge during year, 272 cfs June 20 (gage height, 2.62 ft); minimum, 16 cfs Feb. 8 (gage height, 1.12 ft).

1910-23, 1949-67: Maximum discharge, 1,180 cfs July 1, 1957 (gage height, 4.52 ft, from floodmarks), from rating curve extended above 690 cfs; minimum observed, 10 cfs Mar. 20-23, 25, Apr. 9, 19, 1914.

Remarks.--Records good. Several small diversions above station for irrigation.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	30	26	24	22	18	18	20	22	68	109	50	56
2	30	25	24	22	18	18	20	22	71	107	48	49
3	33	25	24	22	18	18	20	21	94	96	49	43
4	32	25	24	22	18	18	21	21	123	88	47	40
5	33	25	24	22	18	18	20	21	163	88	46	37
6	34	24	26	22	18	18	20	21	184	88	44	37
7	33	24	26	22	18	18	20	20	187	88	46	36
8	32	25	24	22	18	19	22	22	175	105	51	38
9	31	24	22	22	18	19	22	26	153	88	62	47
10	31	24	22	22	18	19	21	30	147	78	62	44
11	31	25	24	22	18	19	21	30	129	80	54	49
12	32	25	23	22	18	19	22	30	125	80	51	98
13	33	25	24	22	18	19	21	37	118	74	49	74
14	31	25	24	22	18	19	20	28	107	71	48	59
15	30	25	24	22	18	18	20	26	94	107	51	54
16	31	25	23	22	18	19	21	28	94	94	52	49
17	30	25	24	21	18	19	20	37	107	94	48	48
18	30	25	24	21	18	20	21	57	129	90	47	48
19	30	24	23	21	18	20	22	82	156	76	47	52
20	29	24	23	21	18	20	22	88	217	71	45	52
21	29	25	23	20	18	20	21	105	214	65	44	49
22	28	25	22	20	18	20	20	156	187	62	43	46
23	28	25	22	20	18	20	20	199	181	60	42	45
24	28	24	22	20	18	20	20	205	163	70	40	44
25	28	24	22	20	18	20	20	199	153	64	38	44
26	27	24	23	19	18	20	19	193	142	55	38	47
27	26	23	23	19	18	20	20	136	136	54	41	53
28	26	24	22	19	18	20	22	120	129	53	43	48
29	26	24	23	18	-	20	24	98	118	50	43	45
30	26	24	22	18	- - - -	20	26	80	112	49	52	43
31	26	- - - -	22	18	- - - -	19	- - - -	72	- - - -	48	51	- - - -
Total	924	737	722	647	504	594	628	2,232	4,176	2,402	1,472	1,474
Mean	29.8	24.6	23.3	20.9	18.0	19.2	20.9	72.0	139	77.5	47.5	49.1
Max	34	26	26	22	18	20	26	205	217	109	62	98
Min	26	23	22	18	18	18	19	20	68	48	38	36
Ac-ft	1,830	1,460	1,430	1,280	1,000	1,180	1,250	4,430	8,280	4,760	2,920	2,920

Cal yr 1966: Total 16,259 Mean 44.5 Max 181 Min 22 Ac-ft 32,250
 Wtr yr 1967: Total 16,512 Mean 45.2 Max 217 Min 18 Ac-ft 32,750

Peak discharge (base, 300 cfs).--No peak above base.

7-0912. Arkansas River near Nathrop, Colo.

Location.--Lat 38°39'10", long 106°03'00", in SE¼SW¼ sec.23, T.51 N., R.8 E., on right bank 300 ft upstream from end of Chaffee County road 60, in Browns Canyon, 3.7 miles downstream from Browns Creek, 6.7 miles south of Nathrop, and 9 miles north of Salida.

Drainage area.--1,060 sq mi.

Records available.--October 1964 to September 1967.

Gage.--Water-stage recorder. Altitude of gage is 7,350 ft (from topographic map).

Extremes.--Maximum discharge during year, 2,680 cfs May 25 (gage height, 6.53 ft); minimum daily, 183 cfs Mar. 9, 27, 31.
1964-67: Maximum discharge, 4,480 cfs July 13, 1965 (gage height, 7.79 ft); minimum daily, 150 cfs Mar. 4, 1965.

Remarks.--Records good. Natural flow of stream affected by transmountain diversions (see elsewhere in this report), storage reservoirs, power developments, diversions for irrigation of about 15,000 acres, and return flow from irrigated areas.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	225	207	217	210	200	223	192	204	1,090	1,410	740	1,070
2	225	197	220	230	192	223	197	212	1,080	1,390	690	1,040
3	234	204	223	230	204	210	202	239	1,000	1,280	685	628
4	255	202	225	240	234	210	223	237	1,240	1,260	720	538
5	252	200	225	230	265	207	248	237	1,650	1,160	775	506
6	258	194	258	220	268	194	282	237	1,880	1,090	812	479
7	262	202	275	210	248	190	268	228	1,960	1,390	830	474
8	285	210	255	190	225	187	258	210	1,850	1,540	848	474
9	302	220	255	220	217	183	262	210	1,740	1,450	990	520
10	271	207	275	240	223	185	255	234	1,570	1,380	990	510
11	248	217	285	220	223	192	242	324	1,420	1,310	941	533
12	258	220	245	205	223	194	234	378	1,360	1,360	920	645
13	258	228	242	200	223	194	234	422	1,290	1,300	854	660
14	271	237	239	200	223	200	225	454	1,080	1,230	848	564
15	268	237	234	197	225	190	248	418	969	1,310	860	528
16	271	237	237	202	214	192	248	354	914	1,340	908	488
17	271	234	234	202	217	220	234	374	976	1,340	715	450
18	265	237	231	190	223	239	239	745	1,140	920	474	462
19	255	231	228	200	223	237	225	1,070	1,590	818	470	488
20	258	231	237	197	223	225	214	1,400	1,960	760	438	515
21	258	234	228	194	212	217	212	1,560	2,100	700	414	488
22	255	234	220	197	210	202	207	1,690	1,920	641	398	458
23	252	231	205	194	217	202	202	2,050	1,980	596	390	442
24	252	237	205	192	220	204	204	2,390	2,010	655	374	430
25	252	228	230	192	220	214	214	2,620	1,950	655	339	426
26	248	220	220	187	223	210	217	2,620	1,850	690	430	426
27	242	212	230	190	220	183	225	2,310	1,670	665	795	470
28	239	217	200	190	220	190	207	1,850	1,470	605	780	446
29	225	225	200	190	-	200	194	1,460	1,380	538	860	418
30	217	228	220	200	- - - -	197	197	1,350	1,450	605	920	390
31	210	- - - -	215	194	- - - -	183	- - - -	1,110	- - - -	745	1,020	- - - -
Total	7,842	6,618	7,213	6,353	6,235	6,297	6,809	29,197	45,539	32,133	22,228	15,967
Mean	253	221	233	205	223	203	227	942	1,518	1,037	717	532
Max	302	237	285	240	268	239	282	2,620	2,100	1,540	1,020	1,070
Min	210	194	200	187	192	183	192	204	914	538	339	390
Ac-ft	15,550	13,130	14,310	12,600	12,370	12,490	13,510	57,910	90,330	63,730	44,090	31,670
Cal yr 1966: Total	197,459		Mean	541	Max	1,880	Min	168	Ac-ft	391,700		
Wtr yr 1967: Total	192,431		Mean	527	Max	2,620	Min	183	Ac-ft	381,700		

ARKANSAS RIVER BASIN

7-0915. Arkansas River at Salida, Colo.

Location.--Lat 38°32'45", long 106°00'36", in NE¼ sec.31, T.50 N., R.9 E., on right bank at Salida, 450 ft upstream from bridge (relocated) on State Highway 291 and 2.7 miles upstream from South Arkansas River.

Drainage area.--1,218 sq mi.

Records available.--April to October 1895, May to December 1897, August 1898 to September 1899, April to October 1900, April 1901 to October 1903, October 1909 to September 1967. Monthly discharge only for some periods, published in WSP 1311.

Gage.--Water-stage recorder. Datum of gage is 7,050.45 ft above mean sea level, datum of 1929. Apr. 11, 1895, to Nov. 18, 1903, staff gage and Nov. 3, 1909, to Dec. 2, 1936, water-stage recorder, at site 1½ miles downstream at different datum. Dec. 3, 1936, to Dec. 5, 1957, water-stage recorder at same site at datum 1.00 ft higher.

Average discharge.--61 years (1898-99, 1901-3, 1909-67), 625 cfs (452,500 acre-ft per year).

Extremes.--Maximum discharge during year, 2,780 cfs May 26 (gage height, 3.53 ft); minimum daily, 192 cfs Mar. 27, 28.

1895-1903, 1909-67: Maximum discharge, 9,220 cfs June 29, 1957 (gage height, 7.82 ft, present datum); minimum observed, 100 cfs Oct. 4, 6, 7, 1898.

Remarks.--Records good. Natural flow of stream affected by transmountain diversions (see elsewhere in this report), storage reservoirs (combined capacity, 81,890 acre-ft), diversions for irrigation of about 18,000 acres above station, and return flow from irrigated areas.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	240	270	265	307	250	240	219	235	1.100	1.550	752	1.140
2	235	260	265	318	240	245	223	240	1.100	1.510	708	1.110
3	255	265	270	318	245	231	223	265	1.020	1.420	685	722
4	285	265	270	334	270	227	240	270	1.200	1.360	715	559
5	280	265	275	329	296	227	265	265	1.600	1.270	752	520
6	280	255	302	329	302	219	290	265	1.800	1.180	821	507
7	280	265	324	324	290	211	285	260	1.950	1.390	837	559
8	290	275	312	331	260	215	275	231	1.830	1.590	853	514
9	307	285	307	338	250	211	275	215	1.760	1.510	982	514
10	290	270	302	346	255	215	280	231	1.610	1.450	1.020	520
11	260	275	307	329	250	215	260	302	1.490	1.360	974	526
12	265	280	302	302	255	219	250	356	1.370	1.440	957	613
13	270	280	302	290	255	215	260	368	1.360	1.380	853	678
14	275	285	290	290	255	215	250	425	1.180	1.300	861	572
15	280	285	290	280	250	211	270	413	1.080	1.340	877	533
16	280	296	296	260	250	211	270	346	1.020	1.380	949	507
17	290	285	312	240	250	231	265	356	1.100	1.370	782	455
18	290	285	324	235	255	245	265	670	1.220	1.010	474	462
19	302	285	324	235	250	240	255	990	1.580	853	462	468
20	302	280	324	255	255	231	240	1.320	2.060	782	443	500
21	302	280	324	245	250	223	235	1.450	2.270	700	419	474
22	302	285	324	245	240	211	235	1.520	2.050	648	413	449
23	307	290	318	240	245	211	231	1.800	2.100	585	401	437
24	307	285	318	240	255	211	231	2.270	2.160	634	395	425
25	312	275	329	240	245	219	240	2.630	2.130	655	373	425
26	318	270	329	235	255	215	245	2.670	1.940	678	395	401
27	307	260	329	235	240	192	255	2.380	1.800	670	821	443
28	296	265	318	235	235	192	240	1.830	1.620	613	829	431
29	290	270	312	231	-	203	223	1.450	1.500	533	901	407
30	275	270	324	245	- - - -	207	223	1.300	1.580	578	982	384
31	270	- - - -	318	240	- - - -	203	- - - -	1.170	- - - -	760	1.100	- - - -
Total	8,842	8,261	9,506	8,621	7,148	6,761	7,518	28,493	47,580	33,499	22,786	16,255
Mean	285	275	307	278	255	218	251	919	1,586	1,081	735	542
Max	318	296	329	346	302	245	290	2,670	2,270	1,590	1,100	1,140
Min	235	255	265	231	235	192	219	215	1,020	533	373	384
Ac-ft	17,540	16,390	18,850	17,100	14,180	13,410	14,910	56,520	94,370	66,440	45,200	32,240
Cal yr 1966: Total	220,190		Mean	603	Max	2,480	Min	210	Ac-ft	436,700		
Wtr yr 1967: Total	205,270		Mean	562	Max	2,670	Min	192	Ac-ft	407,100		

7-0937. Arkansas River near Wellsville, Colo.

Location.--Lat 38°30'10", long 105°56'21", in NE¼ sec.14, T.49 N., R.9 E., on right bank 50 ft upstream from Chaffee-Fremont County line, 2 miles northwest of Wellsville, 2.8 miles downstream from South Arkansas River, and 3.5 miles southeast of Salida.

Drainage area.--1,485 sq mi.

Records available.--April 1961 to September 1967.

Gage.--Water-stage recorder. Datum of gage is 6,883.4 ft above mean sea level (river-profile survey).

Average discharge.--6 years, 676 cfs (489,400 acre-ft per year).

Extremes.--Maximum discharge during year, 2,580 cfs May 26 (gage height, 6.24 ft); minimum daily, 185 cfs Mar. 27.
1961-67: Maximum discharge, 4,390 cfs July 13, 1965 (gage height, 7.36 ft); minimum daily, 110 cfs Jan. 12, 1963.

Remarks.--Records good. Natural flow of stream affected by transmountain diversions, storage reservoirs, power developments, diversions for irrigation of about 26,000 acres, and return flow from irrigated areas.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	257	274	271	288	285	285	220	250	1,040	1,380	736	1,160
2	254	264	264	310	274	285	226	250	1,040	1,360	700	1,110
3	274	260	271	310	274	268	229	282	965	1,260	680	724
4	302	264	271	344	306	257	247	285	1,140	1,240	700	582
5	299	264	274	328	348	244	274	278	1,530	1,140	736	548
6	299	257	302	320	364	238	310	282	1,740	1,090	788	528
7	302	264	344	282	336	232	313	274	1,870	1,280	802	536
8	313	271	316	271	296	244	299	247	1,750	1,500	823	528
9	340	282	316	313	296	229	299	218	1,660	1,430	980	544
10	324	271	310	348	288	232	306	268	1,540	1,360	1,010	540
11	285	282	336	332	292	232	285	376	1,400	1,290	972	544
12	292	288	324	302	288	232	274	436	1,310	1,380	965	623
13	299	302	336	296	292	218	285	416	1,280	1,290	890	685
14	302	313	324	292	296	210	278	464	1,080	1,210	868	600
15	313	316	316	299	292	208	288	448	965	1,290	898	569
16	316	310	328	292	285	205	302	372	898	1,340	965	540
17	328	302	324	271	278	226	292	376	996	1,340	802	500
18	332	299	320	268	292	247	278	626	1,110	988	516	508
19	340	296	316	264	299	241	278	965	1,480	830	500	532
20	344	292	320	296	296	235	250	1,360	1,860	760	484	552
21	352	296	316	285	285	223	250	1,540	2,040	700	452	536
22	336	299	313	288	274	208	244	1,630	1,830	650	432	504
23	328	299	288	285	278	208	238	1,960	1,860	592	424	492
24	332	292	288	282	292	205	238	2,270	1,930	641	412	484
25	324	292	310	282	292	218	254	2,480	1,890	665	380	480
26	320	274	306	271	299	210	257	2,500	1,750	680	384	472
27	316	264	320	274	288	185	268	2,290	1,640	665	816	512
28	310	268	285	274	285	188	254	1,850	1,470	614	816	508
29	306	274	274	271	-	195	232	1,450	1,350	552	890	472
30	285	278	306	285	- - - - -	200	235	1,280	1,430	564	965	452
31	278	- - - - -	299	282	- - - - -	205	- - - - -	1,120	- - - - -	736	1,090	- - - - -
Total	9,602	8,507	9,488	9,105	8,270	7,013	8,003	28,843	43,844	31,817	22,876	17,365
Mean	310	284	306	294	295	226	267	930	1,461	1,026	738	579
Max	352	316	344	348	364	285	313	2,500	2,040	1,500	1,090	1,160
Min	254	257	264	264	274	185	220	218	898	552	380	452
Ac-ft	19,050	16,870	18,820	18,060	16,400	13,910	15,870	57,210	86,960	63,110	45,370	34,440
Cal yr 1966: Total	211,629		Mean	580	Max	1,700	Min	229	Ac-ft	419,800		
Wtr yr 1967: Total	204,733		Mean	561	Max	2,500	Min	185	Ac-ft	406,100		

ARKANSAS RIVER BASIN

7-0945. Arkansas River at Parkdale, Colo.

Location.--Lat 38°29'14", long 105°22'23", in NE¼NW¼ sec.18, T.18 S., R.71 W., on left bank at Parkdale, 100 ft upstream from Bumback Gulch, 300 ft upstream from bridge on U. S. Highway 50, and 0.9 mile upstream from Copper Gulch.

Drainage area.--2,548 sq mi.

Records available.--October 1945 to September 1955, October 1964 to September 1967. Monthly discharge only for October 1945 to May 1946, published in WSP 1311.

Gage.--Water-stage recorder. Altitude of gage is 5,720 ft (from topographic map). Prior to Oct. 1, 1964, at site 600 ft downstream at different datum.

Average discharge.--13 years, 774 cfs (560,400 acre-ft per year).

Extremes.--Maximum discharge during year, 2,400 cfs May 27 (gage height, 5.42 ft); minimum daily, 246 cfs Mar. 29.

1945-55, 1964-67: Maximum discharge, 5,880 cfs June 22, 1947 (gage height, 9.02 ft, site and datum then in use), from rating curve extended above 3,000 cfs; minimum daily, 224 cfs Apr. 5, 1954.

Remarks.--Records good. Natural flow of stream affected by transmountain diversions, storage reservoirs, diversions for irrigation of about 35,000 acres above station, and return flow from irrigated areas.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	324	328	328	333	328	324	256	271	1,130	1,420	844	1,190
2	320	320	320	337	324	324	265	276	1,100	1,360	828	1,170
3	320	313	320	333	313	324	268	287	1,080	1,320	759	1,000
4	349	320	324	358	333	310	274	304	1,100	1,260	780	689
5	358	313	324	381	372	300	287	297	1,440	1,190	773	634
6	349	310	337	376	391	284	310	297	1,700	1,130	852	616
7	354	304	386	337	386	290	333	294	1,850	1,200	860	592
8	354	310	372	335	349	294	320	284	1,790	1,480	852	616
9	367	320	345	350	349	300	320	263	1,660	1,430	940	604
10	376	317	337	360	345	294	324	263	1,540	1,380	1,030	616
11	345	317	362	380	333	294	313	304	1,460	1,330	1,010	604
12	337	324	372	360	337	290	300	386	1,310	1,360	985	628
13	345	337	381	345	341	284	313	386	1,350	1,350	967	766
14	349	345	376	345	345	279	310	420	1,180	1,250	916	717
15	358	358	354	345	333	274	300	425	1,070	1,280	916	634
16	354	362	341	349	328	268	313	376	967	1,410	976	616
17	381	354	358	320	313	268	313	341	985	1,360	932	586
18	381	349	354	300	337	287	297	410	1,120	1,200	668	574
19	376	345	349	310	345	297	300	876	1,300	949	556	580
20	376	341	349	328	341	294	287	1,220	1,780	892	550	610
21	391	341	345	337	328	282	282	1,460	2,000	820	502	604
22	376	345	345	333	324	274	279	1,510	1,910	745	472	574
23	372	341	333	333	320	260	274	1,700	1,780	689	496	550
24	376	341	317	324	333	260	271	1,960	1,880	661	450	532
25	372	341	328	320	337	260	276	2,210	1,830	796	430	526
26	367	324	337	317	341	271	282	2,330	1,740	738	410	526
27	362	320	354	317	337	260	282	2,340	1,630	773	616	538
28	354	320	324	320	328	248	287	1,970	1,510	703	868	562
29	354	328	297	320	-	246	265	1,660	1,360	634	892	532
30	341	345	317	320	- - - -	254	263	1,380	1,370	586	994	508
31	333	- - - -	337	324	- - - -	254	- - - -	1,290	- - - -	738	1,110	- - - -
Total	11,071	9,933	10,623	10,447	9,491	8,748	8,764	27,790	43,922	33,434	24,234	19,494
Mean	357	331	343	337	339	282	292	896	1,464	1,079	782	650
Max	391	362	386	381	391	324	333	2,340	2,000	1,480	1,110	1,190
Min	320	304	297	300	313	246	256	263	967	586	410	508
Ac-ft	21,960	19,700	21,070	20,720	18,830	17,350	17,380	55,120	87,120	66,320	48,070	38,670
Cal yr 1966: Total	234,894		Mean	644	Max	1,760	Min	297	Ac-ft	465,900		
Wtr yr 1967: Total	217,951		Mean	597	Max	2,340	Min	246	Ac-ft	432,300		

7-0950, Grape Creek near Westcliffe, Colo.

Location.--Lat 38°11'10", long 105°28'59", in NW¼NW¼ sec.31, T.21 S., R.72 W., on left bank 0.5 mile upstream from water line of De Weese Reservoir at elevation 7,665 ft, 0.5 mile downstream from Swift Creek, and 3.6 miles northwest of Westcliffe.

Drainage area.--320 sq mi.

Records available.--October 1924 to September 1961, October 1962 to September 1967. Monthly discharge only for some periods, published in WSP 1311.

Gage.--Water-stage recorder and concrete control. Altitude of gage is 7,690 ft (from topographic map). Prior to Mar. 17, 1939, at site 30 ft upstream at same datum.

Average discharge.--42 years, 31.4 cfs (22,730 acre-ft per year).

Extremes.--Maximum discharge during year, 287 cfs Aug. 30 (gage height, 1.94 ft; minimum daily, 4.2 cfs May 25, June 29, 30.

1924-61, 1962-67: Maximum discharge, 7,460 cfs Aug. 2, 1966 (gage height, 8.45 ft), from rating curve extended above 320 cfs on basis of slope-area measurement of peak flow; minimum daily, 0.1 cfs June 19-22, 1936.

Remarks.--Records good except those for period of no gage-height record, which are poor. Diversions above station for irrigation of about 15,000 acres.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	9.8	13	16			35	15	8.0	30	5.2	19	224
2	9.8	12	15			41	13	8.9	28	9.8	25	154
3	9.8	12	16			30	14	8.9	12	9.8	26	123
4	12	12	15			25	13	8.0	20	7.4	32	97
5	12	12	15			17	13	8.9	27	8.0	31	82
6	12	12	19			15	12	8.9	45	16	26	74
7	12	12				20	16	8.0	41	12	28	65
8	12	12				25	11	8.0	24	15	28	61
9	9.8	12				30	11	8.0	14	20	37	61
10	8.9	12				37	14	7.4	5.2	14	82	61
11	8.9	12				36	12	6.9	8.9	12	68	58
12	11	12				34	9.8	6.4	6.9	20	51	54
13	8.9	12				27	6.9	6.4	5.8	32	50	51
14	8.9	12				25	31	8.0	5.8	19	86	49
15	11	12				24	45	8.0	8.0	24	84	44
16	12	13		11	9.0	25	32	7.4	12	77	78	40
17	17	13				28	20	8.0	27	63	59	36
18	15	13				28	17	7.4	21	56	54	35
19	14	13	11			30	14	6.4	19	92	52	34
20	12	14				26	12	6.4	30	63	47	32
21	12	14				25	11	7.4	43	55	43	28
22	12	14				24	11	6.4	43	38	37	24
23	12	14				24	9.8	6.9	34	26	34	19
24	12	14				24	9.8	8.9	25	24	26	17
25	12	12				25	8.9	4.2	17	32	26	16
26	12	13				30	8.9	12	15	58	21	24
27	12	12				34	8.9	34	11	43	21	31
28	12	14				26	8.0	17	6.9	32	22	28
29	12	15				20	8.0	20	4.2	25	31	22
30	12	18				18	7.4	15	4.2	18	146	19
31	12	- - - -				15	- - - -	25	- - - -	19	198	- - - -
Total	358.8	387	371	341	252.0	823	423.4	311.1	593.9	945.2	1,568	1,663
Mean	11.6	12.9	12.0	11	9.0	26.5	14.1	10.0	19.8	30.5	50.6	55.4
Max	17	18	19	-	-	41	45	34	45	92	198	224
Min	8.9	12	-	-	-	15	6.9	4.2	4.2	5.2	19	16
Ac-ft	712	768	736	676	500	1,630	840	617	1,180	1,870	3,110	3,300

Cal yr 1966: Total 9,099.6 Mean 24.9 Max 1,620 Min 2.2 Ac-ft 18,050

Wtr yr 1967: Total 8,037.4 Mean 22.0 Max 224 Min 4.2 Ac-ft 15,940

Peak discharge (base, 250 cfs)--Aug. 30 (1800) 287 cfs (1.94 ft).

Note.--No gage-height record Dec. 7 to Mar. 1.

Location.--Lat 38°26'02", long 105°15'24", in SE~~1~~⁴ sec.31, T.18 S., R.70 W., on right bank 800 ft upstream from Sand Creek, 0.7 mile downstream from Grape Creek, and 0.7 mile upstream from First Street Bridge in Canon City.

Records available.--January 1888 to September 1967. Monthly discharge only for some periods, published in WSP 1311. Published as "near Canyon" 1900-1906.

Gage.--Water-stage recorder. Datum of gage is 5,342.13 ft above mean sea level, datum of 1929, supplementary adjustment of 1960. Prior to Mar. 27, 1922, staff gage, chain gage, or water-stage recorder at sites about a quarter of a mile upstream at various datums. Mar. 27, 1922, to Sept. 30, 1957, water-stage recorder at present site at datum 2.49 ft higher. Oct. 1, 1957, to Nov. 15, 1962, water-stage recorder at present site at datum 1.49 ft higher.

Extremes.--Maximum discharge during year, 2,960 cfs May 27 (gage height, 6.10 ft); minimum daily, 117 cfs Apr. 24, May 10.
1888-1967: Maximum discharge, 19,000 cfs Aug. 2, 1921 (gage height, 10.7 ft, site and datum then in use, from floodmark), from rating curve extended above 5,000 cfs; minimum daily, 69 cfs May 13, 1959.

Remarks.--Records good. Natural flow of stream affected by transmountain diversions, storage reservoirs, power developments, diversions for irrigation of about 56,000 acres, and return flow from irrigated areas. Records of chemical analyses for the water year 1967 are published in Part 2 of this report.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	160	228	268	300	284	260	130	140	964	1,540	850	1,460
2	162	216	236	296	268	260	140	148	975	1,440	840	1,440
3	158	198	242	312	246	268	135	155	920	1,420	720	1,310
4	175	207	246	304	253	253	150	172	850	1,330	696	680
5	188	204	246	312	296	246	160	172	1,200	1,280	704	648
6	188	204	260	320	320	242	162	172	1,650	1,160	790	620
7	185	204	304	304	324	250	188	170	1,940	1,200	790	586
8	185	216	316	296	304	250	188	155	1,770	1,730	760	592
9	204	236	276	292	284	268	182	128	1,680	1,570	870	564
10	213	242	292	312	276	250	195	117	1,560	1,490	1,030	586
11	195	246	300	324	260	253	175	150	1,400	1,390	1,020	569
12	175	268	316	328	260	246	158	222	1,150	1,390	997	586
13	178	272	312	308	268	253	168	253	1,210	1,460	1,100	800
14	185	272	324	304	272	250	175	268	1,040	1,280	986	730
15	192	300	312	288	256	242	160	288	850	1,310	986	604
16	195	296	292	300	253	239	165	246	712	1,520	1,060	569
17	213	280	300	292	242	236	160	190	704	1,490	1,030	515
18	219	260	304	268	253	256	152	201	840	1,320	640	495
19	219	253	304	268	268	268	155	628	1,080	1,030	466	500
20	222	256	324	284	268	268	150	1,070	1,520	860	475	542
21	225	260	332	308	256	239	140	1,320	2,140	720	452	520
22	232	260	332	308	256	213	132	1,500	2,040	628	408	485
23	236	253	336	300	256	192	120	1,800	1,830	574	403	448
24	225	250	312	296	250	192	117	2,280	2,100	542	398	403
25	225	250	316	292	276	201	122	2,580	2,050	628	380	394
26	219	246	332	280	288	216	140	2,760	2,000	704	354	394
27	213	242	349	268	288	201	138	2,680	1,800	750	564	408
28	207	239	324	272	264	178	148	2,070	1,660	640	986	408
29	219	242	308	272	-	125	148	1,680	1,480	580	953	403
30	222	268	284	272	- - - -	118	135	1,270	1,420	515	1,100	376
31	222	- - - -	300	280	- - - -	132	- - - -	1,180	- - - -	658	1,280	- - - -
Total	6,256	7,368	9,299	9,160	7,589	7,065	4,588	26,165	42,535	34,149	24,088	18,637
Mean	202	246	300	295	271	228	153	844	1,418	1,102	777	621
Max	236	300	349	328	324	268	195	2,760	2,140	1,730	1,280	1,460
Min	158	198	236	268	242	118	117	117	704	515	354	376
Ac-ft	12,410	14,610	18,440	18,170	15,050							

7-0992. Arkansas River near Portland, Colo.

Location.--Lat 38°20'16", long 104°56'24", in NW¼SW¼ sec.6, T.20 S., R.67 W., on left bank 1.2 miles downstream from Willow Spring Creek and 5.3 miles southeast of Portland.

Drainage area.--4,280 sq mi.

Records available.--October 1964 to September 1967.

Gage.--Water-stage recorder. Altitude of gage is 4,950 ft (from topographic map). Prior to Apr. 20, 1966, at site 500 ft upstream at same datum.

Extremes.--Maximum discharge during year, 5,010 cfs July 17 (gage height, 5.86 ft); minimum daily, 86 cfs May 10.
1964-67: Maximum discharge, 23,900 cfs Aug. 21, 1965 (gage height, 11.85 ft), from rating curve extended above 7,400 cfs on basis of slope-area measurement of peak flow; minimum daily, that of May 10, 1967.

Remarks.--Records fair. Natural flow of stream affected by transmountain diversions, storage reservoirs, power developments, diversions for irrigation of about 68,000 acres, and return flow from irrigated areas. Records of chemical analyses for the water year 1967 are published in Part 2 of this report.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	260	282	288	290	262	232	126	124	1,200	1,390	874	1,410
2	255	276	276	270	260	230	136	124	1,050	1,340	858	1,270
3	260	273	276	260	250	228	136	126	1,000	1,320	829	1,250
4	265	273	279	270	255	222	126	134	950	1,230	822	866
5	268	279	285	273	265	210	134	144	1,300	1,180	787	738
6	268	273	285	270	291	212	134	144	1,700	1,080	808	682
7	270	273	310	265	294	208	152	134	1,900	1,170	930	661
8	270	279	328	258	276	200	154	124	1,850	1,380	890	724
9	273	276	300	252	265	212	144	104	1,780	1,490	1,080	773
10	288	279	288	276	265	210	154	86	1,730	1,360	1,310	766
11	276	279	294	273	258	202	148	88	1,610	1,280	1,460	717
12	262	276	304	279	252	195	126	134	1,410	1,320	1,380	724
13	260	279	300	276	258	195	148	192	1,410	1,350	1,380	843
14	270	288	314	265	265	188	168	210	1,250	1,250	1,170	930
15	285	297	300	262	258	185	140	232	1,120	1,250	1,230	914
16	297	297	291	265	242	185	142	225	1,060	1,510	1,250	801
17	310	294	297	258	242	178	142	198	1,000	1,830	1,260	752
18	321	285	300	242	240	185	138	188	1,100	1,670	1,060	696
19	321	285	300	248	255	195	128	383	1,260	1,380	829	717
20	313	291	300	250	258	190	128	847	1,660	1,090	759	689
21	307	288	300	270	248	182	126	1,220	2,000	1,010	731	696
22	307	291	294	260	238	168	124	1,280	1,940	890	626	577
23	300	291	291	262	238	156	122	1,460	1,790	850	498	540
24	294	294	276	260	235	152	124	1,900	1,880	850	450	480
25	282	291	285	260	248	152	122	2,260	1,850	922	422	456
26	282	288	297	260	258	160	132	2,540	1,790	970	380	486
27	282	279	304	255	255	164	130	2,510	1,680	882	439	504
28	276	276	307	260	245	160	124	2,150	1,540	766	898	534
29	276	282	282	262	-	142	132	1,690	1,370	731	1,010	510
30	279	297	280	260	- - - -	122	106	1,480	1,330	759	1,270	462
31	276	- - - -	280	265	- - - -	128	- - - -	1,380	- - - -	773	1,320	- - - -
Total	8,753	8,511	9,111	8,176	7,176	5,748	4,046	23,811	44,510	36,273	29,010	22,168
Mean	282	284	294	264	256	185	135	768	1,484	1,170	936	739
Max	321	291	328	290	294	232	168	2,540	2,000	1,830	1,460	1,410
Min	255	273	276	242	235	122	106	86	950	731	380	456
Ac-ft	17,360	16,880	18,070	16,220	14,230	11,400	8,030	47,230	88,280	71,950	57,540	43,970
Cal yr 1966: Total	246,498		Mean	675	Max	2,530	Min	255	Ac-ft	488,900		
Wtr yr 1967: Total	207,293		Mean	568	Max	2,540	Min	86	Ac-ft	411,200		

ARKANSAS RIVER BASIN

7-0994. Arkansas River above Pueblo, Colo.

Location.--Lat 38°16'17", long 104°43'06", in NE¼ sec.36, T.20 S., R.66 W., on left bank 450 ft downstream from headgate of West Pueblo ditch, 0.4 mile downstream from Rock Canyon Barrier Dam, and 7 miles west of Pueblo. Prior to Mar. 23, 1967, at site 730 ft upstream.

Drainage area.--4,670 sq mi.

Records available.--October 1965 to September 1967.

Gage.--Water-stage recorder. Altitude of gage is 4,740 ft (from topographic map). Prior to Mar. 23, 1967, at site 730 ft upstream at datum 1.23 ft higher.

Extremes.--Maximum discharge during year, 4,780 cfs July 17 (gage height, 6.45 ft), from rating curve extended above 1,500 cfs on basis of slope area measurement at gage height 9.4 ft; minimum daily, 28 cfs May 11.

1965-67: Maximum discharge, 10,100 cfs Aug. 1, 1966 (gage height, 9.4 ft, from floodmarks, present site and datum), from rating curve extended above 1,600 cfs on basis of slope-area measurement of peak flow; minimum daily, that of May 11, 1967.

Remarks.--Records good. Natural flow of stream affected by transmountain diversions, storage reservoirs, power developments, diversions above station for irrigation of about 88,000 acres and return flow from irrigated areas. Records of chemical analyses for the water year 1967 are published in Part 2 of this report.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	121	187	208	280	271	184	37	37	998	1,270	773	980
2	126	190	199	290	267	179	42	46	1,070	1,130	710	971
3	116	173	187	280	252	173	50	47	1,030	1,120	678	944
4	119	179	196	300	241	165	43	57	1,010	1,060	670	608
5	150	173	199	330	267	147	46	86	1,210	980	678	510
6	154	173	205	290	319	157	50	96	1,450	881	678	466
7	147	165	234	260	331	135	68	86	1,560	881	755	424
8	150	168	295	260	319	157	96	79	1,600	1,250	710	410
9	140	179	252	250	275	147	89	61	1,510	1,230	782	452
10	165	179	255	310	244	154	99	35	1,490	1,110	1,010	495
11	168	179	275	340	202	142	99	28	1,410	1,070	1,040	520
12	142	176	315	348	182	137	68	54	1,190	1,070	908	480
13	130	184	307	335	179	128	75	128	1,220	1,110	1,010	520
14	140	196	335	299	208	119	164	160	1,210	1,060	935	600
15	179	208	315	283	199	112	106	208	1,010	1,210	872	580
16	208	220	307	327	193	114	89	198	980	1,300	890	680
17	224	217	307	300	184	110	96	128	899	1,800	890	650
18	248	205	315	260	165	104	86	89	962	1,530	755	600
19	255	202	315	310	180	128	61	366	1,070	1,090	525	532
20	263	199	315	307	200	126	57	890	1,460	872	466	540
21	259	208	303	362	190	121	54	1,150	1,840	782	438	540
22	287	202	275	340	173	104	52	1,260	1,810	694	356	431
23	279	208	280	279	184	90	54	1,380	1,690	670	330	394
24	267	205	260	271	170	75	61	1,650	1,740	662	298	356
25	217	205	250	259	187	79	54	1,920	1,710	806	276	319
26	217	205	270	259	230	86	57	2,270	1,640	764	240	335
27	205	196	250	241	241	89	59	2,300	1,490	702	208	356
28	196	179	240	252	208	65	47	1,920	1,360	622	587	372
29	182	182	220	244	-	50	46	1,650	1,180	592	622	367
30	199	205	250	255	- - - - -	36	37	1,260	1,180	646	755	324
31	190	- - - - -	270	271	- - - - -	35	- - - - -	1,170	- - - - -	592	845	- - - - -
Total	5,843	5,747	8,204	8,992	6,261	3,648	2,042	20,809	39,979	30,556	20,690	15,756
Mean	188	192	265	290	224	118	68.1	671	1,333	986	667	525
Max	287	220	335	362	331	184	164	2,300	1,840	1,800	1,040	980
Min	116	165	187	241	165	35	37	28	899	592	208	319
Ac-ft	11,590	11,400	16,270	17,840	12,420	7,240	4,050	41,270	79,300	60,610	41,040	31,250
Cal yr 1966: Total	183,639		Mean	503	Max	2,120	Min	94	Ac-ft	364,200		
Wtr yr 1967: Total	168,527		Mean	462	Max	2,300	Min	28	Ac-ft	334,300		

7-0995. Arkansas River near Pueblo, Colo.

Location.--Lat 38°16'02", long 104°39'26", in SE¼NW¼ sec.34, T.20 S., R.65 W., on right bank at intake of south-side waterworks, 1.6 miles upstream from Dry Creek and 2.5 miles west of city hall in Pueblo.

Drainage area.--4,686 sq mi.

Records available.--May to June 1885, January 1886 to December 1887, May to August 1889, September 1894 to September 1967. Monthly discharge only for some periods, published in WSP 1311. Published as "at Rock Canyon" 1889 and as "at Pueblo" 1885-87, 1894-1924.

Gage.--Water-stage recorder and concrete control on river; water-stage recorder and Parshall flume at north-side waterworks intake. Datum of river gage is 4,689.74 ft above mean sea level, datum of 1929, supplementary adjustment of 1960. May 16, 1885, to Sept. 12, 1886, staff gage at site 2½ miles downstream, at different datum; June 1, 1887, to Aug. 31, 1889, staff gage at site 6½ miles upstream, at different datum. Sept. 19, 1894, to May 25, 1925, staff gage, chain gage, or water-stage recorder about 2½ miles downstream at various sites and datums.

Average discharge.--74 years (1886-87, 1894-1967), 708 cfs (512,600 acre-ft per year).

Extremes.--Maximum discharge during year, 5,870 cfs July 18 (gage height, 5.32 ft); minimum daily, 30 cfs Mar. 30, 31, Apr. 2. 1885-87, 1889, 1894-1967: Maximum discharge, 103,000 cfs June 3, 1921 (gage height, 24.66 ft, site and datum then in use), from rating curve extended above 6,800 cfs on basis of float measurement at gage height 11.2 ft and slope-area measurement of peak flow; minimum daily, 18 cfs (including 13 cfs diverted into intake of north-side waterworks) Apr. 7, 1935.

Remarks.--Records good. Records include water diverted above station into intake of north-side waterworks for municipal supply of Pueblo, but not water diverted by south-side waterworks. Natural flow of stream affected by transmountain diversions, storage reservoirs, power developments, diversions above station for irrigation of about 88,000 acres, and return flow from irrigated areas.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	118	178	226	280	261	170	34	39	976	1,230	879	1,100
2	122	177	214	281	255	154	30	51	837	1,050	823	1,080
3	113	162	197	291	236	154	44	65	828	1,100	787	1,020
4	124	167	201	311	223	150	42	73	897	1,130	745	670
5	141	177	200	331	247	135	41	94	1,070	1,030	726	510
6	141	167	200	288	296	145	43	115	1,460	904	745	441
7	128	167	218	270	310	123	62	111	1,640	906	837	416
8	134	167	275	250	301	131	87	96	1,640	1,300	802	385
9	134	177	253	258	246	135	83	70	1,550	1,310	826	477
10	165	192	253	302	222	140	94	51	1,390	1,150	1,030	485
11	172	182	293	351	199	122	96	46	1,330	1,120	1,150	460
12	134	173	299	359	181	114	62	57	1,090	1,110	1,220	434
13	119	177	307	341	176	98	88	131	1,040	1,190	1,200	503
14	134	191	308	319	188	98	158	153	1,210	1,170	1,150	614
15	188	198	313	296	188	94	112	198	985	1,370	970	584
16	201	192	286	306	188	98	96	188	1,070	1,380	990	662
17	214	197	279	282	182	91	106	138	911	1,760	1,000	652
18	234	197	293	251	172	94	87	107	959	2,100	893	510
19	236	202	286	297	185	109	66	301	1,160	1,310	569	449
20	221	197	293	319	202	105	69	802	1,690	904	479	511
21	194	208	293	333	196	97	61	1,120	2,290	822	436	583
22	228	197	280	291	179	73	56	1,240	2,170	734	354	448
23	234	203	271	269	184	58	52	1,350	2,140	663	317	381
24	234	208	251	255	174	52	61	1,550	1,900	644	270	349
25	188	207	241	255	184	69	53	1,710	1,820	745	248	311
26	179	202	261	263	202	75	52	2,230	1,720	745	230	323
27	158	196	251	255	202	77	64	2,270	1,560	745	212	369
28	157	190	230	255	185	56	49	1,810	1,340	644	560	408
29	164	196	210	254	-	36	49	1,460	1,100	577	703	425
30	181	209	240	254	- - - -	30	42	1,140	1,070	644	787	359
31	163	- - - -	260	254	- - - -	30	- - - -	1,050	- - - -	615	1,000	- - - -
Total	5,253	5,653	7,982	8,921	5,964	3,113	2,039	19,816	40,843	32,102	22,938	15,919
Mean	169	188	257	288	213	100	68.0	639	1,361	1,036	740	531
Max	236	209	313	359	310	170	158	2,270	2,290	2,100	1,220	1,000
Min	113	162	197	251	172	30	30	39	828	577	212	311
Ac-ft	10,420	11,210	15,830	17,690	11,830	6,170	4,040	39,300	81,010	63,670	45,500	31,570

Cal yr 1966: Total 195,199

Mean

535

Max

2,790

Min

109

Ac-ft

387,200

Wtr yr 1967: Total 170,543

Mean

467

Max

2,290

Min

30

Ac-ft

338,300

ARKANSAS RIVER BASIN

7-1037. Fountain Creek near Colorado Springs, Colo.

Location.--Lat 38°51'17", long 104°52'39", in SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec.3, T.14 S., R. 67 W., on left bank 200 ft upstream from diversion to city of Colorado Springs, half a mile east of bridge on U. S. Highway 24 near west city limits of Colorado Springs, and 1 mile downstream from Sutherland Creek.

Drainage area.--102 sq mi.

Records available.--April 1958 to September 1967.

Gage.--Water-stage recorder and Parshall flume with overflow weirs. Altitude of gage is 6,110 ft (from topographic map).

Average discharge.--9 years, 11.8 cfs (8,540 acre-ft per year).

Extremes.--Maximum discharge during year, 544 cfs May 26 (gage height, 4.00 ft, from floodmark); minimum daily, 3.6 cfs Feb. 17.

1958-67: Maximum discharge, 2,630 cfs Aug. 4, 1964 (gage height, 5.27 ft), from rating curve extended above 190 cfs on basis of slope-area measurements at gage heights 3.87, 4.52, and 5.27 ft; minimum daily, 2.3 cfs Mar. 25, 1965.

Remarks.--Records fair. Natural flow of stream affected by storage reservoirs, power developments, diversions for irrigation and municipal use, and at times, transbasin diversion from Beaver Creek drainage and transmountain diversions from Colorado River basin.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	13	5.0	6.0	5.4	5.5	5.7	8.5	9.6	39	11	10	19
2	12	6.0	5.8	5.4	4.3	5.7	8.5	10	37	13	9.5	19
3	12	7.2	5.7	5.2	4.4	5.6	8.8	11	33	11	9.3	9.8
4	11	7.8	5.5	5.4	6.0	5.6	8.8	11	30	13	13	6.9
5	10	8.1	5.5	5.6	6.0	5.6	8.5	11	21	11	17	7.5
6	9.1	8.5	5.5	5.8	3.7	5.6	8.3	12	19	7.2	17	9.0
7	8.1	8.5	5.5	5.6	5.1	5.4	9.1	12	15	8.6	15	9.6
8	7.2	8.1	4.0	5.8	5.5	6.0	9.1	11	15	19	25	9.3
9	6.4	8.0	4.2	6.0	5.8	8.4	7.6	11	13	13	64	8.3
10	5.8	7.6	4.0	6.2	6.7	8.5	8.1	12	13	8.5	63	8.0
11	6.3	7.8	4.3	5.8	5.5	8.5	8.1	11	15	6.6	37	8.8
12	6.0	7.8	4.5	5.6	6.4	8.5	8.0	11	16	18	37	8.8
13	5.5	7.8	4.7	5.4	6.1	8.8	19	11	11	16	38	9.3
14	6.0	7.8	4.5	5.0	5.7	8.3	12	12	8.6	11	24	8.5
15	6.6	7.8	5.0	5.2	5.4	6.3	19	12	9.3	11	28	8.8
16	7.5	7.8	5.5	5.4	4.0	6.3	15	11	11	21	25	11
17	8.6	8.1	6.0	4.8	3.6	6.7	10	11	14	22	17	8.0
18	9.6	8.1	5.5	4.4	5.1	8.3	10	11	15	18	19	7.6
19	10	7.6	5.2	5.4	5.5	8.8	14	11	13	24	30	9.0
20	10	7.6	5.5	6.6	4.8	8.1	15	11	9.8	14	28	7.5
21	10	7.5	5.8	6.1	5.2	8.5	14	9.1	15	11	25	4.4
22	9.1	7.2	6.0	6.0	5.2	8.5	13	7.6	18	8.5	13	4.6
23	7.6	7.2	5.8	6.1	4.7	8.6	12	7.6	17	11	11	4.3
24	6.9	7.0	5.6	5.7	4.8	8.6	12	7.6	14	12	9.1	4.6
25	6.1	6.9	5.2	5.4	6.6	8.5	12	7.8	11	11	9.3	4.7
26	5.7	6.7	5.2	4.7	6.3	8.1	11	37	11	11	11	8.3
27	5.5	6.3	5.0	5.5	5.7	7.8	12	15	7.8	8.0	10	8.1
28	5.2	5.8	5.0	5.7	5.5	7.8	11	28	7.8	6.9	9.1	6.6
29	5.1	5.8	5.2	5.7	-	7.8	11	25	8.8	6.6	8.2	6.1
30	5.0	6.0	5.4	5.5	- - - - -	8.6	9.8	24	8.0	13	13	5.7
31	4.7	- - - - -	5.6	5.5	- - - - -	7.6	- - - - -	36	- - - - -	17	15	- - - - -
Total	241.6	219.4	162.2	171.9	149.1	231.1	333.2	427.3	476.1	392.9	659.5	251.1
Mean	7.79	7.31	5.23	5.55	5.32	7.45	11.1	13.8	15.9	12.7	21.3	8.37
Max	13	8.5	6.0	6.6	6.7	8.8	19	37	39	24	64	19
Min	4.7	5.0	4.0	4.4	3.6	5.4	7.6	7.6	7.8	6.6	8.2	4.3
Ac-ft	479	435	322	341	296	458	661	848	944	779	1,310	498

Cal yr 1966: Total 4,390.2 Mean 12.0 Max 68 Min 4.0 Ac-ft 8,710

Wtr yr 1967: Total 3,715.4 Mean 10.2 Max 64 Min 3.6 Ac-ft 7,370

Peak discharge (base, 250 cfs).--May 26 (1800) 544 cfs (4.00 ft).

Note.--No gage-height record Dec. 8 to Jan. 13.

Location.--Lat 38°58'17", long 104°53'56", in SW¼ sec.28, T.12 S., R.67 W., on right bank in Air Force Academy Reservation, 4 miles upstream from mouth and 1½ miles northwest of Pikeview.

Records available.--October 1957 to September 1967.

Gage.--Water-stage recorder and Parshall flume. Datum of gage is 7,080.78 ft (city of Colorado Springs bench mark).

Average discharge.--10 years, 0.67 cfs (485 acre-ft per year).

Extremes.--Maximum discharge during year, 10 cfs Oct. 3 (gage height, 0.94 ft); no flow for many days.

1957-67: Maximum discharge, about 400 cfs June 17, 1965 (gage height, 4.80 ft, from floodmark), estimated on basis of slope-area measurement of peak flow at point 1.6 miles downstream; no flow for many days in each year.

Remarks.--Records fair except those for winter period, which are poor. Natural flow of stream affected by storage reservoirs (combined capacity, 1,520 acre-ft) and diversions for municipal use.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.10	.30	0.21	0.09	0	0	0	0.38	2.0	0.60	1.2	0.48
2	.05	1.5	.17	.09	0	.10	0	.29	2.1	.48	.90	.48
3	1.1	.60	.06	.17	0	.10	0	.17	1.9	.66	.97	.38
4	.33	.84	.17	.09	0	.15	.20	.17	1.6	.70	.66	.43
5	.33	.90	.06	.06	0	.20	.38	.21	1.3	.52	.78	.43
6	1.2	.84	.17	.03	0	.25	.43	.21	1.2	.45	1.2	.33
7	.60	.78	.21	.09	.06	.30	.33	.21	1.1	1.6	1.6	.29
8	.60	.72	0	.09	0	.20	.21	.25	.90	2.8	2.9	.38
9	.60	.54	0	.09	0	0	.17	.43	1.1	3.7	4.5	.84
10	.66	.90	0	.06	0	0	.13	.54	1.1	3.2	1.3	.66
11	.54	.66	.17	.03	0	0	.13	.48	1.0	3.2	.76	.66
12	.54	.90	.13	.09	0	0	.13	.25	1.1	5.4	.38	.60
13	.60	.72	.21	.06	0	.43	.17	.33	2.6	5.1	.60	.54
14	.66	.66	.17	0	0	0	1.6	.25	2.4	4.3	.66	.48
15	.43	.60	.13	.17	0	0	.66	.21	.78	3.8	.29	.54
16	.48	.66	.06	.03	0	0	.43	.25	1.0	4.6	.17	.60
17	.33	.60	.13	.13	0	0	.54	.38	.72	4.8	.13	.43
18	.48	.66	.17	.03	.66	.10	.78	.33	.72	3.5	.90	.43
19	.43	.66	.03	.13	0	.09	.97	.33	.60	2.9	.60	2.0
20	.48	.66	.13	0	0	0	1.1	.29	.72	2.2	.60	2.7
21	.38	.66	.03	0	0	0	.78	.25	1.2	2.0	.78	.43
22	.54	1.1	.17	0	.25	0	.78	.25	1.1	1.6	.66	.33
23	.84	.72	0	0	0	.10	.72	.60	.78	1.8	.13	.48
24	.66	.43	0	0	0	0	.66	.54	.66	1.7	.21	.84
25	.48	.54	0	0	0	0	.60	.43	.54	1.5	.25	1.0
26	.54	.66	0	0	0	0	2.7	1.5	.54	1.4	.33	.48
27	.54	.43	0	0	0	0	2.3	1.9	.48	1.5	.17	.25
28	.54	.54	.09	0	0	0	1.0	2.2	.66	1.2	.29	.25
29	.60	.54	0	.38	-	.43	.90	1.9	.43	1.3	.43	.38
30	.60	.54	.09	.54	- - - -	0	.54	1.4	.66	1.0	.72	.97
31	2.0	- - - -	.09	.17	- - - -	0	- - - -	1.9	- - - -	1.3	.84	- - - -
Total	18.26	23.56	2.85	2.62	0.97	2.45	19.34	18.83	32.99	70.81	25.91	19.09
Mean	0.589	0.785	0.092	0.085	0.035	0.079	0.645	0.607	1.10	2.28	0.836	0.636
Max	2.0	3.0	0.21	0.54	0.66	0.43	2.7	2.2	2.6	5.4	4.5	2.7
Min	0.05	0.43	0	0	0	0	0	0.17	0.43	0.45	0.13	0.25
Ac-ft	36	47	5.7	5.2	1.9	4.9	38	37	65	140	51	38
Cal yr 1966: Total	133.07		Mean	0.365	Max	4.0	Min	0	Ac-ft	264		
Wtr yr 1967: Total	237.68		Mean	0.651	Max	5.4	Min	0	Ac-ft	471		

ARKANSAS RIVER BASIN

7-1045. Templeton Gap Floodway at Colorado Springs, Colo.

Location.--Lat 38°53'17", long 104°49'01", in SE¼ sec.30, T.13 S., R.66 W., on left bank 75 ft upstream from head of concrete flume, 400 ft upstream from bridge on U. S. Highways 85 and 87, and three-quarters of a mile north of Colorado Springs.

Drainage area.--8.46 sq mi.

Records available.--July 1951 to September 1967.

Gage.--Water-stage recorder and concrete control. Altitude of gage is 6,200 ft (from topographic map).

Average discharge.--16 years, 0.161 cfs (117 acre-ft per year).

Extremes.--Maximum discharge during year, 412 cfs July 3 (gage height, 2.55 ft); no flow for most of year.

1951-67: Maximum discharge, 572 cfs June 17, 1965 (gage height, 2.84 ft), from rating curve based on computation of flow at critical depth at gage heights, 1.3, 1.4, 1.8, and 3.0 ft; no flow for most of time.

Remarks.--Records good. This is an artificial channel constructed to divert flood flows from normally dry channels around Colorado Springs during periods of heavy rainfall.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Apr.	14.....	5.3	July	7.....	1.0
	15.....	7.7		8.....	26
May	26.....	11		9.....	4.8
	27.....	3.0		11.....	37
	30.....	.05		12.....	19
	31.....	1.6		13.....	.01
June	1.....	.17		18.....	10
	19.....	.02		19.....	2.0
	21.....	8.9	Aug.	17.....	4.7
	22.....	8.2		18.....	10
	23.....	2.9		29.....	.32
July	3.....	50	Sept.	16.....	2.4
	4.....	22		17.....	6.8

Month	Cfs-days	Maximum	Minimum	Mean	Runoff in acre-feet
April.....	13.0	7.7	0	0.43	26
May.....	15.65	11	0	.505	31
June.....	20.19	8.9	0	.673	40
July.....	171.81	50	0	5.54	341
August.....	15.02	10	0	.485	30
September.....	9.2	6.8	0	.31	18
Calendar year 1966...	83.7	34	0	.229	166
Water year 1966-67...	244.87	50	0	.671	486

Note.--Flow occurred only on days listed above.

7-1058. Fountain Creek at Security, Colo.

Location.--Lat 38°43'46", long 104°44'00", in SW¼ sec.24, T.15 S., R.66 W., on left bank on upstream side of Carson Road bridge, half a mile southwest of south end of Security, 3½ miles northeast of Fountain, and 5½ miles upstream from Jimmy Camp Creek. Prior to Oct. 26, 1966, at site 60 ft upstream.

Drainage area.--488 sq mi.

Records available.--October 1964 to September 1967.

Gage.--Water-stage recorder. Altitude of gage is 5,640 ft (from topographic map). Prior to Oct. 26, 1966, at site 60 ft upstream at same datum.

Extremes.--Maximum discharge during year, 1,350 cfs July 19 (gage height, 4.55 ft); minimum daily, 8.2 cfs Apr. 8, 9.

1964-67: Maximum discharge, 23,000 cfs July 24, 1965 (gage height, 11.30 ft, from floodmarks), from rating curve extended above 2,900 cfs on basis of slope-area measurement of peak flow; minimum daily, 1.9 cfs Mar. 1, 1965.

Remarks.--Records fair. Natural flow of stream affected by storage reservoirs, power developments, diversions for irrigation of about 5,100 acres, municipal use, and return flow from irrigated areas.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	30	35	13	33	34	37	98	48	204	93	90	23
2	32	35	14	32	33	38	98	36	176	108	80	18
3	34	30	14	32	33	38	98	33	148	188	75	13
4	36	26	15	33	38	38	98	33	132	170	75	10
5	36	27	16	34	40	38	10	32	152	78	75	11
6	33	28	16	37	40	40	10	33	96	45	75	12
7	29	28	15	34	38	29	10	29	96	48	80	12
8	28	28	15	33	40	29	8.2	32	85	50	90	9.8
9	24	26	16	34	32	36	8.2	27	89	70	104	10
10	28	24	15	37	26	26	12	27	93	40	89	13
11	27	23	16	34	22	20	12	32	108	35	74	14
12	25	20	18	33	23	17	12	32	104	56	82	16
13	26	19	23	33	32	16	108	27	74	40	120	17
14	100	16	22	33	37	18	124	33	89	40	56	16
15	61	16	23	37	37	19	45	34	124	40	54	13
16	59	16	24	52	36	24	45	37	128	45	37	19
17	54	15	26	67	34	23	38	34	148	60	37	15
18	67	15	25	52	29	24	36	31	144	112	43	18
19	70	15	23	54	37	23	31	33	156	295	124	21
20	70	15	25	50	37	24	34	33	148	104	27	25
21	52	16	28	54	29	24	36	36	209	85	23	19
22	43	16	31	52	28	23	37	34	70	65	18	18
23	43	16	34	54	29	18	43	32	89	70	24	18
24	45	16	33	45	33	18	31	32	108	80	20	22
25	45	16	33	38	32	18	26	33	116	74	20	25
26	46	16	30	43	34	17	25	157	164	74	23	31
27	45	15	29	41	40	16	24	172	112	64	19	25
28	44	14	28	38	34	10	24	96	128	60	19	21
29	43	15	30	34	-	10	32	100	124	60	23	24
30	50	16	32	37	- - - -	9.3	43	104	124	65	32	28
31	35	- - - -	34	36	- - - -	9.3	- - - -	204	- - - -	166	26	- - - -
Total	1,360	613	716	1,256	937	729.6	903.6	1,656	3,738	2,580	1,734	5,368
Mean	43.9	20.4	23.1	40.5	33.5	23.5	30.1	53.4	125	83.2	55.9	17.9
Max	100	35	34	67	40	40	124	204	209	295	124	31
Min	24	14	13	32	22	9.3	8.2	27	70	35	18	9.8
Ac-ft	2,700	1,220	1,420	2,490	1,860	1,450	1,790	3,280	7,410	5,120	3,440	1,060
Cal yr 1966 : Total	14,210.7			38.9		140	6.6	Ac-ft	28,190			
Wtr yr 1967 : Total	16,760.0			45.9		295	8.2	Ac-ft	33,240			

7-1095. Arkansas River near Avondale, Colo.

Location.--Lat 38°14'53", long 104°23'55", in NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec.1, T.21 S., R.63 W., on right bank 15 ft downstream from bridge on Sixmile Road, 0.3 mile upstream from Sixmile Creek, and 2.6 miles west of Avondale.

Drainage area.--6,327 sq mi.

Records available.--May 1939 to September 1951, February 1965 to September 1967.

Gage.--Water-stage recorder. Datum of gage is 4,509.53 ft above mean sea level, datum of 1929. Prior to February 1965 at site 550 ft downstream at datum 1.37 ft lower.

Average discharge.--14 years, 863 cfs (624,800 acre-ft per year).

Extremes.--Maximum discharge during year, 4,670 cfs July 18 (gage height, 6.12 ft); minimum daily, 138 cfs Apr. 30.

1939-51, 1965-67: Maximum discharge, about 50,000 cfs June 18, 1965 (gage height, 9.77 ft), from rating curve extended above 6,700 cfs on basis of records for station near Pueblo and indirect measurements of peak flow on Fountain Creek at Pueblo, Chaco Creek near North Avondale, and Arkansas River near North Avondale; minimum daily, 50 cfs Apr. 2, 1940

Remarks.--Records fair. Natural flow of stream affected by transmountain diversions, storage reservoirs, power developments, ground-water withdrawals, diversions for irrigation of about 123,000 acres and municipal use, and return flow from irrigated areas.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	279	344	355	441	441	256	163	156	1,100	1,300	1,050	1,150
2	270	344	324	469	434	279	145	165	1,250	1,120	1,000	1,160
3	260	334	318	455	420	294	142	160	1,100	1,140	946	1,100
4	260	318	324	469	402	350	163	170	1,060	1,210	891	882
5	265	318	329	490	414	334	165	196	1,130	1,190	891	652
6	265	308	329	546	462	289	160	213	1,470	1,260	846	568
7	265	298	350	490	504	313	173	196	1,530	1,090	909	546
8	260	294	420	420	490	308	189	186	1,590	1,440	909	490
9	260	308	434	408	448	334	186	178	1,510	1,610	928	532
10	270	334	384	434	434	355	193	160	1,410	1,520	1,170	560
11	279	360	366	525	390	329	210	163	1,400	1,400	1,210	598
12	270	366	408	598	339	284	200	160	1,240	1,820	1,160	553
13	248	350	462	590	308	284	745	203	1,160	1,420	1,100	590
14	256	344	483	568	329	260	434	274	1,240	1,400	1,160	747
15	289	344	462	525	334	250	360	294	1,120	1,480	1,080	720
16	298	334	462	539	344	240	270	284	1,070	1,720	1,100	900
17	313	355	427	525	334	230	260	260	928	1,660	1,070	846
18	339	350	420	434	313	230	248	196	937	2,480	1,020	720
19	360	340	427	414	308	225	213	224	1,060	1,900	819	703
20	366	335	441	490	366	225	193	819	1,500	1,200	738	686
21	339	350	462	525	372	220	196	1,170	2,790	1,050	652	686
22	334	360	476	539	360	228	176	1,330	2,170	950	560	575
23	339	339	462	504	318	252	158	1,410	1,830	900	504	525
24	329	334	448	476	289	294	168	1,730	1,770	850	462	511
25	334	344	420	455	279	378	176	1,990	1,780	1,050	402	455
26	324	339	384	455	265	324	163	2,400	1,720	1,050	372	504
27	308	329	420	441	260	318	173	2,670	1,660	1,070	334	483
28	303	324	427	427	252	252	170	2,010	1,510	937	483	476
29	318	324	372	427	-	206	158	1,650	1,350	828	703	560
30	344	334	344	420	- - - -	173	138	1,290	1,260	864	846	483
31	334	- - - -	390	420	- - - -	170	- - - -	1,150	- - - -	765	1,020	- - - -
Total	9,278	10,055	12,530	14,919	10,209	3,484	6,488	23,457	42,645	39,674	26,335	19,961
Mean	299	335	404	481	365	274	216	757	1,422	1,280	850	665
Max	366	366	483	598	504	378	745	2,670	2,790	2,480	1,210	1,160
Min	248	294	318	408	252	170	138	156	928	765	334	455
Ac-ft	18,400	19,940	24,850	29,590	20,250	16,830	12,870	46,530	84,590	78,690	52,230	39,590
Cal yr 1966: Total	244,939			Mean 671	Max 3,710	Min 210	Ac-ft 485,800					
Wtr yr 1967: Total	224,035			Mean 614	Max 2,790	Min 138	Ac-ft 444,400					

7-1110. Huerfano River at Manzanares Crossing, at Redwing, Colo.

Location.--Lat 37°43'40", long 105°21'00", in sec.5, T.27 S., R.71 W., on left bank at Manzanares Crossing, 500 ft downstream from private bridge, a quarter of a mile downstream from Manzanares Creek, and 3½ miles southwest of Redwing.

Drainage area.--73 sq mi.

Records available.--July 1923 to September 1967. Monthly discharge only for some periods, published in WSP 1311.

Gage.--Water-stage recorder. Altitude of gage is 8,270 ft (from topographic map). Prior to Sept. 8, 1934, at sites about 500 ft upstream at different datums. Sept. 8, 1934, to Mar. 15, 1937, at datum 1.36 ft higher, Mar. 16, 1937, to Sept. 30, 1945, at datum 0.86 ft higher, and Oct. 1, 1945, to Apr. 25, 1946, at datum 0.36 ft higher than present datum.

Average discharge.--44 years, 32.1 cfs (23,240 acre-ft per year).

Extremes.--Maximum discharge during year, 1,060 cfs July 14 (gage height, 2.93 ft); minimum daily, 4.9 cfs Mar. 9, 10.

1923-67: Maximum discharge, 10,200 cfs Aug. 2, 1951 (gage height, 8.14 ft), from rating curve extended above 270 cfs on basis of slope-area measurement of peak flow; minimum daily determined, 4 cfs Jan. 22, 1937.

Remarks.--Records good except those for period of no gage-height record, which are poor. Diversions above station for irrigation of about 1,800 acres.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.		
1	10	9.8	9.0		7.0	9.0	9.0	11	40	31	36	87		
2	10	9.4	9.0			9.0	9.4	9.4	39	32	40	76		
3	11	9.4	9.0			8.2	9.4	9.4	50	31	41	58		
4	11	9.4	9.0			8.2	9.4	9.4	55	30	46	69		
5	9.8	9.4	9.0			8.0	9.4	9.8	65	28	39	43		
6	9.4	9.4	9.8		9.0	7.0	9.0	9.8	87	28	40	38		
7	9.4	9.4	11			6.0	9.0	10	78	28	36	33		
8	9.4	9.8	8.6			5.0	8.6	11	72	29	39	40		
9	9.4	9.4				8.0	4.9	8.2	12	63	30	55	38	
10	9.4	11					4.9	6.7	14	58	31	74	38	
11	9.4	9.8					7.8	7.0	17	52	32	67	38	
12	9.4	9.8					9.0	8.0	20	48	46	62	32	
13	9.4	9.8					9.4	8.0	20	41	32	60	31	
14	9.8	10					9.4	9.0	20	35	66	56	29	
15	9.4	9.8					9.8	9.0	19	36	65	54	28	
16	9.8	9.8		7.0	7.0	10	10	17	36	58	43	28		
17	11	9.8				11	10	17	39	58	38	27		
18	10	9.4				12	11	19	36	58	38	29		
19	10	9.4				12	11	25	50	58	36	29		
20	10	9.4				10	12	30	54	58	33	28		
21	10	9.4	8.0			10	11	29	58	58	32	26		
22	10	9.0				9.4	10	30	52	60	32	26		
23	9.8	9.0				9.8	9.8	39	52	58	24	28		
24	9.8	9.4				10	9.8	43	54	52	30	28		
25	9.8	9.0				10	9.4	49	49	49	29	27		
26	9.8	9.0		7.0	7.0	9.0	9.4	67	32	43	28	27		
27	9.8	11				8.6	9.8	56	41	40	29	26		
28	10	9.0				8.6	10	60	39	35	28	26		
29	10	9.0				8.6	9.8	56	36	33	40	25		
30	10	9.0				8.2	9.0	49	33	33	54	25		
31	10	- - - - -	- - - - -	- - - - -	- - - - -	8.6	- - - - -	46	- - - - -	34	74	- - - - -		
Total	306.0	286.2	258.4	248.0	208.0	271.4	281.1	833.8	1,480	1,324	1,333	1,083		
Mean	9.87	9.54	8.34	8.0	7.4	8.75	9.37	26.9	49.3	42.7	43.0	36.1		
Max	11	11	11	-	-	12	12	67	87	66	74	87		
Min	9.4	9.0	-	-	-	4.9	6.7	9.4	32	28	24	25		
Ac-ft	607	568	513	492	413	538	558	1,650	2,940	2,630	2,640	2,150		

Cal yr 1966: Total 8,101.6 Mean 22.2 Max 144 Min - Ac-ft 16,070
Wtr yr 1967: Total 7,912.9 Mean 21.7 Max 87 Min 4.9 Ac-ft 15,700

Peak discharge (base, 200 cfs).--July 12 (1515) 232 cfs (1.63 ft); July 14 (1630) 1,060 cfs (2.93 ft).

Note.--No gage-height record Dec. 9 to Mar. 1.

ARKANSAS RIVER BASIN

7-1140. Cucharas River at Boyd Ranch, near La Veta, Colo.

Location.--Lat 37°27'12", long 105°03'08", in SE¼NE¼SE¼ sec.24, T.30 S., R.69 W., on left bank at Boyd Ranch, 29 ft downstream from private bridge, 1.4 miles downstream from Chaparral Creek, and 6.5 miles southwest of La Veta.

Drainage area.--56 sq mi.

Records available.--October 1934 to September 1967.

Gage.--Water-stage recorder. Altitude of gage is 7,781 ft (from topographic map).

Average discharge.--33 years, 23.7 cfs (17,160 acre-ft per year).

Extremes.--Maximum discharge during year, 24 cfs June 6 (gage height, 1.41 ft); minimum daily not determined.

1934-67: Maximum discharge, 444 cfs May 23, 1955 (gage height, 4.05 ft); minimum daily, 2 cfs for several days November 1934 to January 1935, Sept. 29, 1950.

Remarks.--Records good except those for period of no gage-height record, which are poor. Diversions for irrigation of about 500 acres above station.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	7.0	7.7	6.4	6.2	6.8	8.0	6.1	7.4	15	10	6.0	12
2	6.7	8.0	6.4				5.8	6.7	15	10	7.4	9.1
3	6.7	8.0	6.4				5.8	6.4	15	10	5.5	8.4
4	7.0	7.7	6.4				5.8	6.4	17	10	7.0	7.7
5	7.4	8.0	5.8				5.8	5.8	19	10	6.7	7.7
6	7.7	7.7	6.4				5.8	5.8	22	9.4	7.4	7.7
7	7.4	7.7	6.2				5.5	5.8	22	9.1	7.0	7.4
8	7.0	8.0	6.0				4.9	5.8	21	9.4	8.0	7.4
9	7.0	7.7	5.4				5.5	5.8	21	8.8	9.8	7.0
10	7.0	8.0	5.0				5.5	6.4	20	9.1	13	7.0
11	7.7	8.0	5.8	6.2	6.8	6.6	5.5	6.7	20	8.8	10	7.7
12	8.0	8.0				6.4	5.5	6.7	19	12	10	6.7
13	7.7	7.7				6.1	6.7	6.7	18	10	9.8	6.7
14	7.7	7.7				6.1	7.0	7.7	16	8.4	9.8	7.7
15	8.0	8.0				5.5	9.4	7.4	16	9.8	9.8	7.7
16	8.4	8.0				5.8	8.4	7.0	20	13	9.1	7.0
17	8.8	7.7				6.7	7.4	6.7	22	11	8.4	8.0
18	8.0	6.7				8.0	8.0	6.1	20	9.8	8.0	8.0
19	7.7	7.0				8.0	8.0	7.4	19	9.4	7.7	9.8
20	8.0	7.0				7.0	8.4	9.4	17	8.4	7.7	10
21	7.4	6.7	5.8	6.2	6.8	6.7	8.0	8.8	19	8.8	7.4	8.8
22	7.4	6.4				7.0	7.0	7.7	17	8.0	7.7	7.7
23	7.4	6.1				7.4	7.0	8.0	15	8.0	7.0	7.7
24	7.4	6.4				7.0	7.0	8.0	14	7.7	6.7	7.7
25	7.4	5.8				6.4	7.0	8.0	14	7.7	6.1	7.7
26	7.4	5.8				6.1	6.4	14	13	8.0	6.7	13
27	7.4	6.1				6.1	6.4	14	13	6.7	6.7	10
28	7.4	6.4				6.4	6.4	15	13	6.4	6.4	8.4
29	7.4	6.7				6.7	6.4	15	12	6.1	9.8	7.7
30	7.4	6.7				6.4	6.4	15	12	5.8	11	7.0
31	7.7	- - - -				5.2	- - - -	15	- - - -	5.5	15	- - - -
Total	232.6	217.4	182.2	192.2	190.4	217.6	198.8	262.6	516	275.1	258.6	246.4
Mean	7.50	7.25	5.88	6.2	6.8	7.02	6.63	8.47	17.2	8.87	8.34	8.21
Max	8.8	8.0	6.4	-	-	-	9.4	15	22	13	15	13
Min	6.7	5.8	-	-	-	5.2	4.9	5.8	12	5.5	5.5	6.7
Ac-ft	461	431	361	381	378	432	394	521	1,020	546	513	489

Cal yr 1966: Total 4,314.8 Mean 11.8 Max 58 Min - Ac-ft 8,560

Wtr yr 1967: Total 2,989.9 Mean 8.19 Max 22 Min - Ac-ft 5,930

Peak discharge (base, 150 cfs).--No peak above base.

Note.--No gage-height record Dec. 7 to Mar. 13.

7-1160. Huerfano River below Huerfano Valley Dam, near Undercliffe, Colo.

Location.--Lat 38°00', long 104°28', in S½ sec.32, T.23 S., R.63 W., at left end of diversion dam for Huerfano Valley ditch, 8 miles southwest of Undercliffe.

Drainage area.--1,673 sq mi.

Records available.--October 1939 to September 1967 (discontinued).

Gage.--Water-stage recorder. Datum of gage is 4,886.29 ft above mean sea level, datum of 1929. Prior to July 26, 1950, at site 0.3 mile downstream at datum 14.27 ft lower and July 26, 1950, to Dec. 15, 1954, at site 0.3 mile downstream at datum 16.27 ft lower.

Average discharge.--28 years, 34.4 cfs (24,900 acre-ft per year).

Extremes.--Maximum discharge during year, 3,820 cfs June 2 (gage height, 5.70 ft); no flow for many days.

1939-67: Maximum discharge, 16,800 cfs July 5, 1958 (gage height, 14.5 ft), from rating curve extended above 380 cfs on basis of computation of flow-over-dam at gage heights 11.04 and 14.5 ft; no flow at times in nearly every year.

Maximum stage and discharge known since at least 1900, that of July 5, 1958, from information by local residents.

Remarks.--Records poor. Diversions above station for irrigation of about 43,000 acres.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	18	2.6	3.2	2.0	1.0	5.4	1.3	0	316	0	0	0.50
2	13	2.5	3.2	2.0	1.2	4.0	1.0	0	277	0	0	.20
3	6.9	2.5	3.2	2.0	1.3	3.0	.52	.05	4.5	0	.20	0
4	5.9	2.5	3.3	2.0	1.4	2.4	0	.12	4.3	0	.20	0
5	4.9	2.5	3.4	2.0	1.5	2.5	0	.11	5.4	.50	0	1.0
6	4.5	2.4	3.4	2.0	1.6	4.0	0	.16	5.9	.50	.10	1.8
7	4.1	2.3	3.4	2.0	1.3	2.9	0	0	6.9	.40	.10	.80
8	3.8	2.2	3.5	2.5	1.5	4.5	0	0	6.4	.60	.90	.26
9	3.4	2.2	3.5	2.8	.72	4.4	0	0	3.4	.20	.74	.14
10	3.0	2.5	3.5	2.8	.90	4.3	0	0	2.4	.10	1.0	.25
11	3.0	2.6	3.5	1.0	.94	4.3	0	0	1.2	4.3	1.4	0
12	3.0	2.6	3.5	1.0	1.0	3.0	0	0	.05	1.4	6.7	0
13	2.9	2.6	3.6	1.0	1.0	2.4	.50	0	0	2.8	2.8	0
14	3.8	2.6	3.8	1.0	1.1	1.4	.20	0	0	1.1	1.4	0
15	3.6	2.6	4.5	1.0	1.0	1.5	.80	0	0	3.8	1.6	0
16	3.6	2.8	5.0	1.0	4.1	1.7	.60	0	0	3.0	6.0	.58
17	4.0	2.8	7.0	1.0	3.8	1.6	.70	.03	0	3.0	3.4	3.2
18	4.0	2.9	9.0	1.0	4.0	1.7	.80	0	0	3.0	2.0	3.4
19	4.7	2.9	1.1	1.0	4.0	.96	1.0	0	0	3.5	1.9	1.7
20	4.1	3.0	1.1	1.0	3.8	2.6	1.1	0.15	0	4.0	0	.80
21	3.0	3.0	1.0	1.0	2.1	2.8	.90	0	6.2	6.0	0	.16
22	2.6	3.0	.90	1.5	2.0	2.9	.68	0	1.0	8.0	0	0
23	2.6	3.0	.80	1.9	1.9	3.0	.56	0	0	1.1	0	0
24	2.6	3.0	6.0	1.7	1.8	3.1	.56	0	0	1.6	0	0
25	2.4	3.0	3.5	1.6	1.7	3.1	.50	0	6.4	2.4	3.0	0
26	2.4	3.1	2.5	1.5	1.4	3.2	.44	1.1	2.4	2.7	5.0	0
27	2.2	3.1	2.0	1.4	1.3	3.1	.38	1.4	0	3.0	4.0	.62
28	2.2	3.1	2.0	1.3	1.1	2.9	.17	1.8	.10	1.3	.50	.12
29	2.2	3.1	2.0	1.2	-	2.2	0	2.8	0	5.0	0	0
30	2.3	3.2	2.0	1.1	- - - -	1.6	0	.62	0	2.0	0	0
31	2.4	- - - -	2.0	1.0	- - - -	1.4	- - - -	1.7	- - - -	0	0	- - - -
Total	131.1	82.2	144.5	274.1	327.3	87.86	12.71	10.04	649.55	196.70	64.54	15.53
Mean	4.23	2.74	4.66	8.84	11.7	2.83	0.424	0.324	21.7	6.35	2.08	0.518
Max	18	3.2	11	19	21	5.4	1.3	2.8	316	30	14	3.4
Min	2.2	2.2	2.0	2.0	3.8	0.96	0	0	0	0	0	0
Ac-ft	260	163	287	544	649	174	25	20	1,290	390	128	31

Cal yr 1966: Total 5,781.0 Mean 15.8 Max 600 Min 0 Ac-ft 11,470

Wtr yr 1967: Total 1,996.13 Mean 5.47 Max 316 Min 0 Ac-ft 3,960

Peak discharge (base, 3,000 cfs).--June 2 (1915) 3,820 cfs (5.70 ft).

ARKANSAS RIVER BASIN

7-1170. Arkansas River near Nepesta, Colo.

Location.--Lat 38°11'03", long 104°10'22", in SW¼SE¼ sec.25, T.21 S., R.61 W., on right bank 0.7 mile upstream from headgate of Oxford Farmers Co. canal, 1.9 miles northwest of Nepesta, 2.7 miles upstream from Kramer Creek, and 6.6 miles downstream from Huerfano River.

Drainage area.--9,345 sq mi, of which 54 sq mi is probably noncontributing.

Records available.--April to October 1903, April to November 1912, October 1913 to September 1967. Monthly discharge only for some periods, published in WSP 1311. Records originally published for October 1933 to June 1936 did not include diversion to Oxford Farmers Co. canal, but monthly figures only for this period have been adjusted for diversion and published in WSP 1311.

Records for river below Oxford Farmers Co. canal (diversion to canal not included), published as "at Nepesta," September 1897 to October 1902 (irrigation seasons only), April to October 1904, June 1906 to September 1908 (irrigation seasons only), September 1909 to December 1910, February to September 1911 (gauge heights and discharge measurements only), October 1911 to November 1912, March to August 1913 (discharge measurements only), October 1913 to September 1936. Monthly discharge only for some periods, published in WSP 1311.

Gage.--Water-stage recorder. Altitude of gage is 4,385 ft (from topographic map). Prior to June 5, 1921, staff gages or water-stage recorders at various sites within 4½ miles upstream and 3 miles downstream at different datums. June 5, 1921, to Apr. 4, 1966, water-stage recorders at sites on river or river and canal within 0.7 mile downstream at various datums.

Average discharge.--54 years (1913-67), 687 cfs (497,400 acre-ft per year).

Extremes.--Maximum discharge during year, 4,530 cfs July 18 (gage height, 6.00 ft); minimum daily, 82 cfs May 1.

1897-1904, 1906-12, 1913-67: Maximum discharge, 180,000 cfs June 4, 1921 (gage height not determined), by slope-area measurement of peak flow at point 8 miles upstream; no flow at times in 1902, 1910, 1931, 1934.

Remarks.--Records fair. Natural flow of stream affected by transmountain diversions, storage reservoirs, power developments, ground-water withdrawals and diversions for irrigation of about 230,000 acres, and return flow from irrigated areas.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	172	193	305	330	310	280	109	82	492	1,420	691	600
2	164	220	305	280	325	265	103	84	740	1,300	588	614
3	154	229	280	230	335	242	95	86	866	1,290	474	558
4	154	206	280	200	330	234	94	90	498	1,460	404	456
5	161	198	290	210	330	252	94	94	621	1,530	409	320
6	158	188	285	247	345	242	94	115	1,180	1,180	345	486
7	154	164	280	247	398	256	95	113	1,200	812	355	480
8	172	172	305	161	409	242	95	105	1,070	1,460	345	480
9	164	175	355	103	398	252	103	101	1,250	1,580	345	474
10	161	206	350	86	370	260	105	109	1,070	1,660	510	480
11	180	234	315	97	350	256	118	89	1,340	964	635	486
12	180	247	320	247	275	229	128	95	1,290	1,900	656	486
13	158	256	376	275	300	202	506	97	1,020	740	522	480
14	144	252	398	247	300	193	387	150	1,360	964	635	594
15	175	265	404	350	300	161	325	180	1,140	1,060	528	588
16	202	270	392	409	315	168	270	198	1,110	1,120	528	749
17	224	260	376	438	295	164	206	193	821	1,040	534	698
18	242	275	376	404	260	161	198	132	740	1,420	498	558
19	247	280	382	345	234	138	175	111	1,010	2,180	510	558
20	238	285	387	350	260	138	154	128	1,620	821	552	564
21	216	260	392	414	280	154	144	504	2,220	918	492	564
22	193	220	392	432	290	140	140	758	1,590	794	414	516
23	202	275	387	387	270	135	125	670	1,290	656	392	398
24	242	265	376	350	247	120	118	964	812	642	360	370
25	305	295	355	325	242	109	120	1,450	1,120	821	382	320
26	310	320	365	335	265	111	122	1,960	1,340	1,500	350	310
27	310	325	382	340	295	111	109	2,040	1,360	885	340	420
28	305	310	290	335	300	118	109	1,460	1,640	767	280	392
29	280	305	150	315	-	111	99	1,040	1,400	677	224	420
30	184	300	240	305	- - - -	107	89	776	1,270	663	270	382
31	188	- - - -	360	300	- - - -	109	- - - -	528	- - - -	663	474	- - - -
Total	6,339	7,450	10,450	9,094	8,628	5,660	4,629	14,502	34,480	34,887	14,042	14,801
Mean	204	248	337	293	308	183	154	468	1,149	1,125	453	493
Max	310	325	404	438	409	280	506	2,040	2,220	2,180	691	749
Min	144	164	150	86	234	107	89	82	492	663	224	310
Ac-ft	12,570	14,780	20,730	18,040	17,110	11,230	9,180	28,760	68,390	69,200	27,850	29,360
Cal yr 1966: Total	173,100		Mean	474	Max	4,450	Min	94	Ac-ft	343,300		
Wtr yr 1967: Total	164,962		Mean	452	Max	2,220	Min	82	Ac-ft	327,200		

7-1195. Apishapa River near Fowler, Colo.

Location.--Lat 38°05'28", long 103°58'52", in SE¼NW¼ sec.35, T.22 S., R.59 W., near right bank on downstream side of county highway bridge, 4 miles southeast of Fowler and 5.4 miles upstream from mouth.

Drainage area.--1,125 sq mi.

Records available.--April 1922 to September 1925, May 1939 to September 1967. Monthly discharge only for some periods, published in WSP 1311.

Gage.--Water-stage recorder. Datum of gage is 4,317.05 ft above mean sea level, datum of 1929. Prior to Aug. 29, 1923, at site 3 miles downstream at different datum. Aug. 29, 1923, to Sept. 30, 1925, at present site at different datum.

Average discharge.--31 years, 35.2 cfs (25,480 acre-ft per year).

Extremes.--Maximum discharge during year, 3,810 cfs May 27 (gage height, 6.92 ft); minimum daily, 0.65 cfs May 10, 11.

1922-25, 1939-67: Maximum discharge, 83,000 cfs Aug. 22, 1923, by slope-area measurement 2 miles upstream from present station, caused by failure of Apishapa Dam 31 miles upstream; no flow Feb. 5, 1951.

Remarks.--Records fair. Waste water from Oxford Farmers Co. and Rocky Ford Highline canals enters river above station. Diversions above station for irrigation of about 4,700 acres. Records of chemical analyses and water temperatures for the water year 1967 are published in Part 2 of this report.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	9.7	19	18	7.0	6.8	2.8	1.2	0.95	33	24	68	4.2
2	19	19	17	6.0	4.2	2.2	1.4	.95	154	45	63	5.0
3	25	21	16	7.0	24	2.2	1.6	1.4	61	59	55	3.0
4	17	20	20	7.0	13	2.2	1.4	.95	30	77	16	3.0
5	5.4	21	15	7.0	12	2.2	1.6	1.1	34	247	74	3.5
6	4.2	7.6	14	6.0	19	2.5	1.6	.95	32	705	107	3.8
7	4.2	20	14	5.0	27	2.2	1.6	.95	24	73	62	3.0
8	3.8	25	15	4.0	24	3.0	1.6	.80	24	27	13	2.5
9	2.0	26	15	4.0	20	4.2	1.7	.95	30	14	224	3.2
10	3.8	30	18	3.8	20	2.8	1.7	.65	34	5.4	234	5.4
11	4.0	27	17	6.8	16	1.4	1.4	.65	12	15	150	4.0
12	3.0	25	5.0	4.5	20	2.0	1.4	.95	19	10	82	3.5
13	1.8	23	12	6.8	16	1.4	2.8	1.1	17	21	61	4.2
14	8.1	22	12	7.6	18	1.4	3.5	1.2	18	22	59	5.0
15	15	18	16	7.2	22	1.8	2.2	1.1	14	29	63	5.4
16	15	18	15	15	12	2.0	1.6	.95	11	664	40	5.4
17	17	17	15	23	9.0	1.6	2.2	.95	248	80	21	9.0
18	14	16	15	24	12	1.8	1.7	.80	48	102	16	7.6
19	19	20	12	20	6.3	2.0	1.7	.80	23	82	12	15
20	16	12	15	23	10	2.8	1.6	1.1	207	67	8.6	12
21	18	14	11	22	11	3.8	1.7	.95	759	75	5.8	8.6
22	26	16	14	17	12	1.8	1.7	.80	191	29	5.4	9.7
23	23	15	17	29	8.1	1.6	1.4	2.0	126	22	3.5	8.1
24	28	14	10	34	4.5	1.6	1.4	1.2	139	129	4.2	3.2
25	24	15	6.0	48	2.0	1.2	1.4	2.8	167	345	3.2	18
26	21	17	3.0	57	2.0	1.2	1.2	64	142	83	1.8	27
27	17	19	4.0	40	2.0	1.7	1.1	1,000	108	30	1.8	33
28	17	20	4.0	11	2.5	1.4	1.1	33	123	12	1.8	27
29	19	20	5.0	15	-	1.1	.95	15	100	23	1.8	27
30	19	19	8.0	12	-	.80	.80	8.1	45	15	3.0	29
31	18	- - - -	10	7.2	- - - -	1.1	- - - -	11	- - - -	10	2.5	- - - -
Total	437.0	575.6	388.0	486.9	355.4	618.0	48.25	1,158.10	2,973	3,141.4	1,345.5	298.3
Mean	14.1	19.2	12.5	15.7	12.7	1.99	1.61	37.4	99.1	101	43.4	9.94
Max	28	30	20	57	27	4.2	3.5	1,000	759	705	234	33
Min	1.8	7.6	3.0	3.8	2.0	0.80	0.80	0.65	11	5.4	1.8	2.5
Ac-ft	867	1,140	770	966	705	123	96	2,300	5,900	6,230	2,670	592

Cal yr 1966: Total 13,616.9 Mean 37.3 Max 1,960 Min 0.50 Ac-ft 27,010
Wtr yr 1967: Total 11,269.25 Mean 30.9 Max 1,000 Min 0.65 Ac-ft 22,350

Peak discharge (base, 3,000 cfs).--May 27 (0030) 3,810 cfs (6.92 ft).

ARKANSAS RIVER BASIN

7-1197. Arkansas River at Catlin Dam, near Fowler, Colo.

Location.--Lat 38°07'35", long 103°56'40", in NE¼NW¼ sec.19, T.22 S., R.58 W., on right bank at diversion dam for Catlin Canal, 1,470 ft downstream from Apishapa River and 4 miles east of Fowler.

Drainage area.--10,901 sq mi.

Records available.--October 1964 to September 1967.

Gage.--Water-stage recorders on river and on Catlin Canal. Datum of river gage is 4,270.00 ft above mean sea level, datum of 1929, supplementary adjustment of 1960.

Extremes.--Maximum discharge during year, 10,800 cfs May 27 (gage height, 3.87 ft); minimum daily, 37 cfs Oct. 10, 11.

1964-67: Maximum discharge, 43,200 cfs June 18, 1965 (gage height, 7.95 ft), from rating curve extended above 13,000 cfs on basis of flow-over-dam computation of peak flow; minimum daily, that of Oct. 10, 11, 1966.

Remarks.--Records fair. Discharge computed by combining discharge of river below canal with that of Catlin Canal. Natural flow of stream affected by transmountain diversions, storage reservoirs, ground-water withdrawals, diversions for irrigation, and return flow from irrigated areas.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	217	230	252	223	455	313	111	72	605	770	659	298
2	199	235	264	280	426	293	97	70	1,210	696	669	353
3	181	242	250	292	391	265	89	60	988	735	572	348
4	160	239	249	299	368	248	75	70	597	782	476	352
5	165	227	257	330	342	256	78	80	547	1,070	460	317
6	165	233	252	324	310	256	73	90	644	985	451	434
7	159	220	250	351	364	263	73	85	686	817	474	421
8	168	207	260	305	371	257	83	81	721	795	391	453
9	147	207	304	244	360	250	84	82	877	1,160	388	385
10	37	224	465	189	329	257	98	79	1,110	1,320	447	398
11	37	232	644	209	321	242	95	76	1,160	769	680	388
12	43	245	622	324	269	227	94	78	1,400	958	740	355
13	42	256	704	437	248	198	172	85	1,110	703	635	337
14	53	248	646	386	245	190	541	118	1,150	824	619	378
15	53	242	589	434	281	186	318	139	994	903	607	453
16	112	254	455	467	294	188	298	161	926	2,300	537	502
17	200	244	361	457	290	95	220	153	844	1,390	505	635
18	240	244	395	399	274	112	187	144	751	2,020	470	638
19	321	252	355	382	252	172	171	98	791	1,670	430	590
20	340	267	360	364	254	163	139	93	1,030	1,110	494	572
21	333	250	354	416	286	174	124	221	2,180	940	447	491
22	249	245	358	460	279	171	117	557	1,320	944	391	452
23	251	249	372	447	264	162	84	565	1,280	805	362	352
24	265	244	432	421	249	149	65	593	707	816	352	332
25	332	225	436	397	240	136	65	896	795	1,210	312	298
26	319	252	492	406	253	117	60	1,240	916	1,290	296	290
27	309	251	490	394	299	103	60	3,940	836	776	289	349
28	295	251	352	350	322	107	60	1,720	834	878	251	367
29	290	251	222	328	-	113	60	471	901	749	205	321
30	255	252	176	352	- - - -	118	60	892	654	675	150	348
31	234	- - - -	204	430	- - - -	108	- - - -	630	- - - -	709	180	- - - -
Total	6,171	7,218	11,822	11,097	8,636	5,889	3,851	13,639	28,564	31,569	13,939	12,207
Mean	199	241	381	358	308	190	128	440	952	1,018	450	407
Max	340	267	704	467	455	313	541	3,940	2,180	2,300	740	638
Min	37	207	176	189	240	95	60	60	547	675	150	290
Ac-ft	12,240	14,320	23,450	22,010	17,130	11,680	7,640	27,050	56,660	62,620	27,650	24,210

Cal yr 1966: Total 169,300 Mean 464 Max 5,030 Min 37 Ac-ft 335,800
 Wtr yr 1967: Total 154,602 Mean 424 Max 3,940 Min 37 Ac-ft 306,600

7-1230. Arkansas River at La Junta, Colo.

Location.--Lat 37°59'26", long 103°31'55", in SE¼NE¼ sec.2, T.24 S., R.55 W., on right bank at upstream side of bridge (relocated) on State Highway 109 in La Junta, 450 ft (revised) upstream from King Arroyo. Prior to June 7, 1967, at site 300 ft upstream.

Drainage area.--12,210 sq mi, of which 115 sq mi is probably noncontributing.

Records available.--May to August 1889, September 1893 to December 1895 (gage heights, discharge measurements, and flood data only), April to October 1903, June to November 1908 (gage heights and discharge measurements only), April 1912 to September 1967. Monthly discharge only for some periods, published in WSP 1311. Published as "near La Junta" in 1903.

Gage.--Water-stage recorder, and chain gage read twice daily. Datum of gage is 4,039.60 ft above mean sea level, datum of 1929. Prior to Apr. 11, 1912, staff gages at several sites within 2 miles at various datums. Apr. 11, 1912, to June 12, 1940, water-stage recorder and staff or chain gages at several sites within 1 mile at various datums. June 13, 1940, to June 6, 1967, water-stage recorder at site 300 ft upstream at present datum.

Average discharge.--55 years (1912-67), 255 cfs (184,600 acre-ft per year).

Extremes.--Maximum discharge during year, 15,100 cfs May 26 (gage height, 10.00 ft); minimum daily, 6.8 cfs Jan. 10.

1889, 1893-95, 1903, 1908, 1912-67: Maximum discharge, 200,000 cfs June 4, 1921 (gage height, 18.4 ft, site and datum then in use), from rating curve extended above 15,000 cfs on basis of slope-area measurement of peak flow; no flow Jan. 20-23, Mar. 20-22, 1915.

Remarks.--Records fair. Natural flow of stream affected by transmountain diversions, storage reservoirs, power developments, ground-water withdrawals and diversions for irrigation of about 400,000 acres, and return flow from irrigated areas. Records of chemical analyses for the water year 1967 are published in Part 2 of this report.

Revisions.--Revised figures of discharge, in cubic feet per second, for the water year 1966, superseding those previously published, are given herewith:

1966
Sept. 28..... 127
29..... 76
30..... 46

Month	Cfs-days	Maximum	Minimum	Mean	Runoff in acre-feet
September.....	5,129	3,930	11	171	10,170
Water year 1966.....	61,070.4	5,350	3.7	167	121,100

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	41	31	28	27	19	47	33	24	81	92	100	54
2	38	24	32	25	24	42	33	28	59	95	55	83
3	34	23	27	23	24	34	33	30	127	108	88	77
4	36	36	27	19	26	25	32	31	79	321	90	81
5	32	30	31	17	25	24	31	27	83	100	83	70
6	31	26	26	20	28	33	31	14	464	148	70	64
7	33	35	26	17	25	38	31	13	145	157	86	79
8	31	24	23	13	22	42	31	7.6	68	98	79	88
9	28	28	23	9.2	21	27	31	7.6	81	129	79	86
10	23	31	22	6.8	19	22	31	12	52	212	90	70
11	21	23	19	8.4	33	22	31	22	52	349	98	79
12	20	27	27	14	26	22	30	36	95	66	95	75
13	18	27	28	15	34	22	30	35	68	54	90	83
14	17	30	36	14	35	17	50	34	66	54	64	75
15	16	50	31	13	31	18	63	24	63	66	68	95
16	15	66	31	13	26	18	40	28	55	356	63	102
17	18	72	31	14	25	18	35	30	90	70	68	98
18	18	64	32	14	32	19	38	36	47	194	63	77
19	21	70	35	15	32	21	32	36	68	212	66	61
20	20	70	35	23	30	27	32	36	72	79	70	79
21	23	52	35	20	27	20	30	32	127	70	79	79
22	32	47	35	19	36	18	27	28	705	79	66	70
23	20	44	41	17	32	21	27	95	250	64	47	72
24	27	50	40	15	32	27	27	72	108	64	41	75
25	38	36	30	14	33	28	28	124	86	170	33	59
26	36	40	33	16	33	23	26	722	100	211	32	66
27	46	42	33	15	35	22	27	4,060	139	93	57	66
28	41	38	27	15	36	21	28	160	130	61	47	48
29	34	33	27	17	-	30	26	157	127	48	36	59
30	38	33	27	20	- - - -	32	24	112	105	50	35	54
31	35	- - - -	27	17	- - - -	35	- - - -	186	- - - -	77	36	- - - -
Total	881	1,202	925	505.4	801	815	968	6,259.2	3,792	3,937	2,074	2,224
Mean	28.4	40.1	29.8	16.3	28.6	26.3	32.3	202	126	127	66.9	74.1
Max	46	72	41	27	36	47	63	4,060	705	356	100	102
Min	15	23	19	6.8	19	17	24	7.6	47	48	32	48
Ac-ft	1,750	2,380	1,830	1,000	1,590	1,620	1,920	12,410	7,520	7,810	4,110	4,410

Cal yr 1966: Total 45,604.4 Mean 125 Max 5,350 Min 3.7 Ac-ft 90,460
Wtr yr 1967: Total 24,383.6 Mean 66.8 Max 4,060 Min 6.8 Ac-ft 48,360

ARKANSAS RIVER BASIN

7-1240. Arkansas River at Las Animas, Colo.

Location.--Lat 38°04'51", long 103°13'09", in SE $\frac{1}{4}$ sec.3, T.23 S., R.52 W., on right bank at downstream side of bridge on U. S. Highway 50, 1.1 miles north of courthouse in Las Animas, and 4.2 miles upstream from Purgatoire River. Prior to Apr. 28, 1967, at site 0.4 mile downstream.

Drainage area.--14,417 sq mi, of which 441 sq mi is probably noncontributing.

Records available.--May to November 1898 (gage heights only), August to November 1909 (gage heights and discharge measurements only), May 1939 to September 1967.

Gage.--Water-stage recorder. Datum of gage is 3,883.97 ft above mean sea level, datum of 1929. May 13 to Nov. 12, 1898, and Aug. 1 to Nov. 10, 1909, staff gage near present site at different datum. May 23, 1939, to Apr. 27, 1967, at site 0.4 mile downstream at datum 9.00 ft lower.

Average discharge.--28 years, 222 cfs (160,700 acre-ft per year).

Extremes.--Maximum discharge during year, 4,970 cfs May 27 (gage height, 5.93 ft); minimum daily, 8.7 cfs May 25. 1939-67: Maximum discharge, 44,000 cfs May 20, 1955 (gage height, 15.03 ft, site and datum then in use), from rating curve extended above 24,000 cfs on basis of slope-area measurement of peak flow; minimum daily, 0.9 cfs July 31, Aug. 1, 3, 1964.

Remarks.--Records good. Natural flow of stream affected by transmountain diversions, storage reservoirs, power developments, ground-water withdrawals and diversions for irrigation of about 412,000 acres, and return flow from irrigated areas. Records of chemical analyses for the water year 1967 are published in Part 2 of this report.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	52	20	33	31	22	18	16	12	85	30	30	16
2	45	17	56	36	21	20	15	11	44	28	35	16
3	40	16	56	37	21	18	14	12	39	28	28	16
4	38	18	50	38	21	20	14	13	54	152	27	16
5	35	18	47	36	21	23	12	16	47	47	23	16
6	33	21	52	30	21	23	12	12	240	30	30	16
7	30	23	50	23	21	25	14	12	170	31	56	15
8	28	25	50	20	21	33	14	12	61	31	32	15
9	26	23	52	20	20	22	15	12	35	28	27	14
10	23	22	47	20	18	20	20	11	31	54	28	13
11	23	22	49	23	17	20	18	11	28	512	30	13
12	25	20	56	25	30	20	14	11	26	140	27	13
13	25	20	47	25	22	20	14	11	26	56	25	15
14	25	18	41	26	17	17	14	16	27	53	23	16
15	56	18	45	25	21	17	16	13	27	58	21	16
16	45	18	50	26	26	17	16	12	28	170	22	19
17	29	17	56	25	29	16	15	12	25	146	22	17
18	23	15	62	26	26	15	16	12	27	69	22	18
19	21	15	66	26	23	17	15	10	28	232	23	19
20	20	14	62	26	21	17	15	13	32	102	21	18
21	30	14	56	28	21	18	15	12	35	69	18	16
22	35	17	58	28	21	16	15	9.9	643	56	16	16
23	29	21	49	26	23	16	14	9.5	118	45	16	15
24	29	22	30	26	23	16	14	9.1	69	42	16	14
25	32	28	25	22	26	16	14	8.7	42	39	16	13
26	26	32	20	20	21	16	14	15	37	336	15	14
27	28	22	18	20	18	18	12	3,130	37	72	15	15
28	28	21	16	21	18	17	13	485	36	42	14	15
29	25	21	15	22	-	17	15	140	34	36	15	15
30	22	21	18	22	- - - -	15	13	69	31	32	16	15
31	22	- - - -	25	22	- - - -	15	- - - -	47	- - - -	31	15	- - - -
Total	948	599	1,357	801	610	578	438	4,179.2	2,162	2,797	724	465
Mean	30.6	20.0	43.8	25.8	21.8	18.6	14.6	135	72.1	90.2	23.4	15.5
Max	56	32	66	40	30	33	20	3,130	643	512	56	19
Min	20	14	15	20	17	15	12	8.7	25	28	14	13
Ac-ft	1,880	1,190	2,690	1,590	1,210	1,150	869	8,290	4,290	5,550	1,440	922

Cal yr 1966: Total 39,337 Mean 108 Max 3,710 Min 10 Ac-ft 78,020
Wtr yr 1967: Total 15,658.2 Mean 42.9 Max 3,130 Min 8.7 Ac-ft 31,060

7-1245. Purgatoire River at Trinidad, Colo.

Location.--Lat 37°10'15", long 104°30'31", in SW¼SE¼ sec.13, T.33 S., R.64 W., on left bank 90 ft downstream from railroad bridge, 680 ft downstream from Animas Street Bridge in Trinidad.

Drainage area.--795 sq mi.

Records available.--October 1895 to September 1899, August to December 1905, November 1906 to March 1907, October 1907 to November 1908, May to August 1909 (gage heights and discharge measurements only), September 1909 to November 1912, October 1915 to September 1960, October 1961 to September 1967. Monthly discharge only for some periods, published in WSP 1311. Prior to October 1915, published as "Purgatory River."

Gage.--Water-stage recorder. Datum of gage is 5,979.76 ft above mean sea level, datum of 1929. May 1, 1896, to July 31, 1899, staff gage on downstream side of Animas Street Bridge 680 ft upstream at datum 1.7 ft higher. Aug. 25, 1905, to Nov. 30, 1912, chain gage on upstream side of Animas Street Bridge at present datum. Apr. 1, 1916, to Nov. 10, 1921, inclined gage painted on concrete bank protection wall at site 410 ft downstream at right bank and 200 ft upstream from Commerical Street Bridge at datum 0.99 ft lower. Nov. 11, 1921, to Nov. 30, 1922, water-stage recorder at site about three-quarters of a mile upstream and 150 ft downstream from former Main Street Bridge at different datum. Dec. 1, 1922, to Mar. 19, 1934, water-stage recorder at site about half a mile upstream at different datum. Mar. 20, 1934, to Dec. 10, 1950, water-stage recorder at site 1,490 ft upstream at foot of State Street at datum 7.00 ft higher. Dec. 11, 1950, to Sept. 30, 1955, water-stage recorder at site 180 ft upstream at datum 2.00 ft higher. Since May 30, 1955, supplemental chain gage at site 90 ft upstream on downstream side of railroad bridge; at datum 3.00 ft lower prior to Oct. 1, 1962, and at present datum thereafter.

Average discharge.--59 years (1895-99, 1907-8, 1909-12, 1915-60, 1961-67), 87.9 cfs (63,640 acre-ft per year).

Extremes.--Maximum discharge during year, 9,050 cfs June 20 (gage height, 9.70 ft, from floodmarks), from rating curve extended above 220 cfs; minimum daily, 6.0 cfs Apr. 9, 10.

1895-99, 1905-12, 1915-60, 1961-67: Maximum discharge, 28,000 cfs May 19, 1955 (gage height, 14.35 ft, site and datum then in use), from rating curve extended above 2,800 cfs on basis of indirect measurements of peak flow above and below station; no flow for several days during summer of 1896, June 11, 1950, Sept. 20, 25, 28, 29, Oct. 3-5, 7, 8, 1956.

Maximum discharge known since at least 1859, 45,400 cfs Sept. 30, 1904 (gage height, 16.6 ft, at site 680 ft upstream), by slope-area measurement of peak flow.

Remarks.--Records poor. Diversions above station for irrigation of about 6,500 acres.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	22	20	20	11	18	16	13	8.2	41	46	83	195
2	21	20	19	11	17	16	12	10	62	65	422	104
3	20	20	18	11	18	16	12	10	35	54	256	98
4	20	20	18	11	18	15	12	8.8	28	47	354	98
5	20	20	17	11	18	14	10	8.5	34	372	177	95
6	20	20	16	11	19	18	8.8	11	41	196	76	95
7	20	20	16	12	17	19	8.2	8.5	43	543	57	92
8	19	20	16	13	18	18	6.8	7.6	44	80	691	90
9	18	20	14	13	19	18	6.0	7.0	41	72	532	101
10	18	20	14	13	24	19	6.0	7.3	36	105	497	87
11	18	20	12	14	20	18	6.2	8.2	37	79	188	80
12	18	20	12	14	22	16	6.8	8.5	39	140	136	71
13	18	18	11	14	22	16	8.2	9.7	39	128	108	69
14	18	18	11	14	20	14	25	11	38	131	103	71
15	18	18	11	14	18	13	22	12	36	128	103	116
16	18	18	11	14	16	13	19	12	58	116	156	299
17	20	18	11	15	16	13	15	15	516	124	140	129
18	20	18	11	15	15	13	14	13	417	106	126	66
19	20	18	10	15	16	13	14	11	139	112	108	62
20	20	18	12	16	16	13	14	13	724	96	98	66
21	20	18	11	16	16	13	14	14	87	93	89	56
22	20	18	10	18	16	13	14	15	65	93	82	52
23	20	18	9.4	16	16	13	14	14	62	159	74	50
24	20	18	9.7	16	16	13	13	14	60	181	69	50
25	20	18	11	16	16	13	13	13	60	133	63	48
26	20	19	12	16	16	13	12	43	71	547	59	50
27	20	19	12	17	16	13	8.5	29	238	340	59	56
28	20	19	12	18	16	13	7.0	25	71	106	62	52
29	20	20	12	18	-	13	6.5	27	53	89	712	47
30	20	20	11	18	- - - -	13	6.5	26	49	83	245	44
31	20	- - - -	11	18	- - - -	13	- - - -	50	- - - -	84	145	- - - -
Total	606	571	401.1	449	495	454	347.5	470.3	3,264	4,648	6,070	2,589
Mean	19.5	19.0	12.9	14.5	17.7	14.6	11.6	15.2	109	150	196	86.3
Max	22	20	20	18	24	19	25	50	724	547	712	299
Min	18	18	9.4	11	15	13	6.0	7.0	28	46	57	44
Ac-ft	1,200	1,130	796	891	982	900	689	933	6,470	9,220	12,040	5,140

Cal yr 1966: Total 24,775.1 Mean 67.9 Max 1,470 Min 9.4 Ac-ft 49,140
Wtr yr 1967: Total 20,364.9 Mean 55.8 Max 724 Min 6.0 Ac-ft 40,390

Peak discharge (base, 2,000 cfs)

Date	Time	Gage height	Discharge	Date	Time	Gage height	Discharge	Date	Time	Gage height	Discharge
6-17	2245	6.69	4,630	7- 5	2015	5.80	3,170	8- 2	1630	6.19	3,910
6-20	1630	9.70	9,050	7- 7	1630	8.28	6,570	8- 8	1515	6.96	4,930
6-27	2030	5.40	2,720	7-26	2200	6.39	4,190	8-29	2030	7.00	4,830

ARKANSAS RIVER BASIN

7-1250. Purgatoire River near Hoehne, Colo.

Location.--Lat 37°14'50", Long 104°23'50", in sec.13, T.32 S., R.63 W., on right bank 550 ft downstream from bridge on county road, 510 ft downstream from diversion dam for Hoehne ditch, 2½ miles southwest of Hoehne, and 8 miles northeast of city hall in Trinidad. Prior to Nov. 22, 1966, at site 545 ft upstream.

Drainage area.--857 sq mi.

Records available.--September 1954 to September 1967.

Gage.--Water-stage recorder. Datum of gage is 5,732.49 ft above mean sea level, datum of 1929. Prior to Nov. 22, 1966, at site 545 ft upstream at datum 8.50 ft higher.

Average discharge.--13 years, 27.2 cfs (19,690 acre-ft per year).

Extremes.--Maximum discharge during year, 12,650 cfs June 20 (gage height, 7.30 ft); no flow for many days.

1954-67: Maximum discharge, 35,000 cfs May 19, 1955 (gage height, 13.97 ft, site and datum then in use), from rating curve extended above 180 cfs by logarithmic plotting on basis of flow-over-dam computations at gage heights, 3.2, 4.5, and 7.34 ft; no flow for many days in each year.

Greatest flood known since at least 1859 occurred Sept. 30, 1904.

Remarks.--Records poor. Flow partly regulated by off-stream reservoirs and a flood control dam on unnamed creek in Pinon Canyon. Diversions above station for irrigation of about 10,500 acres.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	0	1.8	4.9	1.0	0	0	0.06	6.5	1.5	1.3	24
2	0	.30	1.6	3.9	1.0	0	0	.16	8.3	5.0	176	23
3	0	0	1.9	5.5	1.3	0	0	.08	.72	20	67	18
4	0	0	1.8	5.0	1.3	0	0	.16	.56	7.0	158	11
5	0	0	2.0	3.0	.32	0	0	.08	1.0	181	64	4.3
6	0	0	3.0	2.0	.24	0	.05	.08	1.0	185	23	3.0
7	0	0	2.2	1.8	.32	0	.08	0	.48	349	5.2	2.0
8	0	0	5.9	2.0	.40	0	.05	0	1.0	40	228	1.6
9	0	0	4.9	4.0	.40	.38	0	0	.80	6.5	162	1.6
10	0	0	3.5	6.5	.32	.41	0	0	.40	11	178	2.0
11	0	0	5.5	5.0	.48	0	0	0	.80	8.0	25	1.6
12	0	0	4.2	4.8	.64	.06	.04	0	.72	6.5	12	1.8
13	0	0	3.5	4.6	.64	0	3.8	0	.56	6.2	5.9	.80
14	0	0	4.9	4.0	.16	0	4.9	0	0	1.0	6.5	.80
15	0	0	2.8	3.0	.24	0	.22	0	.24	9.8	12	12
16	0	.04	3.9	2.0	.48	0	0	0	.87	33	17	90
17	0	.03	2.3	2.0	.48	0	0	.09	448	13	3.8	36
18	0	.11	1.8	4.0	.64	0	0	.16	591	9.7	.36	14
19	0	.23	1.6	5.6	.48	0	0	.16	403	9.3	1.7	8.2
20	0	.33	1.6	4.0	.64	0	0	.16	1,360	5.5	3.0	5.9
21	0	.31	.72	3.6	.08	0	0	.16	135	4.9	2.1	4.3
22	0	.52	.32	2.3	0	0	0	.16	65	5.5	.32	2.0
23	0	2.0	.48	1.8	0	0	0	.16	43	11	0	2.0
24	0	2.0	.64	1.8	0	0	0	.24	35	19	0	1.8
25	.45	.80	1.3	1.3	.08	0	0	.16	29	20	0	1.6
26	2.6	.56	3.3	1.3	.24	0	0	34	42	260	.03	2.3
27	2.2	1.0	3.0	1.8	0	0	0	36	138	103	1.5	3.3
28	.48	1.8	2.8	1.0	0	0	0	.48	59	2.3	2.4	3.3
29	0	1.0	4.0	1.0	-	0	0	2.5	6.5	1.0	404	5.9
30	0	1.3	3.3	1.0	-	0	0	.94	1.5	2.0	76	3.9
31	0	- - - -	5.5	1.0	- - - -	0	- - - -	7.2	- - - -	1.6	30	- - - -
Total	5.73	12.33	86.06	95.5	11.88	0.85	9.14	50.79	3,466.08	1,338.3	1,666.11	292.00
Mean	0.185	0.411	2.78	3.08	0.424	0.027	0.305	1.64	116	43.2	53.7	9.73
Max	2.6	2.0	5.9	6.5	1.3	0.41	4.9	34	1,360	349	404	90
Min	0	0	0.32	1.0	0	0	0	0	0	1.0	0	0.80
Ac-ft	11	24	171	189	24	1.7	18	101	6,870	2,650	3,300	579

Cal yr 1966 : Total 6,753.62 Mean 18.5 Max 1,010 Min 0 Ac-ft 13,400
Wtr yr 1967 : Total 7,034.77 Mean 19.3 Max 1,360 Min 0 Ac-ft 13,950

Peak discharge (base, 2,000 cfs)

Date	Time	Gage height	Discharge	Date	Time	Gage height	Discharge
6-20	1655	7.30	12,650	8-2	1715	4.67	2,510
7-5	2100	4.90	3,000	8-8	1645	4.70	2,570
7-7	1745	5.83	5,600	8-29	2100	4.98	3,180
7-26	2230	5.37	4,180				

7-1251. Frijole Creek near Alfalfa, Colo.

Location.--Lat 37°12'00", long 104°11'40", in NW¼ sec.2, T.33 S., R.61 W., on right bank at downstream side of bridge on U. S. Highway 160, 1 mile upstream from mouth, 4 miles west of Alfalfa, and 16 miles east of city limits of Trinidad.

Drainage area.--80 sq mi.

Records available.--March 1957 to September 1967.

Gage.--Water-stage recorder. Altitude of gage is 5,400 ft (from topographic map).

Average discharge.--10 years, 4.67 cfs (3,380 acre-ft per year).

Extremes.--Maximum discharge during year, 7,150 cfs June 16 (gage height, 14.40 ft), from rating curve extended above 1,300 cfs as explained below; no flow for many days.

1957-67: Maximum discharge, 10,600 cfs June 17, 1965 (gage height, 17.25 ft), from rating curve extended above 1,300 cfs on basis of slope-area measurement at gage height 8.81 ft and contracted-opening measurement at gage height 17.25 ft; no flow for many days in each year.

Flood of June 22, 1954, reached a stage of 17.23 ft, from floodmarks (discharge, 13,500 cfs, from rating curve extended above 8,800 cfs on basis of contracted-opening measurements of peak flow).

Remarks.--Records fair. Minor diversions above station for irrigation.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1			0	0	0.10			0	5.0	0	1.2	8.0
2			0	0	.15			0	1.5	0	238	3.0
3			0	0	.08			0	.50	0	101	2.5
4			0	0	.06			0	.30	0	460	2.0
5			0	0	.04			0	.20	28	2.9	.50
6			0	0	.02			0	.18	17	1.3	1.0
7			.09	0	.02			0	.05	3.4	.98	1.2
8			.32	0	.02			0	0	.04	57	.89
9			.14	0	.02			0	0	0	77	.74
10			.01	0	.02			0	2.8	0	49	2.2
11			0	0	.01			0	1.1	1.6	3.3	1.4
12			0	0	.01			0	.08	.74	2.3	.68
13			0	0	.01			0	0	2.4	1.3	.38
14			0	0	.01			0	0	.01	1.2	.89
15			0	0	.01			0	0	1.1	1.4	.56
16			0	0	0			0	629	4.7	1.4	22
17			0	0	0			0	278	2.7	1.6	5.1
18			0	0	0			0	15	1.3	.68	2.0
19			0	0	0			0	30	.01	.26	1.0
20			0	0	0			0	364	0	.08	.05
21			0	0	0			0	67	0	.02	0
22			0	.39	0			0	5.5	0	0	0
23			0	.74	0			0	3.3	0	.44	0
24			0	.44	0			0	2.9	4.3	.68	0
25			0	.50	0			0	2.2	13	.26	0
26			0	.32	0			79	1.9	26	.16	0
27			0	.38	0			3.3	1.7	7.5	.08	1.1
28			0	.38	0			1.7	1.4	2.7	.01	.08
29			0	.38	-			.62	1.2	1.6	293	0
30			0	.26	- - - - -			.18	.04	1.4	30	0
31		- - - - -	0	.14	- - - - -		- - - - -	88	- - - - -	1.3	7.0	- - - - -
Total	0	0	0.56	3.93	0.58	0	0	172.80	1,414.85	120.80	1,333.55	57.27
Mean	0	0	0.018	0.126	0.021	0	0	5.57	47.2	3.90	43.0	1.91
Max	0	0	0.32	0.74	0.15	0	0	88	629	28	460	22
Min	0	0	0	0	0	0	0	0	0	0	0	0
Ac-ft	0	0	1.1	7.8	1.2	0	0	343	2,810	240	2,650	114

Cal yr 1966: Total 1,916.66 Mean 5.25 Max 391 Min 0 Ac-ft 3,800
 Wtr yr 1967: Total 3,104.34 Mean 8.51 Max 629 Min 0 Ac-ft 6,160

Peak discharge (base, 700 cfs)

Note.--No gage-height record Feb. 1 to Mar. 11.

Date	Time	Gage height	Discharge	Date	Time	Gage height	Discharge
5-26	1200	6.15	875	8- 2	1445	8.19	1,950
5-31	1600	6.07	835	8- 4	0100	9.18	2,540
6-16	2215	14.40	7,150	8- 9	2245	6.07	835
6-20	1800	9.40	2,680	8-29	2000	7.86	1,760

7-1255. San Francisco Creek near Alfalfa, Colo.

Location.--Lat 37°11'10", long 104°07'50", in sec.8, T.33 S., R.60 W., on downstream side of right abutment of bridge on U. S. Highway 160, half a mile upstream from mouth, 1½ miles south of Alfalfa, and 20 miles east of Trinidad.

Drainage area.--160 sq mi.

Records available.--October 1954 to September 1967.

Gage.--Water-stage recorder. Altitude of gage is 5,320 ft (from topographic map).

Average discharge.--13 years, 8.93 cfs (6,470 acre-ft per year).

Extremes.--Maximum discharge during year, 906 cfs July 15 (gage height, 3.27 ft); no flow for many days.

1954-67: Maximum discharge, 15,500 cfs May 19, 1955, from rating curve extended above 250 cfs on basis of slope-area measurement of peak flow; maximum gage height, 13.24 ft (from highwater mark in gage well) June 18, 1965; no flow for many days in each year.

Flood of July 22, 1954, reached a stage of 14.40 ft, from floodmarks (discharge, 26,300 cfs, by contracted-opening measurement of peak flow).

Remarks.--Records fair except those for winter period, which are poor. Diversions above station for irrigation of about 500 acres.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.08	0.05	0.05	0.05	0.20	0.10	0.05	0	3.0	0.37	0.42	3.4
2	.05	.05	.05	.05	.20	.10	.02	0	.80	.37	9.7	1.4
3	.02	.05	.05	.05	.20	.10	.05	0	.54	.32	30	1.0
4	.05	.05	.05	.05	.20	.10	.05	0	.32	.32	51	.90
5	.02	.05	.05	.05	.20	.10	.05	0	.20	.37	1.4	.60
6	.01	.05	.05	.05	.20	.10	.05	0	.08	8.1	.66	.40
7	0	.05	.12	.05	.20	.10	.05	0	.05	.88	.32	.16
8	0	.05	.12	.05	.20	.10	.05	0	.05	.73	3.9	.12
9	0	.05	.08	.05	.30	.20	.08	0	.05	4.3	3.4	.12
10	0	.05	.08	.05	.40	.20	.08	0	.05	5.0	5.3	.12
11	0	.05	.12	.05	.50	.16	.12	0	.05	57	.73	.12
12	0	.05	.08	.05	.60	.16	.08	0	.05	71	.32	.08
13	.01	.05	.08	.05	.60	.16	.05	.02	.02	.66	.20	.08
14	.05	.05	.08	.05	.66	.12	.05	0	.02	.42	.12	.08
15	.05	.05	.08	.05	.42	.12	.02	0	.02	101	.16	.05
16	.05	.05	.08	.05	.32	.12	.05	0	12	69	1.2	.05
17	.08	.05	.12	.05	.32	.16	.05	0	41	9.4	.37	.05
18	.08	.05	.12	.05	.32	.16	.05	0	1.8	1.8	.16	.05
19	.05	.05	.12	.10	.20	.16	.05	.02	1.0	1.5	.12	.05
20	.05	.05	.12	.10	.20	.12	.05	.02	139	1.4	.12	.05
21	.02	.05	.12	.10	.20	.12	.05	.01	8.2	1.2	.08	.02
22	.02	.05	.12	.10	.20	.12	.05	0	.88	1.2	.08	.02
23	.02	.02	.16	.10	.20	.12	.08	0	.54	1.2	.08	.02
24	.02	.02	.20	.10	.30	.12	.05	0	.48	53	.08	.02
25	.02	.05	.10	.10	.30	.12	.05	0	.42	9.9	.08	.02
26	.02	.02	.10	.10	.20	.12	.05	.05	.37	4.9	.08	.02
27	.02	.08	.10	.10	.10	.12	.05	.02	.37	.66	.08	.02
28	.02	.08	.10	.10	.10	.08	0	.02	.42	.60	.08	.02
29	.05	.08	.05	.10	-	.12	0	.02	.73	.54	119	.02
30	.02	.08	.05	.10	- - - -	.08	0	.02	.42	.48	26	.02
31	.05	- - - -	.05	.10	- - - -	.08	- - - -	13	- - - -	.42	25	- - - -
Total	0.93	1.53	2.85	2.20	8.04	3.84	1.48	13.20	212.93	408.04	280.24	9.08
Mean	0.030	0.051	0.092	0.071	0.287	0.124	0.049	0.426	7.10	13.2	9.04	0.303
Max	0.08	0.08	0.20	0.10	0.66	0.20	0.12	13	139	101	119	3.4
Min	0	0.02	0.05	0.05	0.10	0.08	0	0	0.02	0.32	0.08	0.02
Ac-ft	1.8	3.0	5.7	4.4	16	7.6	2.9	26	422	809	556	18

Cal yr 1966: Total 2,088.51 Mean 5.72 Max 603 Min 0 Ac-ft 4,140

Wtr yr 1967: Total 944.36 Mean 2.59 Max 139 Min 0 Ac-ft 1,870

Peak discharge (base, 1,000 cfs)--No peak above base.

Note.--No gage-height record Dec. 25 to Feb. 12.

7-1260. Purgatoire River near Alfalfa, Colo.

Location.--Lat 37°11'30", long 104°07'30", in NW¼ sec.9, T.33 S., R.60 W., on right bank 700 ft downstream from San Francisco Creek, 1½ miles southeast of Alfalfa, and 20 miles east of Trinidad.

Drainage area.--1,320 sq mi.

Records available.--March 1905 to September 1907 (published as "Purgatory River"), March 1924 to September 1928, October 1951 to September 1967. Monthly discharge only for some periods, published in WSP 1311.

Gage.--Water-stage recorder. Altitude of gage is 5,280 ft (from topographic map). Mar. 22, 1905, to Sept. 30, 1907, staff gage 650 ft downstream at different datum. Feb. 27, 1924, to Sept. 30, 1928, water-stage recorder 1 mile downstream at different datum. Oct. 1, 1951, to July 5, 1955, water-stage recorder at site 150 ft upstream at datum 3.0 ft higher.

Average discharge.--22 years, 57.9 cfs (41,920 acre-ft per year).

Extremes.--Maximum discharge during year, 11,900 cfs June 17 (gage height, 18.50 ft), from rating curve extended above 2,700 cfs as explained below; minimum daily, 1.0 cfs June 15.

1905-7, 1924-28, 1951-67: Maximum discharge, 41,900 cfs May 19, 1955 (gage height, 31.9 ft, from floodmarks, present site and datum), from rating curve extended above 2,700 cfs on basis of slope-area measurements at gage heights 9.79, 13.35, 15.75, 27.30, 30.60, and 31.9 ft; no flow at times in most years.

Remarks.--Records poor. Diversions above station for irrigation of about 29,000 acres.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	14	13	18	9.0	16	11	5.0	3.1	123	12	6.0	123
2	12	15	23	10	15	9.9	5.0	3.7	99	10	851	140
3	11	16	29	12	15	9.4	5.0	3.1	61	22	277	105
4	10	14	18	11	14	9.0	4.6	2.8	25	10	1,430	80
5	9.0	13	13	10	13	9.4	4.3	2.6	15	92	420	60
6	9.0	15	13	10	12	11	4.0	2.1	8.0	713	100	45
7	9.0	14	13	11	13	13	3.4	1.8	6.0	218	50	29
8	8.0	13	19	11	16	14	1.8	1.6	5.0	534	379	23
9	8.0	13	19	12	18	13	2.1	1.4	4.0	35	442	22
10	7.0	15	20	12	18	11	2.1	1.4	4.0	14	950	27
11	7.0	14	19	13	15	10	2.8	1.2	5.0	161	125	45
12	7.0	12	16	14	13	9.0	2.4	1.2	3.0	191	55	20
13	6.0	11	14	16	11	8.1	5.7	1.4	3.0	20	15	17
14	5.0	11	17	19	9.9	6.8	21	1.2	2.0	14	10	18
15	7.0	12	20	22	6.4	6.4	24	1.8	1.0	131	10	17
16	9.0	11	15	21	4.6	6.8	15	2.8	188	179	30	111
17	16	9.4	16	20	8.1	8.6	10	3.1	2,230	61	15	313
18	14	8.1	16	18	8.6	8.6	4.6	2.6	1,520	57	10	120
19	12	9.0	15	17	9.0	8.6	3.4	2.6	577	36	9.0	45
20	10	10	15	15	10	8.6	3.4	3.1	1,340	36	9.0	42
21	8.6	10	15	17	15	8.1	2.8	2.8	785	35	8.0	26
22	8.1	9.0	15	20	13	7.6	2.4	2.8	132	35	8.0	21
23	9.4	7.2	15	34	13	6.8	2.4	2.8	54	34	6.5	18
24	9.4	6.0	13	28	13	6.4	3.4	2.8	48	146	9.8	16
25	7.2	6.8	11	25	13	7.2	4.6	2.8	40	40	6.2	14
26	4.6	8.1	10	26	11	7.6	4.3	365	52	136	5.8	13
27	5.7	9.0	12	28	13	7.2	3.1	140	58	609	4.6	16
28	9.9	13	11	25	12	7.2	3.7	100	340	20	11	16
29	9.0	18	10	22	-	6.0	3.1	80	16	15	634	15
30	8.1	18	9.0	18	- - - - -	5.7	3.1	40	14	17	1,290	16
31	9.9	- - - - -	8.0	16	- - - - -	5.4	- - - - -	177	- - - - -	10	440	- - - - -
Total	279.9	353.6	477.0	542.0	348.6	267.4	162.5	960.6	7,758.0	3,643	7,616.9	1,573
Mean	9.03	11.8	15.4	17.5	12.4	8.63	5.42	31.0	259	118	246	52.4
Max	16	18	29	34	18	14	24	365	2,230	713	1,430	313
Min	4.6	6.0	8.0	9.0	4.6	5.4	1.8	1.2	1.0	10	4.6	13
Ac-ft	555	701	946	1,080	691	530	322	1,910	15,390	7,230	15,110	3,120

Cal yr 1966: Total 17,919.0 Mean 49.1 Max 1,410 Min 2.4 Ac-ft 35,540

Wtr yr 1967: Total 23,982.5 Mean 65.7 Max 2,230 Min 1.0 Ac-ft 47,570

Peak discharge (base, 2,500 cfs)

Date	Time	Gage height	Discharge	Date	Time	Gage height	Discharge
6-17	0100	18.50	11,900	8-2	1545	11.05	4,540
6-20	2315	12.50	5,700	8-4	0230	10.70	4,260
7-7	2245	10.10	3,780	8-10	0330	8.95	2,900
7-27	0215	9.00	2,930	8-30	0045	10.90	4,420

Note.--No gage-height record Dec. 23 to Jan. 29.

ARKANSAS RIVER BASIN

7-1261. Luning Arroyo near Model, Colo.

Location.--Lat 37°18'20", long 104°00'50", in sec.33, T.31 S., R.59 W., on right bank 600 ft downstream from ford, 6 miles upstream from mouth, 13½ miles east of Model, and 29 miles northeast of Trinidad.

Drainage area.--86 sq mi.

Records available.--July 1966 to September 1967.

Gage.--Water-stage recorder. Altitude of gage is 5,150 ft (from topographic map).

Extremes.--1966: Maximum discharge during period July to September, 1,160 cfs Aug. 3 (gage height, 9.07 ft), from rating curve extended above 17 cfs as explained below; no flow for many days.

1966-67: Maximum discharge during water year, 1,060 cfs May 26 (gage height, 8.78 ft, from floodmarks), from rating curve extended above 1.7 cfs on basis of slope-area measurement at gage height 8.78 ft; no flow for many days.

Remarks.--Records good.

Discharge, in cubic feet per second, July to September 1966

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1										0.91	15	0.20
2										.90	103	.10
3										.41	106	.20
4										.26	5.9	.10
5										.20	5.6	.10
6										2.1	1.2	1.1
7										38	25	.66
8										1.3	31	.38
9										.54	3.0	.58
10										.32	.47	.23
11										.23	.44	.10
12										.18	.32	.01
13										.13	.32	.01
14										.06	.44	0
15										0	.26	.24
16										0	.14	.78
17										0	5.1	.26
18										0	.35	.11
19										14	.20	.09
20										2.2	0	.02
21										.32	.10	0
22										.16	1.5	0
23										.13	.80	0
24										6.1	.40	0
25										.82	.40	0
26										7.3	.20	0
27										.38	.10	6.3
28										.59	0	1.3
29										.23	0	.35
30										.18	0	.16
31		- - - - -			- - - - -		- - - - -		- - - - -	.20	.10	- - - - -
Total										78.15	307.34	13.38
Mean										2.52	9.91	0.446
Max										38	106	6.3
Min										0	0	0
Ac-ft										155	610	27

Cal yr : Total Mean Max Min Ac-ft
 Wtr yr 1966 : Total - Mean - Max - Min - Ac-ft -

Peak discharge (base, 200 cfs)

Date	Time	Gage height	Discharge	Date	Time	Gage height	Discharge
7- 7	0030	5.25	253	8- 7	1830	4.85	201
8- 3	1730	9.07	1,160				

7-1261. Luning Arroyo near Model, Colo.--Continued

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.11	0.29	0.26	0.20	0.23	0.18	0.10	0.12	0.38	0.20	0	1.5
2	.10	.38	.23	.20	.20	.16	.12	.13	.38	.19	0	.74
3	.17	.41	.23	.23	.17	.16	.10	.16	.29	.18	12	.50
4	.23	.38	.23	.26	.17	.16	.12	.17	.26	.20	5.8	.38
5	.29	.44	.26	.26	.16	.19	.12	.17	.23	1.1	.54	.35
6	.29	.41	.26	.26	.17	.19	.12	.18	.64	1.3	.08	.29
7	.23	.41	.26	.29	.18	.19	.14	.18	.58	.47	0	.26
8	.17	.41	.26	.35	.19	.20	.17	.18	.29	.32	0	.26
9	.12	.41	.29	.47	.19	.32	.17	.18	.18	.26	19	.29
10	.09	.41	.29	.41	.20	.23	.18	.14	.14	.62	1.8	.67
11	.09	.38	.26	.38	.32	.20	.16	0	.31	.23	.32	.78
12	.10	.38	.26	.38	.23	.17	.13	0	.20	.29	.09	.32
13	.09	.35	.29	.41	.23	.13	.41	0	.14	1.8	0	.19
14	.11	.38	.29	.44	.13	.10	.62	.08	.11	.74	0	.32
15	.13	.35	.29	.44	.17	.04	.54	.14	.01	.50	0	.54
16	.13	.35	.32	.44	.16	.05	.44	.08	7.80	.47	0	.41
17	.26	.32	.32	.44	.11	.10	.32	.04	.73	.24	0	.32
18	.19	.35	.32	.23	.10	.13	.23	0	2.4	.71	0	.32
19	.18	.32	.32	.20	.09	.16	.13	0	.86	.29	0	.32
20	.18	.32	.32	.20	.11	.16	.08	0	.20	.17	0	.32
21	.19	.32	.32	.26	.12	.16	.04	0	.23	.11	0	.32
22	.18	.32	.32	.32	.12	.16	.04	0	.26	.02	0	.23
23	.19	.29	.29	.32	.12	.14	.21	0	.62	0	0	.20
24	.19	.29	.29	.32	.12	.14	.19	0	.47	.86	0	.18
25	.19	.29	.26	.29	.14	.14	.19	0	.41	3.6	0	.17
26	.19	.29	.23	.32	.18	.14	.18	103	.41	3.6	0	.23
27	.19	.23	.23	.29	.20	.14	.18	24	.35	3.1	0	.35
28	.26	.23	.26	.23	.19	.14	.13	1.5	.55	.74	0	.35
29	.35	.23	.26	.26	-	.13	.11	.66	.78	.19	.86	.32
30	.32	.23	.23	.26	- - - - -	.09	.12	.41	.29	0	118	.29
31	.26	- - - - -	.23	.26	- - - - -	.04	- - - - -	.38	- - - - -	0	5.5	- - - - -
Total	5.77	10.17	8.48	9.62	4.70	4.64	5.79	131.90	202.12	140.58	249.13	11.72
Mean	0.186	0.339	0.274	0.310	0.168	0.150	0.193	4.25	6.74	4.53	8.04	0.391
Max	0.35	0.44	0.32	0.47	0.32	0.32	0.62	103	.86	.86	118	1.5
Min	0.09	0.23	0.23	0.20	0.09	0.04	0.04	0	0.01	0	0	0.17
Ac-ft	11	20	17	19	9.3	9.2	11	262	401	279	494	23

Cal yr 1966: Total - Mean - Max - Min - Ac-ft -
Wtr yr 1967: Total 784.62 Mean 2.15 Max 118 Min 0 Ac-ft 1,560

Peak discharge (base, 500 cfs)

Date	Time	Gage height	Discharge	Date	Time	Gage height	Discharge
5-26	1930	8.78	1,060	7-24	1830	8.32	921
6-19	1945	6.82	528	8-29	1830	6.71	503

ARKANSAS RIVER BASIN

7-1262. Van Bremer Arroyo near Model, Colo.

Location.--Lat 37°20'40", Long 103°57'30", in sec.13, T.31 S., R.59 W., on right bank 3 miles upstream from mouth, 16 miles east of Model, and 33 miles northeast of Trinidad.

Drainage area.--168 sq mi.

Records available.--July 1966 to September 1967.

Gage.--Water-stage recorder. Altitude of gage is 4,960 ft (from topographic map).

Extremes.--1966: Maximum discharge during period July to September, 1,020 cfs July 19 (gage height, 3.81 ft), from rating curve extended above 65 cfs as explained below; minimum daily, 0.02 cfs Aug. 29.

1966-67: Maximum discharge during water year, 6,240 cfs May 26 (gage height, 9.4 ft, from floodmarks), from rating curve extended above 65 cfs on basis of slope-area measurement of peak flow; minimum daily, 0.08 cfs Nov. 23, Aug. 28, 29.

Remarks.--Records good.

Discharge, in cubic feet per second, July to September 1966

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1										0.17	0.28	0.11
2										.17	.19	.10
3										.17	64	.11
4										.17	16	.08
5										.17	51	.06
6										.17	5.5	.06
7										.17	35	.06
8										.17	82	.06
9										.17	8.8	.07
10										.17	2.0	.07
11										.17	11	.08
12										.17	1.1	.09
13										.17	.19	.09
14										.17	.17	.09
15										.17	.16	5.2
16										.17	2.9	4.8
17										.17	9.8	.47
18										.17	.47	.19
19										87	.14	.16
20										2.2	.07	.14
21										.12	.11	.15
22										.10	4.3	.16
23										4.4	1.9	.15
24										28	.18	.15
25										1.3	.11	.14
26										12	.11	.16
27										2.2	.08	96
28										.47	.04	3.0
29										.19	.02	.60
30										8.2	.06	.60
31		- - - - -			- - - - -		- - - - -		- - - - -	1.3	.07	- - - - -
Total										150.54	297.75	113.20
Mean										4.86	9.60	3.77
Max										87	82	96
Min										0.10	0.02	0.06
Ac-ft										299	591	225

Cal yr	:	Total		Mean		Max		Min		Ac-ft
Wtr yr	1966	Total	-	Mean	-	Max	-	Min	-	Ac-ft

Peak discharge (base, 450 cfs)

Date	Time	Gage height	Discharge	Date	Time	Gage height	Discharge
7-19	1645	3.81	1,020	8- 8	1645	3.55	842
8- 3	2045	2.85	462	9-27	0100	2.90	467

7-1262. Van Bremer Arroyo near Model, Colo.--Continued

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.19	0.13	0.18	0.16	0.19	0.19	0.20	0.13	8.0	0.15	0.47	0.16
2	.12	.13	.19	.16	.19	.19	.20	.13	7.0	.15	.47	.15
3	.14	.13	.20	.16	.19	.19	.20	.14	6.0	.15	.47	.14
4	.14	.13	.28	.17	.19	.19	.20	.14	5.0	.15	.47	.13
5	.15	.13	.28	.17	.17	.19	.20	.15	4.0	2.5	.37	.12
6	.17	.13	.28	.17	.17	.19	.20	.14	3.0	3.5	.28	.12
7	.16	.13	.28	.17	.17	.19	.20	.14	3.1	.47	.28	.11
8	.17	.13	.28	.18	.17	.20	.20	.14	.96	.18	2.6	.10
9	.11	.13	.28	.18	.16	.20	.20	.14	.28	.16	5.8	.09
10	.10	.13	.28	.18	.16	.20	.19	.13	.19	.15	.96	.10
11	.10	.13	.28	.18	.16	.20	.19	.13	.18	.14	.20	.10
12	.11	.13	.28	.18	.16	.20	.19	.14	.17	29	.18	.11
13	.14	.13	.28	.18	.17	.20	.19	.14	.16	5.2	.16	.11
14	.17	.13	.28	.18	.17	.20	.18	.15	.16	.78	.15	.10
15	.17	.13	.19	.18	.17	.20	.17	.15	.15	46	.15	.47
16	.18	.12	.19	.18	.19	.20	.16	.15	.30	18	.15	.28
17	.20	.12	.19	.18	.19	.20	.16	.15	202	101	.15	.20
18	.20	.12	.17	.18	.20	.20	.16	.15	6.8	22	.15	.18
19	.20	.12	.16	.17	.20	.20	.16	.15	38	.96	.15	.16
20	.19	.11	.15	.18	.28	.20	.15	.14	5.0	.19	.16	.15
21	.18	.10	.14	.18	.19	.20	.15	.14	98	.16	.17	.14
22	.17	.09	.15	.18	.18	.20	.16	.14	40	.14	.15	.11
23	.16	.08	.15	.19	.18	.20	.16	.14	4.2	28	.11	.10
24	.15	.09	.15	.19	.18	.20	.15	.14	.20	81	.11	.10
25	.14	.10	.15	.20	.18	.20	.15	.14	.17	3.8	.09	.09
26	.14	.11	.15	.20	.19	.20	.15	794	.15	1.0	.09	.12
27	.14	.12	.15	.20	.19	.20	.15	45	.15	.47	.09	.19
28	.14	.13	.15	.20	.19	.20	.15	27	.16	1.2	.08	.20
29	.13	.15	.15	.20	-	.20	.13	19	.19	2.4	.08	.20
30	.13	.17	.15	.20	- - - - -	.19	.13	11	.16	.96	.16	.19
31	.13	- - - - -	.15	.20	- - - - -	.19	- - - - -	9.0	- - - - -	.47	.17	- - - - -
Total	4.72	3.68	6.34	5.63	5.13	6.11	5.18	908.53	433.83	325.23	15.07	4.52
Mean	0.152	0.123	0.205	0.182	0.183	0.197	0.173	29.3	14.5	10.5	0.486	0.151
Max	0.20	0.17	0.28	0.20	0.28	0.20	0.20	794	202	101	5.8	0.47
Min	0.10	0.08	0.14	0.16	0.16	0.19	0.13	0.13	0.15	0.14	0.08	0.09
Ac-ft	9.4	7.3	13	11	10	12	10	1,800	860	645	30	9.0

Cal yr 1966: Total - Mean - Max - Min - Ac-ft -
Wtr yr 1967: Total 1,723.97 Mean 4.72 Max 794 Min 0.08 Ac-ft 3,420

Peak discharge (base, 450 cfs)

Date	Time	Gage height	Discharge	Date	Time	Gage height	Discharge
5-26	1545	9.4	6,240	7-15	2030	2.86	467
6-17	0130	3.56	849	7-17	2015	3.45	778
6-21	0800	3.35	718	7-24	1715	4.00	1,150

ARKANSAS RIVER BASIN

7-1263. Purgatoire River near Thatcher, Colo.

Location.--Lat 37°21'30", long 103°53'40", in sec.10, T.31 S., R.58 W., 250 ft downstream from county road bridge at gas line crossing, 1.2 miles downstream from Van Bremer Arroyo, and 18 miles southeast of Thatcher.

Drainage area.--1,935 sq mi.

Records available.--July 1966 to September 1967.

Gage.--Water-stage recorder.

Extremes.--Maximum discharge during year, 15,100 cfs June 17 (gage height, 12.35 ft), from rating curve extended above 2,100 cfs; minimum daily, 0.10 cfs May 12, 13.

1966-67: Maximum discharge, that of June 17, 1967; no flow July 12, 13, 1966.

Floods of July 22, 1954, and May 19, 1955, reached a stage of 26.7 and 25.2 ft (from floodmarks), respectively. Flood of June 18, 1965, reached a stage of 23.5 ft, from floodmarks (discharge, 47,700 cfs).

Remarks.--Records good except those for winter period, which are poor.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	14	9.0	17	8.5	20	15	5.9	1.0	340	32	18	166
2	12	10	17	9.5	20	14	5.6	1.5	260	22	346	114
3	12	14	16	10	18	13	5.3	1.5	180	18	657	91
4	11	13	16	11	20	12	5.3	1.2	110	15	1,300	71
5	9.3	14	18	12	19	12	5.0	2.2	70	38	389	59
6	8.2	12	16	10	19	11	4.7	2.8	45	576	131	40
7	8.2	14	13	9.0	13	11	4.7	2.8	14	126	150	36
8	8.6	14	16	9.1	22	12	4.4	2.0	6.5	586	439	31
9	8.2	14	18	9.3	20	10	4.1	1.0	4.1	106	859	27
10	7.6	14	20	9.5	20	16	3.5	.60	11	92	816	128
11	7.6	14	15	9.6	22	14	2.5	.30	6.8	131	202	52
12	6.8	14	14	9.6	20	14	1.8	.10	2.0	391	107	32
13	6.5	14	14	10	18	12	2.2	.10	.60	69	67	22
14	6.2	13	18	12	18	10	3.5	.60	.50	29	44	20
15	6.2	14	22	18	17	9.6	1.3	1.0	.20	41	37	20
16	5.6	14	20	24	15	9.0	2.5	2.8	98	482	51	207
17	10	14	15	23	10	8.6	1.6	2.8	3,480	159	58	463
18	16	14	18	21	11	9.3	1.2	2.8	1,480	107	36	125
19	15	12	20	18	13	9.3	8.2	2.5	414	31	26	61
20	15	11	20	16	14	9.3	5.6	1.5	869	19	18	40
21	14	12	20	18	12	9.3	4.1	1.5	1,740	16	18	34
22	12	12	20	24	12	9.3	3.0	1.0	301	10	19	24
23	10	12	20	36	14	8.2	2.8	.70	122	39	18	18
24	9.6	11	15	36	13	7.6	2.0	.70	69	354	12	15
25	9.6	9.3	14	31	12	7.2	2.2	.30	54	115	9.0	13
26	9.6	8.2	10	28	14	7.2	2.2	1,590	45	415	7.9	14
27	8.6	7.9	12	34	14	7.6	2.5	750	42	553	5.9	16
28	7.2	8.6	11	32	15	7.9	2.2	400	166	141	5.6	19
29	7.9	10	10	29	-	7.9	2.2	300	107	59	52	20
30	10	16	9.0	22	- - - -	6.8	1.0	240	44	38	1,650	18
31	9.3	- - - -	8.0	22	- - - -	6.2	- - - -	200	- - - -	29	390	- - - -
Total	301.8	369.0	492.0	571.1	455	316.3	162.5	3,515.30	10,081.70	4,839	7,938.4	1,996
Mean	9.74	12.3	15.9	18.4	16.2	10.2	5.42	113	336	156	256	66.5
Max	16	16	22	36	22	16	25	1,590	3,480	586	1,650	463
Min	5.6	7.9	8.0	8.5	10	6.2	1.0	0.10	0.20	10	5.6	13
Ac-ft	599	732	976	1,130	902	627	322	6,970	20,000	9,600	15,750	3,960

Cal yr 1966 : Total - Mean - Max - Min - Ac-ft -
 Wtr yr 1967 : Total 31,038.10 Mean 85.0 Max 3,480 Min 0.10 Ac-ft 61,560

Peak discharge (base, 2,700 cfs)

Date	Time	Gage height	Discharge	Date	Time	Gage height	Discharge
5-26	1930	9.72	6,400	8-4	0830	8.35	3,660
6-17	0330	12.35	15,100	8-8	2030	8.96	4,750
6-21	0130	9.70	6,350	8-30	0530	8.45	3,940

7-1265. Purgatoire River at Ninemile Dam, near Higbee, Colo.

Location.--Lat 37°44', long 103°29', in NW¼ sec. 7, T.27 S., R.54 W., on left bank 850 ft upstream from Ninemile Dam, 4 miles southwest of Higbee, and 5½ miles upstream from Smith Canyon.

Drainage area.--2,900 sq mi.

Records available.--October 1924 to September 1967. Monthly discharge only for some periods, published in WSP 1311.

Gage.--Water-stage recorder. Datum of gage is 4,240.59 ft above mean sea level, datum of 1929. Prior to Oct. 28, 1934, water-stage recorder at site 550 ft downstream at datum 0.60 ft higher. Oct. 28, 1934, to May 19, 1955, water-stage recorder (destroyed by flood) at present site and datum. May 25, 1955, to June 13, 1956, staff or chain gages at nearby sites at different datums. June 14 to Dec. 5, 1956, chain gage at present site and datum.

Average discharge.--43 years, 105 cfs (76,020 acre-ft per year).

Extremes.--Maximum discharge during year, 11,200 cfs June 17 (gage height, 8.51 ft); no flow May 24, 25.

1924-67: Maximum discharge, 105,000 cfs (estimated) June 18, 1965 (gage height, 19.6 ft, from floodmarks); no flow at times in most years.

Remarks.--Records poor. Diversions for irrigation of about 32,000 acres above station.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	60	12	9.0	9.0	43	15	7.4	2.6	98	74	34	646
2	45	14	8.0	10	40	15	8.0	2.6	88	47	29	332
3	35	16	12	12	41	16	7.4	2.0	78	38	655	198
4	33	16	18	11	40	13	6.2	2.0	58	114	3,350	186
5	30	17	20	16	38	11	5.6	1.6	52	641	910	156
6	29	22	16	18	36	11	4.4	1.6	44	160	432	132
7	26	31	17	12	34	11	4.4	1.6	80	400	160	114
8	23	28	20	11	29	10	3.8	1.6	54	342	126	90
9	20	19	17	10	30	11	4.4	1.4	27	393	1,000	54
10	18	23	11	12	29	12	5.0	1.4	23	323	662	40
11	17	23	13	19	26	12	5.6	1.4	77	260	796	52
12	15	18	25	30	26	13	6.2	1.6	43	1,370	250	64
13	16	18	25	37	25	14	6.8	1.4	24	344	142	47
14	12	17	24	38	24	13	7.4	4.0	15	95	105	29
15	13	18	15	40	25	13	8.0	4.0	12	46	74	17
16	12	18	13	41	23	13	9.0	3.0	103	653	108	12
17	15	17	18	36	23	14	10	2.0	4,970	326	82	79
18	19	16	24	25	22	13	10	2.0	1,820	417	76	296
19	17	16	19	25	22	12	11	1.0	992	386	64	150
20	19	17	16	37	19	11	10	80	957	368	47	74
21	25	15	18	44	17	11	9.0	80	3,580	235	37	54
22	24	12	20	30	17	11	8.0	60	881	174	25	44
23	23	12	13	23	17	12	6.8	20	1,290	123	20	38
24	22	12	13	24	15	11	5.6	0	240	85	22	30
25	17	13	12	29	16	11	3.8	0	114	349	19	20
26	16	12	11	34	14	10	3.2	1,030	76	314	18	17
27	13	11	16	33	15	9.0	3.2	3,630	62	255	15	17
28	13	11	12	29	15	8.0	3.2	290	400	485	12	14
29	13	8.0	11	20	-	7.4	3.2	111	166	166	11	12
30	13	8.0	10	25	- - - -	6.2	3.2	62	146	80	650	11
31	12	- - - -	9.0	26	- - - -	5.6	- - - -	72	- - - -	49	1,900	- - - -
Total	665	490.0	485.0	766.0	721	355.2	189.8	5,236.20	16,570	9,112	11,831	3,025
Mean	21.5	16.3	15.6	24.7	25.8	11.5	6.33	169	552	294	382	101
Max	60	31	25	44	43	16	11	3,630	4,970	1,370	3,350	646
Min	12	8.0	8.0	9.0	14	5.6	3.2	0	12	38	11	11
Ac-ft	1,320	972	962	1,520	1,430	705	376	10,390	32,870	18,070	23,470	6,000

Cal yr 1966: Total 52,333.4 Mean 143 Max 11,300 Min 0 Ac-ft 103,800
Wtr yr 1967: Total 49,446.20 Mean 135 Max 4,970 Min 0 Ac-ft 98,080

Peak discharge (base, 3,000 cfs)

Date	Time	Gage height	Discharge	Date	Time	Gage height	Discharge
5-27	0830	6.31	7,450	7-12	0100	6.66	6,870
6-17	1505	8.51	11,200	8- 4	0330	6.57	6,820
6-21	1330	6.88	8,890	8-31	0100	6.17	5,670

ARKANSAS RIVER BASIN

7-1285. Purgatoire River near Las Animas, Colo.

Location.--Lat 38°02'02", long 103°12'00", in NE¼SW¼ sec.23, T.23 S., R.52 W., on right bank at downstream side of bridge on State Highway 101, 2.3 miles southeast of courthouse in Las Animas and 4.5 miles upstream from mouth.

Drainage area.--3,503 sq mi.

Records available.--May to September 1889, July to October 1909 (gage heights and discharge measurements only), January 1922 to September 1931, July 1948 to September 1967. Monthly discharge only for some periods, published in WSP 1311. Published as Purgatoire Creek at Las Animas in 1889 and as Purgatory River near Las Animas in 1909.

Gage.--Water-stage recorder. Datum of gage is 3,874.94 ft above mean sea level, datum of 1929. May 22 to Sept. 30, 1889, staff gage, July 31 to Oct. 9, 1909, chain gage, and Apr. 1, 1922, to June 30, 1924, water-stage recorder, at railroad bridge 4 miles downstream at various datums. July 1, 1924, to Sept. 30, 1931, water-stage recorder at present site at various datums and July 23, 1948, to Sept. 30, 1955, at datum 5.00 ft higher, and Oct. 1, 1955, to July 11, 1966, at datum 3.00 ft higher. Supplementary water-stage recorder at site 1.6 miles downstream at different datum July 12 to Nov. 17, 1966.

Average discharge.--28 years (1922-31, 1948-67), 137 cfs (99,180 acre-ft per year).

Extremes.--Maximum discharge during year, 11,600 cfs June 17 (gage height, 6.50 ft); minimum daily, 1.9 cfs Mar. 15-18, Apr. 28. 1889, 1922-31, 1948-67: Maximum discharge, 70,000 cfs May 20, 1955 (gage height, 20.00 ft, present datum), from rating curve extended above 38,000 cfs by logarithmic plotting; no flow at times in 1924-25, 1927, 1949.

Remarks.--Records good except those for winter period, which are poor. Diversions for irrigation of about 36,000 acres above station. Records of chemical analyses and water temperatures for the water year 1967 are published in Part 2 of this report.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	103	36	21	24	26	5.9	11	5.5	76	84	30	359
2	76	34	19	26	18	5.9	98	3.7	103	56	28	208
3	68	25	22	29	13	5.9	92	4.3	108	30	35	104
4	68	19	23	30	13	5.0	7.7	4.7	134	38	2,880	70
5	61	19	22	31	18	4.0	5.7	4.3	76	390	1,620	66
6	55	26	30	30	27	4.0	5.7	4.5	38	204	605	48
7	48	34	29	28	26	3.5	6.3	3.9	12	179	359	34
8	30	37	27	23	38	23	7.4	4.1	8.1	236	171	31
9	22	36	26	26	41	11	7.1	3.7	13	677	130	22
10	19	34	25	28	35	8.0	8.6	4.7	7.3	358	130	83
11	18	28	30	25	39	6.5	7.7	5.3	6.6	640	130	37
12	15	25	23	23	41	5.7	6.8	6.3	5.8	2,040	130	20
13	12	25	20	25	32	5.1	5.9	5.9	15	632	130	26
14	19	22	19	25	36	4.5	4.7	5.7	5.8	325	112	21
15	32	22	27	24	38	1.9	4.1	4.5	133	186	79	19
16	38	21	26	34	37	1.9	4.3	3.9	253	265	59	20
17	56	25	23	41	28	1.9	4.9	3.7	2,880	632	53	18
18	54	25	23	41	17	1.9	4.1	3.5	2,470	528	56	49
19	50	24	25	37	19	2.5	4.1	3.5	2,010	668	44	139
20	50	23	26	45	19	4.1	4.1	3.9	560	224	44	89
21	34	19	27	46	12	3.9	3.1	3.5	1,780	121	37	65
22	30	19	26	50	20	3.9	3.7	2.9	1,940	52	32	49
23	32	22	25	55	19	4.5	4.1	2.5	1,910	36	26	34
24	36	22	24	53	10	4.5	4.1	2.4	578	22	22	36
25	31	23	23	45	8.6	4.1	3.5	2.0	417	14	18	22
26	34	26	18	30	6.5	4.3	2.9	3.9	209	358	16	14
27	32	31	15	26	6.1	4.9	2.5	2,340	69	265	13	12
28	38	26	18	30	5.9	4.9	1.9	528	94	265	12	14
29	37	22	17	29	-	4.7	2.2	186	310	168	9.0	10
30	30	21	19	26	- - - - -	4.1	4.5	108	101	71	9.0	9.0
31	31	- - - - -	21	27	- - - - -	5.5	- - - - -	82	- - - - -	48	1,190	- - - - -
Total	1,259	771	719	1,012	649.1	161.5	161.7	3,350.8	16,322.6	9,812	8,209.0	1,728.0
Mean	40.6	25.7	23.2	32.6	23.2	5.21	5.39	108	544	317	265	57.6
Max	103	37	30	55	41	23	11	2,340	2,880	2,040	2,880	359
Min	12	19	15	23	5.9	1.9	1.9	2.0	5.8	14	9.0	9.0
Ac-ft	2,500	1,530	1,430	2,010	1,290	320	321	6,650	32,380	19,460	16,280	3,430

Cal yr 1966 Total 41,169.0 Mean 113 Max 7,540 Min 0.90 Ac-ft 81,660
Wtr yr 1967 Total 44,155.7 Mean 121 Max 2,880 Min 1.9 Ac-ft 87,580

Peak discharge (base, 6,000 cfs)

Date	Time	Gage height	Discharge	Date	Time	Gage height	Discharge
6-17	1815	6.50	11,600	7-12	0945	5.40	6,150
6-21	1900	5.60	6,200	8-4	0830	6.20	9,820

7-1300. John Martin Reservoir at Caddoa, Colo.

Location.--Lat 38°04'05", long 102°56'13", in NE¼NW¼ sec.8, T.23 S., R.49 W., at dam on Arkansas River at Caddoa, 3.2 miles southeast of Hasty and 58 miles upstream from Colorado-Kansas State line.

Drainage area.--18,915 sq mi, of which 785 sq mi is probably noncontributing.

Records available.--January 1943 to September 1967.

Gage.--Water-stage recorder for elevations above about 3,785 ft and reference point and tape gage read once daily for those below. Datum of gage is 3,760.00 ft above mean sea level, datum of 1929 (Corps of Engineers bench mark); gage readings have been reduced to elevations above mean sea level. Prior to 1953 water-stage recorder and staff gage at same datum.

Extremes.--Maximum contents during year, 198,800 acre-ft Oct. 1, Mar. 9-14 (elevation, 3,834.20 ft); minimum, 40,270 acre-ft Sept. 30 (elevation, 3,805.78 ft).

1943-67: Maximum contents, 429,600 acre-ft Aug. 25, 1965 (elevation, 3,856.16 ft); no contents at times in 1943, 1945-47, 1952-57, 1959-65.

Remarks.--Reservoir is formed by concrete and earth-fill dam. Storage began while dam was under construction prior to 1943, and record of contents began Jan. 1, 1943. Capacity, 631,100 acre-ft at elevation 3,870.00 ft (top of spillway gates), of which 353,900 acre-ft (between elevations 3,773.5 ft, elevation of no contents, and 3,851.00 ft) is for conservation and 277,200 acre-ft (between elevations 3,851.00 and 3,870.00 ft) is reserved for flood control. No dead storage. Figures given herein represent total contents.

Cooperation.--Record of contents furnished by Corps of Engineers.

Month-end elevation and contents, water year October 1966 to September 1967

Date	Elevation (feet)†	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.....	3,834.23	199,000	-
Oct. 31.....	3,832.58	186,100	-12,900
Nov. 30.....	3,832.72	187,200	+1,100
Dec. 31.....	3,833.22	191,000	+3,800
Calendar year 1966.....	-	-	-184,600
Jan. 31.....	3,833.91	196,400	+5,400
Feb. 28.....	3,834.16	198,400	+2,000
Mar. 31.....	3,834.10	197,900	-500
Apr. 30.....	3,824.18	119,900	a -67,800
May 31.....	3,817.73	85,640	-34,260
June 30.....	3,822.42	110,000	+24,360
July 31.....	3,821.99	107,600	-2,400
Aug. 31.....	3,813.56	67,710	-39,890
Sept. 30.....	3,805.78	40,270	-27,440
Water year 1967.....	-	-	b -148,500

† Elevation at 2400.

a New capacity table put into use Apr. 1, 1967. Contents on Mar. 31, by new capacity table, 187,700.

b Based on revised capacity table being applicable Sept. 30, 1966.

7-1305. Arkansas River below John Martin Reservoir, Colo.

Location.--Lat 38°05'02", long 102°55'10", in NW¼NW¼ sec.4, T.23 S., R.49 W., on left bank 1.1 miles upstream from Caddoa Creek, 1.7 miles downstream from John Martin Dam, and 2.9 miles southeast of Hasty.

Drainage area.--18,917 sq mi, of which 785 sq mi is probably noncontributing.

Records available.--March 1938 to September 1967. Published as "at Caddoa" prior to October 1947.

Gage.--Water-stage recorder. Datum of gage is 3,737.40 ft above mean sea level, datum of 1929 (Corps of Engineers bench mark). Prior to Feb. 22, 1940, at site 3 miles upstream at datum 22.83 ft higher. Feb. 22, 1940, to Feb. 4, 1943, at site 700 ft upstream at datum 3.64 ft higher than present datum.

Average discharge.--29 years, 346 cfs (250,500 acre-ft per year), adjusted for storage in John Martin Reservoir.

Extremes.--Maximum discharge during year, 1,380 cfs Apr. 13 (gage height, 3.36 ft); minimum daily, 3.3 cfs Jan. 8-16. 1938-67: Maximum discharge, 40,000 cfs Apr. 24, 1942 (gage height, 10.46 ft, site and datum then in use), from rating curve extended above 12,000 cfs on basis of flow-over-dam and critical-depth measurement of peak flow; no flow at times in 1945-47; minimum daily prior to construction of John Martin Reservoir, 5 cfs July 16, 1939.

Remarks.--Records excellent. Storage and diversions above station for irrigation of about 438,000 acres and for flood control. Flow regulated by John Martin Reservoir (see preceding page). Records of chemical analyses and water temperatures for the water year 1967 are published in Part 2 of this report.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	361	189	24	3.6	3.8	23	954	1,070	11	204	1,150	861
2	361	17	24	3.6	3.8	23	1,050	1,080	8.5	208	1,130	792
3	365	25	24	3.6	3.8	23	1,120	1,080	5.7	287	1,150	774
4	303	25	24	3.6	3.8	23	1,120	1,050	4.3	386	1,180	768
5	261	24	24	3.6	3.8	23	1,220	1,040	100	426	1,170	762
6	253	24	18	3.6	3.8	22	1,250	1,030	276	400	1,170	732
7	249	24	12	3.6	3.8	15	1,250	1,020	238	374	945	642
8	204	25	12	3.3	3.8	6.2	1,250	924	204	400	1,020	512
9	159	25	12	3.3	3.8	13	1,240	910	200	413	1,120	501
10	196	24	12	3.3	3.8	25	1,230	945	208	440	1,050	501
11	223	24	11	3.3	3.8	23	1,230	931	208	450	959	455
12	223	24	8.5	3.3	3.6	23	1,220	938	215	455	903	422
13	223	24	6.2	3.3	3.6	25	1,260	938	208	455	889	426
14	223	25	5.7	3.3	3.6	24	1,240	931	265	470	854	431
15	223	25	5.7	3.3	3.8	24	1,190	910	299	485	882	431
16	155	25	5.7	3.3	3.6	23	1,180	875	90	485	861	465
17	111	25	5.7	3.6	3.6	23	1,180	868	234	445	780	480
18	85	25	5.7	3.6	3.6	20	1,160	834	159	200	804	480
19	54	25	7.6	3.8	3.6	19	1,130	780	131	352	621	518
20	184	25	6.2	4.0	14	19	1,130	684	128	341	804	534
21	257	25	5.7	4.3	16	19	1,110	618	108	374	762	534
22	181	25	5.7	4.3	17	20	1,120	678	39	584	738	534
23	261	26	5.2	4.8	17	20	1,110	732	7.6	708	798	501
24	303	24	5.2	4.8	20	19	1,110	744	7.1	708	861	496
25	303	25	5.2	5.2	30	20	1,110	756	26	558	889	518
26	303	29	5.2	4.3	30	20	1,090	768	67	448	896	562
27	322	25	4.3	3.8	29	20	1,100	630	111	738	896	528
28	361	25	4.0	3.8	23	22	1,070	567	155	726	959	485
29	404	24	3.8	3.8	-	20	1,050	573	166	726	1,050	470
30	418	24	3.6	3.8	- - - -	18	1,050	462	192	726	1,050	470
31	418	- - - -	3.6	4.0	- - - -	20	- - - -	26	- - - -	994	959	- - - -
Total	7,947	901	305.5	116.8	266.8	637.2	34,524	25,392	4,071.2	14,966	29,300	16,585
Mean	256	30.0	9.85	3.77	9.53	20.6	1,151	819	136	483	945	553
Max	418	189	24	5.2	30	25	1,260	1,080	299	994	1,180	861
Min	54	17	3.6	3.3	3.6	6.2	954	26	4.3	200	621	422
Ac-ft	15,760	1,790	606	232	529	1,260	68,480	50,360	8,080	29,680	58,120	32,900

Cal yr 1966 : Total 165,080.8 Mean 452 Max 1,270 Min 3.6 Ac-ft 327,400

Wtr yr 1967 : Total 135,012.5 Mean 370 Max 1,260 Min 3.3 Ac-ft 267,800

7-1330. Arkansas River at Lamar, Colo.

Location.--Lat 38°06'15", long 102°37'08", in SE¼ sec.30, T.22 S., R.46 W., on right bank 450 ft upstream from bridge on U. S. Highways 50 and 287 and 1.2 miles north of city hall in Lamar.

Drainage area.--19,780 sq mi, of which 950 sq mi is probably noncontributing.

Records available.--May 1913 to September 1955, April 1959 to September 1967. Monthly discharge only for some periods, published in WSP 1311.

Gage.--Water-stage recorder. Datum of gage is 3,599.81 ft above mean sea level, datum of 1929. Prior to June 4, 1941, at site 450 ft downstream on highway bridge at datum 5.07 ft higher. June 4, 1941, to Apr. 3, 1946, at site 1,250 ft downstream and Apr. 4, 1946, to Sept. 30, 1955, at site 600 ft downstream, both at datum 4.07 ft higher.

Average discharge.--50 years, 230 cfs (166,500 acre-ft per year).

Extremes.--Maximum discharge during year, 9,100 cfs May 31 (gage height, 10.83 ft), from rating curve extended above 4,300 ft; minimum daily, 2.5 cfs Mar. 30, 31.

1913-55, 1959-67: Maximum discharge, 130,000 cfs June 5, 1921 (gage height, 17.0 ft, present datum), from rating curve extended above 10,000 cfs by logarithmic plotting and confirmed by relationship of discharges at La Junta 60 miles upstream and Syracuse 52 miles downstream; maximum gage height, 18.90 ft (from floodmark) June 18, 1965; no flow at times in 1913-15, 1953.

Remarks.--Records good. Flow regulated by John Martin Reservoir (see sta. 7-1300). Natural flow of stream affected by transmountain diversions, storage reservoirs, power developments, ground-water withdrawals and diversions for irrigation of about 487,000 acres, and return flow from irrigated areas.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	204	6.0	6.5	26	29	5.0	184	482	305	12	484	354
2	188	5.5	6.0	21	25	4.5	500	513	143	11	506	373
3	192	6.0	6.5	15	25	4.0	518	504	94	13	512	339
4	196	6.0	8.4	10	25	3.0	460	495	88	13	534	368
5	114	6.0	14	14	26	3.0	469	460	76	22	540	399
6	99	6.0	25	17	26	10	536	460	56	40	545	414
7	102	6.5	25	31	25	8.4	575	464	56	18	665	399
8	99	6.5	19	26	22	4.5	595	434	61	16	334	275
9	37	6.0	13	25	24	4.5	590	343	44	22	562	236
10	19	6.0	9.4	13	22	4.5	580	407	37	537	534	290
11	13	6.0	12	20	22	4.5	570	399	36	181	506	290
12	13	6.0	10	33	22	4.5	575	399	34	46	468	246
13	13	5.5	19	31	22	4.5	570	399	30	22	474	222
14	22	6.0	28	31	22	4.5	661	425	28	15	457	218
15	48	6.0	29	29	21	4.5	555	429	32	18	419	208
16	130	6.0	24	29	21	5.0	536	412	235	21	452	168
17	46	6.0	20	28	22	5.0	536	412	65	30	324	164
18	33	6.0	21	33	21	5.0	532	425	51	1,220	319	160
19	19	6.0	21	35	24	5.0	518	382	21	441	724	160
20	17	6.0	21	37	22	5.0	504	373	100	40	354	195
21	11	6.5	19	37	20	5.0	522	287	49	9.8	300	181
22	7.4	7.4	22	35	21	5.0	513	283	16	11	231	190
23	6.5	7.4	13	31	20	4.5	527	347	12	190	222	173
24	7.4	7.4	14	25	19	4.5	522	347	16	208	260	177
25	6.5	6.5	15	24	12	4.5	522	321	15	676	290	218
26	6.5	6.5	17	21	10	4.0	522	317	15	1,800	295	290
27	6.5	6.5	16	25	10	4.0	522	304	132	393	295	314
28	8.4	6.0	37	24	7.4	3.5	518	192	24	251	270	295
29	8.4	6.5	29	25	-	3.0	495	204	15	195	354	265
30	8.4	6.5	29	29	- - - -	2.5	478	247	13	164	373	251
31	6.0	- - - -	25	28	- - - -	2.5	- - - -	3,230	- - - -	218	419	- - - -
Total	1,687.0	187.2	573.8	808	587.4	141.9	15,705	14,696	1,899	6,853.8	13,022	7,832
Mean	54.4	6.24	18.5	26.1	21.0	4.58	524	474	63.3	221	420	261
Max	204	7.4	37	37	29	10	661	3,230	305	1,800	724	414
Min	6.0	5.5	6.0	10	7.4	2.5	184	192	12	9.8	222	160
Ac-ft	3,350	371	1,140	1,600	1,170	281	31,150	29,150	3,770	13,590	25,830	15,530

Cal yr 1966: Total 88,077.4 Mean 241 Max 833 Min 0.9 Ac-ft 174,700
 Wtr yr 1967: Total 63,993.1 Mean 175 Max 3,230 Min 2.5 Ac-ft 126,900

ARKANSAS RIVER BASIN

7-1370. Frontier ditch near Coolidge, Kans.

Location.--Lat 38°02'18", long 102°02'19", in NE¼ sec.21, T.23 S., R.43 W., on left bank 0.3 mile east of Colorado-Kansas State line, 0.5 mile downstream from Holly drain diversion, 1.5 miles west of Coolidge, and 2.3 miles downstream from diversion from Arkansas River.

Records available.--October 1950 to September 1967.

Gage.--Water-stage recorders and Parshall flume. Datum of gage is 3,353.14 ft above mean sea level, datum of 1929.

Extremes.--1950-67: Maximum daily discharge, 70 cfs May 7, 1959; no flow for many days.

Remarks.--Records good. This ditch diverts water from Arkansas River in Colorado for use in Kansas. These records and records for Arkansas River near Coolidge represent total flow of Arkansas River at the Colorado-Kansas State line.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	43						0	40	19	24	57	45
2	30						18	39	0	9.2	62	31
3	9.2						33	35	0	20	59	29
4	7.2						36	36	0	26	42	29
5	5.2						45	37	13	36	41	30
6							46	42	33	16	38	29
7	2.1						46	39	25	15	29	28
8	0						34	34	43	16	25	24
9	0						22	31	21	13	24	22
10	0						18	26	16	15	16	23
11	0						19	25	0	42	0	23
12	10						3.7	26	0	0	29	23
13	23						0	29	7.4	12	39	19
14	9.2						40	34	13	14	37	23
15	0						62	41	8.2	7.4	41	33
16	0						54	39	9.8	19	42	32
17	0						61	36	22	17	40	32
18	0						60	34	18	30	33	33
19	0						52	32	15	26	41	31
20	0						48	28	27	37	41	28
21	0						43	29	29	33	42	29
22	0						35	34	24	35	39	26
23	0						36	43	24	31	33	23
24	0						35	46	23	30	32	33
25	0						33	45	11	31	31	39
26	0						33	43	9.4	41	35	33
27	0						33	49	9.6	55	39	32
28	.70						33	47	17	46	45	36
29	0				-		31	42	28	28	43	36
30	0				- - - - -		33	37	19	32	53	35
31	0	- - - - -			- - - - -		- - - - -	22	- - - - -	41	62	- - - - -
Total	139.6	0	0	0	0	0	1,042.7	1,120	484.4	797.6	1,190	889
Mean	4.50	0	0	0	0	0	34.8	36.1	16.1	25.7	38.4	29.6
Max	43	0	0	0	0	0	62	49	43	55	62	45
Min	0	0	0	0	0	0	0	22	0	0	0	19
Ac-ft	277	0	0	0	0	0	2,070	2,220	961	1,580	2,360	1,760
Cal yr 1966: Total	4,520.0		Mean 12.4	Max 55	Min 0	Ac-ft 8,970						
Wtr yr 1967: Total	5,663.3		Mean 15.5	Max 62	Min 0	Ac-ft 11,230						

7-1375. Arkansas River near Coolidge, Kans.

Location.--Lat 38°01'34", long 102°00'41", in NE¼NW¼ sec.26, T.23 S., R.43 W., on right bank at downstream side of bridge, 1 mile south of Coolidge, and 1.9 miles downstream from Colorado-Kansas State line.

Drainage area.--25,410 sq mi, of which 1,708 sq mi is probably noncontributing.

Records available.--May to October 1903, March to May 1921, October 1950 to September 1967. Monthly discharge only for some periods, published in WSP 1311.

Gage.--Water-stage recorder. Datum of gage is 3,330.84 ft above mean sea level, datum of 1929. May 5 to Oct. 31, 1903, staff gage, and Mar. 1 to May 31, 1921, water-stage recorder at present site at different datums. Oct. 1, 1950, to Mar. 31, 1966, water-stage recorder at site 0.3 mile upstream at datum 3.00 ft higher.

Average discharge.--17 years, 240 cfs (173,800 acre-ft per year).

Extremes.--Maximum discharge during year, 4,500 cfs June 1 (gage height, 6.40 ft), from rating curve extended above 2,100 cfs; minimum daily, 60 cfs, Dec. 28.

1903, 1921, 1950-67: Maximum discharge, 158,000 cfs June 17, 1965 (gage height, 14.8 ft, present site and datum, from flood-marks), from rating curve extended above 13,000 cfs on basis of slope-area measurement of peak flow; no flow for many days in 1903, 1954, 1960.

Remarks.--Records good. Combined flow of river and Frontier ditch (see preceding page) represents entire flow that enters Kansas. Flow regulated by John Martin Reservoir (see station no. 7-1300). Natural flow of stream affected by transmountain diversions, storage reservoirs, power developments, ground-water withdrawals and diversion for irrigation of about 500,000 acres, and return flow from irrigated areas. Records of chemical analyses and water temperatures for the water year 1967 are published in Part 2 of this report.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	285	125	115	75	130	103	77	459	1,930	185	288	560
2	355	148	122	80	136	108	75	459	679	151	426	553
3	350	148	122	82	145	110	232	486	490	112	478	567
4	350	115	151	90	133	115	380	502	412	116	478	518
5	340	118	142	94	128	89	370	530	358	704	412	525
6	290	130	136	100	128	91	375	571	288	265	448	484
7	254	130	128	95	118	93	420	547	250	219	1,070	472
8	208	128	136	90	115	128	454	524	288	181	800	448
9	182	125	139	86	120	108	491	518	308	155	525	372
10	196	118	122	95	120	99	524	411	269	166	658	398
11	176	115	108	120	120	95	547	459	265	408	644	448
12	160	110	128	140	128	91	619	454	246	316	623	394
13	148	103	115	140	136	87	547	443	189	238	637	358
14	142	103	105	212	139	85	553	469	158	170	588	336
15	145	103	112	163	151	85	571	518	185	155	518	312
16	166	99	112	160	154	89	518	513	349	185	490	312
17	245	99	101	145	154	83	480	502	308	174	466	288
18	249	95	110	128	176	83	502	469	598	552	376	261
19	216	95	115	128	186	85	502	443	362	1,570	354	269
20	182	93	115	130	157	83	496	417	362	567	658	257
21	157	97	115	136	125	83	464	417	436	316	421	242
22	166	99	118	151	122	87	459	370	328	215	362	261
23	262	101	90	151	112	99	464	310	292	166	304	284
24	258	97	100	160	105	115	486	320	261	212	277	280
25	196	95	110	139	99	97	496	310	196	367	277	277
26	189	99	90	130	97	87	480	315	170	504	273	280
27	186	103	70	130	99	65	480	350	162	1,220	277	304
28	200	105	60	130	97	65	559	355	215	430	312	328
29	130	110	65	133	-	77	643	325	227	316	340	320
30	139	110	70	145	- - - -	65	524	375	215	250	390	288
31	130	- - - -	70	139	- - - -	65	- - - -	1,430	- - - -	223	472	- - - -
Total	6,652	3,316	3,392	3,897	3,630	2,815	13,788	14,571	10,796	10,808	14,642	10,996
Mean	215	111	109	126	130	90.8	460	470	360	349	472	367
Max	355	148	151	212	186	128	643	1,430	1,930	1,570	1,070	567
Min	130	93	60	75	97	65	75	310	158	112	273	242
Ac-ft	13,190	6,580	6,730	7,730	7,200	5,580	27,350	28,900	21,410	21,440	29,040	21,810

Cal yr 1966: Total 126,689 Mean 347 Max 1,140 Min 60 Ac-ft 251,300
Wtr yr 1967: Total 99,303 Mean 272 Max 1,930 Min 60 Ac-ft 197,000

8-2135. Rio Grande at Thirtymile Bridge, near Creede, Colo.

Location.--Lat 37°43'30", long 107°15'20", in NE¼ sec.13, T.40 N., R.4 W., on right bank 70 ft below bridge, 500 ft upstream from Squaw Creek, three-quarters of a mile downstream from Rio Grande Reservoir, and 20 miles southwest of Creede.

Drainage area.--163 sq mi.

Records available.--June 1909 to September 1923, May 1925 to September 1967. No winter records 1910, 1926. Monthly discharge only for some periods, published in WSP 1312.

Gage.--Water-stage recorder. Altitude of gage is 9,300 ft (from topographic map). June 1, 1909, to Apr. 7, 1912, chain gage at site about a quarter of a mile downstream at different datum. Apr. 8, 1912, to Sept. 30, 1923, staff or chain gage 500 ft upstream at different datum. May 16, 1925, to Sept. 30, 1934, water-stage recorder at present site at datum 0.40 ft higher.

Average discharge.--54 years (1910-23, 1926-67), 215 cfs (155,700 acre-ft per year).

Extremes.--Maximum discharge during year, 1,260 cfs May 22 (gage height, 3.23 ft); minimum daily, 4.0 cfs Nov. 16 to Dec. 31. 1909-23, 1925-67: Maximum discharge, 7,500 cfs June 28, 1927 (gage height, 7.03 ft, present datum), from rating curve extended above 1,200 cfs; minimum daily, 0.1 cfs Nov. 2-4, 1960.

Remarks.--Records good except those for period of no gage-height record, which are poor. Flow regulated by Rio Grande Reservoir (capacity, 51,110 acre-ft) since 1912. Natural flow of stream affected by transmountain diversions from Colorado River basin to drainage area above station through Raber-Lohr and Fuchs ditches (see elsewhere in this report). No known diversion above station.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	40	4.4	4.0	4.5	4.7	4.8	31	134	380	233	85	74
2	40	4.4	4.0	4.5	4.7	4.8	31	96	330	233	85	90
3	40	4.4	4.0	4.5	4.7	4.8	31	85	365	221	72	98
4	44	4.4	4.0	4.5	4.7	4.8	43	85	474	205	65	78
5	50	4.4	4.0	4.5	4.7	4.8	47	85	570	179	63	72
6	53	4.2	4.0	4.5	4.7	4.8	47	83	715	172	63	72
7	58	4.2	4.0	4.5	4.7	4.8	50	76	634	158	74	72
8	61	4.2	4.0	4.5	4.7	4.8	58	161	757	154	96	72
9	53	4.2	4.0	4.5	4.7	4.8	69	375	868	154	128	72
10	50	4.2	4.0	4.5	4.7	4.8	72	532	799	134	198	74
11	50	4.2	4.0	4.5	4.7	4.8	70	608	844	128	209	83
12	50	4.2	4.0	4.5	4.7	4.8	65	556	908	128	190	83
13	55	4.2	4.0	4.5	4.7	4.8	63	563	828	128	168	83
14	56	4.2	4.0	4.5	4.7	4.8	63	418	764	128	144	70
15	45	4.2	4.0	4.5	4.7	4.8	63	294	764	123	137	67
16	39	4.0	4.0	4.5	4.7	5.0	63	435	694	120	123	67
17	39	4.0	4.0	4.5	4.7	5.0	70	694	715	144	112	67
18	39	4.0	4.0	4.5	4.7	5.0	67	820	785	186	109	51
19	39	4.0	4.0	4.5	4.7	5.0	69	1,020	924	194	106	50
20	39	4.0	4.0	4.5	4.7	5.0	72	1,100	641	175	101	58
21	39	4.0	4.0	4.5	4.7	5.0	74	1,090	502	131	98	58
22	39	4.0	4.0	4.5	4.7	5.0	74	1,170	474	103	90	58
23	39	4.0	4.0	4.5	4.7	5.0	74	1,190	462	93	85	58
24	39	4.0	4.0	4.5	4.7	5.0	74	1,140	457	93	85	58
25	39	4.0	4.0	4.5	4.7	5.0	74	1,040	408	93	76	58
26	39	4.0	4.0	4.5	4.7	5.0	74	900	308	88	67	59
27	39	4.0	4.0	4.5	4.7	40	78	634	308	78	63	61
28	39	4.0	4.0	4.5	4.7	56	101	622	290	67	69	61
29	39	4.0	4.0	4.5	-	37	131	582	257	65	74	61
30	39	4.0	4.0	4.5	- - - - -	32	141	418	237	65	74	61
31	17	- - - - -	4.0	4.5	- - - - -	31	- - - - -	380	- - - - -	70	74	- - - - -
Total	1,347	124.0	124.0	139.5	131.6	323.0	2,039	17,386	17,462	4,243	3,183	2,046
Mean	43.5	4.13	4.00	4.50	4.70	10.4	68.0	561	582	137	103	68.2
Max	61	4.4	4.0	4.5	4.7	56	141	1,190	924	233	209	98
Min	17	4.0	4.0	4.5	4.7	4.8	31	76	237	65	63	50
Ac-ft	2,670	246	246	277	261	641	4,040	34,480	34,640	8,420	6,310	4,060

Cal yr 1966: Total 81,704 Mean 224 Max 1,180 Min 4.0 Ac-ft 162,100
 Wtr yr 1967: Total 48,548.1 Mean 133 Max 1,190 Min 4.0 Ac-ft 96,290

Note.--No gage-height record Nov. 3 to Mar. 20.

8-2145. North Clear Creek below Continental Reservoir, Colo.

Location.--Lat 37°53'18", long 107°12'10", in NE¼SW¼ sec.21, T.42 N., R.3 W., on left bank 100 ft below bridge, 1,000 ft downstream from Continental Reservoir, and 15 miles west of Creede.

Drainage area.--51.7 sq mi.

Records available.--May 1929 to September 1967. Monthly discharge only for some periods, published in WSP 1312. Prior to October 1960, published as Clear Creek below Continental Reservoir.

Gage.--Water-stage recorder and concrete control. Altitude of gage is 10,200 ft (from topographic map). Prior to Oct. 2, 1951, at site 150 ft upstream at different datum.

Average discharge.--38 years, 30.8 cfs (22,300 acre-ft per year).

Extremes.--Maximum discharge during year, 112 cfs June 19 (gage height, 2.21 ft); minimum daily, 1.2 cfs Feb. 1 to Mar. 27.
1929-67: Maximum discharge, 362 cfs May 8, 1952 (gage height, 3.66 ft), from rating curve extended above 120 cfs; no flow June 22, 23, 1935.

Remarks.--Records good except those for period of no gage-height record, which are poor. Flow regulated by Continental Reservoir (capacity, 26,720 acre-ft). No diversion above station.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	15	1.3	1.4	1.3	1.2	1.2	14	35	42	74	16	13
2	15	1.3	1.4	1.3	1.2	1.2	14	34	35	65	16	13
3	15	1.3	1.4	1.3	1.2	1.2	14	29	31	65	16	13
4	16	1.3	1.4	1.3	1.2	1.2	14	27	31	67	16	13
5	16	1.3	1.4	1.3	1.2	1.2	14	27	17	61	12	13
6	16	1.3	1.4	1.3	1.2	1.2	14	27	6.2	59	11	13
7	16	1.3	1.4	1.3	1.2	1.2	14	27	5.5	54	11	13
8	16	1.3	1.4	1.3	1.2	1.2	14	31	5.1	49	11	13
9	16	1.4	1.4	1.3	1.2	1.2	14	53	4.7	48	11	13
10	16	1.4	1.4	1.3	1.2	1.2	14	59	4.7	44	20	13
11	16	1.4	1.4	1.3	1.2	1.2	17	55	4.7	42	26	13
12	16	1.4	1.4	1.3	1.2	1.2	20	55	14	39	27	13
13	16	1.4	1.4	1.3	1.2	1.2	20	55	28	38	31	13
14	16	1.4	1.4	1.3	1.2	1.2	25	55	46	38	34	19
15	16	1.4	1.4	1.3	1.2	1.2	31	48	56	38	34	26
16	16	1.4	1.4	1.3	1.2	1.2	31	40	67	39	34	26
17	16	1.4	1.4	1.3	1.2	1.2	23	37	72	41	34	26
18	17	1.4	1.4	1.3	1.2	1.2	18	42	67	42	34	26
19	14	1.4	1.4	1.3	1.2	1.2	21	47	94	38	21	26
20	12	1.4	1.4	1.3	1.2	1.2	24	52	110	36	15	26
21	12	1.4	1.4	1.3	1.2	1.2	24	54	99	26	15	26
22	12	1.4	1.4	1.3	1.2	1.2	24	50	99	18	15	26
23	12	1.4	1.4	1.3	1.2	1.2	24	49	98	15	15	26
24	12	1.4	1.4	1.3	1.2	1.2	24	49	90	13	15	26
25	12	1.4	1.4	1.3	1.2	1.2	24	49	86	16	15	17
26	12	1.4	1.4	1.3	1.2	1.2	24	45	99	17	13	12
27	12	1.4	1.4	1.3	1.2	1.2	24	42	109	17	13	12
28	12	1.4	1.4	1.3	1.2	6.7	31	42	104	17	13	16
29	12	1.4	1.4	1.3	-	13	36	42	101	16	13	23
30	12	1.4	1.4	1.3	- - - - -	13	38	42	88	16	13	18
31	5.7	- - - - -	1.4	1.3	- - - - -	14	- - - - -	42	- - - - -	16	13	- - - - -
Total	4377.7	41.2	43.4	40.3	33.6	79.1	643	1341	1713.9	1164	583	546
Mean	14.1	1.37	1.4	1.3	1.2	2.55	21.4	43.3	57.1	37.5	18.8	18.2
Max	17	1.4	1.4	1.3	1.2	14	38	59	110	74	34	26
Min	5.7	1.3	1.4	1.3	1.2	1.2	14	27	4.7	13	11	12
Ac-ft	868	82	86	80	67	157	1,280	2,660	3,400	2,310	1,160	1,080

Cal yr 1966: Total 13,121.6 Mean 35.9 Max 249 Min 0.8 Ac-ft 26,030
Wtr yr 1967: Total 6,666.2 Mean 18.3 Max 110 Min 1.2 Ac-ft 13,220

Note.--No gage-height record Dec. 1 to Mar. 27.

8-2165. Willow Creek at Creede, Colo.

Location.--Lat 37°51'20", long 106°55'40", in SE¼ sec.25, T.42 N., R.1 W., on left bank at north city limits of Creede, 8 ft upstream from entrance to paved channel just downstream from Windy Gulch, half a mile downstream from confluence of East and West Willow Creeks, and 2½ miles upstream from mouth.

Drainage area.--35.3 sq mi.

Records available.--May 1951 to September 1967.

Gage.--Water-stage recorder and concrete control. Altitude of gage is 8,880 ft (from topographic map). Prior to Sept. 2, 1953, at site 17 ft upstream at same datum.

Average discharge.--16 years, 21.4 cfs (15,490 acre-ft per year).

Extremes.--Maximum discharge during year, 66 cfs May 9 (gage height, 2.11 ft); minimum daily, 3.6 cfs Jan. 8.

1951-67: Maximum discharge, 430 cfs June 5, 1957; maximum gage height, 4.16 ft May 23, 1958; minimum daily discharge, 0.2 cfs Mar. 25, 1956, probably caused by snowslide upstream.

Remarks.--Records good except those for winter period, which are poor. Diversions above station for municipal supply of Creede.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	8.1	5.0	4.5	4.6	4.8	4.2	6.3	14	30	20	16	29
2	8.1	6.3	5.0	4.8	4.8	4.8	6.3	12	31	19	17	23
3	8.6	7.2	5.0	4.4	4.4	4.8	7.2	11	37	18	18	21
4	8.6	7.2	4.5	4.4	4.0	4.4	8.1	10	39	17	16	19
5	8.6	5.8	5.0	4.6	4.0	4.2	8.6	11	40	16	15	20
6	8.6	5.8	5.4	4.6	4.2	4.0	9.0	9.8	49	16	14	20
7	8.1	7.2	4.5	4.2	4.6	3.8	10	14	44	16	16	22
8	8.1	7.2	4.2	3.6	4.4	3.8	12	26	42	18	16	23
9	7.6	6.3	4.0	4.0	4.0	3.8	13	41	40	16	26	25
10	7.6	5.0	4.0	4.2	4.2	4.2	9.0	43	38	16	32	24
11	9.0	4.6	4.2	4.2	4.0	4.2	12	38	35	14	28	23
12	9.0	5.0	4.6	4.0	3.8	4.2	11	35	33	16	23	22
13	8.1	6.0	4.6	4.0	3.8	4.2	7.6	31	31	14	26	21
14	7.2	6.0	4.6	4.0	4.0	4.0	10	26	33	13	24	21
15	7.2	6.0	4.6	4.0	4.0	4.2	9.8	24	31	19	23	21
16	8.1	5.5	4.6	4.0	3.8	4.5	8.6	30	29	19	22	21
17	8.1	5.5	4.6	3.8	3.8	7.2	8.6	36	29	36	20	20
18	8.1	5.5	4.6	3.8	3.8	7.6	10	42	30	27	20	20
19	7.6	5.5	4.6	3.8	4.0	6.8	13	41	30	22	20	21
20	7.6	5.5	4.6	4.0	4.0	5.8	9.8	38	32	20	18	19
21	7.6	5.0	4.4	4.2	4.0	5.8	10	42	30	18	16	18
22	7.2	5.0	4.2	4.2	3.8	6.3	9.8	46	28	18	16	17
23	8.1	5.0	4.4	4.2	3.8	7.2	9.0	45	28	18	15	16
24	7.2	5.0	4.6	4.0	4.0	8.1	11	42	28	19	14	16
25	8.1	5.0	4.4	4.0	4.2	8.6	11	41	26	18	12	16
26	8.1	5.0	4.2	4.0	4.2	7.6	10	40	25	17	13	16
27	7.6	3.8	4.4	3.8	4.4	7.6	14	38	24	16	14	16
28	7.6	5.0	4.6	4.0	4.2	7.6	15	38	22	15	16	15
29	7.6	5.4	4.4	4.2	-	7.2	16	37	22	15	17	14
30	7.2	5.0	4.6	4.4	- - - - -	5.8	15	34	21	16	19	14
31	7.2	- - - - -	4.6	4.6	- - - - -	5.0	- - - - -	32	- - - - -	19	22	- - - - -
Total	245.5	167.3	140.5	128.6	115.0	171.5	310.7	967.8	957	561	584	593
Mean	7.92	5.58	4.53	4.15	4.11	5.53	10.4	31.2	31.9	18.1	18.8	19.8
Max	9.0	7.2	5.4	4.8	4.8	8.6	16	46	49	36	32	29
Min	7.2	3.8	4.0	3.6	3.8	3.8	6.3	9.8	21	13	12	14
Ac-ft	487	332	279	255	228	340	616	1,920	1,900	1,110	1,160	1,180

Cal yr 1966: Total 7,091.0 Mean 19.4 Max 140 Min 3.8 Ac-ft 14,060

Wtr yr 1967: Total 4,941.9 Mean 13.5 Max 49 Min 3.6 Ac-ft 9,800 -

Peak discharge (base, 120 cfs).--No peak above base.

Note.--No gage-height record Dec. 8 to Mar. 14.

8-2175. Rio Grande at Wagonwheel Gap, Colo.

Location.--Lat 37°46'00", long 106°49'50", in NE¼ sec.35, T.41 N., R.1 E., on right bank 250 ft upstream from private bridge, 0.2 mile upstream from Goose Creek, and 0.3 mile west of town of Wagonwheel Gap.

Drainage area.--780 sq mi.

Records available.--May 1951 to September 1967.

Gage.--Water-stage recorder. Datum of gage is 8,431.26 ft above mean sea level, datum of 1929.

Average discharge.--16 years, 492 cfs (356,200 acre-ft per year).

Extremes.--Maximum discharge during year, 2,120 cfs May 23 (gage height, 3.84 ft); minimum daily, 55 cfs Jan. 9.

1951-67: Maximum discharge, 4,870 cfs July 26, 1957 (gage height, 5.38 ft); minimum daily, 46 cfs Dec. 9, 1956.

Remarks.--Records good except those for winter period, which are poor. Flow regulated by Santa Maria, Rio Grande, and Continental Reservoirs (total capacity, 121,400 acre-ft). Diversions above station for irrigation. Transmountain diversions to drainage area above station from Colorado River basin (see elsewhere in this report).

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	174	121	100	65	75	100	177	320	801	550	311	329
2	174	108	100	70	70	110	168	302	780	520	288	324
3	189	109	100	65	65	120	183	249	914	492	298	306
4	201	110	104	70	70	110	201	236	1,060	470	306	288
5	195	106	104	65	75	100	215	245	1,230	450	302	266
6	198	106	111	70	75	95	208	229	1,610	410	302	288
7	201	111	126	65	75	95	208	249	1,480	410	380	284
8	201	114	100	60	70	90	218	370	1,310	395	365	298
9	201	106	90	55	70	90	232	654	1,430	390	504	284
10	189	103	90	60	75	100	229	986	1,370	365	610	275
11	186	100	90	60	75	110	241	1,070	1,290	347	668	288
12	201	110	90	65	70	110	241	1,040	1,340	352	592	284
13	186	110	85	60	75	100	215	1,010	1,370	342	538	271
14	180	110	80	60	80	100	215	906	1,340	324	482	262
15	177	110	80	65	80	110	232	710	1,310	342	450	254
16	180	110	75	65	80	130	222	797	1,250	360	450	254
17	177	110	75	60	65	150	218	1,160	1,220	610	395	258
18	168	110	75	60	70	186	232	1,470	1,310	514	375	254
19	166	100	75	60	80	183	245	1,680	1,480	470	365	258
20	166	100	75	60	85	149	232	1,790	1,510	445	356	275
21	166	110	80	60	75	149	241	1,750	1,160	400	329	258
22	163	110	75	65	70	144	232	1,810	1,070	338	311	245
23	163	100	65	65	75	151	232	1,930	994	311	298	241
24	156	113	60	60	80	161	236	1,850	930	311	280	232
25	154	106	65	60	85	154	236	1,790	866	324	266	236
26	154	107	65	60	90	138	225	1,600	759	316	245	249
27	154	90	65	60	85	142	254	1,320	717	302	245	245
28	154	100	60	60	90	174	293	1,140	696	284	271	232
29	154	110	65	65	-	215	329	1,140	640	254	288	229
30	149	100	70	65	- - - - -	171	347	970	586	266	284	222
31	146	- - - - -	65	70	- - - - -	161	- - - - -	829	- - - - -	284	288	- - - - -
Total	5,423	3,210	2,560	1,950	2,130	4,098	6,957	31,592	33,823	11,948	11,442	7,989
Mean	175	107	82.6	62.9	76.1	132	232	1,019	1,127	385	369	266
Max	201	121	126	70	90	215	347	1,930	1,610	610	668	329
Min	146	90	60	55	65	90	168	229	586	254	245	222
Ac-ft	10,760	6,370	5,080	3,870	4,220	8,130	13,800	62,660	67,090	23,700	22,690	15,850

Cal yr 1966: Total 201,526 Mean 552 Max 2,640 Min 60 Ac-ft 399,700
Wtr yr 1967: Total 123,122 Mean 337 Max 1,930 Min 55 Ac-ft 244,200

8-2185. Goose Creek at Wagonwheel Gap, Colo.

Location.--Lat 37°45'07", long 106°49'46", in SW¼SE¼ sec.35, T.41 N., R.1 E., on left bank a quarter of a mile downstream from Pierce Creek, 1 mile upstream from mouth, 1 mile south of Wagonwheel Gap, and 8.8 miles southeast of Creede.

Drainage area.--90 sq mi, approximately.

Records available.--June 1954 to September 1967.

Gage.--Water-stage recorder. Altitude of gage is 8,460 ft (from topographic map).

Average discharge.--13 years, 57.1 cfs (41,340 acre-ft per year).

Extremes.--Maximum discharge during year, 202 cfs June 7 (gage height, 3.39 ft); minimum not determined.

1954-67: Maximum discharge, 645 cfs July 27, 1957 (gage height, 4.44 ft); minimum daily, 9.6 cfs Nov. 15, 16, Dec. 5, 1956.

Flood in June 1927 is the greatest known including those in October 1911 and June 18, 1949. Flood in October 1911 probably exceeded that of June 18, 1949, from information by local residents.

Remarks.--Records good except those for periods of no gage-height record, which are poor. Several small diversions above station for irrigation. Lake Humphreys (capacity, 842 acre-ft) above station with a fixed spillway and no gates has slight effect on flow.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	21	17	19				25	29	72	58	42	50
2	22	17	19				24	28	72	56	42	50
3	23	17	19				27	26	99	53	48	41
4	24	17	19				34	26	115	50	50	38
5	23	16	19				32	27	132	50	44	36
6	23	17	20			18	28	25	191	47	59	36
7	23	18					29	32	167	47	74	36
8	23	18					30	55	149	47	59	36
9	21	17					29	79	137	40	84	38
10	20	17					27	91	129	36	89	40
11	22	17					29	79	118	32	102	41
12	23	19					28	70	109	40	81	38
13	22	17					25	70	102	40	77	34
14	19	17					25	54	112	35	70	32
15	19	17					26	48	99	35	70	34
16	20	19		14	16	18	25	61	91	40	89	30
17	20	19				20	26	79	91	75	72	30
18	19	18				24	30	91	109	61	65	30
19	19	17				21	36	96	146	50	65	32
20	19	18				18	30	109	137	50	65	36
21	19	19				18	29	112	140	45	59	32
22	18	19				21	30	126	129	45	57	29
23	18	19				20	29	158	120	43	57	28
24	17	19				21	30	161	109	41	50	28
25	17	17				19	30	155	99	45	48	29
26	18	17				20	28	146	94	48	48	32
27	18	14				27	34	123	90	44	50	32
28	18	23				28	41	115	84	40	54	30
29	18	22				28	44	102	76	35	50	28
30	17	20				24	40	84	70	40	48	28
31	17	- - - -				22	- - - -	79	- - - -	48	50	- - - -
Total	620	538	540	434	448	619	900	2,536	3,388	1,416	1,918	1,034
Mean	20.0	17.9	17.4	14	16	20.0	30.0	81.8	113	45.7	61.9	34.5
Max	24	23	20	-	-	28	44	161	191	75	102	50
Min	17	14	-	-	-	-	24	25	70	32	42	28
Ac-ft	1,230	1,070	1,070	861	889	1,230	1,790	5,030	6,720	2,810	3,800	2,050

Cal yr 1966: Total 20,143 Mean 55.2 Max 299 Min - Ac-ft 39,950

Wtr yr 1967: Total 14,391 Mean 39.4 Max 191 Min - Ac-ft 28,540

Peak discharge (base, 200 cfs).--June 7 (0030) 202 cfs (2.39 ft).

Note.--No gage-height record Dec. 6 to Mar. 17, June 27 to July 26.

8-2195. South Fork Rio Grande at South Fork, Colo.

Location.--Lat 37°39'40", long 106°38'50", in sec.4, T.39 N., R.3 E., on left bank near U. S. Highway 160, a quarter of a mile downstream from Church Creek, 1½ miles upstream from mouth, and 1½ miles southwest of village of South Fork.

Drainage area.--216 sq mi.

Records available.--August 1910 to September 1922, May 1936 to September 1967. Monthly discharge only for some periods, published in WSP 1312.

Gage.--Water-stage recorder. Datum of gage is 8,221.79 ft above mean sea level, datum of 1929. Aug. 9, 1910, to Mar. 28, 1915, staff or chain gage and Mar. 29, 1915, to Sept. 30, 1922, water-stage recorder, at bridges 1 mile downstream at different datums.

Average discharge.--43 years, 211 cfs (152,800 acre-ft per year).

Extremes.--Maximum discharge during year, 944 cfs June 6 (gage height, 4.17 ft); minimum daily, 23 cfs Jan. 8.

1910-22, 1936-67: Maximum discharge, 8,000 cfs Oct. 5, 1911 (gage height, 9.7 ft, from floodmarks, present site and datum), from rating curve extended above 1,500 cfs; minimum daily, 14 cfs Nov. 28, 29, 1960.

Maximum stage known since at least 1873, that of Oct. 5, 1911. Flood of June 29, 1927, reached a stage about 1 ft lower than that of Oct. 5, 1911, from information by local resident.

Remarks.--Records good except those for winter period, which are poor. Transmountain diversions from Colorado River basin to drainage area above station through Treasure Pass ditch (see elsewhere in this report). Natural flow of stream affected by a few small diversions for irrigation, slight regulation by Beaver Creek Reservoir (capacity, 4,760 acre-ft) and several smaller storage reservoirs.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	47	41	57	25	31	55	85	208	482	205	210	174
2	46	38	39	25	30	61	85	178	482	188	192	166
3	94	44	33	26	30	64	98	158	578	182	218	150
4	77	49	35	26	29	63	124	141	740	172	248	129
5	70	39	43	26	29	57	134	152	805	168	272	115
6	66	42	53	25	29	52	122	148	916	162	258	112
7	62	50	91	24	29	56	124	208	840	156	262	115
8	61	45	60	23	29	61	127	329	750	162	222	129
9	58	39	39	24	30	58	130	490	668	143	282	122
10	55	63	40	24	31	56	122	582	614	126	320	124
11	57	71	45	25	33	60	126	554	558	124	374	141
12	64	74	48	25	35	62	139	526	506	154	329	136
13	58	65	52	26	37	64	122	490	490	148	317	124
14	52	67	52	26	39	61	116	380	562	130	285	119
15	48	74	53	27	41	55	118	305	614	134	275	112
16	53	70	53	26	39	58	112	380	574	146	285	112
17	60	66	54	25	37	67	122	482	562	296	235	105
18	53	62	54	24	39	80	146	546	562	248	205	96
19	53	59	55	25	40	89	172	566	632	200	198	106
20	55	60	55	25	38	82	162	600	550	200	210	130
21	54	59	51	26	36	80	158	680	526	176	192	112
22	50	54	45	27	37	80	158	750	478	176	180	108
23	51	51	40	28	39	91	160	800	443	170	174	98
24	47	52	37	27	41	105	168	810	404	160	160	95
25	51	49	33	27	43	106	156	800	371	180	146	101
26	52	51	30	26	45	98	141	795	350	188	137	108
27	52	38	28	27	43	103	178	780	332	176	146	105
28	51	63	26	28	48	119	228	765	311	164	132	99
29	52	63	24	29	-	119	250	696	280	148	132	96
30	48	58	24	29	- - - -	95	250	614	230	148	158	92
31	46	- - - -	25	30	- - - -	88	- - - -	550	- - - -	218	170	- - - -
Total	1,743	1,656	1,374	806	1,007	2,345	4,333	15,463	16,210	5,348	6,924	3,531
Mean	56.2	55.2	44.3	26.0	36.0	75.6	144	499	540	173	223	118
Max	94	74	91	30	48	119	250	810	916	296	374	174
Min	46	38	24	23	29	52	85	141	230	124	132	92
Ac-ft	3,460	3,280	2,730	1,600	2,000	4,650	8,590	30,670	32,150	10,610	13,730	7,000

Cal yr 1966: Total 66,442 Mean 182 Max 1,060 Min 24 Ac-ft 131,800
Wtr yr 1967: Total 60,740 Mean 166 Max 916 Min 23 Ac-ft 120,500

Peak discharge (base, 900 cfs).--May 22 (2300) 932 cfs (4.15 ft); June 6 (2130) 944 cfs (4.17 ft).

Note.--No gage-height record Dec. 26 to Mar. 17.

8-2200. Rio Grande near Del Norte, Colo.

Location.--Lat 37°41'20", long 106°27'40", in NW¼ sec.29, T.40 N., R.5 E., on right bank 20 ft downstream from county highway bridge, 5 miles upstream from Pinos Creek, and 6 miles west of Del Norte.

Drainage area.--1,320 sq mi, approximately.

Records available.--June 1889 to September 1967. Monthly discharge only for some periods, published in WSP 1312.

Gage.--Water-stage recorder. Datum of gage is 7,980.25 ft above mean sea level, datum of 1929. Prior to May 16, 1908, staff gage at site 4 miles downstream at different datum. May 16, 1908, to Nov. 8, 1910, staff or chain gage on bridge at present site and datum.

Average discharge.--78 years, 910 cfs (658,800 acre-ft per year).

Extremes.--Maximum discharge during year, 3,140 cfs May 23 (gage height, 3.40 ft); minimum daily, 110 cfs Jan. 18.

1889-1967: Maximum discharge, 18,000 cfs Oct. 5, 1911 (gage height, 6.80 ft), from rating curve extended above 12,900 cfs; minimum daily, 69 cfs Aug. 21, 1902.

Maximum stage known since at least 1873, that of Oct. 5, 1911, from information by local residents.

Remarks.--Records good except those for winter period, which are fair. Small diversions above station for irrigation. Flow regulated by Beaver Creek Reservoir since 1910, Santa Maria Reservoir since 1912, Rio Grande Reservoir since 1913, and Continental Reservoir since 1925 (total capacity, 126,100 acre-ft), and by several smaller reservoirs. Transmountain diversions to drainage area above station from Colorado River basin (see elsewhere in this report).

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	217	237	180	130	140	205	269	568	1,400	866	527	540
2	217	174	168	130	140	210	248	534	1,350	813	507	554
3	264	174	174	135	135	215	264	462	1,580	762	540	520
4	291	189	174	135	135	215	324	407	1,890	704	561	481
5	275	171	171	135	135	190	335	419	2,140	680	588	437
6	275	168	180	125	130	170	347	407	2,700	649	581	443
7	269	189	286	120	130	180	335	449	2,700	634	664	455
8	269	212	212	115	130	200	353	649	2,290	626	641	488
9	269	174	119	120	135	195	371	1,110	2,300	603	762	488
10	258	153	120	120	145	190	365	1,610	2,240	561	1,040	474
11	248	156	140	125	150	205	377	1,710	2,060	547	1,160	494
12	280	189	180	125	155	200	401	1,660	2,060	561	1,050	488
13	269	162	190	130	160	220	371	1,560	2,050	554	974	462
14	253	168	195	130	170	208	341	1,400	2,060	507	874	443
15	248	174	195	135	165	185	359	1,070	2,140	520	813	425
16	248	198	200	125	155	194	347	1,110	2,030	574	839	419
17	269	198	205	120	150	242	335	1,520	1,890	928	737	413
18	258	185	210	110	155	308	383	1,980	1,980	928	664	407
19	242	171	210	115	165	324	437	2,190	2,190	762	634	401
20	242	174	215	120	155	269	437	2,480	2,270	729	656	455
21	242	203	205	125	140	253	425	2,570	1,840	634	603	425
22	242	221	195	130	150	237	407	2,720	1,710	568	561	389
23	242	203	180	140	155	248	407	2,860	1,610	507	540	371
24	231	203	180	130	165	269	419	2,880	1,500	474	494	359
25	237	174	160	125	170	269	425	2,820	1,410	507	462	365
26	226	177	150	120	180	237	395	2,630	1,290	514	431	383
27	221	142	140	120	160	237	419	2,360	1,190	494	431	383
28	226	145	130	125	185	258	520	2,030	1,130	462	425	365
29	226	189	120	130	-	341	588	2,050	1,060	413	455	347
30	217	208	125	135	- - - - -	291	641	1,770	937	407	494	341
31	231	- - - - -	130	135	- - - - -	231	- - - - -	1,500	- - - - -	488	514	- - - - -
Total	7,702	5,481	5,439	3,915	4,240	7,196	11,645	49,485	54,997	18,976	20,222	13,015
Mean	248	183	175	126	151	232	388	1,596	1,833	612	652	434
Max	291	237	286	140	185	341	641	2,880	2,700	928	1,160	554
Min	217	142	119	110	130	170	248	407	937	407	425	341
Ac-ft	15,280	10,870	10,790	7,770	8,410	14,270	23,100	98,150	109,100	37,640	40,110	25,810

Cal yr 1966: Total 292,203 Mean 801 Max 4,090 Min 119 Ac-ft 579,600

Wtr yr 1967: Total 202,313 Mean 554 Max 2,880 Min 110 Ac-ft 401,300

Note.--No gage-height record Jan. 7 to Mar. 14.

8-2205. Pinos Creek near Del Norte, Colo.

Location.--Lat 37°35'30", long 106°26'50", in sec.29, T.39 N., R.5 E., on left bank just downstream from Bennett Creek, 8 miles southwest of Del Norte.

Drainage area.--53 sq mi, approximately.

Records available.--April 1919 to September 1924, May 1936 to September 1967. No winter records prior to 1950 except water years 1941, 1944-47. Monthly discharge only for some periods, published in WSP 1312.

Gage.--Water-stage recorder and rectangular box flume. Altitude of gage is 8,350 ft (from topographic map). May 1, 1919, to Sept. 30, 1924, staff gages at sites about 1,000 ft downstream at different datums.

Average discharge.--23 years (1940-41, 1943-47, 1949-67), 23.8 cfs (17,230 acre-ft per year).

Extremes.--Maximum discharge during year, 152 cfs July 12 (gage height, 1.60 ft); minimum not determined.

1919-24, 1936-67: Maximum discharge not determined, occurred June 3, 1922, caused by failure of private fish-lake dam; maximum discharge determined, 720 cfs Aug. 3, 1936 (gage height, 4.19 ft), by slope-area measurement of peak flow; minimum daily recorded, 1.8 cfs Sept. 26-28, 1951.

Maximum stage known since at least 1903, that of June 3, 1922, from information by local residents.

Remarks.--Records good except those for period of no gage-height record, which are poor. One small diversion above station.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	6.8	7.2	9.2				9.6	13	3.8	2.3	3.4	2.5
2	6.8	6.8	9.6				10	15	4.3	2.3	3.1	2.3
3	11	8.8	8.4				12	14	5.0	2.3	3.1	2.0
4	9.2	9.6	8.0				14	15	5.6	2.3	3.0	1.8
5	8.4	7.6	8.8				15	20	5.1	2.1	2.7	1.7
6	8.0	8.8	9.2				12	1.8	5.6	2.0	2.6	1.6
7	7.6	9.2	10				14	30	4.8	2.2	2.6	1.8
8	8.0	8.4	8.4				14	40	4.6	2.3	3.5	2.6
9	8.4	8.0					16	4.7	4.8	1.9	5.1	2.3
10	8.0	10					14	4.9	4.6	1.8	5.6	2.2
11	8.4	10				8.0	16	4.3	4.5	2.5	5.4	2.0
12	8.4	10					14	3.7	4.6	3.6	4.3	1.7
13	8.4	9.6					10	3.3	4.6	2.6	4.2	1.4
14	7.2	10					14	2.8	5.4	2.2	4.4	1.4
15	7.6	10		6.0	6.5		12	2.3	5.4	2.4	4.0	1.4
16	8.4	10					12	2.6	4.6	3.0	3.5	1.4
17	9.2	10					13	3.4	4.6	6.0	3.4	1.4
18	8.4	10					1.8	4.0	4.8	3.9	3.2	1.4
19	8.0	9.6	8.0				1.9	3.6	5.8	3.1	3.1	1.6
20	8.0	9.6					1.6	4.2	4.9	3.0	3.1	1.5
21	7.6	9.6					1.6	4.4	4.6	2.9	2.7	1.2
22	7.6	8.8				9.6	1.6	4.6	4.2	2.6	2.7	1.2
23	7.2	9.2				10	1.5	5.2	3.9	2.7	2.7	1.2
24	6.8	8.8				11	1.4	5.2	3.9	2.8	2.3	1.1
25	7.6	8.8				10	1.4	5.9	3.4	2.9	2.2	1.2
26	7.6	9.2				10	1.3	6.3	3.4	2.8	2.3	1.3
27	7.6	9.6				10	2.1	5.8	3.2	2.6	2.3	1.3
28	7.6	10				12	2.6	5.6	2.8	2.4	2.6	1.2
29	7.6	10				12	2.4	5.2	2.6	2.6	2.3	1.0
30	7.6	9.2				9.2	2.1	4.8	2.5	3.4	3.5	1.0
31	8.0	- - - -				10	- - - -	4.5	- - - -	4.2	2.8	- - - -
Total	247.0	276.4	255.6	186.0	182.0	271.8	454.6	1,178	1,319	857	1,017	477
Mean	7.97	9.21	8.25	6.0	6.5	8.77	15.2	38.0	44.0	27.6	32.8	15.9
Max	11	10	-	-	-	12	26	63	58	60	56	26
Min	6.8	6.8	-	-	-	-	9.6	13	25	18	22	10
Ac-ft	490	548	507	369	361	539	902	2,340	2,620	1,700	2,020	946

Cal yr 1966 : Total 8,418.2 Mean 23.1 Max 132 Min - Ac-ft 16,700

Wtr yr 1967 : Total 6,721.4 Mean 18.4 Max 63 Min - Ac-ft 13,330

Peak discharge (base, 120 cfs).--July 12 (1500) 152 cfs (1.60 ft).

Note.--No gage-height record Dec. 9 to Mar. 21.

RIO GRANDE BASIN

8-2209. San Francisco Creek at upper station, near Del Norte, Colo.

Location.--Lat 37°34'44", long 106°22'11", in SW¼ sec.36, T.39 N., R.5 E., on left bank just upstream from trail crossing, 0.2 mile upstream from unnamed tributary, 1¼ miles downstream from East Fork, and 7.0 miles south of Del Norte.

Drainage area.--11.8 sq mi.

Records available.--January to September 1967.

Gage.--Water-stage recorder. Altitude of gage is 8,930 ft (from topographic map).

Extremes.--Maximum discharge during period January to September, 7.5 cfs July 14 (gage height, 1.85 ft), from rating curve extended above 3.9 cfs; minimum not determined.

Remarks.--Records poor prior to Apr. 20 and fair thereafter. One small diversion above station for irrigation below.

Discharge, in cubic feet per second, January to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1							2.0	1.4	4.0	2.3	3.5	2.2
2							2.1	1.2	3.9	2.2	3.5	2.2
3							2.2	2.2	3.9	2.2	3.5	2.0
4							2.2	2.1	3.9	2.0	3.3	1.9
5							2.3	1.9	3.9	2.5	3.0	1.9
6							2.0	2.0	3.9	2.6	3.0	1.9
7							1.2	2.1	3.9	3.0	3.0	2.0
8							1.2	2.4	3.9	2.8	3.2	2.3
9							1.4	3.0	3.9	2.5	4.4	2.5
10							1.2	3.4	3.9	2.5	5.1	2.6
11							1.4	3.0	3.9	3.0	5.1	3.2
12							1.4	2.9	3.9	3.3	4.9	3.2
13							1.4	2.9	3.9	3.0	4.9	2.8
14							1.2	2.8	4.0	3.7	5.1	3.0
15							1.4	2.8	3.5	3.7	4.9	3.0
16				1.1	1.2	1.4	1.6	2.8	2.8	4.4	4.7	3.2
17							1.2	2.9	2.6	6.0	4.4	3.0
18							1.4	3.0	2.6	5.1	4.2	3.0
19							1.4	3.0	2.5	4.9	4.2	3.0
20							1.4	3.0	2.5	4.7	4.2	3.0
21							1.5	3.1	2.4	4.4	4.0	3.0
22							1.6	3.1	2.2	4.4	3.0	3.0
23							1.6	3.3	2.1	4.7	2.6	2.8
24							1.4	3.3	2.0	4.9	2.6	2.8
25							1.4	3.5	2.0	4.7	2.5	3.0
26							1.4	4.0	2.0	4.4	2.3	3.0
27							1.3	4.2	1.9	4.2	2.0	3.0
28							1.7	4.3	2.1	4.2	1.9	2.8
29					-		1.8	4.3	2.3	3.8	1.9	2.6
30					- - - - -		1.7	4.2	2.3	3.8	3.0	2.5
31		- - - - -			- - - - -		- - - - -	4.0	- - - - -	3.8	2.5	- - - - -
Total				34.1	33.6	43.4	47.0	92.1	92.6	113.7	110.4	80.4
Mean				1.1	1.2	1.4	1.57	2.97	3.09	3.67	3.56	2.68
Max				-	-	-	2.3	4.3	4.0	6.0	5.1	3.2
Min				-	-	-	1.2	1.2	1.9	2.0	1.9	1.9
Ac-ft				68	67	86	93	183	184	226	219	159

Cal yr 1966: Total - Mean - Max - Min - Ac-ft -
Wtr yr 1967: Total - Mean - Max - Min - Ac-ft -

Note.--No gage-height record Jan. 1 to Apr. 21.

8-2215. Rio Grande near Monte Vista, Colo.

Location.--Lat 37°36'30", long 106°08'50", at west line of sec.19, T.39 N., R.8 E., on left bank 25 ft downstream from bridge on U. S. Highway 285, 2 miles north of Monte Vista, and 12 miles downstream from San Francisco Creek.

Drainage area.--1,590 sq mi, approximately.

Records available.--May 1926 to September 1967. Monthly discharge only for some periods, published in WSP 1312.

Gage.--Water-stage recorder. Datum of gage is 7,654.16 ft above mean sea level, datum of 1929. May 1, 1926, to July 5, 1927, staff or slope gage near present site at datum 0.50 ft lower. July 6-22, 1927, chain gage and July 23, 1927, to Feb. 22, 1934, water-stage recorder, near present site at datum 0.50 ft higher. Feb. 23, 1934, to Aug. 19, 1936, water-stage recorder at present site and datum. Aug. 20 to Dec. 30, 1936, water-stage recorder at site 75 ft downstream at present datum. Dec. 31, 1936, to Apr. 2, 1937, water-stage recorder at present site and datum. Apr. 3, 1937, to June 14, 1938, water-stage recorder at site 75 ft downstream at present datum.

Average discharge.--41 years, 321 cfs (232,400 acre-ft per year).

Extremes.--Maximum discharge during year, 1,540 cfs May 23 (gage height, 4.66 ft); minimum daily, 9.5 cfs Mar. 21, 31.
1926-67: Maximum discharge, 18,500 cfs June 30, 1927 (gage height, 7.35 ft, present datum, from floodmarks); minimum daily, 1.5 cfs Apr. 14, 1959.

Remarks.--Records good except those for winter period, which are poor. Diversions above station for irrigation of about 90,000 acres. Flow regulated by Beaver Creek, Santa Maria, Rio Grande, and Continental Reservoirs (total capacity, 126,100 acre-ft), and by several smaller reservoirs. Transmountain diversions to drainage area above station from Colorado River basin (see elsewhere in this report).

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	72	161	233	105	160	180	19	134	540	177	115	104
2	92	236	219	105	160	145	40	137	485	143	107	132
3	83	222	219	105	160	80	13	126	598	112	129	100
4	104	233	226	105	165	59	17	104	648	97	123	74
5	100	230	226	110	160	44	46	112	723	102	90	74
6	94	216	216	115	150	35	30	118	855	83	74	92
7	92	222	284	110	155	48	12	123	874	67	74	110
8	90	252	268	105	160	60	24	161	705	107	143	107
9	90	236	160	110	155	62	38	216	693	110	140	118
10	87	198	155	110	155	58	46	699	664	92	294	80
11	87	202	150	110	155	33	28	777	699	112	226	83
12	74	212	150	105	150	28	48	681	681	129	272	85
13	72	252	150	105	150	24	54	642	592	132	248	72
14	65	230	155	110	150	25	52	604	560	85	188	74
15	53	219	160	115	155	21	58	406	582	97	146	74
16	48	233	170	115	160	18	58	298	515	149	134	107
17	60	240	165	120	165	16	44	545	495	180	85	100
18	67	236	160	120	175	29	58	843	530	272	44	97
19	59	226	160	125	180	62	54	837	631	115	46	94
20	54	219	165	125	185	21	40	900	723	167	69	107
21	53	233	170	125	185	9.5	54	933	614	129	80	90
22	53	260	175	125	190	44	76	1,070	642	72	80	69
23	53	248	160	125	190	30	92	1,310	664	42	94	72
24	53	244	150	130	195	31	100	1,130	636	40	85	69
25	47	226	140	130	200	41	107	998	565	60	80	69
26	47	222	130	135	200	28	102	837	475	80	110	87
27	40	194	120	140	205	22	104	837	343	87	118	102
28	40	170	105	145	210	31	137	783	280	92	120	87
29	40	191	100	150	-	29	123	825	226	87	132	78
30	41	236	100	155	- - - -	25	137	687	256	102	137	97
31	53	- - - -	105	155	- - - -	9.5	- - - -	598	- - - -	158	107	- - - -
Total	2,063	6,699	5,246	3,745	4,780	1,348.0	1,811	13,471	17,494	3,477	3,890	2,704
Mean	66.5	223	169	121	171	43.5	60.4	596	583	112	125	90.1
Max	104	260	284	155	210	180	137	1,310	874	272	294	132
Min	40	161	100	105	150	9.5	12	104	226	40	44	69
Ac-ft	4,090	13,290	10,410	7,430	9,480	2,670	3,590	36,640	34,700	6,900	7,720	5,360
Cal yr 1966: Total	106,072		Mean	291	Max	1,270	Min	20	Ac-ft	210,400		
Wtr yr 1967: Total	71,728		Mean	197	Max	1,310	Min	9.5	Ac-ft	142,300		

8-2230. Rio Grande at Alamosa, Colo.

Location.--Lat 37°29', long 105°53', in SE¼ sec.4, T.37 N., R.10 E., on right bank a quarter of a mile northwest of city limits of Alamosa and 9 miles upstream from Alamosa Creek.

Drainage area.--1,710 sq mi, approximately.

Records available.--May 1912 to September 1967. Monthly discharge only for some periods, published in WSP 1312.

Gage.--Water-stage recorder. Datum of gage is 7,532.66 ft above mean sea level, datum of 1929. Prior to Apr. 7, 1915, staff or chain gage and Apr. 7, 1915, to Nov. 5, 1935, water-stage recorder, at railroad and highway bridges in Alamosa 1 to 2½ miles downstream at different datums. Nov. 6, 1935, to June 30, 1942, water-stage recorder at present site at datum 1.00 ft higher.

Average discharge.--55 years, 255 cfs (184,600 acre-ft per year).

Extremes.--Maximum discharge during year, 298 cfs May 24 (gage height, 3.09 ft); maximum gage height, 4.32 ft Dec. 10 (backwater from ice); minimum daily discharge, 12 cfs Apr. 16.

1912-67: Maximum discharge, 14,000 cfs July 1, 1927 (gage height, 8.37 ft, site and datum then in use); maximum gage height, 10.62 ft June 20, 1949; minimum daily discharge, 1.0 cfs May 19, 1950.

Flood in October 1911 (stage, 0.2 ft lower than July 1, 1927, from floodmark), probably exceeded that of July 1, 1927, and is probably the greatest known since at least 1884, from information by local resident.

Remarks.--Records fair except those for winter period, which are poor. Natural flow of stream affected by transmountain diversions, storage reservoirs, ground-water withdrawals and diversions for irrigation, and return flow from irrigated areas.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	24	80	257	115	170	235	32	34	87	92	42	49
2	24	150	253	115	170	245	27	36	74	90	41	57
3	31	219	241	115	175	260	29	34	50	81	34	63
4	32	225	241	115	180	163	26	37	49	64	34	67
5	36	233	241	120	170	140	26	30	54	52	39	69
6	36	243	235	120	160	116	31	19	41	47	34	70
7	34	235	243	125	165	151	27	20	50	45	31	65
8	38	245	240	125	175	192	22	24	46	43	30	65
9	44	265	210	120	160	199	20	34	41	43	37	66
10	43	259	180	120	160	183	18	46	48	43	49	68
11	40	233	170	115	160	120	18	105	51	44	100	69
12	36	233	170	115	165	102	19	51	61	50	71	58
13	39	245	170	115	165	93	18	17	66	65	80	57
14	40	269	175	120	165	86	17	21	46	74	73	56
15	51	255	180	125	175	81	15	49	38	64	55	51
16	52	253	190	125	185	76	12	35	34	60	55	50
17	59	263	180	130	195	71	14	21	30	87	58	55
18	74	265	180	130	195	65	13	27	28	111	57	59
19	76	263	180	135	200	64	13	73	28	176	49	58
20	71	253	190	135	200	85	15	83	31	100	40	54
21	61	249	190	135	205	68	26	95	50	93	36	52
22	74	261	200	135	205	58	27	93	37	81	26	50
23	75	281	190	135	210	68	28	138	33	63	23	39
24	76	277	180	135	210	65	30	244	36	56	25	32
25	71	273	160	140	215	65	31	180	43	48	30	29
26	67	257	140	145	220	74	34	110	38	44	26	28
27	59	247	130	155	225	61	32	105	33	40	26	28
28	53	217	120	160	230	42	29	100	40	39	28	21
29	52	209	110	165	-	40	31	129	42	39	31	17
30	54	233	110	165	- - - - -	36	30	122	54	34	35	15
31	56	- - - - -	110	165	- - - - -	35	- - - - -	91	- - - - -	33	39	- - - - -
Total	1,578	7,190	5,766	4,070	5,210	3,339	710	2,203	1,359	2,001	1,334	1,517
Mean	50.9	240	186	131	186	108	23.7	71.1	45.3	64.5	43.0	50.6
Max	76	281	257	165	230	260	34	244	87	176	100	70
Min	24	80	110	115	160	35	12	17	28	33	23	15
Ac-ft	3,130	14,260	11,440	8,070	10,330	6,620	1,410	4,370	2,700	3,970	2,650	3,010
Cal yr 1966: Total	56,226		Mean	154	Max	543	Min	18	Ac-ft	111,500		
Wtr yr 1967: Total	36,277		Mean	99.4	Max	281	Min	12	Ac-ft	71,950		

8-2235. Rock Creek near Monte Vista, Colo.

Location.--Lat 37°29'30", long 106°15'40", in SE¼ sec.36, T.38 N., R.6 E., on left bank just upstream from Mill ditch, 3 miles downstream from North Fork and 9 miles southwest of Monte Vista.

Drainage area.--32.9 sq mi (revised).

Records available.--May to October 1935, April 1936 to September 1955, October 1966 to September 1967. Monthly discharge only for some periods, published in WSP 1312.

Gage.--Water-stage recorder and Parshall flume. Altitude of gage is 8,280 ft (from topographic map).

Average discharge.--20 years (1936-55, 1966-67), 10.8 cfs (7,820 acre-ft per year).

Extremes.--Maximum discharge during water year, 72 cfs Aug. 2 (gage height, 1.66 ft); minimum daily, 1.6 cfs Dec. 29.

1935-55, 1966-67: Maximum discharge, 190 cfs Aug. 19, 1952 (gage height, 3.01 ft); minimum daily determined, 1.0 cfs Nov. 2, 1951.

Flood of Aug. 4, 1957, reached a stage of 3.18 ft (discharge not determined). No flood has greatly exceeded that of Aug. 4, 1957, since at least 1889, from information by local residents.

Remarks.--Records fair. No diversion above station.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3.2	3.0	4.3	1.9	2.5	6.0	5.9	7.3	14	8.6	12	12
2	3.2	3.4	4.3	1.9	2.3	7.0	6.5	7.6	14	8.2	17	12
3	4.1	3.9	4.5	1.8	2.3	6.8	6.8	7.3	16	8.2	14	10
4	3.9	4.4	4.5	1.8	2.5	6.6	7.9	7.0	17	7.6	15	9.8
5	3.7	3.4	4.4	1.9	2.7	6.4	9.0	9.2	16	7.3	13	9.5
6	3.7	3.9	4.6	2.1	2.7	5.6	6.2	7.6	17	7.3	13	9.5
7	3.7	3.9	4.6	1.9	2.2	5.0	6.8	9.8	16	7.9	12	9.2
8	3.4	3.7	4.0	1.8	2.4	5.0	6.8	13	15	7.6	14	9.2
9	3.2	3.4	3.0	1.9	2.7	5.0	6.8	15	14	7.8	20	11
10	3.0	3.0	2.7	2.2	2.9	5.6	6.2	15	14	6.2	26	11
11	3.2	2.5	2.7	2.3	3.0	7.0	7.0	14	14	8.4	26	9.5
12	3.2	2.7	2.9	2.4	3.0	7.6	6.8	13	13	12	24	8.2
13	3.4	2.8	3.0	2.5	3.1	8.0	5.1	12	13	11	24	8.2
14	3.2	2.8	3.0	2.5	3.3	7.8	6.8	12	13	11	26	7.9
15	3.0	2.8	2.9	2.6	3.2	7.6	7.0	11	14	15	23	7.9
16	3.2	2.9	2.8	2.6	3.1	6.5	7.0	11	13	13	22	7.9
17	3.7	2.9	2.9	2.6	3.1	7.9	7.3	11	12	33	19	7.3
18	3.2	2.8	3.0	2.4	3.0	7.6	7.3	12	13	26	18	7.6
19	3.2	3.0	3.1	2.3	3.3	5.4	7.9	12	14	23	17	7.6
20	3.4	3.2	3.3	2.5	3.5	5.1	7.0	12	13	21	16	7.6
21	3.7	3.4	3.3	2.6	3.6	4.9	7.0	13	12	19	15	6.8
22	3.4	3.8	3.2	2.7	3.4	5.1	7.0	13	13	18	14	6.5
23	3.7	4.0	3.0	2.7	3.2	5.4	7.0	14	11	17	13	6.2
24	3.2	4.0	2.7	2.8	3.6	6.5	6.8	14	11	18	12	5.9
25	3.7	3.9	2.5	2.2	4.1	5.9	7.0	14	10	17	10	5.9
26	3.4	3.8	2.6	2.3	4.7	5.7	6.8	17	10	16	12	6.5
27	3.4	3.6	2.7	2.3	5.2	5.9	8.2	18	9.5	16	10	6.8
28	3.7	3.9	2.2	2.2	5.0	7.3	9.8	18	9.3	14	13	6.2
29	3.9	4.2	1.6	2.4	-	6.8	11	18	9.2	13	11	5.9
30	3.7	4.5	1.7	2.6	- - - - -	5.4	8.2	16	8.6	14	16	5.7
31	3.7	- - - - -	1.8	2.6	- - - - -	5.9	- - - - -	15	- - - - -	15	12	- - - - -
Total	107.3	103.5	97.8	71.3	89.6	194.3	216.9	388.8	388.6	427.1	509	245.3
Mean	3.46	3.45	3.15	2.30	3.20	6.27	7.23	12.5	13.0	13.8	16.4	8.18
Max	4.1	4.5	4.6	2.8	5.2	8.0	11	18	17	33	26	12
Min	3.0	2.5	1.6	1.8	2.2	4.9	5.1	7.0	8.6	6.2	10	5.7
Ac-ft	213	205	194	141	178	385	430	771	771	847	1,010	487

Cal yr 1966: Total - Mean - Max - Min - Ac-ft -
Wtr yr 1967: Total 2,839.5 Mean 7.78 Max 33 Min 1.6 Ac-ft 5,630

Peak discharge (base, 40 cfs)

Note.--No gage-height record Nov. 11 to Mar. 14.

Date	Time	Gage height	Discharge	Date	Time	Gage height	Discharge
7-11	1430	1.51	62	7-17	1600	1.22	44
7-15	1500	1.33	51	8- 2	1430	1.66	72

RIO GRANDE BASIN

Closed basin in San Luis Valley, Colo.

8-2242. Raspberry Creek near Villa Grove, Colo.

Location.--Lat 38°20'25", long 105°56'35", in NW¼SE¼ sec.11, T.47 N., R.9 E., on left bank 30 ft upstream from trail crossing, 3.2 miles upstream from Rock Creek, and 6½ miles north of Villa Grove.

Drainage area.--1.78 sq mi.

Records available.--January to September 1967.

Gage.--Water-stage recorder and V-notch sharp-crested weir. Altitude of gage is 8,960 ft (from topographic map).

Extremes.--Maximum discharge during period January to September, 1.8 cfs July 17 (gage height, 2.57 ft), from rating curve extended above 0.7 cfs; minimum daily, 0.1 cfs (estimated) Jan. 8.

Remarks.--Records poor prior to May 22 and fair thereafter. No diversion above station.

Discharge, in cubic feet per second, January to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1				0.20	0.40	0.50	0.60	0.30	0.40	0.33	0.52	0.91
2				.20	.40	.60	.60	.30	.42	.33	.62	.67
3				.20	.40	.60	.60	.30	.45	.31	.59	.64
4				.30	.40	.60	.50	.30	.47	.31	.56	.62
5				.30	.40	.50	.50	.30	.47	.31	.52	.59
6				.20	.30	.40	.40	.30	.54	.31	.59	.62
7				.20	.30	.40	.30	.30	.42	.34	.62	.67
8				.10	.20	.50	.30	.40	.36	.33	.59	.67
9				.20	.20	.50	.30	.40	.38	.31	.62	.64
10				.30	.30	.60	.30	.30	.36	.31	.50	.64
11				.30	.20	.60	.40	.30	.38	.33	.47	.62
12				.30	.30	.60	.30	.30	.38	.34	.45	.62
13				.30	.30	.60	.20	.30	.38	.33	.47	.62
14				.30	.40	.50	.30	.22	.38	.36	.49	.62
15				.30	.40	.50	.30	.22	.34	.42	.49	.62
16				.30	.40	.50	.30	.22	.34	.45	.45	.62
17				.30	.40	.60	.30	.22	.34	1.2	.45	.62
18				.20	.40	.70	.40	.24	.34	.62	.49	.62
19				.20	.40	.60	.40	.33	.33	.52	.49	.64
20				.30	.30	.60	.40	.36	.36	.62	.49	.62
21				.30	.30	.60	.30	.37	.40	.56	.47	.59
22				.40	.30	.60	.30	.38	.40	.52	.47	.59
23				.50	.40	.60	.30	.38	.34	.49	.45	.56
24				.40	.50	.70	.30	.40	.33	.56	.42	.59
25				.40	.50	.60	.30	.40	.33	.54	.42	.59
26				.30	.50	.60	.30	.54	.31	.56	.45	.62
27				.30	.40	.60	.30	.47	.31	.54	.49	.62
28				.40	.40	.60	.40	.49	.33	.52	.54	.59
29				.40	-	.70	.40	.47	.33	.52	.59	.56
30				.40	- - - - -	.60	.30	.42	.33	.52	.66	.56
31		- - - - -		.40	- - - - -	.60	- - - - -	.42	- - - - -	.54	1.1	- - - - -
Total				9.20	10.10	17.80	10.90	10.65	11.25	14.25	16.53	18.76
Mean				0.297	0.361	0.574	0.363	0.344	0.375	0.460	0.533	0.625
Max				0.50	0.50	0.70	0.60	0.54	0.54	1.2	1.1	0.91
Min				0.10	0.20	0.40	0.20	0.22	0.31	0.31	0.42	0.56
Ac-ft				18	20	35	22	21	22	28	33	37

Cal yr 1966: Total - Mean - Max - Min - Ac-ft -
 Wtr yr 1967: Total - Mean - Max - Min - Ac-ft -

Peak discharge (base, 1.0 cfs).--July 17 (0930) 1.8 cfs (2.57 ft); Aug. 31 (1630) 1.5 cfs (2.54 ft).

Note.--No gage-height record Jan. 1 to May 11.

Closed basin in San Luis Valley, Colo.

8-2245. Kerber Creek at Ashley Ranch, near Villa Grove, Colo.

Location.--Lat 38°15', long 106°08', in sec. 7, T.46 N., R.8 E., on left bank at Ashley Ranch, 5 miles upstream from Little Kerber Creek and 10 miles west of Villa Grove.

Drainage area.--38 sq mi, approximately.

Records available.--June 1923 to September 1926 (published as Kerber Creek near Villa Grove), May 1936 to September 1967. Monthly discharge only for some periods, published in WSP 1312.

Gage.--Water-stage recorder. Altitude of gage is 8,900 ft (from topographic map). Prior to Dec. 10, 1963, at site 150 ft upstream at datum 1.50 ft higher.

Average discharge.--34 years, 12.6 cfs (9,120 acre-ft per year).

Extremes.--Maximum discharge during year, 73 cfs Aug. 12 (gage height, 1.13 ft); maximum gage height, 2.71 ft Mar. 18 (backwater from ice); minimum not determined.

1923-26, 1936-67: Maximum discharge, 407 cfs May 14, 1941, from rating curve extended above 140 cfs; maximum gage height, 5.04 ft (site and datum then in use) May 11, 1947 (backwater from beaver dam); minimum daily discharge, 0.2 cfs Sept. 3, 1950, July 30 to Aug. 2, 1963, but may have been less during periods of no gage-height record.

Maximum discharge known since at least 1872, that of May 14, 1941, from information by local residents.

Remarks.--Records good except those for winter period, which are poor. No diversion above station.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.8	4.1					7.0	5.3	9.4	5.6	4.1	1.0
2	1.8	3.6					5.6	5.1	10	5.1	4.6	8.6
3	2.0	3.6					5.6	5.1	12	4.6	4.6	7.0
4	2.2	4.1					6.0	5.5	13	4.1	5.1	6.5
5	2.2	3.6					6.0	5.3	14	4.1	4.1	6.5
6	2.7	3.6					7.8	5.1	15	4.6	4.1	6.0
7	2.7	4.1					8.6	5.1	17	5.6	4.6	6.0
8	2.7	4.1				4.0	8.0	6.0	14	5.6	4.1	6.0
9	2.7	3.0					7.8	7.0	12	4.6	4.6	6.5
10	2.7	2.0					7.0	7.8	12	4.6	5.6	6.0
11	2.7						7.0	7.0	12	5.6	5.1	6.0
12	3.2						7.0	7.0	10	7.0	7.0	6.0
13	3.2						6.0	7.0	10	5.6	15	5.6
14	3.6						5.0	7.0	8.6	7.0	13	4.6
15	3.6		2.5	2.5	2.5		6.0	7.0	9.4	5.6	12	4.6
16	4.1						6.0	7.0	7.8	6.5	10	5.1
17	4.1						5.6	7.8	8.6	11	9.4	5.6
18	3.6						6.0	7.8	7.8	7.0	8.6	5.6
19	4.1						5.6	9.4	7.8	7.0	8.6	6.5
20	4.1	2.5					6.0	10	8.6	7.0	7.8	5.6
21	4.1						6.0	12	9.4	7.8	6.5	5.1
22	3.6						6.0	12	8.6	6.5	6.0	4.1
23	3.2					7.0	6.0	12	7.8	5.6	5.6	3.6
24	3.6						6.0	12	7.0	5.6	5.1	3.2
25	4.1						5.6	13	6.5	6.0	4.6	3.6
26	4.6						5.6	16	6.5	6.5	4.6	4.1
27	4.1						5.6	15	6.0	5.1	4.6	4.1
28	4.6						5.6	14	5.6	4.1	5.6	3.2
29	4.1						5.6	13	5.6	4.1	6.0	3.2
30	4.1						6.0	11	5.6	4.1	7.8	2.7
31	4.1							11		4.1	8.6	
Total	104.0	85.8	77.5	77.5	70.0	172.0	187.6	275.3	287.6	177.3	207.0	161.2
Mean	3.35	2.86	2.5	2.5	2.5	5.5	6.25	8.88	9.59	5.72	6.68	5.37
Max	4.6	4.1	-	-	-	-	8.6	16	17	11	15	10
Min	1.8	-	-	-	-	-	5.0	5.1	5.6	4.1	4.1	2.7
Ac-ft	206	170	154	154	139	341	372	546	570	352	411	320

Cal yr 1966: Total 2,917.1 Mean 7.99 Max 40 Min - Ac-ft 5,790

Wtr yr 1967: Total 1,882.8 Mean 5.16 Max 17 Min - Ac-ft 3,730

Peak discharge (base, 70 cfs).--July 14 (1530) 70 cfs (1.07 ft); Aug. 12 (2110) 73 cfs (1.13 ft).

Note.--No gage-height record Dec. 9 to Mar. 16.

RIO GRANDE BASIN

Closed basin in San Luis Valley, Colo.

8-2267. Cotton Creek near Mineral Hot Springs, Colo.

Location.--Lat 38°08'00", long 105°47'30", in SW¼ sec.20, T.45 N., R.11 E., on left bank just downstream from diversion headgate, 7 miles upstream from mouth and 8 miles southeast of Mineral Hot Springs.

Drainage area.--13.6 sq mi.

Records available.--January to September 1967.

Gage.--Digital water-stage recorder. Altitude of gage is 8,480 ft (by barometer).

Extremes.--Maximum discharge during period January to September, 32 cfs Aug. 2 (gage height, 3.44 ft); minimum daily, 4.2 cfs Jan. 8.

Remarks.--Records good except those prior to May 24, which are fair. No diversion above station.

Discharge, in cubic feet per second, January to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1				4.4	5.4	7.3	5.2	5.2	11	14	13	22
2				4.4	5.2	8.1	5.3	5.1	13	13	19	23
3				4.5	5.2	8.3	5.4	5.0	16	13	28	22
4				4.8	5.5	8.9	5.4	5.1	17	12	24	21
5				5.0	5.2	8.6	5.3	5.2	19	12	20	21
6				5.0	4.8	7.8	5.3	5.2	21	11	20	20
7				4.4	4.9	8.2	5.2	5.4	20	11	22	19
8				4.2	4.6	8.3	5.1	5.7	18	14	23	20
9				4.5	4.8	8.5	5.1	6.3	18	12	25	21
10				4.8	5.1	8.8	4.8	8.0	17	12	23	20
11				5.2	5.0	8.6	5.1	9.2	16	11	22	20
12				5.3	5.2	8.4	5.2	8.5	15	11	21	21
13				5.4	5.3	8.4	4.6	6.5	14	11	21	20
14				5.4	5.6	8.0	4.8	6.0	14	11	21	20
15				5.3	5.4	7.0	4.9	6.5	15	13	22	19
16				5.3	5.2	8.0	5.1	6.8	14	16	21	19
17				5.2	5.3	7.8	5.6	7.5	14	20	21	19
18				5.1	5.5	7.2	5.8	8.0	15	23	20	19
19				5.0	5.6	6.5	5.5	9.0	16	21	20	19
20				5.2	5.4	6.0	5.3	13	20	20	19	18
21				5.5	5.2	6.0	5.2	15	25	20	18	17
22				5.8	5.4	6.3	5.0	17	24	18	17	16
23				5.2	5.7	6.4	5.1	18	24	16	16	16
24				5.0	6.1	6.2	5.1	19	22	17	15	15
25				4.8	6.6	5.8	5.3	18	20	18	15	15
26				4.6	7.0	5.5	4.9	20	19	16	15	15
27				4.7	6.8	5.3	5.0	16	18	15	15	14
28				5.0	6.8	5.2	5.3	15	17	14	15	14
29				5.1	-	5.7	5.6	14	15	13	16	13
30				5.3	- - - -	5.2	5.1	12	14	13	17	13
31		- - - -		5.4	- - - -	5.0	- - - -	12	- - - -	14	20	- - - -
Total				154.8	153.8	221.3	155.6	313.2	521	455	604	551
Mean				4.99	5.49	7.14	5.19	10.1	17.4	14.7	19.5	18.4
Max				5.8	7.0	8.9	5.8	20	25	23	28	23
Min				4.2	4.6	5.0	4.6	5.0	11	11	13	13
Ac-ft				307	305	439	309	621	1,030	902	1,200	1,090

Cal yr	: Total	Mean	Max	Min	Ac-ft
Wtr yr 1967	: Total	-	Mean	-	Max
		-	Min	-	Ac-ft

Peak discharge (base, 30 cfs).--Aug. 2 (2230) 32 cfs (3.44 ft).

Note.--No gage-height record Jan. 1 to May 25.

Closed basin in San Luis Valley, Colo.

8-2270. Saguache Creek near Saguache, Colo.

Location.--Lat 38°10', long 106°17', in SE½ sec.10, T.45 N., R.6 E., on left bank just upstream from Ford Creek, 10 miles northwest of Saguache.

Drainage area.--595 sq mi.

Records available.--August 1910 to September 1912, June 1914 to September 1967. Monthly discharge only for some periods, published in WSP 1312.

Gage.--Water-stage recorder. Altitude of gage is about 8,050 ft (estimated from nearby U. S. Coast and Geodetic Survey level line). Prior to Apr. 9, 1934, at sites three-quarters of a mile downstream at different datums. Apr. 10, 1934, to Nov. 20, 1966, at present site at datum 1.00 ft higher.

Average discharge.--55 years, 70.1 cfs (50,750 acre-ft per year).

Extremes.--Maximum discharge during year, 128 cfs Aug. 31 (gage height, 2.15 ft), from rating curve extended above 71 cfs; minimum daily, 17 cfs Dec. 10.

1910-12, 1914-67: Maximum discharge, 790 cfs Aug. 3, 1964 (gage height, 3.85 ft, present datum), from rating curve extended above 83 cfs; minimum daily recorded, 8.2 cfs Dec. 22, 1950, Aug. 17, 1951.

Greatest flood known occurred in 1869. Flood in 1884 or 1886 exceeded that of Aug. 3, 1964, from information by local residents.

Remarks.--Records good except those for winter period, which are poor. Natural flow of stream affected by transmountain diversions from Colorado River basin to drainage area above station through Tarbell ditch (see elsewhere in this report) and diversions above station for irrigation.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	33	33	30			30	40	29	44	26	43	95
2	33	30	33			35	39	29	39	26	40	90
3	34	33	33			40	38	32	46	25	42	71
4	33	31	32			37	45	32	49	24	48	61
5	32	33	26			32	48	31	51	22	48	55
6	34	32	37			25	47	29	56	21	44	54
7	37	35	44			30	44	29	70	25	47	58
8	37	37	21			29	44	29	48	29	51	66
9	36	33	20			32	42	35	39	29	56	83
10	35	28	17			33	40	40	34	31	77	83
11	34	42	18			34	39	47	34	31	103	80
12	36	34	20			39	40	45	34	38	84	75
13	37	33	22			38	40	42	36	40	74	65
14	36	32	23			39	33	42	33	34	74	61
15	34	33	25			35	41	37	30	40	71	60
16	34	37		20	25	35	40	33	29	61	68	58
17	37	30				45	37	37	29	77	63	57
18	36	26				46	39	42	27	93	63	58
19	33	22				47	41	48	39	58	62	62
20	34	23				43	40	48	48	47	65	66
21	34	29				40	37	46	46	42	62	58
22	33	33				38	35	48	40	37	56	55
23	33	33	25			40	33	52	40	36	53	51
24	34	33				43	33	53	35	46	49	49
25	33	26				46	33	47	33	52	47	50
26	34	25				40	30	51	31	48	46	55
27	34	20				40	30	54	29	44	52	61
28	36	25				37	32	51	29	38	52	55
29	36	33				40	31	56	29	34	54	50
30	35	35				36	32	49	27	39	66	48
31	33					30		48		43	96	
Total	1,070	929	801	620	700	1,154	1,143	1,291	1,154	1,236	1,856	1,890
Mean	34.5	31.0	25.8	20	25	37.2	38.1	41.6	38.5	39.9	59.9	63.0
Max	37	42	44	-	-	47	48	56	70	93	103	95
Min	32	20	17	-	-	25	30	29	27	21	40	48
Ac-ft	2,120	1,840	1,590	1,230	1,390	2,290	2,270	2,560	2,290	2,450	3,680	3,750

Cal yr 1966: Total 17,146 Mean 47.0 Max 140 Min 11 Ac-ft 34,010
 Wtr yr 1967: Total 13,844 Mean 37.9 Max 103 Min 17 Ac-ft 27,460

Peak discharge (base, 210 cfs).--No peak above base.

RIO GRANDE BASIN

Closed basin in San Luis Valley, Colo.

8-2275. North Crestone Creek near Crestone, Colo.

Location.--Lat 38°00'49", long 105°41'32", on right bank in canyon, 1½ miles northeast of Crestone, Saguache County, and 3½ miles upstream from South Crestone Creek.

Drainage area.--10.7 sq mi.

Records available.--May 1936 to September 1967 (no winter records prior to 1948).

Gage.--Water-stage recorder. Altitude of gage is 8,360 ft (from topographic map).

Average discharge.--20 years (1947-67), 10.6 cfs (7,670 acre-ft per year).

Extremes.--Maximum discharge during year, 63 cfs Sept. 1 (gage height, 1.90 ft); minimum not determined.

1936-67: Maximum discharge, 735 cfs Aug. 6, 1936 (gage height, 4.33 ft), from rating curve extended above 160 cfs on basis of slope-area measurement of peak flow; minimum daily recorded, 0.4 cfs Apr. 3, 1945.

Maximum stage known probably since at least 1884 occurred in October 1911. No flood since that in October 1911 has exceeded the flood of Aug. 6, 1936, from information by local residents.

Remarks.--Records good except those for winter period, which are poor. No diversion above station.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3.6	3.4	3.4				1.5	3.2	19	21	21	59
2	3.6	3.0	3.4				1.6	3.2	22	18	23	46
3	3.6	3.4	3.4				1.7	2.5	36	17	26	46
4	3.8	3.4	3.4				1.8	2.3	42	15	25	40
5	4.1	3.4	3.4				1.8	2.2	43	14	24	34
6	4.1	3.4	3.6			2.3	2.2	2.2	47	13	27	31
7	4.1	3.4	4.1				3.4	3.2	41	13	36	29
8	4.1	4.1	3.2				3.6	6.5	36	18	34	28
9	4.1	3.8	2.3				3.4	11	33	14	36	27
10	3.8	3.8					2.5	14	30	13	41	24
11	3.8	3.8		2.0	2.2		2.5	13	26	12	38	22
12	3.8	3.8					2.7	12	23	13	34	20
13	3.8	4.1					1.5	11	22	13	38	18
14	4.5	4.1					3.4	9.8	20	14	40	16
15	4.3	4.1					3.0	8.2	23	16	40	15
16	4.5	3.6	2.5			2.7	2.5	8.2	24	20	36	14
17	4.8	3.6				3.2	2.5	12	26	32	32	14
18	4.3	3.6				3.0	3.2	16	27	42	30	14
19	4.1	3.6				2.5	3.4	17	29	36	29	14
20	4.1	3.4				2.2	3.0	19	33	31	27	14
21	3.8	3.6				2.2	2.7	20	36	30	24	13
22	3.6	3.6				2.2	2.5	25	34	28	22	12
23	3.6	3.6				2.5	2.3	27	34	27	20	12
24	3.4	3.6				2.7	2.5	28	35	27	17	11
25	3.6	3.6				2.7	2.3	28	30	32	16	11
26	3.6	3.2				2.2	2.1	28	28	32	15	12
27	3.6	2.2				2.2	3.2	25	28	30	14	12
28	3.6	4.1				1.9	4.1	23	25	28	14	10
29	3.6	3.6				1.7	4.1	22	22	25	18	9.8
30	3.6	3.6				1.7	4.1	21	22	23	30	9.4
31	3.6	- - - -			- - - -	1.2	- - - -	20	- - - -	23	46	- - - -
Total	120.5	107.5	85.2	62.0	61.6	71.3	81.1	443.5	896	690	873	637.2
Mean	3.89	3.58	2.75	2.0	2.2	2.30	2.70	14.3	29.9	22.3	28.2	21.2
Max	4.8	4.1	4.1	-	-	3.2	4.1	28	47	42	46	59
Min	3.4	2.2	-	-	-	1.2	1.5	2.2	19	12	14	9.4
Ac-ft	239	213	169	123	122	141	161	880	1,780	1,370	1,730	1,260

Cal yr 1966: Total 3,690.3 Mean 10.1 Max 43 Min - Ac-ft 7,320

Wtr yr 1967: Total 4,128.9 Mean 11.3 Max 59 Min - Ac-ft 8,190

Peak discharge (base, 60 cfs).--Sept. 1 (0600) 63 cfs (1.90 ft).

Note.--No gage-height record Dec. 27 to Mar. 16.

Closed basin in San Luis Valley, Colo.

8-2295. Cottonwood Creek near Crestone, Colo.

Location.--Lat 37°56'00", long 105°38'50", in Baca Grant, on left bank at Cottonwood Mining Camp (abandoned), 150 ft downstream from Cottonwood-Liberty Road, 1½ miles upstream from unnamed tributary, and 5 miles southeast of Crestone, Saguache County.

Drainage area.--6.77 sq mi (revised).

Records available.--May to November 1936, January to September 1967.

Gage.--Water-stage recorder. Altitude of gage is 8,400 ft (from topographic map).

Extremes.--Maximum discharge during water year, 93 cfs July 14 (gage height, 2.71 ft), from rating curve extended above 24 cfs, on basis of slope-area measurement at gage height 3.13 ft; minimum not determined.

1936, 1967: Maximum discharge, 257 cfs Aug. 6, 1936 (gage height, 3.13 ft), by slope-area measurement of peak flow; minimum not determined.

Remarks.--Records fair prior to June 7 and good thereafter. No diversion above station.

Discharge, in cubic feet per second, January to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1							0.90	1.2	2.1	9.6	10	81
2							.90	1.2	3.0	9.0	14	58
3							.96	1.1	9.0	9.0	12	33
4							.96	1.1	16	8.3	16	23
5						0.90	1.0	1.1	18	7.7	13	18
6							1.0	1.0	20	7.4	12	16
7							1.1	1.3	20	7.0	14	14
8							1.2	2.7	18	16	13	13
9							1.2	4.5	17	9.9	18	14
10							1.1	3.8	14	7.7	25	12
11							1.1	3.1	11	7.4	18	12
12							1.1	3.3	9.0	13	14	10
13							1.2	3.1	7.4	13	19	9.6
14							1.3	3.1	7.0	27	22	8.6
15				0.80	1.0	1.1	1.1	2.7	8.3	30	19	8.0
16							1.0	3.4	12	24	14	7.4
17							1.0	4.5	13	35	13	7.2
18							1.2	2.8	16	29	12	7.0
19							1.3	2.4	19	23	10	7.0
20							1.1	2.2	23	24	9.3	6.5
21						1.2	1.1	1.9	23	32	8.3	6.3
22						1.2	1.1	3.4	21	29	7.2	6.1
23						1.2	1.0	2.9	20	21	6.7	5.9
24						1.2	1.0	3.0	17	21	6.1	5.6
25						1.2	1.0	2.7	14	28	5.6	5.4
26						1.1	.96	2.4	14	30	5.2	5.6
27						1.1	1.1	2.8	13	21	5.9	5.6
28						1.0	1.2	3.3	12	17	6.5	5.6
29					-	1.0	1.3	2.5	10	14	12	5.4
30					- - - - -	1.0	1.3	2.2	10	12	25	5.2
31		- - - - -			- - - - -	.90	- - - - -	2.1	- - - - -	12	50	- - - - -
Total				24.80	28.0	32.10	32.78	78.8	416.8	554.0	435.8	422.0
Mean				0.80	1.0	1.04	1.09	2.54	13.9	17.9	14.1	14.1
Max				-	-	-	1.3	4.5	23	35	50	81
Min				-	-	-	0.90	1.0	2.1	7.0	5.2	5.2
Ac-ft				49	56	64	65	156	827	1,100	864	837

Cal yr 1966 : Total - Mean - Max - Min - Ac-ft -
 Wtr yr 1967 : Total - Mean - Max - Min - Ac-ft -

Peak discharge (base, 40 cfs)

Date	Time	Gage height	Discharge	Date	Time	Gage height	Discharge
7-14	1830	2.71	93	7-25	1900	2.50	63
7-17	1900	2.47	52	8-31	1630	2.63	91
7-20	1730	2.43	48				

Note.--No gage-height record Jan. 1 to Mar. 20.

RIO GRANDE BASIN

Closed basin in San Luis Valley, Colo.

8-2305. Carnero Creek near La Garita, Colo.

Location.--Lat 37°52', long 106°19', in sec.28, T.42 N., R.6 E., on left bank 4 miles northwest of La Garita and 5½ miles downstream from North Fork.

Drainage area.--117 sq mi.

Records available.--April 1919 to September 1967. No winter records prior to water year 1945 except water years 1926, 1941. Monthly discharge only for some periods, published in WSP 1312.

Gage.--Water-stage recorder. Altitude of gage is 8,200 ft (from topographic map). Prior to Aug. 6, 1925, staff gage or water-stage recorder at site 300 ft downstream at different datum. Aug. 6, 1925, to Apr. 20, 1929, staff gage or water-stage recorder at site at datum 1.00 ft higher. Apr. 21, 1929, to Nov. 20, 1966, water-stage recorder at present site at datum 1.00 ft higher.

Average discharge.--25 years (1925-26, 1940-41, 1944-67), 10.6 cfs (7,670 acre-ft per year).

Extremes.--Maximum discharge during year, 36 cfs Aug. 10 (gage height, 1.92 ft); minimum daily, 0.2 cfs July 6, 7.
1919-67: Maximum discharge, 1,600 cfs July 21, 1945 (gage height, 6.75 ft, present datum), from rating curve extended above 160 cfs; no flow for several days during summer months in 1951, 1955-56, 1963.

Remarks.--Records good except those for winter period, which are poor. Diversions above station for irrigation.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3.0	1.8	3.9				4.8	2.8	4.2	1.0	7.4	27
2	3.0	.70	4.5				4.8	2.8	3.9	.90	6.4	20
3	3.0	.70	4.2				5.4	3.3	5.4	.70	8.4	16
4	3.2	.70	3.6				8.4	2.8	5.7	.60	8.1	13
5	3.2	.50	3.9				9.5	4.5	5.1	.30	1.3	13
6	3.2	.60	3.9			4.0	7.4	3.6	6.0	.20	9.5	12
7	3.2	.70	4.2				7.0	3.9	6.4	.20	11	13
8	3.2	.90	2.2				7.0	3.9	5.4	1.2	11	15
9	3.2	1.8	2.2				6.7	4.5	3.6	4.8	19	25
10	3.2	1.8	2.0				5.7	5.4	2.8	6.7	28	18
11	3.2	2.8					6.0	5.1	3.0	7.0	19	16
12	2.8	2.4					6.4	4.2	2.8	7.0	16	16
13	4.2	2.0					5.1	3.9	2.8	7.0	16	14
14	4.8	2.0					3.3	3.6	2.4	4.5	15	13
15	4.2	2.0					7.0	3.6	3.6	1.4	16	12
16	5.0	3.6	1.0	0.50	1.0	6.0	5.7	3.3	3.6	1.8	16	12
17	5.2	3.6				7.0	5.7	3.0	3.6	1.7	13	12
18	4.8	3.0				7.8	6.7	3.3	4.8	16	14	12
19	2.8	2.5				6.4	7.4	3.3	7.8	8.4	14	12
20	1.8	3.0				6.7	6.4	3.3	7.4	6.7	14	12
21	1.8	3.6				7.0	5.4	3.3	6.7	6.0	13	11
22	1.4	3.6				5.7	5.4	3.0	6.0	4.8	10	10
23	2.0	3.6				4.8	4.8	3.0	5.1	4.5	10	9.2
24	1.6	4.2				6.4	5.1	3.3	4.2	5.1	9.5	8.8
25	2.0	3.6				5.7	5.4	3.0	2.8	9.2	9.2	8.8
26	2.2	3.6				4.8	4.5	3.3	2.6	12	10	11
27	2.0	2.8				4.2	5.1	4.5	2.6	6.7	10	13
28	2.2	2.6				3.9	5.4	5.4	2.2	6.0	10	11
29	2.6	2.8				6.0	5.7	5.4	1.8	5.4	9.2	9.2
30	2.0	3.6				4.2	5.1	5.1	1.6	7.0	11	9.2
31	2.4	- - - -	- - - -	- - - -	- - - -	2.8	- - - -	4.8	- - - -	7.4	18	- - - -
Total	92.4	71.1	55.6	15.50	28.0	149.4	178.3	118.2	125.9	196.30	394.7	404.2
Mean	2.98	2.37	1.79	0.50	1.0	4.82	5.94	3.81	4.20	6.33	12.7	13.5
Max	5.2	4.2	4.5	-	-	7.8	9.5	5.4	7.8	18	28	27
Min	1.4	0.50	-	-	-	2.8	3.3	2.8	1.6	0.20	6.4	8.8
Ac-ft	183	141	110	31	56	296	354	234	250	389	783	802

Cal yr 1966: Total 2,047.8 Mean 5.61 Max 18 Min 0.50 Ac-ft 4,060
Wtr yr 1967: Total 1,829.6 Mean 5.01 Max 28 Min 0.20 Ac-ft 3,630

Peak discharge (base, 110 cfs).--No peak above base.

Note.--No gage-height record Dec. 10 to Mar. 16.

Closed basin in San Luis Valley, Colo.

8-2310. La Garita Creek near La Garita, Colo.

Location.--Lat 37°48'50", long 106°19'10", in sec.9, T.41 N., R.6 E., on right bank 4 miles southwest of La Garita and 4½ miles downstream from Little La Garita Creek.

Drainage area.--61 sq mi, approximately.

Records available.--April 1919 to September 1967. No winter records prior to water year 1948 except water years 1926, 1941, 1945-46. Monthly discharge only for some periods, published in WSP 1312.

Gage.--Water-stage recorder. Altitude of gage is 8,030 ft (from topographic map). Apr. 1, 1919, to June 23, 1927, staff gages and June 24, 1927, to Nov. 13, 1935, water-stage recorder, at sites within a quarter of a mile downstream at different datums. Nov. 14, 1935, to Nov. 16, 1966, water-stage recorder at present site at datum 1.00 ft higher.

Average discharge.--23 years (1925-26, 1940-41, 1944-46, 1947-67), 12.6 cfs (9,126 acre-ft per year).

Extremes.--Maximum discharge during year, 78 cfs Aug. 10 (gage height, 2.14 ft); minimum daily, not determined.
1919-67: Maximum discharge, 530 cfs July 9, 1957 (gage height, 4.00 ft, present datum), from rating curve extended above 140 cfs; minimum daily recorded, 0.2 cfs Sept. 28, 29, 1956.

Remarks.--Records good except those for winter period, which are poor. Diversions above station for irrigation.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3.9	3.3	3.5				5.7	3.2	5.7	2.8	7.4	2.4
2	4.2	2.3	3.8				5.7	3.8	5.4	2.2	6.8	2.0
3	4.6	3.5	4.2				6.8	4.0	7.4	2.2	6.4	1.6
4	5.4	3.9	4.5				9.4	3.8	7.4	2.0	1.3	1.4
5	5.4	2.6	4.0				1.2	4.5	6.4	2.0	9.8	1.4
6	5.0	2.6	4.5				10	4.2	7.8	2.0	8.5	1.4
7	5.0	3.7	4.8				8.2	4.0	8.5	2.0	7.4	1.4
8	5.0	3.9	4.2			5.0	8.5	5.0	6.4	2.8	7.1	1.8
9	4.6	2.8	3.8				8.5	6.0	5.0	8.2	1.3	2.3
10	4.6	2.4	3.0				6.4	6.8	4.8	6.0	2.7	2.2
11	4.6	3.7					6.8	6.4	4.8	5.4	1.9	1.9
12	5.4	3.0					7.1	5.0	4.8	5.4	1.5	1.6
13	5.0						5.7	4.8	4.5	5.4	1.7	1.3
14	4.6	2.4					3.8	4.2	4.8	4.2	1.6	1.3
15	4.2	2.5					7.4	4.0	5.7	7.1	1.6	1.3
16	5.0	4.5		2.5	4.0	5.1	6.0	4.0	5.0	1.3	1.7	1.2
17	5.8	4.5				6.0	5.7	4.2	4.8	1.6	1.4	1.2
18	5.0	3.4				7.1	6.4	4.2	5.4	1.2	1.4	1.1
19	4.2	3.5				8.2	7.4	4.5	6.0	7.1	1.6	1.1
20	4.2	4.0				7.4	6.0	4.2	5.0	5.7	1.8	1.1
21	4.2	4.5	3.0			7.1	5.4	4.2	5.4	6.0	1.5	9.8
22	3.9	4.2				6.4	4.8	4.0	5.4	5.7	1.3	9.0
23	3.9	4.2				7.1	4.5	4.0	4.2	5.0	1.2	9.0
24	3.7	4.2				8.2	5.0	4.2	3.5	5.4	9.8	8.5
25	3.5	3.7				7.8	4.8	3.8	3.0	6.0	9.4	8.5
26	3.5	3.7				6.8	4.2	4.2	3.0	6.8	9.8	1.1
27	3.7	3.0				7.1	5.0	7.4	3.8	6.4	1.2	1.2
28	3.7	3.2				7.4	5.7	6.8	3.2	4.5	1.2	9.4
29	3.7	3.5				7.4	5.7	7.1	3.0	4.5	1.3	8.2
30	3.7	3.8				6.0	5.0	6.4	3.0	9.8	2.2	7.8
31	3.7					3.5		6.0		9.4	2.4	
Total	136.9	103.7	103.3	77.5	112.0	183.6	193.6	148.9	153.1	183.0	420.4	403.2
Mean	4.42	3.46	3.33	2.5	4.0	5.92	6.45	4.80	5.10	5.90	13.6	13.4
Max	5.8	4.5	4.8	-	-	8.2	12	7.4	8.5	16	27	24
Min	3.5	2.3	-	-	-	3.5	3.8	3.2	3.0	2.0	6.4	7.8
Ac-ft	272	206	205	154	222	364	384	295	304	363	834	800

Cal yr 1966: Total 2,856.5 Mean 7.83 Max 27 Min - Ac-ft 5,670
Wtr yr 1967: Total 2,219.2 Mean 6.08 Max 27 Min - Ac-ft 4,400

Peak discharge (base, 80 cfs)--No peak above base.

Note.--No gage-height record Dec. 12 to Mar. 16.

RIO GRANDE BASIN

Closed basin in San Luis Valley, Colo.

8-2342. Mosca Creek near Mosca, Colo.

Location.--Lat 37°44'05", long 105°30'27", in N½ sec.2, T.27 S., R.73 W., Sixth principal meridian, on right bank 150 ft upstream from State Highway 150 in Great Sand Dunes National Monument and 21 miles northeast of Mosca.

Drainage area.--5.45 sq mi.

Records available.--January to September 1967.

Gage.--Water-stage recorder. Altitude of gage is 8,240 ft (from topographic map). Mar. 27 to May 11, 1967, staff gage at same site and datum.

Extremes.--Maximum discharge observed during period January to September, 0.61 cfs Apr. 14; maximum gage height recorded, 0.47 ft May 26; minimum daily discharge, 0.05 cfs Aug. 1.

Remarks.--Records fair prior to May 12 and good thereafter. No diversion above station.

Discharge, in cubic feet per second, January to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1				0.10	0.30	0.20	0.21	0.21	0.40	0.15	0.05	0.21
2				.10	.30	.30	.21	.34	.40	.15	.07	.19
3				.10	.30	.30	.25	.29	.40	.13	.07	.19
4				.20	.30	.30	.25	.29	.38	.13	.09	.19
5				.20	.30	.20	.21	.49	.38	.11	.07	.21
6				.20	.20	.20	.21	.39	.40	.09	.07	.19
7				.10	.20	.20	.29	.29	.38	.09	.07	.17
8				.10	.30	.20	.25	.29	.35	.11	.07	.17
9				.10	.30	.20	.21	.39	.32	.09	.13	.19
10				.10	.30	.30	.21	.49	.30	.11	.17	.19
11				.10	.30	.30	.21	.40	.30	.13	.17	.17
12				.20	.30	.30	.21	.19	.27	.15	.15	.15
13				.20	.30	.30	.11	.21	.27	.13	.15	.15
14				.20	.40	.30	.29	.23	.27	.13	.15	.15
15				.20	.30	.20	.44	.25	.30	.17	.15	.15
16				.20	.20	.20	.39	.27	.27	.15	.17	.17
17				.20	.20	.20	.29	.27	.27	.17	.15	.17
18				.10	.20	.20	.39	.27	.27	.17	.17	.17
19				.20	.30	.20	.29	.27	.25	.15	.17	.17
20				.20	.20	.20	.29	.27	.25	.13	.17	.17
21				.20	.20	.20	.29	.25	.25	.11	.17	.15
22				.30	.20	.20	.29	.25	.23	.09	.15	.13
23				.20	.20	.20	.29	.23	.21	.09	.13	.13
24				.20	.30	.20	.29	.23	.19	.11	.11	.15
25				.20	.30	.20	.29	.23	.19	.13	.11	.17
26				.20	.30	.20	.25	.35	.19	.11	.13	.21
27				.20	.20	.21	.25	.35	.17	.09	.13	.21
28				.30	.20	.21	.29	.40	.15	.07	.11	.19
29				.30	-	.21	.21	.46	.17	.07	.13	.17
30				.30	-	.21	.18	.46	.15	.07	.17	.17
31		- - - - -		.40	- - - - -	.21	- - - - -	.43	- - - - -	.07	.21	- - - - -
Total				5.90	7.40	7.05	7.84	9.74	8.33	3.65	4.01	5.20
Mean				0.190	0.264	0.227	0.261	0.314	0.278	0.118	0.129	0.173
Max				0.40	0.40	0.30	0.44	0.49	0.40	0.17	0.21	0.21
Min				0.10	0.20	0.20	0.11	0.19	0.15	0.07	0.05	0.13
Ac-ft				12	15	14	16	19	17	7.2	8.0	10

Cal yr 1966: Total - Mean - Max - Min - Ac-ft -
Wtr yr 1967: Total - Mean - Max - Min - Ac-ft -

Note.--No gage-height record Jan. 1 to May 26.

8-2360. Alamosa Creek above Terrace Reservoir, Colo.

Location.--Lat 37°23', long 106°21', in sec.8, T.36 N., R.6 E., on left bank 3 miles upstream from Terrace Reservoir Dam and 15 miles northwest of Capulin.

Drainage area.--107 sq mi.

Records available.--September 1911 to September 1912 (published as Rio Alamosa near Monte Vista), May to June 1914, April 1915 to September 1927, October 1934 to September 1967. No winter records water years 1919-23. Monthly discharge only for some periods, published in WSP 1312.

Gage.--Water-stage recorder. Altitude of gage is 8,600 ft (from topographic map). Sept. 29, 1911, to Sept. 30, 1912, staff gage at ranger station 1.8 miles upstream at different datum. Apr. 25, 1914, to May 6, 1915, staff gage and May 7, 1915, to Sept. 30, 1927, water-stage recorder, near present site at different datums. Datum lowered 0.27 ft Mar. 28, 1925.

Average discharge.--41 years (1911-12, 1915-18, 1923-27, 1934-67), 114 cfs (82,530 acre-ft per year).

Extremes.--Maximum discharge during year, 736 cfs May 22 (gage height, 2.76 ft); minimum daily, 10 cfs Nov. 6, 10. 1911-12, 1914-27, 1934-67: Maximum discharge, 5,200 cfs Oct. 5, 1911 (gage height, 11.0 ft, site and datum then in use, from floodmark), from rating curve extended above 1,000 cfs on basis of computation of peak flow over dam about 8 miles upstream; minimum not determined.

Maximum stage known since at least 1854, that of Oct. 5, 1911, from information by local residents.

Remarks.--Records good except those for winter period, which are poor. No diversion above station.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	18	13	17				35	99	211	142	150	124
2	18	12	15				33	87	214	130	138	114
3	39	12	13				36	78	288	128	142	95
4	35	11	13				48	78	345	117	138	85
5	38	11	13				59	93	350	108	152	78
6	36	10	16				50	89	433	108	160	74
7	36	12	31			22	50	140	393	108	160	72
8	33	12	23				56	257	366	124	152	85
9	30	11					62	421	335	99	233	106
10	28	10					59	451	310	91	274	82
11	28	11					62	376	278	102	320	76
12	29	12					64	350	265	124	245	67
13	27	14					56	345	233	95	211	61
14	23	14					49	265	265	82	208	56
15	21	12		16	16	19	52	204	278	76	190	55
16	22	12				18	50	278	241	91	187	52
17	23	12				19	52	376	225	283	152	49
18	23	11				31	67	376	274	194	135	50
19	22	14				34	80	355	350	148	138	53
20	23	14	18			26	74	376	330	142	135	64
21	23	14				28	74	382	320	135	126	59
22	20	14				30	76	445	296	130	128	50
23	19	13				36	76	508	283	124	133	46
24	18	13				42	74	527	253	190	104	43
25	18	12				41	70	494	222	249	93	46
26	18	12				36	61	445	204	241	91	52
27	18	11				36	76	371	194	190	112	52
28	18	19				39	110	388	181	166	93	45
29	18	18			-	42	130	320	160	135	87	42
30	17	17			- - - - -	38	130	274	142	128	119	40
31	16	- - - - -			- - - - -	34	- - - - -	249	- - - - -	190	128	- - - - -
Total	755	383	555	496	448	857	1,971	9,497	8,239	4,370	4,834	1,973
Mean	24.4	12.8	17.9	16	16	27.6	65.7	306	275	141	156	65.8
Max	39	19	31	-	-	42	130	527	433	283	320	124
Min	16	10	-	-	-	-	33	78	142	76	87	40
Ac-ft	1,500	760	1,100	984	889	1,700	3,910	18,840	16,340	8,670	9,590	3,910

Cal yr 1966 : Total 35,137 Mean 96.3 Max 660 Min 10 Ac-ft 69,690

Wtr yr 1967 : Total 34,378 Mean 94.2 Max 527 Min 10 Ac-ft 68,190

Peak discharge (base, 670 cfs).--May 22 (2330) 736 cfs (2.76 ft).

Note.--No gage-height record Dec. 9 to Mar. 15.

8-2380. La Jara Creek at Gallegos Ranch, near Capulin, Colo.

Location.--Lat 37°12'30", long 106°11'20", in NE¼ sec.10, T.34 N., R.7 E., on left bank 2.7 miles downstream from Canyon Del Rancho, 7 miles southwest of Capulin, and 16½ miles downstream from La Jara Reservoir.

Drainage area.--98 sq mi, approximately.

Records available.--April 1916 to November 1917, April 1919 to November 1923, May 1936 to September 1967. No winter records prior to 1950 except water year 1944. Monthly discharge only for some periods, published in WSP 1312.

Gage.--Water-stage recorder. Altitude of gage is 8,130 ft (from topographic map). Apr. 1, 1916, to Nov. 30, 1917, and Apr. 1, 1919, to Nov. 30, 1923, near present site at different datums.

Average discharge.--19 years (1943-44, 1949-67), 15.5 cfs (11,220 acre-ft per year).

Extremes.--Maximum discharge during year, 155 cfs Aug. 13 (gage height, 3.64 ft); minimum not determined. 1916-17, 1919-23, 1936-67: Maximum discharge, 653 cfs Apr. 22, 1919, Apr. 15, 1937; maximum gage height, 6.12 ft Aug. 11, 1961; minimum daily discharge recorded, 2.2 cfs Nov. 6, 1951.

Remarks.--Records good except those for winter period, which are poor. Small diversions above station for irrigation. Flow regulated by La Jara Reservoir (capacity, 14,040 acre-ft).

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	6.8	8.0	11				20	20	20	10	14	18
2	6.8	9.2	12				24	23	20	10	12	16
3	8.0	9.2	12				27	21	20	10	13	13
4	7.5	8.4	11				36	20	21	9.2	12	11
5	7.5	8.4	10				37	20	21	8.4	15	11
6	7.4	8.8	14				32	19	20	8.8	11	10
7	7.1	8.0	18				35	20	20	8.8	10	10
8	7.1	8.8	14				37	26	17	8.8	13	11
9	7.1	9.6	14				34	29	16	8.0	21	18
10	7.1	10	9.2				28	29	14	8.4	26	14
11	7.5	12					29	26	14	9.2	40	12
12	7.3	12					30	22	14	11	24	11
13	7.1	10					17	20	14	10	26	10
14	7.1	10					18	19	13	10	27	9.2
15	8.0	10				10	21	19	13	11	28	9.2
16	8.8	11		6.5	70	10	22	22	12	12	27	8.8
17	10	8.8				11	21	20	12	24	19	8.8
18	10	9.6				21	22	22	15	16	15	8.8
19	9.2	11				23	26	23	16	12	14	9.2
20	8.0	11				19	22	22	16	10	14	9.2
21	7.7	10				27	22	22	14	9.6	14	8.8
22	7.7	9.2				33	22	22	12	9.6	12	8.8
23	8.0	8.8				40	20	22	12	10	11	8.8
24	8.0	10				36	22	20	12	12	10	8.8
25	8.0	10				29	20	19	14	15	10	10
26	8.0	10				24	20	20	13	14	10	11
27	8.0	10				25	20	24	13	11	10	11
28	8.0	11				34	22	23	12	10	10	10
29	8.0	12				37	23	25	11	11	10	10
30	8.0	11				20	25	22	10	10	12	8.8
31	8.0	- - - -				18	- - - -	21	- - - -	18	20	- - - -
Total	2428	2958	272.2	201.5	196.0	571	754	682	451	345.8	510	324.2
Mean	7.83	9.86	8.78	6.5	7.0	18.4	25.1	22.0	15.0	11.2	16.5	10.8
Max	10	12	18	-	-	40	37	29	21	24	40	18
Min	6.8	8.0	-	-	-	-	17	19	10	8.0	10	8.8
Ac-ft	482	587	540	400	389	1,130	1,500	1,350	895	686	1,010	643

Cal yr 1966: Total 4,501.3 Mean 12.3 Max 53 Min - Ac-ft 8,930
 Wtr yr 1967: Total 4,846.3 Mean 13.3 Max 40 Min - Ac-ft 9,610

Note.--No gage-height record Dec. 15 to Mar. 15.

8-2400. Rio Grande above mouth of Trinchera Creek, near Lasasues, Colo.

(Formerly published as Rio Grande above mouth of Trinchera Creek, near La Sausés)

Location.--Lat 37°18'58", long 105°44'32", in sec.35, T.36 N., R.11 E., on right bank a quarter of a mile upstream from Trinchera Creek, 3.2 miles (revised) north of Lasasues, and 13 miles southeast of Alamosa.

Drainage area.--5,740 sq mi, approximately (includes 2,940 sq mi in closed basin in northern part of San Luis Valley, Colo.).

Records available.--May 1936 to September 1967. Prior to Oct. 1, 1966, published as "above mouth of Trinchera Creek, near La Sausés."

Gage.--Water-stage recorder. Altitude of gage is 7,500 ft (estimated from nearby level lines).

Average discharge.--31 years, 235 cfs (170,100 acre-ft per year).

Extremes.--Maximum discharge during year, 394 cfs Nov. 22; maximum gage height, 3.77 ft Dec. 24 (backwater from ice); minimum daily discharge, 16 cfs May 12.

1936-67: Maximum discharge, 5,470 cfs June 21, 1949 (gage height, 9.50 ft), from rating curve extended above 3,600 cfs; minimum daily, 0.4 cfs July 4, 1940.

Remarks.--Records good except those for winter period, which are poor. Natural flow of stream affected by transmountain diversions, storage reservoirs, ground-water withdrawals and diversions for irrigation, and return flow from irrigated areas.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	21	81	264	125	180	275	69	28	99	86	60	101
2	21	93	286	125	185	305	66	21	117	79	61	122
3	23	140	281	125	190	340	58	24	125	70	69	127
4	23	209	276	130	200	330	55	23	138	61	76	129
5	26	227	274	135	190	250	55	22	145	56	68	129
6	26	240	283	135	175	260	54	22	178	53	63	118
7	26	250	281	140	185	280	55	20	182	54	64	106
8	29	250	283	135	200	285	49	18	178	53	68	100
9	41	259	286	135	195	287	40	18	194	50	77	104
10	60	274	220	135	195	278	34	17	220	44	103	105
11	59	276	196	130	195	240	27	17	231	48	118	104
12	54	259	186	130	190	194	24	16	216	47	194	97
13	50	259	180	130	190	166	24	18	182	44	220	89
14	49	269	190	135	190	152	30	18	151	43	236	85
15	50	286	207	135	190	143	30	18	154	41	236	81
16	56	281	209	140	190	134	28	27	142	43	225	70
17	68	278	200	145	195	131	28	26	134	49	200	64
18	72	283	200	150	200	129	33	22	149	53	176	64
19	80	286	205	150	200	120	32	20	147	117	168	70
20	89	283	211	150	200	125	34	20	158	186	166	71
21	88	278	211	150	200	142	33	18	160	196	149	69
22	80	320	220	150	205	129	29	18	200	105	131	67
23	87	286	215	150	210	129	28	17	138	88	118	67
24	93	304	200	150	210	118	26	18	120	91	104	60
25	94	298	180	155	220	105	24	26	116	117	95	53
26	91	296	165	165	230	97	23	30	116	83	94	53
27	69	274	150	175	240	97	22	38	125	66	99	56
28	91	262	135	180	260	86	21	56	117	73	91	54
29	85	240	120	180	-	72	21	73	105	67	81	50
30	78	247	120	175	- - - -	70	24	69	99	64	79	45
31	79	- - - -	125	180	- - - -	70	- - - -	79	- - - -	66	83	- - - -
Total	1,858	7,588	6,559	4,525	5,610	5,539	1,076	857	4,536	2,293	3,772	2,510
Mean	59.9	253	212	146	200	179	35.9	27.6	151	74.0	122	83.7
Max	94	320	286	180	260	340	69	79	231	196	236	129
Min	21	81	120	125	175	70	21	16	99	41	60	45
Ac-ft	3,690	15,050	13,010	8,980	11,130	10,990	2,130	1,700	9,000	4,550	7,480	4,980

Cal yr 1966: Total 75,088 Mean 206 Max 628 Min 18 Ac-ft 148,900
Wtr yr 1967: Total 46,723 Mean 128 Max 340 Min 16 Ac-ft 92,670

Note.--No gage-height record Dec. 29 to Mar. 9.

8-2405. Trinchera Creek above Turners Ranch, near Fort Garland, Colo.

Location.--Lat 37°22', long 105°17', in Sangre de Cristo Grant, on right bank just downstream from confluence of North and South Forks, 1 mile upstream from Turners Ranch and 7 miles southeast of Fort Garland, Costilla County.

Drainage area.--45 sq mi, approximately.

Records available.--April 1923 to September 1967. No winter records prior to 1935 except water year 1928. Monthly discharge only for some periods, published in WSP 1312.

Gage.--Water-stage recorder. Prior to Apr. 12, 1929, at site 200 ft upstream at different datum.

Average discharge.--34 years (1927-28, 1934-67), 23.3 cfs (16,870 acre-ft per year).

Extremes.--Maximum discharge during year, 31 cfs June 18 (gage height, 2.39 ft); minimum daily, 5.0 cfs Dec. 10.

1923-67: Maximum discharge, 689 cfs May 27, 1942, from rating curve extended above 240 cfs; maximum gage height, 3.73 ft May 10, 1947; minimum daily discharge recorded, 3.0 cfs Oct. 3, 1942.

Outstanding floods occurred in 1886 and in October 1911. The flood in 1886 probably exceeded that in October 1911 and the flood in October 1911 probably exceeded all subsequent floods, from information by local residents.

Remarks.--Records good except those for winter period, which are poor. No regulation or diversion above station.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	7.2	7.5	8.3				9.5	9.0	18	13	11	18
2	7.2	7.2	7.2				9.9	10	18	12	11	15
3	7.2	7.9	7.5				10	9.9	19	12	9.9	14
4	7.5	8.3	7.9				10	9.9	21	12	13	13
5	7.5	8.3	7.9				11	9.5	21	12	9.5	13
6	7.5	8.3	7.9			8.0	11	9.5	22	11	9.5	13
7	7.2	8.3	8.7				10	9.5	22	11	9.1	12
8	7.2	8.7	8.3				10	10	21	11	7.9	12
9	7.2	8.3	7.0				10	13	20	9.5	12	13
10	6.9	8.7	5.0				9.9	13	20	10	17	13
11	7.2	9.1					9.9	12	20	11	15	13
12	7.5	8.3					9.9	12	20	13	13	11
13	7.2	8.7				7.4	7.2	12	20	11	13	11
14	6.9	8.3				7.2	11	12	18	12	13	11
15	6.9	8.7		7.0	7.5	7.9	11	11	20	14	13	11
16	6.9	7.9				8.3	10	12	19	15	12	11
17	7.5	7.9				8.3	9.5	12	23	14	12	11
18	7.2	7.9				8.7	9.5	12	22	14	12	11
19	7.2	7.9				9.1	9.5	12	19	14	12	13
20	7.2	8.7				9.1	9.9	12	20	13	12	12
21	7.5	7.9	7.5			9.1	9.5	12	20	13	12	11
22	7.5	7.9				9.1	9.5	12	18	14	12	10
23	7.5	7.9				9.5	9.5	12	17	13	11	9.9
24	7.5	7.9				9.5	9.1	12	17	13	11	9.5
25	7.9	7.9				8.7	9.1	12	16	12	11	10
26	7.9	7.9				9.5	9.1	15	14	12	12	12
27	7.9	7.2				9.1	9.5	17	13	11	12	12
28	7.9	8.3				9.1	9.5	18	13	11	12	11
29	8.3	8.3				9.5	9.9	20	13	10	12	10
30	8.3	8.3				9.1	9.5	19	13	10	14	9.9
31	8.3					8.7		19		9.9	20	
Total	230.8	244.4	233.2	217.0	210.0	262.9	292.9	390.3	557	373.4	375.9	356.3
Mean	7.45	8.15	7.52	7.0	7.5	8.48	9.76	12.6	18.6	12.0	12.1	11.9
Max	8.3	9.1	8.7	-	-	9.5	11	20	23	15	20	18
Min	6.9	7.2	5.0	-	-	-	7.2	9.0	13	9.5	7.9	9.5
Ac-ft	458	485	463	430	417	521	581	774	1,100	741	746	707

Cal yr 1966: Total 5,177.1 Mean 14.2 Max 53 Min 5.0 Ac-ft 10,270
 Wtr yr 1967: Total 3,744.1 Mean 10.3 Max 23 Min 5.0 Ac-ft 7,430

Peak discharge (base, 50 cfs).--No peak above base.

Note.--No gage-height record Dec. 23 to Mar. 13.

8-2415. Sangre de Cristo Creek near Fort Garland, Colo.

Location.--Lat 37°25', long 105°25', in W $\frac{1}{2}$ sec.23, T.30 S., R.72 W., on left bank at road bridge, 2,000 ft upstream from Garland Canal, 1 mile east of Fort Garland, and 6 miles upstream from Ute Creek.

Drainage area.--190 sq mi, approximately.

Records available.--March to October 1916, May 1923 to September 1930, October 1931 to September 1967. No winter records prior to 1946 except water year 1941. Monthly discharge only for some periods, published in WSP 1312.

Gage.--Water-stage recorder. Altitude of gage is 7,930 ft (estimated from nearby U. S. Coast and Geodetic Survey level line). Mar. 15 to Oct. 9, 1916, staff gage and Cippolletti weir at site 1,400 ft downstream at different datum. May 7, 1923, to Feb. 29, 1964, water-stage recorder at site 1 mile upstream at different datum.

Average discharge.--23 years (1940-41, 1945-67), 19.3 cfs (13,970 acre-ft per year).

Extremes.--Maximum discharge during year, 208 cfs July 12 (gage height, 2.15 ft, from floodmark); minimum daily, 0.20 cfs July 10, 11. 1916, 1923-67: Maximum discharge, 1,520 cfs Aug. 31, 1936, from rating curve extended above 280 cfs on basis of slope-area measurement at gage height, 6.10 ft (site and datum then in use); maximum gage height, 7.82 ft (site and datum then in use) June 4, 1957; no flow at times in many years.

Outstanding floods occurred in 1886 and in October 1911. The flood in 1886 probably exceeded that in October 1911 and the flood in October 1911 probably exceeded all subsequent floods, from information by local residents.

Remarks.--Records good except those for period of no gage-height record, which are poor. A few diversions above station for irrigation.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.60	0.60	4.1				14	10	20	1.4	0.60	6.0
2	.60	.60	3.5				14	13	18	1.2	.80	6.5
3	.60	.80	3.5				15	13	18	1.0	4.7	4.4
4	.60	1.4	3.2				17	12	17	.80	3.5	2.6
5	.60	1.4	3.2				18	12	15	.60	6.5	1.8
6	.60	1.4	3.5				17	12	17	.60	4.7	1.6
7	.40	1.6	7.5			7.0	16	11	18	.40	3.2	1.4
8	.40	1.8	7.0				16	11	12	.40	2.0	1.2
9	.40	2.0	3.2				16	11	10	.40	3.5	4.4
10	.40	1.4	2.3				16	12	9.0	.20	6.5	3.2
11	.40	1.6	2.3				14	12	8.5	.20	8.0	2.9
12	.40	2.3	2.6				13	12	8.0	4.4	6.0	2.6
13	.40	2.3	2.9				6.0	12	7.5	56	4.4	1.6
14	.40	2.0	2.9			11	9.5	12	7.5	7.5	3.5	1.2
15	.60	2.3	3.2			9.0	19	13	8.0	12	3.5	1.0
16	.60	2.6	2.6	3.0	4.0	9.0	27	12	7.0	8.5	3.8	.80
17	.60	2.6	2.6			11	22	12	8.5	11	8.0	.80
18	.60	2.6	2.3			18	18	11	9.0	9.5	5.0	1.0
19	.60	2.3	2.3			25	22	11	8.0	14	5.5	1.2
20	.60	2.3	2.3			20	21	11	7.5	6.5	4.7	1.4
21	.60	2.6	2.3			20	19	12	7.0	4.1	4.4	1.4
22	.60	2.6	2.3			17	17	11	6.0	7.5	3.2	1.4
23	.60	2.9	2.0			17	16	9.5	5.0	2.9	2.9	1.2
24	.60	3.2	1.8			21	16	9.0	3.8	2.3	2.0	1.0
25	.60	3.2	1.6			20	15	8.5	3.2	6.5	1.6	1.0
26	.60	3.2	1.6			16	14	10	2.9	6.5	1.2	1.4
27	.60	2.6	1.6			15	14	29	2.3	6.0	1.2	1.6
28	.60	2.0	1.5			14	14	24	2.0	5.5	1.0	1.8
29	.60	2.6	1.5		-	15	13	25	1.8	5.5	1.4	1.8
30	.60	4.1	1.8		- - - - -	15	12	20	1.6	1.4	1.6	1.8
31	.60	- - - - -	2.2		- - - - -	13	- - - - -	17	- - - - -	1.0	2.6	- - - - -
Total	17.00	64.90	87.2	93.0	112.0	377.0	480.5	410.0	269.1	185.80	111.50	62.00
Mean	0.55	2.16	2.81	3.0	4.0	12.2	16.0	13.2	8.97	5.99	3.60	2.07
Max	0.60	4.1	7.5	-	-	25	27	29	20	56	8.0	6.5
Min	0.40	0.60	1.5	-	-	-	6.0	8.5	1.6	0.20	0.60	0.80
Ac-ft	34	129	173	184	222	748	953	813	534	369	221	123

Cal yr 1966: Total 3,049.40 Mean 8.35 Max 39 Min 0.20 Ac-ft 6,050
 Wtr yr 1967: Total 2,270.00 Mean 6.22 Max 56 Min 0.20 Ac-ft 4,500

Peak discharge (base, 75 cfs)--July 12 (2200) 208 cfs (2.15 ft).

Note.--No gage-height record Dec. 29 to Mar. 13, July 12, 13.

8-2425. Ute Creek near Fort Garland, Colo.

Location.--Lat 37°27', long 105°26', in S½ sec.10, T.30 S., R.72 W., on left bank 1½ miles north of Fort Garland and 6 miles upstream from mouth.

Drainage area.--32 sq mi, approximately.

Records available.--March to October 1916, May 1923 to September 1967. Monthly discharge only for some periods, published in WSP 1312.

Gage.--Water-stage recorder. Altitude of gage is 8,030 ft (from topographic map). Mar. 18 to Oct. 9, 1916, staff gage and Cippoletti weir at different datum.

Average discharge.--44 years, 20.6 cfs (14,910 acre-ft per year).

Extremes.--Maximum discharge during year, 133 cfs Sept. 1 (gage height, 2.09 ft); minimum not determined.

1916, 1923-67: Maximum daily discharge, 630 cfs May 15, 1941; no flow July 28-31, Sept. 6-29, 1956.

Outstanding floods occurred in 1886 and in October 1911. The flood in 1886 probably exceeded that in October 1911 and the flood in October 1911 probably exceeded all subsequent floods, from information by local residents.

Remarks.--Records good except those for winter period, which are poor. A few diversions above station for irrigation.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3.0	5.8	6.5				7.4	7.4	19	19	19	107
2	3.0	5.8	6.5				7.0	8.8	18	19	36	74
3	4.0	6.5	6.5				9.2	7.4	25	19	36	53
4	5.1	6.5	6.5				10	7.4	31	18	45	41
5	7.0	6.2	6.5				11	7.8	36	18	33	35
6	7.0	7.0	7.0			6.5	10	7.8	70	18	29	30
7	6.5	7.4	8.8				10	8.3	56	17	25	30
8	6.5	7.0	5.8				10	10	45	17	21	29
9	6.5	7.0	4.0				11	13	39	17	29	29
10	6.5	5.1	4.0				10	17	37	15	58	29
11	6.5	7.4	4.4				10	14	33	15	50	35
12	7.4	7.8	4.0				9.6	15	31	23	38	25
13	7.0	6.5	4.4			6.6	5.4	14	29	18	35	20
14	7.0	7.0				6.2	10	15	26	17	34	22
15	7.0	7.0		5.0	5.5	5.1	16	13	28	22	34	18
16	7.0	7.0				6.2	15	11	27	25	31	15
17	7.4	7.0				7.4	15	12	29	48	26	17
18	7.8	7.0				7.8	15	15	28	55	26	20
19	7.8	6.5				7.8	15	18	33	36	26	22
20	7.8	7.0				7.4	12	18	34	30	25	24
21	7.8	7.0				7.8	12	16	36	40	22	19
22	7.4	7.0	4.0			8.3	11	16	32	29	22	17
23	7.8	7.0				7.8	11	19	33	24	21	15
24	7.8	7.0				8.3	11	23	32	33	19	13
25	7.0	7.0				8.8	11	26	29	40	18	15
26	7.0	7.0				8.8	9.6	33	29	45	17	17
27	6.5	4.4				8.8	11	31	27	32	20	21
28	6.5	6.2				8.3	11	31	25	28	19	16
29	6.5	6.5				8.8	9.6	28	24	25	21	15
30	6.5	7.0				7.4	10	22	20	22	24	15
31	6.5	- - - -				7.0	- - - -	21	- - - -	20	63	- - - -
Total	205.1	200.6	146.9	155.0	154.0	222.6	325.8	505.9	961	804	922	838
Mean	6.62	6.69	4.74	5.0	5.5	7.18	10.9	16.3	32.0	25.9	29.7	27.9
Max	7.8	7.8	8.8	-	-	8.8	16	33	70	55	63	107
Min	3.0	4.4	-	-	-	-	5.4	7.4	18	15	17	13
Ac-ft	407	398	291	307	305	442	646	1,000	1,910	1,590	1,830	1,660

Cal yr 1966: Total 6,400.6 Mean 17.5 Max 101 Min - Ac-ft 12,700
 Wtr yr 1967: Total 5,440.9 Mean 14.9 Max 107 Min - Ac-ft 10,790

Peak discharge (base, 100 cfs).--July 17 (2300) 113 cfs (2.02 ft); Sept. 1 (0100) 133 cfs (2.09 ft).

Note.--No gage-height record Dec. 13 to Mar. 13.

8-2435. Trinchera Creek below Smith Reservoir, near Blanca, Colo.

Location (revised).--Lat 37°23'10", long 105°33'02", in sec.4, T.31 S., R.73 W. (unsurveyed), on right bank 150 ft downstream from bridge, 0.6 mile downstream from Smith Reservoir, and 4.0 miles southwest of Blanca.

Drainage area.--396 sq mi.

Records available.--October 1928 to September 1967. No winter records prior to 1944 except water years 1931, 1934-36, 1938. Monthly discharge only for some periods, published in WSP 1312.

Gage.--Water-stage recorder. Altitude of gage is 7,700 ft (estimated from nearby U. S. Coast and Geodetic Survey level lines). Prior to Oct. 12, 1964, at site 200 ft downstream; prior to Apr. 19, 1943, at datum 1.00 ft higher; and at present datum thereafter.

Average discharge.--29 years (1930-31, 1933-36, 1937-38, 1943-67), 10.9 cfs (7,890 acre-ft per year).

Extremes.--Maximum discharge during year, 16 cfs Mar. 31 (gage height, 2.09 ft); minimum daily, 0.40 cfs Aug. 9, Sept. 28.

1929-67: Maximum daily discharge, 1,340 cfs May 11, 1942; no flow Sept. 13, 14, 16, 17, 1957.

Outstanding floods occurred in 1886 and October 1911. The flood in 1886 probably exceeded that in October 1911 and the flood in October 1911 probably exceeded all subsequent floods, from information by local residents.

Remarks.--Records good except those for period of no gage-height record, which are poor. Diversions above station for irrigation. Flow regulated by Smith Reservoir (capacity, 5,335 acre-ft).

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.1	1.7	1.9	1.9		2.2	1.5	7.3	9.6	3.4	1.9	1.5
2	2.1	1.7	1.9			2.2	1.5	7.3	9.1	1.9	2.5	1.7
3	2.1	1.7	1.9			2.2	1.5	7.3	9.1	1.9	2.5	2.1
4	2.1	1.7	1.9			2.2	1.5	7.3	9.1	1.9	2.3	2.1
5	2.1	1.7	1.9			2.1	1.5	7.3	9.1	1.9	1.7	1.9
6	2.1	1.9	1.9		2.0	2.1	1.1	7.3	9.1	1.7	1.3	1.9
7	2.1	1.9	2.1			2.1	1.5	7.3	8.6	1.7	1.3	2.1
8	2.1	1.9	2.1			2.1	1.5	7.3	8.6	1.7	1.1	2.1
9	1.9	1.9	2.1			2.1	1.5	7.3	9.1	1.7	.40	2.1
10	1.9	1.9	2.1			2.1	1.5	7.3	9.6	1.5	1.5	2.3
11	1.9	1.9	2.1		2.2	2.1	1.5	7.3	11	1.5	2.8	2.3
12	1.9	2.1	2.1			2.1	1.5	7.3	11	1.5	2.8	2.5
13	1.9	2.1	2.1			2.1	1.5	7.3	11	1.5	2.8	2.5
14	1.9	2.1	2.1			2.1	1.5	7.3	10	1.5	2.8	2.5
15	1.9	2.1	2.1			1.9	1.5	7.3	10	1.5	2.8	2.3
16	1.9	1.9	2.1	2.1		1.9	1.5	6.4	10	1.5	3.1	2.3
17	1.9	1.9	2.1			1.9	1.5	3.4	10	1.5	2.8	2.5
18	1.9	1.9	2.1			1.9	1.5	2.8	10	1.5	2.8	2.5
19	1.9	1.9	2.1			1.9	10	2.8	10	1.5	2.8	2.5
20	1.9	1.9	2.1			1.9	7.8	2.8	10	1.9	2.8	2.5
21	1.9	1.9	2.1		2.2	1.9	7.8	2.5	11	1.9	2.8	2.5
22	1.9	1.9	2.1			1.9	7.3	2.5	11	1.9	2.8	2.5
23	1.9	1.9	2.1			1.9	7.3	2.5	11	1.9	2.8	2.1
24	1.9	1.9	2.1			1.9	7.3	2.5	11	1.7	2.8	1.7
25	1.9	1.9	2.1			5.2	6.8	2.5	11	1.7	2.8	1.7
26	1.9	1.9	2.1			7.8	6.8	4.0	8.6	1.7	1.7	1.5
27	1.7	1.9	2.1			7.8	6.8	6.4	4.3	1.7	1.3	.90
28	1.7	1.9	2.1			11	6.8	6.4	4.3	1.7	1.5	.40
29	1.7	1.9	2.1			12	6.8	6.4	4.3	1.7	1.3	.50
30	1.7	1.9	2.1			14	6.8	6.4	4.3	1.7	1.5	.50
31	1.7	- - - -	2.1	- - - -	- - - -	15	- - - -	7.8	- - - -	1.7	1.5	- - - -
Total	59.5	56.8	63.9	63.5	57.2	121.6	354.3	177.6	274.8	54.0	67.60	58.50
Mean	1.92	1.89	2.06	2.05	2.04	3.92	11.8	5.73	9.16	1.74	2.18	1.95
Max	2.1	2.1	2.1	-	-	15	15	7.8	11	3.4	3.1	2.5
Min	1.7	1.7	1.9	-	-	1.9	6.8	2.5	4.3	1.5	0.40	0.40
Ac-ft	118	113	127	126	113	241	703	352	545	107	134	116

Cal yr 1966: Total 2,156.6 Mean 5.91 Max 20 Min 1.7 Ac-ft 4,280
Wtr yr 1967: Total 1,409.3 Mean 3.86 Max 15 Min 0.40 Ac-ft 2,800

Note.--No gage-height record Dec. 28 to Mar. 12.

8-2445. Platoro Reservoir at Platoro, Colo.

Location.--Lat 37°21'00", long 106°32'35", in NW¼SW¼ sec.22, T.36 N., R.4 E., on right bank in valvehouse, 400 ft downstream from Platoro Dam on Conejos River, half a mile west of Platoro, 3½ miles downstream from Adams Fork, and 7 miles southwest of Jasper.

Drainage area.--40 sq mi, approximately.

Records available.--November 1951 to September 1967.

Gage.--Mercury manometer. Datum of gage is 9,911.5 ft above mean sea level (Bureau of Reclamation bench mark). Gage readings have been reduced to elevations above mean sea level. Prior to June 9, 1955, mercury manometer at present site and datum. June 9, 1955, to Sept. 30, 1959, water-stage recorder in gate chamber at dam for elevations above 9,921.0 ft at same datum.

Extremes.--Maximum contents observed during year, 20,500 acre-ft Oct. 1-31 (elevation, 9,983.5 ft); minimum, 3,000 acre-ft Nov. 15 (elevation, 9,942.3 ft).
1951-67: Maximum contents, 61,420 acre-ft June 9, 11, 1958 (elevation, 10,035.5 ft); no contents for long periods in 1952-56.

Remarks.--Reservoir is formed by an earth- and rock-fill dam and dikes. Dam completed Dec. 9, 1951; storage began Nov. 7, 1951. Capacity of reservoir, 60,000 acre-ft between elevations 9,911.5 (sill of trashrack at outlet) and 10,034.0 ft (crest of spillway). No dead storage. Reservoir is used for irrigation and flood control. Figures given herein represent usable contents.

Cooperation.--Records furnished by Bureau of Reclamation.

Month-end elevation and contents, water year October 1966 to September 1967

Date	Elevation (feet)†	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.....	9,983.5	20,500	-
Oct. 31.....	9,982.2	19,800	-700
Nov. 30.....	-	a 3,000	-16,800
Dec. 31.....	-	a 3,000	0
Calendar year 1966.....	-	-	-14,300
Jan. 31.....	-	a 3,000	0
Feb. 28.....	-	a 3,000	0
Mar. 31.....	-	a 3,000	0
Apr. 30.....	9,945.0	3,700	+700
May 31.....	9,946.0	4,000	+300
June 30.....	9,946.5	4,200	+200
July 31.....	9,946.5	4,200	0
Aug. 31.....	9,946.5	4,200	0
Sept. 30.....	9,946.5	4,200	0
Water year 1967.....	-	-	-16,300

† Elevation at 0800 on first day of following month.

a No elevation record; contents estimated.

8-2450. Conejos River below Platoro Reservoir, Colo.

Location.--Lat 37°21'20", long 106°32'35", in NW¼NW¼ sec.22, T.36 N., R.4 E., on left bank 1,500 ft downstream from valve house for Platoro Reservoir and half a mile northwest of Platoro.

Drainage area.--40 sq mi, approximately.

Records available.--May 1952 to September 1967.

Gage.--Water-stage recorder and concrete control. Datum of gage is 9,866.60 ft above mean sea level (levels by Bureau of Reclamation).

Average discharge.--15 years, 88.2 cfs (63,850 acre-ft per year).

Extremes.--Maximum discharge during year, 775 cfs Oct. 20 (gage height, 3.53 ft); minimum not determined.

1952-67: Maximum discharge, 1,160 cfs Nov. 1, 1957; maximum gage height, 4.29 ft June 15, 1958; no flow Oct. 16-20, 1955.

Maximum stage known since at least 1854 occurred Oct. 5, 1911, from information by local residents.

Remarks.--Records good except those for period of no gage-height record, which are poor. No diversion above station. Flow completely regulated by Platoro Reservoir (see preceding page).

Cooperation.--Five discharge measurements furnished by Bureau of Reclamation.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	16	588						94	257	164	136	69
2	16	597						92	209	173	123	69
3	16	602						74	263	173	82	68
4	16	597						68	459	173	65	61
5	16	597						66	510	158	74	55
6	16	592						50	624	136	147	37
7	16	588						45	628	128	170	34
8	16	579					8.5	59	562	106	121	34
9	16	574						237	474	131	121	69
10	19	584						375	498	144	131	96
11	21	597						350	354	144	218	81
12	18	602						269	354	118	248	62
13	23	592						239	319	80	131	45
14	23	592						200	278	74	144	34
15	23	555						182	281	74	161	34
16	23		8.5	8.5	8.5	8.5		185	281	74	144	34
17	23	8.6						296	281	114	109	35
18	23							382	281	221	84	44
19	23							446	434	251	78	44
20	69						8.8	422	592	209	78	44
21	24							502	514	188	78	40
22	24							584	386	179	78	34
23	24	8.5						606	462	139	66	30
24	24							610	462	106	46	21
25	24						8.8	615	364	144	43	23
26	24						11	554	275	144	34	26
27	24						14	403	257	121	31	36
28	24						34	448	284	109	48	48
29	24						80	434	227	84	66	42
30	24						98	272	164	76	68	39
31	188	-----			-----		-----	275	-----	106	69	-----
Total	860	8,963.6	263.5	263.5	238.0	263.5	452.5	9,434	11,334	4,241	3,192	1,388
Mean	27.7	299	8.5	8.5	8.5	8.5	15.1	304	378	137	103	46.3
Max	188	602	-	-	-	-	98	615	628	251	248	96
Min	16	-	-	-	-	-	-	45	164	74	31	21
Ac-ft	1,710	17,780	523	523	472	523	898	18,710	22,480	8,410	6,330	2,750

Cal yr 1966: Total 40,566.2 Mean 111 Max 820 Min 6.2 Ac-ft 80,460
Wtr yr 1967: Total 40,893.6 Mean 112 Max 628 Min - Ac-ft 81,110

Note.--No gage-height record Nov. 16 to Apr. 24.

8-2465. Conejos River near Mogote, Colo.

Location.--Lat 37°03'20", long 106°11'10", in SE¼ sec.34, T.33 N., R.7 E., on right bank 25 ft upstream from bridge on State Highway 174, 0.3 mile downstream from Fox Creek, 5.3 miles west of Mogote, and 10 miles west of Antonito.

Drainage area.--282 sq mi.

Records available.--April 1903 to October 1905, October 1911 to September 1967. Monthly discharge only for some periods, published in WSP 1312. Records for March 1900 at site 5½ miles upstream and May 1905 to September 1911 (some missing periods most years) at site 3½ miles upstream not equivalent to present site owing to inflow.

Gage.--Water-stage recorder. Datum of gage is 8,271.54 ft above mean sea level (State Highway Department bench mark). Apr. 17, 1903, to Oct. 31, 1905, staff gage 500 ft downstream at different datum. Oct. 5, 1911, to early 1915, chain gage at present site and datum.

Average discharge.--58 years, 339 cfs (245,400 acre-ft per year).

Extremes.--Maximum discharge during year, 1,930 cfs May 25 (gage height, 4.18 ft); minimum daily, 38 cfs Jan. 8.

1903-67: Maximum discharge, 9,000 cfs Oct. 5, 1911 (gage height, 8.50 ft, from floodmarks, present site and datum), from rating curve extended above 3,100 cfs; minimum daily determined, 10 cfs July 18, 1904.

Maximum stage known since at least 1854, that of Oct. 5, 1911, from information by local residents.

Remarks.--Records good except those for winter period, which are fair. Diversions for irrigation of about 500 acres of hay meadows above station. Some regulation by Platoro Reservoir (see elsewhere in this report).

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	48	382	63	43	56	69	113	338	806	460	370	329
2	48	585	63	44	53	71	113	312	725	442	360	320
3	59	610	65	45	52	74	130	284	855	432	342	284
4	67	615	65	46	50	74	163	256	1,130	419	272	256
5	61	615	67	44	47	65	206	284	1,320	388	338	221
6	59	620	136	41	45	60	170	284	1,540	352	324	202
7	59	620	198	40	43	67	163	320	1,540	338	473	180
8	61	635	124	38	41	71	188	455	1,410	352	396	188
9	59	615	82	39	40	69	191	680	1,210	308	473	236
10	58	630	58	41	42	69	180	1,030	1,240	308	510	260
11	59	640	56	42	43	75	177	965	998	316	850	244
12	69	655	65	43	45	71	188	899	921	338	760	217
13	67	655	75	45	46	82	159	855	855	264	640	184
14	69	645	78	46	48	79	146	750	844	236	650	156
15	69	650	78	47	45	79	153	660	877	236	655	146
16	69	374	80	46	43	84	150	640	800	225	575	136
17	75	110	80	43	44	107	146	855	780	396	468	133
18	77	84	82	41	45	133	170	1,070	855	428	388	136
19	71	75	84	44	46	143	198	1,300	1,140	442	352	150
20	71	73	85	46	44	116	184	1,310	1,370	442	347	159
21	96	71	78	47	42	113	184	1,380	1,370	406	312	143
22	67	69	72	50	45	113	177	1,480	1,040	406	316	130
23	63	67	66	52	48	133	177	1,710	1,070	342	288	118
24	61	69	62	51	51	146	177	1,760	1,020	329	240	113
25	61	69	56	50	53	150	170	1,780	965	342	202	116
26	61	65	51	49	56	133	153	1,690	750	388	198	136
27	61	53	47	47	52	127	188	1,390	700	515	202	133
28	61	56	43	49	58	133	248	1,320	675	410	188	136
29	59	69	40	51	- - - -	150	320	1,310	630	324	202	136
30	58	65	41	52	- - - -	127	406	987	515	280	256	124
31	59	- - - -	42	54	- - - -	110	- - - -	899	- - - -	360	428	- - - -
Total	1,982	10,541	2,282	1,416	1,323	3,093	5,488	29,253	29,951	11,224	12,375	5,422
Mean	63.9	351	73.6	45.7	47.2	99.8	183	944	998	362	399	181
Max	96	655	198	54	58	150	406	1,780	1,540	515	850	329
Min	48	53	40	38	40	60	113	256	515	225	188	113
Ac-ft	3,930	20,910	4,530	2,810	2,620	6,130	10,890	58,020	59,410	22,260	24,550	10,750
Cal yr 1966: Total	111,700		Mean 306	Max 1,950	Min 40	Ac-ft 221,600						
Wtr yr 1967: Total	114,350		Mean 313	Max 1,780	Min 38	Ac-ft 226,800						

8-2475. San Antonio River at Ortiz, Colo.

Location.--Lat 37°00', long 106°02', in New Mexico, in NE¼ sec.25, T.32 N., R.8 E., on left bank a quarter of a mile south of New Mexico-Colorado State line, half a mile south of Ortiz, and half a mile upstream from Los Pinos River.

Drainage area.--110 sq mi, approximately.

Records available.--April 1919 to October 1920, October 1924 to September 1967 (no winter records prior to 1941). Monthly discharge only for some periods, published in WSP 1312.

Gage.--Water-stage recorder. Altitude of gage is 8,000 ft (from topographic map). Prior to Apr. 7, 1926, staff gage at various locations near present site at different datums. Apr. 7, 1926, to June 24, 1954, water-stage recorder at site 200 ft downstream at present datum.

Average discharge.--27 years (1940-67), 26.0 cfs (18,820 acre-ft per year).

Extremes.--Maximum discharge during year, 334 cfs July 11 (gage height, 2.76 ft); no flow July 1-10, 14-16. 1919-20, 1924-67: Maximum discharge, 1,750 cfs Apr. 15, 1937 (gage height, 5.38 ft), from rating curve extended above 1,100 cfs; no flow at times in most years. Maximum stage known since at least 1854 occurred Oct. 5, 1911, from information by local residents.

Remarks.--Records good except those for winter period, which are poor. A few small diversions above station for irrigation.

Note.--The figures of peak discharge for water year 1966, which were inadvertently omitted from last year's report, are given herewith:

Peak discharge (base, 330 cfs).--1966: Mar. 19 (2030) 370 cfs (2.97 ft); Aug. 5 (2130) 448 cfs (3.13 ft).

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.60	2.3	3.7			9.0	29	66	7.5	0	1.5	11
2	.50	2.3	6.0			10	31	56	6.0	0	1.5	6.0
3	.50	2.0	7.1			11	39	48	7.5	0	4.0	4.8
4	.60	2.3	3.7			11	47	43	10	0	1.5	4.0
5	1.8	2.6	2.9			10	55	53	98	0	2.8	3.5
6	1.8	1.8	11			9.0	42	61	11	0	3.5	3.2
7	1.8	2.3	78			13	41	65	13	0	2.0	3.5
8	1.5	3.1	33			20	52	72	7.5	0	2.0	3.8
9	1.2	4.1	26			19	46	76	50	0	6.2	4.8
10	1.2	1.8	6.7			17	37	66	4.0	0	4.5	5.2
11	.70	1.8				25	39	55	3.2	14	18	3.8
12	.60	4.4				30	43	47	3.2	.50	15	3.5
13	.70	4.1				35	28	41	2.8	.20	6.2	3.0
14	1.2	3.7				40	35	36	1.8	0	5.5	2.2
15	1.2	4.1		0.70	4.0	42	39	33	1.5	0	5.8	2.0
16	.70	4.1				42	38	30	1.8	0	4.0	1.8
17	1.8	4.1				61	35	27	3.0	.10	3.2	1.5
18	4.1	3.1				74	48	24	3.5	3.8	2.2	1.5
19	4.1	2.6				88	62	22	4.8	3.8	1.8	1.8
20	3.7	2.6				56	60	22	5.5	2.2	1.4	2.0
21	4.1	3.4	3.5			42	53	19	5.2	1.3	1.8	2.2
22	3.1	3.7				43	47	19	3.8	1.0	3.0	1.8
23	2.6	3.4				51	48	17	2.2	.90	2.5	1.4
24	2.9	2.3				59	48	11	1.8	.70	1.8	1.4
25	2.6	3.7				51	52	8.8	1.3	1.0	1.4	1.4
26	2.9	3.1				36	45	8.8	1.2	.90	1.2	2.0
27	2.9	2.0				41	62	11	1.1	.60	1.3	3.5
28	2.6	1.2				44	90	9.3	.70	.40	4.8	3.2
29	2.6	2.0			-	45	98	11	.60	.30	4.8	2.2
30	2.9	5.0			-	29	96	9.3	.40	.20	4.0	1.8
31	2.6	- - - -			- - - -	24	- - - -	7.5	- - - -	.30	7.5	- - - -
Total	62.10	89.0	251.6	21.7	112.0	1,087.0	1,485	1,074.7	130.70	32.20	126.7	938
Mean	2.00	2.97	8.12	0.70	4.0	35.1	49.5	34.7	4.36	1.04	4.09	3.13
Max	4.1	5.0	78	-	-	88	98	76	13	14	18	11
Min	0.50	1.2	-	-	-	9.0	29	7.5	0.40	0	1.2	1.4
Ac-ft	123	177	499	43	222	2,160	2,950	2,130	259	64	251	186

Cal yr 1966: Total 8,302.4 Mean 22.7 Max 210 Min 0 Ac-ft 16,470

Wtr yr 1967: Total 4,566.50 Mean 12.5 Max 98 Min 0 Ac-ft 9,060

Peak discharge (base, 330 cfs).--July 11 (1815) 334 cfs (2.76 ft).

Note.--No gage-height record Dec. 24 to Mar. 11.

8-2480. Los Pinos River near Ortiz, Colo.

Location.--Lat 36°59', long 106°05', in NE¼ sec.34, T.32 N., R.8 E., in New Mexico, on left bank 1 mile south of New Mexico-Colorado State line, 2 miles southwest of Ortiz, and 2½ miles upstream from mouth.

Drainage area.--167 sq mi.

Records available.--January 1915 to December 1920, October 1924 to September 1967. Monthly discharge only for some periods, published in WSP 1312.

Gage.--Water-stage recorder. Altitude of gage is 8,100 ft (from topographic map). Prior to Apr. 15, 1955, at site 350 ft upstream at datum 2.52 ft higher.

Average discharge.--48 years, 123 cfs (89,050 acre-ft per year).

Extremes.--Maximum discharge during year, 755 cfs May 10 (gage height, 4.49 ft); minimum daily, 9.0 cfs Nov. 9.

1915-20, 1924-67: Maximum discharge, 3,160 cfs May 12, 1941 (gage height, 5.77 ft, site and datum then in use), from rating curve extended above 1,600 cfs; minimum observed, 4.0 cfs Dec. 17, 1945 (discharge measurement), but may have been less during periods of no gage-height record.

Maximum stage known since at least 1854 occurred Oct. 5, 1911, from information by local residents.

Remarks.--Records good except those for winter period, which are poor. Diversions above station for irrigation.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	13	13	18			17	49	225	258	76	45	73
2	13	11	19			18	57	188	245	69	36	58
3	17	12	20			20	75	169	320	62	39	57
4	17	14	17			20	96	167	360	63	35	46
5	15	11	14			19	118	230	360	56	68	41
6	15	12	30			18	102	248	374	50	46	39
7	14	15	79			25	104	329	338	48	82	37
8	15	17	39			33	125	472	290	56	54	39
9	15	10	26			32	123	560	258	47	70	48
10	14	9.0	18			31	120	556	238	41	127	47
11	14	10				36	125	484	212	48	218	41
12	15	18				34	143	444	195	46	149	37
13	14	15				40	109	410	177	45	121	33
14	14	15				39	104	344	208	37	155	30
15	12	17		15	17	39	109	287	218	41	147	29
16	14	17				39	111	290	181	41	125	28
17	17	15				42	107	335	179	84	101	28
18	18	14				45	145	385	205	85	90	28
19	16	14				48	183	410	245	63	82	28
20	17	16				41	179	385	248	58	93	32
21	15	16	17			40	173	402	210	56	75	28
22	14	15				42	173	392	179	52	69	26
23	14	17				53	177	428	165	52	62	26
24	13	17				65	175	432	145	46	54	25
25	15	18				63	175	436	131	44	49	27
26	14	17				56	155	432	120	52	46	35
27	14	12				61	232	396	105	65	53	34
28	14	18				70	311	428	97	52	48	30
29	14	23			-	72	332	368	88	40	49	27
30	14	18			- - - -	54	320	311	84	35	47	26
31	14	- - - -			- - - -	46	- - - -	287	- - - -	52	96	- - - -
Total	454	446.0	637	465	476	1,258	4,507	11,230	6,433	1,662	2,531	1,083
Mean	14.6	14.9	20.5	15	17	40.6	150	362	214	53.6	81.6	36.1
Max	18	23	79	-	-	72	332	560	374	85	218	73
Min	12	9.0	-	-	-	17	49	167	84	35	35	25
Ac-ft	900	885	1,260	922	944	2,500	8,940	22,270	12,760	3,300	5,020	2,150

Cal. yr 1966: Total 35,238 Mean 96.5 Max 780 Min 9.0 Ac-ft 69,890

Wtr yr 1967: Total 31,182 Mean 85.4 Max 560 Min 9.0 Ac-ft 61,850

Peak discharge (base, 900 cfs)--No peak above base.

Note.--No gage-height record Dec. 10 to Mar. 10.

8-2485. San Antonio River at mouth, near Manassa, Colo.

Location.--Lat 37°11', long 105°53', in sec.21, T.34 N., R.10 E., on right bank a quarter of a mile downstream from bridge on State Highway 142, 1 mile upstream from mouth, and 3½ miles east of Manassa.

Drainage area.--348 sq mi.

Records available.--April 1923 to September 1967. Monthly discharge only for some periods, published in WSP 1312.

Gage.--Water-stage recorder. Altitude of gage is 7,680 ft (estimated from nearby U. S. Coast and Geodetic Survey level line). Prior to Apr. 23, 1936, at former bridge site 200 ft upstream at same datum.

Average discharge.--44 years, 81.6 cfs (59,080 acre-ft per year).

Extremes.--Maximum discharge during year, 236 cfs May 9 (gage height, 2.72 ft); no flow Oct. 1-31.

1923-67: Maximum discharge, 2,620 cfs May 14, 1941, from rating curve extended above 2,200 cfs; maximum gage height, 6.42 ft May 6, 1952; no flow at times in most years.

Maximum stage known since at least 1854 occurred Oct. 5, 1911, from information by local residents.

Remarks.--Records good except those for period of no gage-height record, which are poor. Natural flow of stream affected by diversions to Cave Lake Reservoir (capacity, 9,700 acre-ft) and diversions for irrigation above station.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	0.20	6.6				7.9	71	116	12	18	2.9
2	0	.90	7.1				8.3	76	130	11	18	12
3	0	1.0	5.8				9.2	64	150	8.7	26	8.7
4	0	1.1	5.5				11	55	179	7.1	25	7.1
5	0	1.2	5.8				14	61	205	7.9	19	6.2
6	0	1.2	5.8				18	76	193	7.1	17	5.5
7	0	1.2	30			17	18	98	185	6.6	17	5.2
8	0	1.4	42				26	148	157	5.8	21	5.8
9	0	1.6	21				26	179	120	4.4	28	5.5
10	0	2.7	13				23	184	96	3.6	98	4.1
11	0	2.4	11				37	144	85	4.4	105	3.3
12	0	2.2					37	126	70	5.2	115	3.0
13	0	2.3					47	119	63	4.7	93	2.7
14	0	4.1					43	125	48	5.0	77	2.3
15	0	3.8				12	47	120	50	4.7	76	2.0
16	0	4.4		10	13							
17	0	4.7				6.2	43	108	50	7.1	66	1.9
18	0	4.7				10	41	116	83	15	55	1.7
19	0	4.4				15	34	137	139	39	45	1.7
20	0	4.1				24	45	167	122	36	34	1.7
						27	54	160	144	28	30	1.7
21	0	4.0				15	63	143	140	22	32	1.7
22	0	4.0	11			12	65	158	126	18	30	1.6
23	0	4.5				12	62	182	102	14	26	1.6
24	0	4.5				14	65	172	76	15	17	1.6
25	0	4.5				15	64	157	64	14	9.2	1.5
26	0	4.5				13	58	168	53	10	5.8	1.6
27	0	4.0				9.6	60	204	44	8.3	3.8	1.6
28	0	5.0				9.6	77	172	30	8.3	3.0	1.7
29	0	4.4				11	77	198	22	7.9	2.9	1.7
30	0	5.2				12	75	174	14	11	2.9	1.7
31	0					8.7		134		11	3.0	
Total	0	94.20	373.6	310	364	464.1	1,255.4	4,196	3,059	3,628	1,118.6	101.3
Mean	0	3.14	12.1	10	13	15.0	41.8	135	102	11.7	36.1	3.38
Max	0	5.2	42	-	-	27	77	204	208	39	115	12
Min	0	0.20	5.5	-	-	6.2	7.9	55	14	3.6	2.9	1.5
Ac-ft	0	187	741	615	722	921	2,490	8,320	6,070	720	2,220	201

Cal yr 1966 Total 19,566.2 Mean 53.6 Max 528 Min 0 Ac-ft 38,810
 Wtr yr 1967 Total 11,699.0 Mean 32.1 Max 208 Min 0 Ac-ft 23,200

Peak discharge (base, 500 cfs).--No peak above base.

Note.--No gage-height record Dec. 12 to Mar. 15.

8-2490. Conejos River near Lasauces, Colo.

(Formerly published as Conejos River near La Sauces)

Location (revised).--Lat 37°18'01", long 105°44'47", in SW¼SW¼ sec.2 and SE¼NE¼ sec.10 (two channels), T.35 N., R.11 E., on left bank of main channel 125 ft downstream from bridge on State Highway 158 and on left bank of secondary channel 230 ft upstream from bridge on State Highway 158, 1.0 mile upstream from mouth, 2.1 miles north of Lasauces, and 13 miles southeast of Alamosa.

Drainage area.--887 sq mi.

Records available.--March 1921 to September 1967. Monthly discharge only for some periods, published in WSP 1312. Prior to Oct. 1, 1966, published as "near La Sauces."

Gage.--Two water-stage recorders. Datum of gage on main (north) channel is 7,495.02 ft, and on secondary (south) channel is 7,496.89 ft, above mean sea level (levels by Bureau of Reclamation). Main channel: Prior to Oct. 23, 1934, at bridge 125 ft upstream at various datums; Oct. 23, 1934, to Apr. 10, 1937, at site 50 ft upstream, and Apr. 11 to Sept. 30, 1937, at present site, at datum 1.00 ft higher. South channel: Prior to Oct. 23, 1934, at bridge 230 ft downstream at datum 0.56 ft lower. Oct. 23, 1934, to May 3, 1936, at site 250 ft downstream, and May 4, 1936, to Oct. 13, 1965, at site 280 ft downstream, at datum 1.00 ft lower.

Average discharge.--46 years, 188 cfs (136,100 acre-ft per year).

Extremes.--Maximum discharge during year, 959 cfs Aug. 12; no flow Oct. 1-19.

1921-67: Maximum discharge, 3,890 cfs May 15, 1941; no flow at times in 1934, 1948, 1950-51, 1953-64, 1966.

Maximum stage known since at least 1854 occurred Oct. 5, 1911, from information by local residents.

Remarks.--Records good except those for winter period, which are poor. Diversions for irrigation of about 75,000 acres above station.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	31	78	55	92	99	51	4.5	115	2.9	60	83
2	0	236	72	56	106	114	45	4.9	72	2.6	143	77
3	0	443	68	56	109	106	42	5.1	83	2.4	159	97
4	0	504	61	58	113	113	42	5.1	162	2.4	173	79
5	0	532	61	60	102	116	37	4.9	251	2.2	140	62
6	0	531	63	54	106	110	39	4.7	324	2.0	141	51
7	0	557	101	50	113	92	36	5.1	546	2.2	132	34
8	0	563	180	49	102	84	32	7.0	501	2.4	162	24
9	0	585	116	52	106	80	27	14	378	2.7	185	23
10	0	571	96	55	102	83	24	30	253	2.7	292	23
11	0	588	67	57	93	87	22	38	224	2.7	448	27
12	0	605	66	61	92	89	25	21	127	2.6	767	27
13	0	617	62	59	89	89	23	12	59	3.3	688	24
14	0	616	62	63	89	81	30	14	26	3.9	596	23
15	0	626	61	65	89	64	33	12	20	3.7	595	22
16	0	631	59	71	86	62	31	12	20	3.5	575	22
17	0	272	54	75	86	58	26	10	20	4.3	444	21
18	0	175	52	75	87	58	20	10	45	54	297	20
19	0	137	54	75	84	68	12	12	59	69	237	19
20	12	118	52	71	86	70	12	17	221	60	184	19
21	14	109	54	71	84	68	12	18	371	50	161	17
22	14	101	54	75	83	58	13	13	407	42	111	17
23	16	98	52	76	85	58	12	16	262	37	86	14
24	16	95	54	76	111	56	12	88	199	35	64	3.9
25	16	93	60	79	97	56	5.0	153	168	33	38	3.0
26	16	93	34	89	102	54	4.9	206	115	16	33	3.2
27	16	85	48	90	109	53	4.4	340	24	20	30	2.9
28	18	75	50	83	106	50	4.3	267	6.2	35	29	2.8
29	23	70	54	74	-	49	4.9	263	3.3	33	22	11
30	29	75	56	81	- - - -	47	4.5	284	2.7	27	19	18
31	27	- - - -	56	91	- - - -	49	- - - -	173	- - - -	32	26	- - - -
Total	217	9,832	2,057	2,102	2,709	2,321	686.0	2,064.3	5,064.2	591.5	7,037	869.8
Mean	7.00	328	66.4	67.8	96.8	74.9	22.9	66.6	169	19.1	227	29.0
Max	29	631	180	91	113	116	51	340	546	69	767	97
Min	0	31	34	49	83	47	4.3	4.5	2.7	2.0	19	2.8
Ac-ft	430	19,500	4,080	4,170	5,370	4,600	1,360	4,090	10,040	1,170	13,960	1,730

Cal yr 1966: Total 48,561.0 Mean 133 Max 968 Min 0 Ac-ft 96,320
 Wtr yr 1967: Total 35,550.8 Mean 97.4 Max 767 Min 0 Ac-ft 70,510-

8-2500. Culebra Creek at San Luis, Colo.

Location.--Lat 37°11', long 105°26', in Beaubien Grant, at bridge on left bank, 1 mile south of San Luis, Costilla County, and 1 mile upstream from Rito Seco.

Drainage area.--220 sq mi.

Records available.--April 1927 to September 1967. Monthly discharge only for some periods, published in WSP 1312. Records for January 1910 to December 1911, published as Culebra River at San Luis in WSP 288 and 308, have been found to be unreliable and should not be used.

Gage.--Water-stage recorder and concrete control. Altitude of gage is 8,000 ft (from topographic map). Prior to May 23, 1931, water-stage recorder at present site at different datum.

Average discharge.--40 years, 49.2 cfs (35,620 acre-ft per year).

Extremes.--Maximum discharge during year, 141 cfs June 17 (gage height, 1.72 ft); minimum daily, 11 cfs Jan. 3, 7, 9.
1927-67: Maximum discharge, 654 cfs July 1, 1947 (gage height, 5.09 ft), from rating curve extended above 300 cfs; minimum daily, 4.6 cfs Oct. 31, 1950.

Remarks.--Records good except those for period of no gage-height record, which are fair. Diversions above station for irrigation. Flow regulated by Sanchez Reservoir on Ventero Creek (capacity, 103,000 acre-ft).

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	34	26	16	12	16	18	14	27	34	89	71	66
2	33	25	14	12	14	18	14	28	39	86	79	39
3	33	26	14	11	15	18	14	25	53	68	91	33
4	34	26	14	12	15	18	14	24	70	48	94	29
5	29	26	14	12	16	18	14	22	69	47	92	26
6	20	25	14	12	16	17	14	13	73	47	63	25
7	20	25	17	11	15	16	14	13	74	48	57	35
8	19	25	14	12	14	16	14	13	70	52	58	25
9	18	22	14	11	14	18	14	13	62	53	81	24
10	19	18	13	12	15	18	14	14	59	54	61	21
11	21	18	14	12	15	19	16	14	55	54	37	18
12	22	17	15	13	14	18	21	14	54	54	37	17
13	21	16	15	13	16	18	26	16	48	51	30	20
14	22	16	16	12	16	17	31	19	49	48	39	22
15	28	16	16	13	15	16	24	26	53	53	38	33
16	28	16	15	14	16	17	19	52	99	50	37	29
17	31	16	15	13	16	18	16	49	125	50	39	22
18	27	16	15	12	16	18	16	52	89	50	36	26
19	29	16	15	12	16	18	16	50	70	48	37	27
20	29	15	15	12	16	16	18	49	53	42	51	20
21	28	16	15	14	14	16	16	53	55	38	49	19
22	28	16	14	15	14	16	14	55	38	38	49	19
23	28	16	13	14	14	16	14	60	34	34	43	19
24	28	16	13	14	15	16	14	54	28	31	50	19
25	29	16	13	14	15	16	14	57	26	34	72	19
26	28	16	13	14	16	16	16	58	41	53	100	19
27	28	15	14	14	17	18	25	47	53	50	90	18
28	27	15	13	14	18	16	25	46	61	52	73	18
29	27	16	12	14	-	15	24	48	82	58	80	16
30	26	16	12	16	- - - -	14	25	34	93	59	89	16
31	26	- - - -	12	16	- - - -	14	- - - -	36	- - - -	71	107	- - - -
Total	820	564	439	402	429	523	530	1,081	1,809	1,610	1,930	739
Mean	26.5	18.8	14.2	13.0	15.3	16.9	17.7	34.9	60.3	51.9	62.3	24.6
Max	34	26	17	16	18	19	31	60	125	89	107	66
Min	18	15	12	11	14	14	14	13	26	31	30	16
Ac-ft	1,630	1,120	871	797	851	1,040	1,050	2,140	3,590	3,190	3,830	1,470

Cal yr 1966: Total 14,974 Mean 41.0 Max 186 Min 12 Ac-ft 29,700
 Wtr yr 1967: Total 10,876 Mean 29.8 Max 125 Min 11 Ac-ft 21,570

Note.--No gage-height record July 27 to Sept. 7.

8-2515. Rio Grande near Lobatos, Colo.

Location.--Lat 37°05', long 105°45', in sec.22, T.33 N., R.11 E., on right bank at highway bridge, 6 miles north of Colorado-New Mexico State line, 7 miles downstream from Culebra Creek, 10 miles east of Lobatos, and 14 miles east of Antonito.

Drainage area.--7,700 sq mi, approximately (includes 2,940 sq mi in closed basin in northern part of San Luis Valley, Colo.).

Records available.--June 1899 to September 1967. Monthly discharge only for some periods, published in WSP 1312. Published as "at Cenicero" 1899-1901, and as "near Cenicero" 1902-4.

Gage.--Water-stage recorder. Datum of gage is 7,427.63 ft above mean sea level, datum of 1929. Prior to Nov. 8, 1910, staff or chain gage at same site and datum.

Average discharge.--68 years, 608 cfs (440,200 acre-ft per year).

Extremes.--Maximum discharge during year, 1,110 cfs Aug. 13 (gage height, 2.78 ft); maximum gage height, 4.21 ft Dec. 21 (backwater from ice); minimum daily discharge, 25 cfs Oct. 1.
1899-1967: Maximum discharge observed, 13,200 cfs June 8, 1905 (gage height, 9.1 ft), from rating curve extended above 8,000 cfs; no flow at times in 1950-51, 1956.
Maximum stage known, probably since at least 1828, occurred June 8, 1905.

Remarks.--Records good except those for winter period, which are fair. Natural flow of stream affected by transmountain diversions, storage reservoirs, ground-water withdrawals, diversions for irrigation, and return flow from irrigation areas. Records of chemical analyses and water temperatures for the water year 1967 are published in Part 2 of this report as "above Culebra Creek, near Lobatos."

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	25	115	345	190	280	430	120	48	270	120	122	154
2	28	133	365	195	280	460	115	48	242	105	260	202
3	32	450	375	200	270	490	108	44	250	98	242	209
4	31	643	370	200	285	490	102	48	302	90	254	212
5	32	720	350	220	300	400	102	44	370	78	242	202
6	38	768	370	215	280	315	90	41	544	71	226	192
7	40	792	370	215	250	370	95	38	728	67	223	174
8	38	824	460	215	300	345	95	37	840	65	226	145
9	40	848	450	210	290	365	76	44	736	62	262	139
10	55	848	335	210	290	380	71	65	594	58	335	133
11	73	864	242	205	290	375	62	98	502	58	514	133
12	71	872	254	200	280	306	55	105	440	65	808	136
13	69	880	262	205	280	282	58	73	325	60	1,060	125
14	60	889	274	210	285	262	56	70	242	58	934	115
15	56	898	325	215	285	226	73	65	209	62	916	112
16	58	925	278	220	290	209	76	65	202	67	907	108
17	78	760	290	230	300	206	69	60	198	76	808	95
18	95	472	295	235	300	195	73	70	209	102	594	90
19	102	425	300	235	300	198	76	65	246	154	455	90
20	115	400	305	235	300	188	65	65	278	238	385	100
21	122	390	310	240	305	212	71	60	490	270	330	95
22	120	410	300	240	305	206	71	65	664	230	278	90
23	115	380	280	245	305	195	67	56	562	184	226	88
24	125	390	260	240	320	188	65	69	400	160	212	82
25	130	390	250	250	320	184	58	184	310	167	170	76
26	128	385	230	265	330	167	48	230	286	160	148	69
27	118	375	210	270	350	164	44	350	230	118	148	65
28	105	350	200	265	390	157	44	435	174	112	142	69
29	128	340	190	260	-	142	44	370	145	142	130	73
30	125	325	180	270	- - - -	136	44	400	133	120	122	76
31	120	- - - -	185	275	- - - -	120	- - - -	360	- - - -	122	120	- - - -
Total	2,472	17,261	9,210	7,080	8,360	8,363	2,193	3,772	11,121	3,539	11,799	3,649
Mean	79.7	575	297	228	299	270	73.1	122	371	114	381	122
Max	130	925	460	275	390	490	120	435	840	270	1,060	212
Min	25	115	180	190	270	120	44	37	133	58	120	65
Ac-ft	4,900	34,240	18,270	14,040	16,580	16,590	4,350	7,480	22,060	7,020	23,400	7,240

Cal yr 1966: Total 128,749 Mean 353 Max 1,280 Min 25 Ac-ft 255,400

Wtr yr 1967: Total 88,819 Mean 243 Max 1,060 Min 25 Ac-ft 176,200

8-2520. Rio Grande at Colorado-New Mexico State line

Location.--Lat 37°00', long 105°43', in SE¼ sec.36, T.1 N., R.75 W., on left bank a quarter of a mile upstream from Colorado-New Mexico State line, 1½ miles upstream from Costilla Creek, and 5¼ miles west of Jaroso.

Records available.--October 1953 to September 1967.

Gage.--Water-stage recorder. Altitude of gage is 7,390 ft (from topographic map).

Average discharge.--14 years, 274 cfs (198,400 acre-ft per year).

Extremes.--Maximum discharge during year, 944 cfs Aug. 13 (gage height, 3.82 ft); minimum daily, 24 cfs Oct. 1.

1953-67: Maximum discharge, 4,150 cfs May 29, 1958 (gage height, 7.07 ft); no flow at times in 1956.

Flood of June 8, 1905 (daily discharge, 13,100 cfs at station near Lobatos 5.8 miles upstream) was probably the greatest since at least 1828.

Remarks.--Records good except those for winter period, which are poor. Natural flow of stream affected by transmountain diversions, storage reservoirs, ground-water withdrawals and diversions for irrigation, and return flow from irrigated areas.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	24	103	346	195	285	425	97	36	286	115	112	138
2	25	106	356	200	285	460	101	42	249	103	192	204
3	28	352	365	205	280	490	92	44	252	92	283	210
4	31	579	362	205	285	495	82	46	289	84	252	222
5	31	666	349	210	305	410	80	46	359	78	258	210
6	33	707	356	220	290	305	76	40	494	68	231	201
7	36	725	365	220	260	360	80	38	635	66	228	189
8	35	743	428	220	295	330	80	35	748	63	222	146
9	36	766	452	215	295	359	74	36	676	61	274	143
10	40	780	356	215	295	365	68	44	579	57	314	138
11	64	790	243	210	295	368	63	68	490	55	459	130
12	66	800	264	205	285	311	50	101	445	70	662	130
13	59	800	280	210	285	277	57	74	343	61	905	128
14	55	810	302	215	290	246	54	57	261	57	835	118
15	50	815	305	220	290	228	63	61	204	59	805	112
16	52	835	289	225	295	201	66	59	198	68	800	108
17	66	752	280	230	305	192	64	68	201	64	738	97
18	80	490	286	240	305	180	64	66	207	99	603	90
19	88	431	302	240	305	180	64	61	237	120	476	88
20	92	411	320	240	305	175	59	57	268	228	414	99
21	101	394	308	245	310	189	61	66	435	280	359	99
22	108	401	289	245	310	192	63	74	587	258	314	90
23	101	388	261	250	310	178	59	64	563	186	258	88
24	110	391	219	245	325	175	57	64	411	169	231	84
25	115	398	225	255	325	172	55	155	330	155	198	76
26	115	391	230	265	335	152	48	228	298	172	157	70
27	108	388	220	275	350	143	42	327	246	120	152	64
28	88	362	210	270	395	141	38	452	183	106	152	66
29	110	352	200	265	-	120	34	385	149	125	135	68
30	112	336	185	270	- - - -	103	33	398	128	122	197	70
31	108	- - - -	185	280	- - - -	99	- - - -	391	- - - -	118	130	- - - -
Total	2,167	16,262	9,138	7,205	8,495	8,021	1,924	3,683	10,751	3,479	11,346	3,676
Mean	69.9	542	295	232	303	259	64.1	119	358	112	366	123
Max	115	835	452	280	395	495	101	452	748	280	905	222
Min	24	103	185	195	260	99	33	35	128	55	112	64
Ac-ft	4,300	32,260	18,120	14,290	16,850	15,910	3,820	7,310	21,320	6,900	22,500	7,290
Cal yr 1966: Total	128,180		Mean 351	Max 1,270	Min 24	Ac-ft 254,200						
Wtr yr 1967: Total	86,147		Mean 236	Max 905	Min 24	Ac-ft 170,900						

COLORADO RIVER MAIN STEM

9-0105. Colorado River below Baker Gulch, near Grand Lake, Colo.

Location.--Lat 40°19'33", long 105°51'22", in sec.12, T.4 N., R.76 W., on left bank 500 ft downstream from Baker Gulch, 1 mile upstream from Bowen Gulch, and 5 miles northwest of town of Grand Lake.

Drainage area.--53.4 sq mi (revised).

Records available.--May 1953 to September 1967.

Gage.--Water-stage recorder. Altitude of gage is 8,750 ft (from topographic map).

Average discharge.--14 years, 57.0 cfs (41,270 acre-ft per year).

Extremes.--Maximum discharge during year, 721 cfs June 24 (gage height, 6.63 ft); minimum daily, 5.4 cfs Feb. 20.
1953-67: Maximum discharge, 976 cfs June 30, 1957 (gage height, 7.19 ft); minimum daily, 3.0 cfs Jan. 13, 1963.

Remarks.--Records good except those for winter period, which are poor. Transmountain diversion above station by Grand River ditch (see elsewhere in this report).

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	17	14	9.8	6.0	6.2	6.6	15	53	258	556	44	32
2	22	13	9.8	6.0	6.2	6.6	18	49	312	532	42	25
3	39	16	9.2	5.6	6.2	6.6	20	40	345	413	41	23
4	32	16	9.8	6.0	6.6	6.6	22	34	366	305	43	20
5	29	12	9.8	6.0	6.6	6.2	26	33	378	339	37	18
6	30	14	8.8	5.8	6.4	6.0	25	36	384	420	36	17
7	31	13	9.2	5.6	6.0	6.0	29	48	348	387	42	20
8	29	13	8.2	5.6	6.2	6.4	38	83	308	393	43	24
9	28	13	7.6	6.0	6.4	6.8	32	111	275	366	41	24
10	26	13	7.0	6.4	6.4	7.0	34	113	246	336	41	24
11	26	13	7.0	6.0	6.4	6.6	41	91	237	300	35	26
12	26	13	7.0	6.0	6.4	6.6	48	83	210	250	34	55
13	25	12	7.0	6.0	6.0	6.6	38	75	214	232	32	36
14	23	12	7.2	6.0	6.4	6.6	40	64	219	228	33	32
15	22	12	7.6	6.0	6.4	6.6	36	59	212	217	36	28
16	24	12	7.6	6.0	6.4	7.0	35	63	208	198	31	29
17	22	12	7.6	5.6	6.4	7.6	39	78	285	210	28	33
18	20	12	7.4	6.2	6.0	8.0	37	110	393	228	27	35
19	19	12	7.2	6.4	5.8	8.0	42	131	434	192	25	66
20	21	14	7.0	6.2	5.4	8.0	40	142	525	178	24	60
21	20	12	7.0	6.2	6.0	9.0	36	166	578	164	24	59
22	16	12	7.0	6.2	6.2	9.0	38	221	578	156	24	56
23	19	15	7.0	6.2	6.0	9.0	29	298	623	133	22	52
24	18	12	6.6	6.2	6.0	10	28	360	640	80	19	49
25	17	16	6.6	6.2	6.0	11	25	414	595	73	18	55
26	17	10	7.0	6.2	6.2	10	25	462	574	63	19	69
27	17	12	7.0	6.2	6.6	11	33	357	570	57	20	63
28	17	13	7.0	6.2	6.6	11	50	315	570	54	24	54
29	16	12	6.0	6.2	-	12	79	302	522	50	24	48
30	16	11	6.0	6.2	- - - -	12	73	288	542	46	29	45
31	16	- - - -	6.0	6.2	- - - -	13	- - - -	260	- - - -	45	32	- - - -
Total	700	386	235.0	187.6	174.4	253.4	1,071	4,939	11,949	7,201	970	1,177
Mean	22.6	12.9	7.58	6.05	6.23	8.17	35.7	159	398	232	31.3	39.2
Max	39	16	9.8	6.4	6.6	13	79	462	640	556	44	69
Min	16	10	6.0	5.6	5.4	6.0	15	33	208	45	18	17
Ac-ft	1,390	766	466	372	346	503	2,120	9,800	23,700	14,280	1,920	2,330
Cal yr 1966: Total	13,915.6		Mean	38.1	Max	223	Min	6.0	Ac-ft	27,600		
Wtr yr 1967: Total	29,243.4		Mean	80.1	Max	640	Min	5.4	Ac-ft	26,420		

9-0110. Colorado River near Grand Lake, Colo.

Location.--Lat 40°13'08", long 105°51'25", in NE¼SW¼ sec.13, T.3 N., R.76 W., on left bank 200 ft downstream from bridge on U. S. Highway 34, 400 ft upstream from high-water line of Shadow Mountain Lake at elevation 8,367 ft, and 3 miles southwest of town of Grand Lake.

Drainage area.--102 sq mi (revised).

Records available.--July 1904 to September 1918, October 1933 to September 1967. Monthly discharge only for some periods, published in WSP 1313. Published as Grand River (North Fork) near Grand Lake 1904 and as North Fork of Grand River near Grand Lake 1905-18.

Gage.--Water-stage recorder. Altitude of gage is 8,380 ft (from topographic map). Prior to June 15, 1934, staff gage at same site and datum. June 15, 1934, to Sept. 26, 1944, water-stage recorder at site 1,100 ft downstream at different datum.

Average discharge.--48 years, 93.8 cfs (67,910 acre-ft per year).

Extremes.--Maximum discharge during year, 709 cfs June 24 (gage height, 5.82 ft); minimum daily, 10 cfs Feb. 20. 1904-18, 1933-67: Maximum discharge observed, 1,840 cfs June 15, 16, 1918 (gage height, 7.0 ft), from rating curve extended above 1,100 cfs; minimum daily, 1.7 cfs July 18, 19, 1934.

Remarks.--Records good except those for winter period, which are fair. Diversions above station for irrigation of about 200 acres of hay meadows above station and about 2,000 acres below. Transmountain diversion above station by Grand River ditch through La Poudre Pass to Cache la Poudre River basin (see elsewhere in this report).

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	21	23	15	12	12	12	24	90	325	476	63	50
2	22	19	15	12	12	12	28	75	376	460	58	41
3	52	21	15	11	12	14	35	66	416	408	56	35
4	44	21	14	12	13	14	40	56	420	260	60	30
5	39	18	15	12	13	11	46	57	440	248	55	27
6	38	19	14	12	12	11	43	63	440	311	51	25
7	39	18	15	11	12	11	49	69	416	297	58	26
8	38	18	13	11	12	12	60	118	356	346	65	29
9	36	20	13	12	12	13	68	159	304	332	55	31
10	34	18	12	14	12	13	66	171	254	266	60	32
11	33	18	12	12	12	14	74	145	236	215	50	33
12	33	18	13	12	12	12	82	130	208	179	47	68
13	33	18	14	12	11	12	70	122	210	153	44	52
14	32	18	15	12	12	14	57	104	197	145	44	43
15	28	18	15	12	12	12	60	96	197	142	51	38
16	32	18	15	12	12	13	56	98	175	120	46	37
17	31	18	15	11	12	15	69	109	222	114	39	42
18	30	18	15	12	12	16	55	149	325	147	38	45
19	28	18	14	11	12	16	75	185	468	110	37	87
20	27	18	14	12	10	16	82	203	560	94	35	86
21	27	18	14	12	11	16	69	210	660	76	34	79
22	22	18	14	12	12	15	60	272	611	64	35	70
23	23	20	14	12	12	15	58	360	618	60	34	65
24	23	17	13	12	12	16	51	420	625	32	29	60
25	23	21	13	12	12	19	50	468	566	68	28	60
26	23	18	14	12	12	18	46	515	536	91	27	79
27	23	15	14	12	12	20	64	456	505	84	27	83
28	22	14	13	12	12	20	100	408	520	75	35	69
29	21	14	12	12	-	21	136	384	480	69	34	63
30	20	15	12	12	- - - - -	20	142	353	460	64	41	58
31	21	- - - - -	12	12	- - - - -	21	- - - - -	332	- - - - -	63	46	- - - - -
Total	918	545	428	369	334	464	1,915	6,443	12,126	5,569	1,382	1,543
Mean	29.6	18.2	13.8	11.9	11.9	15.0	63.8	208	404	180	44.6	51.4
Max	52	23	15	14	13	21	142	515	660	476	65	87
Min	20	14	12	11	10	11	24	56	175	32	27	25
Ac-ft	1,820	1,080	849	732	662	920	3,800	12,780	24,050	11,050	2,740	3,060
Cal yr 1966: Total	13,818.3		Mean	37.9	Max	239	Min	2.4	Ac-ft	27,410		
Wtr yr 1967: Total	32,036		Mean	87.8	Max	660	Min	10	Ac-ft	63,540		

Location.--Lat 40°19'40", long 105°34'39", in SW¼ sec.9, T.4 N., R.73 W., on right bank at upstream end of Aspen Creek siphon, 700 ft downstream from east portal and 4½ miles southwest of Estes Park.

Gage.--Water-stage recorder and Parshall flume. Altitude of gage is 8,250 ft (from topographic map). Prior to Oct. 1, 1950, water-stage recorder and Parshall flume at different datum. Oct. 1, 1950, to Sept. 30, 1952, water-stage recorder and Cippoletti weir at different datum.

Extremes.--Maximum discharge during year, 574 cfs Dec. 7 (gage height, 4.20 ft); no flow for many days.
1946-67: Maximum discharge, 671 cfs Jan. 23, 1962 (gage height, 4.63 ft); no flow at times in most years.

Remarks.--Records excellent. This is a transmountain diversion from Grand Lake and Shadow Mountain Lake for power and irrigation development in the South Platte River basin as part of the Colorado-Big Thompson project. Diversion point is at west portal near town of Grand Lake, 13.35 miles west of east portal.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	390	508	531	314	524	557	557	544	84	0	348	337
2	387	507	555	406	557	555	553	555	254	0	295	368
3	439	457	534	498	544	557	512	557	125	0	285	312
4	506	509	557	512	471	553	511	553	1.2	0	351	268
5	504	436	557	512	383	412	553	555	0	0	381	350
6	506	410	557	466	519	559	433	437	0	0	345	353
7	504	487	543	441	514	561	427	308	0	0	391	358
8	489	492	518	406	512	561	366	500	0	129	417	354
9	441	518	529	509	527	559	188	555	0	0	470	304
10	506	555	525	441	516	559	61	557	0	147	471	230
11	510	512	529	389	449	561	192	553	0	6.2	450	352
12	514	497	553	438	406	557	64	553	0	0	397	311
13	514	513	506	411	502	557	70	550	0	0	437	181
14	512	555	504	388	437	557	9.6	527	0	0	450	196
15	492	483	450	410	489	555	0	432	4.1	0	480	198
16	340	475	458	412	510	557	0	316	12	0	509	219
17	559	460	338	429	512	499	69	317	12	0	384	150
18	559	462	354	461	410	550	2.6	337	12	0	501	238
19	559	308	557	494	410	328	2.0	340	12	157	439	206
20	559	355	548	512	535	557	261	213	12	88	447	200
21	553	547	540	564	531	557	557	138	7.0	54	524	180
22	485	472	546	350	538	555	557	245	0	52	559	180
23	410	486	557	396	561	557	557	363	0	0	548	178
24	400	375	465	484	561	557	557	293	0	205	508	145
25	559	320	349	457	559	559	559	268	0	208	440	220
26	559	404	360	513	461	519	559	223	0	206	523	315
27	559	406	559	470	561	557	559	2.0	0	181	454	177
28	544	525	559	313	557	557	557	0	0	235	561	176
29	408	363	557	305	-	557	557	163	0	209	561	179
30	408	510	557	388	- - - -	557	510	123	0	103	496	180
31	519	- - - -	496	409	- - - -	557	- - - -	240	- - - -	341	304	- - - -
Total	15,194	13,907	15,748	13,498	14,056	16,800	10,360.2	11,317.0	535.3	2,321.2	13,726	7,415
Mean	490	464	508	435	502	542	345	365	17.8	74.9	443	247
Max	559	555	559	564	561	561	559	557	254	341	561	368
Min	340	308	338	305	383	328	0	0	0	0	285	145
Ac-ft	30,140	27,580	31,240	26,770	27,880	33,320	20,550	22,450	1,060	4,600	27,230	14,710
Cal yr 1966: Total	136,686.4		Mean	374	Max	559	Min	0	Ac-ft	271,100		
Wtr yr 1967: Total</												

9-0145. Shadow Mountain Lake near Grand Lake, Colo.

Location.--Lat 40°12'30", long 105°50'20", in SW¼ sec.19, T.3 N., R.75 W., in gatehouse on left side of outlet gates near center of Shadow Mountain Dam on the Colorado River, 1 mile upstream from Pole Creek and 3½ miles south of town of Grand Lake.

Drainage area.--185 sq mi (revised).

Records available.--April 1947 to September 1967. Prior to October 1960, published as Shadow Mountain Reservoir near Grand Lake.

Gage.--Water-stage recorder for elevations above 8,364.0 ft and reference points along upstream face of dam for those below. Datum of gage is at mean sea level (Bureau of Reclamation bench mark). Supplementary water-stage recorder at Grand Lake outlet gates about 3 miles from dam.

Extremes.--Maximum contents during year, 17,860 acre-ft July 7 (elevation, 8,367.00 ft); minimum, 16,540 acre-ft June 6 (elevation, 8,366.28 ft).

1947-67: Maximum contents, 17,920 acre-ft May 22, 1955 (elevation, 8,367.03 ft); minimum since appreciable storage was first attained, 2,630 acre-ft May 14, 1948.

Remarks.--Figures given herein are combined figures of usable contents for Shadow Mountain Lake and Grand Lake. Shadow Mountain Lake is used for stabilization of water level in Grand Lake, from which it is separated by gates. Shadow Mountain Lake is formed by earth- and rock-fill dam and dikes. Storage began in April 1947. Capacity, 17,860 acre-ft (including usable capacity of Grand Lake above elevation, 8,365 ft) between elevations 8,347 (sill of outlet gate) and 8,367 ft (maximum water surface). Dead storage in Shadow Mountain Lake, 506 acre-ft. Dead storage in Grand Lake not determined. Capacity of Shadow Mountain Lake and Grand Lake usable for diversion through Alva B. Adams tunnel, 3,660 acre-ft between elevations 8,365 (crest of tunnel inlet) and 8,367 ft (maximum water surface). Transmountain diversion from Colorado River basin, including water pumped from Lake Granby, is effected through Grand Lake and Alva B. Adams tunnel, for power and irrigation in South Platte River basin.

Cooperation.--Records furnished by Bureau of Reclamation.

Month-end elevation and contents, water year October 1966 to September 1967

Date	Elevation (feet) †	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.....	8,366.59	17,110	-
Oct. 31.....	8,366.63	17,180	+70
Nov. 30.....	8,366.57	17,070	-110
Dec. 31.....	8,366.60	17,130	+60
Calendar year 1966.....	-	-	-10
Jan. 31.....	8,366.68	17,270	+140
Feb. 28.....	8,366.68	17,270	0
Mar. 31.....	8,366.68	17,270	0
Apr. 30.....	8,366.63	17,180	-90
May 31.....	8,366.44	16,830	-350
June 30.....	8,366.47	16,890	+60
July 31.....	8,366.54	17,020	+130
Aug. 31.....	8,366.73	17,370	+350
Sept. 30.....	8,366.62	17,160	-210
Water year 1967.....	-	-	+50

† Elevation at 2400.

ARAPAHO CREEK BASIN

9-0165. Arapaho Creek at Monarch Lake Outlet, Colo.

Location.--Lat 40°06'45", long 105°44'57", in SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.24, T.2 N., R.75 W., on left bank a quarter of a mile downstream from Monarch Lake Outlet and 10 miles east of Granby.

Drainage area.--46.9 sq mi (revised).

Records available.--October 1944 to September 1967.

Gage.--Digital water-stage recorder. Altitude of gage is 8,310 ft (from topographic map). Prior to Oct. 1, 1963, graphic water-stage recorder at same site and datum.

Average discharge.--23 years, 81.9 cfs (59,290 acre-ft per year).

Extremes.--Maximum discharge during year, 625 cfs May 23 (gage height, 3.59 ft); minimum daily, 1.3 cfs Aug. 23, 24.

1944-67: Maximum discharge, 1,300 cfs June 11, 1952 (gage height, 4.71 ft); minimum daily, 0.20 cfs Nov. 5, 1956 (spillway at Monarch Lake blocked for construction).

Remarks.--Records good. Natural flow regulated by Monarch Lake. No diversion above station.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	16	13	7.8	7.0	6.2	5.5	1.0	59	231	369	75	6.3
2	16	11	7.3	7.0	6.1	5.3	1.1	50	337	347	71	1.1
3	162	12	7.3	7.0	6.0	5.2	1.3	40	430	309	67	2.9
4	117	11	7.7	6.8	6.0	5.2	1.6	34	466	271	64	3.9
5	51	11	8.0	6.8	5.8	5.0	2.0	30	487	273	58	4.5
6	39	10	8.2	6.2	5.2	4.6	2.4	27	475	264	55	4.1
7	37	9.8	8.0	6.0	4.6	5.0	2.5	25	459	261	55	3.8
8	37	9.8	7.6	5.6	5.0	5.3	2.9	30	402	370	59	3.6
9	35	10	7.4	5.4	5.4	5.7	3.5	54	365	307	58	3.5
10	32	10	7.4	5.7	5.1	5.0	3.8	87	337	255	59	3.4
11	29	10	7.6	5.5	5.1	4.9	3.9	92	329	225	56	3.0
12	27	10	7.8	5.9	5.2	4.9	4.2	87	305	212	51	3.3
13	26	10	8.0	5.9	7.1	4.9	4.5	78	306	205	48	3.6
14	28	9.6	7.8	6.1	5.0	5.0	4.2	67	300	187	46	3.6
15	27	9.4	7.6	6.2	5.7	5.1	3.6	58	296	173	45	3.4
16	26	9.2	7.6	6.4	5.4	4.7	3.1	51	290	168	40	3.2
17	24	9.1	7.6	6.4	5.8	5.4	2.7	53	328	161	38	3.1
18	23	9.1	7.8	6.9	5.6	7.0	2.6	80	381	170	38	3.0
19	21	8.7	7.8	6.4	5.5	7.6	3.1	121	426	162	38	3.2
20	21	8.5	8.0	6.2	5.4	7.2	3.6	155	429	145	35	15.2
21	20	8.7	7.8	6.0	5.4	6.9	3.7	164	507	134	34	15.8
22	19	8.3	7.8	5.7	5.5	6.5	3.3	184	523	127	10	9.1
23	18	8.0	7.8	5.5	5.5	6.7	3.0	428	518	122	1.3	5.5
24	17	8.2	7.6	5.7	5.5	7.0	2.6	489	426	121	1.3	3.9
25	16	7.7	7.2	6.1	5.3	7.6	2.3	482	421	127	1.4	3.2
26	16	7.8	6.8	6.1	5.7	7.5	2.0	517	380	119	1.9	3.2
27	16	7.4	6.4	5.8	5.4	7.8	1.9	378	385	111	2.0	3.5
28	16	7.0	6.6	5.5	5.6	7.9	2.0	308	369	102	2.5	3.5
29	15	7.4	6.8	5.5	-	8.8	3.2	326	364	91	3.0	3.4
30	15	7.8	7.0	5.5	- - - - -	11	56	280	370	82	3.4	3.2
31	14	- - - - -	7.0	6.1	- - - - -	10	- - - - -	235	- - - - -	77	4.3	- - - - -
Total	976	279.5	233.1	188.9	155.1	196.2	872	5,069	11,642	6,047	1,121.1	1,303.3
Mean	31.5	9.32	7.52	6.09	5.54	6.33	29.1	164	388	195	36.2	43.4
Max	162	13	8.2	7.0	7.1	11	56	517	523	370	75	158
Min	14	7.0	6.4	5.4	4.6	4.6	10	25	231	77	1.3	6.3
Ac-ft	1,940	554	462	375	308	389	1,730	10,050	23,090	11,990	2,220	2,590

Cal yr 1966 : Total 19,059.4 Mean 52.2 Max 316 Min 6.4 Ac-ft 37,800
 Wtr yr 1967 : Total 28,083.2 Mean 76.9 Max 523 Min 1.3 Ac-ft 55,700

Note.--No gage-height record Dec. 6 to Jan. 10.

9-0185. Lake Granby near Granby, Colo.

Location--Lat 40°11'00", long 105°52'10", in NW¼NE¼ sec.35, T.3 N., R.76 W., in Granby pumping plant at north shore of lake, 2½ miles north of Granby Dam on Colorado River and 7½ miles northeast of Granby.

Drainage area--312 sq mi (revised).

Records available--October 1949 to September 1967. Prior to October 1955, published as Granby Reservoir near Granby.

Gage--Water-stage recorder. Datum of gage is at mean sea level (Bureau of Reclamation bench mark). Prior to Apr. 9, 1951, staff gage at Granby Dam at same datum.

Extremes--Maximum contents during year, 228,500 acre-ft July 30 (elevation, 8,242.95 ft); minimum, 50,470 acre-ft May 9 (elevation, 8,202.96 ft).

1949-67: Maximum contents, 465,900 acre-ft July 13, 1962 (elevation, 8,280.05 ft); minimum since appreciable storage was first attained, 22,940 acre-ft Apr. 21, 1956 (elevation, 8,194.37 ft).

Remarks--Lake is formed by earth-fill dam and dikes. Regulation began Sept. 13, 1949, and usable storage began June 14, 1950, while dam was under construction. Usable capacity, 465,600 acre-ft between elevations 8,186.00 (trashrack sills at outlet structures) and 8,280.00 ft (top of radial spillway gates). Dead storage, 74,190 acre-ft. Lake is used to store water for pumping to Shadow Mountain Lake and transmountain diversion through Alva B. Adams tunnel for power and irrigation in South Platte River basin. Figures given herein represent usable contents.

Cooperation--Records furnished by Bureau of Reclamation.

Month-end elevation and contents, water year October 1966 to September 1967

Date	Elevation (feet)†	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.....	8,241.19	219,400	-
Oct. 31.....	8,236.59	195,200	-24,200
Nov. 30.....	8,231.42	169,200	-26,000
Dec. 31.....	8,225.35	140,500	-28,700
Calendar year 1966.....	-	-	-131,900
Jan. 31.....	8,219.83	116,000	-24,500
Feb. 28.....	8,213.60	90,100	-25,900
Mar. 31.....	8,205.49	59,350	-30,750
Apr. 30.....	8,204.35	55,310	-4,040
May 31.....	8,213.42	89,380	+34,070
June 30.....	8,235.44	189,300	+99,920
July 31.....	8,242.86	228,500	+39,200
Aug. 31.....	8,239.31	209,400	-19,100
Sept. 30.....	8,238.13	203,200	-6,200
Water year 1967.....	-	-	-16,200

† Elevation at 2400.

9-0190. Colorado River below Lake Granby, Colo.

Location.--Lat 40°08'39", long 105°52'00", in SE¼SE¼ sec.11, T.2 N., R.76 W., on right bank 0.3 mile downstream from Granby Dam, 1 mile upstream from Walden Hollow, and 5 miles northeast of Granby.

Drainage area.--312 sq mi (revised).

Records available.--October 1950 to September 1967. Prior to October 1955, published as "below Granby Reservoir."

Gage.--Water-stage recorder and Parshall flume. Altitude of gage is 8,050 ft (from topographic map).

Extremes.--Maximum discharge during year, 103 cfs July 7 (gage height, 1.82 ft); minimum daily, 16 cfs Oct. 22-24.
1950-67: Maximum daily discharge, 1,400 cfs (estimated) July 3, 4, 1962; minimum, 5.6 cfs Sept. 23-28, 1961.

Remarks.--Records excellent. Seepage from Lake Granby, which varies from 2-8 cfs depending on elevation of Lake Granby, is not included in record. Flow completely regulated by Lake Granby (see sta. 9-0185). Several diversions for irrigation of hay meadows above station. Transmountain diversions by Eureka and Grand River ditches and Alva B. Adams tunnel (see elsewhere in this report).

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	29	17	17	19	19	19	19	47	84	96	49	27
2	29	17	17	19	19	19	19	67	84	96	39	19
3	29	17	17	19	19	19	19	67	84	96	41	19
4	29	17	17	19	19	19	19	67	84	94	41	19
5	30	17	17	19	19	19	19	67	87	95	40	19
6	32	17	17	19	19	19	19	67	91	97	40	20
7	33	17	17	19	19	19	19	67	91	100	39	21
8	33	17	17	19	19	18	19	67	91	100	39	22
9	33	17	18	19	19	18	19	67	92	100	39	20
10	33	17	18	19	19	18	19	68	92	89	39	20
11	23	17	18	19	19	18	19	68	92	84	40	20
12	17	17	18	19	19	18	17	69	89	84	40	31
13	17	17	18	19	19	18	17	71	88	81	40	38
14	17	17	18	19	19	18	17	71	88	79	41	38
15	17	17	18	19	19	18	17	70	89	79	43	38
16	17	17	19	19	19	18	17	69	89	77	43	38
17	17	17	19	19	19	19	17	70	89	84	42	38
18	17	17	19	19	19	19	18	71	89	91	42	27
19	17	17	19	19	19	19	18	70	92	91	41	27
20	17	17	19	19	19	19	18	69	95	92	41	26
21	17	17	19	19	19	19	18	69	89	94	41	25
22	16	17	19	18	19	19	18	67	84	95	41	25
23	16	17	19	18	19	19	18	71	84	95	41	25
24	16	17	19	18	19	19	18	78	85	84	41	25
25	17	17	19	18	19	19	18	75	87	75	41	24
26	17	17	19	18	19	19	18	74	94	75	41	22
27	17	17	19	18	19	19	18	74	95	77	41	22
28	17	17	19	18	19	19	18	75	91	78	44	23
29	17	17	19	18	-	19	18	79	92	78	47	21
30	17	17	19	19	- - - - -	19	18	84	95	78	43	22
31	17	- - - - -	19	19	- - - - -	19	- - - - -	84	- - - - -	74	40	- - - - -
Total	670	510	566	581	532	580	545	2,179	2,676	2,708	1,280	761
Mean	21.6	17.0	18.3	18.7	19.0	18.7	18.2	70.3	89.2	87.4	41.3	25.4
Max	33	17	19	19	19	19	19	84	95	100	49	38
Min	16	17	17	18	19	18	17	47	84	74	39	19
Ac-ft	1,330	1,010	1,120	1,150	1,060	1,150	1,080	4,320	5,310	5,370	2,540	1,510
Cal yr 1966 : Total	12,067		Mean	33.1	Max	85	Min	16	Ac-ft	23,930		
Wtr yr 1967 : Total	13,588		Mean	37.2	Max	100	Min	16	Ac-ft	26,950		

9-0195. Colorado River near Granby, Colo.

Location.--Lat 40°07'15", long 105°54'00", in SW¼NW¼ sec.22, T.2 N., R.76 W., on right bank 0.3 mile upstream from bridge on U. S. Highway 34, 1.3 miles upstream from Willow Creek, and 3.2 miles northeast of Granby.

Drainage area.--323 sq mi (revised).

Records available.--October 1907 to September 1911 (published as Grand River near Granby), October 1933 to September 1953, May 1961 to September 1967 (seasonal records only). Monthly discharge only for some periods, published in WSP 1313.

Gage.--Water-stage recorder. Altitude of gage is 7,960 ft (from topographic map). June 10, 1908, to Sept. 30, 1911, staff gage and May 12 to June 10, 1934, chain gage, at site 300 ft upstream at different datums. June 11, 1934, to Sept. 30, 1953, water-stage recorder at same site and datum.

Extremes.--Maximum discharge during season, 118 cfs July 7 (gage height, 1.30 ft); minimum daily, 18 cfs Sept. 27, 30.

1907-11, 1933-53: Maximum discharge observed, 4,100 cfs June 20, 1909 (gage height, 5.5 ft, site and datum then in use); minimum daily, 6.6 cfs Jan. 29, 1950; minimum observed prior to starting construction of Shadow Mountain Lake, 20 cfs Apr. 6, 1936 (discharge measurement).

1961-67: Maximum discharge observed for season, 1,420 cfs July 3, 1962 (gage height, 3.44 ft); minimum daily for season, 12 cfs Sept. 19, 20, 1964.

Remarks.--Records good. Flow regulated by Lake Granby since Sept. 13, 1949 (see sta. 9-0185). Several diversions for irrigation of hay meadows above station. Transmountain diversions above station by Eureka and Grand River ditches and Alva B. Adams tunnel (see elsewhere in this report).

Discharge, in cubic feet per second, May to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1								41	75	75	51	32
2								75	75	80	37	20
3								75	75	77	41	20
4								75	75	75	41	19
5								75	75	72	41	19
6								75	75	72	41	20
7								73	73	81	43	19
8								73	75	89	43	21
9								73	75	90	43	20
10								75	75	78	43	20
11								75	77	71	42	21
12								75	75	73	41	20
13								76	73	75	41	20
14								76	73	72	42	20
15								75	72	76	42	20
16								75	72	73	42	20
17								75	71	71	42	21
18								76	72	72	42	22
19								78	75	71	42	22
20								84	80	71	42	21
21								85	78	73	42	20
22								80	73	75	42	20
23								73	72	73	42	20
24								75	69	73	42	20
25								80	67	73	42	20
26								82	73	73	36	21
27								75	78	75	35	18
28								75	75	76	37	20
29								71	75	76	44	19
30					- - - - -			73	73	77	45	18
31		- - - - -			- - - - -		- - - - -	76	- - - - -	73	42	- - - - -
Total								2,320	2,221	2,331	1,291	613
Mean								74.8	74.0	75.2	41.6	20.4
Max								85	80	90	51	32
Min								41	67	71	35	18
Ac-ft								4,600	4,410	4,620	2,560	1,220

Cal yr	: Total	Mean	Max	Min	Ac-ft
Wtr yr	: Total	Mean	Max	Min	Ac-ft

WILLOW CREEK BASIN

9-0207. Willow Creek Reservoir near Granby, Colo.

Location.--Lat 40°08'40", long 105°56'30", in SE¼ sec.7, T.2 N., R.76 W., in shaft house near right end of Willow Creek Dam on Willow Creek, 3½ miles upstream from mouth, and 4 miles north of Granby.

Drainage area.--134 sq mi.

Records available.--May 1953 to September 1967.

Gage.--Water-stage recorder. Datum of gage is 8,077.00 ft above mean sea level, datum of 1929 (levels by Bureau of Reclamation); gage readings have been reduced to elevations above mean sea level.

Extremes.--Maximum contents during year, 8,660 acre-ft Aug. 8 (elevation, 8,128.62 ft); minimum 5,440 acre-ft Oct. 14 (elevation, 8,115.58 ft).
1953-67: Maximum contents observed, 9,060 acre-ft Aug. 3, 1953 (elevation, 8,129.99 ft); minimum since first filling to spillway level, 2,380 acre-ft Apr. 2, 1962 (elevation, 8,097.15 ft).

Remarks.--Reservoir is formed by earth- and rock-fill dam. Storage began in March 1953 and dead storage pool filled May 3, 1953. Usable capacity, 9,060 acre-ft between elevations 8,077.00 (trashrack sill at Willow Creek Outlet) and 8,130.00 ft (crest of spillway). Dead storage, 1,490 acre-ft. Reservoir is used to store water for pumping to Lake Granby, Shadow Mountain Lake, and transmountain diversion through Alva B. Adams tunnel for power and irrigation in the South Platte River basin. It is part of the Colorado-Big Thompson project. Figures given herein represent usable contents.

Cooperation.--Records furnished by Bureau of Reclamation.

Month-end elevation and contents, water year October 1966 to September 1967

Date	Elevation (feet)†	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.....	8,121.25	6,700	-
Oct. 31.....	8,116.91	5,820	-980
Nov. 30.....	8,118.51	6,070	+350
Dec. 31.....	8,120.02	6,410	+340
Calendar year 1966.....	-	-	+390
Jan. 31.....	8,121.49	6,760	+350
Feb. 28.....	8,122.68	7,050	+290
Mar. 31.....	8,125.92	7,890	+840
Apr. 30.....	8,120.40	6,500	-1,390
May 31.....	8,128.05	8,490	+1,990
June 30.....	8,128.17	8,520	+30
July 31.....	8,126.75	8,120	-400
Aug. 31.....	8,126.12	7,950	-170
Sept. 30.....	8,127.00	8,190	+240
Water year 1967.....	-	-	+1,490

† Elevation at 2400.

9-0210. Willow Creek below Willow Creek Reservoir, Colo.

Location.--Lat 40°08'45", long 105°56'22", in SE¼ sec.7, T.2 N., R.76 W., on left bank 1,000 ft downstream from Willow Creek Dam, three-quarters of a mile upstream from Bunte Highline Canal diversion, 3 miles upstream from mouth, and 4 miles north of Granby.

Drainage area.--134 sq mi.

Records available.--August 1953 to September 1967.

Gage.--Water-stage recorder and 10-ft Parshall flume with overflow weirs. Datum of gage is 8,023.64 ft above mean sea level (Bureau of Reclamation bench mark). Supplementary water-stage recorder and Parshall flume on McQueary ditch 500 ft downstream from point of diversion at Willow Creek Dam. Datum of gage is 8,031.68 ft above mean sea level (Bureau of Reclamation bench mark).

Average discharge (combined flow).--14 years, 25.6 cfs (18,530 acre-ft per year).

Extremes (combined flow).--Maximum discharge during year, 236 cfs May 27 (1930) to May 28 (0845); minimum daily, 0.10 cfs May 2-5. 1953-67: Maximum discharge, 867 cfs June 7, 1957 (gage height, 4.84 ft); no flow Sept. 17-24, 1963, May 1, 1965.

Remarks.--Records good. Records show combined flow of creek and McQueary ditch. Flow completely regulated by Willow Creek Reservoir (see sta. 9-0207). Diversions above station for irrigation of hay meadows. McQueary ditch diverts at Willow Creek Dam for irrigation below station. Diversion above station from Willow Creek Reservoir by Willow Creek Pump Canal to Lake Granby as part of the Colorado-Big Thompson project. Prior to Oct. 1, 1962, records included priming and waste water from pump canal.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	6.4	6.8	6.6	6.8	6.8	6.8	7.6	3.0	4.3	4.4	0.30	0.20
2	6.4	6.8	6.6	6.8	6.8	6.8	7.6	.10	4.3	4.4	.30	.20
3	6.4	6.8	6.6	6.8	6.8	6.8	7.6	.10	4.3	4.4	.30	.20
4	6.7	6.8	6.6	6.8	6.8	6.8	7.6	.10	4.3	4.4	.30	.20
5	7.1	6.8	6.6	6.8	6.8	6.8	7.6	.10	4.2	4.4	.30	.20
6	7.1	6.6	6.6	6.8	6.8	6.8	7.6	.20	4.1	4.4	.30	.20
7	7.1	6.6	6.6	6.8	6.8	6.8	7.6	.30	4.1	4.4	.30	.20
8	7.1	6.6	6.6	6.8	6.8	6.8	7.6	.30	4.3	4.4	.30	.20
9	7.4	6.6	6.6	6.8	6.8	6.8	7.6	.40	4.6	4.3	.30	.20
10	7.4	6.6	6.6	6.8	6.8	6.8	7.6	.50	4.6	4.3	.30	.20
11	7.4	6.6	6.6	6.8	6.8	7.0	7.4	.50	4.6	4.3	.30	.20
12	7.1	6.6	6.6	6.8	6.8	7.0	7.4	.50	4.6	4.3	.30	.20
13	7.1	6.6	6.6	6.8	6.8	7.0	7.4	.60	4.7	4.3	.30	.30
14	7.1	6.6	6.6	6.8	6.8	7.0	7.4	.60	4.8	4.3	.30	.30
15	7.1	6.6	6.6	6.8	6.8	7.0	7.4	.70	4.8	4.3	.30	.30
16	7.1	6.6	6.6	6.8	6.8	7.0	7.2	.70	4.8	4.4	.30	.30
17	7.1	6.6	6.6	6.8	6.8	7.0	7.2	.70	4.8	4.3	.30	.30
18	7.1	6.6	6.6	6.8	6.8	7.0	7.2	.70	4.7	4.4	.30	.30
19	7.1	6.6	6.6	6.8	6.8	7.0	7.2	.80	4.7	4.4	.30	.30
20	7.1	6.6	6.6	6.8	6.8	7.0	7.2	.70	4.7	4.4	.30	.30
21	7.0	6.6	6.8	6.8	6.8	7.0	7.0	.70	4.7	4.4	.30	.30
22	7.0	6.6	6.8	6.8	6.8	7.0	7.0	.70	4.6	4.4	.30	.30
23	7.0	6.6	6.8	6.8	6.8	7.0	7.0	1.4	4.3	4.4	.30	.30
24	7.0	6.6	6.8	6.8	6.8	7.0	7.0	3.2	4.3	4.1	.30	.30
25	7.0	6.6	6.8	6.8	6.8	7.0	7.0	3.2	4.3	4.0	.30	.30
26	7.0	6.6	6.8	6.8	6.8	7.4	7.0	8.3	4.3	4.0	.30	.30
27	7.0	6.6	6.8	6.8	6.8	7.4	7.0	21.3	4.3	4.0	.30	.30
28	7.0	6.6	6.8	6.8	6.8	7.4	7.0	160	4.4	1.8	.30	.30
29	7.0	6.6	6.8	6.8	-	7.4	7.0	3.6	4.4	3.0	.30	.30
30	7.0	6.6	6.8	6.8	- - - -	7.4	7.0	3.8	4.4	3.0	.30	.30
31	7.0	- - - -	6.8	6.8	- - - -	7.4	- - - -	4.1	- - - -	1.0	.30	- - - -
Total	217.4	199.0	206.8	210.8	190.4	217.4	219.0	662.00	1,343	1,190.0	9.30	7.80
Mean	7.01	6.63	6.67	6.80	6.80	7.01	7.30	21.4	44.8	38.4	0.300	0.260
Max	7.4	6.8	6.8	6.8	6.8	7.4	7.6	213	48	44	0.30	0.30
Min	6.4	6.6	6.6	6.8	6.8	6.8	7.0	0.10	4.1	1.0	0.30	0.20
Ac-ft	431	395	410	418	378	431	434	1,310	2,660	2,360	18	15
(†)	1,580	0	0	0	0	0	5,190	17,040	14,900	3,420	1,940	1,300
Cal yr 1966: Total	4,467.5		Mean	12.2	Max	50	Min	0.2	Ac-ft	8,860		
Wtr yr 1967: Total	4,672.90		Mean	12.8	Max	213	Min	0.10	Ac-ft	9,270		

† Diversions, in acre-ft, by Willow Creek Pump Canal; furnished by Bureau of Reclamation.

Note.--No gage-height record Oct. 14 to May 10.

9-0240. Fraser River near Winter Park, Colo.

Location.--Lat 39°54'00", long 105°46'35", in NE¼ sec.4, T.2 S., R.75 W., on left bank 500 ft downstream from bridge on U. S. Highway 40, 1.1 miles northwest of Winter Park, 2 miles upstream from Vasquez Creek, 3½ miles downstream from point of diversion for Moffat water tunnel, and 4 miles southeast of Fraser.

Drainage area.--27.6 sq mi.

Records available.--September 1910 to September 1967. Monthly discharge only for some periods, published in WSP 1313. Published as "near Arrow" 1910-23 and as "near West Portal" 1924-39. Records since June 9, 1936, equivalent to earlier records if transmountain diversions are added to flow past station.

Gage.--Water-stage recorder. Datum of gage is 8,906.23 ft above mean sea level (State Highway Department bench mark). Sept. 23, 1910, to May 12, 1916, staff gage at trail bridge 1 mile upstream at different datum.

Average discharge.--57 years, 40.1 cfs (29,030 acre-ft per year) including diversions to Berthoud Pass ditch and Moffat water tunnel.

Extremes.--Maximum discharge during year, 160 cfs June 18 (gage height, 1.33 ft); minimum daily, 2.6 cfs Oct. 1, 10, 1910-66; Maximum discharge, 820 cfs June 13, 1918 (gage height, 2.9 ft); minimum daily determined, 2 cfs Mar. 30, Apr. 9, 1912, Jan. 23, 1915.

Remarks.--Records good. Transmountain diversions above station through Berthoud Pass ditch (see elsewhere in this report) and to Moffat water tunnel (see adjusted figures below).

Cooperation.--Record of flow diverted to Berthoud Pass ditch and Moffat water tunnel furnished by State engineer of Colorado.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.6	2.9	2.9	2.9	3.1	3.3	4.8	6.8	15	77	3.9	3.4
2	2.8	3.0	2.9	2.8	3.0	3.4	5.0	5.6	14	76	3.9	3.2
3	3.1	3.1	2.9	2.8	3.0	3.4	6.1	5.5	23	72	4.1	3.5
4	3.1	3.1	2.9	2.9	3.2	3.4	5.8	5.3	28	77	4.1	4.5
5	3.2	3.1	2.8	2.9	3.4	3.3	6.4	5.3	35	80	3.7	4.5
6	3.1	3.0	2.8	2.9	3.2	3.2	6.4	5.0	38	76	3.9	4.8
7	2.9	3.4	2.8	2.9	3.2	3.2	6.4	6.4	40	71	3.9	2.8
8	2.8	3.4	2.8	2.9	3.2	3.2	8.3	9.7	25	65	4.3	2.8
9	2.8	3.4	2.8	2.9	3.4	3.7	7.1	12	16	60	3.9	2.8
10	2.6	3.4	2.8	2.9	3.2	3.7	6.4	10	12	63	3.9	2.9
11	3.1	3.2	2.8	2.9	3.2	3.7	7.9	10	16	76	3.7	3.2
12	2.8	2.9	2.9	2.9	3.2	3.6	8.7	9.7	15	74	3.7	4.1
13	2.8	2.9	2.9	2.9	3.4	3.5	7.5	8.7	14	68	3.7	3.1
14	3.4	2.9	2.9	2.9	3.2	3.6	7.9	7.5	12	62	3.7	2.9
15	3.9	3.0	2.9	2.9	3.2	3.6	7.1	7.1	13	65	3.7	2.8
16	3.2	3.0	2.9	2.9	3.2	3.6	6.4	8.7	13	60	3.7	3.1
17	2.9	3.0	2.9	2.9	3.4	3.7	6.0	11	11	60	3.5	3.1
18	2.8	2.9	2.9	2.9	3.4	4.1	7.9	11	44	58	3.5	3.1
19	4.5	2.9	2.8	2.9	3.2	3.9	7.9	11	69	54	3.4	3.5
20	3.1	2.9	2.9	2.9	3.0	3.7	7.1	12	103	51	3.2	3.1
21	2.9	2.9	2.9	2.9	3.4	3.5	6.1	12	132	49	3.2	2.8
22	3.4	3.0	2.9	2.9	3.9	3.4	5.4	14	132	46	3.2	2.8
23	2.8	3.0	2.8	2.9	3.4	3.6	4.8	16	94	45	3.2	2.8
24	2.8	3.0	3.0	2.9	3.4	3.7	4.8	28	94	27	3.7	2.8
25	2.8	3.0	3.0	2.9	3.2	3.7	4.8	28	94	4.8	3.7	3.1
26	2.8	3.0	3.0	2.9	3.2	3.6	5.4	20	110	4.3	3.5	3.7
27	2.8	3.0	3.0	2.9	3.2	3.4	6.1	18	90	4.3	3.7	3.2
28	2.8	2.9	3.0	3.1	3.2	3.5	7.5	20	95	4.3	3.7	2.9
29	2.8	2.9	3.0	3.1	-	4.1	8.7	18	76	4.1	3.7	2.8
30	2.9	2.9	3.0	3.1	-	4.1	7.9	16	77	3.9	3.4	2.8
31	2.9	- - - -	3.0	3.1	- - - -	4.0	- - - -	15	- - - -	3.9	3.4	- - - -
Total	93.2	91.0	89.8	90.5	91.2	111.4	198.6	373.3	1,550	1,541.6	113.8	96.9
Mean	3.01	3.03	2.90	2.92	3.26	3.59	6.62	12.0	51.7	49.7	3.67	3.23
Max	4.5	3.4	3.0	3.1	3.9	4.1	8.7	28	132	80	4.3	4.8
Min	2.6	2.9	2.8	2.8	3.0	3.2	4.8	5.0	11	3.9	3.2	2.8
Ac-ft	185	180	178	180	181	221	394	740	3,070	3,060	226	192

Adjusted for diversions to Berthoud Pass ditch and Moffat water tunnel

Mean	15.0	12.1	9.32	7.38	7.35	9.69	17.4	52.0	146	77.7	27.4	18.6
Ac-ft	925	720	573	455	408	596	1,040	3,200	8,660	4,790	1,680	1,110

Observed

Adjusted

Cal yr 1966: Total	2,529.2	Mean	6.93	Max	18	Min	2.3	Ac-ft	5,020	Mean	26.5	Ac-ft	19,240
Wtr yr 1967: Total	4,441.3	Mean	12.2	Max	132	Min	2.6	Ac-ft	8,810	Mean	33.4	Ac-ft	24,150

9-0250, Vasquez Creek near Winter Park, Colo.

Location.--Lat 39°55'13", long 105°47'05", in NE¼NW¼ sec.33, T.1 S., R.75 W., on right bank 40 ft downstream from bridge on U. S. Highway 40, a quarter of a mile upstream from mouth, 2½ miles northwest of Winter Park, 2½ miles southeast of Fraser, and 4½ miles downstream from Moffat water tunnel diversion.

Drainage area.--27.8 sq mi.

Records available.--June to August 1907, July to October 1909, October 1933 to September 1967. Monthly discharge only for some periods, published in WSP 1313. Records for June to October 1908, published in WSP 269, have been found to be unreliable and should not be used. Published as Vasquez River at lower station, near Fraser 1907, 1909 and as "near West Portal" 1934-39. Records for May 26, 1937, to September 1959 equivalent to earlier records if diversion to Moffat water tunnel is added to flow past station.

Gage.--Water-stage recorder and concrete control. Datum of gage is 8,768.48 ft above mean sea level, unadjusted. June 1, 1907, to Oct. 31, 1909, staff gage at site three-quarters of a mile upstream at different datum.

Extremes.--Maximum discharge during year, 151 cfs June 26 (gage height, 2.63 ft); minimum daily, 0.13 cfs Oct. 1. 1933-67: Maximum discharge, 470 cfs June 10, 1952 (gage height, 3.13 ft), from rating curve extended above 340 cfs; no flow at times in 1944, 1946, 1956, 1960, 1966.

Remarks.--Records good. Transmountain diversions above station to Moffat water tunnel not known since 1959.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.13	2.0	2.6	2.1	2.1	2.3	5.2	8.4	7.5	100	2.9	2.1
2	.25	2.1	2.6	2.1	2.1	2.5	5.2	7.5	6.6	95	2.6	2.0
3	.40	2.1	2.6	2.1	2.1	2.5	5.6	6.3	5.9	89	3.1	2.0
4	.40	2.3	2.5	2.0	2.1	2.5	5.9	6.3	5.6	91	3.3	1.8
5	.40	2.3	2.4	2.1	2.1	2.3	6.3	5.9	5.2	87	2.6	2.0
6	.30	2.3	2.4	2.0	2.1	2.3	6.3	5.9	5.2	81	2.6	1.8
7	.25	2.6	2.4	2.0	2.1	2.3	6.3	6.6	4.9	77	2.9	1.8
8	.25	2.1	2.4	2.0	2.1	2.3	4.6	10	4.6	77	3.1	2.0
9	.22	2.6	2.4	1.8	2.1	2.3	4.9	14	4.3	73	2.6	2.0
10	.22	2.9	2.4	1.8	2.1	2.3	4.9	17	4.0	69	3.3	2.0
11	.19	2.8	2.4	1.8	2.1	2.3	4.9	18	4.9	66	2.5	2.1
12	.79	2.6	2.4	1.8	2.1	2.5	5.6	18	4.9	66	2.5	4.0
13	1.3	2.6	2.3	1.8	2.1	2.5	5.2	18	5.6	61	2.3	2.1
14	1.3	2.6	2.3	1.6	2.1	2.5	5.6	15	4.9	57	2.5	2.1
15	1.0	2.6	2.1	1.8	2.1	2.5	4.9	12	4.9	61	2.5	2.0
16	1.4	2.4	1.9	1.6	2.3	2.5	5.2	13	5.6	57	2.3	2.1
17	1.3	2.4	1.9	1.8	2.3	2.5	6.6	18	5.2	56	2.3	2.1
18	2.9	2.4	1.9	1.8	2.1	3.0	6.3	20	20	51	2.3	2.1
19	12	2.4	1.9	1.8	2.3	3.0	6.3	17	18	48	2.1	2.6
20	3.8	2.6	1.9	1.8	2.3	2.9	6.3	16	46	45	2.1	2.1
21	3.1	2.6	1.9	1.8	2.3	2.6	5.6	15	51	44	2.1	2.0
22	2.3	2.6	1.9	1.8	2.3	2.6	6.6	15	62	42	2.0	1.8
23	3.3	2.6	2.1	1.8	2.3	2.8	5.2	14	104	45	2.0	1.8
24	3.1	2.6	2.3	1.8	2.3	2.8	5.9	13	104	29	2.0	1.8
25	2.9	2.6	2.3	1.8	2.3	2.8	4.9	13	102	4.0	2.0	2.0
26	2.3	2.6	2.3	1.8	2.3	2.6	5.6	13	119	2.1	2.0	2.5
27	2.3	2.6	2.3	2.0	2.3	2.5	5.6	12	81	1.4	2.1	2.1
28	2.3	2.6	2.3	2.1	2.3	3.0	7.5	12	42	1.3	2.3	2.0
29	2.5	2.6	2.0	2.1	-	3.5	11	9.5	35	5.2	2.1	1.8
30	2.1	2.6	2.0	2.1	- - - - -	4.6	9.5	8.4	59	2.9	2.1	1.8
31	2.3	- - - - -	2.0	2.1	- - - - -	4.9	- - - - -	8.0	- - - - -	2.9	2.1	- - - - -
Total	57.30	74.7	69.1	58.8	61.2	84.5	179.5	385.8	932.8	1,586.8	75.2	62.4
Mean	1.85	2.49	2.23	1.90	2.19	2.73	5.98	12.4	31.1	51.2	2.43	2.08
Max	12	2.9	2.6	2.1	2.3	4.9	11	20	119	100	3.3	4.0
Min	0.13	2.0	1.9	1.6	2.1	2.3	4.6	5.9	4.0	1.3	2.0	1.8
Ac-ft	114	148	137	117	121	168	356	765	1,850	3,150	149	124

Cal yr 1966: Total 1,165.5 Mean 3.19 Max 12 Min 0 Ac-ft 2,310
Wtr yr 1967: Total 3,628.10 Mean 9.94 Max 119 Min 0.13 Ac-ft 7,200

FRASER RIVER BASIN

9-0265. St. Louis Creek near Fraser, Colo.

Location.--Lat 39°54'30", long 105°52'45", in sec.34, T.1 S., R.76 W., on left bank 300 ft downstream from West St. Louis Creek and 4 miles southwest of Fraser.

Drainage area.--32.9 sq mi (revised).

Records available.--October 1933 to September 1967. Prior to August 1934 monthly discharge only, published in WSP 1313. Records for May 1956 to September 1959, equivalent to earlier records if diversion to Moffat water tunnel is added to flow past station.

Gage.--Water-stage recorder. Datum of gage is 8,980.17 ft above mean sea level, unadjusted.

Extremes.--Maximum discharge during year, 166 cfs June 27 (gage height, 2.02 ft); minimum daily, 2.4 cfs Jan. 18-24.

1933-67: Maximum discharge, 470 cfs June 15, 1952 (gage height, 2.89 ft); maximum gage height, 3.21 ft June 10, 1952 (backwater from log on control); minimum discharge not determined, probably occurred during January or February 1961.

Remarks.--Records good except those for winter period, which are fair. Transmountain diversions above station to Moffat water tunnel not known since 1959.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	8.2	2.9	2.6	2.8	2.6	2.9	3.9	8.2	14	140	20	14
2	8.2	3.0	2.7	2.7	2.7	2.9	4.4	7.0	14	133	18	13
3	9.6	3.0	2.7	2.5	2.8	2.9	4.7	5.6	14	128	18	13
4	8.6	3.0	2.7	2.5	2.9	2.9	4.2	5.2	14	126	17	13
5	8.6	3.0	2.5	2.5	2.9	2.7	4.7	5.2	15	117	16	14
6	8.6	3.0	3.1	2.5	2.7	2.6	4.9	5.1	20	110	16	14
7	8.2	3.0	3.2	2.5	2.7	2.7	5.4	5.8	23	108	16	14
8	8.2	3.0	3.0	2.5	2.7	3.0	5.6	7.9	27	104	15	14
9	7.6	3.0	2.9	2.5	2.7	3.2	5.1	10	27	99	13	14
10	6.8	3.2	2.8	2.5	2.7	3.2	4.9	11	27	93	13	14
11	5.8	3.0	2.9	2.5	2.7	3.2	5.4	10	28	90	11	16
12	5.4	2.9	2.9	2.5	2.7	3.2	5.6	11	27	86	11	22
13	3.8	2.9	2.9	2.5	2.8	3.0	5.6	10	27	83	10	16
14	3.8	2.8	2.9	2.5	2.6	3.2	5.4	8.2	27	78	10	14
15	4.9	2.8	2.8	2.6	2.8	3.2	4.9	7.9	27	81	10	14
16	4.7	2.8	2.8	2.7	2.7	3.3	4.7	9.0	27	75	9.6	15
17	3.5	2.8	2.8	2.5	2.9	3.4	4.9	11	26	73	11	15
18	4.4	2.8	2.8	2.4	2.8	3.5	5.6	12	26	72	12	15
19	16	2.8	2.7	2.4	2.7	3.4	6.5	13	27	68	12	16
20	14	2.8	2.8	2.4	2.6	3.2	6.0	14	46	63	12	15
21	11	2.8	2.8	2.4	2.8	3.2	6.0	14	61	60	11	14
22	13	2.8	2.8	2.4	3.1	3.1	5.4	14	75	58	11	14
23	11	2.8	2.7	2.4	2.9	3.1	5.4	16	101	61	11	14
24	11	2.8	2.8	2.4	2.7	3.4	4.9	16	102	57	13	14
25	8.6	2.8	3.1	2.5	2.8	3.2	4.4	18	99	42	13	16
26	4.4	3.1	3.2	2.7	2.8	3.2	5.6	18	124	28	13	18
27	4.2	2.9	3.4	2.7	2.8	3.2	5.8	17	148	26	14	16
28	4.1	2.8	3.4	2.7	2.8	3.2	7.2	17	142	24	14	14
29	3.8	2.8	3.2	2.7	-	3.7	8.6	16	138	22	14	14
30	4.1	2.8	3.2	2.7	- - - - -	3.4	7.6	15	138	21	14	14
31	2.9	- - - - -	3.1	2.6	- - - - -	3.6	- - - - -	15	- - - - -	21	14	- - - - -
Total	227.0	86.9	90.2	78.7	77.4	97.9	163.3	353.1	1,611	2,347	412.6	443
Mean	7.32	2.90	2.91	2.54	2.76	3.16	5.44	11.4	53.7	75.7	13.3	14.8
Max	16	3.2	3.4	2.8	3.1	3.7	8.6	18	148	140	20	22
Min	2.9	2.8	2.5	2.4	2.6	2.6	3.9	5.1	14	21	9.6	13
Ac-ft	450	172	179	156	154	194	324	700	3,200	4,660	818	879

Cal yr 1966: Total 4,306.0 Mean 11.8 Max 38 Min 2.5 Ac-ft 8,540
 Wtr yr 1967: Total 5,988.1 Mean 16.4 Max 148 Min 2.4 Ac-ft 11,880

Note.--No gage-height record Jan. 8 to Mar. 31.

9-0320. Ranch Creek near Fraser, Colo.

Location.--Lat 39°57'00", long 105°45'54", in NW¼ sec.22, T.1 S., R.75 W., on right bank 450 ft downstream from Middle Fork and 2.7 miles east of Fraser.

Drainage area.--19.9 sq mi.

Records available.--August 1934 to September 1967. Records since May 15, 1949, equivalent to earlier records if diversion to Moffat water tunnel is added to flow past station.

Gage.--Water-stage recorder. Altitude of gage is 8,685 ft (from topographic map).

Average discharge.--33 years, 20.6 cfs (14,910 acre-ft per year), including diversion to Moffat water tunnel.

Extremes.--Maximum discharge during year, 148 cfs June 22 (gage height, 2.41 ft); minimum daily, 0.99 cfs Jan. 16-26.

1934-67: Maximum discharge, 402 cfs June 28, 1957 (gage height, 3.72 ft); minimum daily, 0.4 cfs Sept. 21, Oct. 6, 1960.

Remarks.--Records good. Diversion above station for irrigation of hay meadows along Fraser River. Transmountain diversion above station to Moffat water tunnel was 7,460 acre-ft during water year 1967.

Cooperation.--Records of flow diverted to Moffat water tunnel furnished by State engineer.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.7	1.6	1.2	1.2	1.0	1.2	1.8	4.5	13	66	15	2.7
2	1.7	1.4	1.2	1.2	1.0	1.2	2.1	3.7	10	79	14	2.2
3	2.1	1.4	1.1	1.2	1.0	1.2	2.1	3.6	10	72	15	2.1
4	2.0	1.6	1.1	1.2	1.0	1.2	2.4	3.2	10	66	14	2.0
5	2.0	1.4	1.1	1.2	1.0	1.2	3.2	3.6	10	59	14	2.0
6	2.0	1.2	1.1	1.1	1.0	1.1	3.1	3.6	12	53	14	2.0
7	3.1	1.2	1.2	1.1	1.0	1.2	3.4	4.3	9.0	52	14	2.0
8	2.0	1.2	1.1	1.0	1.0	1.1	4.1	6.5	7.6	51	14	2.0
9	1.8	1.2	1.1	1.0	1.0	1.1	3.6	7.6	6.8	44	13	2.1
10	1.7	1.2	1.1	1.1	1.0	1.1	3.4	8.1	6.5	39	13	2.2
11	1.7	1.2	1.1	1.1	1.1	1.2	4.1	8.4	8.7	37	12	2.2
12	1.7	1.2	1.1	1.0	1.1	1.2	4.1	8.4	8.4	36	12	3.9
13	1.7	1.2	1.1	1.0	1.1	1.2	4.6	7.6	7.0	30	11	2.6
14	2.2	1.1	1.1	1.0	1.1	1.2	3.9	6.8	5.3	28	10	2.3
15	2.0	1.1	1.0	1.0	1.1	1.2	3.1	6.0	5.6	30	11	2.3
16	2.2	1.0	1.0	.99	1.1	1.2	3.1	6.3	5.8	25	10	2.4
17	2.0	1.0	1.0	.99	1.1	1.4	3.1	7.8	5.3	25	9.6	2.6
18	2.0	1.0	1.0	.99	1.1	1.5	3.4	9.3	5.1	25	8.1	2.6
19	1.9	1.1	1.0	.99	1.1	1.5	4.5	10	8.4	22	7.8	3.4
20	1.9	1.1	1.0	.99	1.1	1.4	3.9	11	22	20	6.8	2.8
21	1.8	1.1	1.0	.99	1.1	1.3	3.6	11	28	18	6.5	2.2
22	1.8	1.1	1.0	.99	1.1	1.3	3.4	14	66	18	6.3	1.8
23	1.6	1.1	1.1	.99	1.1	1.4	3.6	15	122	20	5.8	1.7
24	1.6	1.2	1.2	.99	1.1	1.4	3.1	15	118	22	5.3	1.7
25	1.6	1.2	1.2	.99	1.1	1.4	3.6	17	112	21	4.8	1.9
26	1.6	1.2	1.3	.99	1.1	1.4	3.8	21	109	19	4.8	3.4
27	1.7	1.2	1.3	1.0	1.1	1.3	3.9	17	104	18	4.1	2.4
28	1.7	1.2	1.4	1.0	1.1	1.4	5.1	17	97	17	2.7	2.0
29	1.7	1.3	1.4	1.0	-	1.4	6.0	17	92	16	2.4	2.4
30	1.6	1.3	1.4	1.0	- - - -	1.4	6.8	16	88	16	2.4	1.9
31	1.6	- - - -	1.3	1.0	- - - -	1.7	- - - -	15	- - - -	15	2.6	- - - -
Total	57.7	36.3	35.3	32.29	29.8	40.0	109.9	305.3	1,112.5	1,079	286.0	69.8
Mean	1.86	1.21	1.14	1.04	1.06	1.29	3.66	9.85	37.1	34.8	9.23	2.33
Max	3.1	1.6	1.4	1.2	1.1	1.7	6.8	21	122	86	15	3.9
Min	1.6	1.0	1.0	0.99	1.0	1.1	1.8	3.2	5.1	15	2.4	1.7
Ac-ft	114	72	70	64	59	79	218	606	2,210	2,140	567	138
Cal yr 1966: Total	1,189.1		Mean	3.26	Max	9.6	Min	1.0	Ac-ft	2,360		
Wtr yr 1967: Total	3,193.89		Mean	8.75	Max	122	Min	0.99	Ac-ft	6,330		

COLORADO RIVER MAIN STEM

9-0345. Colorado River at Hot Sulphur Springs, Colo.

Location.--Lat 40°05'00", long 106°05'15", in NE¼ sec.2, T.1 N., R.78 W., on left bank about 1,000 ft north of U. S. Highway 40, 1 mile northeast of Hot Sulphur Springs, and 4½ miles upstream from Beaver Creek.

Drainage area.--825 sq mi.

Records available.--July 1904 to September 1967. Monthly discharge only for some periods, published in WSP 1313. Prior to 1907 and 1914-18, published as Grand River at Hot Sulphur Springs and as Grand River at Sulphur Springs 1907-13.

Gage.--Water-stage recorder. Altitude of gage is 7,670 ft (from railroad elevations). July 28, 1904, to Apr. 16, 1906, staff gage on bridge 1.7 miles downstream at different datum. Apr. 17, 1906, to Sept. 18, 1930, chain gage at bridge 1.4 miles downstream at datum 7,651.26 ft above mean sea level, unadjusted. Supplemental water-stage recorder (staff gage prior to Jan. 1, 1963) at different datum at site 1.7 miles downstream, used for winter records some years.

Extremes.--Maximum discharge during year, 876 cfs June 23, July 8; maximum gage height, 1.82 ft June 23; minimum daily discharge, 48 cfs Jan. 12.

1904-67: Maximum discharge observed, 10,300 cfs June 15, 1921 (gage height, 8.7 ft, site and datum then in use); minimum daily, 33 cfs Sept. 27, 1956.

Remarks.--Records good except those for winter period, which are fair. Flow affected by transmountain diversions, storage reservoirs, and diversions above station for irrigation of about 13,000 acres. Records of chemical analyses and water temperatures for the water year 1967 are published in Part 2 of this report.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	55	69	60	62	58	58	146	212	448	673	166	107
2	67	67	68	62	56	56	178	238	472	638	142	83
3	83	64	64	60	54	56	203	230	460	604	145	76
4	74	71	62	60	54	56	228	230	448	592	152	67
5	67	60	62	58	54	58	254	225	490	586	135	64
6	67	64	62	58	54	58	305	230	484	544	128	62
7	69	62	62	56	56	56	280	216	478	580	135	62
8	71	60	60	54	56	60	300	252	408	720	152	58
9	67	60	60	58	56	62	310	295	364	586	135	62
10	67	63	60	52	56	62	243	336	364	508	132	62
11	71	69	62	50	56	62	261	336	392	490	125	64
12	76	66	64	48	56	60	300	336	402	508	115	85
13	71	70	64	52	54	66	270	336	430	472	109	88
14	74	63	64	54	56	66	198	305	424	514	107	71
15	74	67	62	54	58	66	220	275	442	508	112	71
16	76	64	62	56	54	69	220	256	436	508	115	69
17	76	69	66	56	58	79	170	270	397	454	112	78
18	74	64	66	54	56	107	225	310	408	502	107	83
19	76	63	66	54	54	115	285	342	502	430	104	93
20	78	67	64	54	52	110	280	392	520	397	101	90
21	71	64	62	54	54	112	212	386	696	392	101	80
22	69	63	60	56	56	110	173	408	696	370	101	74
23	74	62	60	56	56	112	180	466	792	370	101	64
24	71	62	60	56	54	128	166	520	712	386	96	62
25	71	60	64	56	54	149	166	556	696	326	93	62
26	71	60	64	54	56	146	148	638	696	270	93	71
27	64	56	64	54	54	141	170	673	776	248	90	83
28	64	60	64	56	56	149	207	666	680	238	90	71
29	62	64	64	56	-	193	234	556	645	202	96	67
30	62	66	64	56	- - - -	175	266	484	586	194	109	62
31	62	- - - -	64	58	- - - -	150	- - - -	442	- - - -	189	112	- - - -
Total	2,174	1,919	1,950	1,724	1,548	2,947	6,798	11,417	15,744	13,999	3,611	2,191
Mean	70.1	64.0	62.9	55.6	55.3	95.1	227	368	525	452	116	73.0
Max	83	71	68	62	58	193	310	673	792	720	166	107
Min	55	56	60	48	52	56	146	212	364	189	90	58
Ac-ft	4,310	3,810	3,870	3,420	3,070	5,850	13,480	22,650	31,230	27,770	7,160	4,350
Cal yr 1966	Total 42,718	Mean 117	Max 402	Min 44	Ac-ft 84,730							
Wtr yr 1967	Total 66,022	Mean 181	Max 792	Min 48	Ac-ft 131,000							

Note.--No gage-height record Jan. 8-Apr. 5.

9-0349. Bobtail Creek near Jones Pass, Colo.

Note.--Records for the 1967 water year are being withheld pending further study of base data. They will be published in a subsequent annual report.

WILLIAMS FORK BASIN

9-0355. Williams Fork below Steelman Creek, Colo.

Note.--Records for the 1967 water year are being withheld pending further study of base data. They will be published in a subsequent annual report.

WILLIAMS FORK BASIN

9-0357. Williams Fork above Darling Creek, near Leal, Colo.

Location.--Lat 39°47'50", long 106°01'30", in NW 1/4 sec.16, T.3 S., R.77 W., on left bank, 0.4 mile upstream from Darling Creek and 1.4 miles southeast of Leal.

Drainage area.--35.2 sq mi.

Records available.--October 1965 to September 1967.

Gage.--Digital water-stage recorder. Altitude of gage is 8,940 ft (from topographic map).

Extremes.--Maximum discharge during year, 327 cfs June 23 (gage height, 4.52 ft); minimum daily, 3.8 cfs Mar. 5.
1965-67: Maximum discharge, that of June 23, 1967; minimum daily, that of Mar. 5, 1967.

Remarks.--Records good except those for winter period, which are fair. Transmountain diversion above station through August P. Gumlick Tunnel (see sta. 9-0360).

DISCHARGE, IN CFS, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.
1	6.6	6.1	5.6	4.7	4.1	4.1	6.3	14	97	201	21	13
2	7.0	6.1	5.8	4.7	4.1	4.1	6.8	14	153	190	19	11
3	8.6	5.8	5.8	4.7	4.1	4.1	7.4	13	210	175	21	10
4	8.2	5.8	5.4	4.7	4.1	4.1	8.0	10	228	168	20	9.9
5	8.9	5.6	5.4	4.7	4.4	3.8	8.2	10	237	155	17	9.4
6	8.6	5.3	5.4	4.7	4.4	3.9	8.2	10	243	145	17	8.9
7	8.6	5.3	5.7	4.4	4.4	4.2	8.9	11	240	138	19	9.4
8	8.2	5.3	5.4	4.3	4.1	4.3	9.7	14	240	129	22	9.4
9	7.8	5.6	5.2	4.1	4.4	4.3	9.3	17	240	122	23	9.9
10	7.0	5.8	5.2	4.1	4.4	4.4	8.9	21	222	114	22	9.4
11	7.4	5.8	5.6	4.4	4.1	4.5	9.3	19	204	108	17	9.4
12	7.4	5.8	5.6	4.4	4.1	4.5	9.3	20	165	110	16	23
13	7.4	5.6	5.4	4.4	4.1	4.5	8.2	21	91	98	15	12
14	7.8	5.6	5.4	4.4	4.1	4.5	9.5	18	88	93	15	10
15	8.2	5.8	5.2	4.4	4.1	4.5	10	16	86	100	15	9.9
16	7.4	5.8	5.2	4.4	4.4	4.8	8.7	16	108	93	15	9.9
17	7.4	5.8	5.2	4.4	4.4	5.5	9.0	21	91	91	14	9.9
18	7.0	5.6	5.2	4.4	4.4	5.8	9.7	40	106	89	13	9.9
19	6.3	5.3	4.9	4.1	4.4	5.8	11	52	222	79	13	13
20	7.0	5.3	4.9	4.1	4.1	5.2	12	38	246	72	13	12
21	7.0	5.6	4.9	4.1	4.1	5.2	10	39	255	69	13	10
22	6.3	5.3	4.9	4.1	4.4	5.2	10	52	258	66	12	9.4
23	6.3	5.3	4.9	4.1	4.4	5.6	9.3	72	264	70	12	8.9
24	6.3	5.0	4.7	4.1	4.4	6.1	8.9	97	264	64	11	9.4
25	7.0	5.0	4.7	4.1	4.4	6.1	8.6	112	252	58	11	12
26	6.3	5.0	4.7	4.1	4.4	5.8	9.3	98	240	57	12	13
27	6.1	5.0	4.7	4.1	4.1	5.8	9.7	76	231	54	10	12
28	6.1	5.4	4.7	4.1	4.1	6.0	11	81	219	49	10	9.9
29	6.1	5.8	4.4	4.1	-----	7.1	13	74	207	23	10	9.4
30	5.8	5.8	4.4	4.1	-----	6.4	14	69	210	20	13	8.9
31	6.1	-----	4.7	4.4	-----	5.8	-----	84	-----	23	15	-----
TOTAL	222.2	166.3	159.2	133.9	119.0	156.0	282.2	1,249	5,917	3,023	476	322.2
MEAN	7.17	5.54	5.14	4.32	4.25	5.03	9.41	40.3	197	97.5	15.4	10.7
MAX	8.9	6.1	5.8	4.7	4.4	7.1	14	112	264	201	23	23
MIN	5.8	5.0	4.4	4.1	4.1	3.8	6.3	10	86	20	10	8.9
AC-FT	441	330	316	266	236	309	560	2,480	11,740	6,000	944	639
CAL YR 1966: TOTAL	6,287.8											
WAT YR 1967: TOTAL	12,226.0											
MEAN	17.2											
MAX	90											
MIN	3.8											
AC-FT	12,470											
AC-FT	24,250											

Note.--No gage-height record Jan. 12 to Apr. 3.

9-0358. Darling Creek near Leal, Colo.

Location.--Lat 39°48'15", long 106°01'10", in NE¼SW¼ sec.9, T.3 S., R.77 W., on left bank, 0.6 mile upstream from mouth and 1.4 miles southeast of Leal.

Drainage area.--8.18 sq mi.

Records available.--October 1965 to September 1967.

Gage.--Digital water-stage recorder. Altitude of gage is 9,090 ft (from topographic map).

Extremes.--Maximum discharge during year, 71 cfs June 23 (gage height, 3.20 ft); minimum daily, 1.8 cfs Mar. 6.
1965-67: Maximum discharge, that of June 23, 1967; minimum daily, that of Mar. 6, 1967.

Remarks.--Records good except those for winter period, which are fair. No diversion above station.

DISCHARGE, IN CFS, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.
1	3.2	2.7	2.1	2.0	2.0	1.9	2.2	5.5	27	34	7.0	4.2
2	3.2	2.6	2.0	2.0	1.9	1.9	2.3	5.0	35	32	6.8	4.0
3	3.6	2.8	2.0	2.0	1.9	1.9	2.3	4.6	38	29	7.7	3.9
4	3.7	2.7	2.1	2.0	2.0	1.9	2.3	4.1	38	27	7.1	3.9
5	3.8	2.5	2.2	2.0	2.0	1.9	2.5	4.0	37	25	6.6	3.8
6	3.8	2.6	2.3	1.9	2.0	1.8	2.6	4.1	43	23	6.6	3.8
7	3.7	2.6	2.3	1.9	2.0	1.9	2.9	4.9	36	22	6.8	3.8
8	3.5	2.5	2.3	2.0	2.1	1.9	3.2	5.9	35	21	7.7	3.8
9	3.4	2.6	2.2	2.0	2.0	1.9	3.2	6.9	36	19	7.0	3.9
10	3.3	2.6	2.2	1.9	2.0	1.9	3.0	7.5	32	17	6.4	3.8
11	3.5	2.5	2.2	1.9	2.0	1.9	3.4	7.3	30	17	6.1	4.2
12	3.5	2.5	2.2	1.9	1.9	2.0	3.5	7.8	28	16	5.9	6.8
13	3.4	2.5	2.1	1.9	2.0	2.0	3.4	8.0	27	15	5.7	4.4
14	3.3	2.5	2.1	1.9	1.9	2.0	3.5	7.2	26	14	5.7	4.2
15	4.2	2.5	2.1	1.9	1.9	2.0	3.3	7.0	25	14	5.7	3.9
16	3.5	2.5	2.1	1.9	2.0	2.0	3.2	6.9	26	13	5.5	3.9
17	3.4	2.5	2.1	1.9	2.0	2.1	3.2	8.0	27	12	5.3	3.9
18	3.2	2.5	2.1	1.9	2.0	2.1	3.6	9.6	35	12	5.2	3.9
19	3.2	2.5	2.1	1.9	2.0	2.1	3.8	11	34	11	5.0	4.8
20	3.3	2.5	2.0	1.9	2.0	2.0	3.7	12	45	10	5.2	4.2
21	3.3	2.5	2.0	1.9	2.0	2.0	3.6	14	43	9.9	5.0	3.8
22	3.1	2.4	2.0	1.9	2.0	2.0	3.4	20	45	9.5	4.8	3.6
23	3.1	2.4	2.0	1.9	2.0	2.1	3.4	26	50	11	4.7	3.4
24	3.1	2.4	2.0	1.9	2.0	2.2	3.5	33	51	9.7	4.5	3.8
25	3.1	2.4	2.0	1.9	2.0	2.3	3.5	36	45	9.1	4.5	4.3
26	3.1	2.4	2.0	1.9	2.0	2.2	3.5	32	42	8.6	4.5	4.5
27	3.0	2.3	2.0	1.9	1.9	2.1	3.8	26	39	8.2	4.3	4.0
28	3.0	2.2	2.0	1.9	1.9	2.1	4.5	25	37	8.0	4.2	3.5
29	2.9	2.2	2.0	1.9	-----	2.2	5.3	24	35	7.7	4.2	3.4
30	2.9	2.2	1.9	1.9	-----	2.4	5.7	24	36	7.5	4.5	3.3
31	2.8	-----	2.0	2.0	-----	2.3	-----	23	-----	7.3	4.4	-----
TOTAL	103.1	74.6	64.7	59.7	55.4	63.0	101.3	420.3	1,083	479.5	174.6	120.7
MEAN	3.33	2.49	2.09	1.93	1.98	2.03	3.38	13.6	36.1	15.5	5.63	4.02
MAX	4.2	2.8	2.3	2.0	2.1	2.4	5.7	36	51	34	7.7	6.8
MIN	2.8	2.2	1.9	1.9	1.9	1.8	2.2	4.0	25	7.3	4.2	3.3
AC-FT	205	148	128	118	110	125	201	834	2,150	951	346	239

CAL YR 1966: TOTAL 2,185.0 MEAN 5.99 MAX 28 MIN 1.9 AC-FT 4,330
WAT YR 1967: TOTAL 2,799.9 MEAN 7.67 MAX 51 MIN 1.8 AC-FT 5,550

Note.--No gage-height record Dec. 24 to Apr. 4.

WILLIAMS FORK BASIN

9-0359. South Fork of Williams Fork near Leal, Colo.

Location.--Lat 39°47'45", long 106°01'50", in NE¼ sec.17, T.3 S., R.77 W., on left bank, 800 ft upstream from highway bridge, 0.6 mile upstream from mouth, and 1.2 miles southeast of Leal.

Drainage area.--27.2 sq mi.

Records available.--October 1965 to September 1967.

Gage.--Digital water-stage recorder. Altitude of gage is 8,950 ft (from topographic map).

Extremes.--Maximum discharge during year, 213 cfs June 23 (gage height, 3.25 ft); minimum daily, 2.6 cfs Mar. 6. 1965-67: Maximum discharge, that of June 23, 1967; minimum daily, that of Mar. 6, 1967.

Remarks.--Records good except those for winter period, which are poor. No diversions above station.

DISCHARGE, IN CFS, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.
1	7.0	3.6	3.8	3.2	2.8	2.8	3.5	20	92	120	18	11
2	6.8	3.2	4.0	3.2	2.8	2.8	3.6	19	150	120	17	9.3
3	8.0	3.5	4.0	3.2	2.8	2.8	3.7	13	170	115	19	8.9
4	10	3.3	3.6	3.2	2.8	2.8	3.7	10	180	110	18	8.4
5	10	3.6	3.6	3.2	3.0	2.7	3.8	9.5	190	100	20	8.2
6	11	3.7	3.6	3.2	3.0	2.6	3.8	8.9	180	98	25	8.0
7	11	3.8	3.8	3.0	3.0	2.8	4.0	9.4	170	98	26	7.6
8	10	4.0	3.7	2.9	2.8	2.9	4.6	12	180	89	28	7.7
9	10	3.8	3.5	2.8	3.0	3.0	4.6	17	150	82	24	8.5
10	9.6	3.9	3.5	2.8	3.0	3.0	4.2	21	120	77	30	8.1
11	10	4.0	3.7	3.0	2.8	3.1	4.2	21	100	74	24	8.3
12	10	4.0	3.7	3.0	2.8	3.1	4.4	23	96	79	23	21
13	10	3.8	3.6	3.0	2.8	3.1	2.9	24	92	68	22	14
14	10	3.8	3.6	3.0	2.8	3.1	4.2	18	90	64	21	15
15	12	4.0	3.5	3.0	2.8	3.1	3.4	16	88	68	20	14
16	11	4.0	3.5	3.0	3.0	3.2	2.8	16	95	61	20	13
17	10	4.0	3.5	3.0	3.0	3.4	3.1	22	100	59	19	13
18	9.9	3.8	3.5	3.0	3.0	3.5	3.4	33	130	57	18	14
19	12	3.6	3.3	2.8	3.0	3.5	4.6	49	150	50	18	17
20	10	3.6	3.3	2.8	2.8	3.2	4.4	51	170	46	17	16
21	10	3.8	3.3	2.8	2.8	3.2	4.0	61	175	42	17	14
22	9.9	3.6	3.3	2.8	3.0	3.2	3.7	91	170	33	17	13
23	9.8	3.6	3.3	2.8	3.0	3.4	3.3	118	170	35	16	13
24	9.5	3.4	3.2	2.8	3.0	3.6	3.1	91	160	35	15	13
25	9.5	3.4	3.2	2.8	3.0	3.6	3.1	97	150	30	15	15
26	9.6	3.4	3.2	2.8	3.0	3.5	3.5	97	140	25	14	17
27	9.6	3.4	3.2	2.8	2.8	3.5	3.6	82	135	23	13	16
28	9.3	3.8	3.2	2.8	2.8	3.5	4.8	82	130	21	9.5	14
29	9.3	4.0	3.0	2.8	-----	3.7	12	74	125	19	10	13
30	9.0	4.0	3.0	2.8	-----	3.6	16	69	125	18	10	13
31	6.1	-----	3.2	3.0	-----	3.5	-----	65	-----	18	12	-----
TOTAL	299.9	111.4	107.4	91.3	81.2	98.8	134.0	1,339.8	4,173	1,934	575.5	372.0
MEAN	9.67	3.71	3.46	2.95	2.90	3.19	4.47	43.2	139	62.4	18.6	12.4
MAX	12	4.0	4.0	3.2	3.0	3.7	16	118	190	120	30	21
MIN	6.1	3.2	3.0	2.8	2.8	2.6	2.8	8.9	88	18	9.5	7.6
AC-FT	595	221	213	181	161	196	266	2,660	8,280	3,640	1,140	738

CAL YR 1966: TOTAL 7,052.1
WAT YR 1967: TOTAL 9,318.3

MEAN 19.3
MEAN 25.5

MAX 112
MAX 190

MIN 3.0
MIN 2.6

AC-FT 13,990
AC-FT 18,480

Note.--No gage-height record Jan. 1 to Apr. 3, June 2 to July 6.

9-0360, Williams Fork near Leal, Colo.

Location.--Lat 39°49'55", long 106°03'20", in sec.31, T.2 S., R.77 W., on right bank at downstream side of private bridge, 100 ft downstream from Kinney Creek and 1.7 miles northwest of Leal.

Drainage area.--89.3 sq mi (revised).

Records available.--July 1933 to September 1967. Records since May 10, 1940, equivalent to earlier records if diversion to August P. Gumlick Tunnel is added to flow past station. Prior to October 1958, published as Williams River near Leal.

Gage.--Digital water-stage recorder since Oct. 1, 1963. Altitude of gage is 8,790 ft (from topographic map). Prior to Oct. 1, 1963, graphic water-stage recorder at same datum; at site 15 ft downstream prior to Aug. 16, 1953, and at present site thereafter.

Average discharge.--34 years, 101 cfs (73,120 acre-ft per year), including diversions to August P. Gumlick Tunnel.

Extremes.--Maximum discharge during year, 736 cfs June 20 (gage height, 2.51 ft); minimum daily, 13 cfs Mar. 5, 6.
1933-67: Maximum discharge, 1,720 cfs June 10, 1952 (gage height, 4.23 ft); minimum daily, 13 cfs Dec. 28, 29, 1939, Dec. 7, 1963, Jan. 13, 14, 1964, Mar. 5, 6, 1967.

Remarks.--Records good. Transmountain diversion above station through August P. Gumlick Tunnel. Diversions above station for irrigation of about 200 acres of hay meadows above station and about 40 acres below.

Revisions.--Revised figures of diversions, in acre-feet, through August P. Gumlick Tunnel for water year 1966, superseding those previously published, are given herewith:

1966		1966-Con.		1966-Con.	
October.....	0	February.....	0	June.....	3,150
November.....	0	March.....	25	July.....	1,260
December.....	0	April.....	228	August.....	614
January.....	0	May.....	2,110	September.....	400

DISCHARGE, IN CFS, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.
1	27	17	20	16	14	14	20	42	268	408	62	37
2	26	16	20	16	14	14	21	40	364	378	58	33
3	31	18	20	16	14	14	25	38	471	350	65	32
4	31	17	19	16	14	14	28	40	511	335	65	30
5	33	18	19	16	15	13	28	36	534	311	59	29
6	32	19	19	16	15	13	31	35	567	288	60	29
7	31	19	21	15	15	14	33	37	553	275	62	29
8	30	20	19	15	14	14	36	45	549	260	73	29
9	30	19	18	14	15	14	35	56	551	240	66	31
10	28	20	18	14	15	14	32	69	517	222	70	31
11	28	19	20	15	14	14	38	65	465	211	58	31
12	28	21	20	15	14	14	38	66	395	215	55	62
13	27	20	19	15	14	14	28	73	299	195	52	41
14	27	19	19	15	14	14	34	58	284	179	50	39
15	27	21	18	15	14	14	35	51	277	188	50	37
16	28	21	18	15	15	15	31	49	300	179	49	37
17	27	21	18	15	15	17	32	57	286	170	46	37
18	27	21	18	15	15	18	36	94	326	169	45	36
19	23	19	17	14	15	18	41	120	464	150	44	44
20	26	19	17	14	14	16	39	120	546	138	43	42
21	26	20	17	14	14	16	35	127	584	125	42	37
22	23	19	17	14	15	16	31	178	597	116	40	36
23	25	18	17	14	15	17	31	239	572	123	39	34
24	24	17	17	14	15	19	29	290	579	119	37	35
25	24	17	16	14	15	19	28	325	541	107	36	39
26	25	17	16	14	15	18	27	308	498	98	37	40
27	24	18	16	14	14	18	32	249	472	95	36	39
28	24	19	16	14	14	19	39	263	446	90	33	35
29	24	21	16	14	-----	22	48	251	411	67	33	33
30	23	21	15	14	-----	20	53	243	415	60	35	32
31	22	-----	16	15	-----	18	-----	247	-----	64	40	-----
TOTAL	831	571	556	457	406	494	994	3,911	13,642	5,925	1,540	1,076
MEAN	26.8	19.0	17.9	14.7	14.5	15.9	33.1	126	455	191	49.7	35.9
MAX	33	21	21	16	15	22	53	325	597	408	73	62
MIN	22	16	15	14	14	13	20	35	268	60	33	29
AC-FT	1,650	1,130	1,100	906	805	980	1,970	7,760	27,060	11,750	3,050	2,130
(†)	301	193	156	84	76	79	137	1,280	1,050	124	820	507

CAL YR 1966: TOTAL 19,968 MEAN 54.7 MAX 284 MIN 15 AC-FT 39,610
WAT YR 1967: TOTAL 30,403 MEAN 83.3 MAX 597 MIN 13 AC-FT 60,300

† Diversion, in acre-feet, through August P. Gumlick Tunnel; furnished by state engineer of Colorado.

WILLIAMS FORK BASIN

9-0375. Williams Fork near Parshall, Colo.

Location.--Lat 40°00'01", long 106°10'45", in SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.31, T.1 N., R.78 W., on right bank 150 ft downstream from bridge on State Highway 286, 3.7 miles downstream from Skylark Creek, 3.9 miles south of Parshall, and 4.2 miles upstream from Williams Fork Reservoir Dam.

Drainage area.--184 sq mi (revised).

Records available.--July 1904 to September 1924, June 1933 to September 1967. Records since May 10, 1940, equivalent to earlier records if diversion to August P. Gumlick Tunnel is added to flow past station. Published as "near (Hot) Sulphur Springs" 1904-12, and as Williams River near Parshall June 1933 to September 1958.

Gage.--Water-stage recorder. Datum of gage is 7,808.95 ft above mean sea level (datum of Denver Board of Water Commissioners). Prior to Oct. 18, 1919, staff gage and Oct. 18, 1919, to Sept. 30, 1924, water-stage recorder, at site $1\frac{1}{2}$ miles downstream at different datum. June 19, 1933, to Aug. 8, 1938, water-stage recorder at bridge 150 ft upstream at datum 1.00 ft higher.

Average discharge.--54 years, 142 cfs (102,800 acre-ft per year), including diversion to August P. Gumlick Tunnel.

Extremes.--Maximum discharge during year, 713 cfs June 6 (gage height, 3.88 ft); minimum daily, 9.8 cfs Oct. 7, May 17, 18.

1904-24, 1933-67: Maximum discharge observed, 2,620 cfs June 14, 1918 (gage height, 6.05 ft, site and datum then in use), from rating curve extended above 1,400 cfs; minimum daily, that of Oct. 7, 1966 and May 17, 18, 1967.

Remarks.--Records good except those for winter period, which are fair. Transmountain diversion above station through August P. Gumlick Tunnel (see sta. 9-0360). Diversions above station for irrigation of about 1,300 acres above station and about 2,500 acres below. About 150 acres above station irrigated by diversions into the drainage area.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	11	34	33	32	29	30	51	78	322	332	60	19
2	11	34	34	32	28	30	51	76	310	310	60	19
3	13	40	36	32	26	30	60	70	460	255	35	19
4	11	36	36	32	26	30	70	66	500	238	20	18
5	11	33	35	32	30	30	73	65	520	212	36	18
6	11	36	34	30	30	28	83	65	535	198	53	18
7	98	33	33	28	30	28	81	52	530	178	58	18
8	10	34	32	26	30	28	93	32	470	212	72	18
9	10	35	31	30	30	30	97	14	440	222	83	19
10	24	37	30	30	30	30	81	14	425	228	95	19
11	44	36	34	30	29	30	97	13	400	178	88	20
12	46	36	36	32	30	31	104	13	316	176	80	21
13	44	36	36	32	32	34	84	13	277	176	76	20
14	46	35	36	32	32	35	70	12	248	146	58	19
15	43	39	34	34	32	35	83	12	265	132	50	19
16	47	37	32	34	30	36	78	11	295	142	50	19
17	46	36	32	30	32	43	61	98	280	153	50	19
18	45	37	32	30	32	46	76	98	289	178	50	19
19	40	35	32	30	32	46	93	18	388	178	50	20
20	45	36	30	32	30	43	88	57	450	159	49	20
21	46	36	30	32	25	43	75	67	588	146	49	19
22	41	34	30	31	27	46	67	142	617	130	27	25
23	44	33	30	30	29	48	69	250	617	124	15	60
24	42	32	30	30	32	47	64	289	623	144	15	60
25	42	32	30	30	32	49	62	304	605	146	14	69
26	43	32	32	30	32	48	57	316	515	132	16	70
27	43	30	32	30	32	46	37	260	384	130	18	70
28	42	33	32	30	30	47	19	235	372	116	18	62
29	42	34	30	30	-	53	53	228	346	100	18	58
30	41	34	28	30	- - - - -	54	78	220	339	91	18	57
31	41	- - - - -	32	32	- - - - -	46	- - - - -	258	- - - - -	72	19	- - - - -
Total	1,034.8	1,045	1,004	955	839	1,200	2,155	3,269.6	12,726	5,334	1,400	931
Mean	33.4	34.8	32.4	30.8	30.0	38.7	71.8	105	424	172	45.2	31.0
Max	47	40	36	34	32	54	104	316	623	332	95	70
Min	9.8	30	28	26	25	28	19	9.8	248	72	14	18
Ac-ft	2,050	2,070	1,990	1,890	1,660	2,380	4,270	6,490	25,240	10,580	2,780	1,850
Cal yr 1966: Total	16,222.8			Mean 44.4	Max 215	Min 9.8	Ac-ft 32,180					
Wtr yr 1967: Total	31,893.4			Mean 87.4	Max 623	Min 9.8	Ac-ft 63,260					

Note.--No gage-height record Dec. 31 to Feb. 11.

9-0380. Williams Fork Reservoir near Parshall, Colo.

Location.--Lat 40°02'06", long 106°12'17", in SE¼ sec.23, T.1 N., R.79 W., at dam on Williams Fork, 2.1 miles upstream from mouth and 2.2 miles southwest of Parshall.

Drainage area.--230 sq mi (revised).

Records available.--April 1939 to September 1967. Prior to October 1948, published in WSP 1313.

Gage.--Mercury manometer gage read once daily. Datum of gage is at mean sea level (levels by city engineer of Denver). Prior to Sept. 2, 1959, tape-weight gage at same site and datum.

Extremes.--Maximum contents observed during year, 52,700 acre-ft Aug. 13 (elevation, 7,777.08 ft); no contents Oct. 1-5, 8, 9, 11, 23, 25, Nov. 16, 17, 21.

1939-67: Maximum contents observed, 97,130 acre-ft July 9, 1962 (elevation, 7,811.19 ft); no contents Oct. 14 to Dec. 2, 1958, caused by construction operations at dam, and Sept. 21 to Oct. 5, Oct. 8, 9, 11, 23, 25, Nov. 16, 17, 21, 1966, reservoir drained for repairs.

Remarks.--Reservoir is formed by concrete-arch dam. Dam completed in October 1938; storage began in April 1939; dam was enlarged Dec. 5, 1956, to Apr. 22, 1959. Enlarged capacity of reservoir, 96,820 acre-ft between elevations 7,634 (invert of outlet pipes) and 7,811 ft (top of radial gates on spillway). No dead storage. Figures given herein represent usable contents. Reservoir is used for power development and storage for replacement of water diverted through August P. Gumlick Tunnel (see sta. 9-0360) during periods when flow of Colorado River is insufficient to supply decreed prior water rights below Williams Fork.

Cooperation.--Records furnished by Denver Board of Water Commissioners.

Month-end elevation and contents, water year October 1966 to September 1967

Date	Elevation (feet)†	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.....	7,634.49	0	-
Oct. 31.....	7,649.9	94	+94
Nov. 30.....	7,654.92	206	+112
Dec. 31.....	7,678.00	1,870	+1,660
Calendar year 1966.....	-	-	-50,730
Jan. 31.....	7,686.96	3,080	+1,210
Feb. 28.....	7,686.75	3,040	-40
Mar. 31.....	7,686.50	3,010	-30
Apr. 30.....	7,702.25	6,310	+3,300
May 31.....	7,720.90	12,780	+6,470
June 30.....	7,763.75	40,050	+27,270
July 31.....	7,775.58	51,170	+11,120
Aug. 31.....	7,773.10	48,700	-2,470
Sept. 30.....	7,767.78	43,660	-5,040
Water year 1967.....	-	-	+43,660

† Elevation at 0800.

9-0385. Williams Fork below Williams Fork Reservoir, Colo.

Location.--Lat 40°02'07", long 106°12'17", in SE¼ sec.23, T.1 N., R.79 W., on left bank 400 ft downstream from Williams Fork Reservoir, 2.1 miles upstream from mouth, and 2.1 miles southwest of Parshall.

Drainage area.--230 sq mi (revised).

Records available.--October 1948 to September 1954, August 1958 to September 1967. Monthly discharge only for some periods, published in WSP 1313. Prior to October 1958, published as Williams River below Williams Fork Reservoir.

Gage.--Digital water-stage recorder since Oct. 1, 1963, and concrete control. Datum of gage is 7,615.0 ft above mean sea level (datum of Denver Board of Water Commissioners). Oct. 1, 1948, to Sept. 30, 1954, graphic water-stage recorder at site a quarter of a mile downstream at different datum. Aug. 1, 1958, to Oct. 20, 1959, graphic water-stage recorder at site half a mile downstream at different datum. Oct. 21, 1959, to Sept. 30, 1963, graphic water-stage recorder at same site and datum.

Average discharge.--15 years, 121 cfs (87,600 acre-ft per year), adjusted for storage in Williams Fork Reservoir.

Extremes.--Maximum discharge during year, 284 cfs Sept. 28, 30 (gage height, 2.48 ft); minimum daily, 13 cfs Apr. 11, 13.

1948-54, 1958-67: Maximum discharge, 2,640 cfs June 20, 1953 (gage height, 8.50 ft, site and datum then in use), from rating curve extended above 1,500 cfs; minimum daily, 0.3 cfs May 14, 1963.

Remarks.--Records excellent. Flow regulated by Williams Fork Reservoir (see sta. 9-0380). Transmountain diversion above station through August P. Gumlick Tunnel (see sta. 9-0360). Diversions above station for irrigation of about 3,200 acres above station and about 100 acres below. About 450 acres above station irrigated by diversion into the drainage area.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	23	51	15	15	38	38	79	15	15	15	15	153
2	26	30	15	15	38	38	75	15	15	15	15	153
3	37	45	15	15	39	38	73	15	15	15	15	153
4	28	54	15	15	37	38	71	14	15	15	15	154
5	26	48	15	14	37	38	92	14	15	15	15	153
6	16	44	15	14	37	37	103	15	15	15	15	153
7	15	43	15	14	37	36	48	15	15	15	15	155
8	24	46	15	14	36	36	16	15	15	15	15	155
9	23	47	15	14	35	36	16	15	15	15	15	154
10	21	51	15	14	35	37	15	15	15	15	14	155
11	37	52	15	14	34	37	13	16	15	15	14	155
12	47	49	15	14	35	38	16	15	15	15	15	156
13	59	49	15	14	35	38	13	15	15	15	15	156
14	96	48	15	14	36	38	15	15	15	15	91	157
15	82	47	15	14	36	38	15	16	15	15	161	153
16	67	48	15	14	37	38	15	15	15	15	194	87
17	60	49	15	14	38	40	16	15	15	15	152	89
18	75	49	15	14	38	50	14	15	15	15	149	89
19	55	49	15	14	39	69	14	15	15	15	150	87
20	53	45	15	14	39	69	15	15	15	15	150	89
21	58	46	15	14	39	63	15	14	15	15	150	89
22	59	47	15	14	39	59	14	15	15	15	150	89
23	57	45	15	14	38	67	15	15	15	15	152	89
24	56	42	15	17	39	78	15	15	15	15	151	89
25	54	35	15	23	38	92	15	15	15	15	152	89
26	54	38	15	27	38	92	15	15	15	15	153	91
27	58	37	15	33	38	91	15	15	15	15	153	93
28	53	35	15	36	38	86	15	15	15	15	151	93
29	52	42	15	36	-	84	15	15	15	15	152	93
30	52	25	15	36	- - - -	84	15	15	15	15	153	93
31	52	- - - -	15	37	- - - -	86	- - - -	14	- - - -	15	153	- - - -
Total	1,475	1,336	465	571	1,043	1,709	883	463	450	465	2,910	3,664
Mean	47.6	44.5	15.0	18.4	37.3	55.1	29.4	14.9	15.0	15.0	93.9	122
Max	96	54	15	37	39	92	103	16	15	15	194	157
Min	15	25	15	14	34	36	13	14	15	15	14	87
Ac-ft	2,930	2,650	922	1,130	2,070	3,390	1,750	918	893	922	5,770	7,270
Cal yr 1966: Total	18,710		Mean	51.3	Max	194	Min	15	Ac-ft	37,110		
Wtr yr 1967: Total	15,434		Mean	42.3	Max	194	Min	13	Ac-ft	30,610		

9-0390. Troublesome Creek near Pearmont, Colo.

Location.--Lat 40°13'03", long 106°18'45", in SE¼ sec.14, T.3 N., R.80 W., on left bank 45 ft downstream from small tributary, 3 miles north of Pearmont, 4 miles downstream from Rabbit Ear Creek, 5½ miles upstream from East Fork, and 12 miles northeast of Kremmling.

Drainage area.--44.6 sq mi.

Records available.--October 1953 to September 1967.

Gage.--Water-stage recorder. Altitude of gage is 8,049 ft (from topographic map).

Average discharge.--14 years, 27.6 cfs (19,980 acre-ft per year).

Extremes.--Maximum discharge during year, 220 cfs May 26 (gage height, 2.22 ft); minimum daily, 7.6 cfs Mar. 10-15.

1953-67: Maximum discharge, 503 cfs June 7, 1957 (gage height, 3.48 ft); maximum gage height, 3.93 ft Mar. 31, 1965 (backwater from ice); minimum daily discharge, 4.8 cfs Sept. 17, 1966.

Remarks.--Records good. One diversion above station for irrigation of about 250 acres below. Flow partly regulated during irrigation season by one reservoir (capacity, 1,070 acre-ft) above station.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	12	11	9.6	9.4	8.6	10	10	18	104	51	16	16
2	16	10	9.8	9.0	8.2	10	11	17	94	49	16	14
3	19	11	9.4	9.0	9.4	9.8	14	15	92	48	16	14
4	13	12	9.8	9.0	9.4	9.8	16	14	104	46	16	13
5	14	10	10	10	9.4	9.4	15	14	112	44	17	13
6	14	10	11	9.4	9.0	8.2	16	14	114	40	17	13
7	13	11	11	9.0	9.0	8.0	17	14	116	37	17	14
8	12	10	9.4	9.2	9.0	8.2	19	19	97	35	17	14
9	12	9.0	8.8	9.2	9.8	7.9	18	24	85	31	17	15
10	11	9.0	8.0	9.0	9.8	7.6	16	27	85	29	18	14
11	12	9.0	9.2	9.6	9.8	7.6	18	26	88	31	17	14
12	13	9.2	9.2	10	9.8	7.6	18	27	87	30	17	16
13	14	9.4	8.8	10	9.4	7.6	15	26	83	27	16	14
14	12	9.6	8.8	10	9.8	7.6	12	23	85	26	16	14
15	13	9.6	9.0	10	9.8	7.6	13	21	79	26	16	13
16	14	9.6	9.4	9.4	9.8	7.9	12	20	71	25	16	13
17	14	9.4	9.8	9.4	9.4	9.0	13	24	69	27	16	14
18	14	9.2	9.8	9.4	10	12	13	33	64	28	16	15
19	12	9.0	9.8	8.6	9.8	9.4	16	44	63	26	15	17
20	12	9.0	9.8	8.6	8.6	8.6	14	46	74	25	15	16
21	13	10	9.8	8.6	9.8	7.9	13	48	80	24	15	14
22	12	11	10	8.6	10	9.4	12	74	82	22	15	14
23	13	10	9.8	8.6	10	9.0	13	121	77	21	14	13
24	12	9.8	9.4	8.6	10	9.0	12	143	75	20	14	13
25	14	9.4	9.4	8.6	10	9.4	11	160	72	18	15	14
26	14	9.6	9.4	8.6	10	9.0	11	187	66	18	16	14
27	14	9.4	9.8	8.6	9.8	9.0	11	177	60	18	14	14
28	14	9.0	9.4	8.6	9.8	9.0	17	156	58	17	14	14
29	14	9.6	8.8	8.6	-	11	23	130	57	16	15	14
30	13	9.8	8.6	8.6	- - - -	10	24	128	53	16	16	14
31	14	- - - -	9.2	9.0	- - - -	9.2	- - - -	121	- - - -	16	16	- - - -
Total	413	293.6	294.0	282.2	267.2	275.7	443	1,911	2,446	887	491	424
Mean	13.3	9.79	9.48	9.10	9.54	8.89	14.8	61.6	81.5	28.6	15.8	14.1
Max	19	12	11	10	10	12	24	187	116	51	18	17
Min	11	9.0	8.0	8.6	8.2	7.6	10	14	53	16	14	13
Ac-ft	819	582	583	560	530	547	879	3,790	4,850	1,760	974	841

Cal yr 1966: Total 7,549.5 Mean 20.7 Max 88 Min 4.8 Ac-ft 14,970
 Wtr yr 1967: Total 8,427.7 Mean 23.1 Max 187 Min 7.6 Ac-ft 16,720

9-0400. East Fork Troublesome Creek near Troublesome, Colo.

Location.--Lat 40°09'27", long 106°16'58", in NW¼ sec.7, T.2 N., R.79 W., on right bank 400 ft upstream from mouth and 6½ miles north of Troublesome.

Drainage area.--76.0 sq mi.

Records available.--April 1937 to September 1943, October 1953 to September 1967. Monthly discharge only for some periods, published in WSP 1313.

Gage.--Water-stage recorder. Altitude of gage is 7,670 ft (from topographic map). Apr. 18, 1937, to May 13, 1941, staff gage at present site. May 13 to Aug. 8, 1941, staff gage, Aug. 8, 1941, to Sept. 30, 1943, chain gage, and Oct. 1, 1953, to July 21, 1966, water-stage recorder, at site 100 ft downstream. Prior to Oct. 1, 1953, at different datum and at present datum thereafter.

Average discharge.--20 years, 26.5 cfs (19,190 acre-ft per year).

Extremes.--Maximum discharge during year, 204 cfs May 26 (gage height, 4.72 ft); minimum daily, 3.4 cfs Oct. 1, Jan. 8, Aug. 25. 1937-43, 1953-67: Maximum discharge, 720 cfs May 9, 1962; maximum gage height, 5.19 ft June 6, 1957; minimum daily discharge, 0.2 cfs Oct. 3, 1941, Sept. 2, 3, 26, 27, 1942.

Remarks.--Records good except those for winter period, which are poor. Diversions above station for irrigation.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3.4	4.7	4.3	4.0	4.0	4.0	15	45	116	29	6.8	7.1
2	3.8	4.5	4.5	3.8	3.9	3.7	20	39	109	26	6.1	5.8
3	1.4	4.3	4.5	4.0	3.8	3.6	24	34	114	25	6.1	4.9
4	9.0	4.2	4.5	4.0	3.9	3.5	33	32	112	25	7.1	4.3
5	7.4	4.0	4.5	4.2	3.9	3.5	32	31	111	25	6.4	4.0
6	7.4	3.8	4.8	4.0	3.9	3.8	32	32	107	21	5.6	3.8
7	7.1	4.0	5.2	3.6	3.8	4.3	32	30	100	21	6.4	4.0
8	6.4	4.3	4.5	3.4	3.7	4.3	42	42	89	21	9.9	4.3
9	5.6	4.0	4.0	3.5	3.7	4.5	45	65	80	19	7.7	6.1
10	5.1	4.1	3.8	3.7	3.9	4.5	38	84	73	17	7.7	6.4
11	5.1	4.3	4.0	3.8	4.1	4.9	45	81	68	17	6.4	5.8
12	5.4	4.5	4.3	3.8	4.1	5.1	52	81	66	18	5.6	11
13	5.4	4.6	4.0	3.8	4.0	5.1	40	76	68	15	5.6	8.4
14	6.4	4.8	4.1	4.0	4.1	5.4	33	66	62	14	4.9	6.4
15	5.6	4.8	4.2	4.1	4.1	5.1	35	59	60	17	5.8	5.6
16	6.1	4.7	4.2	3.8	4.0	5.1	37	55	57	21	5.8	5.6
17	6.1	4.6	4.1	3.8	3.9	7.1	28	64	55	17	5.1	6.8
18	5.6	4.6	4.0	3.8	4.0	9.4	37	86	52	25	4.9	8.4
19	5.6	4.6	3.9	4.0	4.0	9.4	49	109	51	16	4.7	16
20	5.1	4.7	3.9	4.3	3.8	7.7	45	112	51	14	4.3	16
21	5.6	4.5	4.0	4.1	4.0	8.0	37	111	52	13	4.0	10
22	5.1	4.5	4.0	4.0	4.3	7.4	31	126	48	11	4.0	8.0
23	5.1	4.4	4.0	3.9	4.0	8.4	31	147	45	11	4.0	7.1
24	5.1	4.3	3.9	3.7	3.8	9.9	25	154	46	11	3.8	6.4
25	4.9	4.2	3.8	3.7	4.0	12	26	168	46	11	3.4	7.1
26	4.9	4.3	4.0	3.7	4.0	12	22	184	46	9.4	3.8	8.4
27	4.9	4.0	4.2	3.7	4.0	13	25	168	41	9.0	6.4	7.7
28	5.1	4.1	4.0	3.8	3.8	14	35	149	41	8.0	5.1	6.8
29	4.9	4.3	3.9	3.9	-	16	50	135	40	7.1	6.8	6.1
30	4.9	4.5	3.7	4.0	- - - - -	15	59	124	33	6.4	7.7	5.6
31	4.9	- - - - -	3.8	4.0	- - - - -	16	- - - - -	124	- - - - -	6.1	6.1	- - - - -
Total	181.0	131.2	128.6	119.9	110.5	235.7	1,055	2,813	2,039	506.0	178.0	213.9
Mean	5.84	4.37	4.15	3.87	3.95	7.60	35.2	90.7	68.0	16.3	5.74	7.13
Max	14	4.8	5.2	4.3	4.3	16	59	184	116	29	9.9	16
Min	3.4	3.8	3.7	3.4	3.7	3.5	15	30	33	6.1	3.4	3.8
Ac-ft	359	260	255	238	219	468	2,090	5,580	4,040	1,000	353	424

Cal yr 1966: Total 4,700.2 Mean 12.9 Max 87 Min 1.5 Ac-ft 9,320
Wtr yr 1967: Total 7,711.8 Mean 21.1 Max 184 Min 3.4 Ac-ft 15,300

Peak discharge (base, 170 cfs) May 26 (0030) 204 cfs (4.72 ft).

9-0410. Muddy Creek near Kremmling, Colo.

Location.--Lat 40°17'37", long 106°28'59", in SE¼ sec.20, T.4 N., R.81 W., on left bank a quarter of a mile upstream from Lindsey Creek, half a mile upstream from bridge on U. S. Highway 40, 3 miles downstream from Albert Creek, and 17 miles northwest of Kremmling.

Drainage area.--87.4 sq mi.

Records available.--September 1937 to September 1943, October 1955 to September 1967. Monthly discharge only for some periods, published in WSP 1313.

Gage.--Water-stage recorder. Altitude of gage is 7,856 ft (from topographic map). Prior to Oct. 1, 1955, staff gage at site 3 miles upstream at different datum.

Average discharge.--18 years, 50.9 cfs (36,850 acre-ft per year).

Extremes.--Maximum discharge during year, 469 cfs May 26 (gage height, 4.77 ft); minimum daily, 1.2 cfs Sept. 8. 1937-43, 1955-67: Maximum discharge, 992 cfs May 9, 1957 (gage height, 6.46 ft); maximum gage height, 6.72 ft Apr. 17, 1962 (backwater from ice); minimum daily discharge, 0.1 cfs Aug. 19, 24, 1940.

Remarks.--Records good except those for winter period, which are poor. Some regulation by Barber Reservoir (capacity, 4,290 acre-ft). Diversions for irrigation of about 900 acres above station.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.0	5.0	5.0	4.4	4.0	4.4	17	78	242	44	12	6.9
2	2.7	5.3	5.3	4.6	4.0	4.0	25	60	253	39	11	6.9
3	13	4.6	4.8	4.6	4.6	4.0	29	50	250	36	8.3	4.1
4	10	4.1	5.0	4.6	4.8	4.0	38	52	236	41	8.0	3.2
5	6.2	4.8	5.5	4.6	4.8	4.0	48	57	226	37	6.6	2.5
6	6.6	5.0	6.0	4.4	4.8	4.0	54	60	226	32	5.9	2.0
7	7.6	4.6	6.4	4.2	4.4	4.0	60	56	220	35	6.2	1.3
8	8.0	4.4	5.2	3.8	4.4	4.2	63	79	207	42	7.6	1.2
9	6.9	4.0	4.8	3.6	4.8	4.4	52	108	189	33	8.7	2.5
10	5.3	4.0	4.6	3.8	4.8	4.8	47	140	165	27	10	5.6
11	4.6	4.8	4.4	3.8	4.8	5.2	64	156	153	26	9.5	4.6
12	5.3	4.8	4.4	4.0	4.8	5.4	59	147	151	27	7.3	11
13	6.6	4.8	4.6	4.2	4.8	5.6	44	134	142	23	6.2	11
14	7.3	5.0	4.4	4.4	4.8	5.6	39	110	153	20	5.3	6.6
15	6.6	5.0	4.4	4.4	5.0	5.2	53	96	153	20	5.3	4.8
16	7.3	5.0	4.8	4.4	5.0	5.2	63	88	127	20	5.9	4.6
17	7.6	4.8	4.8	4.4	4.6	8.0	47	125	134	23	5.0	5.6
18	6.2	4.6	4.8	4.2	4.6	10	54	167	130	33	4.8	5.9
19	5.0	4.6	4.8	4.2	5.0	9.8	74	223	132	21	5.3	14
20	4.8	4.8	4.8	4.2	4.4	9.0	76	244	140	17	4.3	16
21	11	5.3	4.8	4.2	4.6	9.0	56	270	119	18	4.3	11
22	4.8	5.0	4.8	4.4	4.6	9.2	45	303	119	17	4.1	8.0
23	4.6	5.0	4.8	4.4	4.6	11	44	362	106	20	3.9	6.6
24	5.0	4.8	4.8	4.4	4.4	13	40	356	84	20	3.7	6.9
25	4.6	5.0	4.6	4.4	4.4	14	41	381	76	19	3.4	6.2
26	4.8	4.8	4.6	4.4	4.4	15	35	421	82	16	3.4	7.3
27	4.8	4.8	4.8	4.4	4.4	16	41	365	70	15	3.0	7.3
28	5.0	4.6	4.8	4.4	4.4	17	58	344	63	14	2.8	7.3
29	5.0	4.6	4.8	4.4	-	19	85	316	62	13	2.1	6.2
30	4.6	4.6	4.4	4.4	- - - -	19	75	279	52	12	5.3	5.9
31	4.8	- - - -	4.4	4.4	- - - -	19	- - - -	250	- - - -	12	6.2	- - - -
Total	188.6	142.5	150.4	133.0	129.0	272.0	1,526	5,877	4,462	772	185.4	193.0
Mean	6.08	4.75	4.85	4.29	4.61	8.77	50.9	190	149	24.9	5.98	6.43
Max	13	5.3	6.4	4.6	5.0	19	85	421	253	44	12	16
Min	2.0	4.0	4.4	3.6	4.0	4.0	17	50	52	12	2.1	1.2
Ac-ft	374	283	298	264	256	540	3,030	11,660	8,850	1,530	368	383

Cal yr 1966: Total 9,938.3 Mean 27.2 Max 316 Min 0.50 Ac-ft 19,710
Wtr yr 1967: Total 14,030.9 Mean 38.4 Max 421 Min 1.2 Ac-ft 27,830

Peak discharge (base, 300 cfs) May 26 (0530) 469 cfs (4.77 ft).

Note.--No gage-height record Dec. 12 to Apr. 6.

9-0411. Antelope Creek near Kremmling, Colo.

Location.--Lat 40°14'26", long 106°22'23", in N½ sec.8, T.3 N., R.80 W., on right bank 5.8 miles upstream from mouth and 12½ miles north of Kremmling.

Drainage area.--11.5 sq mi.

Records available.--October 1955 to September 1967.

Gage.--Water-stage recorder and concrete control. Altitude of gage is 7,933 ft (from topographic map).

Average discharge.--12 years, 1.97 cfs (1,430 acre-ft per year).

Extremes.--Maximum discharge during year, 14 cfs May 26 (gage height, 1.48 ft); minimum daily, 0.11 cfs Aug. 21, Sept. 7, 8.

1955-67: Maximum discharge, 148 cfs Mar. 27, 1960 (gage height, 2.70 ft, from floodmarks), by slope-area measurement of peak flow; maximum gage height, 3.32 ft Apr. 10, 1962 (backwater from plugged culvert); no flow at times in 1963 and 1966.

Remarks.--Records good except those for winter period, which are poor. No diversion or regulation above station.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.47	0.40	0.45	0.67	0.62	0.80	1.6	2.7	7.2	0.64	0.37	0.42
2	.76	.45	.52	.66	.62	.80	1.6	2.4	6.3	.55	.37	.32
3	1.8	.50	.76	.69	.68	.80	2.0	2.0	5.1	.47	.37	.24
4	.76	.55	.64	.69	.70	.70	2.4	2.2	4.6	.55	.42	.24
5	.64	.50	.55	.69	.70	.70	2.5	2.0	4.6	.55	.48	.20
6	.64	.50	.68	.64	.68	.70	3.2	2.2	4.3	.55	.37	.24
7	.55	.64	.66	.59	.60	.80	3.2	2.2	4.1	.56	.37	.11
8	.55	.55	.60	.56	.68	.80	3.6	3.8	3.8	.74	.74	.11
9	.47	.64	.58	.56	.72	.80	3.6	5.4	3.6	.64	.56	.48
10	.47	.64	.56	.58	.78	.80	2.7	6.0	3.2	.48	.64	.32
11	.47	.55	.60	.62	.70	.80	2.9	5.4	3.1	.42	.42	.28
12	.47	.55	.60	.62	.73	.80	3.1	4.9	3.1	.42	.48	.64
13	.55	.55	.60	.62	.70	.80	2.0	4.6	3.2	.42	.24	.32
14	.64	.54	.60	.66	.70	.80	1.7	6.0	3.6	.37	.17	.24
15	.40	.54	.66	.68	.69	.80	1.8	2.9	3.6	.37	.28	.28
16	.64	.54	.64	.66	.69	.80	1.8	2.9	3.2	.48	.32	.28
17	.76	.54	.64	.60	.69	.90	1.8	4.1	2.4	.64	.28	.32
18	.64	.55	.64	.60	.62	1.0	1.8	5.4	2.9	1.3	.37	.56
19	.64	.55	.64	.64	.62	1.0	2.2	6.6	2.4	.64	.24	1.1
20	.55	.52	.65	.70	.62	.90	2.2	6.6	2.4	.48	.14	.56
21	.64	.64	.65	.70	.64	1.0	1.7	5.7	2.9	.56	.11	.42
22	.55	.55	.69	.68	.66	1.1	1.5	6.6	2.7	.48	.14	.37
23	.47	.55	.67	.68	.70	1.2	1.5	7.5	2.0	.56	.14	.32
24	.64	.47	.65	.66	.74	1.2	1.3	6.9	1.5	.42	.14	.37
25	.64	.45	.64	.66	.74	1.4	1.3	7.2	1.5	.48	.14	.42
26	.64	.49	.66	.66	.70	1.3	1.3	11	1.5	.48	.17	.42
27	.64	.45	.70	.66	.70	1.3	1.3	9.8	1.1	.48	.20	.42
28	.76	.45	.62	.66	.70	1.3	2.9	7.2	1.0	.42	.20	.42
29	.64	.48	.67	.66	-	1.5	4.1	6.3	1.1	.37	.24	.42
30	.47	.49	.69	.66	- - - -	1.5	4.1	5.4	.76	.37	.32	.42
31	.47	- - - -	.73	.76	- - - -	1.5	- - - -	6.6	- - - -	.37	.37	- - - -
Total	19.43	15.82	19.64	20.17	19.12	30.60	68.7	160.5	92.76	16.26	9.80	11.26
Mean	0.627	0.527	0.634	0.651	0.683	0.987	2.29	5.18	3.09	0.525	0.316	0.375
Max	1.8	0.64	0.76	0.76	0.78	1.5	4.1	11	7.2	1.3	0.74	1.1
Min	0.40	0.40	0.45	0.56	0.60	0.70	1.3	2.0	0.76	0.37	0.11	0.11
Ac-ft	39	31	39	40	38	61	136	318	184	32	19	22

Cal yr 1966: Total 384.69 Mean 1.05 Max 6.3 Min 0 Ac-ft 763
Wtr yr 1967: Total 484.06 Mean 1.33 Max 11 Min 0.11 Ac-ft 960

Peak discharge (base, 15 cfs).--No peak above base.

Note.--No gage-height record Dec. 7 to Apr. 5.

9-0412. Red Dirt Creek near Kremmling, Colo.

Location.--Lat 40°09'41", long 106°33'32", in NE¼NE¼ sec.10, T.2 N., R.82 W., on left bank three-quarters of a mile upstream from Snow Shoe Ranch, 2 miles downstream from McMahon (Red Dirt) Reservoir, 9½ miles upstream from mouth, and 11½ miles northwest of Kremmling.

Drainage area.--19.0 sq mi (includes 1.4 sq mi in Yampa River basin).

Records available.--October 1955 to September 1967.

Gage.--Water-stage recorder. Altitude of gage is 8,961 ft (from topographic map).

Average discharge.--12 years, 18.7 cfs (13,540 acre-ft per year).

Extremes.--Maximum discharge during year, 93 cfs June 5 (gage height, 2.10 ft); minimum daily, 1.3 cfs Sept. 11.
1955-67: Maximum discharge, 343 cfs June 13, 1957 (gage height, 3.01 ft); minimum not determined.

Remarks.--Records fair except those for winter period, which are poor. No diversion above station. Flow regulated by McMahon (Red Dirt) Reservoir (capacity, about 4,500 acre-ft).

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.7	2.1	1.7	1.6	1.5	1.8	2.0	6.5	69	46	6.3	3.4
2	2.5	1.8	1.7	1.6	1.5	1.8	2.3	4.8	69	45	6.3	3.3
3	4.1	1.9	1.8	1.6	1.5	1.8	2.6	4.7	74	44	6.1	4.4
4	3.1	1.9	1.8	1.6	1.7	1.8	2.9	4.4	80	45	6.1	5.8
5	4.4	1.7	1.7	1.6	1.7	1.8	3.2	3.8	89	44	6.1	5.8
6	4.2	1.8	1.7	1.6	1.7	1.5	2.8	4.0	89	44	6.1	5.8
7	4.2	1.9	1.9	1.6	1.7	1.5	2.8	6.3	84	44	7.0	5.8
8	4.1	1.8	1.7	1.6	1.7	1.5	3.5	11	74	44	7.0	6.1
9	3.4	1.8	1.4	1.5	1.7	1.5	3.5	10	65	46	6.1	6.1
10	3.0	2.0	1.5	1.4	1.7	1.5	3.0	12	62	50	4.1	5.0
11	2.9	1.9	1.5	1.4	1.7	1.5	3.0	11	58	54	3.5	1.3
12	3.2	2.0	1.5	1.4	1.7	1.5	3.5	11	55	54	3.4	1.8
13	3.4	2.2	1.5	1.4	1.7	1.5	2.8	9.7	61	53	3.4	1.5
14	2.7	2.1	1.5	1.5	1.7	1.5	2.5	7.5	63	51	3.4	3.7
15	3.4	2.0	1.5	1.5	1.7	1.5	2.5	6.7	58	49	3.4	7.8
16	3.2	2.1	1.5	1.5	1.6	1.7	2.5	7.0	58	47	3.3	7.8
17	2.9	1.9	1.5	1.5	1.6	2.0	2.5	8.9	56	47	3.3	9.4
18	2.8	2.0	1.5	1.5	1.6	2.0	3.0	13	55	45	3.3	13
19	2.5	2.1	1.5	1.5	1.6	2.0	3.5	18	54	45	3.2	14
20	2.8	2.0	1.5	1.5	1.6	1.7	4.7	16	54	44	3.2	13
21	3.0	1.9	1.5	1.5	1.6	1.7	3.5	19	54	42	3.2	12
22	2.3	2.2	1.4	1.5	1.7	1.7	2.8	23	55	42	3.2	13
23	2.5	2.1	1.4	1.6	1.8	1.7	2.5	27	51	22	3.2	15
24	2.5	2.1	1.4	1.6	1.8	1.7	2.5	31	50	7.2	3.2	14
25	2.7	1.8	1.4	1.6	1.8	1.7	2.7	37	49	7.2	3.2	14
26	2.7	1.8	1.4	1.6	1.8	1.7	2.7	37	50	6.7	3.2	14
27	2.7	1.7	1.4	1.6	1.8	1.7	4.0	33	48	6.5	3.3	14
28	2.7	1.6	1.4	1.6	1.8	2.0	8.9	48	48	6.3	3.3	14
29	2.7	1.8	1.4	1.6	-	2.0	13	66	47	6.3	3.4	14
30	2.5	1.7	1.4	1.6	- - - -	2.0	8.6	68	46	6.3	3.4	14
31	2.6	- - - -	1.4	1.6	- - - -	1.7	- - - -	70	- - - -	6.3	3.4	- - - -
Total	93.4	57.7	47.4	47.8	47.0	53.0	110.3	635.3	1825	1099.8	130.6	262.8
Mean	3.01	1.92	1.53	1.54	1.68	1.71	3.68	20.5	60.8	35.5	4.21	8.76
Max	4.4	2.2	1.9	1.6	1.8	2.0	13	70	89	54	7.0	15
Min	1.7	1.6	1.4	1.4	1.5	1.5	2.0	3.8	46	6.3	3.2	1.3
Ac-ft	185	114	94	95	93	105	219	1,260	3,620	2,180	259	521

Cal yr 1966 Total 3,450.7 Mean 9.45 Max 52 Min 1.2 Ac-ft 6,840
Wtr yr 1967 Total 4,410.1 Mean 12.1 Max 89 Min 1.3 Ac-ft 8,750

Note.--No gage-height record Dec. 8 to Apr. 19.

9-0413. Pass Creek near Kremmling, Colo.

Location.--Lat 40°08'00", long 106°29'20", in NW¼NE¼ sec.20, T.2 N., R.81 W., on left bank half a mile downstream from Burke Spring Creek, 6 miles upstream from mouth, and 7½ miles northwest of Kremmling.

Drainage area.--17.8 sq mi.

Records available.--October 1957 to September 1967.

Gage.--Water-stage recorder and concrete control. Altitude of gage is 7,840 ft (from topographic map).

Average discharge.--10 years, 8.33 cfs (6,030 acre-ft per year).

Extremes.--Maximum discharge during year, 44 cfs May 19, 31 (gage height, 3.53 ft); minimum daily, 0.88 cfs Sept. 5-8.

1957-67: Maximum discharge, 204 cfs May 11, 1962 (gage height, 3.63 ft), from rating curve extended above 75 cfs; maximum gage height, 4.18 ft Apr. 2, 1964 (ice jam); minimum daily discharge, 0.40 cfs Aug. 16, 17, 1966.

Remarks.--Records good except those for winter period, which are poor. Some regulation by small reservoir on Spring Creek above station. Several small diversions above station for irrigation.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.4	1.8	2.2	1.6	1.9	2.0	4.1	15	26	5.9	1.4	2.2
2	2.0	1.7	2.4	1.6	1.8	2.0	4.5	13	22	5.4	1.3	1.7
3	4.8	2.0	2.4	1.6	1.8	1.9	5.2	12	20	4.8	1.5	1.3
4	2.6	1.8	2.2	1.6	1.7	1.8	7.0	12	17	5.1	1.7	1.0
5	2.1	1.8	2.2	1.6	1.8	1.8	9.8	12	16	4.8	1.7	.88
6	2.2	2.0	2.1	1.6	1.6	1.8	9.0	12	16	4.1	1.7	.88
7	2.2	2.0	2.4	1.6	1.5	1.9	10	12	15	4.1	2.4	.88
8	1.8	2.0	2.0	1.6	1.8	2.0	11	16	15	4.1	3.9	.88
9	1.8	2.0	1.9	1.5	1.8	2.1	10	21	16	3.7	3.3	2.0
10	1.8	2.0	1.8	1.4	1.8	2.1	10	25	16	3.3	3.7	1.5
11	1.8	2.0	1.7	1.5	1.8	2.1	12	26	16	3.3	2.7	1.4
12	2.2	2.1	1.7	1.6	1.8	2.1	12	28	15	3.7	2.4	3.5
13	2.1	2.2	1.7	1.7	1.8	2.1	11	28	15	3.3	2.1	2.6
14	2.7	2.2	1.7	1.7	1.8	2.1	11	24	18	3.5	2.1	2.0
15	2.4	2.4	1.7	1.7	1.8	2.1	11	23	15	4.6	2.0	1.8
16	2.6	2.4	1.7	1.7	1.7	2.1	12	24	14	4.1	2.1	1.8
17	2.7	2.4	1.7	1.6	1.6	2.3	11	26	12	3.7	2.0	2.1
18	2.4	2.4	1.7	1.6	1.6	2.6	11	31	12	3.9	1.7	2.4
19	2.1	2.4	1.7	1.6	1.6	2.6	13	36	13	3.3	1.8	4.8
20	2.4	2.2	1.7	1.6	1.6	2.6	13	35	13	2.7	1.5	3.7
21	2.4	2.6	1.5	1.7	1.7	2.6	11	31	13	2.6	1.5	2.6
22	2.1	2.4	1.4	1.8	1.7	3.1	10	34	13	2.4	1.5	2.2
23	2.1	2.4	1.4	1.8	1.7	3.1	11	34	11	2.4	1.4	2.1
24	2.1	2.2	1.4	1.8	1.8	3.1	11	35	9.1	2.6	1.3	2.0
25	2.1	2.2	1.4	1.8	1.9	3.6	11	36	8.7	2.2	1.1	2.1
26	2.1	2.1	1.4	1.8	1.8	3.4	11	40	9.1	1.5	1.2	2.1
27	2.1	2.0	1.4	1.8	1.8	3.4	12	39	8.0	1.4	1.3	2.1
28	2.1	2.6	1.5	1.7	2.0	3.6	13	35	7.6	1.3	1.4	2.0
29	2.1	2.4	1.6	1.8	-	3.7	15	31	7.6	1.3	1.5	2.0
30	2.0	2.2	1.6	1.8	-	3.9	17	28	6.5	1.2	1.5	1.8
31	2.0	-	1.6	1.8	-	4.0	-	31	-	1.1	1.8	-
Total	69.3	64.9	54.8	51.6	49.0	79.6	319.6	805	415.6	101.4	58.5	60.32
Mean	2.24	2.16	1.77	1.66	1.75	2.57	10.7	26.0	13.9	3.27	1.89	2.01
Max	4.8	2.6	2.4	1.8	2.0	4.0	17	40	26	5.9	3.9	4.8
Min	1.4	1.7	1.4	1.4	1.5	1.8	4.1	12	6.5	1.1	1.1	0.88
Ac-ft	137	129	109	102	97	158	634	1,600	824	201	116	120
Cal yr 1966: Total	1,356.6											
Mean	3.72											
Max	24											
Wtr yr 1967: Total	2,129.62											
Mean	5.83											
Max	40											
Min	0.88											
Ac-ft	4,220											

Note.--No gage-height record Dec. 10 to Apr. 7.

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Location.--Lat 39°22'50", long 106°04'10", in NE 1/4 sec.2, T.8 S., R.78 W., on left bank at entrance to Hoosier Pass tunnel, 2,000 ft downstream from diversion point, 1 1/2 miles northwest of Hoosier Pass, and 7 miles southwest of Breckenridge.

Gage.--Water-stage recorder and Parshall flume. Altitude of gage is 10,986 ft (from State engineer).

Extremes.--1957-67: Maximum daily discharge, 70 cfs June 20, 1965; no flow for most of each year.

Remarks.--Records good. This is a transmountain diversion from Monte Cristo Creek in Blue River basin through Hoosier Pass tunnel to South Platte River basin whence it is again diverted to South Catamount Creek in the Arkansas River basin. Water is for municipal use by city of Colorado Springs. Diversion point is in SW 1/4 sec.2, T.8 S., R.78 W. The entire flow is regulated by diversion gates.

Cooperation.--Gage-height record furnished by city of Colorado Springs.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1							0	0.60	3.4	3.6	3.6	31
2							0	.68	5.0	3.6	0	33
3							0	.60	6.5	3.4	0	32
4							0	.68	5.5	4.0	0	30
5							0	.68	5.4	3.8	0	29
6							0	.76	5.5	3.6	0	28
7							0	.84	4.8	3.7	0	27
8							0	1.4	4.4	3.4	0	27
9							0	2.6	4.0	4.6	0	25
10							0	3.1	4.0	3.8	0	24
11							0	3.0	3.4	1.7	0	23
12							0	3.0	3.0	2.1	0	22
13							0	2.6	3.0	3.0	0	20
14							0	2.1	3.2	3.4	0	19
15							0	1.7	3.5	3.8	0	17
16							0	1.8	4.5	4.2	0	15
17							0	3.0	4.9	4.3	9.6	14
18							0	5.7	5.2	4.3	36	12
19							0	7.1	4.9	17.0	41	11
20							0	7.3	4.9	15	40	8.7
21							.30	8.3	6.1	14	40	6.9
22							.60	12	5.7	17	39	1.4
23							.68	14	5.4	16	38	0
24							.60	7.9	4.8	29	37	0
25							.68	6.5	4.2	17	36	0
26							.76	5.5	4.0	14	36	0
27							.90	5.0	3.7	12	35	0
28							1.0	4.3	3.7	10	34	0
29					-		1.0	4.0	3.2	8.9	33	0
30					---		.70	3.6	3.4	8.9	32	0
31		-----			-----		-----	3.2	-----	8.9	30	-----
Total	0	0	0	0	0	0	7.22	123.54	133.2	252.0	520.2	456.0
Mean	0	0	0	0	0	0	0.241	3.99	4.44	8.13	16.8	15.2
Max	0	0	0	0	0	0	1.0	14	6.5	29	41	33
Min	0	0	0	0	0	0	0	0.60	3.0	1.7	0	0
Ac-ft	0	0	0	0	0	0	14	245	264	500	1,030	904
Cal yr 1966: Total	1,126.8			3.09	Max 25	Min 0	Ac-ft 2,230					
Wtr yr 1967: Total	1,492.16			Mean 4.09	Max 41	Min 0	Ac-ft 2,960					

BLUE RIVER BASIN

9-0443. Bemrose-Hoosier diversion near Hoosier Pass, Colo.

Location.--Lat 39°22'50", long 106°04'10", in NE¼SE¼ sec.2, T.8 S., R.78 W., on right bank at entrance to Hoosier Pass tunnel, 1½ miles northwest of Hoosier Pass, about 2 miles downstream from diversion point on Bemrose Creek, and 7 miles southwest of Breckenridge.

Records available.--October 1957 to September 1967.

Gage.--Water-stage recorder and Parshall flume. Altitude of gage is 10,986 ft (from State engineer).

Extremes.--1957-67: Maximum daily discharge, 44 cfs June 21, 1965; no flow for most of each year.

Remarks.--Records good. This is a transmountain diversion from Bemrose and Hoosier Creeks in Blue River basin through Hoosier Pass tunnel to South Platte River basin whence it is again diverted to South Catamount Creek in the Arkansas River basin. Water is for municipal use by city of Colorado Springs. Diversion points are in SW¼SW¼ sec.6, T.8 S., R.77 W., and in sec.12, T.8 S., R.78 W. The entire flow is regulated by diversion gates.

Cooperation.--Gage-height record furnished by city of Colorado Springs.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1							0	0.70	5.7	9.1	2.6	
2							0	.54	7.2	8.6	2.2	
3							0	.48	8.2	8.0	2.3	
4							0	.48	9.1	8.4	2.2	
5							0	.54	10	7.8	2.1	
6							0	.48	12	7.6	2.0	
7							0	.69	11	7.6	2.0	
8							0	1.3	11	7.0	2.2	
9							0	2.5	10	6.5	2.6	
10							0	2.9	9.5	6.1	2.1	
11							0	2.7	9.1	6.1	2.0	
12							0	3.0	8.4	5.7	1.7	
13							0	2.3	7.8	5.6	1.6	
14							0	1.7	7.6	5.4	1.6	
15							0	1.2	7.4	5.7	2.0	
16							0	1.5	8.0	5.7	2.0	
17							0	2.2	9.1	5.7	1.7	
18							0	4.1	10	5.2	1.7	
19							0	4.8	10	4.8	1.6	
20							0	4.8	10	4.7	1.6	
21							.44	5.4	11	4.5	.73	
22							.78	7.0	11	4.3	0	
23							.78	7.2	11	4.7	0	
24							.78	7.4	11	4.7	0	
25							.78	7.4	10	4.1	0	
26							.78	7.0	10	3.8	0	
27							.96	6.7	10	3.7	0	
28							1.1	6.1	9.5	3.5	0	
29							1.3	5.7	9.1	3.3	0	
30							1.0	5.4	9.1	3.2	0	
31								5.0		3.2	0	
Total	0	0	0	0	0	0	8.70	109.21	282.8	174.3	40.53	0
Mean	0	0	0	0	0	0	0.290	3.52	9.43	5.62	1.31	0
Max	0	0	0	0	0	0	1.3	7.4	12	9.1	2.6	0
Min	0	0	0	0	0	0	0	0.48	5.7	3.2	0	0
Ac-ft	0	0	0	0	0	0	17	217	561	346	80	0

Cal yr 1966: Total 469.3 Mean 1.29 Max 8.0 Min 0 Ac-ft 931
Wtr yr 1967: Total 615.54 Mean 1.69 Max 12 Min 0 Ac-ft 1,220

9-0448. McCullough-Spruce-Crystal diversion near Hoosier Pass, Colo.

Location.--Lat 39°22'50", long 106°04'10", in NE½SE¼ sec.2, T.8 S., R.78 W., on left bank at entrance to Hoosier Pass tunnel, 1½ miles northwest of Hoosier Pass, about 2 miles downstream from diversion point on McCullough Gulch, and 7 miles southwest of Breckenridge.

Records available.--October 1957 to September 1967. Prior to October 1961, published as McCullough diversion near Hoosier Pass.

Gage.--Water-stage recorder and Parshall flume. Altitude of gage is 10,986 ft (from State engineer).

Extremes.--1957-67: Maximum daily discharge, 102 cfs June 21, 1965; no flow for most of each year.

Remarks.--Records good. This is a transmountain diversion from McCullough Gulch, Spruce and Crystal Creeks in Blue River basin through Hoosier Pass tunnel to South Platte River basin whence it is again diverted to South Catamount Creek in the Arkansas River basin. Water is for municipal use by city of Colorado Springs. Diversion points are in secs.14, 23, 26, T.7 S., R.78 W. The entire flow is regulated by diversion gates.

Cooperation.--Gage-height record furnished by city of Colorado Springs.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1							0	0.80	10	70	9.4	
2							0	.50	22	66	.40	
3							0	.45	33	58	.40	
4							0	.40	34	57	.40	
5							0	.40	41	54	.40	
6							0	.40	45	54	.40	
7							0	.40	42	59	.40	
8							0	.83	42	56	.40	
9							0	2.2	39	49	.40	
10							0	3.6	35	43	.40	
11							0	3.2	26	42	.40	
12							0	4.2	23	46	.35	
13							0	3.9	21	44	.35	
14							0	2.3	19	55	.35	
15							0	1.7	19	60	.35	
16							0	1.9	25	60	.35	
17							0	4.0	38	46	.35	
18							0	7.8	60	43	.35	
19							0	10	56	36	.35	
20							0	9.2	51	31	.35	
21							.24	11	54	34	.35	
22							.60	19	55	34	.35	
23							1.0	31	58	41	.35	
24							1.0	39	64	68	.35	
25							1.0	40	62	46	.35	
26							1.0	35	56	34	.35	
27							1.2	25	57	29	.35	
28							1.5	20	54	25	.35	
29							1.5	17	52	22	.20	
30					- - - - -		1.3	15	64	21	0	
31		- - - - -			- - - - -		- - - - -	12	- - - - -	19	0	- - - - -
Total	0	0	0	0	0	0	10.34	322.18	1,257	1,402	19.55	0
Mean	0	0	0	0	0	0	0.345	10.4	41.9	45.2	0.631	0
Max	0	0	0	0	0	0	1.5	40	64	70	9.4	0
Min	0	0	0	0	0	0	0	0.40	10	19	0	0
Ac-ft	0	0	0	0	0	0	21	639	2,490	2,780	39	0
Cal yr 1966: Total	2,324.9		Mean	6.37	Max	56	Min	0	Ac-ft	4,610		
Wtr yr 1967: Total	3,011.07		Mean	8.25	Max	70	Min	0	Ac-ft	5,970		

BLUE RIVER BASIN

9-0466. Blue River near Dillon, Colo.

Location.--Lat 39°32'58", long 106°02'22", in NW¼NE¼ sec.7, T.6 S., R.77 W., on right bank 0.3 mile downstream from Swan River and 4½ miles south of Dillon.

Drainage area.--119 sq mi (revised).

Records available.--October 1957 to September 1967.

Gage.--Water-stage recorder. Altitude of gage is 9,120 ft (from topographic map).

Average discharge.--10 years, 91.9 cfs (66,530 acre-ft per year), including diversion to Hoosier Pass tunnel.

Extremes.--Maximum discharge during year, 224 cfs June 22 (gage height, 3.43 ft); minimum daily, 20 cfs Jan. 28 to Mar. 16.
1957-67: Maximum discharge, 1,250 cfs June 17, 1965 (gage height, 5.38 ft), from rating curve extended above 610 cfs; minimum daily, 17 cfs Mar. 21, 1961.

Remarks.--Records good. Transmountain diversion above station by Boreas Pass ditch and Hoosier Pass tunnel (see elsewhere in this report).

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	41	33	25	22	20	20	26	38	136	165	76	80
2	41	32	24	22	20	20	27	36	134	162	72	90
3	41	32	24	22	20	20	27	35	140	158	72	90
4	41	32	24	22	20	20	31	34	162	152	82	84
5	41	32	24	21	20	20	33	34	185	148	88	78
6	41	31	25	21	20	20	35	34	202	145	88	72
7	41	31	25	21	20	20	36	35	210	143	88	67
8	41	31	25	22	20	20	38	35	210	143	86	65
9	40	31	25	22	20	20	38	38	206	138	84	65
10	40	31	25	22	20	20	36	43	206	131	96	69
11	39	31	24	22	20	20	35	48	202	127	115	72
12	39	31	24	22	20	20	37	51	192	122	110	72
13	39	31	24	22	20	20	37	54	178	122	101	78
14	39	31	24	22	20	20	36	55	171	120	96	82
15	38	29	24	22	20	20	35	54	168	120	92	74
16	39	29	24	22	20	20	35	51	168	120	94	69
17	39	29	24	22	20	21	33	48	168	125	101	65
18	40	29	24	21	20	22	33	49	175	122	96	63
19	40	29	24	21	20	22	36	55	188	118	92	62
20	39	28	24	21	20	22	38	69	196	108	90	62
21	39	27	24	21	20	22	39	80	213	103	84	62
22	39	27	24	21	20	22	37	87	220	103	78	58
23	38	27	24	21	20	23	35	103	217	98	72	55
24	36	27	24	21	20	23	33	124	210	108	71	54
25	36	27	23	21	20	24	33	145	206	120	67	51
26	36	26	23	21	20	25	32	168	199	115	63	51
27	36	25	23	21	20	25	32	168	192	106	62	55
28	35	25	22	20	20	25	33	158	185	96	62	58
29	34	25	22	20	-	25	36	145	178	88	63	63
30	33	25	22	20	- - - - -	26	38	138	168	84	71	58
31	33	- - - - -	22	20	- - - - -	27	- - - - -	138	- - - - -	80	74	- - - - -
Total	1,194	874	739	661	560	674	1,030	2,350	5,585	3,790	2,586	2,024
Mean	38.5	29.1	23.8	21.3	20.0	21.7	34.3	75.8	186	122	83.4	67.5
Max	41	33	25	22	20	27	39	168	220	165	115	90
Min	33	25	22	20	20	20	26	34	134	80	62	51
Ac-ft	2,370	1,730	1,470	1,310	1,110	1,340	2,040	4,660	11,080	7,520	5,130	4,010
Cal yr 1966 : Total	18,539			Mean 50.8	Max 171	Min 21	Ac-ft 36,770					
Wtr yr 1967 : Total	22,067			Mean 60.5	Max 220	Min 20	Ac-ft 43,770					

9-0475. Snake River near Montezuma, Colo.

Location.--Lat 39°36'20", long 105°56'33", in NW¼ sec.19, T.5 S., R.76 W. (projected), on right bank 200 ft downstream from North Fork and 4½ miles northwest of Montezuma.

Drainage area.--57.7 sq mi (revised).

Records available.--July 1942 to September 1946, October 1951 to September 1967.

Gage.--Water-stage recorder. Altitude of gage is 9,320 ft (from topographic map). Prior to Oct. 14, 1943, staff gage at same site and datum.

Average discharge.--20 years, 59.4 cfs (43,000 acre-ft per year).

Extremes.--Maximum discharge during year, 362 cfs June 20 (gage height, 2.78 ft); minimum daily, 7.8 cfs Feb. 9.
1942-46, 1951-67: Maximum discharge, 1,250 cfs June 10, 1952 (gage height, 3.51 ft); minimum not determined.

Remarks.--Records good except those for winter period, which are poor. Small diversions above station for irrigation and domestic use.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	20	15	13	9.6	8.4	8.4	11	19	117	222	65	36
2	20	16	13	9.6	8.4	8.4	11	17	148	208	64	33
3	24	17	13	9.6	8.4	8.4	11	16	194	188	64	31
4	26	17	13	9.6	8.4	8.4	12	15	219	180	58	29
5	25	17	12	9.6	8.4	8.4	13	14	243	168	55	28
6												
7	24	16	12	9.2	9.0	8.4	15	14	262	164	55	27
8	24	16	12	9.0	8.6	8.4	15	15	262	164	54	27
9	23	15	12	9.0	8.0	8.4	18	19	243	152	54	34
10	21	15	12	9.0	7.8	8.4	16	28	243	142	55	36
11	20	15	12	9.2	8.4	8.4	15	33	222	133	52	33
12												
13	22	14	11	9.4	8.4	8.4	15	29	191	131	49	33
14	23	15	11	9.4	8.4	8.4	15	32	168	128	45	58
15	22	16	11	9.4	8.4	8.4	15	35	154	119	44	38
16	23	17	11	9.4	8.4	8.4	14	29	144	119	44	36
17	22	17	11	9.4	8.4	8.4	14	25	139	146	46	34
18												
19	23	16	11	9.4	8.4	8.4	13	26	154	126	44	34
20	23	16	11	9.4	8.4	9.0	14	38	178	115	40	34
21	19	15	11	9.0	8.4	9.0	16	57	240	110	38	34
22	18	15	11	9.0	8.4	9.0	16	70	234	101	37	37
23	21	15	11	9.0	8.4	9.0	16	75	262	103	36	35
24												
25	20	14	11	9.0	8.4	9.0	16	95	269	101	36	33
26	18	14	11	9.0	8.4	10	15	142	265	103	35	31
27	19	14	11	9.0	8.4	10	14	183	262	119	33	30
28	18	14	11	9.0	8.4	10	14	202	278	115	32	32
29	19	14	11	9.0	8.4	10	13	214	262	103	31	34
30												
31	19	13	10	9.0	8.4	11	14	170	250	93	32	39
32	19	12	10	9.0	8.4	11	15	141	243	86	32	37
33	18	13	10	9.0	8.4	11	16	139	222	76	36	34
34	18	13	9.6	8.4	-	11	20	135	214	73	38	33
35	17	13	9.6	8.4	- - - -	11	21	129	222	70	39	32
36	18	- - - -	9.6	8.4	- - - -	12	- - - -	120	- - - -	68	43	- - - -
Total	646	449	347.8	283.4	235.0	286.4	443	2,276	6,504	3,926	1,386	1,022
Mean	20.8	15.0	11.2	9.14	8.39	9.24	14.8	73.4	217	127	44.7	34.1
Max	26	17	13	9.6	9.0	12	21	214	278	222	65	58
Min	17	12	9.6	8.4	7.8	8.4	11	14	117	68	31	27
Ac-ft	1,280	891	690	562	466	568	879	4,510	12,900	7,790	2,750	2,030

Cal yr 1966: Total 12,482.0 Mean 34.2 Max 134 Min 8.0 Ac-ft 24,760
Wtr yr 1967: Total 17,804.6 Mean 48.8 Max 278 Min 7.8 Ac-ft 35,310

Peak discharge (base, 500 cfs).--No peak above base.

Note.--No gage-height record Dec. 5 to Apr. 4.

BLUE RIVER BASIN

9-0477. Keystone Gulch near Dillon, Colo.

Location.--Lat 39°35'40", long 105°58'19", in NE¼ sec.26, T.5 S., R.77 W., on right bank 0.7 mile upstream from mouth and 4.7 miles southeast of Dillon.

Drainage area.--9.10 sq mi (revised).

Records available.--October 1957 to September 1967.

Gage.--Water-stage recorder. Altitude of gage is 9,350 ft (from topographic map).

Average discharge.--10 years, 5.21 cfs (3,770 acre-ft per year).

Extremes.--Maximum discharge during year, 22 cfs June 6 (gage height, 1.86 ft); minimum daily, 1.3 cfs Feb. 22.

1957-67: Maximum discharge, 90 cfs June 5, 1958 (gage height, 2.75 ft), from rating curve extended above 28 cfs; minimum not determined.

Remarks.--Records good except those for winter period, which are poor. No known diversion above station.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.4	2.1	2.2	1.7	1.5	1.4	1.4	3.3	16	12	5.4	4.2
2	2.4	2.1	2.3	1.7	1.5	1.4	1.4	3.2	18	12	5.1	3.9
3	2.5	2.1	2.3	1.7	1.5	1.4	1.4	3.2	17	11	5.1	3.6
4	2.4	2.2	2.3	1.7	1.5	1.4	1.4	3.3	16	11	4.8	3.3
5	2.4	2.3	2.2	1.7	1.5	1.4	1.5	3.3	18	10	4.8	3.3
6	2.4	2.3	2.2	1.7	1.5	1.4	1.7	3.3	18	10	4.8	3.3
7	2.4	2.3	1.9	1.5	1.5	1.4	1.8	3.6	18	10	5.1	3.6
8	2.4	2.3	1.9	1.5	1.5	1.4	1.8	3.9	17	10	5.4	4.5
9	2.4	2.2	1.8	1.5	1.5	1.4	1.8	4.2	18	9.0	5.4	4.5
10	2.4	2.2	1.7	1.5	1.5	1.4	1.7	4.5	17	8.5	5.1	4.2
11	2.4	2.2	1.8	1.5	1.5	1.4	2.3	4.5	18	8.0	4.8	4.2
12	2.2	2.3	1.9	1.5	1.5	1.4	2.3	5.7	16	8.5	4.5	5.7
13	2.2	2.3	1.9	1.5	1.5	1.4	2.2	5.4	16	8.0	4.2	3.9
14	2.2	2.3	1.9	1.6	1.5	1.4	2.1	4.5	15	7.5	4.5	3.6
15	2.4	2.3	1.9	1.6	1.5	1.4	2.1	4.5	15	9.5	5.1	3.3
16	2.4	2.3	1.9	1.6	1.5	1.4	2.3	4.5	16	8.5	4.8	3.0
17	2.5	2.3	1.9	1.5	1.5	1.4	2.8	6.0	15	8.0	4.2	3.0
18	2.2	2.3	1.9	1.5	1.5	1.4	3.1	7.0	15	7.5	4.2	3.0
19	2.6	2.3	1.9	1.5	1.5	1.4	3.5	7.5	14	7.5	3.9	3.6
20	2.5	2.4	1.9	1.5	1.5	1.4	3.5	8.5	16	7.5	3.9	3.3
21	2.1	2.2	1.9	1.6	1.4	1.4	3.4	10	18	7.5	3.6	3.0
22	2.5	2.1	1.9	1.6	1.3	1.4	3.2	14	17	7.0	3.6	2.9
23	2.0	2.1	1.9	1.6	1.4	1.4	3.1	16	17	8.5	3.3	2.9
24	2.1	2.1	1.8	1.6	1.4	1.4	3.1	16	16	9.0	3.3	3.3
25	2.2	2.1	1.8	1.6	1.4	1.4	3.1	16	16	7.5	3.3	4.2
26	2.2	2.0	1.8	1.6	1.4	1.4	3.1	16	15	6.5	3.6	4.8
27	2.1	1.9	1.7	1.5	1.4	1.4	3.3	16	15	6.5	3.6	4.8
28	2.1	2.0	1.6	1.5	1.4	1.5	3.6	16	14	5.7	3.9	3.9
29	2.1	2.1	1.6	1.5	-	1.5	3.6	16	13	5.7	4.2	3.6
30	2.2	2.3	1.7	1.5	- - - -	1.4	3.5	15	13	5.4	4.2	3.6
31	2.1	- - - -	1.7	1.5	- - - -	1.4	- - - -	15	- - - -	5.4	4.8	- - - -
Total	71.4	66.0	59.1	48.6	41.1	43.6	75.1	259.9	483	258.7	136.5	112.0
Mean	2.30	2.20	1.91	1.57	1.47	1.41	2.50	8.38	16.1	8.35	4.40	3.73
Max	2.6	2.4	2.3	1.7	1.5	1.5	3.6	16	18	12	5.4	5.7
Min	2.0	1.9	1.6	1.5	1.3	1.4	1.4	3.2	13	5.4	3.3	2.9
Ac-ft	142	131	117	96	82	86	149	516	958	513	271	222

Cal yr 1966: Total 1,149.8 Mean 3.15 Max 9.0 Min 1.6 Ac-ft 2,280

Wtr yr 1967: Total 1,655.0 Mean 4.53 Max 18 Min 1.3 Ac-ft 3,280

Peak discharge (base, 35 cfs).--No peak above base.

Note.--No gage-height record Nov. 1 to May 1.

9-0501. Tenmile Creek below North Fork, at Frisco, Colo.

Location.--Lat 39°34'35", long 106°06'30", in SW 1/4 sec. 34, T.5 S., R.78 W., on left bank 500 ft downstream from North Fork, 800 ft downstream from bridge on U. S. Highway 6, and 0.6 mile west of Frisco.

Drainage area.--93.3 sq mi.

Records available.--October 1957 to September 1967.

Gage.--Water-stage recorder. Altitude of gage is 9,090 ft (from topographic map).

Average discharge.--10 years, 86.0 cfs (62,260 acre-ft per year).

Extremes.--Maximum discharge during year, 832 cfs May 24 (gage height, 5.14 ft); minimum daily, 10 cfs Feb. 9.

1957-67: Maximum discharge, 1,910 cfs June 16, 1965 (gage height, 6.15 ft), from rating curve extended above 750 cfs; minimum daily, 7 cfs Mar. 8, 14, 1960.

Remarks.--Records good except those for winter period, which are poor. Natural flow of stream affected by a few small diversions above station for irrigation and municipal use and transbasin diversion from Robinson Reservoir (capacity, 2,520 acre-ft) in Eagle River basin.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	18	17	18	12	11	13	17	46	336	272	54	57
2	18	20	16	12	11	13	17	41	450	254	51	50
3	22	18	16	12	11	13	17	37	510	239	52	44
4	22	16	16	12	11	13	19	34	530	254	49	39
5	23	18	14	11	11	12	21	34	546	245	45	35
6	23	16	13	11	12	11	22	33	576	239	46	33
7	23	18	13	11	12	13	23	34	535	242	47	31
8	22	14	13	11	11	13	26	49	495	230	49	32
9	21	16	12	12	10	13	29	75	455	195	53	45
10	20	19	14	13	11	13	28	104	420	176	58	41
11	20	16	13	13	11	13	31	108	372	173	50	38
12	21	16	13	13	11	13	36	121	348	171	46	69
13	21	16	13	13	11	13	35	133	302	151	42	49
14	21	19	13	13	11	13	31	106	278	127	41	42
15	20	19	13	13	11	13	33	88	275	123	42	39
16	21	18	13	13	11	15	33	89	281	131	41	36
17	20	18	13	12	11	15	32	127	305	127	36	35
18	20	15	13	12	11	15	33	190	368	121	35	35
19	20	17	13	12	11	15	39	236	380	104	34	39
20	19	19	12	12	11	15	41	248	384	92	31	34
21	19	16	12	12	11	15	35	287	400	89	30	28
22	18	16	12	12	11	15	34	404	392	82	29	29
23	18	18	11	12	12	16	32	500	380	84	28	29
24	17	18	11	12	13	16	29	582	388	98	26	28
25	18	17	11	12	14	16	29	606	372	94	27	31
26	18	17	11	12	13	16	28	530	332	76	29	36
27	18	15	11	12	12	17	30	455	308	67	28	35
28	18	16	12	12	13	17	41	436	296	62	36	28
29	17	16	12	12	-	17	55	404	278	58	42	26
30	16	16	12	12	- - - - -	17	59	368	278	55	43	25
31	16	- - - - -	12	11	- - - - -	19	- - - - -	328	- - - - -	54	51	- - - - -
Total	608	510	401	374	320	448	935	6,833	11,570	4,485	1,271	1,118
Mean	19.6	17.0	12.9	12.1	11.4	14.5	31.2	220	386	145	41.0	37.3
Max	23	20	18	13	14	19	59	606	576	272	58	69
Min	16	14	11	11	10	11	17	33	275	54	26	25
Ac-ft	1,210	1,010	795	742	635	889	1,850	13,550	22,950	8,900	2,520	2,220

Cal yr 1966: Total 19,209 Mean 52.6 Max 345 Min 11 Ac-ft 38,100

Wtr yr 1967: Total 28,873 Mean 79.1 Max 606 Min 10 Ac-ft 57,270

Peak discharge (base, 700 cfs).--May 24 (1945) 832 cfs (5.14 ft); June 6 (2000) 744 cfs (5.02 ft).

Note.--No gage-height record Dec. 6 to Apr. 4.

BLUE RIVER BASIN

9-0506. Dillon Reservoir at Dillon, Colo.

Location.--Lat 39°37'15", long 106°03'55", in NE¼ sec.13, T.5 S., R.78 W., in gatehouse at dam on Blue River, 0.8 mile upstream from Straight Creek, about 1 mile southwest of Dillon, and 3.5 miles northeast of Frisco.

Drainage area.--335 sq mi.

Records available.--September 1963 to September 1967.

Gage.--Electric tape gage read once daily. Datum of gage is at mean sea level (levels by Denver Board of Water Commissioners).

Extremes.--Maximum contents observed during year, 258,000 acre-ft June 28 (elevation, 9,018.20 ft); minimum observed, 200,800 acre-ft May 10 (elevation, 8,998.76 ft).

1963-67: Maximum contents observed, that of June 28, 1967; minimum observed since appreciable storage was attained in July 1964, 45,310 acre-ft Apr. 20, 1965 (elevation, 8,904.16 ft).

Remarks.--Reservoir is formed by earth- and rock-fill dam. Dam completed and storage began Sept. 3, 1963, dead storage pool filled Sept. 12, 1963. Capacity, 254,000 acre-ft between elevations 8,829.00 (invert of valves in outlet to Blue River) and 9,017.00 ft (crest of spillway). Dead storage, 3,270 acre-ft. Reservoir is used to store water for transmountain diversion to South Platte River basin through Harold D. Roberts tunnel (see elsewhere in this report) for municipal use by city of Denver. Figures given herein represent usable contents.

Cooperation.--Records furnished by Denver Board of Water Commissioners.

Month-end elevation and contents, water year October 1966 to September 1967

Date	Elevation (feet) †	Contents (acre-feet)	Changes in contents (acre-feet)
Sept. 30.....	9,010.96	235,200	-
Oct. 31.....	9,008.44	227,700	-7,500
Nov. 30.....	9,007.75	225,700	-2,000
Dec. 31.....	9,006.36	221,600	-4,100
Calendar year 1966.....	-	-	-29,600
Jan. 31.....	9,005.01	217,800	-3,800
Feb. 28.....	9,003.65	214,000	-3,800
Mar. 31.....	9,002.28	210,200	-3,800
Apr. 30.....	8,999.29	202,200	-8,000
May 31.....	9,005.71	219,800	+17,600
June 30.....	9,018.19	258,000	+38,200
July 31.....	9,017.35	255,200	-2,800
Aug. 31.....	9,015.06	247,800	-7,400
Sept. 30.....	9,012.30	239,200	-8,600
Water year 1967.....	-	-	+4,000

† Elevation at 0800.

9-0507. Blue River below Dillon, Colo.

Location.--Lat 39°37'30", long 106°04'05", in SE¼ sec.12, T.5 S., R.78 W., on right bank 0.3 mile downstream from Dillon Dam, 0.5 mile upstream from Straight Creek, and 1.1 miles west of Dillon.

Drainage area.--335 sq mi.

Records available.--January 1960 to September 1967.

Gage.--Water-stage recorder and concrete control. Altitude of gage is 8,760 ft (from topographic map). Supplementary water-stage recorder and Parshall flume on Valear ditch about 600 ft downstream from point of diversion.

Extremes.--Maximum discharge during year, 775 cfs June 28; minimum daily, 50 cfs May 2.

1960-67: Maximum discharge, 1,720 cfs June 17, 1960; maximum gage height, 3.60 ft June 14, 1962; no flow Sept. 4 to Nov. 19, 1963.

Remarks.--Records good. Records show combined flow of river and Valear ditch. Flow completely regulated by Dillon Reservoir (see sta. 9-0506). Natural flow of stream affected by transmountain diversions, transbasin diversions, and diversions above station for irrigation of about 400 acres of hay meadows. Valear ditch diverts water just below Dillon Dam for irrigation below station. Part of natural flow of Snake River above station diverted through old power canal Sept. 1 to Nov. 20, 1963, and returned to river below this station.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	122	95	74	65	79	76	74	70	54	730	132	192
2	122	95	74	65	79	76	74	50	54	717	117	203
3	122	95	74	65	79	72	72	53	53	665	105	170
4	122	95	74	65	79	67	79	51	53	623	127	118
5	122	95	74	65	79	67	101	89	53	593	198	100
6	128	95	74	65	79	67	101	155	53	569	198	99
7	132	95	92	65	72	67	95	155	53	557	195	100
8	132	92	123	63	70	67	89	155	55	539	209	121
9	129	95	109	63	67	67	89	187	55	517	152	152
10	130	95	98	63	65	67	89	96	51	475	109	159
11	130	95	98	63	65	67	89	51	51	450	147	159
12	130	92	89	63	65	67	109	51	51	435	190	192
13	130	92	74	60	65	67	140	51	52	411	190	203
14	130	81	74	60	65	63	147	51	53	377	191	174
15	130	70	74	60	65	60	214	51	54	377	190	149
16	134	70	74	60	65	60	248	51	53	395	190	149
17	134	70	74	63	70	60	137	51	54	386	190	148
18	134	76	74	65	76	58	63	51	54	372	190	133
19	134	89	74	67	74	58	119	53	98	358	190	133
20	127	89	74	67	74	67	116	53	183	340	192	140
21	117	89	74	67	76	74	116	53	255	330	192	140
22	117	89	74	67	76	74	129	53	309	312	142	140
23	117	89	70	70	76	74	129	53	313	312	118	140
24	101	89	65	70	76	74	106	53	358	312	118	140
25	95	84	65	70	76	74	109	53	425	299	118	112
26	95	74	65	72	76	74	101	53	558	283	118	98
27	95	74	65	79	76	74	136	53	661	248	118	106
28	95	74	65	79	76	74	118	54	744	224	118	106
29	95	74	65	79	-	74	87	55	750	194	135	98
30	95	74	65	79	- - - -	74	87	54	744	168	167	98
31	95	- - - -	65	79	- - - -	74	- - - -	54	- - - -	149	181	- - - -
Total	3,691	2,581	2,383	2,083	2,040	2,134	3,363	2,163	6,354	12,717	4,927	4,172
Mean	119	86.0	76.9	67.2	72.9	68.8	112	69.8	212	410	159	139
Max	134	95	123	79	79	76	248	187	750	730	209	203
Min	95	70	65	60	65	58	63	50	51	149	105	98
Ac-ft	7,320	5,120	4,730	4,130	4,050	4,230	6,670	4,290	12,600	25,220	9,770	8,280
Cal yr 1966: Total	52,988		Mean 145		Max 673	Min 48		Ac-ft 105,100				
Wtr yr 1967: Total	48,608		Mean 133		Max 750	Min 50		Ac-ft 96,410				

9-0520. Rock Creek near Dillon, Colo.

Location.--Lat 39°43'25", long 106°07'40", in NE¼ sec.9, T.4 S., R.78 W., on right bank 500 ft upstream from bridge on State Highway 9, 1,100 ft upstream from mouth, 1,200 ft downstream from confluence of North and South Rock Creeks, and 8 miles northwest of Dillon.

Drainage area.--15.8 sq mi.

Records available.--July 1942 to September 1956, October 1966 to September 1967.

Gage.--Digital water-stage recorder. Datum of gage is 8,502.52 ft above mean sea level (State Highway Department bench mark). Prior to Apr. 21, 1943, staff gage and Apr. 21, 1943, to Sept. 13, 1950, graphic water-stage recorder, at site 500 ft downstream at datum 28.76 ft lower. Sept. 14, 1950, to Sept. 30, 1956, graphic water-stage recorder at present site and datum.

Average discharge.--15 years, 23.2 cfs (16,800 acre-ft per year).

Extremes.--Maximum discharge during year, 124 cfs May 25 (gage height, 3.89 ft); minimum daily, 2.9 cfs Feb. 9.

1942-56, 1966-67: Maximum discharge, 260 cfs June 18, 1951 (gage height, 4.35 ft), from rating curve extended above 190 cfs; minimum daily determined, 2.2 cfs Apr. 13, 17, 1945.

Remarks.--Records good except those for winter period, which are fair. A few small diversions for irrigation of hay meadows above and below station.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	7.2	6.0	4.6	4.0	3.2	3.7	5.1	14	60	80	25	13
2	7.1	6.6	4.3	4.0	3.2	3.7	5.0	12	71	77	24	12
3	9.5	6.6	4.1	3.9	3.2	3.7	5.2	10	86	74	23	11
4	9.1	6.2	4.1	3.8	3.2	3.7	5.8	9.0	93	72	22	10
5	8.9	6.4	4.1	3.4	3.2	3.5	6.4	8.0	93	69	20	10
6	9.4	5.9	3.8	3.3	3.2	3.2	6.4	7.7	95	70	19	9.8
7	9.1	6.4	3.8	3.3	3.2	3.5	8.0	8.3	89	74	21	9.6
8	8.5	5.2	3.6	3.2	3.1	3.7	9.1	12	84	84	22	9.7
9	8.0	5.8	3.8	3.2	2.9	3.7	8.3	17	86	70	21	11
10	7.4	7.0	3.9	3.6	3.0	3.7	8.4	21	85	60	20	11
11	7.3	6.6	3.9	3.5	3.1	3.7	8.9	19	67	52	18	11
12	7.8	5.0	3.9	3.5	3.1	3.7	9.5	20	57	57	17	32
13	7.9	5.9	3.9	3.5	3.2	3.7	8.3	20	55	56	16	20
14	8.6	5.6	3.9	3.5	3.8	3.7	8.8	16	49	50	15	16
15	10	5.6	3.8	3.5	3.6	3.8	8.1	14	52	53	15	14
16	8.1	5.4	3.7	3.4	3.3	4.0	8.2	15	60	49	14	13
17	7.6	5.5	3.7	3.5	3.1	4.2	13	22	63	48	13	12
18	7.2	4.6	3.7	3.4	3.1	4.5	9.3	33	78	47	13	12
19	8.8	5.3	3.6	3.3	3.1	4.9	10	40	87	39	13	14
20	7.7	5.4	3.5	3.3	3.1	4.3	11	42	92	36	12	13
21	6.8	5.1	3.6	3.3	3.1	4.3	11	49	91	35	12	12
22	7.3	4.5	3.6	3.3	3.1	4.3	10	66	89	35	12	11
23	6.4	5.0	3.5	3.3	3.3	4.5	8.5	83	88	37	11	11
24	6.3	5.2	3.5	3.3	3.6	4.6	7.4	100	91	33	11	11
25	6.7	5.0	3.7	3.3	4.0	4.8	7.3	106	93	30	11	12
26	6.3	4.7	3.9	3.3	3.7	4.7	9.0	98	88	28	10	13
27	6.6	4.6	3.9	3.3	3.5	4.6	7.9	77	85	27	10	13
28	6.3	4.8	3.9	3.3	3.4	4.8	10	70	81	26	11	12
29	6.0	4.8	3.9	3.3	-	5.0	14	67	71	24	11	11
30	6.4	4.8	4.0	3.3	- - - - -	5.4	15	65	78	24	11	11
31	6.0	- - - - -	4.0	3.2	- - - - -	5.3	- - - - -	61	- - - - -	24	13	- - - - -
Total	236.3	165.5	119.2	106.3	91.6	128.9	262.9	1,202.0	2,357	1,540	486	381.1
Mean	7.62	5.32	3.85	3.43	3.27	4.16	8.76	38.8	78.6	49.7	15.7	12.7
Max	10	7.0	4.6	4.0	4.0	5.4	15	106	95	84	25	32
Min	6.0	4.5	3.5	3.2	2.9	3.2	5.0	7.7	49	24	10	9.6
Ac-ft	469	328	236	211	182	256	521	2,380	4,680	3,050	964	756

Cal yr 1966: Total -- Mean -- Max -- Min -- Ac-ft --
 Wtr yr 1967: Total 7,076.8 Mean 19.4 Max 106 Min 2.9 Ac-ft 14,040

Note.--No gage-height record Feb. 8 to Apr. 5.

9-0524. Boulder Creek at upper station, near Dillon, Colo.

Location.--Lat 39°43'40", long 106°10'20", in SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.6, T.4 S., R.78 W., on left bank 1.2 miles downstream from Boulder Lake, 3.2 miles upstream from mouth, and 9.4 miles northwest of Dillon.

Drainage area.--8.56 sq mi.

Records available.--October 1966 to September 1967.

Gage.--Water-stage recorder. Altitude of gage is 9,460 ft (from topographic map).

Extremes.--Maximum discharge during year, 120 cfs June 23 (gage height, 2.61 ft); minimum daily, 1.6 cfs Mar. 5.

Remarks.--Records good except those for winter period, which are poor.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5.0	3.0	2.5	2.3	1.8	1.8	2.4	5.0	38	87	22	14
2	4.5	3.0	2.4	2.1	1.8	1.8	2.5	4.0	48	83	21	12
3	5.6	2.9	2.3	2.1	1.8	1.8	2.6	3.5	68	76	19	10
4	5.8	2.8	2.4	2.1	1.8	1.8	2.8	3.0	78	75	18	9.1
5	5.6	2.8	2.5	2.1	1.9	1.6	3.0	2.8	80	71	17	8.0
6	5.6	2.8	2.4	2.1	1.9	1.7	3.2	2.6	79	65	17	7.4
7	5.6	2.8	2.3	2.2	1.9	1.7	3.3	3.0	71	69	20	7.2
8	5.3	2.8	2.3	2.2	1.9	1.7	3.9	4.0	69	79	23	6.8
9	5.0	2.9	2.3	2.2	1.8	1.7	4.7	6.9	75	61	22	7.6
10	5.0	2.8	2.4	2.2	1.8	1.7	4.0	10	70	57	20	8.2
11	4.8	2.9	2.5	2.1	1.8	1.7	4.0	9.4	54	48	17	9.0
12	5.0	2.9	2.4	2.1	1.8	1.7	4.5	9.4	44	52	16	3.0
13	4.8	2.8	2.3	2.1	1.8	1.7	3.7	9.1	42	57	14	2.3
14	5.0	2.8	2.3	2.0	2.0	1.7	4.2	7.3	38	48	13	1.8
15	5.0	2.8	2.3	2.0	2.0	1.7	3.9	5.8	38	48	12	1.4
16	5.0	2.7	2.4	2.0	2.0	1.7	3.6	5.6	42	44	11	1.1
17	4.5	2.6	2.4	2.0	2.0	1.7	3.4	8.3	50	42	10	1.0
18	4.1	2.6	2.3	2.0	2.0	2.2	3.5	16	69	44	9.8	9.1
19	3.8	2.6	2.3	1.8	2.0	2.2	4.2	23	83	40	8.7	9.4
20	3.8	2.6	2.3	1.8	1.8	2.2	4.8	27	92	34	8.3	1.0
21	3.6	2.5	2.4	1.8	1.8	2.0	5.1	30	88	33	7.6	9.4
22	3.4	2.4	2.3	1.8	1.8	2.0	4.5	46	84	33	7.3	8.0
23	3.4	2.4	2.3	1.8	1.8	2.1	4.0	60	88	33	6.9	7.3
24	3.2	2.5	2.3	1.8	1.8	2.2	3.5	71	92	31	6.4	6.9
25	3.2	2.4	2.3	1.7	1.8	2.3	3.0	84	87	28	6.1	7.3
26	3.2	2.4	2.3	1.9	1.8	2.3	3.0	76	82	25	6.1	8.3
27	3.2	2.4	2.1	1.9	1.8	2.2	3.0	54	82	24	6.4	9.1
28	3.2	2.4	2.3	1.9	1.8	2.2	3.3	44	79	23	6.9	8.3
29	3.2	2.3	2.3	1.8	-	2.6	4.0	42	66	22	8.3	7.3
30	3.0	2.5	2.3	1.8	- - - -	2.5	6.0	42	76	22	12	6.4
31	3.0	- - - -	2.3	1.8	- - - -	2.4	- - - -	41	- - - -	21	15	- - - -
Total	134.4	80.1	72.5	61.5	52.0	60.6	111.6	755.7	2,052	1,475	407.8	312.1
Mean	4.34	2.67	2.34	1.98	1.86	1.95	3.72	24.4	68.4	47.6	13.2	10.4
Max	5.8	3.0	2.5	2.3	2.0	2.6	6.0	84	92	87	23	30
Min	3.0	2.3	2.1	1.7	1.8	1.6	2.4	2.6	38	21	6.1	6.4
Ac-ft	267	159	144	122	103	120	221	1,500	4,070	2,930	809	619

Cal yr 1966: Total -- Mean - Max - Min - Ac-ft -
 Wtr yr 1967: Total 5,575.3 Mean 15.3 Max 92 Min 1.6 Ac-ft 11,060

Note.--No gage-height record Nov. 3 to Apr. 17.

9-0528. Slate Creek at upper station, near Dillon, Colo.

Location.--Lat 39°45'45", long 106°11'30", in SW 1/4 sec.25, T.3 S., R.79 W., on left bank a quarter of a mile upstream from unnamed tributary, 2.7 miles upstream from mouth, and 12 miles northwest of Dillon.

Drainage area.--14.2 sq mi.

Records available.--October 1966 to September 1967.

Gage.--Water-stage recorder. Altitude of gage is 9,040 ft (from topographic map).

Extremes.--Maximum discharge during year, 252 cfs May 25 (gage height, 5.15 ft), from rating curve extended above 130 cfs; minimum daily, 2.2 cfs Feb. 21, Mar. 5, 6.

Remarks.--Records good except those for winter period, which are fair. No diversions above station.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	7.1	4.8	3.8	3.4	3.0	2.4	4.3	11	49	134	30	14
2	6.7	5.1	3.2	3.4	2.8	2.4	4.4	8.6	68	132	30	12
3	8.6	5.0	3.2	3.4	2.8	2.4	3.4	7.1	97	113	28	11
4	9.6	4.8	3.5	3.2	2.8	2.4	6.0	6.7	113	110	27	10
5	10	4.6	3.6	3.2	2.8	2.2	6.2	6.4	121	110	25	9.6
6	10	4.3	3.6	3.2	2.6	2.2	6.4	6.4	119	102	28	9.0
7	9.6	4.1	3.6	3.2	2.6	2.6	8.6	6.7	95	95	36	8.3
8	9.0	4.4	3.4	3.0	2.4	2.6	8.6	8.3	92	134	46	8.3
9	8.6	5.8	3.4	3.0	2.6	2.6	7.6	13	86	97	38	11
10	7.9	5.1	3.8	3.4	2.6	2.6	7.6	19	78	86	39	10
11	7.6	5.1	3.8	3.4	2.4	2.6	8.6	16	72	72	32	10
12	8.3	4.3	3.8	3.2	2.6	2.6	9.0	15	57	73	28	42
13	8.3	4.6	3.8	3.2	2.6	2.6	9.0	15	57	82	24	30
14	9.6	4.4	4.0	3.2	2.8	2.6	8.6	12	47	74	22	21
15	8.6	4.2	4.0	3.4	2.6	2.6	7.4	10	46	75	19	17
16	8.3	4.3	3.4	3.6	2.6	2.7	7.6	9.3	55	71	17	15
17	7.9	4.3	3.4	3.8	2.6	3.2	9.6	13	66	65	16	13
18	7.4	3.6	3.4	3.6	2.6	4.3	7.6	28	95	72	15	12
19	7.1	3.6	3.4	3.5	2.6	4.3	8.6	38	121	62	14	14
20	6.9	3.6	3.2	3.3	2.4	3.8	8.3	39	143	54	13	16
21	6.4	3.6	3.2	3.2	2.2	3.3	7.1	42	145	53	12	14
22	5.8	3.5	3.2	3.2	2.4	3.4	6.9	70	134	50	11	12
23	5.8	3.4	3.2	3.2	2.6	4.1	6.0	118	139	50	11	11
24	5.5	3.4	3.0	3.2	2.6	4.1	5.5	124	139	47	10	11
25	5.5	3.2	3.0	3.2	2.6	4.1	5.3	135	131	42	9.6	12
26	5.5	3.2	3.2	3.2	2.4	4.4	5.3	140	124	39	9.6	15
27	5.3	3.0	3.4	3.2	2.4	3.8	6.0	89	124	36	10	16
28	5.3	3.0	3.4	3.2	2.4	3.9	7.1	70	124	34	10	14
29	5.1	3.2	3.4	3.1	-	4.4	9.3	62	94	33	11	13
30	5.0	3.3	3.4	3.1	- - - - -	5.1	11	57	119	32	12	11
31	4.8	- - - - -	3.4	3.1	- - - - -	4.8	- - - - -	55	- - - - -	31	15	- - - - -
Total	227.1	122.8	107.1	101.5	72.4	101.1	216.9	1,250.5	2,950	2,260	648.2	422.2
Mean	7.33	4.09	3.45	3.27	2.59	3.26	7.23	40.3	98.3	72.9	20.9	14.1
Max	10	5.8	4.0	3.8	3.0	5.1	11	140	145	134	46	42
Min	4.8	3.0	3.0	3.0	2.2	2.2	3.4	6.4	46	31	9.6	8.3
Ac-ft	450	244	212	201	144	201	430	2,480	5,850	4,480	1,290	837

Cal yr 1966: Total ---- Mean - Max - Min - Ac-ft -
 Wtr yr 1967: Total 8,479.8 Mean 23.2 Max 145 Min 2.2 Ac-ft 16,820

Note.--No gage-height record Jan. 31 to Mar. 15.

9-0535. Blue River above Green Mountain Reservoir, Colo.

Location.--Lat 39°49'55", long 106°13'20", in S½ sec.34, T.2 S., R.79 W., on left bank 300 ft north of old State Highway 9, just upstream from high-water line of Green Mountain Reservoir at elevation 7,950 ft, 1.3 miles downstream from Brush Creek, and 18 miles southeast of Kremmling.

Drainage area.--511 sq mi (revised).

Records available.--October 1943 to September 1967.

Gage.--Water-stage recorder. Datum of gage is 7,946.56 ft above mean sea level, unadjusted.

Extremes.--Maximum discharge during year, 1,210 cfs July 2 (gage height, 2.56 ft); maximum gage height recorded, 3.67 ft Feb. 21 (backwater from ice); minimum daily discharge, 94 cfs Feb. 10.

1943-67: Maximum discharge, 5,020 cfs June 11, 1952 (gage height, 4.93 ft); maximum gage height recorded, 6.93 ft Nov. 5, 1961 (backwater from ice); minimum daily discharge, 33 cfs Oct. 20, 1963.

Remarks.--Records good except those for winter period, which are fair. Flow regulated by Dillon Reservoir since Sept. 3, 1963 (see sta. 9-0506). Natural flow of stream affected by transmountain and transbasin diversions and many small diversions for irrigation of about 4,000 acres of hay meadows above station.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	171	144	120	108	126	110	168	174	245	1,140	319	302
2	174	147	120	108	126	110	172	138	292	1,130	297	308
3	189	144	120	108	126	110	178	132	378	1,080	280	280
4	201	144	123	110	126	100	190	129	444	1,040	270	225
5	189	141	123	110	120	100	213	129	470	1,000	336	185
6	185	144	141	110	110	100	209	213	460	950	348	185
7	189	141	144	110	105	100	201	213	425	940	378	182
8	189	144	170	106	100	100	205	221	395	990	420	185
9	185	147	165	105	97	100	201	265	390	882	384	225
10	185	147	160	105	94	106	189	292	385	810	324	245
11	185	144	150	106	95	110	197	185	375	746	302	245
12	189	144	138	106	95	110	205	189	370	730	348	366
13	182	144	130	107	95	111	225	185	360	722	342	360
14	193	141	120	102	95	112	235	164	350	658	342	308
15	189	115	120	102	95	109	280	150	350	674	348	255
16	201	115	120	102	96	109	354	141	370	674	348	250
17	197	115	120	105	102	120	292	154	420	650	342	250
18	193	115	120	107	110	135	171	197	500	643	336	230
19	189	126	122	110	110	141	189	221	590	594	330	245
20	197	129	124	115	110	132	230	240	680	594	324	260
21	174	132	122	115	110	141	193	230	765	554	319	250
22	164	129	120	115	112	132	205	275	819	560	292	240
23	168	135	116	115	112	135	205	360	828	560	235	230
24	164	132	112	122	112	147	193	426	855	560	230	225
25	150	132	108	126	112	160	182	456	900	522	221	217
26	150	123	108	126	110	150	193	482	1,010	489	221	197
27	150	129	108	126	110	153	201	360	1,090	456	221	197
28	150	125	108	126	110	155	240	314	1,150	420	221	197
29	147	123	108	126	-	157	178	280	1,110	378	230	182
30	144	123	108	126	- - - -	160	193	265	1,120	342	265	178
31	147	- - - -	108	126	- - - -	160	- - - -	255	- - - -	324	297	- - - -
Total	5,480	4,014	3,876	3,491	3,021	3,875	6,287	7,435	17,896	21,812	9,470	7,204
Mean	177	134	125	113	108	125	210	240	597	704	305	240
Max	201	147	170	126	126	160	354	482	1,150	1,140	420	366
Min	144	115	108	102	94	100	168	129	245	324	221	178
Ac-ft	10,870	7,960	7,690	6,920	5,990	7,690	12,470	14,750	35,500	43,260	18,780	14,290

Cal yr 1966 : Total 88,234 Mean 242 Max 891 Min 90 Ac-ft 175,000
 Wtr yr 1967 : Total 93,861 Mean 257 Max 1,150 Min 94 Ac-ft 186,200

BLUE RIVER BASIN

9-0540. Black Creek below Black Lake, near Dillon, Colo.

Location.--Lat 39°48'00", long 106°16'05", in SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.8, T.3 S., R.79 W., on right bank, 600 ft upstream from bridge, 0.3 mile downstream from Black Lake, 4.5 miles upstream from highwater line of Green Mountain Reservoir at elevation 7,950 ft, and 17 miles northwest of Dillon.

Drainage area.--15.0 sq mi. Area at site used prior to Oct. 1, 1966, 15.5 sq mi (revised).

Records available.--July 1942 to September 1949, October 1966 to September 1967.

Gage.--Digital water-stage recorder. Altitude of gage is 8,750 ft (from topographic map). July 17, 1942, to May 27, 1943, staff gage and May 28, 1943, to Sept. 30, 1949, graphic water-stage recorder at site 600 ft downstream at different datum.

Average discharge.--8 years, 33.0 cfs (23,890 acre-ft per year).

Extremes.--Maximum discharge during year, 241 cfs May 25 (gage height, 3.81 ft), from rating curve extended above 145 cfs; minimum daily, 2.2 cfs Mar. 5.

1942-49, 1966-67: Maximum discharge, 384 cfs July 1, 1943 (gage height, 4.72 ft, site and datum then in use), from rating curve extended above 260 cfs; minimum daily, 1.7 cfs Feb. 23, 1947.

Remarks.--Records good except those for winter period, which are fair. No diversion above station.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	8.6	4.6	3.6	2.7	2.6	2.6	3.8	12	64	173	51	20
2	8.6	4.4	3.4	2.7	2.6	2.6	3.8	9.0	96	167	50	18
3	12	4.3	3.3	2.7	2.6	2.6	4.3	7.7	124	142	49	16
4	12	4.2	3.6	2.6	2.6	2.6	4.9	6.6	135	135	51	16
5	14	4.1	3.5	2.7	2.9	2.2	5.2	6.5	153	135	45	15
6	14	3.7	3.5	2.8	2.8	2.3	5.6	6.6	144	137	44	14
7	14	4.0	3.3	2.8	2.8	2.4	5.8	6.1	124	138	49	13
8	13	3.5	3.3	2.4	2.8	2.4	7.7	8.2	109	179	67	13
9	11	4.0	3.3	2.4	2.8	2.4	10	17	107	139	58	19
10	10	3.8	3.6	2.6	2.9	2.4	9.1	24	111	117	52	17
11	9.6	4.4	3.6	2.6	2.9	2.4	8.9	20	98	98	44	16
12	11	4.6	3.6	2.6	2.9	2.4	11	17	72	101	39	68
13	12	4.3	3.4	2.5	2.9	2.4	12	15	71	118	36	46
14	15	4.5	3.4	2.5	3.5	2.4	8.7	12	67	104	33	29
15	14	4.3	3.4	2.5	3.3	2.4	7.5	10	64	108	27	23
16	13	4.4	3.4	2.7	3.0	2.5	7.4	9.3	76	100	25	19
17	12	4.0	3.4	2.8	2.8	2.6	6.8	14	88	97	23	16
18	10	4.1	3.4	2.7	2.8	3.2	6.6	35	113	102	22	15
19	8.8	3.9	3.4	2.6	2.8	4.1	8.7	50	154	90	21	20
20	8.8	3.9	3.4	2.6	2.8	3.8	10	56	186	78	20	22
21	8.3	3.8	3.4	2.5	2.5	3.5	9.5	63	195	77	19	21
22	6.2	3.5	3.2	2.5	2.6	3.4	7.8	103	183	76	19	19
23	6.1	3.5	3.3	2.4	2.6	3.4	7.0	155	166	76	17	18
24	5.7	3.6	3.0	2.4	2.6	3.4	6.2	166	158	84	17	17
25	5.7	3.5	3.0	2.5	2.6	3.8	5.6	188	156	72	17	21
26	5.5	3.4	2.9	2.8	2.7	3.8	4.9	179	146	65	17	33
27	5.6	3.3	2.9	2.8	2.7	3.8	4.9	127	143	62	17	36
28	5.2	3.3	3.0	2.7	2.6	3.8	6.4	89	146	57	20	28
29	4.8	3.5	2.9	2.5	-	3.7	12	74	121	51	18	23
30	4.7	3.6	2.8	2.5	- - - -	3.7	17	67	151	52	19	19
31	4.9	- - - -	2.7	2.6	- - - -	3.7	- - - -	66	- - - -	53	22	- - - -
Total	294.1	118.0	101.9	80.7	78.0	92.7	229.1	1,619.0	3,721	3,183	1,008	670
Mean	9.49	3.93	3.29	2.60	2.79	2.99	7.64	52.2	124	103	32.5	22.3
Max	15	4.6	3.6	2.8	3.5	4.1	17	188	195	179	67	68
Min	4.7	3.3	2.7	2.4	2.5	2.2	3.8	6.1	64	51	17	13
Ac-ft	583	234	202	160	155	184	454	3,210	7,380	6,310	2,000	1,330

Cal yr 1966: Total -- Mean -- Max -- Min -- Ac-ft --
 Wtr yr 1967: Total 11,195.5 Mean 30.7 Max 195 Min 2.2 Ac-ft 22,210

Note.--No gage-height record Feb. 15 to Mar. 15.

9-0553, Cataract Creek near Kremmling, Colo.

Location.--Lat 39°50'05", long 106°18'35", in SW¼NE¼ sec.35, T.2 S., R.80 W., on right bank 70 ft downstream from lower Cataract Lake, 2.8 miles upstream from highwater line of Green Mountain Reservoir at elevation 7,950 ft, and 17 miles south of Kremmling.

Drainage area.--12.0 sq mi.

Records available.--October 1966 to September 1967.

Gage.--Digital water-stage recorder. Altitude of gage is 8,605 ft (from topographic map).

Extremes.--Maximum discharge during year, 321 cfs June 21 (gage height, 5.43 ft), from rating curve extended above 130 cfs; minimum daily, 0.60 cfs Mar. 6.

Remarks.--Records good except those for winter period, which are fair. No diversion above station.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.7	2.0	2.0	1.4	1.0	1.2	2.1	10	58	107	14	5.1
2	2.5	2.1	2.1	1.4	1.1	1.2	2.0	8.8	69	99	13	4.7
3	4.0	2.1	2.0	1.4	1.2	1.2	2.3	7.4	92	85	13	4.8
4	4.4	2.0	1.8	1.4	1.2	1.2	2.9	6.3	104	75	15	4.2
5	4.3	1.6	1.8	1.4	1.4	1.0	3.7	5.8	115	73	14	4.1
6	4.5	1.3	1.8	1.4	1.4	.60	4.0	5.5	117	72	13	4.0
7	4.6	1.3	2.0	1.4	1.4	.80	4.0	5.1	117	66	12	3.9
8	4.7	1.2	1.8	1.2	1.2	.80	4.5	6.0	102	80	14	3.6
9	4.7	1.6	2.0	1.0	1.4	1.2	5.3	10	91	70	16	3.9
10	4.5	1.6	2.0	1.0	1.4	1.4	5.4	18	91	62	15	4.3
11	4.4	1.6	2.0	1.0	1.4	1.2	5.7	18	97	53	13	4.6
12	4.5	2.0	2.0	1.0	1.4	1.4	6.3	15	72	49	12	11
13	5.0	1.8	1.9	1.2	1.2	1.4	6.5	14	60	51	11	14
14	6.2	1.8	1.8	1.2	1.2	1.0	6.2	13	53	47	10	12
15	5.4	2.0	1.8	1.2	1.2	.90	5.9	11	53	43	9.7	10
16	5.4	2.0	1.6	1.2	1.2	.80	5.9	9.2	51	43	9.2	9.6
17	5.0	2.0	1.6	1.2	1.4	.94	5.6	12	53	39	8.7	8.7
18	4.2	1.8	1.6	1.2	1.4	1.2	5.4	26	62	38	8.5	8.4
19	3.8	1.6	1.6	1.2	1.4	1.6	6.0	37	102	37	8.1	8.5
20	3.7	1.6	1.6	1.0	1.2	1.6	6.6	39	102	34	7.8	9.3
21	3.3	1.8	1.6	1.0	1.0	1.6	6.7	37	142	30	7.4	9.8
22	2.6	1.8	1.6	1.0	1.2	1.6	6.2	54	146	27	6.9	9.6
23	2.5	1.6	1.6	1.0	1.2	1.5	5.6	84	127	26	6.1	9.0
24	2.4	1.4	1.6	1.0	1.2	1.6	5.2	101	127	26	5.2	8.6
25	2.4	1.4	1.4	1.0	1.2	1.7	4.7	105	121	24	4.8	8.9
26	2.3	1.6	1.4	1.0	1.4	1.8	4.5	112	106	21	4.3	13
27	2.3	1.8	1.4	1.0	1.4	1.8	4.3	96	99	17	4.1	17
28	2.4	2.0	1.4	1.0	1.2	1.9	4.7	84	101	16	4.5	15
29	2.3	2.1	1.4	1.0	-	2.0	6.6	71	84	16	4.5	14
30	2.3	2.1	1.2	1.0	- - - - -	2.3	10	63	93	15	4.5	12
31	2.0	- - - - -	1.4	1.2	- - - - -	2.3	- - - - -	60	- - - - -	14	5.1	- - - - -
Total	115.3	52.6	52.8	35.6	35.5	42.74	154.8	1,144.1	2,807	1,455	294.4	255.6
Mean	3.72	1.75	1.70	1.15	1.27	1.38	5.16	36.9	93.6	46.9	9.50	8.52
Max	6.2	2.1	2.1	1.4	1.4	2.3	10	112	146	107	16	17
Min	2.0	1.2	1.2	1.0	1.0	0.60	2.0	5.1	51	14	4.1	3.6
Ac-ft	229	104	105	71	70	85	307	2,270	5,570	2,890	584	507

Cal yr 1966 : Total -- Mean - Max - Min - Ac-ft -
Wtr yr 1967 : Total 6,445.44 Mean 17.7 Max 146 Min 0.60 Ac-ft 12,780

Note.--No gage-height record Nov. 10 to Mar. 16.

BLUE RIVER BASIN

9-0570. Green Mountain Reservoir near Kremmling, Colo.

Location.--Lat 39°52'45", long 106°19'45", in NE¼ sec.15, T.2 S., R.80 W., in hoist house at right end of Green Mountain Dam on Blue River, 0.6 mile upstream from Elliott Creek and 13 miles southeast of Kremmling.

Drainage area.--598 sq mi, revised (includes 15.3 sq mi, revised, of Elliott Creek above diversion for Elliott Creek feeder canal).

Records available.--November 1942 to September 1967.

Gage.--Water-stage recorder. Datum of gage is 7,800 ft above mean sea level (Bureau of Reclamation bench mark). Gage heights have been reduced to elevations above mean sea level. Prior to Sept. 25, 1951, mercury gage in powerhouse at same datum. Sept. 25, 1951, to Oct. 1, 1953, electric-tape gage at present site and datum.

Extremes.--Maximum contents during year, 146,100 acre-ft July 24, 25 (elevation, 7,949.61 ft); minimum, 39,000 acre-ft Apr. 30 (elevation, 7,875.90 ft).

1942-67: Maximum contents observed, 148,900 acre-ft July 10, 1947 (elevation, 7,950.95 ft); minimum since appreciable storage was attained, 388 acre-ft Jan. 12, 1963 (elevation, 7,801.70 ft).

Remarks.--Reservoir is formed by an earth- and rock-fill dam. Dam completed and storage began in November 1942. Capacity of reservoir, 146,900 acre-ft between elevations 7,800 (sill of outlet gate) and 7,950 ft (top of radial spillway gates). Dead storage, 7,760 acre-ft. Reservoir is used for power development and storage for replacement of water diverted to South Platte River basin during late irrigation season. Figures given herein represent usable contents.

Cooperation.--Records furnished by Bureau of Reclamation.

Month-end elevation and contents, water year October 1966 to September 1967

Date	Elevation (feet)†	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.....	7,926.28	101,700	-
Oct. 31.....	7,917.93	88,440	-13,260
Nov. 30.....	7,914.58	83,480	-4,960
Dec. 31.....	7,909.63	76,490	-6,990
Calendar year 1966.....	-	-	-31,310
Jan. 31.....	7,901.34	65,670	-10,820
Feb. 28.....	7,893.35	56,260	-9,410
Mar. 31.....	7,884.50	47,000	-9,260
Apr. 30.....	7,875.90	39,000	-8,000
May 31.....	7,894.12	57,130	+18,130
June 30.....	7,929.15	106,600	+49,470
July 31.....	7,949.19	145,200	+38,600
Aug. 31.....	7,942.85	132,200	-13,000
Sept. 30.....	7,936.66	120,200	-12,000
Water year 1967.....	-	-	+18,500

† Elevation at 2400.

9-0575. Blue River below Green Mountain Reservoir, Colo.

Location.--Lat 39°52'50", long 106°20'00", in NE¼ sec.15, T.2 S., R.80 W., on left bank 0.3 mile upstream from Elliott Creek, 0.3 mile downstream from Green Mountain Dam, and 13 miles southeast of Kremmling.

Drainage area.--599 sq mi (includes 15.3 sq mi, revised, of Elliott Creek above diversion for Elliott Creek feeder canal).

Records available.--October 1937 to September 1967. Published as Blue River below Green Mountain Reservoir, near Kremmling, 1938-43.

Gage.--Digital water-stage recorder. Datum of gage is 7,682.66 ft above mean sea level (Bureau of Reclamation bench mark). Prior to Oct. 1, 1951, graphic water-stage recorder at site 3.7 miles downstream at different datum. Oct. 1, 1951, to Sept. 30, 1963, graphic water-stage recorder at present site and datum.

Extremes.--Maximum discharge during year, 1,560 cfs Apr. 14 (gage height, 7.06 ft); minimum daily, 43 cfs May 1. 1937-67: Maximum discharge, 4,000 cfs June 4, 1938 (gage height, 5.93 ft, site and datum then in use), from rating curve extended above 3,000 cfs; minimum daily (prior to construction of Green Mountain Reservoir), 80 cfs Feb. 18-24, 1938, Feb. 18, 19, 1940; no flow at times in 1943.

Remarks.--Records good. Flow regulated by Green Mountain Reservoir (see sta. 9-0570). Diversions for irrigation of about 5,000 acres above station. Transmountain diversions above station (see elsewhere in this report).

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	698	237	238	292	287	283	282	43	56	55	491	634
2	712	235	240	294	287	283	280	55	56	55	488	634
3	652	233	104	290	290	283	280	54	56	55	487	637
4	614	233	240	291	285	284	279	55	56	55	558	635
5	613	233	238	288	286	283	281	86	56	55	586	637
6	613	235	237	293	287	282	280	194	56	55	592	637
7	577	237	241	292	288	284	282	193	57	55	589	635
8	557	233	220	290	286	282	280	195	57	55	553	637
9	558	230	219	291	285	282	332	194	57	55	493	635
10	557	230	218	293	285	283	929	102	57	55	494	636
11	534	232	218	293	284	284	544	57	56	55	497	637
12	496	232	219	293	286	283	517	56	57	53	495	549
13	508	232	219	295	285	283	333	56	57	53	496	496
14	479	231	220	288	286	285	617	56	57	55	523	441
15	262	231	221	293	285	283	249	56	57	55	542	365
16	308	229	218	290	285	283	335	56	57	56	541	388
17	304	231	217	289	285	283	406	56	56	56	543	385
18	303	229	215	290	285	283	556	56	56	56	544	349
19	292	229	218	290	285	283	472	56	56	61	545	293
20	316	230	229	292	285	284	294	56	56	224	541	292
21	315	231	255	289	285	282	300	56	56	415	542	292
22	310	234	281	291	287	281	301	56	56	660	541	261
23	314	240	293	290	282	283	300	56	55	641	544	306
24	311	237	294	289	282	282	298	56	55	591	544	306
25	312	238	295	293	282	281	301	56	55	596	542	306
26	312	236	297	288	284	281	291	56	55	594	538	305
27	309	239	295	289	285	280	295	56	55	592	541	306
28	263	241	296	289	283	280	297	56	55	521	571	345
29	235	241	297	288	-	283	298	56	55	491	636	369
30	242	240	293	287	- - - -	281	299	56	56	487	634	364
31	240	- - - -	292	290	- - - -	280	- - - -	56	- - - -	490	634	- - - -
Total	13,116	7,019	7,577	9,010	7,987	8,757	10,808	2,348	1,682	7,352	16,865	13,712
Mean	423	234	244	291	285	282	360	75.7	56.1	237	544	457
Max	712	241	297	295	290	285	929	195	57	660	636	637
Min	235	229	104	287	282	280	249	43	55	53	487	261
Ac-ft	26,020	13,920	15,030	17,870	15,840	17,370	21,440	4,660	3,340	14,580	33,450	27,200
Cal yr 1966 : Total	123,262		Mean	338	Max	815	Min	48	Ac-ft	244,500		
Wtr yr 1967 : Total	106,233		Mean	291	Max	929	Min	43	Ac-ft	210,700		

9-0580. Colorado River near Kremmling, Colo.

Location.--Lat 40°02'12", long 106°26'22", in NE¼SW¼ sec.23, T.1 N., R.81 W., on right bank at upstream end of Gore Canyon, 3 miles southwest of Kremmling and 3.8 miles downstream from Blue River.

Drainage area.--2,382 sq mi (revised).

Records available.--July 1904 to September 1918 (published as Grand River near Kremmling), October 1961 to September 1967.

Gage.--Digital water-stage recorder. Altitude of gage is 7,320 ft (from topographic map). Prior to July 28, 1910, wire-weight, chain and staff gages and July 28, 1910, to Sept. 30, 1918, graphic water-stage recorder supplemented in winter by staff gage, all within a few hundred feet, at datum of 7,301.32 ft above mean sea level (Denver Northwestern and Pacific Railway bench mark) except prior to Oct. 18, 1906, at datum 0.80 ft lower. Oct. 1, 1961, to Sept. 30, 1963, graphic water-stage recorder at present site and datum.

Extremes.--Maximum discharge during year, 1,890 cfs Apr. 10 (gage height, 6.94 ft); minimum daily, 302 cfs Dec. 10. 1904-18, 1961-67: Maximum discharge observed, 21,500 cfs June 7, 1912 (gage height, 21.8 ft, datum then in use), from rating curve extended above 14,000 cfs; minimum observed, 166 cfs Dec. 19, 1907.

Remarks.--Records good. Natural flow of stream affected by transmountain diversions, storage reservoirs, diversions for irrigation of about 40,000 acres above station, and return flow from irrigated areas.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	813	437	385	410	448	457	709	650	1,280	925	780	999
2	864	418	420	420	415	463	723	493	1,220	932	740	982
3	901	393	306	430	450	464	752	495	1,200	878	760	933
4	849	434	368	430	440	472	818	467	1,170	844	820	916
5	816	415	400	420	430	472	851	460	1,150	867	850	919
6	795	409	400	410	440	465	929	560	1,160	788	850	915
7	762	423	405	410	448	464	902	592	1,130	737	840	907
8	727	431	383	400	442	459	840	590	1,040	934	830	906
9	730	431	364	410	440	465	881	703	940	908	790	916
10	726	434	302	410	455	474	1,230	756	853	767	780	917
11	721	459	340	410	446	482	1,250	721	856	690	780	927
12	698	459	360	410	447	492	1,050	724	880	777	778	916
13	709	456	360	410	443	504	1,010	718	905	755	758	832
14	750	453	340	420	449	513	998	673	916	760	767	812
15	611	442	340	430	449	504	793	605	992	750	910	692
16	509	448	340	420	450	508	712	562	973	700	960	708
17	539	448	330	410	429	540	824	517	885	680	926	662
18	530	450	330	410	495	634	866	598	830	700	914	674
19	530	450	350	410	448	757	1,030	722	915	660	916	648
20	512	434	370	420	450	724	926	881	942	750	907	631
21	524	439	400	410	432	726	831	928	1,130	920	899	609
22	530	450	410	410	474	702	723	970	1,190	1,140	897	589
23	518	445	420	415	455	710	700	1,090	1,250	1,130	903	544
24	518	431	430	419	453	742	682	1,220	1,210	1,090	896	570
25	512	403	430	426	453	617	654	1,240	1,100	1,020	883	566
26	518	423	430	425	462	751	652	1,500	1,080	960	886	562
27	518	383	420	435	457	738	622	1,700	1,140	920	882	577
28	500	380	420	441	452	721	656	1,620	1,070	900	888	595
29	439	431	420	449	-	765	726	1,490	1,060	840	967	621
30	442	456	420	444	- - - -	787	797	1,290	965	800	974	618
31	439	- - - -	420	451	- - - -	698	- - - -	1,230	- - - -	800	997	- - - -
Total	19,550	12,965	11,813	13,025	12,552	18,270	25,137	26,765	31,432	26,322	26,728	22,663
Mean	631	432	381	420	448	589	838	863	1,048	849	862	755
Max	901	459	430	451	495	787	1,250	1,700	1,280	1,140	997	999
Min	439	380	302	400	415	457	622	460	830	660	740	544
Ac-ft	38,780	25,720	23,430	25,830	24,900	36,240	49,860	53,090	62,340	52,210	53,010	44,950
Cal yr 1966: Total	250,642		Mean 687	Max 1,180	Min 296	Ac-ft 497,100						
Wtr yr 1967: Total	247,222		Mean 677	Max 1,700	Min 302	Ac-ft 490,400						

9-0585. Piney River below Piney Lake, near Minturn, Colo.

Location.--Lat 39°42'25", long 106°25'40", in sec.14, T.4 S., R.81 W., on left bank 1½ miles upstream from Dickson Creek, 2 miles downstream from Piney Lake, and 8½ miles north of Minturn.

Drainage area.--13.0 sq mi.

Records available.--October 1947 to September 1954, October 1963 to September 1967.

Gage.--Water-stage recorder. Datum of gage is 9,145.25 ft above mean sea level (levels by Bureau of Reclamation). Prior to October 1963, water-stage recorder at site 15 ft upstream at same datum.

Average discharge.--11 years, 24.4 cfs (17,660 acre-ft per year).

Extremes.--Maximum discharge during year, 228 cfs June 21 (gage height, 4.99 ft); minimum daily, 1.6 cfs Feb. 20. 1947-54, 1963-67: Maximum discharge, 396 cfs June 11, 1952 (gage height, 5.47 ft); minimum not determined.

Remarks.--Records good except those for winter period, which are poor. No diversion above station.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3.1	4.0	2.8	2.3	2.3	2.5	4.6	16	74	155	12	6.4
2	3.1	4.6	2.8	2.3	2.1	2.6	6.0	12	104	142	11	5.5
3	4.6	4.4	2.5	2.2	2.0	2.7	8.0	10	139	131	11	4.3
4	5.2	4.0	2.8	2.3	2.0	2.7	8.5	9.5	148	113	12	3.7
5	6.8	4.2	2.8	2.3	2.0	2.6	7.0	9.6	162	110	9.6	3.1
6	7.8	4.4	2.8	2.3	1.9	2.5	10	9.6	148	102	8.6	2.5
7	7.8	4.0	2.8	2.2	1.8	2.5	14	9.6	131	94	11	2.4
8	7.3	3.7	2.6	2.2	1.7	2.5	17	13	124	124	16	2.8
9	6.8	3.8	2.4	2.2	1.8	2.5	16	22	123	94	14	4.9
10	6.0	3.8	2.0	2.3	2.0	2.6	15	29	116	84	13	4.9
11	5.5	3.8	2.2	2.3	2.1	2.7	16	28	105	68	12	4.3
12	7.3	4.0	2.6	2.4	2.1	2.9	17	25	81	64	9.6	22
13	8.2	4.2	2.4	2.4	2.1	3.2	17	24	74	68	7.8	20
14	9.1	4.0	2.2	2.4	2.1	3.1	16	20	70	56	6.8	12
15	8.6	3.8	2.4	2.5	2.0	3.0	15	17	70	53	6.4	8.2
16	9.1	3.6	2.2	2.6	1.9	3.0	14	16	77	54	5.5	6.0
17	8.6	3.4	2.0	2.5	2.0	3.6	13	22	83	52	5.2	5.2
18	8.2	3.4	2.0	2.4	2.0	4.2	13	34	108	57	4.9	4.9
19	6.8	3.6	2.1	2.4	1.8	4.2	17	49	155	47	4.9	7.3
20	6.8	3.6	2.2	2.4	1.6	3.8	16	58	181	39	4.6	11
21	6.8	3.1	2.2	2.5	1.7	3.6	15	73	193	35	4.3	9.6
22	5.2	3.1	2.1	2.4	1.9	3.6	13	110	171	32	4.0	7.8
23	5.2	3.2	2.0	2.3	2.1	3.8	12	144	169	29	4.0	6.0
24	4.6	3.4	2.0	2.2	2.2	4.4	11	171	169	29	3.4	6.0
25	4.6	3.4	2.0	2.1	2.4	5.0	9.0	167	164	25	3.4	9.6
26	4.6	3.4	2.1	2.0	2.5	4.8	9.0	160	153	22	3.7	15
27	4.6	3.2	2.2	2.1	2.4	4.4	9.0	131	145	21	3.7	16
28	4.3	3.0	2.2	2.2	2.4	4.2	12	104	147	18	3.4	12
29	4.3	3.0	2.1	2.3	-	4.2	19	86	116	16	3.7	9.6
30	4.0	3.0	2.1	2.4	- - - -	4.8	19	83	144	14	4.6	7.8
31	3.7	- - - -	2.2	2.4	- - - -	5.0	- - - -	83	- - - -	13	5.2	- - - -
Total	188.6	110.1	71.8	71.8	56.9	107.2	388.1	1,745.3	3,844	1,961	229.3	240.8
Mean	6.08	3.67	2.32	2.32	2.03	3.46	12.9	56.3	128	63.3	7.40	8.03
Max	9.1	4.6	2.8	2.6	2.5	5.0	19	171	193	155	16	22
Min	3.1	3.0	2.0	2.0	1.6	2.5	4.6	9.5	70	13	3.4	2.4
Ac-ft	374	218	142	142	113	213	770	3,460	7,620	3,890	455	478

Cal yr 1966: Total 5,879.5 Mean 16.1 Max 123 Min - Ac-ft 11,660

Wtr yr 1967: Total 9,014.9 Mean 24.7 Max 193 Min 1.6 Ac-ft 17,880

Peak discharge (base, 150 cfs)

Note.--No gage-height record Dec. 26 to Apr. 12.

Date	Time	Gage height	Discharge	Date	Time	Gage height	Discharge
5-25	0200	4.86	197	7- 1	0330	4.89	199
6- 5	0330	4.87	195	7- 8	0500	4.65	153
6-21	0400	4.99	228				

9-0586. Dickson Creek near Minturn, Colo.

Location.--Lat 39°42'15", long 106°27'20", on right bank 0.5 mile upstream from Freeman Creek, 1.0 mile upstream from mouth, and 8 miles north of Minturn, Eagle County.

Drainage area.--3.41 sq mi.

Records available.--October 1964 to September 1967.

Gage.--Water-stage recorder. Altitude of gage is 9,250 ft (from topographic map).

Extremes.--Maximum discharge during year, 17 cfs May 27 (gage height, 2.68 ft); minimum daily, 0.70 cfs several days in December and January.

1964-67: Maximum discharge, 41 cfs June 13, 1965 (gage height, 3.13 ft); minimum not determined.

Remarks.--Records good except those for winter period, which are poor. No regulation or diversion above station.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.2	1.2	1.1	0.80	0.90	1.0	1.4	3.3	11	4.0	2.2	2.1
2	1.3	1.2	1.0	.70	.90	1.0	1.5	2.6	11	3.7	2.1	1.9
3	1.8	1.2	1.1	.70	.90	1.0	2.0	2.6	12	3.7	2.5	1.6
4	1.8	1.2	1.1	.70	.90	1.0	2.1	2.3	12	4.0	2.2	1.5
5	1.6	1.1	1.1	.80	.80	.90	2.0	2.3	12	3.5	2.1	1.6
6	1.5	1.2	1.1	.80	.80	.80	2.2	2.2	12	3.3	2.1	1.6
7	1.4	1.2	1.0	.70	.80	.80	2.9	2.6	11	4.0	2.3	1.8
8	1.3	1.3	.90	.70	.80	.80	3.5	3.5	10	4.0	2.8	2.9
9	1.3	1.3	.80	.70	.80	.90	2.8	4.4	9.3	3.1	2.6	2.6
10	1.3	1.2	.70	.70	.80	1.0	3.1	4.6	8.5	2.9	2.6	1.8
11	1.5	1.2	.90	.80	.90	1.1	4.0	4.6	8.9	3.5	2.2	2.5
12	1.5	1.2	.90	.80	.90	1.2	3.7	4.6	7.8	3.1	2.2	3.3
13	1.5	1.2	.80	.80	.80	1.2	2.9	4.2	7.4	2.8	2.1	1.9
14	1.6	1.2	.80	.80	.80	1.1	2.5	3.3	7.1	2.8	2.1	1.8
15	1.4	1.1	.80	.80	.90	1.1	2.6	2.9	7.4	3.1	2.1	1.6
16	1.5	1.1	.80	.90	.90	1.1	2.6	2.9	7.4	2.9	1.8	1.5
17	1.4	1.0	.80	.90	.90	1.2	2.3	4.2	6.4	3.3	1.6	1.6
18	1.4	1.0	.80	.80	.90	1.3	2.9	5.0	6.4	2.9	1.8	1.8
19	1.3	1.0	.80	.70	.90	1.3	3.7	6.0	7.1	2.6	1.8	2.6
20	1.3	1.0	.80	.70	.80	1.1	3.1	6.0	8.2	2.6	1.6	1.9
21	1.3	1.0	.80	.80	.80	1.1	2.6	6.8	7.8	2.5	1.6	1.8
22	1.3	1.0	.80	.90	.80	1.2	2.3	8.2	7.4	2.3	1.6	1.6
23	1.3	1.0	.70	.90	.90	1.3	2.2	9.3	6.8	2.5	1.8	1.4
24	1.3	1.0	.70	.90	1.0	1.4	2.3	12	6.0	2.5	1.4	1.4
25	1.3	1.0	.80	.80	1.0	1.5	2.3	14	5.7	2.3	1.4	1.8
26	1.3	1.0	.80	.80	1.0	1.5	2.5	16	5.4	2.2	1.5	2.2
27	1.3	1.0	.80	.80	1.0	1.3	3.7	15	5.0	2.3	1.5	1.8
28	1.3	1.0	.70	.80	1.0	1.3	5.0	15	5.4	2.2	1.5	1.5
29	1.2	1.1	.70	.80	-	1.3	5.0	14	4.8	2.2	1.8	1.5
30	1.2	1.1	.80	.80	- - - -	1.5	4.2	13	4.4	2.1	1.9	1.3
31	1.2	- - - -	.80	.90	- - - -	1.5	- - - -	12	- - - -	2.3	2.2	- - - -
Total	42.9	33.3	26.50	24.50	24.60	35.80	85.9	209.4	241.6	91.2	61.0	56.2
Mean	1.38	1.11	0.855	0.790	0.879	1.15	2.86	6.75	8.05	2.94	1.97	1.87
Max	1.8	1.3	1.1	0.90	1.0	1.5	5.0	16	12	4.0	2.8	3.3
Min	1.2	1.0	0.70	0.70	0.80	0.80	1.4	2.2	4.4	2.1	1.4	1.3
Ac-ft	85	66	53	49	49	71	170	415	479	181	121	111

Cal yr 1966: Total 908.70 Mean 2.49 Max 14 Min 0.70 Ac-ft 1,800

Wtr yr 1967: Total 932.90 Mean 2.56 Max 16 Min 0.70 Ac-ft 1,850

Peak discharge (base, 25 cfs).--No peak above base.

Note.--No gage-height record Jan. 6 to Apr. 5.

9-0587. Freeman Creek near Minturn, Colo.

Location.--Lat 39°41'50", long 106°26'40", on right bank 0.9 mile upstream from mouth and 7½ miles north of Minturn, Eagle County.Drainage area.--2.94 sq mi.Records available.--October 1964 to September 1967.Gage.--Water-stage recorder. Altitude of gage is 9,360 ft (from topographic map).Extremes.--Maximum discharge during year, 11 cfs May 25 (gage height, 2.17 ft); no flow for many days.

1964-67: Maximum discharge 29 cfs June 13, 1965; no flow for many days each year.

Remarks.--Records good except those for period of no gage-height record, which are poor. No regulation or diversion above station.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.14	0.20	0.10	0.10	0.10	0.10	0	2.0	5.6	1.1	0.11	0.17
2	.15	.20	.10	.10	.10	.10	0	1.5	4.7	1.1	.07	.17
3	.32	.20	.15	.10	.10	.10	0	1.5	4.6	.98	.12	.11
4	.34	.20	.15	.10	.10	.10	0	1.4	4.6	1.0	.11	.08
5	.32	.20	.15	.10	.10	.05	0	1.2	4.2	.82	.07	.06
6	.30	.25	.15	.05	.10	0	.10	1.0	3.9	.70	.06	.07
7	.24	.25	.10	.05	.10	0	.25	1.5	3.3	.90	.09	.06
8	.21	.25	.05	.05	.10	0	.50	2.5	3.1	1.1	.17	.25
9	.18	.25	.05	.05	.10	0	.40	4.0	2.8	.66	.14	.29
10	.17	.20	.10	.10	.10	0	.45	5.9	2.8	.50	.14	.16
11	.22	.20	.15	.10	.10	0	1.0	6.1	3.2	.62	.10	.18
12	.32	.20	.15	.10	.10	0	.90	6.6	3.0	.62	.10	.58
13	.26	.20	.15	.10	.15	0	.80	4.3	3.3	.42	.08	.18
14	.36	.20	.10	.10	.15	0	.80	2.8	3.1	.36	.07	.14
15	.27	.20	.10	.15	.10	0	.80	2.4	3.0	.50	.07	.11
16	.27	.15	.10	.15	.10	0	.80	3.7	3.0	.46	.08	.09
17	.26	.15	.10	.10	.10	0	.80	4.6	3.0	.48	.07	.12
18	.25	.15	.10	.05	.10	0	1.2	4.9	2.8	.42	.07	.15
19	.24	.10	.10	.05	.10	0	1.5	5.4	2.8	.27	.09	.40
20	.25	.10	.15	.05	.05	0	1.3	5.9	3.0	.24	.08	.25
21	.26	.15	.15	.10	.05	0	1.1	6.1	3.2	.20	.08	.16
22	.25	.15	.10	.15	.05	0	1.0	7.1	2.7	.17	.08	.13
23	.24	.10	.05	.15	.05	0	1.0	7.7	2.3	.18	.09	.12
24	.24	.10	.05	.15	.10	0	1.0	7.8	2.0	.18	.07	.11
25	.26	.10	.05	.10	.10	0	1.0	8.2	1.8	.16	.06	.16
26	.27	.10	.10	.05	.10	0	1.5	9.3	1.7	.14	.08	.34
27	.27	.10	.10	.05	.05	0	2.0	9.0	1.6	.11	.09	.22
28	.26	.10	.10	.05	.05	0	3.0	8.5	1.7	.10	.09	.14
29	.24	.10	.05	.10	-	0	3.0	6.9	1.7	.09	.15	.12
30	.24	.10	.10	.10	- - - - -	0	2.5	6.2	1.3	.07	.15	.11
31	.22	- - - - -	.10	.10	- - - - -	0	- - - - -	6.2	- - - - -	.09	.17	- - - - -
Total	7.82	4.95	3.25	2.85	2.60	0.45	28.70	152.2	89.8	14.74	3.00	5.23
Mean	0.252	0.160	0.105	0.092	0.093	0.015	0.957	4.91	2.99	0.475	0.097	0.174
Max	0.36	0.25	0.15	0.15	0.15	0.10	3.0	9.3	5.6	1.1	0.17	0.58
Min	0.14	0.10	0.05	0.05	0.05	0	0	1.0	1.3	0.07	0.06	0.06
Ac-ft	16	9.8	6.4	5.7	5.2	0.9	57	302	178	29	6.0	10

Cal yr 1966: Total 308.32 Mean 0.84 Max 9.6 Min 0 Ac-ft 612
Wtr yr 1967: Total 315.59 Mean 0.86 Max 9.3 Min 0 Ac-ft 626

Peak discharge (base, 25 cfs).--No peak above base.

Note.--No gage-height record Nov. 1 to May 9.

PINEY RIVER BASIN

9-0588. East Meadow Creek near Minturn, Colo.

Location.--Lat 39°43'50", long 106°25'40", on left bank 1½ miles upstream from mouth and 10 miles north of Minturn, Eagle County.

Drainage area.--3.61 sq mi.

Records available.--October 1964 to September 1967.

Gage.--Water-stage recorder. Altitude of gage is 9,420 ft (from topographic map).

Extremes.--Maximum discharge during year, 34 cfs May 25 (gage height, 1.58 ft); minimum daily, 0.45 cfs Jan. 8.

1964-67: Maximum discharge, 58 cfs June 17 or 18, 1965 (gage height, 1.85 ft); minimum daily, that of Jan. 8, 1967.

Remarks.--Records good except those for winter period, which are poor. No regulation or diversion above station.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.80	0.70	0.70	0.60	0.60	0.60	0.70	4.1	18	16	2.0	1.1
2	.86	.80	.70	.60	.60	.65	.70	4.1	21	15	2.0	.98
3	1.0	.85	.70	.60	.60	.70	.75	4.1	23	14	2.5	.86
4	1.1	.85	.70	.65	.60	.70	.85	4.1	24	13	2.2	.77
5	1.2	.85	.70	.60	.60	.60	1.0	2.8	24	12	2.1	.77
6	1.3	.80	.80	.55	.60	.55	1.2	2.0	25	9.5	2.1	.74
7	1.3	.80	.80	.50	.55	.50	1.4	2.1	25	10	2.2	.74
8	1.2	.80	.65	.45	.50	.50	2.0	2.6	24	10	3.2	.86
9	1.1	.80	.55	.50	.55	.50	1.9	4.1	24	8.5	2.1	1.1
10	1.0	.85	.55	.55	.60	.55	1.7	5.0	22	7.3	2.0	.92
11	1.2	.85	.60	.60	.65	.60	2.0	4.7	23	7.7	1.9	1.1
12	1.2	.85	.65	.60	.65	.65	2.1	5.0	20	7.3	1.6	2.2
13	1.2	.80	.65	.60	.65	.70	1.8	5.0	19	6.0	1.5	1.2
14	1.6	.75	.65	.60	.65	.65	1.6	3.6	19	5.0	1.5	.98
15	1.4	.75	.65	.60	.60	.60	1.5	3.0	18	6.7	1.5	.92
16	1.5	.80	.65	.70	.60	.60	1.6	3.9	19	6.0	1.4	.86
17	1.4	.80	.60	.60	.60	.65	1.6	6.7	18	6.4	1.3	.86
18	1.3	.80	.60	.55	.60	.70	1.9	9.0	19	5.4	1.3	.92
19	1.3	.75	.60	.55	.55	.70	2.2	9.5	21	4.5	1.3	1.3
20	1.2	.75	.60	.55	.50	.65	2.5	9.5	26	4.1	1.3	1.3
21	1.1	.80	.60	.60	.50	.65	2.5	12	27	3.6	1.2	1.0
22	1.2	.80	.60	.70	.50	.70	2.5	17	26	3.2	1.2	.92
23	1.0	.75	.55	.70	.55	.75	2.5	21	26	3.2	1.1	.86
24	1.3	.70	.50	.65	.60	.80	2.1	25	26	3.2	1.1	.92
25	1.2	.70	.55	.60	.65	.80	1.5	27	24	2.8	1.1	1.2
26	1.1	.70	.60	.55	.70	.75	1.5	28	22	2.6	1.1	1.8
27	1.1	.70	.60	.55	.70	.70	1.8	26	20	2.8	1.0	1.3
28	1.0	.70	.60	.55	.60	.70	2.4	23	20	2.6	1.0	1.0
29	.90	.70	.55	.60	-	.70	3.4	21	18	2.2	1.1	.98
30	1.0	.70	.55	.60	-	.70	4.1	19	17	2.1	1.1	.92
31	.80	-	.60	.60	-	.70	-	17	-	2.0	1.2	-
Total	35.86	23.25	19.40	18.25	16.65	20.30	55.30	330.9	658	204.7	49.2	31.38
Mean	1.16	0.775	0.626	0.589	0.595	0.655	1.84	10.7	21.9	6.60	1.59	1.05
Max	1.6	0.85	0.80	0.70	0.70	0.80	4.1	28	27	16	3.2	2.2
Min	0.80	0.70	0.50	0.45	0.50	0.50	0.70	2.0	17	2.0	1.0	0.74
Ac-ft	71	46	38	36	33	40	110	656	1,310	406	98	62

Cal yr 1966: Total 1,149.01 Mean 3.15 Max 21 Min - Ac-ft 2,280

Wtr yr 1967: Total 1,463.19 Mean 4.01 Max 28 Min 0.45 Ac-ft 2,900

Peak discharge (base, 40 cfs).--No peak above base.

Note.--No gage-height record Nov. 1 to Apr. 12.

9-0595. Piney River near State Bridge, Colo.

Location.--Lat 39°48', long 106°35', in sec.16, T.3 S., R.82 W., on left bank at downstream side of private bridge at Perry Olsen Ranch just downstream from Rock Creek, 6 miles southeast of State Bridge.

Drainage area.--86.2 sq mi (revised).

Records available.--May 1944 to September 1967.

Gage.--Water-stage recorder. Datum of gage is 7,272.35 ft above mean sea level, unadjusted. Prior to July 29, 1944, staff gage and July 29, 1944, to Oct. 24, 1947, water-stage recorder, at datum 2.38 ft higher.

Average discharge.--23 years, 72.9 cfs (52,780 acre-ft per year).

Extremes.--Maximum discharge during year, 515 cfs May 25 (gage height, 4.65 ft); minimum daily, 7.8 cfs Oct. 2.
1944-67: Maximum discharge, 1,110 cfs June 8, 1952 (gage height, 5.61 ft); minimum daily, 1.9 cfs Sept. 1, 18, 19, 1954.

Remarks.--Records good except those for winter period, which are poor. Diversions above station for irrigation of about 400 acres of hay meadows above and below station.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	8.4	12	12	11	15	15	19	85	274	234	30	17
2	7.8	14	11	11	15	15	22	69	306	214	29	16
3	14	16	12	10	15	15	34	62	358	200	32	14
4	13	14	12	11	14	16	40	54	382	179	32	13
5	15	13	13	12	14	15	36	50	402	172	27	12
6	14	15	14	12	14	14	34	48	394	152	25	11
7	13	14	14	12	14	13	36	46	378	150	27	12
8	12	13	12	11	14	13	46	61	350	177	39	12
9	14	13	11	10	14	14	40	94	334	141	34	20
10	16	13	10	10	15	15	40	135	316	130	34	16
11	17	13	11	10	15	16	42	135	309	115	28	16
12	20	14	12	11	15	17	44	135	274	105	25	40
13	20	14	12	13	16	17	44	130	260	103	22	32
14	23	13	12	15	16	15	40	102	244	93	22	23
15	22	12	12	15	15	15	36	87	241	91	22	20
16	22	13	11	15	14	16	34	82	260	94	20	19
17	21	12	11	14	15	17	34	115	247	89	19	16
18	20	11	11	12	16	19	36	167	267	91	18	16
19	18	11	11	13	15	17	50	200	312	75	17	27
20	19	12	11	14	14	16	110	211	354	62	16	26
21	19	13	11	15	14	16	95	247	378	55	15	22
22	17	13	11	16	15	16	75	323	334	52	15	20
23	17	12	10	16	16	17	60	378	316	50	15	20
24	15	12	10	16	16	18	50	430	312	49	15	18
25	15	12	11	15	16	19	46	450	298	45	14	19
26	16	13	11	14	15	18	46	465	274	41	14	30
27	16	13	11	13	15	17	60	425	250	40	13	32
28	15	12	11	14	15	18	100	370	250	36	13	27
29	14	12	10	15	-	19	100	330	211	34	12	24
30	14	13	10	16	- - - - -	20	90	306	231	32	14	22
31	14	- - - - -	11	15	- - - - -	20	- - - - -	292	- - - - -	31	16	- - - - -
Total	501.2	387	352	407	417	508	1,539	6,084	9,116	3,132	674	612
Mean	16.2	12.9	11.4	13.1	14.9	16.4	51.3	196	304	101	21.7	20.4
Max	23	16	14	16	16	20	110	465	402	234	39	40
Min	7.8	11	10	10	14	13	19	46	211	31	12	11
Ac-ft	994	768	698	807	827	1,010	3,050	12,070	18,080	6,210	1,340	1,210

Cal yr 1966: Total 18,602.8 Mean 51.0 Max 338 Min 7.8 Ac-ft 36,900

Wtr yr 1967: Total 23,729.2 Mean 65.0 Max 465 Min 7.8 Ac-ft 47,070

Peak discharge (base, 520 cfs).--No peak above base.

Note.--No gage-height record Nov. 11 to May 1.

9-0605. Rock Creek near Toponas, Colo.

Location.--Lat 40°02'28", long 106°39'19", in NW¼ sec.24, T.1 N., R.83 W., on right bank 0.1 mile upstream from Horse Creek, three-quarters of a mile downstream from Shoe and Stocking Creek, and 8 miles east of Toponas.

Drainage area.--47.6 sq mi (revised).

Records available.--October 1952 to September 1967.

Gage.--Water-stage recorder. Altitude of gage is 8,544 ft (from topographic map).

Average discharge.--15 years, 30.4 cfs (22,010 acre-ft per year).

Extremes.--Maximum discharge during year, 262 cfs May 25 (gage height, 3.85 ft); minimum daily, 5.5 cfs Nov. 3, Dec. 10.
1952-67: Maximum discharge, 482 cfs May 12, 1962 (gage height, 4.80 ft), from rating curve extended above 300 cfs; maximum gage height, 5.49 ft Apr. 18, 1962 (backwater from ice); minimum daily discharge, 2.2 cfs Aug. 30, 31, Sept. 2, 1954.

Remarks.--Records fair except those for period of indefinite stage-discharge relation and those for winter period, which are poor.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	11	6.2	8.0	7.5	8.0	8.0	15	57	127	27	12	13
2	10	5.8	7.5	8.0	8.0	8.0	20	57	119	23	11	7.5
3	15	5.5	7.5	8.0	8.0	8.0	24	44	112	22	11	7.0
4	12	6.0	7.5	8.0	8.0	8.0	28	35	106	23	11	7.0
5	12	6.5	8.0	8.0	8.0	7.5	32	38	105	25	9.8	7.0
6	13	7.0	8.0	7.5	8.0	7.0	38	42	100	21	11	7.0
7	12	7.0	8.0	7.0	7.5	7.5	46	47	92	22	13	7.0
8	10	7.0	7.0	6.5	7.5	8.0	60	68	84	24	29	8.0
9	9.0	6.0	6.0	6.0	7.5	8.0	55	77	80	23	17	10
10	7.8	6.5	5.5	6.5	7.5	8.0	50	78	80	20	24	8.0
11	7.4	7.0	6.0	7.0	8.0	8.5	55	82	80	20	15	12
12	8.2	7.5	6.5	7.5	7.5	9.0	60	88	80	22	13	20
13	8.6	7.0	7.0	8.0	7.5	8.5	49	82	77	17	11	12
14	9.0	6.5	7.0	8.5	7.5	8.0	46	68	92	17	11	10
15	9.4	6.5	7.0	9.0	8.0	8.0	42	62	73	20	10	9.5
16	10	6.5	7.0	7.5	8.0	8.5	42	59	71	22	11	8.5
17	11	7.0	7.0	7.0	8.0	9.5	42	71	59	23	10	8.0
18	9.0	7.0	7.0	7.0	8.0	11	48	92	59	32	8.0	8.0
19	9.0	7.0	7.0	7.5	7.5	10	60	117	63	20	9.0	11
20	9.0	6.5	7.0	8.0	7.0	10	44	128	64	16	9.0	13
21	9.4	7.5	6.5	8.5	7.0	10	34	132	66	16	9.5	11
22	7.4	7.0	6.5	8.5	7.0	11	34	163	69	15	9.5	10
23	8.6	6.5	6.5	8.5	7.5	12	36	174	58	15	9.5	9.0
24	7.4	6.5	6.5	8.5	8.0	13	39	186	43	16	9.5	9.0
25	7.8	6.5	7.0	8.0	8.5	14	36	194	39	18	10	9.5
26	7.8	6.5	7.0	7.5	8.5	13	32	211	47	16	11	12
27	7.8	6.5	6.5	7.5	8.5	13	52	201	42	16	10	14
28	7.8	6.5	6.5	7.5	8.0	13	84	178	39	13	10	12
29	7.0	7.0	6.5	8.0	-	13	98	158	42	11	11	11
30	6.8	7.5	6.5	8.0	- - - - -	15	73	147	32	12	10	10
31	7.0	- - - - -	7.0	8.0	- - - - -	14	- - - - -	142	- - - - -	11	12	- - - - -
Total	287.2	200.0	214.5	238.5	218.0	510.0	1,374	3,278	2,200	598	367.8	301.0
Mean	9.26	6.67	6.92	7.69	7.79	10.0	45.8	106	73.3	19.3	11.9	10.0
Max	15	7.5	8	9	8.5	15	98	211	127	32	29	20
Min	6.8	5.5	5.5	6	7	7	15	35	32	11	8	7
Ac-ft	570	397	425	473	432	615	2,730	6,500	4,360	1,190	730	597

Cal yr 1966: Total 5,317.3 Mean 14.6 Max 108 Min - Ac-ft 10,550.

Wtr yr 1967: Total 9,587.0 Mean 26.3 Max 211 Min 5.5 Ac-ft 19,020

Peak discharge (base, 200 cfs).--May 25 (2230) 262 cfs (3.85 ft).

Note.--No gage-height record Nov. 3 to Mar. 24. Stage-discharge relation indefinite Aug. 15 to Sept. 30.

9-0607. Egeria Creek near Toponas, Colo.

Location.--Lat 40°03'00", long 106°51'50", in SE¼ sec.13, T.1 N., R.85 W., on right bank 15 ft upstream from county bridge, 5 miles upstream from King Creek, and 3 miles west of Toponas.

Drainage area.--29.4 sq mi.

Records available.--October 1965 to September 1967.

Gage.--Water-stage recorder.

Extremes.--Maximum discharge during water year, 40 cfs May 23 (gage height, 1.64 ft); minimum daily, 0.53 cfs Aug. 1. 1965-67: Maximum discharge, 60 cfs (estimated) Apr. 2, 1966; minimum daily, 0.3 cfs June 15, July 4-7, 1966.

Remarks.--Records good except those for winter period, which are poor. Diversions above station for irrigation above and below. Water imported above station from Yampa River basin by Stillwater and Dome Creek ditches.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3.0	5.4	4.4	4.2	4.6	4.4	11	14	4.3	2.1	0.53	6.5
2	4.0	5.0	4.4	4.4	4.4	4.4	13	11	3.5	1.6	.92	5.4
3	5.5	5.4	4.4	4.4	4.4	4.6	15	11	1.9	1.2	1.2	5.0
4	5.5	5.6	4.4	4.4	4.4	4.6	17	9.1	1.6	1.0	.80	4.3
5	5.0	5.8	4.6	4.2	4.4	4.4	20	9.6	1.7	.79	1.0	3.9
6	4.6	5.8	4.8	4.0	4.4	4.2	18	11	1.7	1.0	1.4	3.9
7	4.0	5.6	4.8	3.8	4.4	4.2	15	12	2.8	1.3	2.6	3.9
8	3.7	5.2	4.6	3.6	4.4	4.2	14	17	3.9	2.1	2.4	5.8
9	3.7	4.6	3.8	3.6	4.4	4.4	13	23	3.9	2.1	2.4	9.1
10	3.9	4.6	3.4	3.6	4.4	4.6	11	30	5.0	2.4	3.0	6.1
11	4.6	4.8	3.4	3.8	4.6	4.8	14	28	6.1	1.7	1.7	5.8
12	5.8	4.8	3.6	4.0	4.8	5.0	16	21	6.5	2.8	1.4	5.4
13	5.0	4.8	3.8	4.2	4.8	5.0	13	20	6.9	1.4	3.2	3.7
14	8.6	4.8	4.0	4.4	4.8	4.6	12	16	5.0	1.3	3.7	3.5
15	5.8	4.8	4.2	4.4	4.6	4.6	13	14	7.6	1.9	5.0	3.5
16	6.1	4.8	4.4	4.4	4.4	4.8	13	14	9.1	3.0	4.3	3.5
17	5.8	4.8	4.4	4.2	4.2	5.5	12	16	4.6	3.9	3.5	3.7
18	5.4	4.8	4.4	4.2	4.0	6.5	12	19	4.3	4.3	3.5	4.3
19	5.2	4.8	4.4	4.4	4.0	6.6	16	19	5.0	3.7	3.5	8.1
20	5.2	4.8	4.2	4.6	4.0	6.4	15	17	7.6	3.7	2.8	6.1
21	5.8	4.8	4.0	4.8	4.0	6.4	18	14	7.2	3.7	2.6	5.0
22	5.8	4.6	4.0	4.8	4.2	7.0	19	26	11	3.7	2.4	4.6
23	5.6	4.4	4.0	4.8	4.4	7.5	16	27	8.1	5.0	2.1	4.6
24	5.4	4.2	4.0	4.8	4.6	8.5	15	22	5.8	3.9	1.7	4.6
25	5.4	4.0	4.2	4.6	4.8	9.0	15	19	5.0	3.0	1.7	5.4
26	5.6	3.8	4.2	4.4	4.8	9.0	14	18	3.5	3.2	1.7	6.1
27	5.8	3.8	4.2	4.4	4.6	8.0	12	14	2.8	2.4	2.4	6.1
28	5.8	3.8	4.0	4.4	4.4	8.0	14	11	4.6	2.4	4.3	5.4
29	5.8	4.0	3.8	4.6	-	8.0	16	8.1	5.0	1.3	4.3	5.0
30	5.8	4.2	3.8	4.8	- - - - -	9.0	17	6.5	2.6	.66	4.3	4.8
31	5.6	- - - - -	4.0	4.8	- - - - -	10	- - - - -	7.2	- - - - -	.79	5.4	- - - - -
Total	162.8	142.6	128.6	134.0	124.2	188.2	439	504.5	148.6	73.34	81.75	153.1
Mean	5.25	4.75	4.15	4.32	4.44	6.07	14.6	16.3	4.95	2.37	2.64	5.10
Max	8.6	5.8	4.8	4.8	4.8	10	20	30	11	5.0	5.4	9.1
Min	3.0	3.8	3.4	3.6	4.0	4.2	11	6.5	1.6	0.66	0.53	3.5
Ac-ft	323	283	255	266	246	373	871	1,000	295	145	162	304

Cal yr 1966: Total 2,012.1 Mean 5.51 Max 45 Min 0.3 Ac-ft 3,990
 Wtr yr 1967: Total 2,280.69 Mean 6.25 Max 30 Min 0.53 Ac-ft 4,520

Note.--No gage-height record Oct. 19 to Mar. 21.

9-0630. Eagle River at Red Cliff, Colo.

Location.--Lat 39°30'35", long 106°22'00", in SE¼ sec.19, T.6 S., R.80 W., on left bank at Red Cliff, 0.3 mile upstream from Turkey Creek.

Drainage area.--70.0 sq mi (revised).

Records available.--October 1910 to September 1925, May 1944 to September 1967. Monthly discharge only for some periods, published in WSP 1313.

Gage.--Water-stage recorder. Datum of gage is 8,648.48 ft above mean sea level, datum of 1929. Jan. 8, 1911, to Sept. 30, 1925, chain gage at bridge a quarter of a mile downstream at different datum. May 25, 1944, to Oct. 12, 1952, water-stage recorder at site 200 ft upstream at datum 3.54 ft higher.

Average discharge.--38 years, 51.8 cfs (37,500 acre-ft per year).

Extremes.--Maximum discharge during year, 196 cfs May 24 (gage height, 3.56 ft); minimum daily, 6 cfs Jan. 8.

1910-25, 1944-67: Maximum discharge observed, 1,010 cfs June 5, 1912 (gage height, 4.0 ft, site and datum then in use), from rating curve extended above 500 cfs; minimum daily, 1 cfs Oct. 15, 1917.

Remarks.--Records good except those for winter period, which are poor. Transmountain diversions above station by Columbine, Ewing, and Wurtz ditches (see elsewhere in this report). Transbasin diversion above station from Robinson Reservoir (capacity, 2,520 acre-ft) to Tenmile Creek for mining development. Small diversions for irrigation of about 400 acres above station.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	12	11	8.0	8.5	8.0	10	14	27	129	56	23	23
2	12	10	8.2	8.0	8.0	10	15	25	140	53	22	18
3	14	10	8.2	7.5	8.5	10	18	24	153	50	22	16
4	14	9.9	8.6	7.0	8.5	9.5	22	22	158	53	21	15
5	13	9.5	8.6	7.0	9.0	9.0	29	24	163	50	20	15
			8.6									
6	13	9.5	9.9	7.5	9.0	9.0	34	24	156	48	21	14
7	12	9.6	9.0	7.0	8.5	9.0	34	25	150	48	22	14
8	12	9.9	8.0	6.0	8.5	9.0	38	31	145	46	22	15
9	12	9.0	7.5	6.5	9.0	9.5	38	41	143	41	26	22
10	12	9.0	6.5	8.0	9.5	10	37	50	129	39	25	18
11	12	10	7.0	8.5	9.0	11	40	50	120	41	22	17
12	13	9.9	7.5	8.5	9.0	11	42	50	122	42	20	26
13	13	10	7.0	8.5	9.0	10	33	56	105	37	19	20
14	14	9.5	6.5	8.0	9.0	10	36	49	97	35	18	18
15	14	9.5	7.0	7.5	9.0	10	33	44	95	38	18	17
16	13	9.5	7.0	7.0	9.0	9.6	32	42	90	42	17	16
17	12	9.5	7.0	6.5	9.5	10	29	53	84	36	16	16
18	12	9.3	7.0	6.5	9.5	10	33	70	82	35	16	16
19	12	9.5	7.5	6.5	9.0	10	38	82	82	31	16	18
20	12	9.0	8.0	7.0	8.5	9.6	39	89	84	29	15	19
21	12	9.6	8.0	7.0	8.5	9.6	35	92	84	29	15	16
22	11	9.5	7.0	7.5	9.0	10	30	118	81	28	15	16
23	12	9.0	6.5	7.5	9.5	11	27	148	76	30	14	16
24	11	8.5	6.5	7.5	9.5	11	25	163	72	45	14	15
25	11	8.0	7.5	7.5	9.5	14	23	163	70	31	14	16
26	11	8.0	8.5	8.0	9.5	13	23	163	68	29	14	17
27	11	8.0	8.5	9.0	9.5	13	27	156	66	28	13	18
28	11	8.5	7.5	9.0	9.5	13	37	150	64	25	14	16
29	11	9.0	6.5	8.5	-	14	40	148	60	23	16	15
30	11	8.6	7.5	10	- - - -	15	38	140	57	22	18	15
31	11	- - - -	8.0	9.0	- - - -	17	- - - -	131	- - - -	22	20	- - - -
Total	376	279.8	236.0	238.0	251.5	336.8	939	2,450	3,125	1,162	568	513
Mean	12.1	9.33	7.61	7.68	8.98	10.9	31.3	79.0	104	37.5	18.3	17.1
Max	14	11	9.9	10	9.5	17	42	163	163	56	26	26
Min	11	8	6.5	6	8	9	14	22	57	22	13	14
Ac-ft	746	555	468	472	499	668	1,860	4,860	6,200	2,300	1,130	1,020

Cal yr 1966: Total 8,907.8 Mean 24.4 Max 111 Min 6.5 Ac-ft 17,670
 Wtr yr 1967: Total 10,475.1 Mean 28.7 Max 163 Min 6 Ac-ft 20,780

Peak discharge (base, 280 cfs).--No peak above base.

Note.--No gage-height record Dec. 19 to Mar. 15.

9-0632. Wearyman Creek near Red Cliff, Colo.

Location.--Lat 39°31'15", long 106°19'05", in SE¼ sec.15, T.6 S., R.80 W., on left bank 10 ft upstream from bridge, half a mile upstream from mouth, and 3 miles east of Red Cliff.

Drainage area.--8.78 sq mi.

Records available.--October 1964 to September 1967.

Gage.--Water-stage recorder. Altitude of gage is 9,250 ft (from topographic map).

Extremes.--Maximum discharge during year, 48 cfs June 5 (gage height, 2.70 ft); minimum daily, 0.30 cfs Feb. 21.
1964-67: Maximum discharge, about 140 cfs June 18, 1965 (gage height, 3.23 ft); minimum daily, that of Feb. 21, 1967.

Remarks.--Records good except those for winter period, which are poor. No regulation or diversions above station.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.8	1.5	1.5	1.8	0.50	0.60	1.3	3.8	25	30	7.4	4.4
2	1.8	1.5	1.5	1.8	.40	.70	1.4	3.1	29	28	7.0	4.2
3	1.9	1.4	1.5	1.5	.40	.80	1.5	2.8	32	28	7.0	4.0
4	2.0	1.5	1.5	1.4	.40	.80	1.6	2.8	37	27	6.4	3.8
5	1.9	1.6	1.5	1.4	.40	.75	1.6	2.6	44	25	6.4	3.6
6	1.9	1.6	1.5	1.4	.50	.80	1.8	2.8	45	24	6.4	3.6
7	1.9	1.7	1.5	1.3	.50	.80	1.9	2.8	46	23	6.7	3.4
8	1.9	1.8	1.5	1.2	.40	.80	2.1	3.1	43	22	6.4	3.8
9	1.9	1.7	1.5	1.0	.40	.90	2.2	3.4	39	21	6.7	4.0
10	1.9	1.7	1.4	.80	.40	1.0	2.1	4.0	38	21	6.1	3.8
11	1.9	1.7	1.0	.90	.40	1.1	2.5	4.2	38	20	5.8	4.0
12	1.9	1.7	1.5	1.0	.40	1.2	2.6	4.7	35	20	5.8	4.4
13	1.9	1.7	1.3	1.1	.40	1.2	2.8	5.3	33	18	5.5	3.6
14	1.9	1.7	1.1	1.1	.40	1.1	2.8	5.3	31	17	5.3	3.4
15	2.1	1.7	1.0	1.1	.40	1.0	2.6	5.1	32	17	5.3	3.3
16	1.7	1.7	1.0	1.0	.50	1.0	2.4	5.1	32	16	5.3	3.3
17	1.8	1.7	1.0	.80	.50	1.0	3.0	5.3	33	15	5.1	3.3
18	1.8	1.7	1.1	.70	.55	1.0	2.6	6.1	33	14	5.1	3.3
19	1.7	1.6	1.2	.70	.55	1.0	2.9	7.0	32	13	5.1	3.4
20	1.7	1.6	1.4	.70	.40	1.0	2.9	7.7	37	12	5.1	3.3
21	1.7	1.6	1.5	.80	.30	1.1	2.9	8.3	38	11	4.9	3.0
22	1.7	1.6	1.4	.80	.40	1.2	2.9	9.7	40	11	4.9	2.9
23	1.7	1.6	1.1	.60	.50	1.3	2.8	14	40	10	4.7	2.9
24	1.7	1.5	.90	.50	.50	1.4	2.6	17	40	9.7	4.4	2.9
25	1.7	1.6	1.0	.50	.50	1.4	2.5	20	40	9.1	4.4	2.9
26	1.7	1.6	1.6	.50	.50	1.3	2.5	23	38	8.6	4.7	3.0
27	1.7	1.6	2.0	.60	.55	1.2	2.6	26	36	8.3	4.4	3.0
28	1.7	1.6	1.6	.60	.55	1.2	3.0	27	35	8.0	4.4	2.9
29	1.7	1.6	1.2	.50	-	1.3	3.3	26	33	8.0	4.9	2.8
30	1.6	1.5	1.0	.40	- - - - -	1.2	3.4	26	32	7.7	4.7	2.6
31	1.6	- - - - -	1.4	.70	- - - - -	1.4	- - - - -	24	- - - - -	7.7	4.7	- - - - -
Total	55.8	48.6	41.20	29.20	12.60	32.55	73.1	308.0	1,086	510.1	171.0	102.8
Mean	1.80	1.62	1.33	0.942	0.450	1.05	2.44	9.94	36.2	16.5	5.52	3.43
Max	2.1	1.8	2.0	1.8	0.55	1.4	3.4	27	46	30	7.4	4.4
Min	1.6	1.4	0.90	0.40	0.30	0.60	1.3	2.6	25	7.7	4.4	2.6
Ac-ft	111	96	82	58	25	65	145	611	2,150	1,010	339	204

Cal yr 1966: Total 1,819.70 Mean 4.99 Max 27 Min - Ac-ft 3,610

Wtr yr 1967: Total 2,470.95 Mean 6.77 Max 46 Min 0.30 Ac-ft 4,900

Peak discharge (base, 70 cfs)--No peak above base.

Note.--No gage-height record Dec. 25 to Mar. 28.

9-0634. Turkey Creek near Red Cliff, Colo.

Location.--Lat 39°31'20", long 106°20'15", in NW¼SW¼ sec.16, T.6 S., R.80 W., on right bank 400 ft downstream from Lime Creek, 1.9 miles northeast of Red Cliff, and 2.0 miles upstream from mouth.

Drainage area.--23.9 sq mi.

Records available.--October 1963 to September 1967.

Gage.--Water-stage recorder. Altitude of gage is 8,885 ft (from topographic map).

Extremes.--Maximum discharge during year, 163 cfs June 6 (gage height, 2.20 ft); maximum gage height, 2.62 ft Mar. 31 (backwater from ice); minimum daily discharge, 2.3 cfs Feb. 21-23.

1963-67: Maximum discharge, 515 cfs June 17, 1965 (gage height, 3.03 ft), from rating curve extended above 230 cfs; minimum not determined.

Remarks.--Records good except those for winter period, which are poor. No diversion above station.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4.2	3.8	3.6	3.4	3.0	2.6	4.0	15	76	76	16	8.5
2	4.2	3.0	3.6	3.2	2.8	2.6	4.0	13	85	72	16	8.5
3	5.0	3.9	3.6	3.0	2.6	2.6	4.2	11	96	64	16	8.8
4	5.0	3.8	3.6	3.0	2.6	2.6	5.2	10	106	64	14	8.8
5	5.0	3.4	3.6	3.2	2.6	2.5	5.5	9.7	112	58	14	8.8
6	4.8	3.9	3.8	3.2	2.7	2.4	6.0	9.4	126	53	14	8.8
7	4.8	3.8	3.8	3.0	2.6	2.4	6.5	9.4	117	52	14	8.8
8	4.5	3.8	3.8	2.8	2.5	2.5	7.3	10	109	48	14	9.1
9	4.5	3.8	3.2	2.8	2.5	2.7	7.3	14	101	44	14	9.1
10	4.5	3.8	2.8	2.8	2.5	2.9	7.0	21	91	42	12	9.1
11	4.8	3.8	3.0	3.0	2.6	3.1	8.2	24	87	40	11	8.8
12	4.8	3.8	3.2	3.0	2.6	3.0	8.8	22	82	38	11	9.1
13	4.8	3.8	3.2	3.0	2.6	3.0	11	22	76	34	10	8.8
14	5.0	3.6	2.8	2.9	2.6	3.0	9.1	20	76	33	9.7	8.5
15	4.8	3.8	2.8	2.9	2.5	3.0	8.2	17	78	34	9.7	8.2
16	4.8	3.8	2.9	3.0	2.5	3.4	7.9	18	78	34	9.7	8.2
17	4.5	3.8	2.8	2.8	2.5	3.9	7.5	20	76	33	9.4	8.2
18	4.4	3.6	2.8	2.6	2.5	3.9	7.9	25	82	30	9.4	8.2
19	4.2	3.6	3.0	2.6	2.5	3.9	9.1	33	89	26	9.4	8.8
20	4.4	3.6	3.4	2.6	2.4	3.9	9.4	36	87	26	9.4	8.5
21	4.2	3.6	3.4	2.8	2.3	3.9	9.4	43	82	24	9.1	8.2
22	4.0	3.6	3.2	3.0	2.3	3.8	9.7	55	89	24	9.1	7.6
23	4.2	3.4	3.0	3.0	2.3	3.9	8.8	69	85	25	8.8	7.6
24	4.0	3.2	3.0	3.0	2.4	4.0	8.5	96	85	22	8.8	7.6
25	4.2	3.0	3.4	3.0	2.5	4.4	8.2	106	85	20	8.8	7.9
26	4.0	3.0	3.6	3.0	2.6	4.2	8.5	106	82	18	9.1	8.5
27	4.0	3.0	3.6	3.0	2.6	4.0	8.8	106	82	16	8.8	7.9
28	4.0	3.2	3.2	3.0	2.6	4.0	9.7	104	85	17	8.8	7.6
29	4.0	3.4	3.0	2.8	-	4.2	13	98	85	17	9.1	7.3
30	4.0	3.6	3.0	3.0	- - - - -	4.0	14	96	80	16	8.5	7.0
31	3.9	- - - - -	3.4	3.0	- - - - -	4.0	- - - - -	87	- - - - -	17	8.5	- - - - -
Total	137.5	107.2	101.1	91.4	71.3	104.3	242.7	1,325.5	2,670	1,117	340.1	250.8
Mean	4.44	3.57	3.26	2.95	2.55	3.36	8.09	42.8	89.0	36.0	11.0	8.36
Max	5.0	3.9	3.8	3.4	3.0	4.4	14	106	126	76	16	9.1
Min	3.9	3.0	2.8	2.6	2.3	2.4	4.0	9.4	76	16	8.5	7.0
Ac-ft	273	213	201	181	141	207	481	2,630	5,300	2,220	675	497

Cal yr 1966: Total 4,423.6 Mean 12.1 Max 67 Min - Ac-ft 8,770

Wtr yr 1967: Total 6,558.9 Mean 18.0 Max 126 Min 2.3 Ac-ft 13,010

Peak discharge (base, 160 cfs).--June 6 (1415) 163 cfs (2.20 ft).

Note.--No gage-height record Dec. 10 to Jan. 10, Jan. 17 to Mar. 15.

9-0645. Homestake Creek near Red Cliff, Colo.

Location--Lat 39°28'25", long 106°22'00", in sec.6, T.7 S., R.80 W., on right bank at downstream side of Forest Service Highway bridge, 3 miles upstream from mouth, and 3 miles south of Red Cliff.

Drainage area--58.3 sq mi (revised).

Records available--October 1910 to September 1918, May 1944 to September 1967. Published as "at Redcliff" October 1910 to September 1916.

Gage--Water-stage recorder. Datum of gage is 8,783 ft above mean sea level (river-profile survey). Jan. 8, 1911, to Sept. 30, 1918, staff gage at three sites 2½ to 2.8 miles downstream at different datums. May 25, 1944, to May 8, 1961, water-stage recorder at site 15 ft downstream at same datum.

Average discharge--31 years, 84.8 cfs (61,390 acre-ft per year).

Extremes--Maximum discharge during year, 330 cfs May 23 (gage height, 2.99 ft); minimum daily, 3.6 cfs Nov. 2, 3. 1910-18, 1944-67: Maximum discharge observed, 1,300 cfs June 24, 1918 (gage height, 6.2 ft, site and datum then in use); minimum observed, 0.6 cfs Jan. 25, 1915 (discharge measurement).

Remarks--Records good except those for winter period, which are poor. Flow regulated by Homestake Lake, revised (capacity, 44,360 acre-ft) since June 7, 1966. Transmountain diversions above station by Homestake tunnel (see elsewhere in this report).

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	6.4	5.0	5.5	6.5	5.0	7.5	26	34	80	53	17	58
2	6.4	3.6	5.5	6.5	5.0	8.0	26	30	101	47	28	35
3	11	3.6	6.0	5.5	4.8	8.0	28	30	128	39	29	30
4	30	4.4	6.0	5.5	4.6	8.0	34	29	157	39	26	28
5	32	5.0	6.0	6.0	4.6	7.5	40	28	149	37	24	24
6	29	5.5	5.5	6.0	5.0	6.5	40	29	157	30	26	23
7	15	5.5	5.0	6.0	5.0	6.5	37	30	134	29	32	22
8	13	5.0	4.8	6.0	4.8	6.5	39	35	120	34	34	24
9	12	4.4	4.6	5.5	4.8	7.0	47	53	120	30	47	37
10	11	4.4	4.4	5.5	5.0	8.0	41	70	104	29	49	29
11	11	5.0	4.6	6.0	5.0	10	45	65	83	29	37	30
12	13	6.0	4.8	6.0	5.0	10	45	62	83	32	34	55
13	13	6.0	4.8	6.0	5.0	10	41	58	83	30	30	39
14	15	6.0	4.6	6.0	5.0	9.0	43	47	78	28	29	30
15	17	6.0	4.4	6.0	5.0	9.0	35	39	83	32	29	28
16	17	6.0	4.4	6.0	5.0	9.5	37	43	78	34	29	28
17	16	6.0	4.4	5.5	5.5	12	35	62	80	28	35	28
18	17	6.0	4.8	5.0	5.5	14	35	86	98	26	51	26
19	18	5.5	5.0	5.0	5.5	14	43	104	98	23	51	32
20	17	5.5	5.5	5.0	5.0	15	43	101	95	22	51	34
21	17	6.0	5.5	5.0	5.0	16	37	98	101	20	51	29
22	15	6.0	5.0	5.0	5.5	18	29	131	83	18	51	26
23	15	5.5	4.4	5.0	6.0	20	24	190	83	18	55	23
24	15	5.0	4.4	5.0	6.5	24	23	212	86	29	49	20
25	15	5.0	4.8	5.0	7.0	28	19	190	75	24	26	20
26	22	5.5	6.0	5.0	7.0	27	22	181	62	20	28	24
27	14	5.5	6.0	5.0	7.0	26	24	128	55	19	28	23
28	11	5.0	5.5	4.8	7.0	26	32	114	53	17	26	20
29	10	5.0	5.0	4.6	-	27	43	101	51	15	29	19
30	9.0	6.0	5.0	4.4	- - - -	29	47	92	51	15	39	18
31	7.0	- - - -	6.0	5.0	- - - -	30	- - - -	86	- - - -	16	62	- - - -
Total	469.8	158.9	158.2	169.3	151.1	457.0	1,060	2,558	2,809	862	1,132	862
Mean	15.2	5.30	5.10	5.46	5.40	14.7	35.3	82.5	93.6	27.8	36.5	28.7
Max	32	6.0	6.0	6.5	7.0	30	47	212	157	53	62	58
Min	6.4	3.6	4.4	4.4	4.6	6.5	19	28	51	15	17	18
Ac-ft	932	315	314	336	300	906	2,100	5,070	5,570	1,710	2,250	1,710

Cal yr 1966: Total 16,660.3 Mean 45.6 Max 345 Min 3.6 Ac-ft 33,050
 Wtr yr 1967: Total 10,847.3 Mean 29.7 Max 212 Min 3.6 Ac-ft 21,520

Note--No gage-height record Nov. 1 to Apr. 8.

9-0655. Gore Creek at upper station, near Minturn, Colo.

Location.--Lat 39°37'40", long 106°16'30", on left bank 140 ft downstream from bridge on U. S. Highway 6, half a mile upstream from Black Gore Creek, and 8.8 miles northeast of Minturn, Eagle County.

Drainage area.--14.3 sq mi (revised).

Records available.--October 1947 to September 1956, October 1963 to September 1967.

Gage.--Water-stage recorder. Altitude of gage is 8,620 ft (from topographic map). Prior to Aug. 26, 1952, at site 40 ft upstream at same datum; Aug. 27, 1952, to Sept. 30, 1956, at site 20 ft upstream at same datum.

Average discharge.--13 years, 27.5 cfs (19,910 acre-ft per year).

Extremes.--Maximum discharge during year, 320 cfs June 25 (gage height, 3.68 ft), from rating curve extended above 170 cfs; minimum daily, 1.9 cfs Jan. 8.

1947-56, 1963-67: Maximum discharge, 588 cfs June 10, 1952, from rating curve extended above 260 cfs; maximum gage height, 6.65 ft June 18, 1951, site then in use; minimum daily discharge, 1.4 cfs Feb. 27, Mar. 3-9, 1966.

Remarks.--Records good except those for the winter period, which are poor. No diversion above station.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5.8	4.0	2.3	2.1	2.4	3.1	5.3	19	77	152	16	11
2	5.8	4.0	2.3	2.1	2.4	3.2	5.9	15	100	120	15	10
3	6.0	3.8	2.3	2.1	2.4	3.2	7.7	13	131	131	15	9.5
4	6.2	3.6	2.3	2.1	2.4	3.0	8.3	12	152	122	14	9.0
5	6.7	3.4	2.3	2.1	2.4	2.9	6.7	12	155	118	13	8.5
6	7.1	3.2	2.4	2.1	2.4	2.8	8.1	12	180	112	14	8.3
7	7.1	3.2	2.4	2.0	2.4	2.7	10	11	169	110	14	8.1
8	6.9	3.2	2.3	1.9	2.4	2.6	12	14	155	108	17	8.5
9	6.5	3.3	2.2	2.0	2.4	2.6	11	24	158	92	15	11
10	6.0	3.4	2.0	2.1	2.4	2.7	10	31	155	76	14	10
11	6.0	3.4	2.1	2.0	2.4	3.0	11	29	118	68	13	10
12	6.0	3.3	2.2	2.0	2.4	3.3	12	29	102	76	13	21
13	6.0	3.2	2.3	2.1	2.4	3.6	10	31	110	78	12	15
14	6.0	3.2	2.3	2.1	2.4	3.3	9.2	24	105	64	12	12
15	6.9	3.2	2.3	2.2	2.4	3.2	9.0	20	98	61	12	11
16	6.2	3.2	2.2	2.3	2.4	3.5	8.8	18	94	53	12	9.8
17	6.2	3.2	2.2	2.4	2.5	4.7	8.8	22	118	53	11	9.2
18	5.9	3.0	2.2	2.3	2.4	5.8	8.8	36	176	51	10	9.2
19	5.6	2.9	2.1	2.3	2.4	5.9	11	52	210	49	10	10
20	5.9	2.8	2.1	2.3	2.4	5.2	11	65	198	42	9.5	11
21	5.8	2.8	2.1	2.2	2.4	5.0	11	80	186	41	9.5	9.5
22	5.0	2.7	2.1	2.2	2.5	5.0	9.8	120	180	39	9.2	8.8
23	5.4	2.6	2.0	2.3	2.5	5.4	8.8	158	180	39	9.0	8.3
24	5.0	2.5	2.0	2.3	2.6	5.9	8.8	162	202	35	8.8	9.2
25	4.8	2.4	2.0	2.3	2.8	6.9	8.3	180	248	30	9.2	10
26	4.6	2.5	2.1	2.4	2.8	6.2	7.9	146	198	26	10	11
27	4.8	2.4	2.1	2.4	2.7	5.8	8.8	110	158	24	10	11
28	4.8	2.3	2.1	2.4	2.8	5.4	11	100	140	21	10	10
29	4.6	2.2	2.0	2.4	-	5.8	18	92	137	18	9.8	9.5
30	4.2	2.2	2.0	2.4	- - - -	6.5	21	90	146	18	10	8.8
31	4.0	- - - -	2.1	2.4	- - - -	6.0	- - - -	82	- - - -	16	11	- - - -
Total	177.8	91.1	67.4	68.3	69.2	134.2	298.0	1,809	4,536	2,043	368.0	308.2
Mean	5.74	3.04	2.17	2.20	2.47	4.33	9.93	58.4	151	65.9	11.9	10.3
Max	7.1	4.0	2.4	2.4	2.8	6.9	21	180	248	152	17	21
Min	4.0	2.2	2.0	1.9	2.4	2.6	5.3	11	77	16	8.8	8.1
Ac-ft	353	181	134	135	137	266	591	3,590	9,000	4,050	730	611

Cal yr 1966: Total 6,302.0 Mean 17.3 Max 122 Min 1.4 Ac-ft 12,500
Wtr yr 1967: Total 9,970.2 Mean 27.3 Max 248 Min 1.9 Ac-ft 19,780

Peak discharge (base, 200 cfs)

Date	Time	Gage height	Discharge	Date	Time	Gage height	Discharge
5-25	2030	3.60	248	6-18	1800	3.60	280
6-6	2000	3.58	239	6-25	2030	3.68	320

9-0660. Black Gore Creek near Minturn, Colo.

Location.--Lat 39°35'50", long 106°15'55", on right bank 300 ft from U. S. Highway 6, 0.3 mile upstream from Timber Creek, 2½ miles upstream from mouth, and 9 miles east of Minturn, Eagle County.

Drainage area.--11.8 sq mi.

Records available.--October 1947 to September 1956, October 1963 to September 1967.

Gage.--Water-stage recorder. Altitude of gage is 9,180 ft (from topographic map). Prior to October 1963 water-stage recorder at site 15 ft upstream at same datum.

Average discharge.--13 years, 16.1 cfs (11,660 acre-ft per year).

Extremes.--Maximum discharge during year, 218 cfs May 24 (gage height, 4.33 ft), from rating curve extended above 110 cfs; maximum gage height, 4.54 ft Apr. 2 (backwater from ice); minimum daily discharge, 1.0 cfs Mar. 15.
1947-56, 1963-67: Maximum discharge, 365 cfs June 7, 1952 (gage height, 5.42 ft); maximum gage height, 5.70 ft Mar. 31, 1956 (ice jam); minimum discharge, 0.9 cfs Jan. 11, 1950 (gage height, 2.79 ft).

Remarks.--Records good except those for the winter period, which are poor. No diversion above station. Natural regulation by two small recreation lakes above station.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.0	2.2	2.2	2.0	1.6	1.8	2.4	12	97	33	6.0	3.5
2	2.1	2.0	2.1	2.0	1.5	2.1	2.5	9.2	117	28	5.4	3.1
3	2.9	2.2	2.1	1.9	1.4	2.1	2.8	8.9	121	26	5.4	2.9
4	3.3	2.4	2.0	2.0	1.4	2.1	3.5	7.5	124	28	5.1	2.7
5	3.3	2.4	2.0	2.0	1.5	2.0	3.5	7.2	119	24	4.5	2.5
6	2.9	2.2	2.0	2.0	1.6	1.8	3.6	6.9	124	22	4.8	2.5
7	2.7	2.2	2.0	1.8	1.7	1.6	4.6	7.2	108	21	5.4	2.4
8	2.5	2.4	1.8	1.6	1.8	1.6	6	9.6	97	20	5.7	2.9
9	2.4	2.4	1.6	1.6	1.8	1.6	6.0	16	86	18	5.1	3.7
10	2.2	2.3	1.6	1.8	1.7	1.6	5.5	20	80	16	4.8	3.3
11	2.3	2.2	1.8	2.0	1.6	1.8	6.6	23	75	16	4.3	3.7
12	2.4	2.1	2.0	2.0	1.7	2.0	6.9	26	69	15	4.1	6.3
13	2.4	2.2	1.9	2.0	1.9	2.1	6.9	25	65	14	3.7	3.9
14	2.5	2.2	1.8	2.1	1.9	1.2	6.9	18	61	12	3.9	3.5
15	2.8	2.4	1.8	2.2	1.8	1.0	5.7	15	60	13	3.9	3.1
16	3.2	2.4	1.7	2.1	1.9	1.2	5.4	16	57	12	3.9	3.1
17	3.1	2.4	1.6	2.0	1.8	1.4	6	24	55	12	3.5	3.1
18	3.1	2.3	1.5	1.8	1.7	1.6	6.6	39	57	12	3.9	3.1
19	3.0	2.4	1.5	1.6	1.6	1.8	8.6	51	54	10	3.5	3.9
20	2.8	2.2	1.6	1.6	1.6	1.8	8.2	54	57	9.6	3.3	3.5
21	2.4	2.1	1.8	1.8	1.7	1.6	6.5	75	58	8.9	3.3	2.9
22	2.5	2.2	1.8	1.9	1.8	1.4	6	114	55	8.6	3.3	2.9
23	2.3	2.2	1.6	1.9	2.0	1.4	6.0	138	54	8.6	3.1	2.7
24	2.6	2.0	1.6	1.8	2.0	1.8	5.5	160	52	8.6	2.9	3.7
25	2.4	2.0	1.8	1.7	1.9	2.2	5.1	165	48	7.8	3.3	4.3
26	2.4	2.0	2.0	1.6	1.8	2.0	5	140	46	7.5	3.3	4.8
27	2.7	2.2	2.0	1.5	1.8	2.1	5.5	124	45	6.9	3.1	3.7
28	2.4	2.2	1.8	1.5	1.8	2.1	8.6	119	41	6.6	3.1	3.3
29	2.2	2.3	1.6	1.6	-	2.2	12	110	39	6.3	3.1	3.1
30	2.4	2.3	1.6	1.7	-	2.2	14	105	35	5.7	3.7	2.9
31	2.3	- - - -	2.0	1.6	- - - -	2.3	- - - -	90	- - - -	6.0	4.1	- - - -
Total	80.5	67.0	56.2	56.7	48.3	55.5	182.4	1,735.5	2,156	443.1	126.5	101.0
Mean	2.60	2.23	1.81	1.83	1.72	1.79	6.08	56.0	71.9	14.3	4.08	3.37
Max	3.3	2.4	2.2	2.2	2.0	2.3	14	165	124	33	6.0	6.3
Min	2.0	2.0	1.5	1.5	1.4	1.0	2.4	6.9	35	5.7	2.9	2.4
Ac-ft	160	133	111	112	96	110	362	3,440	4,280	879	251	200

Cal yr 1966: Total 3,479.0 Mean 9.53 Max 74 Min 1.5 Ac-ft 6,900

Wtr yr 1967: Total 5,108.7 Mean 14.0 Max 165 Min 1.0 Ac-ft 10,130

Peak discharge (base, 150 cfs)--May 24 (1730) 218 cfs (4.33 ft); June 2 (1800) 158 cfs (4.09 ft).

Note.--No gage-height record Dec. 19 to Mar. 14.

EAGLE RIVER BASIN

9-0661. Bighorn Creek near Minturn, Colo.

Location.--Lat 39°38'20", long 106°17'35", on left bank 0.3 miles upstream from U. S. Highway 6, 0.4 mile upstream from mouth, and 8.2 miles northeast of Minturn, Eagle County.

Drainage area.--4.37 sq mi.

Records available.--October 1963 to September 1967.

Gage.--Water-stage recorder and concrete control. Altitude of gage is 8,600 ft (from topographic map).

Extremes.--Maximum discharge during year, 54 cfs May 24 (gage height, 3.42 ft); minimum daily, 0.10 cfs Feb. 8.

1963-67: Maximum discharge, 71 cfs June 16, 1965; maximum gage height, 3.43 ft June 7, 1964; minimum daily discharge determined, that of Feb. 8, 1967.

Remarks.--Records good except those for period of no gage-height record, which are poor. No regulation or diversion above station.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.4	1.2	0.80	0.80	0.40	0.40	1.7	6.3	24	29	6.1	3.1
2	1.4	1.2	.80	.70	.30	.50	1.9	4.5	31	27	5.5	2.6
3	1.9	1.2	.80	.60	.30	.50	2.5	3.4	38	25	5.1	2.5
4	1.9	1.2	.80	.60	.30	.40	3.1	2.9	41	24	5.1	2.4
5	2.1	1.2	1.0	.60	.40	.30	3.0	2.7	41	24	4.9	2.3
6	2.2	1.0	1.2	.60	.30	.30	2.9	2.6	42	22	5.1	2.1
7	2.3	1.0	1.2	.50	.20	.30	3.7	2.6	40	24	5.5	2.0
8	2.1	1.2	1.0	.40	.10	.30	4.7	3.1	42	24	6.1	2.4
9	2.0	1.3	.40	.30	.20	.40	4.7	6.1	42	21	4.9	3.1
10	1.8	1.3	.40	.30	.30	.40	3.3	8.5	39	18	4.5	2.6
11	1.9	1.2	.50	.40	.40	.50	4.5	8.3	31	15	4.2	2.7
12	2.0	1.1	.60	.50	.40	.60	4.5	9.0	27	16	4.1	7.2
13	1.9	1.1	.60	.50	.40	.60	4.1	9.4	25	14	3.7	5.1
14	1.7	1.1	.50	.50	.50	.50	3.3	7.4	24	13	3.4	4.1
15	2.1	1.2	.40	.50	.50	.40	3.3	6.1	25	13	3.3	3.6
16	2.0	1.2	.40	.40	.40	.40	3.4	5.5	31	12	3.1	3.1
17	2.0	1.2	.40	.30	.40	.60	3.9	7.2	33	12	3.0	3.0
18	1.8	1.2	.40	.20	.40	.90	3.7	13	41	12	2.6	3.1
19	1.8	1.1	.60	.20	.40	1.2	5.3	16	44	10	2.5	3.9
20	1.9	1.0	.70	.20	.30	1.0	5.1	20	43	9.8	2.5	3.7
21	1.8	1.0	.70	.30	.30	1.0	4.4	26	43	9.4	2.5	3.3
22	1.6	1.0	.50	.40	.30	1.2	3.9	34	41	9.4	2.4	3.3
23	1.6	.90	.40	.60	.40	1.4	3.1	42	41	9.4	2.1	3.3
24	1.6	.80	.40	.60	.40	1.7	2.9	46	40	8.5	2.1	3.6
25	1.6	.70	.70	.50	.40	2.0	2.6	47	37	8.1	2.1	3.7
26	1.6	.70	.90	.50	.40	2.0	2.5	41	35	7.6	2.4	4.1
27	1.6	.70	.90	.40	.40	1.9	2.9	35	32	7.4	2.4	4.1
28	1.5	.60	.70	.30	.40	1.8	4.2	31	31	6.9	2.4	3.6
29	1.4	.60	.60	.30	-	1.9	5.9	28	28	6.5	3.0	3.4
30	1.4	.70	.60	.40	- - - - -	2.0	7.2	28	31	6.3	3.0	3.1
31	1.4	- - - - -	.80	.40	- - - - -	1.9	- - - - -	26	- - - - -	6.5	3.1	- - - - -
Total	55.3	30.90	20.70	13.80	9.90	29.30	112.2	528.6	1,063	450.8	112.7	100.1
Mean	1.78	1.03	0.668	0.445	0.334	0.945	3.74	17.1	35.4	14.5	3.64	3.34
Max	2.3	1.3	1.2	0.80	0.50	2.0	7.2	47	44	29	6.1	7.2
Min	1.4	0.60	0.40	0.20	0.10	0.30	1.7	2.6	24	6.3	2.1	2.0
Ac-ft	110	61	41	27	20	58	223	1,050	2,110	894	224	199

Cal yr 1966: Total 1,787.50 Mean 4.90 Max 27 Min - Ac-ft 3,550
 Wtr yr 1967: Total 2,527.30 Mean 6.92 Max 47 Min 0.10 Ac-ft 5,010

Peak discharge (base, 50 cfs)

Date	Time	Gage height	Discharge	Date	Time	Gage height	Discharge
5-24	2030	3.42	54	6-18	2100	3.35	52
6-9	1730	3.34	51				

Note.--No gage-height record Nov. 2 to Mar. 21.

9-0661.5. Pitkin Creek near Minturn, Colo.

Location--Lat 39°38'35", long 106°18'10", on left bank 100 ft downstream from Pitkin ditch headgate, 800 ft upstream from U. S. Highway 6, 900 ft upstream from mouth, and 8 miles northeast of Minturn, Eagle County.

Drainage area--5.39 sq mi.

Records available--Annual maximum and occasional low-flow measurements water years 1965-66. October 1966 to September 1967.

Gage--Water-stage recorder and concrete control. Altitude of gage is 8,600 ft (from topographic map). Oct. 1, 1964, to Sept. 30, 1966, crest-stage gage at same site at datum 0.98 ft lower.

Extremes (combined flow)--Maximum discharge during year, 72 cfs June 23 (gage height, 2.60 ft); minimum daily, 0.50 cfs Jan. 8. 1964-67: Maximum discharge, 83 cfs June 16, 1965 (gage height, 2.20 ft, datum then in use).

Remarks--Records good except those for period of no gage-height record, which are poor. Records show combine flow of creek and Pitkin ditch. Pitkin ditch diverts water above station for irrigation below station.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.4	1.4	1.4	1.2	1.4	1.2	1.3	5.1	23	50	8.2	4.5
2	2.4	2.6	1.6	1.2	1.2	1.2	1.3	4.5	35	48	7.1	3.7
3	2.4	2.4	1.8	1.2	1.0	1.2	1.5	4.4	48	40	7.1	3.2
4	2.5	2.2	1.8	1.0	1.0	1.2	1.7	3.8	53	39	6.3	2.6
5	2.7	2.0	2.0	1.0	1.2	1.0	1.8	3.5	53	35	5.7	2.8
6	2.7	2.0	2.2	1.0	1.0	.90	2.1	3.3	51	32	5.6	2.8
7	2.5	2.0	2.2	.80	.90	.90	2.4	3.3	46	34	6.5	2.6
8	2.5	2.2	2.0	.50	.80	1.0	3.2	4.1	48	37	7.9	3.2
9	2.2	2.2	1.6	.60	.90	1.0	3.6	6.6	48	32	6.4	4.0
10	2.2	2.2	1.2	.70	1.0	1.2	3.2	7.5	44	26	6.4	3.6
11	2.3	2.2	1.4	.80	1.0	1.2	4.0	7.0	33	22	5.6	4.4
12	2.4	2.0	1.6	.90	1.2	1.2	4.6	6.6	25	24	5.2	1.2
13	2.2	2.0	1.6	1.0	1.4	1.2	4.0	6.6	24	23	5.0	8.5
14	2.2	2.0	1.6	1.0	1.4	1.4	4.0	6.2	21	20	4.8	7.5
15	2.2	2.0	1.6	1.0	1.2	1.2	3.7	5.4	21	19	4.8	6
16	2.2	2.2	1.4	.90	1.2	1.0	4.0	5.4	25	17	4.4	5.5
17	1.8	2.2	1.4	.90	1.2	1.2	3.6	7.5	32	18	4.3	5.5
18	2.6	2.0	1.4	.80	1.2	1.4	3.6	1.1	48	19	4.0	5.5
19	2.3	2.0	1.2	.70	1.2	1.4	4.7	14	59	16	4.0	6
20	2.4	2.0	1.2	.80	1.2	1.2	5.0	15	62	15	4.0	6
21	2.4	2.0	1.0	.90	1.0	1.2	4.6	21	62	14	4.0	5.5
22	2.0	2.0	1.0	1.0	1.0	1.0	3.9	35	59	13	3.7	5
23	2.1	1.8	.80	1.0	1.2	1.0	3.4	46	60	14	3.4	5
24	1.8	1.8	.90	1.0	1.2	1.2	3.0	53	60	13	3.7	5.5
25	1.9	1.6	1.0	1.0	1.2	1.3	2.6	55	53	11	3.7	6
26	2.3	1.4	1.4	1.0	1.2	1.3	2.6	46	51	11	3.7	6.5
27	2.3	1.2	1.2	1.0	1.2	1.4	2.6	34	48	10	3.4	6.5
28	2.1	1.2	1.0	1.0	1.2	1.3	3.0	27	44	9.1	3.4	6
29	2.0	1.4	1.0	1.0	-	1.3	4.4	25	40	8.7	4.3	5.5
30	1.8	1.6	1.0	1.2	- - - - -	1.3	5.2	26	50	8.7	4.3	5
31	1.7	- - - - -	1.2	1.4	- - - - -	1.6	- - - - -	23	- - - - -	8.2	4.8	- - - - -
Total	69.5	57.8	43.70	29.50	31.80	37.10	98.6	521.8	1,326	696.7	155.7	156.4
Mean	2.24	1.93	1.41	0.952	1.14	1.20	3.29	16.8	44.2	22.2	5.02	5.21
Max	2.7	2.6	2.2	1.4	1.4	1.6	5.2	55	62	50	8.2	12
Min	1.7	1.2	0.80	0.50	0.80	0.90	1.3	3.3	21	8.2	3.4	2.6
Ac-ft	138	115	87	59	63	74	196	1,030	2,630	1,360	309	310

Cal yr 1966: Total - Mean - Max - Min - Ac-ft -
 Wtr yr 1967: Total 3,214.60 Mean 8.81 Max 62 Min 0.50 Ac-ft 6,380

Peak discharge (base, 60 cfs)

Note.--No gage-height record Nov. 2 to Mar. 21.

Date	Time	Gage height	Discharge	Date	Time	Gage height	Discharge
5-24	2000	2.59	68	6-23	1730	2.60	72
6-4	2100	2.59	68				

9-0662. Booth Creek near Minturn, Colo.

Location.--Lat 39°39'05", long 106°19'15", on left bank 0.2 mile upstream from U. S. Highway 6, 0.4 mile upstream from mouth, and 7 miles northeast of Minturn, Eagle County.

Drainage area.--6.03 sq mi.

Records available.--October 1964 to September 1967.

Gage.--Water-stage recorder. Altitude of gage is 8,450 ft (from topographic map).

Extremes.--Maximum discharge during year, 107 cfs May 24 (gage height, 3.66 ft); minimum daily, 0.20 cfs Feb. 8.

1964-67: Maximum discharge about 150 cfs June 16, 1965; maximum gage height, 3.83 ft June 17, 1965; minimum daily discharge, that of Feb. 8, 1967.

Remarks.--Records good except those for the winter period, which are poor. No diversion or regulation above station.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.77	1.3	0.92	0.50	0.40	0.56	1.4	6.0	37	47	4.3	2.6
2	.77	1.4	.92	.40	.40	.68	1.5	5.3	54	43	3.9	2.1
3	1.3	1.5	.88	.40	.40	.71	2.3	4.6	65	37	4.2	1.9
4	1.6	1.4	.92	.50	.40	.68	3.2	4.0	65	32	3.8	1.7
5	1.8	1.2	.96	.50	.40	.65	2.9	3.6	67	30	3.5	1.6
6	1.9	1.2	.90	.40	.40	.65	3.3	3.3	62	29	3.4	1.6
7	2.1	1.2	1.0	.40	.30	.62	4.3	3.5	65	31	3.8	1.6
8	2.0	1.2	1.4	.40	.20	.62	6.4	5.6	63	32	5.4	1.7
9	1.8	1.2	1.2	.40	.30	.62	6.2	9.8	58	26	4.3	2.6
10	1.7	1.3	.80	.40	.40	.62	5.0	10	51	20	3.9	1.9
11	1.6	1.2	.80	.40	.40	.68	6.6	10	43	17	3.5	2.1
12	1.9	1.2	.80	.50	.40	.74	7.1	9.8	34	19	3.2	10
13	1.9	1.2	.92	.50	.30	.74	5.4	10	31	17	3.0	7.3
14	2.0	1.2	.92	.50	.30	.74	4.8	8.5	27	15	2.7	4.0
15	2.5	1.2	.88	.40	.40	.71	5.0	7.3	26	15	2.8	3.5
16	2.7	1.2	.84	.35	.45	.74	5.1	6.9	31	14	2.7	3.0
17	2.5	1.2	.84	.35	.50	.96	4.5	10	38	16	2.4	2.9
18	2.4	1.1	.84	.35	.50	1.3	5.1	18	63	15	2.3	2.8
19	2.1	1.1	.84	.40	.50	1.4	7.1	24	69	13	2.0	4.0
20	2.4	1.0	.84	.40	.55	1.2	7.1	27	76	11	1.9	4.0
21	2.2	1.1	.84	.40	.59	1.1	6.0	37	67	10	1.9	3.5
22	1.9	1.0	.84	.45	.59	1.1	5.1	57	69	8.9	1.8	3.0
23	1.7	.96	.77	.45	.59	1.3	4.5	58	72	8.5	1.7	2.8
24	1.7	.92	.70	.40	.59	1.6	3.8	65	72	7.9	1.7	3.3
25	1.7	.80	.70	.35	.56	2.1	3.4	74	62	7.1	1.7	3.8
26	1.7	.84	.80	.30	.56	1.7	3.0	62	58	6.6	1.7	4.0
27	1.6	.80	.80	.30	.56	1.6	3.2	50	58	6.0	1.7	3.4
28	1.6	.80	.80	.30	.56	1.5	4.0	44	51	5.4	1.6	3.0
29	1.6	.92	.70	.35	-	1.6	6.6	41	50	5.0	1.7	2.7
30	1.5	.92	.70	.40	- - - -	1.6	7.3	41	52	4.5	2.0	2.4
31	1.4	- - - -	.60	.40	- - - -	1.5	- - - -	37	- - - -	4.5	2.6	- - - -
Total	56.34	33.56	26.67	12.55	12.50	32.32	141.2	753.2	1,636	553.4	87.1	94.8
Mean	1.82	1.12	0.860	0.405	0.446	1.04	4.71	24.3	54.5	17.9	2.81	3.16
Max	2.7	1.5	1.4	0.50	0.59	2.1	7.3	74	76	47	5.4	10
Min	0.77	0.80	0.60	0.30	0.20	0.56	1.4	3.3	26	4.5	1.6	1.6
Ac-ft	112	67	53	25	25	64	280	1,490	3,240	1,100	173	188

Cal yr 1966: Total 2,383.17 Mean 6.53 Max 50 Min - Ac-ft 4,730
 Wtr yr 1967: Total 3,439.64 Mean 9.42 Max 76 Min 0.20 Ac-ft 6,820

Peak discharge (base, 80 cfs)

Date	Time	Gage height	Discharge	Date	Time	Gage height	Discharge
5-24	1830	3.66	107	6-23	1630	3.60	105
6-8	1900	3.57	90				

9-0663. Middle Creek near Minturn, Colo.

Location.--Lat 39°38'50", long 106°22'50", on right bank a quarter of a mile upstream from U. S. Highway 6, 0.4 mile upstream from mouth, and 5 miles northeast of Minturn, Eagle County.

Drainage area.--5.97 sq mi.

Records available.--October 1964 to September 1967.

Gage.--Water-stage recorder. Altitude of gage is 8,300 ft (from topographic map).

Extremes.--Maximum discharge during year, 47 cfs June 20 (gage height, 1.90 ft); no flow for several days.

1964-67: Maximum discharge, 105 cfs June 19, 1965 (gage height, 2.60 ft), from rating curve extended above 56 cfs; no flow for several days in 1965, 1967.

Remarks.--Records good except those for period of no gage-height record, which are poor. No diversion or regulation above station.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.28	0.24	0.30	0.30	0.10	0.10	0.54	1.6	15	23	2.2	1.0
2	.30	.20	.20	.20	.10	.20	.54	1.4	18	20	2.0	1.0
3	.65	.30	.20	.10	.10	.20	.54	1.3	21	18	2.3	.82
4	.70	.40	.20	.10	.10	.20	.50	1.2	25	16	2.1	.70
5	.89	.50	.30	.10	.10	.20	.46	1.1	26	13	1.7	.62
6	.89	.40	.40	.10	.10	.20	.50	1.1	27	12	1.5	.58
7	.75	.30	.50	.10	.10	.20	.54	1.1	28	12	1.9	.62
8	.65	.40	.40	.10	.10	.20	.70	1.4	30	10	2.3	.70
9	.60	.50	.30	.20	.10	.20	.76	1.9	28	9.8	1.9	1.4
10	.45	.60	.10	.30	.10	.20	.34	2.7	26	8.0	1.8	.88
11	.60	.50	.10	.30	.10	.20	.82	2.7	24	7.8	1.5	1.0
12	.70	.50	.20	.30	.10	.30	1.0	2.8	21	7.0	1.3	3.1
13	.70	.60	.10	.20	.10	.30	.88	3.1	21	6.2	1.2	1.2
14	.55	.50	.10	.10	.10	.20	.94	2.6	20	5.8	1.2	1.1
15	.75	.50	.10	0	.20	.20	.88	2.3	20	6.0	1.2	.94
16	.75	.60	.10	0	.20	.20	.80	2.5	20	5.3	1.2	.88
17	.70	.50	0	0	.20	.20	.80	3.5	20	5.8	1.1	.88
18	.60	.50	.10	0	.20	.30	.94	3.7	25	5.5	1.1	.94
19	.45	.40	.10	0	.20	.30	1.1	6.2	30	4.7	1.0	1.4
20	.65	.30	.20	0	.20	.20	1.2	7.0	39	4.1	1.0	1.2
21	.65	.30	.10	0	.20	.20	1.2	8.7	42	3.7	.94	1.0
22	.50	.30	0	0	.20	.20	1.2	12	38	3.2	.94	.82
23	.55	.30	0	0	.20	.30	1.1	17	38	3.4	.88	.76
24	.45	.20	0	.10	.20	.40	1.0	18	38	3.2	.82	1.2
25	.50	.10	.10	.20	.10	.80	1.0	21	35	3.0	.82	1.9
26	.65	.10	.20	.20	.10	.60	.94	21	32	2.6	.82	2.1
27	.60	0	.20	.10	.10	.50	.94	19	29	2.6	.76	1.3
28	.60	.10	.10	0	.10	.50	1.1	18	27	2.2	.76	1.1
29	.60	.20	0	0	-	.60	1.5	17	23	2.0	.82	1.0
30	.50	.30	.10	0	- - - - -	.60	1.8	17	23	1.8	.94	.94
31	.50	- - - - -	.20	.10	- - - - -	.50	- - - - -	16	- - - - -	2.1	1.1	- - - - -
Total	18.71	10.64	5.00	3.20	3.80	9.50	26.56	235.9	809	229.8	41.10	33.08
Mean	0.604	0.355	0.161	0.103	0.136	0.306	0.885	7.61	27.0	7.41	1.33	1.10
Max	0.89	0.60	0.50	0.30	0.20	0.80	1.8	21	42	23	2.3	3.1
Min	0.28	0	0	0	0.10	0.10	0.34	1.1	15	1.8	0.76	0.58
Ac-ft	37	21	9.9	6.3	7.5	19	53	468	1,600	456	82	66

Cal yr 1966: Total 1,128.95 Mean 3.09 Max 24 Min 0 Ac-ft 2,240
Wtr yr 1967: Total 1,426.29 Mean 3.91 Max 42 Min 0 Ac-ft 2,830

Peak discharge (base, 60 cfs).--No peak above base.

Note.--No gage-height record Nov. 2 to Mar. 31.

9-0664. Red Sandstone Creek near Minturn, Colo.

Location.--Lat 39°40'55", long 106°24'05", in sec.25, T.4 S., R.81 W. (projected), on left bank 150 ft upstream from road culvert, 1,200 ft upstream from Indian Creek, and 6.8 miles north of Minturn.

Drainage area.--7.27 sq mi.

Records available.--October 1963 to September 1967.

Gage.--Water-stage recorder and concrete control. Altitude of gage is 9,150 ft (from topographic map).

Extremes.--Maximum discharge during year, 88 cfs May 24 (gage height, 3.92 ft); minimum daily, 0.30 cfs Jan. 8.

1963-67: Maximum discharge, 139 cfs June 17, 1965 (gage height, 4.22 ft), from rating curve extended above 80 cfs; minimum not determined.

Remarks.--Records good except those for period of no gage-height record, which are poor. No regulation or diversion above station.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.95	1.1	0.88	0.60	0.60	1.1	1.4	5.5	46	23	3.2	2.1
2	.95	1.1	.88	.60	.60	1.1	1.6	3.8	54	22	2.9	2.0
3	1.2	1.1	.88	.50	.60	1.1	2.3	3.4	58	19	3.2	1.6
4	1.6	1.2	.88	.60	.60	1.0	3.2	3.0	62	18	3.0	1.5
5	1.7	1.2	.88	.70	.50	.80	3.5	3.0	61	17	2.9	1.4
6	1.6	1.2	.95	.60	.50	.60	3.5	2.9	57	15	2.7	1.3
7	1.5	1.1	.95	.50	.50	.70	4.0	3.4	53	15	3.2	1.2
8	1.3	1.1	.90	.30	.50	.60	5.1	5.1	49	16	4.0	1.5
9	1.2	1.2	.70	.40	.50	.70	4.7	7.6	45	13	3.4	2.2
10	1.2	1.2	.60	.50	.60	.80	4.2	9.5	41	11	3.4	1.4
11	1.3	1.2	.70	.60	.60	1.0	5.1	10	39	11	2.7	1.7
12	1.5	1.2	.80	.60	.60	1.2	5.1	11	34	10	2.6	4.2
13	1.4	1.3	.80	.60	.60	1.4	4.0	11	33	9.2	2.3	2.1
14	1.3	1.0	.80	.60	.60	1.0	3.7	8.6	31	8.1	2.2	1.7
15	1.5	1.0	.80	.70	.60	.95	3.8	7.8	30	8.9	2.2	1.6
16	1.7	1.1	.70	.80	.70	1.1	4.7	10	32	8.4	2.1	1.5
17	1.6	1.1	.70	.70	.70	1.4	3.4	16	30	9.2	2.0	1.5
18	1.4	1.1	.70	.60	.70	1.7	4.0	19	33	8.1	2.0	1.6
19	1.4	1.0	.70	.50	.60	1.6	5.5	22	37	6.5	2.1	2.9
20	1.8	1.0	.70	.50	.60	1.4	5.3	26	42	6.0	2.0	2.7
21	1.7	1.1	.70	.50	.60	1.3	4.0	35	44	5.5	1.7	2.1
22	1.4	1.1	.60	.60	.80	1.3	3.5	52	39	5.3	1.7	1.8
23	1.4	1.0	.60	.70	1.0	1.3	3.0	65	37	5.8	1.7	1.6
24	1.3	.90	.50	.70	1.1	1.6	2.7	73	37	5.5	1.6	2.0
25	1.3	.90	.50	.60	1.1	1.7	2.6	76	35	4.7	1.6	2.9
26	1.4	.88	.60	.50	1.1	1.6	2.6	72	31	4.0	1.7	3.5
27	1.3	.80	.70	.50	1.1	1.5	2.9	69	29	4.0	1.7	2.6
28	1.4	.80	.60	.60	1.1	1.4	4.7	61	27	3.7	1.6	2.1
29	1.4	.88	.40	.60	-	1.5	6.7	54	25	3.4	2.3	1.7
30	1.3	.88	.40	.60	- - - - -	1.5	6.0	51	24	3.0	2.2	1.7
31	1.3	- - - - -	.60	.60	- - - - -	1.4	- - - - -	46	- - - - -	3.0	2.2	- - - - -
Total	43.30	31.74	22.10	18.00	19.70	37.35	116.8	842.6	1195	302.3	74.1	59.7
Mean	1.40	1.06	0.713	0.581	0.704	1.20	3.89	27.2	39.8	9.75	2.39	1.99
Max	1.8	1.3	0.95	0.80	1.1	1.7	6.7	76	62	23	4.0	4.2
Min	0.95	0.80	0.40	0.30	0.50	0.60	1.4	2.9	24	3.0	1.6	1.2
Ac-ft	86	63	44	36	39	74	232	1,670	2,370	600	147	118

Cal yr 1966: Total 2,018.24 Mean 5.53 Max 40 Min 0.40 Ac-ft 4,000
 Wtr yr 1967: Total 2,762.69 Mean 7.57 Max 76 Min 0.30 Ac-ft 5,480

Peak discharge (base, 70 cfs).--May 24 (1530) 88 cfs (3.92 ft); June 4 (1900) 74 cfs (3.81 ft).

Note.--No gage-height record Dec. 8 to Mar. 14.

9-0677. East Brush Creek at Yeoman Park, near Eagle, Colo.

Location.--Lat 39°30'15", long 106°40'39", in NE¼ sec.27, T.6 S., R.83 W., on downstream right bank wingwall of Forest Service bridge 1 mile upstream from Hat Creek and 13 miles southeast of Eagle.

Drainage area.--9.84 sq mi.

Records available.--October 1965 to September 1967.

Gage.--Water-stage recorder. Altitude of gage is 9,050 ft (from topographic map).

Extremes.--Maximum discharge during year, 119 cfs June 19 (gage height, 1.98 ft); minimum daily, 2.1 cfs Feb. 3. 1965-67: Maximum discharge, that of June 19, 1967; minimum daily determined, 2.1 cfs Feb. 3, 1967.

Remarks.--Records good except those for the winter period, which are poor. No regulation or diversion above station.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4.7	3.6	3.4	3.4	2.3	2.5	2.7	7.2	33	62	9.9	5.9
2	4.7	3.6	3.3	3.2	2.2	2.5	2.8	5.6	55	58	9.5	5.1
3	5.6	3.8	3.2	3.0	2.1	2.5	3.5	5.1	69	54	8.7	4.6
4	5.8	3.8	3.2	3.0	2.3	2.5	4.0	4.6	80	51	8.3	4.2
5	6.0	4.0	3.3	3.0	2.5	2.5	4.3	4.5	88	47	8	3.8
6	5.8	4.3	3.4	3.2	2.4	2.5	4.8	4.5	81	41	8	3.7
7	6.0	4.3	3.4	3.0	2.5	2.4	5.9	4.6	75	37	8.5	3.7
8	5.8	4.3	3.0	2.5	2.3	2.3	7.2	6.4	75	43	9.5	4.2
9	5.8	4.4	2.8	2.7	2.4	2.3	7.0	11	76	39	8.5	9.5
10	5.6	4.4	2.8	2.8	2.5	2.4	5.9	17	67	32	7.5	7.2
11	5.6	4.5	3.0	2.9	2.5	2.5	6.4	13	50	33	7	6.4
12	5.8	4.5	3.1	3.0	2.5	2.5	6.4	13	42	37	6.5	9.9
13	6.0	4.2	3.2	3.0	2.5	2.4	5.3	16	39	32	6	8.7
14	6.6	4.0	3.2	3.0	2.5	2.4	5.3	11	30	28	6	7.5
15	6.6	4.0	3.3	2.8	2.5	2.4	5.6	8.3	28	28	6	7.0
16	6.6	4.2	3.4	2.6	2.5	2.5	5.3	7.0	31	31	5.5	6.7
17	6.4	4.4	3.3	2.4	2.5	2.8	4.6	7.2	43	30	5.5	6.4
18	6.2	4.3	3.2	2.4	2.5	2.9	5.9	12	61	31	5	6.2
19	5.8	3.8	3.2	2.4	2.4	2.8	7.0	21	69	27	5	7.5
20	5.8	3.8	3.2	2.4	2.3	2.8	6.4	21	93	24	5	8.7
21	5.8	4.1	3.2	2.4	2.2	2.8	5.3	32	86	21	5	8.3
22	5.4	4.1	3.2	2.5	2.3	2.7	4.8	55	78	18	5.5	7.9
23	5.2	4.0	2.8	2.6	2.4	2.9	4.3	74	80	17	5	7.5
24	5.0	3.6	2.6	2.6	2.5	3.0	4.2	84	87	18	5	7.0
25	4.9	3.4	3.0	2.6	2.5	3.1	4.0	84	81	16	4.4	7.0
26	4.9	3.2	3.2	2.6	2.5	3.0	3.8	76	69	15	4.6	9.1
27	4.9	3.2	3.2	2.5	2.4	2.8	4.5	57	69	13	4.6	9.5
28	4.9	3.2	2.8	2.4	2.5	2.8	6.7	46	64	12	4.6	8.3
29	4.9	3.4	3.0	2.3	-	2.8	9.5	35	55	11	4.6	7.2
30	4.4	3.4	3.2	2.2	- - - -	2.8	9.1	32	61	10	4.6	7.0
31	4.0	- - - -	3.4	2.2	- - - -	2.6	- - - -	32	- - - -	9.5	5.3	- - - -
Total	171.5	117.8	97.5	83.6	67.5	81.7	162.5	807.0	1,915	925.5	197.1	205.7
Mean	5.53	3.93	3.15	2.70	2.41	2.64	5.42	26.0	63.8	29.9	6.36	6.86
Max	6.6	4.5	3.4	3.4	2.5	3.1	9.5	84	93	62	9.9	9.9
Min	4.0	3.2	2.6	2.2	2.1	2.3	2.7	4.5	28	9.5	4.4	3.7
Ac-ft	340	234	193	166	134	162	322	1,600	3,800	1,840	391	408

Cal yr 1966: Total 4,174.8 Mean 11.4 Max 72 Min - Ac-ft 8,280
 Wtr yr 1967: Total 4,832.4 Mean 13.2 Max 93 Min 2.1 Ac-ft 9,580

Peak discharge (base, 110 cfs)

Date	Time	Gage height	Discharge	Date	Time	Gage height	Discharge
5-25	2200	1.94	112	6-19	2330	1.98	119
6-4	2230	1.96	116				

Note.--No gage-height record Dec. 1 to Mar. 17.

9-0680. Brush Creek near Eagle, Colo.

Location.--Lat 39°33'40", long 106°46'20", in SE¼ sec.1, T.6 S., R.84 W., on left bank 150 ft downstream from Beecher Creek, 1½ miles downstream from confluence of East and West Brush Creeks, and 7½ miles southeast of Eagle.

Drainage area.--69.7 sq mi (revised).

Records available.--October 1950 to September 1967.

Gage.--Water-stage recorder. Altitude of gage is 7,450 ft (estimated from nearby level line).

Average discharge.--17 years, 43.0 cfs (31,130 acre-ft per year).

Extremes.--Maximum discharge during year, 242 cfs June 20 (gage height, 3.71 ft); maximum gage height, 3.81 ft Jan. 9 (backwater from ice); minimum daily discharge, 13 cfs Jan. 27-30, Feb. 3.

1950-67: Maximum discharge, 775 cfs June 7, 1952 (gage height, 5.10 ft), from rating curve extended above 400 cfs; minimum daily, 11 cfs Feb. 28, Mar. 14, 1962.

Remarks.--Records good except those for winter period, which are poor. Small diversions for irrigation of hay meadows above and below station. One small diversion to Gypsum Creek above station. Slight regulation by Zurcher's Lake (capacity, 450 acre-ft) on West Brush Creek for irrigation of hay meadows above station.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	16	21	20	17	14	16	17	27	69	130	42	30
2	16	20	20	16	14	16	18	23	98	122	40	28
3	20	22	20	15	13	16	20	21	118	101	40	26
4	21	22	20	15	14	16	21	20	132	90	37	26
5	22	21	20	16	16	16	22	18	150	85	36	25
6	21	21	22	16	15	16	23	18	145	80	36	25
7	20	21	25	15	16	15	23	17	142	74	39	25
8	19	22	17	14	14	14	26	20	155	83	42	26
9	19	22	16	15	15	14	26	26	158	80	41	36
10	19	22	17	16	16	15	23	33	152	71	38	34
11	19	22	19	16	16	16	24	30	132	76	36	33
12	21	22	19	17	16	16	25	26	120	90	33	40
13	23	22	19	17	16	15	23	30	120	76	31	37
14	28	21	19	18	16	15	23	23	103	69	30	34
15	30	22	19	18	16	14	23	19	101	69	30	31
16	30	22	20	16	16	16	22	18	103	80	28	31
17	30	22	19	15	16	17	20	16	115	78	27	30
18	31	22	19	14	16	19	22	27	138	78	26	30
19	28	21	19	14	16	19	24	43	155	65	26	34
20	28	21	19	14	15	18	25	45	195	56	26	33
21	26	22	18	14	14	18	23	55	193	52	26	31
22	24	21	18	15	15	18	21	74	183	49	27	31
23	24	21	14	15	16	18	21	96	178	46	26	30
24	23	20	16	15	16	19	20	115	178	48	26	30
25	23	19	17	15	16	19	20	112	165	43	25	29
26	23	19	18	14	16	18	20	130	150	37	26	34
27	23	16	18	13	15	17	20	105	140	31	26	37
28	22	18	14	13	16	18	24	94	140	27	26	34
29	22	20	15	13	-	19	30	74	115	33	26	32
30	21	20	16	13	- - - -	18	32	69	130	44	26	30
31	21	- - - -	17	14	- - - -	16	- - - -	73	- - - -	41	27	- - - -
Total	713	627	569	468	430	517	681	1,497	4,163	2,104	971	932
Mean	23.0	20.9	18.4	15.1	15.4	16.7	22.7	48.3	139	67.9	31.3	31.1
Max	31	22	25	18	16	19	32	130	195	130	42	40
Min	16	16	14	13	13	14	17	16	69	27	25	25
Ac-ft	1,410	1,240	1,130	928	853	1,030	1,350	2,970	8,260	4,170	1,930	1,850

Cal yr 1966: Total 13,199 Mean 36.2 Max 152 Min 14 Ac-ft 26,180
Wtr yr 1967: Total 13,672 Mean 37.5 Max 195 Min 13 Ac-ft 27,120

Peak discharge (base, 160 cfs)

Date	Time	Gage height	Discharge	Date	Time	Gage height	Discharge
5-26	0200	3.50	162	6-20	0200	3.71	242
6-5	0300	3.53	180				

9-0695. Gypsum Creek near Gypsum, Colo.

Location.--Lat 39°32'44", long 106°56'03", in sec.9, T.6 S., R.85 W., on left bank 10 ft upstream from private footbridge, 1 mile upstream from Sundell Creek and 7 miles south of Gypsum.

Drainage area.--63.4 sq mi (revised).

Records available.--October 1950 to September 1955. October 1965 to September 1967.

Gage.--Water-stage recorder. Altitude of gage is 7,600 ft (from topographic map). Oct. 13, 1950, to Sept. 30, 1955, water-stage recorder at same site at datum 0.12 ft lower.

Average discharge.--7 years (1950-55, 1965-67), 31.1 cfs (22,520 acre-ft per year).

Extremes.--Maximum discharge during year, 108 cfs June 21 (gage height, 3.65 ft); minimum daily, 14 cfs Jan. 8, 9.

1950-55, 1965-67: Maximum discharge, 395 cfs June 11, 1952 (gage height, 4.77 ft, present datum); minimum daily, 9.4 cfs Dec. 9, 1954.

Remarks.--Records good except those for winter period, which are poor. Diversion from tributary about 1 mile upstream for municipal supply of Gypsum. Small diversions for irrigation of hay meadows above station. Slight regulation by L.E.D.E. Reservoir above station (capacity about 400 acre-ft). One small diversion imports water from West Brush Creek above station.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	18	20	20	16	16	16	18	16	44	56	30	26
2	19	20	20	16	15	16	18	17	49	54	30	25
3	22	20	20	15	15	16	18	17	61	51	30	25
4	22	20	20	15	18	16	19	16	75	50	29	25
5	20	20	20	16	17	16	20	16	88	47	28	24
6	20	20	22	16	17	18	20	16	94	45	29	24
7	20	20	23	15	18	16	19	16	92	45	33	24
8	20	22	20	14	17	16	19	16	94	47	35	26
9	20	21	19	14	16	16	18	16	94	43	35	27
10	20	20	17	15	19	16	18	17	92	40	34	25
11	21	20	17	15	18	17	18	16	86	42	34	26
12	22	20	18	15	18	18	18	16	84	43	34	27
13	22	20	18	15	18	16	18	16	79	38	33	25
14	23	20	18	15	18	16	17	16	75	37	33	23
15	22	21	18	15	17	16	17	16	73	37	33	23
16	21	21	17	15	16	18	17	16	81	38	32	23
17	21	21	17	16	18	19	17	16	73	39	32	24
18	21	20	17	18	17	20	17	16	77	37	32	24
19	21	20	17	18	17	20	16	16	83	36	31	28
20	21	20	17	18	16	18	16	17	90	35	31	25
21	21	20	17	17	15	18	16	18	99	34	31	24
22	20	20	17	16	16	18	16	20	94	34	31	24
23	20	20	16	16	18	18	16	23	86	33	30	23
24	20	20	15	16	17	18	16	31	83	33	29	23
25	20	19	16	16	16	18	16	44	81	33	29	23
26	20	20	17	16	16	18	16	64	75	33	29	23
27	20	20	17	16	16	18	16	64	72	32	29	23
28	20	21	16	16	16	18	16	64	70	32	28	23
29	20	20	15	16	-	19	16	59	64	32	28	23
30	20	20	15	16	- - - -	18	17	52	59	30	28	22
31	20	- - - -	16	16	- - - -	17	- - - -	49	- - - -	30	27	- - - -
Total	637	606	552	489	471	538	519	812	2,367	1,216	957	730
Mean	20.5	20.2	17.8	15.8	16.8	17.4	17.3	26.2	78.9	39.2	30.9	24.3
Max	23	22	23	18	19	20	20	64	99	56	35	28
Min	18	19	15	14	15	16	16	16	44	30	27	22
Ac-ft	1,260	1,200	1,090	970	934	1,070	1,030	1,610	4,690	2,410	1,900	1,450

Cal yr 1966: Total 9,710 Mean 26.6 Max 79 Min 15 Ac-ft 19,260

Wtr yr 1967: Total 9,894 Mean 27.1 Max 99 Min 14 Ac-ft 19,620

Peak discharge (base, 100 cfs).--June 21 (0600) 108 cfs (3.65 ft).

9-0700. Eagle River below Gypsum, Colo.

Location.--Lat 39°39'00", long 106°57'10", in NW¼ sec.5, T.5 S., R.85 W., on right bank 30 ft downstream from bridge on U. S. Highways 6 and 24 at Gypsum and 150 ft downstream from Gypsum Creek.

Drainage area.--944 sq mi (revised)

Records available.--October 1946 to September 1967.

Gage.--Water-stage recorder. Altitude of gage is 6,270 ft.

Average discharge.--21 years, 566 cfs (409,800 acre-ft per year).

Extremes.--Maximum discharge during year, 2,730 cfs May 26 (gage height, 6.30 ft); minimum daily, 130 cfs Jan. 9.
1946-67: Maximum discharge, 6,580 cfs June 11, 1952; maximum gage height, 9.17 ft June 29, 1957; minimum daily discharge, 110 cfs Feb. 21, 1955, Feb. 3, 1956, Dec. 26, 27, 1962.

Remarks.--Records good. Transmountain diversions above station (see elsewhere in this report). Transbasin diversions above station from Robinson Reservoir (capacity, 2,520 acre-ft) to Tenmile Creek for mining development. Many small diversions for irrigation of hay meadows above station. Records of chemical analyses and water temperatures for the water year 1967 are published in Part 2 of this report as "at Gypsum."

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	162	208	180	190	160	155	212	377	1,270	1,460	316	251
2	162	201	175	170	152	170	215	334	1,440	1,340	305	238
3	172	201	175	160	144	178	228	305	1,740	1,270	316	212
4	178	204	184	170	148	178	270	270	2,020	1,170	295	204
5	187	198	184	160	160	172	305	256	2,130	1,160	265	198
6	187	194	201	160	155	150	316	256	2,080	1,070	256	201
7	190	190	208	160	155	158	305	242	2,070	990	275	198
8	180	208	194	150	149	150	334	256	2,000	1,100	305	194
9	178	212	162	130	146	155	358	328	1,960	1,000	328	204
10	184	208	137	150	155	175	334	488	1,920	888	346	251
11	184	208	154	160	152	201	322	520	1,640	843	334	242
12	190	208	175	160	150	201	352	504	1,430	924	300	322
13	194	208	158	160	152	184	358	528	1,380	843	285	370
14	238	201	149	160	155	172	322	472	1,200	735	265	300
15	256	201	158	160	150	170	322	398	1,160	726	256	280
16	256	204	152	160	150	178	322	334	1,240	798	242	251
17	256	201	148	140	148	204	290	328	1,290	780	224	238
18	256	198	155	140	155	220	295	488	1,490	816	228	238
19	246	194	170	140	155	246	328	699	1,800	690	238	275
20	238	187	175	140	149	212	370	798	1,920	609	224	290
21	233	190	175	150	140	204	358	807	2,140	560	224	285
22	233	187	160	158	143	198	322	1,200	1,950	536	212	280
23	233	180	150	158	155	201	310	1,730	1,940	512	215	265
24	228	178	140	155	152	204	290	2,090	2,000	520	208	265
25	224	170	160	155	150	220	275	2,200	1,920	488	201	275
26	215	172	201	155	154	220	260	2,400	1,720	440	190	322
27	220	170	204	158	152	224	256	2,000	1,610	405	201	328
28	215	162	170	150	150	215	285	1,790	1,590	377	198	305
29	212	184	140	150	-	220	364	1,560	1,360	340	194	295
30	208	187	160	155	- - - -	238	419	1,470	1,420	328	198	285
31	208	- - - -	180	162	- - - -	212	- - - -	1,370	- - - -	310	220	- - - -
Total	6,523	5,814	5,234	4,826	4,236	5,985	9,297	26,798	50,820	24,028	7,864	7,862
Mean	210	194	169	156	151	193	310	864	1,694	775	254	262
Max	256	212	208	190	160	246	419	2,400	2,140	1,460	346	370
Min	162	162	137	130	140	150	212	242	1,160	310	190	194
Ac-ft	12,940	11,530	10,380	9,570	8,400	11,870	18,440	53,150	100,800	47,660	15,600	15,590

Cal yr 1966: Total 135,568 Mean 371 Max 1,830 Min 132 Ac-ft 268,900

Wtr yr 1967: Total 159,287 Mean 436 Max 2,400 Min 130 Ac-ft 315,900

Peak discharge (base, 3,500 cfs).--No peak above base.

9-0705. Colorado River near Dotsero, Colo.

Location.--Lat 39°38'40", long 107°04'40", in sec.6, T.5 S., R.86 W., on left bank about 500 ft south of U. S. Highways 6 and 24, 1½ miles west of Dotsero, and 1½ miles downstream from Eagle River.

Drainage area.--4,394 sq mi (revised).

Gage.--Water-stage recorder. Altitude of gage is 6,130 ft (from topographic map).

Records available.--October 1940 to September 1967.

Average discharge.--27 years, 2,083 cfs (1,508,000 acre-ft per year).

Extremes.--Maximum discharge during year, 6,220 cfs May 26 (gage height, 6.17 ft); minimum daily, 500 cfs Dec. 11.

1940-67: Maximum discharge, 19,100 cfs June 8, 1952 (gage height, 11.56 ft); minimum daily, 350 cfs Jan. 5, 1944.

Remarks.--Records good except those for winter period, which are poor. Natural flow of stream affected by transmountain diversions, storage reservoirs, power development, diversions for irrigation of 68,000 acres above station, and return flow from irrigated areas.

Cooperation.--Gage-height record collected in cooperation with The Public Service Co. of Colorado.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1060	834	820	640	820	802	1190	1670	3930	3130	1320	1470
2	1100	820	760	640	760	848	1200	1350	4100	3030	1290	1460
3	1220	808	755	660	720	897	1290	1140	4400	2870	1290	1400
4	1270	796	750	630	640	890	1420	1100	4790	2660	1280	1330
5	1210	802	720	660	720	883	1580	1040	4980	2610	1260	1290
6	1180	796	848	720	740	796	1610	1030	4920	2510	1330	1280
7	1160	808	790	680	760	834	1650	1100	4820	2250	1340	1280
8	1120	841	745	620	760	790	1650	1180	4600	2360	1400	1280
9	1070	862	670	620	640	827	1680	1330	4320	2480	1420	1400
10	1080	827	520	660	740	883	1690	1730	4140	2230	1370	1420
11	1080	834	500	720	780	939	2220	1940	3750	1970	1310	1380
12	1090	862	600	820	760	968	1980	1860	3490	2060	1240	1540
13	1090	862	620	800	740	932	2000	1890	3410	1990	1190	1600
14	1160	841	580	820	760	918	1760	1820	3240	1840	1140	1430
15	1220	841	600	840	760	904	1750	1610	3130	1760	1150	1330
16	1080	834	600	760	740	911	1530	1400	3280	1900	1300	1200
17	976	834	580	740	720	968	1500	1350	3210	1980	1340	1180
18	1020	834	600	680	700	1060	1550	1570	3270	1960	1280	1140
19	1000	820	580	700	780	1210	1740	2110	3610	1860	1290	1280
20	984	814	600	740	760	1230	1940	2580	3890	1680	1290	1240
21	968	802	600	780	700	1170	1730	2790	4360	1600	1280	1190
22	968	814	600	800	700	1150	1580	3410	4210	1720	1280	1120
23	984	802	620	820	780	1150	1440	4240	4250	1960	1270	1080
24	968	796	640	800	808	1180	1360	5000	4250	2000	1270	1030
25	953	760	640	780	808	1280	1360	5430	4070	1950	1270	1070
26	946	745	680	720	834	1290	1290	5780	3750	1820	1240	1140
27	946	745	720	760	808	1240	1260	5540	3550	1670	1240	1160
28	946	710	700	760	802	1210	1300	5380	3560	1580	1250	1140
29	925	760	690	760	-	1230	1470	4850	3300	1460	1250	1130
30	855	820	660	800	- - - -	1320	1700	4460	3260	1350	1370	1140
31	841	- - - -	640	820	- - - -	1250	- - - -	4180	- - - -	1320	1390	- - - -
Total	32,470	24,324	20,428	22,750	21,040	31,960	47,410	81,860	117,840	63,560	39,940	38,130
Mean	1,047	811	659	734	751	1,031	1,580	2,641	3,928	2,050	1,288	1,271
Max	1,270	862	848	840	834	1,320	2,220	5,780	4,980	3,130	1,420	1,600
Min	841	710	500	620	640	790	1,190	1,030	3,130	1,320	1,140	1,030
Ac-ft	64,400	48,250	40,520	45,120	41,730	63,390	94,040	162,400	233,700	126,100	79,220	75,630

Cal yr 1966: Total 487,652 Mean 1,336 Max 3,800 Min 500 Ac-ft 967,200
Wtr yr 1967: Total 541,712 Mean 1,484 Max 5,780 Min 500 Ac-ft 1,074,000

Note.--No gage-height record Dec. 26 to Feb. 1.

ROARING FORK RIVER BASIN

9-0734. Roaring Fork River near Aspen, Colo.

Location--Lat 39°10'48", long 106°48'04", on right bank 200 ft upstream from Salvation ditch headgate, 1 mile southeast of Aspen, and 2 miles upstream from Hunter Creek, Pitkin County.

Drainage area--108 sq mi.

Records available--October 1964 to September 1967.

Gage--Water-stage recorder. Datum of gage is 8,015.17 ft above mean sea level, datum of 1929.

Extremes--Maximum discharge during year, 540 cfs May 24 (gage height, 3.90 ft); minimum daily, 19 cfs Feb. 3.

1964-67: Maximum discharge, 1,310 cfs July 1, 1965 (gage height, 5.20 ft), from rating curve extended above 770 cfs; minimum daily, 16 cfs Mar. 3, 4, 1965.

Remarks--Records good except those for winter period, which are poor. Transmountain diversion 14 miles upstream through Twin Lakes tunnel to Arkansas River basin since May 24, 1935 (see elsewhere in this report).

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	30	26	26	24	23	27	32	55	191	170	47	39
2	30	22	26	24	22	28	30	52	222	158	45	36
3	38	27	26	24	19	29	35	46	257	143	43	34
4	41	27	26	24	20	30	39	44	332	135	42	31
5	45	25	27	24	22	26	39	44	362	125	40	30
6	45	27	30	24	24	25	42	42	398	119	38	28
7	43	29	34	25	23	26	43	39	392	115	41	29
8	42	29	28	24	21	24	51	46	389	115	47	41
9	41	30	25	25	21	23	52	72	386	108	67	60
10	38	29	22	24	22	23	49	99	356	99	56	55
11	40	30	24	24	22	24	50	96	296	92	57	57
12	46	30	24	24	22	24	57	105	278	93	48	77
13	48	29	24	23	22	24	49	116	248	94	45	70
14	42	28	24	23	23	22	47	92	218	84	42	61
15	40	30	26	23	23	22	57	84	200	95	41	56
16	41	30	26	22	23	23	55	84	187	94	39	53
17	37	30	25	23	23	25	44	111	195	93	37	52
18	35	29	25	23	23	28	52	160	251	93	37	51
19	33	27	26	23	23	30	56	210	296	83	36	57
20	38	28	26	23	22	29	59	210	281	78	34	65
21	38	31	24	23	22	28	55	210	284	72	34	57
22	33	29	22	23	22	29	51	284	278	68	34	54
23	36	27	20	23	23	33	50	377	308	67	34	51
24	31	27	20	22	25	35	46	434	287	90	33	49
25	31	24	22	23	25	36	45	430	248	71	29	50
26	31	26	22	23	24	32	43	402	210	65	29	63
27	30	26	20	23	26	33	45	317	200	61	30	70
28	31	27	20	23	27	35	56	299	187	56	29	61
29	31	29	22	23	-	37	61	254	177	53	30	55
30	28	28	24	23	- - - -	33	68	232	175	48	33	51
31	29	- - - -	24	23	- - - -	29	- - - -	202	- - - -	49	37	- - - -
Total	1,142	836	760	725	637	872	1,458	5,249	8,089	2,886	1,234	1,543
Mean	36.8	27.9	24.5	23.4	22.8	28.1	48.6	169	270	93.1	39.8	51.4
Max	48	31	34	25	27	37	68	434	398	170	67	77
Min	28	22	20	22	19	22	30	39	175	48	29	28
Ac-ft	2,270	1,660	1,510	1,440	1,260	1,730	2,890	10,410	16,040	5,720	2,450	3,060
Cal yr 1966: Total	22,685		Mean 62.2	Max 323	Min 20	Ac-ft 45,000						
Wtr yr 1967: Total	25,430		Mean 69.7	Max 434	Min 19	Ac-ft 50,440						

9-0737. Hunter Creek above Midway Creek, near Aspen, Colo.

Location.--Lat 39°12'50", long 106°39'20", on right bank 2.8 miles upstream from Midway Creek and 9 miles east of Aspen, Pitkin County.Drainage area.--6.18 sq mi.Records available.--October 1964 to September 1967.Gage.--Water-stage recorder. Altitude of gage is 10,500 ft (from topographic map).Extremes.--Maximum discharge during year, 240 cfs June 23 (gage height, 2.36 ft), from rating curve extended above 70 cfs; minimum daily, 1.6 cfs Feb. 14-19.

1964-67: Maximum discharge, 320 cfs sometime during period June 18-20, 1965 (gage height, 2.6 ft, from floodmarks) from rating curve extended above 70 cfs; maximum gage height recorded, 3.02 May 2, 1965 (backwater from ice); minimum discharge not determined.

Remarks.--Records good except those for winter period, which are poor. No regulation or diversion above station.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.0	2.6	2.6	2.2	2.0	2.0	2.0	4.0	42	58	7.2	11
2	2.2	2.6	2.6	2.4	2.0	2.0	2.2	3.8	59	54	6.6	8.0
3	3.2	2.8	2.6	2.4	2.0	2.0	2.2	3.6	78	49	6.2	6.4
4	3.2	2.6	2.6	2.4	2.0	2.0	2.2	3.5	110	46	6.2	5.5
5	3.4	2.4	2.6	2.4	1.8	2.0	2.2	3.5	116	47	5.9	4.8
6	3.4	2.4	2.6	2.2	1.8	1.8	2.2	3.5	114	38	6.6	4.4
7	3.3	2.4	2.6	2.2	1.8	1.8	2.4	3.5	116	36	7.2	4.4
8	3.2	2.4	2.6	2.2	1.8	1.8	2.4	3.5	103	43	14	5.7
9	2.8	2.6	2.4	2.2	1.8	1.8	2.4	3.8	101	34	16	7.5
10	2.7	3.0	2.2	2.2	1.8	2.0	2.4	4.5	75	28	11	6.4
11	2.9	2.8	2.2	2.4	1.8	2.0	2.4	5.5	61	24	9.5	7.8
12	3.9	2.8	2.2	2.4	1.8	2.0	2.2	6.0	60	25	7.5	12
13	3.6	2.6	2.2	2.4	1.8	2.0	2.2	5.5	45	23	6.2	7.2
14	3.6	2.4	2.4	2.4	1.6	2.0	2.0	5.0	39	21	5.5	5.7
15	3.4	2.6	2.4	2.4	1.6	1.8	1.8	4.8	37	22	5.7	4.4
16	3.2	2.6	2.2	2.4	1.6	1.8	1.8	4.4	46	22	5.3	3.7
17	3.0	2.6	2.2	2.4	1.6	2.0	2.0	7.8	65	26	4.6	3.5
18	3.4	2.6	2.2	2.2	1.6	1.8	2.2	16	97	29	4.2	4.0
19	4.0	2.6	2.2	2.0	1.6	1.8	2.4	25	90	20	3.7	5.9
20	3.6	2.4	2.4	2.0	2.0	1.8	2.4	30	99	18	4.4	5.5
21	3.2	2.4	2.2	2.0	2.2	1.8	2.4	34	90	16	4.4	4.6
22	3.0	2.4	2.2	2.0	2.2	1.8	2.6	65	108	13	3.7	4.4
23	2.8	2.4	2.2	2.0	2.2	1.8	2.6	110	116	13	3.5	4.2
24	2.6	2.4	2.2	2.0	2.2	1.8	2.4	135	99	18	3.1	4.4
25	2.8	2.4	2.2	2.0	2.0	1.8	2.4	116	75	13	3.1	4.6
26	3.0	2.2	2.4	2.0	2.0	1.8	2.4	74	67	12	5.3	7.5
27	3.2	2.4	2.4	2.0	2.0	2.0	2.6	46	70	11	4.6	6.9
28	3.2	2.6	2.4	2.0	2.4	2.0	3.0	38	57	8.9	5.3	5.3
29	3.0	2.6	2.2	2.0	-	2.0	3.5	31	53	8.6	6.9	4.4
30	3.0	2.6	2.2	2.0	- - - - -	2.0	4.0	31	61	7.8	6.6	4.0
31	3.0	- - - - -	2.2	2.0	- - - - -	1.8	- - - - -	28	- - - - -	7.5	13	- - - - -
Total	96.8	76.2	72.8	67.8	53.0	58.8	71.9	855.2	2,349	791.8	203.0	174.1
Mean	3.12	2.54	2.35	2.19	1.89	1.90	2.40	27.6	78.3	25.5	6.55	5.80
Max	4.0	3.0	2.6	2.4	2.4	2.0	4.0	135	116	58	16	12
Min	2.0	2.2	2.2	2.0	1.6	1.8	1.8	3.5	37	7.5	3.1	3.5
Ac-ft	192	151	144	134	105	117	143	1,700	4,660	1,570	403	345

Cal yr 1966: Total 3,882.5 Mean 10.6 Max 80 Min - Ac-ft 7,700
Wtr yr 1967: Total 4,870.4 Mean 13.3 Max 135 Min 1.6 Ac-ft 9,660

Peak discharge (base, 80 cfs)

Note.--No gage-height record Oct. 18 to Apr. 11, Apr. 15 to May 16.

Date	Time	Gage height	Discharge	Date	Time	Gage height	Discharge
5-24	2030	2.14	188	6-23	1830	2.36	240
6-7	1845	2.35	238				

9-0772. Fryingpan River near Ivanhoe Lake, Colo.

Location.--Lat 39°14'55", long 106°31'55", on right bank 1,100 ft downstream from Martin Creek, 2 miles southwest of Ivanhoe Lake, and 9 miles southeast of Norrie, Pitkin County. Prior to May 15, 1967, at site 900 ft upstream, and May 16 to Aug. 24, 1967, at site 37 ft upstream.

Drainage area.--18.7 sq mi.

Records available.--October 1963 to September 1967.

Gage.--Water-stage recorder. Datum of gage is 9,892.49 ft above mean sea level (Bureau of Reclamation bench mark). Prior to May 15, 1967, at site 900 ft upstream at different datum. May 16, to Aug. 24, 1967, at site 37 ft upstream at datum 2.52 ft higher.

Extremes.--Maximum discharge during year, 232 cfs May 23 (gage height, 2.49 ft, site and datum then in use); minimum daily, 4.0 cfs Feb. 19, 20, Mar. 6, 20-22.

1963-67: Maximum discharge, 391 cfs June 22, 1965 (gage height, 3.02 ft, site and datum then in use), from rating curve extended above 230 cfs; minimum discharge not determined.

Remarks.--Records good except those for winter period, which are poor. No diversion above station.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	11	16	8.0	6.0	4.8	5.0	5.0	12	112	110	25	22
2	12	13	8.0	5.5	4.8	5.0	5.0	11	140	96	24	19
3	14	10	8.0	5.0	5.0	4.8	5.4	10	155	93	23	18
4	15	8.8	7.5	4.8	5.0	4.6	5.6	9.0	171	91	22	16
5	15	8.5	8.0	5.5	4.8	4.4	6.0	8.0	177	89	21	15
6	15	9.1	8.0	5.0	4.8	4.0	6.2	8.0	182	80	22	15
7	15	9.1	7.5	4.8	5.0	4.2	6.2	9.0	171	72	23	15
8	14	9.0	7.0	4.6	5.5	4.4	6.0	13	162	79	25	17
9	13	8.5	6.5	5.0	5.5	4.6	5.5	16	160	69	34	20
10	13	9.0	6.0	5.5	5.5	4.8	5.5	18	142	61	29	18
11	14	9.5	6.5	6.0	5.0	4.8	6.5	20	118	56	24	19
12	16	11	7.0	6.0	5.5	4.8	6.5	22	110	56	23	32
13	15	10	7.0	5.5	5.5	4.8	5.8	26	95	54	21	21
14	14	9.5	6.5	5.5	5.0	4.6	5.8	22	86	60	20	19
15	13	10	7.0	6.0	4.8	4.4	5.6	18	77	64	21	18
16	14	10	7.5	5.5	4.6	4.2	5.2	24	80	61	20	17
17	13	10	7.5	5.0	4.4	4.4	5.2	43	100	58	20	18
18	12	10	7.5	5.0	4.2	4.4	7.0	62	124	56	18	18
19	13	9.5	7.5	5.5	4.0	4.2	7.5	77	122	48	18	21
20	13	9.5	7.0	6.0	4.0	4.0	8.0	80	118	43	17	19
21	12	10	6.5	6.0	4.2	4.0	8.5	102	112	41	17	16
22	12	10	6.0	6.0	4.6	4.0	9.0	149	114	40	16	15
23	12	9.7	5.5	5.5	4.8	4.2	8.5	188	129	40	15	14
24	13	9.0	5.5	5.0	4.8	4.4	7.5	198	129	43	14	14
25	13	8.5	6.0	5.0	4.8	4.6	7.0	193	124	39	14	15
26	13	8.0	6.0	5.5	4.6	5.0	8.0	168	118	39	14	20
27	13	8.0	5.5	6.0	4.4	5.0	9.0	135	110	34	14	18
28	12	8.0	5.0	6.0	4.6	5.0	10	116	108	32	15	16
29	12	8.0	5.5	6.0	-	5.0	12	104	104	29	17	15
30	12	8.0	6.0	5.5	- - - -	5.0	14	98	108	27	17	14
31	11	- - - -	6.0	5.0	- - - -	5.0	- - - -	91	- - - -	26	29	- - - -
Total	409	287.2	209.0	169.2	134.5	141.6	213.0	2,050.0	3,758	1,786	632	534
Mean	13.2	9.57	6.74	5.46	4.80	4.57	7.10	66.1	125	57.6	20.4	17.8
Max	16	16	8.0	6.0	5.5	5.0	14	198	182	110	34	32
Min	11	8.0	5.0	4.6	4.0	4.0	5.0	8.0	77	26	14	14
Ac-ft	811	570	415	336	267	281	422	4,070	7,450	3,540	1,250	1,060

Cal yr 1966: Total 9,248.7 Mean 25.3 Max 188 Min - Ac-ft 18,340
Wtr yr 1967: Total 10,323.5 Mean 28.3 Max 198 Min 4.0 Ac-ft 20,480

Peak discharge (base, 250 cfs).--No peak above base.

Note.--No gage-height record Jan. 7 to Feb. 8.

9-0774. Fryingpan River near Norrie, Colo.

Location.--Lat 39°17'45", long 106°36'10", in sec.1, T.9 S., R.83 W. (projected), on right bank just upstream from bridge at Horseshoe Bend Ranch, 0.1 mile upstream from Ivanhoe Creek, and 4 miles southeast of Norrie.

Drainage area.--32.2 sq mi.

Records available.--October 1963 to September 1967 (discontinued).

Gage.--Water-stage recorder. Altitude of gage is 8,760 ft (from topographic map).

Extremes.--Maximum discharge during year, 419 cfs May 23 (gage height, 3.48 ft); minimum daily, 6.5 cfs, Jan. 26, 27, Feb. 1. 1963-67: Maximum discharge, 530 cfs June 19, 1965 (gage height, 3.82 ft); minimum not determined.

Remarks.--Records good except those for winter period, which are poor. No regulation or diversion above station.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	12	16	12	9.0	6.5	8.0	11	28	160	131	30	30
2	13	11	12	9.0	7.0	8.0	12	22	211	119	28	24
3	16	10	12	8.5	7.5	8.0	13	21	233	115	28	22
4	16	11	13	9.0	7.5	8.0	15	18	280	110	27	21
5	17	12	14	9.5	7.5	8.0	19	18	300	108	25	20
6	18	12	13	9.0	7.0	8.0	21	18	312	102	25	19
7	16	12	11	8.5	7.0	7.5	22	20	268	94	28	20
8	14	12	10	8.5	7.5	7.5	24	28	249	100	30	22
9	14	12	10	8.5	8.0	7.5	22	45	241	90	44	26
10	13	12	10	9.0	8.0	8.5	20	61	213	82	38	22
11	14	13	10	9.5	8.0	9.0	21	62	177	78	32	23
12	18	12	11	10	8.0	9.0	24	67	168	72	29	35
13	16	12	12	10	8.5	8.4	20	65	149	69	26	27
14	15	13	11	9.5	8.5	8.4	19	48	139	72	24	24
15	19	14	11	9.0	8.0	8.4	18	42	133	80	25	23
16	16	13	11	8.5	8.0	8.8	17	48	135	80	24	22
17	16	12	12	8.0	8.0	10	16	68	148	74	23	22
18	15	11	12	7.5	8.5	12	15	94	185	75	21	23
19	14	11	12	7.5	8.5	11	24	116	187	63	21	27
20	14	12	12	8.0	8.0	10	22	123	184	57	20	25
21	15	12	11	8.5	8.0	9.6	19	137	178	53	20	22
22	13	11	10	8.5	8.5	9.5	18	203	172	52	19	22
23	14	10	9.5	8.0	9.0	11	18	282	178	54	18	21
24	13	10	9.5	7.5	9.5	13	16	330	167	61	18	21
25	14	11	9.5	7.0	9.5	13	14	340	158	48	18	21
26	14	12	10	6.5	9.0	12	15	278	148	47	18	25
27	13	12	10	6.5	8.5	11	18	205	141	43	18	24
28	14	14	9.5	7.0	8.0	11	22	180	139	39	19	22
29	13	15	9.0	7.5	-	12	28	158	128	35	21	22
30	12	15	9.0	7.5	- - - -	11	32	152	133	33	22	21
31	11	- - - -	9.0	7.0	- - - -	11	- - - -	145	- - - -	31	31	- - - -
Total	452	365	337.0	257.5	225.5	298.1	575	3,422	5,614	2,267	770	698
Mean	14.6	12.2	10.9	8.31	8.05	9.62	19.2	110	187	73.1	24.8	23.3
Max	19	16	14	10	9.5	13	32	340	312	131	44	35
Min	11	10	9.0	6.5	6.5	7.5	11	18	128	31	18	19
Ac-ft	897	724	668	511	447	591	1,140	6,790	11,140	4,500	1,530	1,380

Cal yr 1966: Total 13,154.9 Mean 36.0 Max 198 Min - Ac-ft 26,090

Wtr yr 1967: Total 15,281.1 Mean 41.9 Max 340 Min 6.5 Ac-ft 30,310

Peak discharge (base, 350 cfs).--May 23 (2130) 419 cfs (3.48 ft); June 5 (2300) 392 cfs (3.37 ft).

Note.--No gage-height record Oct. 17 to Nov. 23.

ROARING FORK RIVER BASIN

9-0776. Ivanhoe Creek near Norrie, Colo.

Location.--Lat 39°17'20", long 106°33'10", on right bank near Public Service powerline cabin, 1½ miles downstream from Lyle Creek, 3 miles upstream from mouth, and 6½ miles southeast of Norrie, Pitkin County.

Drainage area.--9.12 sq mi.

Records available.--October 1963 to September 1967.

Gage.--Water-stage recorder. Altitude of gage is 10,350 ft (from topographic map).

Extremes.--Maximum discharge during year, 170 cfs May 25 (gage height, 5.84 ft); minimum daily, 0.35 cfs Oct. 1, 2.

1963-67: Maximum discharge, 180 cfs June 17, 1965 (gage height, 5.87 ft), from rating curve extended above 90 cfs; maximum gage height, 6.50 ft May 17, 1964 (backwater from ice); minimum daily discharge, that of Oct. 1, 2, 1966.

Remarks.--Records good except those for winter period, which are poor. Transmountain diversions above station through Busk-Ivanhoe tunnel to Arkansas River basin (see elsewhere in this report).

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.35	0.80	1.2	0.80	0.80	0.60	2.3	6.0	63	7.5	2.1	2.2
2	.35	.60	1.2	.70	.90	.80	2.4	6.0	81	6.8	1.7	1.3
3	.98	.90	1.2	.70	1.0	1.0	2.7	5.5	77	5.9	1.6	1.0
4	1.1	.70	1.2	.80	1.0	1.0	2.8	5.5	72	5.9	1.5	.86
5	1.4	.70	1.2	.90	.80	.80	2.6	5.5	63	5.3	1.4	.80
6	1.6	.80	1.1	.80	.60	.60	3.0	5.5	67	4.8	1.4	.75
7	1.4	.90	1.0	.70	.50	.70	3.4	5.5	55	4.8	1.8	1.1
8	1.2	1.0	.80	.60	.60	.90	4.0	6.0	46	5.7	2.2	1.7
9	1.0	.90	.60	.60	.70	1.0	4.6	6.5	38	4.5	2.8	2.2
10	.80	.80	.80	.70	.70	1.3	4.2	8.0	29	3.8	2.2	1.4
11	.86	.80	.90	.90	.60	1.5	4.0	10	25	4.3	1.7	2.2
12	1.4	.90	1.0	.80	.70	1.6	3.9	13	26	4.3	1.4	3.5
13	1.3	1.0	1.0	.80	.80	1.6	3.8	12	22	3.5	1.2	2.0
14	1.6	1.2	1.0	.90	.80	1.5	3.7	11	20	3.3	1.2	1.5
15	1.6	1.4	.90	.90	.70	1.4	3.6	10	19	3.7	1.4	1.5
16	1.5	1.5	1.0	.80	.60	1.6	3.6	9.5	18	3.8	1.4	1.4
17	1.5	1.5	1.1	.60	.60	2.0	3.8	18	19	3.8	1.1	1.4
18	1.4	1.4	1.2	.70	.70	1.8	4.0	28	22	4.0	1.0	1.5
19	1.3	1.4	1.2	.90	.70	1.7	4.4	38	22	3.0	1.0	2.2
20	1.7	1.4	1.1	1.0	.60	1.6	4.6	41	25	2.6	.86	1.8
21	1.6	1.4	.90	1.1	.50	1.7	4.6	56	24	2.4	.86	1.6
22	1.6	1.3	.70	1.1	.50	1.9	4.2	87	20	2.4	.80	1.4
23	1.5	1.2	.60	1.0	.60	2.1	4.0	104	18	3.8	.75	1.3
24	1.7	1.1	.90	.90	.80	2.3	3.8	98	16	5.3	.70	1.3
25	1.6	1.0	.80	.80	.80	2.6	3.6	102	14	3.4	.60	1.4
26	1.6	.80	.70	.90	.80	2.6	3.6	108	13	2.9	.70	2.3
27	1.6	.90	.60	1.0	.70	2.5	3.8	65	12	2.8	.70	1.8
28	1.5	1.1	.60	1.2	.60	2.4	4.2	54	11	2.3	.70	1.5
29	1.4	1.2	.60	1.2	-	2.3	5.0	47	9.9	2.2	.92	1.4
30	1.3	1.2	.70	1.1	- - - - -	2.3	5.5	52	8.5	2.0	1.2	1.4
31	1.3	- - - - -	.80	1.0	- - - - -	2.3	- - - - -	52	- - - - -	1.8	2.8	- - - - -
Total	41.04	31.80	28.60	26.90	19.70	50.00	113.7	1,075.5	955.4	122.6	41.69	47.71
Mean	1.32	1.06	0.923	0.868	0.704	1.61	3.79	34.7	31.8	3.95	1.34	1.59
Max	1.7	1.5	1.2	1.2	1.0	2.6	5.5	108	81	7.5	2.8	3.5
Min	0.35	0.60	0.60	0.60	0.50	0.60	2.3	5.5	8.5	1.8	0.60	0.75
Ac-ft	81	63	57	53	39	99	226	2,130	1,900	243	83	95

Cal yr 1966 : Total 1,856.24 Mean 5.09 Max 60 Min 0.35 Ac-ft 3,680

Wtr yr 1967 : Total 2,554.64 Mean 7.00 Max 108 Min 0.35 Ac-ft 5,070

Note.--No gage-height record Nov. 1 to Apr. 11.

9-0778. South Fork Fryngpan River at upper station, near Norrie, Colo.

Location.--Lat 39°14'30", long 106°35'35", on left bank 5 miles upstream from mouth and 7 miles southeast of Norrie, Pitkin County.Drainage area.--11.5 sq mi.Records available.--October 1963 to September 1967.Gage.--Water-stage recorder. Altitude of gage is 9,960 ft (from topographic map).Extremes.--Maximum discharge during year, 188 cfs June 5 (gage height, 3.05 ft); minimum daily, 2.8 cfs for many days in February, March.

1963-67: Maximum discharge, 266 cfs June 19, 1965 (gage height, 3.25 ft), from rating curve extended above 150 cfs; minimum daily determined, 2.8 cfs for many days in February, March 1967.

Remarks.--Records good. No diversion above station.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5.1	4.5	3.8	3.6	3.2	3.2	3.0	6.6	64	79	15	17
2	5.4	4.5	3.8	3.6	3.2	3.2	3.2	6.3	86	72	14	13
3	6.3	5.1	3.8	3.6	3.2	3.0	3.2	6.3	100	68	13	11
4	6.6	4.2	3.8	3.5	3.2	3.0	3.2	6.0	128	65	12	10
5	6.6	4.2	3.8	3.5	3.2	3.0	3.2	6.0	135	64	11	10
6	6.9	4.2	3.8	3.2	3.0	2.8	3.2	6.0	140	57	13	10
7	6.6	4.2	3.8	3.2	3.0	2.8	3.5	6.3	122	51	14	9.2
8	6.0	4.5	3.8	3.2	3.0	2.8	3.8	6.9	113	56	20	10
9	5.7	4.5	3.8	3.5	3.0	2.8	3.8	8.9	115	47	28	12
10	5.4	5.1	3.5	3.2	3.0	3.0	3.5	10	91	39	20	10
11	6.6	4.8	3.5	3.5	3.0	3.0	3.8	12	75	35	17	12
12	7.5	4.8	3.5	3.5	3.0	3.0	3.8	14	71	36	14	21
13	7.2	4.2	3.5	3.5	2.8	3.0	3.2	16	60	34	12	12
14	6.0	4.2	3.8	3.5	2.8	3.0	3.5	12	53	36	12	11
15	6.6	4.5	3.5	3.5	2.8	2.8	3.2	9.2	51	42	12	10
16	6.3	4.2	3.5	3.5	2.8	2.8	3.2	8.9	60	42	11	9.6
17	6.0	4.2	3.6	3.5	2.8	3.0	3.2	11	74	42	10	9.2
18	5.7	4.2	3.6	3.2	2.8	2.8	3.8	22	100	43	9.6	10
19	5.7	4.0	3.8	3.2	2.8	2.8	4.2	33	93	33	8.9	12
20	5.7	3.8	3.8	3.2	3.0	2.8	4.2	33	91	30	8.6	11
21	5.7	3.8	3.6	3.2	3.2	2.8	4.2	39	91	28	8.6	9.2
22	5.4	3.8	3.6	3.2	3.4	2.8	4.0	64	97	25	8.2	8.6
23	5.4	4.0	3.4	3.2	3.4	2.8	4.2	97	115	25	7.8	8.2
24	5.1	3.8	3.4	3.2	3.4	2.8	4.0	120	111	31	7.8	8.2
25	5.4	3.8	3.6	3.2	3.2	2.8	4.0	125	102	27	7.8	8.2
26	6.0	3.5	3.8	3.2	3.2	2.8	4.2	100	91	27	8.6	11
27	5.7	3.8	3.8	3.2	3.2	2.8	5.1	74	88	23	10	10
28	5.7	3.8	3.6	3.2	3.2	3.0	6.0	67	82	20	12	8.6
29	5.7	4.0	3.4	3.2	-	3.0	6.9	58	77	18	14	7.8
30	5.4	3.8	3.6	3.2	- - - - -	3.0	6.9	58	84	16	13	7.2
31	5.7	- - - - -	3.6	3.2	- - - - -	2.8	- - - - -	52	- - - - -	16	21	- - - - -
Total	185.1	126.0	113.2	103.4	85.8	90.0	119.2	1094.4	2760	1227	393.9	317.0
Mean	5.97	4.20	3.65	3.34	3.06	2.90	3.97	35.3	92.0	39.6	12.7	10.6
Max	7.5	5.1	3.8	3.6	3.4	3.2	6.9	125	140	79	28	21
Min	5.1	3.5	3.4	3.2	2.8	2.8	3.0	6.0	51	16	7.8	7.2
Ac-ft	367	250	225	205	170	179	236	2,170	5,470	2,430	781	629

Cal yr 1966: Total 5,901.6 Mean 16.2 Max 102 Min - Ac-ft 11,710
Wtr yr 1967: Total 6,615.0 Mean 18.1 Max 140 Min 2.8 Ac-ft 13,120

Peak discharge (base, 200 cfs).--No peak above base.

9-0779. South Fork Fryingpan River near Norrie, Colo.

Location.--Lat 39°18'05", long 106°37'05", in sec.1, T.9 S., R.83 W. (projected), on right bank 100 ft downstream from trail crossing, half a mile upstream from mouth, and 3 miles southeast of Norrie.

Drainage area.--17.3 sq mi.

Records available.--October 1963 to September 1967 (discontinued).

Gage.--Water-stage recorder. Altitude of gage is 8,650 ft (from topographic map).

Extremes.--Maximum discharge during year, 270 cfs June 7 (gage height, 3.15 ft), from rating curve extended above 170 cfs; minimum daily, 3.8 cfs Feb. 16.

1963-67: Maximum discharge, 429 cfs June 19, 1965 (gage height, 3.51 ft), from rating curve extended above 170 cfs; minimum daily determined, 3.8 cfs Feb. 16, 1967.

Remarks.--Records good except those for winter period, which are poor. One small diversion above station to Nast Lake.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	8.5	7.8	6.0	5.5	4.4	4.0	5.0	14	61	81	20	20
2	9.0	6.5	6.0	5.5	4.4	4.2	5.0	14	87	75	20	17
3	10	8.0	6.0	5.5	4.4	4.2	5.4	14	109	72	19	15
4	11	6.5	6.0	5.5	4.4	4.2	5.7	14	145	69	18	14
5	11	6.0	6.0	5.5	4.4	4.2	6.3	14	162	66	18	12
6	12	6.0	5.5	5.0	4.2	4.0	7.3	14	189	61	18	12
7	11	6.0	5.5	5.0	4.2	4.0	8.0	14	175	56	20	12
8	10	6.0	5.5	5.0	4.2	4.0	9.5	14	152	60	22	13
9	9.8	6.0	5.5	5.0	4.2	4.0	9.5	20	162	55	30	16
10	9.2	6.5	5.0	4.6	4.2	4.4	9.2	28	126	48	24	14
11	10	6.5	5.0	5.0	4.2	4.8	9.5	29	101	45	22	14
12	12	6.3	5.0	5.0	4.2	4.8	9.8	30	94	46	20	20
13	11	6.0	5.0	5.0	4.0	4.8	9.5	31	80	44	18	16
14	9.8	6.0	6.0	5.0	4.0	4.8	9.5	23	69	45	18	14
15	14	6.5	5.5	5.0	4.0	5.0	8.8	19	66	50	18	14
16	10	6.0	5.5	5.0	3.8	5.5	8.5	18	73	51	18	13
17	9.8	6.0	5.5	5.0	4.0	5.4	9.0	22	92	48	16	12
18	9.5	6.1	5.5	4.8	4.0	5.5	9.5	34	137	48	16	12
19	11	6.0	5.5	4.6	4.0	5.5	11	44	129	39	15	15
20	9.5	5.5	6.0	4.6	4.0	5.4	11	45	129	36	15	14
21	9.0	6.0	5.5	4.6	4.2	5.4	11	49	126	34	14	12
22	8.8	5.9	5.0	4.6	4.6	5.9	10	76	129	32	14	12
23	8.8	6.0	5.0	4.8	4.6	5.7	11	126	134	33	14	11
24	8.5	6.0	5.0	4.6	4.6	5.7	11	178	121	36	14	11
25	8.5	5.5	5.5	4.6	4.4	5.7	11	165	112	31	13	11
26	8.5	5.0	5.5	4.6	4.2	5.7	11	129	103	31	13	14
27	8.5	5.5	5.5	4.6	4.0	5.7	11	81	96	28	15	14
28	8.5	6.0	5.5	4.6	4.0	5.7	13	70	92	25	16	12
29	8.2	6.0	5.0	4.6	-	5.9	15	57	81	23	18	11
30	8.0	6.0	5.0	4.4	- - - - -	5.5	15	55	83	22	18	10
31	8.0	- - - - -	5.5	4.2	- - - - -	5.0	- - - - -	50	- - - - -	21	22	- - - - -
Total	301.4	184.1	169.5	151.3	117.8	154.6	286.0	1,491	3,415	1,411	556	407
Mean	9.72	6.14	5.47	4.88	4.21	4.99	9.53	48.1	114	45.5	17.9	13.6
Max	14	8.0	6.0	5.5	4.6	5.9	15	178	189	81	30	20
Min	8.0	5.0	5.0	4.2	3.8	4.0	5.0	14	61	21	13	10
Ac-ft	598	365	336	300	234	307	567	2,960	6,770	2,800	1,100	807

Cal yr 1966: Total 7,436.6 Mean 20.4 Max 123 Min - Ac-ft 14,750

Wtr yr 1967: Total 8,644.7 Mean 23.7 Max 189 Min 3.8 Ac-ft 17,150

Peak discharge (base, 220 cfs)

Note.--No gage-height record Dec. 10 to Mar. 16.

Date	Time	Gage height	Discharge	Date	Time	Gage height	Discharge
5-24	2115	3.15	250	6-18	2030	3.11	254
6-7	2030	3.15	270				

9-0779.5. Chapman Gulch near Norrie, Colo.

Location.--Lat 39°16'00", long 106°38'00", on right bank a quarter of a mile above Sawyer Lake Creek, 3½ miles upstream from mouth, and 4½ miles south of Norrie, Pitkin County.

Drainage area.--6.38 sq mi.

Records available.--October 1966 to September 1967.

Gage.--Water-stage recorder. Altitude of gage is 9,920 ft (from topographic map).

Extremes.--Maximum discharge during year, 100 cfs June 18 (gage height, 3.90 ft); minimum daily, 0.50 cfs Feb. 17.

Remarks.--Records good except those for winter period, which are poor. No diversion above station.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.3	1.6	1.2	1.0	0.80	0.70	0.98	2.8	34	37	8.6	7.5
2	2.4	1.6	1.2	.80	.80	.70	1.0	2.2	45	36	7.5	5.6
3	2.7	2.0	1.2	.90	.90	.70	1.1	2.0	55	33	7.3	4.6
4	2.8	1.8	1.2	.90	.90	.70	1.1	1.9	65	32	6.8	4.1
5	2.8	1.6	1.2	.90	.90	.70	1.1	1.9	66	31	6.4	3.9
6	2.8	1.4	1.3	.90	.90	.60	1.1	1.8	72	28	10	3.8
7	2.6	1.6	1.3	.80	.90	.60	1.2	2.2	67	28	11	3.7
8	2.5	1.8	1.2	.90	.90	.60	1.4	3.3	63	32	16	5.2
9	2.4	1.8	1.2	1.0	.80	.60	1.4	7.0	59	26	18	6.2
10	2.3	1.8	1.0	.90	.80	.70	1.3	10	56	22	12	4.9
11	2.6	1.9	1.0	1.0	.90	.70	1.4	11	48	20	9.4	5.8
12	3.2	1.9	1.0	1.1	.90	.70	1.5	13	45	20	7.8	10
13	3.0	1.8	1.1	1.1	.90	.70	1.3	11	37	18	6.8	5.8
14	2.8	1.8	1.2	1.1	.80	.70	1.2	6.2	34	21	6.2	4.9
15	3.0	1.8	.90	1.1	.70	.80	1.2	4.7	33	29	6.0	4.6
16	3.0	1.6	.90	1.1	.60	.80	1.2	4.9	37	29	5.2	4.1
17	2.8	1.5	1.0	1.0	.50	.80	1.2	9.2	49	27	4.8	4.0
18	2.7	1.5	1.0	.90	.60	.80	1.4	17	64	25	4.7	4.1
19	2.7	1.4	1.2	.80	.70	.80	1.7	22	59	20	4.4	5.6
20	2.6	1.3	1.2	.80	.80	.80	1.6	24	59	19	4.3	4.8
21	2.4	1.3	1.1	.80	.90	.80	1.4	30	60	17	4.6	4.1
22	2.3	1.3	1.0	.80	.90	.80	1.4	41	59	15	4.2	3.8
23	2.3	1.4	.90	.80	.90	.80	1.3	52	60	14	4.1	3.7
24	2.3	1.3	.90	.80	.90	.90	1.3	58	58	16	3.8	3.6
25	2.3	1.3	1.1	.80	.80	.90	1.3	63	51	15	3.6	3.8
26	2.4	1.0	1.2	.80	.70	.98	1.3	55	48	15	4.1	5.6
27	2.3	1.2	1.2	.80	.70	.98	1.9	39	45	13	4.4	4.7
28	2.2	1.1	1.0	.80	.70	.98	2.8	36	41	11	4.8	3.9
29	2.1	1.0	.90	.80	-	.96	3.7	31	37	10	5.4	3.6
30	2.0	1.2	1.0	.80	-	.96	3.9	31	39	9.4	4.9	3.5
31	2.0	- - - -	1.1	.80	- - - -	.96	- - - -	31	- - - -	8.9	11	- - - -
Total	78.6	45.6	33.90	27.80	22.50	24.22	45.68	625.1	1,545	677.3	218.1	143.5
Mean	2.54	1.52	1.09	0.897	0.804	0.781	1.52	20.2	51.5	21.8	7.04	4.78
Max	3.2	2.0	1.3	1.1	0.90	0.98	3.9	63	72	37	18	10
Min	2.0	1.0	0.90	0.80	0.50	0.60	0.98	1.8	33	8.9	3.6	3.5
Ac-ft	156	90	67	55	45	48	91	1,240	3,060	1,340	433	285

Cal yr 1966: Total - Mean - Max - Min - Ac-ft -
 Wtr yr 1967: Total 3,487.30 Mean 9.55 Max 72 Min 0.50 Ac-ft 6,920

Peak discharge (base, 120 cfs).--No peak above base.

Note.--No gage-height record Jan. 7 to Mar. 16.

ROARING FORK RIVER BASIN

9-0780. Fryingpan River at Norrie, Colo.

Location.--Lat 39°19'50", long 106°39'30", in NE¼ sec.28, T.8 S., R.83 W., on right bank 300 ft south of State Highway 104 at Norrie, 1 mile upstream from North Fork, and 2 miles downstream from Chapman Gulch.

Drainage area.--90.6 sq mi (revised).

Records available.--October 1910 to March 1917, October 1947 to September 1967. Prior to October 1962, published as Fryingpan Creek at Norrie.

Gage.--Water-stage recorder. Altitude of gage is 8,410 ft (from river-profile map). February 1911 to March 1917 staff gages at site 200 ft upstream at different datums.

Average discharge.--26 years (1910-16, 1947-67), 123 cfs (89,050 acre-ft per year).

Extremes.--Maximum discharge during year, 830 cfs May 25 (gage height, 4.17 ft); minimum daily, 14 cfs Jan. 26, Mar. 6, 7, 1910-17, 1947-67: Maximum discharge, 1,780 cfs June 30, 1957; maximum gage height, 5.55 ft June 28, 1957; minimum daily discharge, 8.0 cfs Dec. 26, 1962, but may have been less during periods of no gage-height record.

Remarks.--Records good except those for winter period, which are poor. Transmountain diversions above station through Busk-Ivanhoe tunnel to Arkansas River basin since June 1925 (see elsewhere in this report).

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	25	23	24	24	15	15	30	77	431	314	72	74
2	25	22	25	24	15	15	32	66	540	294	68	52
3	34	22	24	22	16	15	38	62	580	274	66	45
4	36	24	25	24	16	15	45	56	670	263	62	40
5	38	25	30	26	15	15	53	56	670	260	59	37
6	37	26	25	24	15	14	58	55	705	232	62	36
7	36	26	24	22	15	14	59	56	655	228	77	35
8	33	25	22	20	16	15	70	81	605	242	79	38
9	31	25	22	20	17	16	63	138	575	214	113	56
10	29	26	22	20	16	17	53	186	526	182	94	45
11	30	26	22	22	16	18	59	196	454	168	76	45
12	37	25	24	22	17	19	66	214	444	165	66	83
13	39	24	26	22	17	19	51	210	395	159	59	59
14	36	28	26	22	17	18	51	150	354	162	53	50
15	35	29	24	20	16	18	53	124	330	200	58	47
16	36	26	24	19	16	19	51	119	338	218	53	44
17	35	27	24	17	16	20	48	162	382	190	48	42
18	32	24	26	17	17	22	53	249	458	193	46	44
19	29	24	26	18	17	24	68	318	467	153	45	53
20	29	26	26	18	16	22	66	330	462	138	42	55
21	31	24	26	18	16	22	56	364	454	127	42	44
22	28	22	24	18	16	22	48	508	431	122	39	40
23	30	20	22	17	17	24	52	635	444	127	39	38
24	27	20	22	16	18	30	48	710	431	153	36	37
25	28	22	22	15	17	36	46	730	408	122	35	38
26	29	23	24	14	15	31	44	695	377	119	36	52
27	28	24	24	15	15	30	53	540	354	106	39	51
28	29	28	24	16	15	30	79	485	342	94	39	42
29	28	26	22	16	-	31	101	431	318	85	48	38
30	26	25	22	15	- - - -	29	101	422	322	79	48	36
31	26	- - - -	24	16	- - - -	30	- - - -	408	- - - -	77	72	- - - -
Total	972	737	747	599	450	665	1,695	8,833	13,922	5,460	1,771	1,396
Mean	31.4	24.6	24.1	19.3	16.1	21.5	56.5	285	464	176	57.1	46.5
Max	39	29	30	26	18	36	101	730	705	314	113	83
Min	25	20	22	14	15	14	30	55	318	77	35	35
Ac-ft	1,930	1,460	1,480	1,190	893	1,320	3,360	17,520	27,610	10,830	3,510	2,770

Cal yr 1966: Total 29,922 Mean 82.0 Max 472 Min 12 Ac-ft 59,350

Wtr yr 1967: Total 37,247 Mean 102 Max 730 Min 14 Ac-ft 73,880

Peak discharge (base, 760 cfs).--May 25 (2300) 830 cfs (4.17 ft); June 6 (0015) 805 cfs (4.12 ft).

Note.--No gage-height record Dec. 30 to Mar. 8.

9-0781. North Fork Fryingpan River above Cunningham Creek, near Norrie, Colo.

Location.--Lat 39°21'25", long 106°34'30", on left bank 1.2 miles upstream from Cunningham Creek and 5½ miles east of Norrie, Pitkin County.

Drainage area.--12.0 sq mi.

Records available.--October 1963 to September 1967.

Gage.--Water-stage recorder. Altitude of gage is 9,410 ft (from topographic map).

Extremes.--Maximum discharge during year, 188 cfs May 25 (gage height, 3.45 ft); minimum daily, 0.70 cfs Jan. 26.

1963-67: Maximum discharge, 313 cfs June 17, 1965 (gage height, 4.07 ft); maximum gage height recorded, 4.24 ft Apr. 22, 1965 (backwater from ice); minimum daily discharge, that of Jan. 26, 1967.

Remarks.--Records good except those for winter period, which are poor. No diversion above station.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.3	2.4	2.0	1.8	0.80	0.90	2.4	15	62	75	13	14
2	2.4	2.4	2.0	1.8	.80	1.0	2.4	13	96	70	11	10
3	3.1	2.4	2.2	1.8	1.0	1.1	3.0	11	121	65	10	8.4
4	3.8	2.4	2.2	2.0	1.0	1.2	3.6	10	150	60	9.0	7.4
5	4.1	2.6	2.0	2.0	.90	1.2	4.4	10	138	55	9.0	6.2
6	4.4	2.8	1.8	2.0	.80	1.0	4.4	11	137	50	9.4	5.6
7	4.4	2.8	1.6	1.8	.80	.90	5.0	13	128	45	11	5.0
8	4.4	2.6	1.4	1.6	1.0	.90	6.5	16	117	50	15	5.3
9	4.1	2.8	1.4	1.4	1.2	.90	6.0	20	116	40	18	9.4
10	3.6	3.0	1.4	1.4	1.0	.90	5.5	25	102	35	18	8.4
11	3.8	3.0	1.4	1.6	1.0	1.0	6.0	26	78	30	15	9.0
12	4.4	2.8	1.6	1.8	1.2	1.2	5.5	25	75	28	13	16
13	4.4	2.6	1.8	2.0	1.2	1.4	5.0	22	62	26	11	12
14	4.2	2.8	1.8	2.0	1.0	1.4	5.0	15	55	26	10	9.4
15	4.0	3.0	1.8	1.8	.90	1.2	5.5	12	55	27	10	8.0
16	4.4	3.0	1.6	1.6	.90	1.4	5.5	11	60	32	9.8	7.4
17	4.6	2.8	1.6	1.4	1.0	1.6	5.0	18	72	28	8.4	6.8
18	4.7	2.6	1.8	1.2	1.2	2.0	6.0	33	100	29	8.0	6.8
19	4.8	2.4	1.8	1.2	1.2	2.2	7.0	46	102	24	8.0	8.7
20	4.7	2.6	1.8	1.4	1.0	2.2	7.0	48	110	21	7.1	8.7
21	4.2	2.4	1.8	1.4	.90	2.0	6.0	63	110	19	6.5	7.7
22	3.6	2.2	1.6	1.4	.90	2.0	5.5	98	100	18	5.6	6.8
23	3.6	2.0	1.4	1.2	.90	2.2	5.0	124	100	20	5.0	5.9
24	3.2	2.0	1.4	1.0	1.0	2.6	4.8	128	110	26	4.7	5.3
25	3.2	2.2	1.6	.80	1.2	3.0	4.8	135	100	20	4.6	5.3
26	3.4	2.4	1.8	.70	1.2	2.8	5.0	127	90	18	4.7	6.8
27	3.4	2.4	1.8	.80	1.0	2.6	6.5	93	80	18	4.7	6.5
28	3.2	2.4	1.8	.90	.90	2.6	8.4	76	75	15	4.8	5.3
29	3.2	2.2	1.8	1.0	-	2.6	13	62	75	13	6.2	4.7
30	3.0	2.0	1.6	1.0	- - - - -	2.4	15	58	80	13	7.1	4.4
31	2.8	- - - - -	1.6	1.0	- - - - -	2.4	- - - - -	57	- - - - -	13	13	- - - - -
Total	117.4	76.0	53.2	44.80	27.90	52.80	174.7	1,421	2,856	1,009	290.6	231.2
Mean	3.79	2.53	1.72	1.45	0.996	1.70	5.82	45.8	95.2	32.5	9.37	7.71
Max	4.8	3.0	2.2	2.0	1.2	3.0	15	135	150	75	18	16
Min	2.3	2.0	1.4	0.70	0.80	0.90	2.4	10	55	13	4.6	4.4
Ac-ft	233	151	106	89	55	105	347	2,820	5,660	2,000	576	459

Cal yr 1966: Total 4,790.8 Mean 13.1 Max 91 Min 1.4 Ac-ft 9,500

Wtr yr 1967: Total 6,354.60 Mean 17.4 Max 150 Min 0.70 Ac-ft 12,600

Peak discharge (base, 150 cfs).--May 25 (2130) 188 cfs (3.45 ft); June 4 (2200) 168 cfs (3.31 ft).

Note.--No gage-height record Nov. 2 to Apr. 11.

ROARING FORK RIVER BASIN

9-0782. Cunningham Creek near Norrie, Colo.

Location.--Lat 39°20'05", long 106°34'30", on left bank half a mile upstream from unnamed tributary, 1½ miles upstream from mouth, and 4½ miles east of Norrie, Pitkin County.

Drainage area.--7.12 sq mi.

Records available.--October 1963 to September 1967.

Gage.--Water-stage recorder. Altitude of gage is 9,600 ft (from topographic map).

Extremes.--Maximum discharge during year, 120 cfs June 4 (gage height, 2.20 ft), from rating curve extended above 69 cfs; minimum daily, 0.50 cfs Feb. 8.

1963-67: Maximum discharge, 218 cfs June 17, 1965 (gage height, 2.57 ft), from rating curve extended above 120 cfs; maximum gage height, 3.45 ft Apr. 30, 1965 (backwater from ice); minimum daily discharge, that of Feb. 8, 1967.

Remarks.--Records good except those for winter period, which are poor. No diversion or regulation above station.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.64	0.90	0.70	0.70	0.60	0.60	0.90	8.0	54	33	5.0	4.1
2	.68	.90	.70	.70	.60	.60	.90	7.0	64	27	3.6	3.0
3	1.2	.90	.80	.70	.60	.60	1.2	5.5	72	23	3.3	2.6
4	1.7	.90	.80	.80	.70	.70	1.6	3.6	90	22	3.3	2.2
5	1.8	.90	.70	.80	.70	.70	2.0	3.2	84	20	3.0	1.8
6	1.8	.90	.70	.80	.60	.60	2.4	3.1	88	17	3.1	1.7
7	1.7	1.0	.60	.80	.60	.60	2.4	3.6	82	16	4.6	1.8
8	1.5	1.0	.60	.70	.50	.60	2.8	6.4	76	21	6.0	3.0
9	1.3	1.0	.60	.70	.60	.60	3.2	12	74	15	7.5	3.8
10	1.2	1.2	.60	.70	.60	.70	4.0	17	65	12	5.5	2.8
11	1.3	1.2	.60	.70	.60	.80	4.8	18	59	12	4.1	3.1
12	1.8	1.0	.70	.80	.70	.80	3.6	18	59	12	3.3	6.4
13	1.8	1.0	.70	.80	.70	.80	3.4	15	54	9.8	3.0	3.6
14	1.6	1.2	.70	.80	.70	.80	3.2	11	51	9.4	2.8	3.1
15	1.4	1.2	.60	.80	.60	.70	3.0	7.9	50	10	3.0	2.8
16	1.5	1.2	.60	.80	.60	.70	2.8	7.9	53	11	2.8	2.7
17	1.6	1.2	.70	.70	.60	.70	2.8	11	59	9.8	2.7	2.4
18	1.6	1.0	.70	.70	.70	.80	4.0	19	67	9.4	2.4	2.4
19	1.6	.90	.70	.70	.70	.90	4.8	25	62	7.5	2.4	3.6
20	1.5	.90	.70	.70	.70	.90	4.8	26	67	6.4	2.3	3.3
21	.98	.90	.70	.70	.60	.80	3.6	38	68	5.5	2.2	2.7
22	1.4	.80	.60	.70	.60	.80	3.0	53	59	5.0	2.1	2.3
23	1.3	.70	.60	.70	.60	.80	2.6	64	60	7.5	1.8	2.2
24	1.2	.70	.60	.70	.60	1.0	2.6	70	57	12	1.7	2.0
25	1.2	.70	.70	.60	.70	1.2	2.6	74	54	7.9	1.6	2.3
26	1.2	.80	.70	.60	.70	1.0	2.8	68	53	7.5	1.9	3.3
27	1.2	.80	.70	.60	.70	1.0	3.0	57	50	8.7	1.8	2.8
28	1.2	.80	.70	.60	.60	1.0	4.0	53	44	5.3	2.0	2.3
29	1.2	.80	.70	.70	-	1.0	6.0	47	38	4.3	2.4	2.1
30	1.2	.70	.70	.70	- - - - -	1.0	8.0	47	36	3.8	2.6	1.9
31	1.0	- - - - -	.70	.70	- - - - -	1.0	- - - - -	48	- - - - -	3.8	5.3	- - - - -
Total	42.30	28.10	20.90	22.20	17.80	24.80	96.80	847.2	1,849	374.6	99.1	84.1
Mean	1.36	.937	0.674	0.716	0.636	0.800	3.23	27.3	61.6	12.1	3.20	2.80
Max	1.8	1.2	0.80	0.80	0.70	1.2	8.0	74	90	33	7.5	6.4
Min	0.64	0.70	0.60	0.60	0.50	0.60	0.90	3.1	36	3.8	1.6	1.7
Ac-ft	84	56	41	44	35	49	192	1,680	3,670	743	197	167

Cal yr 1966: Total 2,468.50 Mean 6.76 Max 53 Min 0.60 Ac-ft 4,900-
Wtr yr 1967: Total 3,506.90 Mean 9.61 Max 90 Min 0.50 Ac-ft 6,960

Peak discharge (base, 100 cfs)--May 25 (1930) 108 cfs (2.16 ft); June 4 (1930) 120 cfs (2.20 ft).

Note.--No gage-height record Nov. 1 to Apr. 16.

9-0783. North Fork Fryingpan River below Cunningham Creek, near Norrie, Colo.

Location.--Lat 39°20'35", long 106°36'40", in sec.24, T.8 S., R.83 W., on right bank 200 ft upstream from campground, 1.2 miles downstream from Cunningham Creek, and 2½ miles east of Norrie.

Drainage area.--24.2 sq mi.

Records available.--October 1963 to September 1967.

Gage.--Water-stage recorder. Altitude of gage is 8,770 ft (from topographic map).

Extremes.--Maximum discharge during year, 292 cfs May 25 (gage height, 2.35 ft); minimum daily, 2.8 cfs Oct. 1.
1963-67: Maximum discharge, 561 cfs June 17, 1965 (gage height, 2.96 ft), from rating curve extended above 360 cfs; minimum daily, that of Oct. 1, 1966.

Remarks.--Records good except those for winter period, which are poor. No diversion above station.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.8	4.6	3.8	3.6	3.2	3.2	7.2	24	135	93	20	19
2	3.0	4.0	3.8	3.6	3.0	3.2	8.0	18	173	83	15	12
3	4.8	4.0	4.0	3.6	3.0	3.4	10	15	195	75	14	9.4
4	6.8	4.0	4.0	3.8	3.2	3.6	17	12	232	71	12	7.6
5	7.2	4.0	4.0	4.0	3.4	3.6	14	11	220	69	11	6.8
6	7.2	4.4	3.6	4.0	3.4	3.4	14	11	220	61	12	6.0
7	8.0	5.0	3.4	4.0	3.2	3.2	19	12	211	57	15	6.0
8	7.2	5.0	3.2	3.8	3.2	3.0	25	21	197	73	22	6.8
9	6.4	5.5	3.2	3.6	3.2	3.0	24	38	193	63	21	12
10	6.0	5.6	3.2	3.4	3.2	3.2	19	63	161	48	26	9.4
11	6.4	5.6	3.4	3.2	3.4	3.6	18	63	135	43	21	9.4
12	8.0	5.2	3.6	3.2	3.6	3.8	17	65	133	46	16	24
13	8.0	5.0	3.6	3.4	3.6	3.8	17	63	115	43	14	15
14	8.7	5.5	3.6	3.6	3.6	3.6	17	41	107	37	12	12
15	7.0	5.6	3.4	3.6	3.4	3.4	17	34	105	38	12	10
16	7.5	5.6	3.4	3.6	3.4	3.4	16	33	111	46	12	10
17	7.5	5.6	3.4	3.4	3.4	4.0	17	45	121	38	9.4	8.7
18	8.0	4.8	3.6	3.2	3.6	5.0	18	81	143	41	8.7	8.7
19	7.0	4.6	3.6	3.2	3.6	5.0	26	103	137	34	8.7	13
20	7.0	4.4	3.6	3.2	3.4	5.0	29	109	147	29	7.6	13
21	7.6	4.4	3.6	3.2	3.2	4.8	22	129	153	26	7.2	11
22	6.5	4.0	3.4	3.2	3.2	5.0	19	165	143	24	7.2	8.7
23	6.4	3.6	3.2	3.4	3.2	7.0	15	190	147	28	6.8	8.0
24	6.0	3.6	3.2	3.2	3.4	10	14	206	145	46	6.4	7.2
25	6.0	3.8	3.4	3.2	3.6	12	12	215	137	32	5.6	7.6
26	6.0	4.0	3.6	3.2	3.6	11	12	204	121	28	6.0	10
27	6.0	4.0	3.6	3.2	3.6	8.7	13	163	113	30	6.4	9.4
28	6.0	4.0	3.6	3.2	3.4	7.6	22	149	105	22	6.0	8.0
29	6.0	4.0	3.4	3.4	-	8.0	30	135	93	18	6.8	7.2
30	6.0	3.8	3.4	3.6	- - - - -	7.5	35	129	95	18	8.0	6.8
31	5.5	- - - - -	3.6	3.6	- - - - -	7.0	- - - - -	131	- - - - -	16	17	- - - - -
Total	202.5	137.2	109.4	107.4	94.2	162.0	543.2	2,678	4,443	1,376	372.8	302.7
Mean	6.53	4.57	3.53	3.46	3.36	5.23	18.1	86.4	148	44.4	12.0	10.1
Max	8.7	5.6	4.0	4.0	3.6	12	35	215	232	93	26	24
Min	2.8	3.6	3.2	3.2	3.0	3.0	7.2	11	93	16	5.6	6.0
Ac-ft	402	272	217	213	187	321	1,080	5,310	8,810	2,730	739	600

Cal yr 1966: Total 7,878.3 Mean 21.6 Max 137 Min 2.8 Ac-ft 15,630
Wtr yr 1967: Total 10,528.4 Mean 28.8 Max 232 Min 2.8 Ac-ft 20,880

Peak discharge (base, 250 cfs).--May 25 (2230) 292 cfs (2.35 ft); June 4 (2200) 272 cfs (2.26 ft).

Note.--No gage-height record Dec. 13 to Mar. 16.

9-0785. North Fork Fryingpan River near Norrie, Colo.

Location.--Lat 39°20'40", long 106°39'50", in N½ sec.21, T.8 S., R.83 W., on left bank 1,000 ft upstream from bridge on State Highway 104, a quarter of a mile upstream from mouth, half a mile downstream from Last Chance Creek, and 1 mile northwest of Norrie.

Drainage area.--42.0 sq mi (revised).

Records available.--October 1910 to March 1917, October 1947 to September 1967. Prior to October 1962, published as North Fork Fryingpan Creek near Norrie.

Gage.--Water-stage recorder. Altitude of gage is 8,400 ft (from topographic map). Feb. 18, 1911, to Mar. 31, 1917, staff gage at site 10 ft downstream at different datum. Oct. 1, 1947, to Sept. 30, 1949, water-stage recorder at present site at datum 2.00 ft higher.

Average discharge.--26 years (1910-16, 1947-67), 51.8 cfs (37,500 acre-ft per year).

Extremes.--Maximum discharge during year, 477 cfs May 25 (gage height, 4.18 ft); minimum daily, 4.5 cfs Oct. 1. 1910-17, 1947-67: Maximum discharge, 1,320 cfs June 6, 1958, from rating curve extended above 700 cfs; maximum gage height, 5.80 ft May 21, 1948 (present datum); minimum daily discharge, 0.5 cfs Nov. 1, 1950.

Remarks.--Records good except those for winter period, which are poor. One small diversion bypasses station for domestic use and irrigation of pasture.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4.5	7.0	6.0	5.5	5.5	6.0	17	40	174	131	24	20
2	5.1	6.0	6.5	6.0	5.5	6.0	18	32	241	118	20	14
3	8.9	7.0	6.5	6.0	5.5	6.5	24	28	272	105	19	12
4	11	7.0	6.5	6.0	6.0	6.5	28	25	364	101	17	10
5	12	6.0	6.5	5.5	6.0	6.0	27	24	338	96	16	8.9
6	12	6.5	7.0	5.5	5.5	5.5	26	24	338	84	16	8.3
7	12	7.0	8.0	5.0	5.5	5.5	36	25	338	81	20	7.8
8	11	7.5	6.0	5.0	5.5	5.5	45	36	300	105	24	8.0
9	10	8.0	5.5	5.5	5.5	6.0	43	64	288	81	27	16
10	9.2	8.5	5.5	5.5	6.0	6.5	39	91	250	65	27	12
11	9.8	8.5	5.5	5.5	6.5	7.0	40	88	191	60	21	11
12	12	8.0	5.5	5.0	6.5	8.0	42	91	194	61	19	24
13	12	8.0	5.5	5.0	6.5	8.0	31	93	170	55	16	18
14	13	8.0	5.5	5.5	6.5	7.5	32	60	153	47	15	14
15	12	8.5	5.5	5.5	6.0	7.5	31	46	156	52	15	12
16	12	8.5	5.5	5.5	5.5	9.0	29	42	162	61	15	11
17	13	8.5	5.5	5.5	5.5	12	31	60	177	49	13	11
18	13	8.0	6.0	5.0	6.0	13	34	101	232	54	12	10
19	11	7.5	6.0	5.0	6.0	14	43	124	218	42	12	14
20	11	7.5	5.5	5.0	5.5	13	42	131	241	37	10	16
21	12	7.5	5.0	5.0	5.5	13	34	159	250	34	10	13
22	10	7.0	5.0	5.0	5.5	14	30	232	214	31	8.9	11
23	11	7.0	5.0	5.5	5.5	15	27	288	210	33	8.3	10
24	9.0	7.0	5.0	6.0	5.5	18	25	294	210	53	7.5	9.2
25	8.5	7.0	5.5	6.0	6.0	22	23	305	188	36	7.2	9.2
26	9.0	6.5	6.0	5.5	6.0	20	23	294	167	31	7.0	12
27	9.0	6.0	6.0	5.5	6.0	18	26	218	159	33	7.0	11
28	9.0	6.0	6.0	5.5	6.0	16	37	194	145	27	7.0	9.8
29	9.0	6.5	5.5	5.5	-	17	50	167	131	24	7.8	8.6
30	9.0	6.5	5.5	5.5	- - - -	15	54	162	135	22	10	8.0
31	8.0	- - - -	5.5	5.5	- - - -	16	- - - -	162	- - - -	20	18	- - - -
Total	318.0	218.5	180.0	168.5	163.0	343.0	987	3,700	6,606	1,829	456.7	359.8
Mean	10.3	7.28	5.81	5.44	5.82	11.1	32.9	119	220	59.0	14.7	12.0
Max	13	8.5	8.0	6.0	6.5	22	54	305	364	131	27	24
Min	4.5	6.0	5.0	5.0	5.5	5.5	17	24	131	20	7.0	7.8
Ac-ft	631	433	357	334	323	680	1,960	7,340	13,100	3,630	906	714

Cal yr 1966: Total 11,414.4 Mean 31.3 Max 198 Min 4.5 Ac-ft 22,640

Wtr yr 1967: Total 15,329.5 Mean 42.0 Max 364 Min 4.5 Ac-ft 30,410

Peak discharge (base, 420 cfs).--May 25 (2300) 477 cfs (4.18 ft); June 4 (2230) 468 cfs (4.13 ft).

Note.--No gage-height record Nov. 9 to Mar. 23.

9-0789. Lime Creek near Troutville, Colo.

Location.--Lat 39°26'00", long 106°35'45", in sec.19, T.7 S., R.82 W. (projected), on left bank 600 ft upstream from Eagle Lake and 2 miles northeast of Troutville.

Drainage area.--4.56 sq mi.

Records available.--October 1963 to September 1967.

Gage.--Water-stage recorder. Altitude of gage is 10,080 ft (from topographic map).

Extremes.--Maximum discharge during year, 99 cfs May 23 (gage height, 2.82 ft); minimum daily, 0.80 cfs Mar. 9.
1963-67: Maximum discharge, 128 cfs June 17, 1965 (gage height, 3.07 ft), from rating curve extended above 80 cfs; minimum daily determined, that of Mar. 9, 1967.

Remarks.--Records good except those for winter period, which are poor. No diversion above station.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.4	1.9	1.8	2.0	1.6	1.0	1.2	4.6	22	48	7.2	3.8
2	1.4	1.9	1.8	1.9	1.5	1.0	1.4	4.0	38	45	6.9	3.6
3	1.8	1.8	1.8	1.8	1.4	1.1	1.6	3.6	50	39	6.0	3.0
4	2.0	1.8	1.8	1.8	1.2	1.2	2.0	3.2	62	39	5.2	2.5
5	2.1	2.0	1.9	1.9	1.4	1.2	1.8	3.0	57	39	4.6	2.3
6	2.2	2.1	2.0	2.0	1.4	1.1	2.0	3.0	51	34	4.0	2.1
7	2.4	2.2	1.8	1.7	1.3	1.0	2.4	3.8	49	32	4.4	2.0
8	2.4	2.2	1.6	1.4	1.2	.90	2.8	5.0	51	39	5.6	2.3
9	2.3	2.1	1.4	1.6	1.4	.80	2.8	6.9	50	33	5.8	5.2
10	2.2	2.0	1.6	1.8	1.4	1.0	2.6	11	47	28	6.3	4.8
11	2.2	2.1	1.7	1.8	1.4	1.2	2.4	10	33	27	5.2	4.2
12	2.4	2.1	1.8	1.8	1.4	1.3	2.3	10	29	30	4.0	6.3
13	2.5	2.1	1.8	1.8	1.4	1.2	2.2	11	28	30	3.4	5.8
14	3.2	2.1	1.8	1.8	1.4	1.1	2.1	7.5	23	28	3.1	4.8
15	3.6	2.0	1.8	1.8	1.4	1.0	2.1	8.4	21	31	2.8	4.0
16	3.6	2.0	1.8	1.6	1.4	1.0	2.1	5.0	24	37	2.8	3.6
17	3.4	2.1	1.8	1.5	1.2	1.2	2.1	7.2	31	32	2.6	3.1
18	3.2	2.1	1.8	1.4	1.4	1.4	2.3	15	46	31	2.4	3.0
19	3.1	2.1	1.8	1.4	1.4	1.6	2.6	21	51	26	2.2	3.7
20	3.1	2.0	1.8	1.4	1.4	1.6	3.1	23	69	22	2.1	4.0
21	3.0	2.0	1.8	1.6	1.2	1.3	2.8	30	62	20	2.1	3.8
22	2.6	2.1	1.7	1.6	1.0	1.1	2.6	52	51	18	2.1	3.6
23	2.8	2.1	1.6	1.6	1.0	1.2	2.4	72	52	17	1.9	3.1
24	2.6	2.0	1.4	1.6	1.2	1.6	2.3	72	59	17	2.0	2.8
25	2.5	1.9	1.6	1.6	1.2	2.0	2.3	63	50	16	1.9	2.8
26	2.4	1.8	1.6	1.4	1.2	2.0	2.4	56	41	14	1.9	3.2
27	2.4	1.6	1.8	1.6	1.1	1.6	2.8	36	41	12	1.8	3.4
28	2.4	1.7	1.7	1.6	1.0	1.5	3.8	28	43	11	1.8	3.1
29	2.3	1.8	1.6	1.6	-	1.4	4.8	23	40	9.4	1.7	2.6
30	2.2	1.8	1.6	1.6	- - - - -	1.3	5.2	20	48	7.8	2.0	2.6
31	2.0	- - - - -	1.8	1.6	- - - - -	1.2	- - - - -	20	- - - - -	7.2	3.0	- - - - -
Total	77.7	59.5	53.6	51.6	36.5	39.10	75.3	638.2	1,319	819.4	108.8	105.1
Mean	2.51	1.98	1.73	1.66	1.30	1.26	2.51	20.6	44.0	26.4	3.51	3.50
Max	3.6	2.2	2.0	2.0	1.6	2.0	5.2	72	69	48	7.2	6.3
Min	1.4	1.6	1.4	1.4	1.0	0.80	1.2	3.0	21	7.2	1.7	2.0
Ac-ft	154	118	106	102	73	78	149	1,270	2,620	1,630	216	208

Cal yr 1966: Total 2,674.1 Mean 7.33 Max 54 Min - Ac-ft 5,300
Wtr yr 1967: Total 3,383.80 Mean 9.27 Max 72 Min 0.80 Ac-ft 6,710

Peak discharge (base, 80 cfs)

Note.--No gage-height record Nov. 3 to Apr. 18.

Date	Time	Gage height	Discharge	Date	Time	Gage height	Discharge
5-23	2200	2.82	99	6-20	2200	2.82	98
6-4	2200	2.70	83				

ROARING FORK RIVER BASIN

9-0801. Fryingpan River at Meredith, Colo.

Location.--Lat 39°21'45", long 106°44'00", in NE¼ Sec.14, T.8 S., R.84 W., on left bank at Meredith, 0.1 mile downstream from Waterbury Creek and 0.7 mile downstream from Jakeman Gulch.

Drainage area.--191 sq mi.

Records available.--October 1966 to September 1967.

Gage.--Water-stage recorder. Altitude of gage is 7,780 ft (from topographic map).

Extremes.--Maximum discharge during year, 1,360 cfs May 26 (gage height, 5.06 ft); minimum daily, 26 cfs Feb. 22.

Remarks.--Records good except those for winter period, which are poor. Diversion for irrigation of several hundred acres and small transmountain diversion above station to Arkansas River basin.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	46	42	45	42	33	30	52	148	600	510	115	90
2	46	42	39	44	32	30	56	132	794	465	103	67
3	55	47	39	44	30	32	68	122	892	438	99	58
4	60	45	39	44	30	32	82	107	1,060	420	94	54
5	65	43	38	42	32	30	86	101	1,060	411	86	50
6	70	46	36	40	32	30	94	98	1,080	367	88	48
7	70	45	34	38	33	28	101	92	998	351	111	47
8	65	45	34	36	28	28	124	124	913	402	122	49
9	60	45	34	34	30	30	124	195	892	347	155	71
10	55	46	34	32	32	32	101	267	836	299	143	59
11	55	50	36	32	32	33	111	281	687	270	122	58
12	60	48	38	32	32	34	128	295	665	274	103	101
13	65	46	40	34	33	36	101	307	600	257	94	75
14	70	47	40	34	33	36	96	224	535	251	83	68
15	75	49	38	34	33	36	99	185	515	288	85	62
16	75	46	38	34	32	36	98	175	515	331	82	60
17	70	46	38	32	30	41	83	212	570	284	74	57
18	60	45	38	34	30	45	99	331	698	292	68	57
19	55	42	40	34	32	46	130	456	738	239	68	71
20	60	46	42	33	32	46	132	483	750	215	64	74
21	60	46	42	33	28	46	113	535	794	195	64	63
22	55	44	40	33	26	46	98	756	720	182	62	59
23	50	42	38	33	30	51	98	976	720	182	59	57
24	50	37	36	33	32	58	88	1,090	698	236	55	56
25	55	40	36	34	32	64	85	1,100	670	188	52	56
26	55	43	40	34	30	63	82	1,130	616	175	51	68
27	55	46	42	34	30	57	101	829	575	168	56	69
28	48	49	40	34	30	55	141	750	545	146	56	63
29	47	42	38	34	-	57	180	643	506	130	56	60
30	46	40	38	33	- - - -	55	195	616	510	122	58	57
31	47	- - - -	40	33	- - - -	55	- - - -	590	- - - -	115	78	- - - -
Total	1,805	1,340	1,190	1,097	869	1,298	3,146	13,350	21,752	8,550	2,606	1,884
Mean	58.2	44.7	38.4	35.4	31.0	41.9	105	431	725	276	84.1	62.8
Max	75	50	45	44	33	64	195	1,130	1,080	510	155	101
Min	46	37	34	32	26	28	52	92	506	115	51	47
Ac-ft	3,580	2,660	2,360	2,180	1,720	2,570	6,240	26,480	43,140	16,960	5,170	3,740

Cal yr 1966: Total - Mean - Max - Min - Ac-ft -
 Wtr yr 1967: Total 58,887 Mean 161 Max 1,130 Min 26 Ac-ft 116,800

Peak discharge (base, 1,350 cfs) May 26 (0030) 1,360 cfs (5.06 ft).

9-0804. Fryingspan River near Ruedi, Colo.

Location.--Lat 39°22'10", long 106°51'12", in SW¼ sec.11, T.8 S., R.85 W., on left bank 20 ft upstream from private bridge, 0.7 mile downstream from Snyder Gulch, and 3 miles west of Ruedi.

Drainage area.--244 sq mi (revised).

Records available.--October 1964 to September 1967.

Gage.--Water-stage recorder. Altitude of gage is 7,300 ft (from topographic map).

Extremes.--Maximum discharge during year, 1,720 cfs May 26 (gage height, 3.82 ft); minimum daily, 32 cfs Feb. 22.
1964-67: Maximum discharge, 2,690 cfs June 18, 1965 (gage height, 5.16 ft); minimum daily, 28 cfs Mar. 4, 1966.

Remarks.--Records good except those for winter period, which are poor. Diversions for irrigation of several hundred acres and small transmountain diversions above station to Arkansas River basin.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	54	52	48	46	36	41	75	190	831	598	148	135
2	54	41	46	48	34	42	80	145	1060	550	133	110
3	66	52	44	50	34	42	95	133	1170	510	129	95
4	73	52	42	50	34	41	110	118	1390	485	124	87
5	79	44	40	46	36	41	120	122	1380	465	114	80
6	78	46	38	44	36	42	130	120	1410	436	116	78
7	78	52	38	40	36	41	150	114	1340	392	135	74
8	76	54	38	38	34	36	160	150	1260	441	140	74
9	73	53	38	36	34	38	160	256	1220	396	190	105
10	69	52	38	36	36	44	130	356	1150	340	190	96
11	65	60	40	36	34	45	140	392	971	296	156	93
12	72	60	42	36	36	48	160	396	922	300	135	129
13	76	54	44	36	36	49	130	441	866	304	122	120
14	82	49	46	36	36	46	120	328	747	292	114	103
15	80	55	46	36	36	47	130	272	712	328	110	95
16	100	54	40	36	36	52	120	248	698	387	110	90
17	80	57	42	34	34	61	100	284	775	344	103	85
18	75	57	44	36	34	73	124	441	943	352	96	84
19	65	47	46	36	36	74	148	592	1010	304	91	96
20	80	50	46	36	36	73	167	628	1010	268	88	107
21	70	55	44	36	34	74	148	705	1080	244	87	95
22	65	47	42	36	32	76	122	999	950	222	85	85
23	65	49	40	36	34	79	120	1270	936	214	80	80
24	60	46	40	36	36	87	105	1430	901	294	79	78
25	65	42	42	38	36	95	105	1460	866	244	76	78
26	65	40	46	38	38	91	96	1490	768	218	73	87
27	65	40	46	38	39	80	112	1150	712	200	78	91
28	60	40	46	38	40	80	156	1060	677	183	79	85
29	55	50	40	36	-	85	207	908	610	159	84	79
30	57	44	44	36	- - - - -	90	252	866	604	150	88	74
31	56	- - - - -	46	36	- - - - -	75	- - - - -	824	- - - - -	142	109	- - - - -
Total	2,158	1,494	1,322	1,196	993	1,878	3,972	17,878	28,959	10,048	3,462	2,768
Mean	69.6	49.8	42.6	38.6	35.5	60.6	132	577	965	324	112	92.3
Max	100	60	48	50	40	95	252	1,490	1,410	598	190	135
Min	54	40	38	34	32	36	75	114	604	142	73	74
Ac-ft	4,280	2,960	2,620	2,370	1,970	3,720	7,880	35,460	57,440	19,930	6,870	5,490

Cal yr 1966: Total 60,731 Mean 166 Max 1,010 Min 28 Ac-ft 120,500
Wtr yr 1967: Total 76,128 Mean 209 Max 1,490 Min 32 Ac-ft 151,000

Peak discharge (base, 1,600 cfs).--May 26 (0145) 1,720 cfs (3.82 ft); June 5 (0200) 1,600 cfs (3.64 ft).

ROARING FORK RIVER BASIN

9-0808. West Sopris Creek near Basalt, Colo.

Location.--Lat 39°20'10", long 107°05'40", in S½ sec.22, T.8 S., R.87 W., on right bank 30 ft downstream from private bridge, 2½ miles upstream from East Sopris Creek, and 4 miles southwest of Basalt.

Drainage area.--14.4 sq mi.

Records available.--October 1963 to September 1967.

Gage.--Water-stage recorder. Altitude of gage is 7,210 ft (from topographic map).

Extremes.--Maximum discharge during year, 17 cfs May 26 (gage height, 2.13 ft); minimum daily, 0.50 cfs Dec. 29.

1963-67: Maximum discharge, 52 cfs May 22, 1965 (gage height, 2.79 ft), from rating curve extended above 35 cfs; minimum daily, that of Dec. 29, 1966.

Remarks.--Records good except those for period of no gage-height record, which are poor. Small diversions above station for irrigation of hay meadows. Water exported from Dinkle Lake above station to Prince Creek drainage.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.8	1.2	1.3	1.0	0.90	1.2	1.8	4.4	4.1	5.1	2.4	2.4
2	2.8	1.1	1.3	1.2	.70	1.4	1.7	4.0	3.6	4.8	2.4	2.4
3	3.5	1.2	1.4	1.1	.70	1.4	1.7	3.8	4.3	4.6	2.6	2.3
4	3.0	1.2	1.5	1.0	.80	1.2	1.7	3.8	4.6	4.8	2.4	2.3
5	2.8	1.1	1.7	1.1	.90	1.0	1.9	3.8	4.9	4.9	2.4	2.3
6	2.8	1.2	1.8	1.1	.80	.70	1.9	3.8	5.4	4.8	2.6	2.3
7	2.8	1.2	2.0	1.0	.90	.80	1.8	3.5	5.1	5.1	3.6	2.3
8	2.8	1.3	1.5	.80	.60	.60	1.7	2.9	5.2	4.9	3.5	2.4
9	2.6	1.3	1.2	.60	.80	1.0	1.6	4.4	5.2	4.4	3.0	2.8
10	2.6	1.3	1.1	.80	1.0	1.3	1.7	8.9	5.2	4.3	2.8	2.6
11	2.8	1.3	1.1	1.0	.80	1.2	1.7	9.7	5.6	4.3	2.4	2.6
12	2.8	1.5	1.3	1.0	.80	1.1	1.8	8.9	5.8	4.3	2.3	2.6
13	2.9	1.3	1.4	1.0	.70	1.0	1.8	7.8	5.6	4.0	2.2	2.3
14	2.9	1.2	1.4	1.0	.90	1.0	1.8	5.1	6.1	3.8	2.2	2.3
15	2.6	1.2	1.4	1.0	.80	1.0	1.7	4.1	6.1	3.8	2.1	2.3
16	2.9	1.3	1.4	.80	.70	1.2	1.7	3.5	5.9	3.5	1.9	2.3
17	2.6	1.3	1.4	.80	.70	1.8	1.6	3.8	5.6	4.3	1.9	2.3
18	2.1	1.3	1.3	.70	.80	1.9	1.7	5.2	5.4	3.6	1.9	2.4
19	1.8	1.3	1.2	.80	.80	1.8	1.7	5.2	5.2	3.2	1.9	2.6
20	1.7	1.2	1.2	1.0	.70	1.7	2.1	4.8	5.8	2.9	2.1	2.4
21	1.6	1.3	1.1	1.0	.60	1.6	2.4	4.8	5.6	2.9	2.8	2.3
22	1.6	1.3	1.0	1.0	.80	1.6	2.4	4.0	5.9	2.8	2.8	2.3
23	1.5	1.3	1.0	1.0	.90	1.6	2.4	3.5	5.6	3.0	2.6	2.3
24	1.5	1.3	1.0	.90	.80	1.6	2.4	3.8	5.6	3.0	2.4	2.3
25	1.5	1.2	1.0	.80	1.0	1.7	2.6	4.8	5.4	3.0	2.3	2.4
26	1.5	1.3	1.0	.80	1.0	1.7	2.4	9.2	6.1	3.2	2.2	2.8
27	1.3	4.1	1.1	.80	.90	1.7	2.2	5.8	5.8	3.0	2.2	2.6
28	1.3	4.6	1.0	.90	.90	1.7	2.4	4.9	5.9	2.8	2.3	2.8
29	1.3	1.7	.50	.90	-	1.8	2.8	4.3	5.4	2.4	2.3	2.9
30	1.3	1.4	.80	.90	- - - -	1.9	4.4	4.4	5.2	2.3	2.3	2.8
31	1.3	- - - -	1.0	1.0	- - - -	1.7	- - - -	4.8	- - - -	3.0	2.8	- - - -
Total	69.3	44.5	38.40	28.80	22.70	42.90	61.5	155.7	161.2	116.8	75.6	73.7
Mean	2.24	1.48	1.24	0.929	0.811	1.38	2.05	5.02	5.37	3.77	2.44	2.46
Max	3.5	4.6	2.0	1.2	1.0	1.9	4.4	9.7	6.1	5.1	3.6	2.9
Min	1.3	1.1	0.50	0.60	0.60	0.60	1.6	2.9	3.6	2.3	1.9	2.3
Ac-ft	137	88	76	57	45	85	122	309	320	232	150	146

Cal yr 1966: Total 977.80 Mean 2.68 Max 9.4 Min 0.50 Ac-ft 1,940

Wtr yr 1967: Total 891.10 Mean 2.44 Max 9.7 Min 0.50 Ac-ft 1,770

Peak discharge (base, 40 cfs)--No peak above base.

Note.--No gage-height record Nov. 30 to Mar. 15.

9-0815.5. Crystal River at Placita, Colo.

Location.--Lat 39°08'35", long 107°15'25", in SE¼ sec.31, T.10 S., R.88 W., on right bank 0.1 mile downstream from highway bridge, 0.4 mile upstream from Bears Gulch, 0.7 mile north of Placita, and 3 miles upstream from Coal Creek.

Drainage area.--107 sq mi.

Records available.--October 1959 to September 1967.

Gage.--Water-stage recorder. Datum of gage is 7,371.89 ft above mean sea level (levels by U. S. Bureau of Reclamation).

Average discharge.--8 years, 208 cfs (150,600 acre-ft per year).

Extremes.--Maximum discharge during year, 1,670 cfs May 23; maximum gage height, 5.57 ft June 22; minimum daily discharge, 25 cfs Jan. 9.

1959-67: Maximum discharge, 1,710 cfs June 20, 1965 (gage height, 5.65 ft); minimum daily, 12 cfs Mar. 3, 1965.

Remarks.--Records good except those for winter period, which are poor. A few small diversions above station for irrigation of hay meadows.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	50	37	36	34	32	34	50	132	535	996	206	106
2	50	37	36	34	32	36	50	117	620	948	190	96
3	67	38	40	32	32	36	56	107	778	844	180	92
4	61	37	42	36	30	36	72	99	996	806	166	89
5	58	35	45	36	30	34	82	101	1,040	757	157	83
6	57	36	115	34	30	32	75	96	1,050	668	155	82
7	56	36	128	30	30	32	81	93	1,140	662	192	82
8	54	42	78	27	28	32	95	114	1,220	674	259	79
9	52	41	50	25	30	36	101	182	1,240	626	277	107
10	50	42	46	30	30	38	95	253	1,170	560	238	107
11	54	41	50	32	30	42	101	235	1,040	525	244	117
12	58	42	48	36	30	44	109	283	948	475	214	161
13	54	40	44	36	30	36	104	314	708	490	178	132
14	57	41	44	34	30	34	93	253	578	436	159	120
15	57	41	46	32	30	33	90	241	515	500	150	109
16	58	42	40	30	30	34	83	307	505	420	142	102
17	57	41	38	26	30	43	75	428	578	500	132	96
18	53	41	40	26	32	51	82	572	836	525	128	96
19	50	40	44	28	30	60	102	668	1,080	444	123	112
20	50	41	44	30	30	50	117	694	1,230	380	118	110
21	48	42	40	32	26	50	110	892	1,180	356	112	107
22	46	41	38	30	30	52	101	1,070	1,210	334	112	102
23	46	38	34	30	30	55	99	1,300	1,290	314	106	101
24	44	38	30	34	30	58	92	1,450	1,270	370	101	98
25	44	37	30	32	32	61	86	1,410	1,170	307	99	101
26	44	38	34	26	32	57	79	1,290	1,060	280	95	118
27	42	37	35	30	30	54	83	1,040	1,020	265	89	114
28	42	38	35	32	32	52	117	996	988	247	92	107
29	40	38	30	30	-	54	153	799	884	226	110	98
30	39	38	34	32	- - - -	54	157	662	980	214	114	92
31	38	- - - -	34	32	- - - -	50	- - - -	584	- - - -	206	107	- - - -
Total	1,576	1,176	1,428	968	848	1,370	2,790	16,782	28,859	15,355	4,745	3,116
Mean	50.8	39.2	46.1	31.2	30.3	44.2	93.0	541	962	495	153	104
Max	67	42	128	36	32	61	157	1,450	1,290	996	277	161
Min	38	35	30	25	26	32	50	93	505	206	89	79
Ac-ft	3,130	2,330	2,830	1,920	1,680	2,720	5,530	33,290	57,240	30,460	9,410	6,180

Cal yr 1966: Total 58,537 Mean 160 Max 813 Min 30 Ac-ft 116,100
 Wtr yr 1967: Total 79,013 Mean 216 Max 1,450 Min 25 Ac-ft 156,700

Peak discharge (base, 1,200 cfs)

Note.--No gage-height record Dec. 16 to Mar. 8.

Date	Time	Gage height	Discharge	Date	Time	Gage height	Discharge
5-23	2100	5.56	1,670	6-22	2345	5.57	1,590
6-9	2230	5.55	1,590				

9-0816. Crystal River above Avalanche Creek, near Redstone, Colo.

Location.--Lat 39°13'55", long 107°13'35", in SW¼ sec.33, T.9 S., R.88 W., on right bank 1½ miles upstream from Avalanche Creek and ¾ miles north of Redstone.

Drainage area.--167 sq mi.

Records available.--October 1955 to September 1967.

Gage.--Water-stage recorder. Altitude of gage is 6,905 ft (from river-profile map).

Average discharge.--12 years, 288 cfs (208,500 acre-ft per year).

Extremes.--Maximum discharge during year, 2,580 cfs May 23 (gage height, 5.12 ft); minimum daily, 29 cfs Feb. 8.

1955-67: Maximum discharge, 3,980 cfs July 1, 1957 (gage height, 5.65 ft); minimum daily, 22 cfs Dec. 5, 1955, Feb. 15, 1964.

Remarks.--Records good. A few small diversions for irrigation above station.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	70	55	50	45	44	46	84	216	796	1,200	240	130
2	72	52	48	44	39	52	96	192	894	1,110	226	118
3	88	53	55	40	39	53	97	166	1,060	1,010	216	113
4	84	52	57	46	40	48	130	158	1,380	943	201	108
5	78	48	57	45	42	45	153	155	1,420	901	195	104
6	76	50	175	39	39	39	132	153	1,440	894	192	101
7	74	48	210	38	40	46	140	150	1,460	859	247	99
8	72	59	113	31	29	39	155	189	1,540	873	335	99
9	70	55	76	34	40	45	169	270	1,540	796	326	132
10	68	57	61	39	44	48	155	425	1,490	733	290	145
11	74	59	80	44	40	53	169	395	1,270	691	294	150
12	82	59	57	45	42	55	183	454	1,190	628	266	198
13	76	59	61	45	42	53	169	514	929	616	226	161
14	80	57	61	44	42	50	150	390	824	580	201	142
15	78	59	57	42	39	48	145	350	740	628	192	132
16	80	61	46	42	40	57	137	460	726	532	180	125
17	78	61	52	33	40	74	132	670	838	646	166	118
18	72	61	55	39	45	84	161	859	1,110	646	158	113
19	66	59	57	40	46	95	195	964	1,340	538	150	150
20	66	57	57	40	38	92	201	1,010	1,610	472	142	140
21	64	61	53	44	33	92	183	1,240	1,590	425	137	130
22	62	61	50	40	36	90	164	1,570	1,600	400	132	127
23	64	55	38	40	40	101	155	1,890	1,650	365	127	122
24	62	53	32	42	40	104	145	2,040	1,540	442	122	120
25	64	53	40	42	42	104	137	1,890	1,460	365	120	125
26	62	55	48	36	44	95	127	1,790	1,280	322	118	145
27	61	48	52	46	39	93	142	1,490	1,240	302	113	137
28	61	52	45	42	42	86	198	1,350	1,190	290	115	132
29	61	53	36	44	-	90	270	1,100	1,050	266	130	122
30	57	53	44	45	- - - - -	90	274	936	1,190	254	140	113
31	55	- - - - -	46	46	- - - - -	80	- - - - -	859	- - - - -	243	130	- - - - -
Total	2,177	1,665	1,969	1,282	1,126	2,127	4,738	24,295	37,387	18,970	5,827	3,851
Mean	70.2	55.5	63.5	41.4	40.2	68.6	158	784	1,246	612	188	128
Max	88	61	210	46	46	104	274	2,040	1,650	1,200	335	198
Min	55	48	32	31	29	39	84	150	726	243	113	99
Ac-ft	4,320	3,300	3,910	2,540	2,230	4,220	9,400	48,190	74,160	37,630	11,560	7,640

Cal yr 1966: Total 78,496 Mean 215 Max 1,100 Min 32 Ac-ft 155,700
Wtr yr 1967: Total 105,414 Mean 289 Max 2,040 Min 29 Ac-ft 209,100

Peak discharge (base, 2,000 cfs).--May 23 (2230) 2,580 cfs (5.12 ft).

9-0828. North Thompson Creek near Carbondale, Colo.

Location.--Lat 39°19'47", long 107°19'58", in sec.28, T.8 S., R.89 W., on right bank 0.4 mile downstream from Yank Creek and 8½ miles southwest of Carbondale.

Drainage area.--26.8 sq mi.

Records available.--October 1963 to September 1967.

Gage.--Water-stage recorder. Altitude of gage is 8,120 ft (from topographic map).

Extremes.--Maximum discharge during year, 150 cfs July 31 (gage height, 3.22 ft); minimum daily, 0.09 cfs Sept. 6, 7.

1963-67: Maximum discharge, 322 cfs May 17, 1964 (gage height, 4.05 ft), from rating curve extended above 190 cfs; minimum daily, that of Sept. 6, 7, 1967.

Remarks.--Records fair except those for winter period, which are poor. Transbasin diversion above station by Thompson Creek feeder ditch for irrigation in West Divide Creek basin.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.80	1.0	1.8	1.2	1.8	2.4	9.0	30	33	6.5	5.5	3.4
2	1.0	1.9	1.6	1.2	1.8	2.6	10	26	32	5.5	5.0	.82
3	1.4	1.6	1.6	1.0	1.8	2.6	16	24	32	7.0	4.5	.55
4	1.8	1.4	1.4	1.0	1.8	2.4	20	22	34	7.0	5.0	.19
5	1.8	1.4	1.0	1.2	1.8	2.2	22	20	31	6.5	6.0	.10
6	2.0	1.3	1.6	1.0	1.6	2.2	21	19	30	5.5	6.5	.09
7	1.8	1.0	2.2	1.0	1.6	2.2	22	21	27	6.0	8.0	.09
8	1.8	1.0	2.0	.90	1.4	2.2	24	29	25	9.0	9.0	.64
9	1.8	1.4	1.6	.90	1.6	2.2	24	36	22	6.5	6.5	2.2
10	2.0	1.8	1.2	1.0	1.8	2.0	22	45	19	5.0	6.5	1.3
11	2.2	1.9	1.4	1.0	2.0	2.2	26	50	19	5.5	6.5	1.9
12	3.4	1.6	1.6	1.2	2.0	2.4	26	57	22	6.5	6.0	2.5
13	3.4	1.8	1.8	1.2	2.0	2.4	23	49	19	4.0	4.5	2.5
14	4.0	1.6	1.6	1.2	2.0	2.2	22	36	21	4.0	3.7	1.3
15	3.7	1.8	1.4	1.2	1.8	2.2	19	33	18	5.5	2.5	.73
16	4.0	2.0	1.4	1.2	1.8	2.6	18	37	22	6.5	2.5	.64
17	3.7	2.0	1.4	1.2	1.8	4.5	18	44	17	13	1.9	.64
18	2.2	2.0	1.4	1.0	1.8	7.0	21	52	14	10	1.3	.55
19	1.6	1.8	1.4	1.0	1.8	7.0	30	52	13	5.0	1.6	1.6
20	1.6	1.8	1.6	1.0	1.8	5.0	29	52	17	3.7	1.6	1.6
21	1.6	1.9	1.6	1.2	1.6	4.0	23	51	19	3.1	1.6	1.3
22	1.3	1.9	1.4	1.2	1.6	5.0	22	51	15	2.8	1.0	1.0
23	1.6	1.3	1.4	1.4	1.8	8.0	21	50	13	3.4	1.0	.91
24	1.3	1.4	1.2	1.6	2.0	12	18	48	10	3.7	.91	1.3
25	1.3	1.6	1.4	1.6	2.0	12	18	54	9.7	3.7	.82	1.9
26	1.3	1.4	1.4	1.6	2.0	11	17	69	9.0	2.5	.82	3.1
27	1.0	1.2	1.2	1.4	2.2	10	22	62	8.5	2.2	.82	2.8
28	1.0	1.2	1.0	1.4	2.2	8.0	32	56	8.0	1.9	.82	2.8
29	1.3	1.4	.80	1.4	-	10	43	46	7.0	1.0	.82	1.9
30	1.0	1.6	.80	1.6	- - - -	9.0	39	41	6.5	.91	.91	1.6
31	1.0	- - - -	1.0	2.0	- - - -	9.0	- - - -	35	- - - -	7.1	2.8	- - - -
Total	59.70	47.0	44.20	38.00	51.2	158.5	677.0	1,297	572.7	160.51	106.92	41.95
Mean	1.93	1.57	1.43	1.23	1.83	5.11	22.6	41.8	19.1	5.18	3.45	1.40
Max	4.0	2.0	2.2	2.0	2.2	12	43	69	34	13	9.0	3.4
Min	0.80	1.0	0.80	0.90	1.4	2.0	9.0	19	6.5	0.91	0.82	0.09
Ac-ft	118	93	88	75	102	314	1,340	2,570	1,140	318	212	83
(†)	0	0	0	0	0	0	0	0	480	0	0	0

Cal yr 1966: Total 4,150.80 Mean 11.4 Max 93 Min 0.40 Ac-ft 8,230
 Wtr yr 1967: Total 3,254.68 Mean 8.92 Max 69 Min 0.09 Ac-ft 6,460

Peak discharge (base, 160 cfs).--No peak above base.

† Diversions, in acre-feet, by Thompson Creek feeder ditch; furnished by State engineer of Colorado

Note.--No gage-height record Dec. 8 to Mar. 15.

ROARING FORK RIVER BASIN

9-0830. Thompson Creek near Carbondale, Colo.

Location.--Lat 39°19'50", long 107°13'25", in sec.28, T.8 S., R.88 W., on right bank 800 ft upstream from Camp Foster Creek, 1 mile upstream from mouth, and 5 miles south of Carbondale.

Drainage area.--75.7 sq mi.

Records available.--October 1950 to September 1960, October 1964 to September 1967.

Gage.--Water-stage recorder. Altitude of gage is 6,450 ft (from topographic map).

Average discharge.--13 years, 36.6 cfs (26,500 acre-ft per year).

Extremes.--Maximum discharge during year, 220 cfs May 26 (gage height, 3.30 ft); minimum daily, 3.2 cfs Sept. 17, 18.

1950-60, 1964-67: Maximum discharge, about 800 cfs between June 4 and 8, 1957; maximum gage height, 4.4 ft Aug. 27, 1955, from floodmarks; minimum daily discharge, 1.5 cfs Aug. 30 to Sept. 1, 1954.

Remarks.--Records good except those for winter period and those for periods of no gage-height record, which are poor. Small diversions for irrigation of hay meadows above station. Transbasin diversion above station through Thompson Creek feeder ditch to West Divide Creek.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3.7	3.6	6.5	4.4	5.5	6.5	1.0	45	84	23	14	1.0
2	4.1	3.8	6.2	4.2	5.0	6.5	1.1	35	94	20	7.4	7.1
3	5.3	4.0	5.9	4.0	5.0	6.5	1.6	29	93	20	7.1	5.6
4	5.6	3.8	6.2	4.4	5.0	6.5	2.3	27	114	19	6.5	5.0
5	5.6	3.6	6.2	4.6	5.0	6.0	2.6	26	114	17	8.5	4.3
6	6.0	3.6	7.7	4.2	5.0	5.5	2.2	26	116	15	7.7	4.1
7	5.5	3.4	14	3.8	4.6	5.5	2.6	25	102	14	12	4.1
8	5.5	3.8	6.5	3.8	4.4	5.5	3.0	36	84	22	18	4.8
9	5.5	4.0	4.1	3.6	4.6	5.5	3.0	53	74	16	10	7.7
10	5.5	4.0	5.0	3.8	4.8	5.0	2.6	98	65	14	8.0	6.5
11	6.0	4.2	6.0	4.4	5.0	5.5	3.3	91	62	15	7.4	9.5
12	6.0	4.4	6.0	4.6	5.0	5.5	3.8	102	65	20	6.2	12
13	6.5	4.4	5.5	4.6	5.0	5.6	3.1	96	62	14	6.2	5.3
14	7.0	4.4	5.5	4.6	5.5	5.3	2.5	64	69	12	5.6	3.9
15	7.0	4.4	5.5	4.6	5.5	5.3	2.5	51	61	16	5.3	3.7
16	7.0	4.6	4.6	4.4	4.6	6.2	2.5	54	66	16	5.3	3.5
17	7.0	4.8	4.8	3.8	4.6	7.7	2.2	80	55	32	5.0	3.2
18	6.5	4.8	5.0	3.8	5.0	1.0	2.9	118	55	32	4.8	3.2
19	6.0	4.8	5.5	4.2	5.0	1.0	4.6	129	54	20	4.8	5.0
20	5.0	4.8	5.5	4.4	4.6	7.7	4.9	136	68	17	5.0	5.6
21	4.6	5.0	5.5	4.8	4.4	7.7	3.6	140	76	14	4.8	3.9
22	4.4	5.0	5.0	4.6	4.4	8.5	3.0	152	64	12	4.6	3.5
23	4.2	5.0	4.4	4.4	4.6	1.0	3.2	150	55	12	4.3	3.5
24	4.0	5.0	3.8	4.6	4.8	1.2	2.8	140	45	14	4.1	3.5
25	4.0	5.5	4.0	4.6	5.0	1.2	2.6	152	40	12	4.1	4.3
26	3.8	5.5	4.6	4.2	5.5	1.1	2.3	190	36	10	4.3	5.6
27	3.6	5.0	4.8	4.2	5.5	1.0	2.8	170	34	9.5	4.3	5.0
28	3.6	5.0	4.6	4.8	5.5	1.0	4.5	152	33	8.0	4.6	4.3
29	3.6	5.5	3.6	4.6	-	1.2	7.0	127	31	7.4	4.6	4.1
30	3.6	6.0	4.2	4.8	- - - - -	1.1	7.0	98	26	7.1	4.6	3.9
31	3.6	- - - - -	4.4	5.5	- - - - -	1.0	- - - - -	88	- - - - -	1.1	7.4	- - - - -
Total	159.3	135.7	171.1	135.3	138.4	242.0	931	2,870	1,987	491.0	206.5	155.7
Mean	5.14	4.52	5.52	4.36	4.94	7.81	31.0	92.6	66.2	15.8	6.66	5.19
Max	7.0	6.0	14	5.5	5.5	12	70	190	116	32	18	12
Min	3.6	3.4	3.6	3.6	4.4	5.0	10	25	26	7.1	4.1	3.2
Ac-ft	316	269	339	268	275	480	1,850	5,690	3,940	974	410	309

Cal yr 1966: Total 10,464.4 Mean 28.7 Max 202 Min 3.4 Ac-ft 20,760

Wtr yr 1967: Total 7,623.0 Mean 20.9 Max 190 Min 3.2 Ac-ft 15,120

Peak discharge (base, 200 cfs)--May 26 (0700) 220 cfs (3.30 ft); July 31 (1900) about 200 cfs.

Note.--No gage-height record Oct. 6 to Dec. 1, Dec. 29 to Mar. 8.

9-0837. Prince Creek near Carbondale, Colo.

Location.--Lat 39°19'25", long 107°08'20", in SW¼SW¼, sec.29, T.8 S., R.87 W., on right bank 100 ft from county road, a quarter of a mile downstream from unnamed tributary, and 7 miles southeast of Carbondale.

Drainage area.--3.04 sq mi.

Records available.--October 1963 to September 1967.

Gage.--Water-stage recorder. Altitude of gage is 7,880 ft (from topographic map).

Extremes.--Maximum discharge during year, 15 cfs May 25 (gage height, 2.19 ft); minimum daily, 1.6 cfs Feb. 20.
1963-67: Maximum discharge, 22 cfs July 17, 1965 (gage height, 2.35 ft); no flow Oct. 13, 1963.

Remarks.--Records good except those for period of no gage-height record, which are poor. Water imported above station from Dinkle Lake in West Sopris Creek drainage.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.6	3.3	3.5	2.6	2.0	2.3	4.3	4.3	12	13	9.3	8.9
2	2.8	3.3	3.2	2.4	1.8	2.5	4.3	4.6	12	13	8.6	9.3
3	3.3	3.3	3.0	2.2	1.8	2.5	4.8	4.6	12	13	8.3	9.3
4	3.0	3.3	3.1	2.2	2.0	2.3	5.0	4.6	13	13	8.3	9.3
5	2.8	3.3	3.2	2.4	2.1	2.2	5.3	4.6	13	13	7.4	8.9
6	2.6	3.3	3.2	2.4	2.1	2.1	5.0	4.8	14	13	7.4	8.9
7	2.5	3.3	3.2	2.4	1.8	2.1	5.0	4.6	14	13	9.3	8.6
8	2.4	3.3	3.0	2.2	1.8	2.2	5.3	4.6	14	12	10	8.6
9	2.4	3.3	2.8	2.1	2.2	2.4	5.3	4.3	14	11	10	8.3
10	2.4	3.3	2.6	2.1	2.2	2.5	5.3	4.0	14	11	9.6	8.0
11	2.5	3.3	2.4	2.1	2.0	2.5	5.3	4.0	14	11	8.6	7.7
12	2.5	3.3	2.4	2.2	2.0	2.4	5.3	4.0	14	11	8.6	7.1
13	2.6	3.3	2.5	2.3	2.1	2.3	5.3	4.6	14	11	8.6	6.2
14	2.6	3.0	2.6	2.3	2.1	2.4	5.0	4.6	14	11	8.6	5.9
15	2.6	3.3	2.5	2.2	2.0	2.6	5.0	4.6	13	11	7.7	5.6
16	2.6	3.3	2.5	2.1	2.0	2.8	5.0	4.6	13	11	8.6	5.6
17	2.6	3.6	2.6	2.1	2.1	3.3	4.8	4.6	13	11	9.3	5.6
18	2.6	3.6	2.6	2.1	2.1	3.6	4.8	4.8	13	10	8.9	5.3
19	2.6	3.6	2.6	2.2	2.0	3.3	4.8	5.3	13	9.6	8.9	6.2
20	2.8	3.6	2.6	2.3	1.6	3.3	4.8	5.9	13	9.3	8.9	5.3
21	2.8	3.6	2.6	2.3	1.8	3.6	4.8	6.8	13	8.9	8.9	5.3
22	2.8	3.6	2.4	2.2	2.1	3.8	4.6	9.3	14	8.6	8.6	5.3
23	2.8	3.6	2.2	2.2	2.1	3.8	4.6	12	13	8.9	8.3	5.3
24	2.8	3.6	2.0	2.2	2.1	4.0	4.0	13	13	8.6	8.0	5.3
25	2.8	3.6	2.4	2.2	2.2	3.8	4.0	13	13	8.6	8.0	5.3
26	2.8	3.6	2.6	2.4	2.2	3.8	4.0	14	13	8.9	8.9	5.3
27	3.0	3.8	2.6	2.4	2.1	4.0	4.0	13	13	8.6	9.3	5.3
28	3.3	3.6	2.5	2.2	2.2	4.6	4.0	13	14	8.3	9.3	5.3
29	3.3	3.6	2.0	2.2	-	4.6	4.0	12	13	8.3	9.3	5.0
30	3.3	3.6	2.2	2.2	- - - -	4.0	4.3	11	13	9.3	9.3	5.0
31	3.3	- - - -	2.4	2.2	- - - -	4.6	- - - -	11	- - - -	9.9	9.3	- - - -
Total	85.8	103.1	82.0	69.6	56.6	96.2	142.0	220.1	398	327.8	272.1	201.0
Mean	2.77	3.44	2.65	2.25	2.02	3.10	4.73	7.10	13.3	10.6	8.78	6.70
Max	3.3	3.8	3.5	2.6	2.2	4.6	5.3	14	14	13	10	9.3
Min	2.4	3.0	2.0	2.1	1.6	2.1	4.0	4.0	12	8.3	7.4	5.0
Ac-ft	170	204	163	138	112	191	282	437	789	650	540	399
Cal yr 1966: Total	1,717.5		Mean 4.71	Max 13	Min 1.7	Ac-ft 3,410						
Wtr yr 1967: Total	2,054.3		Mean 5.63	Max 14	Min 1.6	Ac-ft 4,070						

Note.--No gage-height record Dec. 1 to Mar. 15.

9-0840. Cattle Creek near Carbondale, Colo.

Location.--Lat 39°28'00", long 107°03'05", in NE¼ sec.12, T.7 S., R.87 W., on left bank at ford just downstream from Taylor Creek, half a mile upstream from diversion to Missouri Heights Reservoir and 10 miles northeast of Carbondale.

Drainage area.--31.1 sq mi.

Records available.--October 1950 to September 1955, October 1962 to September 1967.

Gage.--Water-stage recorder. Altitude of gage is 7,640 ft (from topographic map).

Average discharge.--10 years, 14.3 cfs (10,350 acre-ft per year).

Extremes.--Maximum discharge during year, 123 cfs May 26 (gage height, 3.37 ft); minimum daily, 2.7 cfs Dec. 28, 29, Jan. 17, 18.
1950-55, 1962-67: Maximum discharge, 280 cfs about June 4, 1952 (gage height, 4.75 ft, from recorded range in stage); minimum daily determined, 1.7 cfs Oct. 3-5, 1963.

Remarks.--Records good except those for winter period, which are poor. Small diversions for irrigation of hay meadows above station.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3.5	4.4	4.7	3.1	3.2	4.4	9.9	18	47	18	5.4	4.4
2	3.6	3.4	4.6	3.1	3.2	4.6	11	17	47	17	5.2	4.2
3	4.4	3.4	4.8	3.0	3.2	4.8	13	16	48	16	5.6	4.1
4	4.4	3.6	4.8	3.0	3.1	4.8	15	15	51	15	5.3	3.8
5	4.1	4.0	4.8	3.0	3.0	4.8	17	14	51	14	4.8	3.6
6	3.8	4.4	5.0	2.9	2.9	4.6	18	14	50	12	5.3	3.6
7	3.8	4.8	5.0	2.8	2.9	4.4	19	15	47	11	5.8	3.8
8	3.6	5.2	4.4	2.8	2.9	4.3	20	17	45	11	5.3	4.2
9	3.6	5.0	3.8	2.9	3.0	4.2	19	24	43	9.6	4.8	5.0
10	3.6	4.6	3.6	3.0	3.1	4.2	17	36	41	9.9	4.7	4.1
11	4.1	4.4	3.6	3.1	3.2	4.3	18	39	39	10	4.4	4.1
12	4.2	4.2	3.8	3.1	3.3	4.6	19	43	38	9.6	4.4	4.6
13	4.2	4.2	3.8	3.1	3.3	4.8	17	45	36	8.1	4.1	4.1
14	5.0	4.2	3.8	3.0	3.3	4.9	16	38	34	8.1	4.1	4.0
15	4.2	4.4	3.6	2.9	3.2	5.0	16	32	32	9.2	4.2	3.8
16	4.4	5.0	3.4	2.8	3.2	6.0	16	29	30	11	4.2	3.6
17	4.4	5.0	3.4	2.7	3.2	7.1	15	37	27	10	4.1	4.0
18	4.4	4.8	3.4	2.7	3.2	8.1	15	50	28	8.8	4.1	4.0
19	4.6	4.4	3.4	2.8	3.1	7.9	17	58	28	7.5	4.2	5.2
20	4.8	4.4	3.2	2.9	3.0	7.5	18	60	30	7.3	4.1	4.2
21	5.2	5.0	3.2	3.0	2.9	7.3	17	72	32	6.9	4.1	4.0
22	5.0	5.0	3.2	3.1	2.9	9.2	16	88	32	6.4	4.4	4.0
23	5.0	4.8	3.2	3.1	2.9	9.6	15	100	30	6.4	4.1	3.8
24	5.2	4.2	3.2	3.0	3.0	9.6	14	106	29	6.5	4.1	4.1
25	5.2	4.2	3.0	3.0	3.2	9.6	13	106	27	6.2	4.1	4.0
26	5.2	4.0	2.9	3.0	3.4	9.2	13	111	25	5.6	4.0	3.6
27	5.2	3.8	2.8	2.9	3.8	8.8	13	111	24	5.6	3.8	3.3
28	5.2	4.7	2.7	2.9	4.0	9.6	16	100	24	5.4	3.8	3.2
29	5.2	4.8	2.7	2.9	-	10	19	82	23	5.3	4.1	3.2
30	5.0	4.8	2.8	3.0	- - - - -	9.5	20	65	20	5.2	4.4	3.3
31	5.0	- - - - -	3.0	3.1	- - - - -	9.0	- - - - -	52	- - - - -	5.0	4.8	- - - - -
Total	139.1	133.1	113.6	91.7	98.6	206.7	481.9	1,610	1,058	287.6	139.8	118.9
Mean	4.49	4.44	3.66	2.96	3.16	6.67	16.1	51.9	35.3	9.28	4.51	3.96
Max	5.2	5.2	5.0	3.1	4.0	10	20	111	51	18	5.8	5.2
Min	3.5	3.4	2.7	2.7	2.9	4.2	9.9	14	20	5.0	3.8	3.2
Ac-ft	276	264	225	182	176	410	956	3,190	2,100	570	277	236

Cal yr 1966: Total 3,866.0 Mean 10.6 Max 72 Min 2.7 Ac-ft 7,670
Wtr yr 1967: Total 4,469.0 Mean 12.2 Max 111 Min 2.7 Ac-ft 8,860

Peak discharge (base, 100 cfs).--May 26 (0500) 123 cfs (3.37 ft).

Note.--No gage-height record Dec. 11 to Mar. 15.

9-0850. Roaring Fork River at Glenwood Springs, Colo.

Location.--Lat 39°32'37", long 107°19'44", in SW¼SE¼ sec.9, T.6 S., R.89 W., on left bank at Glenwood Springs, 2,100 ft upstream from mouth.

Drainage area.--1,451 sq mi (revised).

Records available.--October 1905 to September 1909, September 1910 to September 1967. Monthly discharge only for some periods, published in WSP 1313. Prior to October 1964, published as Roaring Fork at Glenwood Springs.

Gage.--Water-stage recorder. Datum of gage is 5,720.73 ft above mean sea level, adjustment of 1912. Prior to Nov. 20, 1915, chain gage on highway bridge 800 ft downstream at different datum. Nov. 20, 1915, to Oct. 26, 1917, staff gage at present site and datum.

Average discharge.--61 years, 1,375 cfs (995,900 acre-ft per year).

Extremes.--Maximum discharge during year, 6,050 cfs May 26 (gage height, 4.97 ft); minimum daily, 260 cfs May 7.

1905-9, 1910-67: Maximum discharge, 19,000 cfs July 1, 1957; maximum gage height, 8.7 ft June 14, 1921, from floodmarks; minimum discharge, 145 cfs Jan. 21, 1935 (gage height, 0.65 ft); minimum daily, 179 cfs Jan. 21, 1935.

Remarks.--Records good. Diversions above station for irrigation of about 35,000 acres. Transmountain diversions to Arkansas River basin through Busk-Ivanhoe tunnel since 1925 and through Twin Lakes tunnel since 1935 (see elsewhere in this report). Records of chemical analyses and water temperatures for the water year 1967 are published in Part 2 of this report.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	335	474	448	460	358	370	436	558	2,500	3,790	923	586
2	340	460	436	467	320	436	424	442	2,830	3,510	878	551
3	382	467	442	406	310	448	448	364	3,410	3,260	842	530
4	430	467	454	467	335	424	481	305	4,250	3,040	797	530
5	436	460	454	495	364	388	586	275	4,610	2,920	752	509
6	460	448	572	460	330	325	586	265	4,790	2,790	725	495
7	481	448	815	406	364	352	586	260	4,710	2,730	761	481
8	481	488	572	364	290	315	648	265	4,770	2,750	1,080	460
9	488	516	467	350	325	358	707	382	4,650	2,630	1,080	579
10	491	509	394	350	382	394	648	725	4,810	2,390	1,010	608
11	495	516	474	360	340	406	656	815	4,090	2,170	1,000	648
12	523	523	448	380	340	394	716	878	3,890	2,130	905	761
13	530	509	424	380	320	376	689	1,100	3,220	2,100	842	806
14	572	495	430	380	358	358	600	896	2,860	1,940	797	734
15	579	502	474	360	346	358	624	734	2,630	2,180	752	680
16	586	502	412	350	335	370	608	698	2,540	2,070	743	656
17	593	488	474	330	330	418	565	980	2,680	2,290	664	648
18	586	488	460	358	346	467	586	1,450	3,280	2,290	632	632
19	565	474	442	358	346	516	672	1,970	4,130	2,040	624	725
20	565	460	436	352	325	467	734	2,130	4,450	1,780	600	734
21	558	474	424	370	295	424	689	2,480	4,810	1,650	565	716
22	551	467	420	358	325	424	608	3,300	4,610	1,530	544	680
23	530	460	388	358	352	448	586	4,310	4,960	1,430	516	664
24	516	454	346	352	340	460	537	5,060	4,750	1,650	488	656
25	495	436	358	358	340	481	509	5,220	4,650	1,490	488	656
26	488	448	380	340	388	467	442	5,410	4,150	1,320	481	680
27	495	430	420	358	352	448	412	4,330	3,990	1,230	474	707
28	495	424	360	346	352	436	418	4,010	3,930	1,150	474	664
29	488	467	382	352	-	448	537	3,410	3,530	1,010	454	632
30	488	467	436	346	- - - -	481	672	2,960	3,610	1,010	481	593
31	481	- - - -	460	364	- - - -	430	- - - -	2,710	- - - -	960	530	- - - -
Total	15,493	14,221	13,902	11,735	9,508	12,887	17,410	58,692	118,090	65,230	21,902	19,001
Mean	500	474	448	378	340	416	580	1,893	3,936	2,104	707	633
Max	593	523	815	495	388	516	734	5,410	4,960	3,790	1,080	806
Min	335	424	346	330	290	315	412	260	2,500	960	454	460
Ac-ft	30,730	28,210	27,570	23,280	18,860	25,560	34,530	116,400	234,200	129,400	43,440	37,690

Cal yr 1966: Total 316,254 Mean 866 Max 3,510 Min 275 Ac-ft 627,300
 Wtr yr 1967: Total 378,071 Mean 1,036 Max 5,410 Min 260 Ac-ft 749,900

Peak discharge (base, 6,300 cfs).--No peak above base.

9-0851. Colorado River below Glenwood Springs, Colo.

Location.--Lat 39°33'18", long 107°20'13", in NW¼ sec. 9, T.6 S., R.89 W., on left bank 0.6 mile downstream from Roaring Fork River and 1 mile northwest of Post Office in Glenwood Springs.

Drainage area.--6,013 sq mi.

Records available.--October 1966 to September 1967.

Gage.--Digital water-stage recorder. Datum of gage is 5,700.75 ft above mean sea level (State Highway Department bench mark).

Extremes.--Maximum discharge during year, 14,200 cfs June 5 (gage height, 7.03 ft); minimum daily, 924 cfs Jan. 9.

Remarks.--Records good. Natural flow of stream affected by transmountain diversions, storage reservoirs, power development, and diversions for irrigation of 110,000 acres.

DISCHARGE, IN CFS, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.
1	1,470	1,410	1,380	1,150	1,240	1,210	1,720	2,330	6,740	7,030	2,470	2,120
2	1,500	1,400	1,320	1,170	1,120	1,300	1,650	2,050	7,260	6,610	2,400	2,140
3	1,680	1,390	1,290	1,140	1,110	1,420	1,790	1,720	8,100	6,230	2,340	2,080
4	1,860	1,360	1,360	1,160	1,020	1,370	1,930	1,500	9,450	5,870	2,290	2,020
5	1,800	1,350	1,210	1,240	1,150	1,320	2,240	1,420	10,200	5,680	2,220	1,940
6	1,740	1,370	1,500	1,260	1,130	1,100	2,270	1,380	10,400	5,450	2,210	1,880
7	1,770	1,360	1,810	1,160	1,190	1,210	2,330	1,370	10,100	5,170	2,280	1,870
8	1,760	1,410	1,350	1,030	1,060	1,150	2,390	1,450	9,820	5,260	2,640	1,850
9	1,680	1,460	1,210	924	1,010	1,120	2,460	1,680	9,360	5,260	2,740	2,030
10	1,670	1,450	950	1,060	1,230	1,300	2,430	2,460	9,180	4,820	2,570	2,110
11	1,690	1,440	993	1,180	1,180	1,410	2,770	2,870	8,060	4,370	2,520	2,170
12	1,740	1,540	1,100	1,260	1,160	1,450	2,830	2,880	7,620	4,370	2,400	2,340
13	1,740	1,430	1,120	1,230	1,100	1,410	2,690	3,170	6,940	4,310	2,290	2,560
14	1,850	1,510	1,050	1,280	1,180	1,280	2,460	2,880	6,300	4,020	2,150	2,270
15	1,930	1,410	1,070	1,290	1,170	1,280	2,400	2,500	5,960	4,200	2,040	2,190
16	1,900	1,460	1,050	1,170	1,140	1,330	2,250	2,310	6,000	4,210	2,170	2,050
17	1,670	1,400	1,020	1,160	1,160	1,430	2,060	2,630	6,130	4,530	2,140	1,910
18	1,750	1,420	1,050	1,090	1,080	1,550	2,120	3,330	6,750	4,510	2,130	1,880
19	1,720	1,320	1,060	1,110	1,260	1,830	2,330	4,360	7,900	4,110	2,090	2,040
20	1,740	1,390	1,080	1,160	1,180	1,840	2,640	5,000	8,570	3,730	2,060	2,160
21	1,630	1,470	1,070	1,250	1,040	1,700	2,490	5,700	9,410	3,460	2,030	2,030
22	1,580	1,450	1,080	1,240	1,060	1,660	2,240	7,080	9,070	3,430	1,980	1,950
23	1,640	1,350	1,060	1,280	1,160	1,690	2,090	9,170	9,500	3,570	1,940	1,900
24	1,620	1,360	987	1,200	1,200	1,730	1,990	11,100	9,250	3,900	1,910	1,750
25	1,560	1,320	1,010	1,230	1,160	1,820	1,920	11,900	8,910	3,670	1,900	1,830
26	1,550	1,320	1,100	1,140	1,340	1,890	1,810	12,400	8,040	3,390	1,820	1,930
27	1,560	1,210	1,210	1,220	1,210	1,840	1,720	10,900	7,490	3,150	1,820	2,010
28	1,570	1,260	1,190	1,180	1,190	1,670	1,700	10,200	7,530	2,970	1,930	1,950
29	1,520	1,280	1,080	1,180	-----	1,870	1,920	8,940	6,950	2,750	1,790	1,910
30	1,500	1,400	1,110	1,270	-----	1,860	2,350	7,940	6,930	2,580	1,950	1,850
31	1,440	-----	1,150	1,230	-----	1,820	-----	7,300	-----	2,490	2,020	-----
TOTAL	51,830	41,700	36,020	36,644	32,230	46,860	65,990	151,920	243,920	135,100	67,240	60,720
MEAN	1,672	1,390	1,162	1,182	1,151	1,512	2,200	4,901	8,131	4,358	2,169	2,024
MAX	1,930	1,540	1,810	1,290	1,340	1,890	2,830	12,400	10,400	7,030	2,740	2,560
MIN	1,440	1,210	950	924	1,010	1,100	1,650	1,370	5,960	2,490	1,790	1,750
AC-FT	102,800	82,710	71,440	72,680	63,930	92,950	130,900	301,300	483,800	268,000	133,400	120,400

CAL YR 1966: TOTAL MEAN MAX MIN AC-FT
WAT YR 1967: TOTAL 970,174 MEAN 2,658 MAX 12,400 MIN 924 AC-FT 1,924,000

9-0876. Colorado River at New Castle, Colo.

Location.--Lat 39°34'06", long 107°32'26", in SW¼ sec.31, T.5 S., R.90 W., on left bank at southwest edge of New Castle, 50 ft downstream from county bridge, and 600 ft downstream from Elk Creek.

Drainage area.--6,308 sq mi.

Records available.--July 1966 to September 1967.

Gage.--Water-stage recorder. Altitude of gage is 5,515 ft (from topographic map).

Extremes.--1966: Maximum discharge during period July to September, about 4,000 cfs July 2; minimum daily, 1,540 cfs Sept. 24-27.
1966-67: Maximum discharge during water year, 14,400 cfs May 26 (gage height, 9.35 ft); minimum daily, 1,000 cfs Jan. 9.

Remarks.--Records good except those for winter period, which are poor. Natural flow of stream affected by transmountain diversion, storage reservoirs, power development, and diversions for irrigation of about 115,000 acres.

Discharge, in cubic feet per second, July to September 1966

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1										3,600	1,930	1,820
2										3,800	1,880	1,800
3										3,600	1,980	1,820
4										3,400	2,450	1,780
5										3,200	2,740	1,800
6										3,100	2,540	1,780
7										2,900	2,220	1,760
8										2,750	2,040	1,800
9										2,620	1,850	1,760
10										2,510	1,820	1,740
11										2,420	1,790	1,720
12										2,560	1,820	1,740
13										2,540	2,060	1,720
14										2,500	2,060	1,740
15										2,380	2,020	1,700
16										2,270	1,890	1,720
17										2,220	1,770	1,740
18										2,160	1,760	1,760
19										2,260	1,740	1,700
20										2,450	1,830	1,620
21										2,380	1,930	1,600
22										2,420	2,030	1,580
23										2,320	1,930	1,560
24										2,360	1,800	1,540
25										2,420	1,780	1,540
26										2,390	1,820	1,540
27										2,300	1,900	1,540
28										2,220	1,780	1,550
29										2,160	1,760	1,550
30										2,070	1,760	1,550
31		-----			-----		-----		-----	1,990	1,830	-----
Total										80,270	60,510	50,570
Mean										2,589	1,952	1,686
Max										3,800	2,740	1,820
Min										1,990	1,740	1,540
Ac-ft										159,200	120,000	100,300

Cal yr : Total Mean Max Min Ac-ft
Wtr yr 1966: Total Mean Max Min Ac-ft

9-0876. Colorado River at New Castle, Colo.--Continued

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,490	1,420	1,390	1,200	1,340	1,300	1,840	2,460	7,670	7,240	2,600	2,150
2	1,500	1,410	1,340	1,220	1,210	1,350	1,740	2,160	8,320	6,830	2,510	2,150
3	1,670	1,400	1,300	1,200	1,130	1,510	1,850	1,780	9,430	6,400	2,450	2,100
4	1,860	1,380	1,380	1,220	1,130	1,470	2,010	1,560	10,900	6,020	2,380	2,030
5	1,800	1,380	1,220	1,260	1,200	1,420	2,340	1,470	11,500	5,780	2,290	1,950
6	1,760	1,400	1,530	1,280	1,190	1,220	2,420	1,430	11,600	5,560	2,260	1,880
7	1,770	1,400	1,890	1,200	1,230	1,260	2,500	1,400	11,300	5,260	2,330	1,860
8	1,760	1,420	1,490	1,100	1,190	1,230	2,580	1,470	11,000	5,300	2,750	1,880
9	1,680	1,480	1,300	1,000	1,090	1,190	2,620	1,680	10,400	5,320	2,880	2,100
10	1,660	1,480	1,020	1,100	1,240	1,380	2,640	2,640	10,200	4,890	2,720	2,160
11	1,700	1,500	1,020	1,220	1,290	1,480	2,880	3,090	8,950	4,410	2,640	2,230
12	1,730	1,550	1,140	1,300	1,230	1,530	3,080	2,960	8,400	4,450	2,480	2,420
13	1,770	1,500	1,160	1,280	1,160	1,490	2,860	3,260	7,700	4,400	2,340	2,680
14	1,840	1,550	1,100	1,300	1,230	1,370	2,680	3,020	6,970	4,170	2,290	2,400
15	1,930	1,500	1,100	1,300	1,250	1,370	2,560	2,600	6,570	4,380	2,060	2,230
16	1,930	1,500	1,080	1,180	1,210	1,410	2,400	2,400	6,570	4,450	2,190	2,100
17	1,700	1,460	1,060	1,200	1,190	1,480	2,190	2,850	6,660	4,850	2,160	1,910
18	1,780	1,480	1,080	1,160	1,170	1,610	2,200	3,640	7,260	4,830	2,150	1,900
19	1,720	1,400	1,100	1,120	1,300	1,820	2,420	4,760	8,510	4,340	2,100	2,060
20	1,740	1,440	1,120	1,170	1,230	1,920	2,800	5,480	9,340	3,960	2,080	2,220
21	1,660	1,480	1,120	1,230	1,100	1,780	2,660	6,420	10,200	3,630	2,060	2,060
22	1,600	1,500	1,150	1,240	1,130	1,730	2,370	8,240	9,800	3,630	1,980	1,950
23	1,650	1,400	1,150	1,250	1,210	1,760	2,190	10,600	10,100	3,730	1,940	1,910
24	1,630	1,400	1,060	1,230	1,280	1,810	2,050	12,600	10,000	4,110	1,910	1,780
25	1,580	1,380	1,080	1,240	1,230	1,890	1,990	13,300	9,490	3,870	1,900	1,820
26	1,550	1,360	1,120	1,140	1,440	1,960	1,860	13,700	8,510	3,580	1,830	1,930
27	1,570	1,280	1,220	1,220	1,300	1,940	1,780	12,400	8,090	3,340	1,820	2,030
28	1,530	1,260	1,220	1,290	1,270	1,730	1,760	11,700	7,880	3,130	1,950	1,980
29	1,590	1,300	1,140	1,300	-	1,950	1,960	10,400	7,240	2,930	1,790	1,930
30	1,510	1,410	1,160	1,300	- - - -	1,950	2,430	9,070	7,140	2,700	1,950	1,880
31	1,450	- - - -	1,200	1,350	- - - -	1,920	- - - -	8,350	- - - -	2,600	2,030	- - - -
Total	52,110	42,820	37,440	37,800	34,170	49,230	69,660	168,890	267,700	140,090	68,820	61,680
Mean	1,681	1,427	1,208	1,219	1,220	1,588	2,322	5,448	8,923	4,519	2,220	2,056
Max	1,930	1,550	1,890	1,350	1,440	1,960	3,080	13,700	11,600	7,240	2,880	2,680
Min	1,450	1,260	1,020	1,000	1,090	1,190	1,740	1,400	6,570	2,600	1,790	1,780
Ac-ft	103,400	84,930	74,260	74,980	67,780	97,650	138,200	335,000	531,000	277,900	136,500	122,300

Cal yr 1966: Total - Mean - Max - Min - Ac-ft -
Wtr yr 1967: Total 1,030,410 Mean 2,823 Max 13,700 Min 1,000 Ac-ft 2,044,000

9-0890. West Divide Creek below Willow Creek, near Raven, Colo.

Location.--Lat 39°16'32", long 107°31'10", in sec.14, T.9 S., R.91 W., on right bank at upstream side of bridge, 0.4 mile downstream from Willow Creek, 13 miles south of Raven, and 20 miles south of Silt.

Drainage area.--34.9 sq mi.

Records available.--October 1938 to September 1947, October 1963 to September 1967.

Gage.--Water-stage recorder. Altitude of gage is 7,820 ft (from topographic map). October 1938 to September 1947 at site 0.25 mile upstream at different datum.

Average discharge.--13 years, 26.5 cfs (19,190 acre-ft per year).

Extremes.--Maximum discharge during year, 165 cfs May 26 (gage height, 3.40 ft); minimum daily, 0.20 cfs Jan. 18.

1938-47, 1963-67: Maximum discharge, 876 cfs May 13, 1941 (gage height, 3.27 ft, site and datum then in use), from rating curve extended above 320 cfs; no flow at times in 1939, 1940.

Remarks.--Records good except those for winter period, which are poor. Records include water imported from Gunnison and Roaring Fork River basins.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.42	0.40	1.0	0.40	0.70	1.0	5.8	27	59	29	2.9	3.3
2	.42	.50	1.0	.40	.70	.90	8.1	21	68	24	1.9	1.3
3	.78	.60	1.0	.50	.60	.90	12	17	74	19	1.3	.62
4	.86	.60	1.2	.60	.60	.90	15	15	85	17	1.2	.58
5	.70	.60	1.2	.80	.70	1.0	15	15	87	15	1.1	.46
6	.70	.70	1.3	.80	.80	1.1	14	17	87	13	1.3	.38
7	.86	.80	2.0	.70	.80	1.2	17	16	80	13	2.9	.27
8	.66	.90	1.7	.50	.80	1.2	19	28	72	20	9.9	.46
9	.58	1.0	1.0	.40	.80	1.2	17	42	67	13	4.0	1.4
10	.62	1.0	.80	.40	.80	1.3	14	78	64	9.9	3.5	1.1
11	.70	.90	.70	.50	.70	1.6	19	78	62	11	2.9	1.4
12	1.0	.80	.70	.60	.70	2.0	23	80	64	12	1.9	4.8
13	1.0	.80	.70	.60	.60	2.0	14	75	60	7.2	1.5	1.2
14	1.3	.90	.70	.60	.60	1.9	14	48	62	6.9	1.2	.70
15	1.1	1.2	.70	.50	.80	1.7	14	37	57	9.4	.94	.58
16	1.2	1.2	.80	.40	.80	2.7	14	38	57	10	1.0	.54
17	1.2	1.2	.90	.30	.70	3.6	12	62	56	24	.94	.46
18	1.0	1.1	.90	.20	.60	5.0	17	85	58	20	.70	.50
19	.94	.86	.90	.30	.55	6.0	24	91	62	11	.62	1.3
20	1.1	.94	.90	.40	.50	6.0	30	96	74	8.1	.66	1.0
21	1.1	1.0	.80	.40	.40	5.5	18	103	77	6.9	.62	.58
22	1.2	1.1	.70	.40	.40	5.5	17	116	72	6.6	.62	.38
23	1.3	.94	.60	.30	.60	6.5	19	114	67	6.3	.58	.27
24	1.1	.70	.70	.30	.78	7.0	15	107	60	6.6	.46	.34
25	.94	.70	.70	.30	.78	7.0	15	109	54	5.5	.42	.66
26	.94	.94	.80	.40	.86	6.0	14	140	50	4.5	.38	1.0
27	.86	.94	.70	.40	.86	5.2	18	118	46	4.2	.38	.86
28	.94	1.0	.70	.40	.94	5.0	37	100	44	3.8	.42	.62
29	.80	1.0	.60	.40	-	6.0	50	82	39	3.3	.46	.50
30	.70	1.1	.50	.50	- - - - -	5.5	48	67	33	3.1	.58	.42
31	.60	- - - - -	.40	.60	- - - - -	5.0	- - - - -	59	- - - - -	2.9	1.3	- - - - -
Total	27.62	26.42	27.30	14.30	19.47	107.40	568.9	2,081	1,897	346.2	48.58	27.98
Mean	0.891	0.881	0.881	0.461	0.695	3.46	19.0	67.1	63.2	11.2	1.57	0.933
Max	1.3	1.2	2.0	0.80	0.94	7.0	50	140	87	29	9.9	4.8
Min	0.42	0.40	0.40	0.20	0.40	0.90	5.8	15	33	2.9	0.38	0.27
Ac-ft	55	52	54	28	39	213	1,130	4,130	3,760	687	96	55
(†)	0	0	0	0	0	0	0	0	1,910	427	0	0

Cal yr 1966: Total 7,795.44 . Mean 21.4 Max 192 Min 0.10 Ac-ft 15,460
Wtr yr 1967: Total 5,192.17 Mean 14.2 Max 140 Min 0.20 Ac-ft 10,300

Peak discharge (base, 150 cfs).--May 26 (0600) 165 cfs (3.40 ft).

† Imports, in acre-feet, from Gunnison and Roaring Fork River basins; furnished by State engineer of Colorado.

9-0895. West Divide Creek near Raven, Colo.

Location.--Lat 39°19'52", long 107°34'46", in W½ sec.29, T.8 S., R.91 W., on left bank 10 ft downstream from private road bridge, 0.8 mile upstream from Brook Creek, 8 miles south of Raven, and 16 miles south of Silt.

Drainage area.--64.6 sq mi (revised).

Records available.--October 1955 to September 1967.

Gage.--Water-stage recorder. Altitude of gage is 7,050 ft (from topographic map).

Average discharge.--12 years, 27.2 cfs (19,690 acre-ft per year).

Extremes.--Maximum discharge during year, 157 cfs May 25 (gage height, 3.90 ft); no flow Aug. 29.

1955-67: Maximum discharge, 790 cfs May 12, 1962 (gage height, 5.41 ft), from rating curve extended above 350 cfs; no flow at times in most years.

Remarks.--Records good except those for winter period, which are poor. Records include water imported from Gunnison River, Plateau Creek, and Roaring Fork River basins.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.22	0.78	1.9	1.1	1.8	2.0	6.8	32	68	30	2.1	0.96
2	.23	.70	1.6	1.1	1.8	1.8	9.4	26	70	26	2.0	1.4
3	.44	.74	1.7	1.2	1.8	1.8	13	22	73	21	1.4	1.0
4	.58	.74	2.1	1.6	1.8	1.8	18	19	80	18	1.2	.76
5	.62	.78	2.1	1.8	1.8	1.7	20	20	84	16	1.1	.62
6	.58	.78	2.4	1.7	1.8	1.6	18	23	85	13	1.1	.54
7	.62	.82	2.8	1.6	1.8	1.6	20	21	81	13	1.5	.50
8	.58	1.2	2.7	1.4	1.8	1.6	24	29	76	20	4.5	.46
9	.58	1.3	2.4	1.3	1.8	2.0	23	52	71	14	2.7	.54
10	.58	1.3	2.0	1.3	1.8	2.2	16	74	69	12	2.2	1.2
11	.58	1.4	1.8	1.4	1.8	2.6	20	79	69	9.7	2.0	1.1
12	.70	1.3	1.6	1.5	1.7	2.8	27	76	70	18	1.6	2.7
13	.78	1.1	1.6	1.5	1.6	2.8	17	77	73	10	1.3	1.8
14	1.1	1.2	1.6	1.5	1.6	3.4	14	57	79	7.6	1.1	1.3
15	.84	1.3	1.6	1.3	1.7	3.8	16	46	72	6.8	.90	1.0
16	.80	1.6	1.7	1.2	1.6	4.5	16	43	72	8.2	.86	.90
17	.84	1.4	1.8	1.1	1.5	6.6	12	60	65	24	.84	.86
18	.78	1.6	1.9	1.1	1.5	9.1	15	83	67	24	.80	.84
19	.70	1.1	2.0	1.2	1.5	10	29	98	67	14	.72	.96
20	.74	1.0	2.0	1.4	1.4	9.4	34	95	78	9.4	.66	1.6
21	.84	1.6	1.9	1.6	1.3	7.6	24	96	83	7.3	.64	1.4
22	1.2	1.4	1.6	1.7	1.2	7.6	19	110	73	6.1	.64	1.0
23	1.3	1.4	1.5	1.7	1.2	9.7	23	120	69	5.7	.58	.88
24	1.1	1.0	1.5	1.7	1.3	12	20	116	60	5.2	.52	.78
25	.96	.82	1.6	1.7	1.5	12	19	112	53	4.8	.48	.82
26	1.1	1.1	1.8	1.7	1.8	7.9	18	141	47	4.0	.46	1.2
27	1.2	1.2	1.8	1.7	2.0	7.6	20	116	43	3.4	.38	1.3
28	1.2	1.1	1.5	1.8	2.0	6.8	36	103	39	3.1	.22	1.3
29	1.2	1.3	1.2	1.8	-	8.8	48	92	38	2.8	0	1.1
30	1.1	1.7	1.2	1.8	- - - - -	8.8	50	78	33	2.4	.07	1.0
31	1.1	- - - - -	1.1	1.8	- - - - -	6.6	- - - - -	71	- - - - -	2.4	.54	- - - - -
Total	25.19	34.76	56.0	46.3	46.2	168.5	645.2	2,177	2,007	361.9	35.11	31.82
Mean	0.813	1.16	1.81	1.49	1.65	5.44	21.5	70.2	66.9	11.7	1.13	1.06
Max	1.3	1.7	2.8	1.8	2.0	12	50	141	85	30	4.5	2.7
Min	0.22	0.70	1.1	1.1	1.2	1.6	6.8	19	33	2.4	0	0.46
Ac-ft	50	69	111	92	92	334	1,280	4,320	3,980	718	70	63
(†)	0	0	0	0	0	0	21	404	2,480	428	0	0

Cal yr 1966: Total 9,048.65 Mean 24.8 Max 197 Min 0.10 Ac-ft 17,950

Wtr yr 1967: Total 5,634.98 Mean 15.4 Max 141 Min 0 Ac-ft 11,180

Peak discharge (base, 160 cfs).--No peak above base.

† Imports, in acre-feet, from Gunnison River, Plateau Creek, and Roaring Fork River basins; furnished by State engineer of Colorado.

9-0925. Beaver Creek near Rifle, Colo.

Location.--Lat 39°28'20", long 107°49'55", in NE¼ sec.1, T.7 S., R.94 W., on left bank 150 ft upstream from unnamed tributary, 200 ft upstream from road bridge, 4 miles upstream from mouth, and 4.8 miles southwest of Rifle.

Drainage area.--7.90 sq mi.

Records available.--October 1952 to September 1967.

Gage.--Digital water-stage recorder and plank control. Altitude of gage is 6,685 ft (from topographic map). Prior to Oct. 1, 1966, graphic water-stage recorder at same site and datum.

Average discharge.--15 years, 4.26 cfs (3,080 acre-ft per year).

Extremes.--Maximum discharge during year, 49 cfs May 22, 27 (gage height, 3.67 ft); minimum daily, 0.36 cfs Nov. 2.

1952-67: Maximum discharge, 85 cfs May 24, 1964 (gage height, 4.00 ft), from rating curve extended above 37 cfs; minimum daily, 0.3 cfs Jan. 4-6, 1959.

Remarks.--Records good except those for winter period, which are poor. Diversions above station for irrigation of about 170 acres below station and about 380 acres in Mamm Creek basin.

DISCHARGE, IN CFS, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.
1	.70	.38	.90	.80	1.0	1.0	1.0	2.6	19	10	2.9	1.8
2	1.0	.36	.90	1.0	1.0	1.2	.99	2.4	21	9.2	2.7	1.6
3	1.6	.54	1.0	.80	1.0	1.1	1.1	2.2	25	8.0	2.7	1.5
4	1.2	.54	1.0	1.2	.96	1.2	1.9	2.2	25	7.2	2.5	1.4
5	1.1	.38	.90	1.2	.97	1.1	2.4	2.3	25	7.1	2.3	1.4
6	1.1	.54	1.7	1.2	.96	.97	1.6	2.3	26	7.4	2.2	1.4
7	1.1	.50	2.3	1.0	.96	.96	1.6	2.4	25	7.3	3.1	1.4
8	1.1	.60	1.3	.80	.80	.96	1.6	3.4	24	8.1	4.2	1.6
9	1.0	.50	1.0	.80	.90	1.0	1.6	5.0	22	6.8	3.3	2.1
10	.90	.70	.80	.80	.90	1.1	1.5	6.3	21	6.1	3.3	1.5
11	1.2	.70	.80	.80	.92	1.3	1.5	6.1	21	5.9	3.3	1.8
12	1.4	.60	.80	.80	.94	1.1	1.5	6.0	21	5.8	2.7	2.1
13	1.2	.54	.80	.80	.93	1.1	1.4	6.5	20	5.1	2.5	1.5
14	1.1	.54	.80	.80	.97	1.1	1.3	5.6	18	5.0	2.3	1.5
15	1.0	.54	.80	.80	.98	.98	1.5	5.4	18	6.5	2.3	1.5
16	1.2	.60	.80	.80	.96	1.2	1.6	7.1	17	5.7	2.3	1.4
17	1.0	.60	.80	.80	.96	1.5	1.4	9.9	17	7.6	2.1	1.4
18	1.0	.50	.80	.80	.96	1.8	1.7	12	18	6.3	2.0	1.4
19	.82	.54	1.0	.80	.98	1.6	2.1	17	18	5.3	1.9	1.7
20	1.1	.54	1.0	1.0	.96	1.4	2.1	23	24	4.8	1.8	1.5
21	1.0	.60	1.0	1.0	.96	1.4	1.9	31	27	4.5	1.8	1.4
22	.90	.50	1.0	1.0	1.1	1.3	1.8	36	24	4.2	1.7	1.4
23	1.1	.50	1.0	1.0	.96	1.4	1.8	36	22	4.5	1.7	1.4
24	.90	.40	1.0	1.0	.96	1.5	1.7	36	21	4.7	1.6	1.3
25	1.0	.40	1.0	1.0	.98	1.4	1.8	36	18	4.1	1.6	1.5
26	1.0	.54	.90	1.2	1.0	1.3	1.7	37	17	3.7	1.6	2.1
27	1.0	1.4	.80	1.2	.96	1.1	1.8	40	15	3.5	1.6	1.5
28	1.0	1.1	.80	1.2	.98	1.1	2.6	34	13	3.3	1.5	1.4
29	1.0	.80	.80	1.2	-----	1.2	3.2	27	12	3.1	1.6	1.4
30	.90	1.0	.80	1.2	-----	1.0	3.0	24	11	3.0	1.8	1.3
31	.90	-----	.80	1.2	-----	1.1	-----	21	-----	3.0	1.8	-----
TOTAL	32.52	17.98	30.10	30.00	26.91	37.47	52.69	487.7	605	176.8	70.7	46.2
MEAN	1.05	.60	.97	.97	.96	1.21	1.76	15.7	20.2	5.70	2.28	1.54
MAX	1.6	1.4	2.3	1.2	1.1	1.8	3.2	40	27	10	4.2	2.1
MIN	.70	.36	.80	.80	.80	.96	.99	2.2	11	3.0	1.5	1.3
AC-FT	65	36	60	60	53	74	105	967	1,200	351	140	92

CAL YR 1966: TOTAL 1,465.20 MEAN 4.01 MAX 32 MIN .36 AC-FT 2,910
WAT YR 1967: TOTAL 1,614.07 MEAN 4.42 MAX 40 MIN .36 AC-FT 3,200

Peak discharge (base, 25 cfs)

Note.--No gage height record Dec. 29 to Feb. 3.

Date	Time	Gage height	Discharge	Date	Time	Gage height	Discharge
5-22	1800	3.67	49	6-3	1830	3.49	30
5-27	1630	3.67	49	6-20	2215	3.58	38

9-0930. Parachute Creek near Grand Valley, Colo.

Location.--Lat 39°34'15", long 108°06'35", in NE¼ sec.36, T.5 S., R.96 W., on right bank 600 ft downstream from bridge, 0.2 mile downstream from confluence of West and East Forks, and 9 miles north of Grand Valley.

Drainage area.--141 sq mi (revised).

Records available.--October 1948 to September 1954, October 1964 to September 1967.

Gage.--Water-stage recorder. Altitude of gage is 5,770 ft (from topographic map). October 1948 to September 1954, at site 500 ft upstream at different datum.

Average discharge.--9 years, 17.7 cfs (12,810 acre-ft per year).

Extremes.--Maximum discharge during year, 24 cfs May 12 (gage height, 2.64 ft); no flow for many days.

1948-54, 1964-67: Maximum discharge, 738 cfs May 5, 1952; maximum gage height, 5.20 ft May 6, 1952, site and datum then in use; no flow Dec. 2, 1948 (field observation), and many days in 1965, 1967.

Remarks.--Records fair except those for winter period, which are poor. Diversions for irrigation of about 75 acres above station. One diversion from East Fork bypasses station for irrigation of about 100 acres below station.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.0	0	0		0	0.50	0.16	18	18	11	3.9	2.2
2	1.4	0	0		0	.40	.14	18	18	10	3.9	2.0
3	3.2	0	0		0	.30	.72	16	18	9.9	3.6	1.8
4	2.4	0	0		0	.20	7.2	17	17	9.0	3.6	1.5
5	1.6	0	.10		0	.10	17	17	18	8.7	3.3	1.4
6	.90	0	2.0		0	0	15	17	18	8.4	3.3	1.5
7	.32	.10	3.0		0	0	16	17	18	8.1	5.1	1.5
8	.20	.20	1.5		0	0	19	18	18	8.4	4.5	1.4
9	.20	.10	.80		0	.05	19	19	18	7.5	3.6	3.6
10	20	0	0		0	.10	17	20	17	7.2	3.6	2.0
11	.20	0	0		0	.10	18	23	17	6.6	3.6	2.0
12	.15	0	0		0	.10	18	24	18	6.6	2.8	2.8
13	.15	0	0		0	.10	18	24	18	6.3	2.7	2.2
14	.20	0	0		0	.10	17	24	19	6.3	2.6	2.0
15	.26	0	0		0	.10	18	23	18	6.6	2.6	1.8
16	.26	0	0		0	.15	19	22	18	7.8	2.4	1.8
17	.26	0	0		0	.15	18	22	17	8.7	2.2	1.6
18	.29	0	0		0	.15	19	22	17	8.4	2.2	1.4
19	.20	0	0		0	.15	22	22	16	7.2	2.2	1.6
20	.15	0	0		0	.15	21	22	17	6.6	2.2	1.3
21	.10	.10	0		0	.15	20	22	16	6.3	2.1	1.3
22	.10	.20	0		0	.15	19	22	16	5.4	2.0	1.4
23	.10	.10	0		.10	.20	20	21	14	4.8	2.0	1.3
24	.10	.10	0		.10	.20	19	21	14	4.8	2.0	1.3
25	.05	.10	0		.20	.20	20	20	14	4.8	1.8	1.5
26	0	.05	0		.30	.20	19	21	13	4.5	2.0	1.8
27	0	0	0		.50	.20	18	22	13	4.2	1.8	1.5
28	0	0	0		.50	.54	18	21	12	4.2	2.0	1.5
29	0	0	0		-	.60	18	21	12	4.5	2.1	1.6
30	0	0	0		- - - - -	.16	19	21	11	4.2	2.0	1.6
31	0	- - - - -	0		- - - - -	.15	- - - - -	21	- - - - -	3.9	2.1	- - - - -
Total	13.99	1.05	7.40	0	1.70	5.65	489.22	638	488	210.9	85.8	52.2
Mean	0.451	0.035	0.239	0	0.061	0.182	16.3	20.6	16.3	6.80	2.77	1.74
Max	3.2	0.20	3.0	0	0.50	0.60	22	24	19	11	5.1	3.6
Min	0	0	0	0	0	0	0.14	16	11	3.9	1.8	1.3
Ac-ft	28	2.1	15	0	3.4	11	970	1,270	968	418	170	104

Cal yr 1966: Total 3,194.24 Mean 8.75 Max 63 Min 0 Ac-ft 6,340

Wtr yr 1967: Total 1,993.91 Mean 5.46 Max 24 Min 0 Ac-ft 3,950

Peak discharge (base, 150 cfs).--No peak above base.

Note.--No gage-height record Nov. 28 to Mar. 6.

9-0937. Colorado River near De Beque, Colo.

Location.--Lat 39°21'45", long 108°09'05", in NE¼SW¼ sec.7, T.8 S., R.96 W., on left bank 3 miles downstream from Alkali Creek and 3.8 miles northeast of De Beque.

Drainage area.--7,370 sq mi.

Records available.--October 1966 to September 1967.

Gage.--Water-stage recorder. Altitude of gage is 4,940 ft (from topographic map).

Extremes.--Maximum discharge during water year, 14,400 cfs May 26 (gage height, 9.03 ft); maximum gage height, 10.75 ft Jan. 8 (backwater from ice); minimum daily discharge, 1,050 cfs Dec. 11.

Remarks.--Records good except those for winter period or no gage-height record, which are poor. Natural flow of stream affected by transmountain diversion, storage reservoirs, power development, and diversions for irrigation of about 158,000 acres.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1500	1500	1510	1280	1440	1430	1940	2460	8050	7420	2490	2080
2	1520	1480	1440	1260	1380	1420	1810	2220	8300	7060	2430	2110
3	1700	1460	1420	1240	1230	1550	1810	1840	9220	6700	2330	2020
4	1820	1440	1430	1280	1140	1550	2040	1600	10600	6270	2320	1950
5	1800	1420	1420	1300	1200	1550	2250	1400	11400	5980	2230	1940
6	1780	1440	1620	1300	1200	1420	2470	1380	11600	5740	2210	1810
7	1780	1460	2430	1280	1130	1300	2460	1300	11400	5450	2330	1780
8	1780	1500	1810	1200	1290	1200	2490	1360	11100	5230	2500	1800
9	1700	1520	1490	1100	1070	1200	2560	1450	10600	5380	2670	2040
10	1680	1520	1240	1160	1170	1400	2640	1930	10300	5140	2760	2110
11	1700	1540	1050	1280	1300	1430	2540	2840	9680	4590	2580	2210
12	1740	1560	1170	1340	1290	1580	3070	2960	8880	4580	2490	2320
13	1780	1540	1260	1320	1260	1560	2880	3090	8300	4360	2370	2580
14	1850	1560	1210	1360	1180	1500	2790	3260	7530	4220	2260	2470
15	1940	1540	1100	1380	1340	1390	2490	2790	6960	4020	2110	2300
16	1940	1560	1210	1320	1300	1370	2560	2520	6750	4190	2090	2190
17	1740	1520	1110	1240	1210	1450	2300	2620	6870	4680	2180	1970
18	1780	1500	1160	1200	1250	1620	2190	3310	7240	4790	2140	1910
19	1740	1520	1140	1200	1320	1740	2320	4420	8350	4380	2110	1970
20	1760	1430	1200	1260	1320	2010	2580	5480	9190	4000	2080	2180
21	1680	1490	1210	1320	1230	1910	2710	6460	10200	3640	2070	2140
22	1660	1560	1190	1340	1120	1770	2430	7870	10000	3480	2010	2000
23	1680	1430	1190	1340	1160	1780	2220	10100	10200	3520	1930	1940
24	1680	1420	1100	1360	1320	1820	2070	12000	10000	3880	1890	1860
25	1660	1430	1100	1320	1340	1860	2010	13200	9740	3940	1850	1740
26	1640	1370	1160	1300	1620	1970	1930	13700	8940	3560	1820	1810
27	1620	1320	1240	1340	1620	2000	1800	12900	8440	3090	1720	1900
28	1640	1220	1240	1360	1420	1930	1720	11900	8100	3070	1840	1940
29	1620	1310	1200	1380	-	1850	1760	10900	7760	2830	1810	1890
30	1600	1480	1200	1440	- - - - -	2040	2020	9590	7270	2580	1780	1850
31	1560	- - - - -	1240	1440	- - - - -	2000	- - - - -	8800	- - - - -	2550	1950	- - - - -
Total	53,070	44,040	40,490	40,240	35,850	50,600	68,860	167,650	272,970	140,120	67,350	60,810
Mean	1,712	1,468	1,306	1,298	1,280	1,632	2,295	5,408	9,099	4,520	2,173	2,027
Max	1,940	1,560	2,430	1,440	1,620	2,040	3,070	13,700	11,600	7,420	2,760	2,580
Min	1,500	1,220	1,050	1,100	1,070	1,200	1,720	1,300	6,750	2,550	1,720	1,740
Ac-ft	105,300	87,350	80,310	79,810	71,110	100,400	136,600	332,500	541,400	277,900	133,600	120,600

Cal yr 1966: Total - Mean - Max - Min - Ac-ft -
 Wtr yr 1967: Total 1,042,050 Mean 2,855 Max 13,700 Min 1,050 Ac-ft 2,067,000

Note.--No gage-height record Oct. 1 to Nov. 17.

ROAN CREEK BASIN

9-0942. Roan Creek above Clear Creek, near De Beque, Colo.

Location.--Lat 39°29'30", long 108°21'15", in SE¼NW¼ sec.32, T.6 S., R.98 W., on left bank 1.7 miles upstream from Clear Creek and 14 miles northwest of De Beque.

Drainage area.--151 sq mi.

Records available.--October 1962 to September 1967.

Gage.--Water-stage recorder. Altitude of gage is 5,560 ft (from topographic map).

Average discharge.--5 years, 14.8 cfs (10,720 acre-ft per year).

Extremes.--Maximum discharge during year, 300 cfs Aug. 7 (gage height, 5.43 ft); minimum daily, 3.8 cfs Oct. 27, Nov. 13, Dec. 16, 17, 23, 24.

1962-67: Maximum discharge, about 800 cfs Aug. 14, 1965 (gage height, 7.26 ft); minimum daily, 1.0 cfs Nov. 23, 1963.

Remarks.--Records fair. Diversions for irrigation of about 1,400 acres above station.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5.1	5.1	7.2	6.3	8.2	13	13	17	22	20	16	10
2	5.4	4.8	6.9	6.3	7.2	13	13	19	22	20	15	7.2
3	8.2	4.8	6.9	4.5	7.2	13	12	20	22	20	14	7.2
4	6.6	4.8	7.2	6.0	6.9	12	13	20	22	20	14	6.6
5	6.0	4.5	8.2	6.6	7.8	11	13	20	23	20	13	7.5
6	5.7	4.8	11	6.6	5.4	9.2	13	20	22	20	13	8.9
7	7.8	6.0	17	5.4	7.5	10	13	20	22	22	35	10
8	6.6	7.5	8.9	4.0	4.8	9.2	13	20	22	25	16	11
9	6.0	6.6	4.0	4.0	6.9	10	13	21	22	21	13	13
10	6.0	5.1	4.0	4.6	7.2	11	13	21	22	21	12	6.9
11	5.1	4.5	5.1	5.0	6.0	11	13	21	22	21	13	8.2
12	5.1	4.0	4.8	5.5	6.9	11	13	21	22	21	13	9.6
13	4.8	3.8	4.0	5.5	6.9	11	14	23	23	21	13	8.2
14	4.6	4.0	4.2	5.0	7.5	11	13	23	25	21	13	7.8
15	4.4	4.5	4.4	5.0	7.8	11	13	23	24	25	13	7.5
16	4.2	4.2	3.8	4.8	7.2	11	13	23	22	23	11	7.5
17	4.0	4.8	3.8	4.0	6.0	11	14	23	23	35	11	6.3
18	4.0	5.1	4.2	4.8	8.2	11	15	23	24	25	9.6	6.3
19	4.0	4.8	4.4	5.0	7.5	11	15	23	24	18	9.2	7.2
20	4.2	5.7	4.4	6.0	6.6	11	15	23	28	16	10	6.9
21	4.4	6.3	4.4	7.2	5.7	11	15	23	26	16	10	6.3
22	4.4	7.5	4.2	6.9	6.3	11	15	23	22	16	11	6.3
23	4.4	7.2	3.8	6.9	7.5	11	15	23	22	16	11	6.0
24	4.2	6.9	3.8	6.9	8.2	11	15	23	19	16	11	6.0
25	4.0	6.0	5.4	6.9	10	13	15	24	20	16	11	6.3
26	4.0	6.3	6.6	6.9	12	13	15	26	19	15	10	6.3
27	3.8	4.8	6.0	7.5	11	12	15	26	19	14	10	6.3
28	4.0	5.4	4.2	7.5	12	12	15	24	19	14	10	6.9
29	4.2	6.9	4.2	7.8	-	12	15	26	19	15	10	6.9
30	4.2	7.2	6.0	8.2	- - - -	13	15	25	19	14	11	6.9
31	5.1	- - - -	6.0	8.9	- - - -	12	- - - -	24	- - - -	16	11	- - - -
Total	154.5	163.9	179.0	186.5	212.4	352.4	417	691	662	603	392.8	228.0
Mean	4.98	5.46	5.77	6.02	7.59	11.4	13.9	22.3	22.1	19.5	12.7	7.60
Max	8.2	7.5	17	8.9	12	13	15	26	28	35	35	13
Min	3.8	3.8	3.8	4.0	4.8	9.2	12	17	19	14	9.2	6.0
Ac-ft	306	325	355	370	421	699	827	1,370	1,310	1,200	779	452

Cal yr 1966: Total 5,495.7 Mean 15.1 Max 70 Min 3.8 Ac-ft 10,900
 Wtr yr 1967: Total 4,242.5 Mean 11.6 Max 35 Min 3.8 Ac-ft 8,420

Peak discharge (base, 80 cfs)--Aug. 7 (1800) 300 cfs (5.43 ft).

Note.--No gage-height record Apr. 17 to May 22.

9-0944. Clear Creek near De Beque, Colo.

Location.--Lat 39°29'00", long 108°19'35", in SE½SE½ sec.33, T.6 S., R.98 W., on left bank 100 ft below road bridge, 0.4 mile above mouth, and 12 miles northwest of De Beque.

Drainage area.--111 sq mi.

Records available.--July 1966 to September 1967.

Gage.--Water-stage recorder. Altitude of gage is 5,475 ft (from topographic map). Prior to Sept. 15, 1967, at site 200 ft upstream at different datum.

Extremes.--1966: Maximum discharge during period July to September, 18 cfs Aug. 20 (gage height, 2.42 ft); no flow July 1-15.
1966-67: Maximum discharge during water year, 1,540 cfs Aug. 31 (gage height, 10.93 ft, from floodmarks), from rating curve extended above 5.1 cfs on basis of slope-area measurement of peak flow; no flow for many days.

Remarks.--Records fair. Several diversions for hay meadows above and one diversion from Roan Creek for irrigation above and below station.

Discharge, in cubic feet per second, July 1966 to September 1966

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1										0	3.9	4.9
2										0	4.8	4.8
3										0	4.4	5.1
4										0	2.6	5.3
5										0	3.1	5.3
6										0	3.3	5.3
7										0	3.7	5.1
8										0	4.0	5.1
9										0	3.7	5.1
10										0	3.7	5.1
11										0	3.7	5.1
12										0	3.7	5.1
13										0	3.7	5.1
14										0	3.7	4.8
15										0	4.0	4.6
16										.82	4.0	4.6
17										3.1	4.2	4.6
18										3.1	4.6	4.6
19										3.0	5.5	4.4
20										2.4	6.4	4.6
21										1.3	5.8	4.4
22										.82	5.7	4.4
23										.33	5.3	4.4
24										.82	5.5	4.4
25										1.4	4.9	4.2
26										1.3	5.3	4.2
27										3.5	5.1	4.2
28										3.7	5.1	4.4
29										3.7	4.9	4.4
30										3.5	5.3	4.6
31		-----			-----		-----		-----	3.5	5.3	-----
Total										36.29	138.9	142.2
Mean										1.17	4.48	4.74
Max										3.7	6.4	5.3
Min										0	2.6	4.2
Ac-ft										72	276	282

Cal yr : Total Mean Max Min Ac-ft
Wtr yr 1966 : Total Mean Max Min Ac-ft

ROAN CREEK BASIN

9-0944. Clear Creek near De Beque, Colo.--Continued

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4.6	0	0.05	4.0	3.0	3.1	1.7	0	0	0.29	1.4	10
2	4.8	.02	.05	4.0	3.0	3.0	1.6	0	0	.21	1.7	5.5
3	4.8	0	.10	4.0	3.0	2.4	1.4	0	0	.25	1.7	5.0
4	4.4	0	1.0	4.0	3.0	2.6	1.4	0	0	.33	1.7	5.0
5	4.2	0	1.5	4.0	3.0	2.6	2.8	0	0	.29	1.7	5.0
6	4.6	.02	3.0	4.0	3.0	2.8	2.6	1.5	0	.21	2.1	5.0
7	6.8	0	5.0	3.5	3.0	2.6	1.6	3.0	0	.25	11	5.0
8	5.5	.01	4.4	3.0	3.0	2.4	2.1	3.1	0	.33	3.9	35
9	4.9	0	4.0	3.5	3.0	2.2	1.6	3.3	0	.41	0	5.5
10	4.8	0	3.5	3.5	3.0	2.2	.59	3.3	0	.82	1.1	5.0
11	4.4	.03	3.5	3.5	3.0	2.1	.52	3.3	0	.17	1.9	5.0
12	4.6	.09	4.0	3.5	3.0	2.2	.09	3.7	0	.07	1.3	5.0
13	3.9	.09	4.5	3.5	3.0	2.6	0	3.9	0	0	1.4	5.0
14	1.3	.05	4.5	3.5	3.0	3.0	0	3.1	.22	0	.95	5.4
15	0	.04	4.5	3.5	3.0	3.0	.02	.95	0	0	1.6	5.6
16	0	.03	4.5	3.5	2.6	3.0	0	1.9	.01	0	1.3	6.0
17	0	0	4.5	3.0	2.4	3.0	0	.22	.17	1.7	1.9	5.6
18	0	0	4.5	3.0	2.4	2.6	0	0	.18	.04	3.5	5.6
19	0	0	4.5	3.2	1.6	2.1	0	0	0	0	3.0	5.6
20	0	.02	4.5	3.5	1.3	2.1	0	0	.92	0	1.1	5.1
21	0	.05	4.5	3.5	1.7	1.7	0	.19	1.6	0	0	5.1
22	0	.05	4.5	3.5	2.2	1.5	0	.58	0	0	0	5.1
23	0	.05	4.2	4.0	2.8	1.3	.01	1.1	0	0	0	5.1
24	0	.05	4.0	3.5	2.8	1.1	0	.23	0	0	0	5.1
25	0	.05	4.0	3.0	3.3	1.6	.01	0	.24	0	1.0	5.1
26	0	.05	4.0	3.0	3.5	1.9	.02	.63	.71	0	1.9	4.7
27	0	.05	4.0	3.0	3.3	2.1	0	.95	.15	0	2.1	4.7
28	0	.05	4.0	3.0	3.1	2.1	0	.33	.02	0	2.3	4.7
29	0	.05	4.0	3.0	-	3.7	0	.02	.70	0	2.3	4.7
30	0	.05	4.0	3.0	- - - - -	3.9	0	0	.29	0	2.3	4.7
31	0	- - - - -	4.0	3.5	- - - - -	.82	- - - - -	0	- - - - -	0	70	- - - - -
Total	63.6	0.90	111.30	107.2	78.0	73.32	18.06	35.30	5.21	5.37	126.15	188.9
Mean	2.05	0.030	3.59	3.46	2.79	2.37	0.602	1.14	0.174	0.173	4.07	6.30
Max	6.8	0.09	5.0	4.0	3.5	3.9	2.8	3.9	1.6	1.7	70	35
Min	0	0	0.05	3.0	1.3	0.82	0	0	0	0	0	4.7
Ac-ft	126	1.8	221	213	155	145	36	70	10	11	250	375

Cal yr 1966: Total - Mean - Max - Min - Ac-ft -
Wtr yr 1967: Total 813.31 Mean 2.23 Max 70 Min 0 Ac-ft 1,610

Note.--No gage-height record Nov. 28 to Feb. 15, Aug. 28 to Sept. 15.

9-0950. Roan Creek near De Beque, Colo.

Location.--Lat 39°27'15", long 108°19'00", on line between secs. 10 and 15, T.7 S., R.98 W., on left bank 15 ft downstream from bridge, half a mile downstream from Kimball Creek, and 10 miles northwest of De Beque.

Drainage area.--321 sq mi.

Records available.--April 1921 to September 1926, October 1962 to September 1967.

Gage.--Digital water-stage recorder. Altitude of gage is 5,380 ft (from topographic map). Prior to October 1962, chain gage at present site at different datum. Oct. 1, 1962, to Oct. 4, 1966, graphic water-stage recorder at present site and datum.

Average discharge.--10 years, 40.0 cfs (28,960 acre-ft per year).

Extremes.--Maximum discharge during year, 1,220 cfs Aug. 31 (gage height, 6.09 ft), from rating curve extended above 130 cfs as explained below; minimum daily, 6.5 cfs Dec. 12, 13.

1921-26, 1962-67: Maximum discharge that of Aug. 31, 1967, from rating curve extended above 130 cfs on basis of slope-area measurements at gage heights 4.30 and 6.09 ft; minimum daily discharge, 3.2 cfs Nov. 25, 1963, but may have been less during periods of no gage-height record.

Remarks.--Records good except those for winter period or period of no gage-height record, which are poor. Diversions above station for irrigation of about 2,800 acres above and about 570 acres below station.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	8.4	6.7	12	9.4	17	18	7.8	19	24	12	20	33
2	9.1	6.7	12	9.8	15	17	7.6	19	23	12	21	27
3	12	6.9	12	8.3	14	16	6.9	19	23	12	19	25
4	11	6.9	13	9.4	14	16	6.9	19	23	13	19	24
5	10	6.9	13	10	14	15	8.1	19	24	13	17	24
6	10	7.4	14	10	12	13	8.0	20	23	14	18	25
7	16	8.1	20	9.7	13	14	6.9	20	22	14	36	27
8	13	9.5	12	8.1	11	14	7.5	19	21	17	25	43
9	12	9.1	7.6	8.4	12	15	7.3	19	22	15	18	37
10	11	7.6	7.2	9.6	13	15	8.2	21	21	14	17	17
11	10	7.5	7.0	10	12	15	12	22	21	13	18	16
12	9.7	7.2	6.5	11	13	16	15	22	23	13	17	18
13	9.4	6.9	6.5	11	12	16	16	23	24	13	17	15
14	8.1	6.9	7.0	11	13	16	16	23	24	15	16	15
15	7.4	7.7	8.0	11	12	15	16	23	22	25	16	15
16	7.3	7.3	7.2	12	12	15	17	24	20	21	15	15
17	7.0	7.7	7.2	10	11	15	18	24	20	40	14	13
18	7.0	7.8	7.2	11	15	16	18	24	22	30	13	14
19	7.4	7.5	7.8	11	13	15	18	25	24	26	12	15
20	7.6	7.8	8.0	11	11	15	18	25	30	23	12	15
21	7.7	9.4	8.0	13	11	14	18	25	20	23	12	15
22	7.5	12	7.6	13	12	11	19	25	16	23	13	14
23	7.7	11	7.2	13	14	10	18	25	14	23	14	15
24	7.7	11	7.0	13	16	9.8	19	25	12	23	13	14
25	7.5	9.9	8.0	14	18	10	19	26	12	22	14	14
26	7.5	10	9.4	13	22	9.2	19	29	12	20	16	15
27	7.4	9.4	9.5	13	19	8.2	19	29	12	19	15	15
28	7.0	9.7	7.8	13	18	8.7	19	27	12	19	15	15
29	7.0	11	7.9	14	-	9.7	19	27	12	19	15	15
30	7.0	12	9.0	15	- - - -	11	19	27	12	19	16	15
31	7.1	- - - -	9.0	18	- - - -	8.2	- - - -	27	- - - -	20	82	- - - -
Total	274.5	255.5	285.6	353.7	389	416.8	427.2	721	590	585	585	580
Mean	8.85	8.52	9.21	11.4	13.9	13.4	14.2	23.3	19.7	18.9	18.9	19.3
Max	16	12	20	18	22	18	19	29	30	40	82	43
Min	7.0	6.7	6.5	8.3	11	8.2	6.9	19	12	12	12	13
Ac-ft	544	507	566	702	772	827	847	1,430	1,170	1,160	1,160	1,150

Cal yr 1966: Total 7,598.7 Mean 20.8 Max 93 Min 6.5 Ac-ft 15,070
Wtr yr 1967: Total 5,463.3 Mean 15.0 Max 82 Min 6.5 Ac-ft 10,840

Peak discharge (base, 100 cfs)

Note.--No gage-height record June 14 to July 31.

Date	Time	Gage height	Discharge	Date	Time	Gage height	Discharge
8- 7	1900	2.71	121	9- 8	2100	4.01	330
8-31	1545	6.09	1,220				

9-0955. Colorado River near Cameo, Colo.

Location.--Lat 39°14'20", long 108°16'00", in SW¼SW¼ sec.30, T.9 S., R.97 W., on left bank 100 ft north of U. S. Highways 6 and 24, half a mile upstream from Jackson Canyon, 5.9 miles upstream from Grand Valley project diversion dam, and 7 miles northeast of Cameo.

Drainage area.--8,050 sq mi, approximately.

Records available.--October 1933 to September 1967.

Gage.--Water-stage recorder. Datum of gage is 4,813.73 ft above mean sea level, datum of 1929. Prior to Oct. 10, 1934, staff gage on river and water-stage recorder on highline canal, about 10 miles downstream at different datum. Oct. 10, 1934, to Feb. 27, 1958, water-stage recorder at site 3 miles downstream at datum 22.55 ft lower.

Average discharge.--34 years, 3,833 cfs (2,775,000 acre-ft per year).

Extremes.--Maximum discharge during year, 14,400 cfs May 26 (gage height, 8.29 ft); maximum gage height, 8.33 ft Dec. 25 (backwater from ice); minimum daily discharge, 1,180 cfs Feb. 10.

1933-67: Maximum discharge, 36,000 cfs June 16, 1935; maximum gage height, 11.60 ft June 8, 1952 (site and datum then in use); minimum daily discharge, 700 cfs Dec. 29, 1939.

Remarks.--Records good except those for winter period, which are fair. Natural flow of stream affected by transmountain diversions, storage reservoirs, power developments, and diversion for irrigation of about 160,000 acres. Records of chemical analyses and water temperatures for the water year 1967 are published in Part 2 of this report.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1590	1590	1550	1380	1480	1460	2020	2500	8130	7550	2500	2160
2	1570	1580	1540	1360	1400	1470	1880	2300	8150	7280	2470	2180
3	1900	1570	1490	1340	1300	1640	1980	1990	8940	6900	2380	2110
4	1800	1580	1490	1380	1200	1640	2080	1760	10100	6540	2380	2060
5	1900	1540	1520	1400	1220	1580	2250	1610	11200	6230	2300	2020
6	1840	1580	1700	1420	1240	1490	2470	1590	11600	5940	2270	1930
7	1790	1540	2610	1380	1260	1330	2470	1540	11500	5720	2500	1920
8	1810	1590	1830	1300	1300	1390	2500	1520	11200	5530	2520	1920
9	1760	1610	1510	1220	1200	1320	2570	1580	10600	5600	2630	2140
10	1710	1600	1330	1240	1180	1370	2650	1860	10400	5310	2820	2140
11	1740	1630	1250	1360	1310	1530	2540	2680	9500	4760	2570	2320
12	1780	1610	1200	1420	1320	1680	3060	2960	8940	4540	2480	2340
13	1760	1650	1280	1440	1300	1660	2860	3040	8310	4510	2390	2520
14	1870	1600	1240	1460	1260	1560	2720	3200	7670	4400	2300	2520
15	1900	1670	1220	1480	1370	1480	2480	2780	7190	4200	2180	2340
16	1980	1600	1240	1420	1340	1480	2480	2480	6970	4400	2130	2250
17	1810	1600	1200	1360	1310	1550	2230	2560	7090	4800	2210	2080
18	1760	1580	1220	1300	1320	1700	2260	3160	7430	5200	2180	2010
19	1780	1580	1240	1300	1360	1920	2340	4290	8390	5200	2160	2020
20	1790	1480	1260	1360	1340	2100	2600	5240	9190	4400	2130	2210
21	1790	1570	1240	1400	1260	1980	2720	6060	10100	3800	2090	2180
22	1720	1610	1220	1440	1200	1840	2440	7280	9980	3520	2060	2060
23	1710	1530	1220	1460	1240	1860	2240	9130	10200	3560	2010	2010
24	1760	1520	1200	1480	1360	1900	2060	11300	10000	3770	1960	1960
25	1720	1520	1240	1420	1400	2000	2010	13000	9770	3960	1930	1880
26	1710	1490	1260	1400	1630	2040	1980	13500	9020	3560	1920	1940
27	1700	1440	1300	1420	1640	2100	1860	12800	8460	3300	1810	2020
28	1720	1370	1360	1440	1450	2020	1760	11500	8180	3080	1880	2060
29	1700	1460	1340	1460	-	2000	1800	11200	7910	2900	1880	2020
30	1670	1530	1320	1500	- - - - -	2100	2040	10000	7480	2680	1830	1940
31	1650	- - - - -	1360	1500	- - - - -	2100	- - - - -	9200	- - - - -	2570	2060	- - - - -
Total	54,690	46,820	42,980	43,240	37,190	53,290	69,350	165,610	273,600	145,710	68,930	63,260
Mean	1,764	1,561	1,386	1,395	1,328	1,719	2,312	5,342	9,120	4,700	2,224	2,109
Max	1,980	1,670	2,610	1,500	1,640	2,100	3,060	13,500	11,600	7,550	2,820	2,520
Min	1,570	1,370	1,200	1,220	1,180	1,320	1,760	1,520	6,970	2,570	1,810	1,880
Ac-ft	108,500	92,870	85,250	85,770	73,770	105,700	137,600	328,500	542,700	289,000	136,700	125,500

Cal yr 1966: Total 907,660 Mean 2,487 Max 8,490 Min 1,200 Ac-ft 1,800,000
 Wtr yr 1967: Total 1,064,670 Mean 2,917 Max 13,500 Min 1,180 Ac-ft 2,112,000

Note.--No gage-height record Jan. 1 to Feb. 10.

9-0961. Vega Reservoir near Collbran, Colo.

Location--Lat 39°13'30", long 107°48'40", in sec.6, T.10 S., R.93 W., at dam on Plateau Creek, 10 miles southeast of Collbran.

Drainage area--24.4 sq mi.

Records available--April 1960 to September 1967.

Gage--Staff gage read once daily. Datum of gage is 7,906 ft above mean sea level (Bureau of Reclamation bench mark); gage readings have been reduced to elevations above mean sea level.

Extremes--Maximum contents observed during year, 21,610 acre-ft June 26 to July 1 (elevation, 7,969.8 ft); minimum observed, 1,420 acre-ft Sept. 30 (elevation, 7,918.5 ft).
1960-67: Maximum contents observed, 34,570 acre-ft June 16-20, 1965 (elevation, 7,985.8 ft); minimum observed, 1,260 acre-ft Apr. 15, 1960 (elevation, 7,917.5 ft).

Remarks--Reservoir is formed by an earth- and rock-fill dam. Dam completed by Bureau of Reclamation in 1960. Usable storage began in May 1958 while dam was under construction. Capacity of reservoir, 32,930 acre-ft between elevations 7,906 (bottom of outlet gate) and 7,984 ft (crest of spillway). Dead storage, 823 acre-ft. Figures given herein are usable contents. Reservoir is used to store water for irrigation and power development.

Cooperation--Records furnished by Bureau of Reclamation.

Month-end elevation and contents, water year October 1966 to September 1967

Date	Elevation (feet)†	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.....	7,936.5	5,550	-
Oct. 31.....	7,935.5	5,250	-300
Nov. 30.....	7,936.4	5,520	+270
Dec. 31.....	7,938.0	6,020	+500
Calendar year 1966.....	-	-	-13,120
Jan. 31.....	7,939.3	6,440	+420
Feb. 28.....	7,940.4	6,810	+370
Mar. 31.....	7,942.3	7,460	+650
Apr. 30.....	7,943.6	7,940	+480
May 31.....	7,961.4	16,260	+8,320
June 30.....	7,969.8	21,610	+5,350
July 31.....	7,963.2	17,320	-4,290
Aug. 31.....	7,941.6	7,220	-10,100
Sept. 30.....	7,918.5	1,420	-5,800
Water year 1967.....	-	-	-4,130

† Elevation at 0800.

9-0965. Plateau Creek near Collbran, Colo.

Location.--Lat 39°15'00", long 107°50'25", in NE¼ sec.26, T.9 S., R.94 W., on right bank 10 ft downstream from private bridge, 1½ miles downstream from Leon Creek, and 6 miles east of Collbran.

Drainage area.--80.4 sq mi.

Records available.--September 1921 to September 1967. Prior to October 1933 monthly discharge only, published in WSP 1313.

Gage.--Water-stage recorder. Altitude of gage is 7,130 ft (from topographic map).

Extremes.--Maximum discharge during year, 678 cfs May 23 (gage height, 4.22 ft); minimum daily, 3.5 cfs Mar. 15.

1921-67: Maximum discharge, 3,080 cfs May 27, 1922 (gage height, 6.90 ft), from rating curve extended above 1,300 cfs; minimum daily, 1.9 cfs Feb. 26, 1961 (result of storage in Vega Reservoir); minimum daily prior to construction of Vega Reservoir, 3 cfs Sept. 21, 1926.

Remarks.--Records good except those for winter period, which are poor. Natural flow of stream affected by storage in Vega Reservoir since 1959, transbasin diversion to Surface Creek in Gunnison River basin, diversions above station for irrigation of about 800 acres above and about 8,400 acres below, and about 550 acres in Buzzard Creek drainage, and for power development.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	8.2	6.7	5.0	4.9	3.9	3.8	6.3	23	29	29	17	18
2	8.5	9.2	5.0	4.9	5.0	3.8	6.5	23	53	29	13	15
3	9.2	9.8	5.0	4.8	6.0	3.8	6.5	22	42	28	16	13
4	10	8.0	5.0	4.8	6.0	3.8	6.9	25	45	27	18	13
5	11	8.8	4.9	4.8	5.0	3.9	6.9	22	45	30	17	15
6	11	8.2	5.4	4.8	4.4	5.0	6.7	20	45	29	18	23
7	11	4.9	5.4	4.8	4.2	6.0	6.5	20	35	29	28	16
8	9.8	5.0	6.5	4.8	4.2	6.0	6.1	28	31	32	57	16
9	9.0	5.9	6.0	4.9	4.0	4.4	6.1	44	29	33	59	19
10	8.5	4.6	5.0	4.8	3.9	3.8	9.2	42	33	30	61	24
11	8.8	4.6	5.0	4.6	3.8	3.9	12	38	33	30	51	25
12	10	4.6	5.5	4.6	3.8	3.9	12	39	33	30	30	30
13	9.8	4.8	6.0	4.6	3.8	3.8	12	39	33	26	23	20
14	9.5	5.0	6.0	4.6	3.8	3.8	12	34	33	25	22	18
15	9.0	4.4	6.0	4.4	4.0	3.5	12	42	29	28	23	19
16	9.5	4.6	6.0	4.4	4.0	3.8	12	48	30	28	23	19
17	8.8	4.6	5.5	4.6	4.0	4.0	11	46	29	38	18	17
18	9.0	4.9	5.5	4.4	3.8	4.2	9.5	49	30	37	18	17
19	8.2	5.2	5.5	4.2	3.8	4.2	12	49	29	32	20	23
20	10	5.2	5.4	4.2	4.0	4.0	12	53	29	28	21	22
21	12	5.2	5.2	4.2	4.4	4.2	13	76	29	25	19	16
22	8.0	5.2	5.2	4.0	4.4	4.2	14	112	28	20	21	15
23	9.0	5.2	5.0	4.0	4.2	4.9	14	186	27	24	21	14
24	8.0	5.2	4.8	4.0	3.6	6.7	15	226	28	30	19	14
25	8.8	5.0	4.8	4.0	3.6	6.3	19	246	27	25	17	14
26	8.8	5.0	5.0	4.2	3.6	6.1	19	209	25	19	17	18
27	8.2	5.0	5.0	4.0	3.6	5.9	18	138	25	16	17	20
28	8.8	5.0	5.0	4.0	3.6	5.9	18	81	27	16	16	15
29	9.0	5.2	5.0	4.0	-	6.3	20	54	28	17	14	13
30	8.2	5.0	5.0	4.0	- - - - -	6.0	23	37	29	15	13	12
31	7.8	- - - - -	4.9	4.0	- - - - -	6.0	- - - - -	33	- - - - -	18	15	- - - - -
Total	285.4	170.0	164.5	137.3	116.4	145.9	357.2	2,104	968	823	742	533
Mean	9.21	5.67	5.31	4.43	4.16	4.71	11.9	67.9	32.3	26.5	23.9	17.8
Max	12	9.8	6.5	4.9	6.0	6.7	23	246	53	38	61	30
Min	7.8	4.4	4.8	4.0	3.6	3.5	6.1	20	25	15	13	12
Ac-ft	566	337	326	272	231	289	708	4,170	1,920	1,630	1,470	1,060
Cal yr 1966: Total	8,644.6		Mean 23.7	Max 363	Min 3.0	Ac-ft 17,150						
Wtr yr 1967: Total	6,546.7		Mean 17.9	Max 246	Min 3.5	Ac-ft 12,990						

9-0968. Buzzard Creek below Owens Creek, near Heiberger, Colo.

Location.--Lat 39°14'10", long 107°38'00", in N½ sec.35, T.9 S., R.92 W., on left bank 500 ft downstream from Owens Creek, 2½ miles upstream from Porter Creek, 4½ miles southeast of Hightower ranger station, and 8½ miles southeast of Heiberger.

Drainage area.--49.7 sq mi (revised).

Records available.--October 1955 to September 1967.

Gage.--Water-stage recorder. Altitude of gage is 8,206 ft (from topographic map).

Average discharge.--12 years, 23.4 cfs (16,940 acre-ft per year).

Extremes.--Maximum discharge during year, 198 cfs May 21 (gage height, 3.81 ft); no flow Aug. 20-31, Sept. 7-9.
1955-67: Maximum discharge, 636 cfs June 4, 1957 (gage height, 5.82 ft); no flow at times in most years.

Remarks.--Records good except those for winter period or periods of indefinite stage-discharge relation, which are poor. Transbasin diversion above station by Owens Creek ditch for irrigation in West Divide Creek basin.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.40	1.2	2.4	1.1	1.5	1.2	7.0	22	48	6.0	7.0	2.0
2	.40	1.2	2.5	1.1	1.6	1.4	9.0	16	54	4.5	5.0	3.0
3	.90	1.2	2.1	1.2	1.6	1.8	12	13	56	4.0	3.0	2.4
4	1.4	1.2	2.4	1.2	1.6	2.1	16	11	65	5.0	2.2	1.5
5	1.2	1.2	2.2	1.3	1.6	2.2	18	11	63	4.5	2.0	.50
6	1.4	1.2	4.6	1.3	1.6	2.0	18	13	64	3.8	1.8	.20
7	1.1	1.2	7.0	1.2	1.6	1.7	20	13	49	4.0	5.0	0
8	1.0	1.5	8.0	1.1	1.8	1.8	20	23	40	8.0	10	0
9	.90	2.5	5.0	1.1	1.8	2.0	16	50	28	12	7.5	0
10	.80	2.5	3.0	1.1	2.0	2.2	16	69	24	8.0	9.5	1.0
11	1.0	2.4	2.4	1.2	1.9	2.6	17	66	24	7.0	5.0	4.4
12	1.4	2.5	2.0	1.3	1.9	3.2	18	69	30	10	4.0	6.0
13	1.6	3.2	1.6	1.4	1.7	3.5	12	64	31	8.0	3.0	3.4
14	2.2	3.2	1.6	1.4	1.6	3.2	14	39	39	4.0	2.0	1.6
15	2.1	3.3	1.7	1.5	1.4	3.0	15	31	29	12	1.5	1.0
16	2.2	3.2	1.8	1.4	1.3	3.4	15	37	30	10	1.2	.80
17	2.1	2.8	1.8	1.3	1.2	4.0	13	72	22	25	.80	.80
18	1.8	2.4	2.0	1.2	1.2	7.0	19	107	22	20	.60	.80
19	1.7	2.2	2.0	1.1	1.1	8.0	28	110	25	8.0	.20	3.0
20	1.6	2.2	2.0	1.0	1.0	8.0	29	124	29	6.0	0	4.0
21	1.6	2.2	1.8	1.0	1.0	7.5	20	132	34	4.6	0	5.0
22	1.5	2.2	1.6	1.0	1.0	7.5	15	136	21	4.0	0	4.4
23	1.5	2.1	1.4	1.1	1.0	8.0	15	128	16	4.4	0	4.0
24	1.4	1.7	1.4	1.1	1.2	8.0	13	119	12	4.6	0	4.0
25	1.2	1.5	1.4	1.1	1.4	7.5	14	120	11	5.0	0	5.0
26	1.5	2.1	1.4	1.1	1.4	7.0	13	125	7.5	4.0	0	6.0
27	1.6	1.8	1.4	1.1	1.3	6.5	15	120	6.2	3.6	0	5.0
28	1.8	2.1	1.3	1.1	1.2	6.5	27	94	6.2	3.4	0	4.0
29	1.7	2.0	1.2	1.1	-	7.5	38	75	6.8	2.8	0	3.0
30	1.6	2.1	1.1	1.2	- - - -	6.5	38	61	5.5	3.4	0	2.4
31	1.6	- - - -	1.1	1.4	- - - -	5.5	- - - -	49	- - - -	3.2	0	- - - -
Total	44.20	62.1	73.2	36.8	40.5	142.3	540.0	2,119	898.2	212.8	71.30	79.20
Mean	1.43	2.07	2.36	1.19	1.45	4.59	18.0	68.4	29.9	6.86	2.30	2.64
Max	2.2	3.3	8.0	1.5	2.0	8.0	38	136	65	25	10	6.0
Min	0.40	1.2	1.1	1.0	1.0	1.2	7.0	11	5.5	2.8	0	0
Ac-ft	88	123	145	73	80	282	1,070	4,200	1,780	422	141	157
(†)	0	0	0	0	0	0	21	404	574	1.4	0	0

Cal yr 1966: Total 7,058.50 Mean 19.3 Max 200 Min 0 Ac-ft 14,000
Wtr yr 1967: Total 4,319.60 Mean 11.8 Max 136 Min 0 Ac-ft 8,570

Peak discharge (base, 200 cfs).--No peak above base.

† Diversions, in acre-feet, by Owens Creek ditch, furnished by State engineer of Colorado.

Note.--No gage-height record Dec. 21 to Apr. 5. Stage-discharge relation indefinite June 30 to Aug. 7, Aug. 11 to Sept. 30.

PLATEAU CREEK BASIN

9-0975. Buzzard Creek near Collbran, Colo.

Location.--Lat 39°16'20", long 107°51'00", in sec.14, T.9 S., R.94 W., on right bank 150 ft upstream from county bridge, half a mile upstream from Brush Creek, and 7 miles east of Collbran.

Drainage area.--139 sq mi.

Records available.--September 1921 to September 1967. Prior to October 1933 monthly discharge only, published in WSP 1313.

Gage.--Water-stage recorder. Altitude of gage is 6,955 ft (from topographic map).

Average discharge.--46 years, 46.2 cfs (33,450 acre-ft per year).

Extremes.--Maximum discharge during year, 214 cfs May 22 (gage height, 3.04 ft); minimum daily, 0.70 cfs Aug. 25-27.

1921-67: Maximum discharge, 1,630 cfs May 14, 1941 (gage height, 7.80 ft), from rating curve extended above 900 cfs; no flow for many days in 1959-60, 1963.

Remarks.--Records poor. Diversions for irrigation of about 1,300 acres above station. Erie Canal imports water from Plateau Creek for irrigation of about 280 acres above station. Small diversions above station from Middleton and Uhl Creeks to West Mamm Creek (Mamm Creek basin).

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.2	3.9	4.5	2.8	3.8	3.2	16	43	64	8.2	5.5	1.0
2	2.4	2.7	5.0	2.8	3.8	4.0	21	31	68	6.2	3.9	2.0
3	3.3	3.1	6.0	2.8	3.8	5.0	30	26	70	6.2	4.5	2.4
4	2.4	3.7	7.0	2.8	4.0	6.0	42	22	76	6.8	3.7	1.0
5	2.2	3.1	8.0	2.8	4.0	7.4	51	22	71	6.0	2.9	1.1
6	2.5	3.1	10	2.6	4.0	9.8	39	28	78	4.8	2.5	1.2
7	2.9	3.3	13	2.6	4.0	6.8	34	32	64	5.8	3.1	1.3
8	3.1	4.3	10	2.6	4.0	6.5	36	32	52	9.8	3.5	1.4
9	3.1	3.9	4.5	2.6	4.4	6.5	34	63	41	9.4	7.0	1.4
10	3.1	3.7	3.5	2.8	4.6	9.4	25	84	37	11	6.5	1.3
11	3.5	4.5	3.5	2.8	4.6	11	30	80	36	8.2	6.8	1.4
12	3.7	4.5	3.2	2.8	4.4	20	32	83	43	7.8	4.5	1.4
13	3.9	4.1	3.2	3.0	3.8	20	26	90	48	11	3.0	3.0
14	4.8	3.9	3.4	3.2	3.6	16	21	63	50	10	1.4	3.6
15	4.8	4.1	3.4	3.2	3.6	18	29	53	47	13	1.2	3.8
16	4.5	4.8	3.8	3.0	3.4	21	28	51	48	20	1.0	3.8
17	4.5	4.8	3.8	2.8	3.4	36	24	71	43	32	1.0	3.6
18	4.1	4.5	3.6	2.8	3.4	49	27	105	37	49	.90	3.6
19	4.1	3.9	3.6	2.6	3.4	48	37	119	37	24	.90	3.4
20	3.9	3.7	3.6	2.4	3.2	46	39	123	44	14	.80	3.4
21	4.3	4.3	3.4	2.6	3.0	42	32	139	56	9.8	.80	3.4
22	4.1	4.3	3.4	2.6	3.0	46	24	150	42	7.8	.80	3.6
23	4.1	4.3	3.2	2.6	3.2	48	25	143	36	7.8	.80	3.8
24	4.5	3.9	3.0	2.6	3.4	43	21	117	27	8.6	.80	4.0
25	4.3	2.4	2.8	2.6	3.6	40	20	130	24	9.8	.70	4.2
26	3.7	3.3	2.8	2.8	3.6	26	20	131	18	8.6	.70	4.6
27	3.7	2.0	2.8	2.8	3.4	25	19	144	13	7.8	.70	4.0
28	3.9	2.5	2.8	2.8	3.2	21	24	113	11	6.5	.80	3.8
29	4.5	3.7	2.8	3.0	-	26	43	101	11	6.0	.80	3.8
30	3.3	4.1	2.6	3.2	- - - - -	20	52	85	12	6.0	.90	3.6
31	3.3	- - - - -	2.6	3.8	- - - - -	16	- - - - -	78	- - - - -	5.8	.90	- - - - -
Total	112.7	112.4	138.8	87.2	103.6	702.6	901	2552	1304	347.7	73.30	83.9
Mean	3.64	3.75	4.48	2.81	3.70	22.7	30.0	82.3	43.5	11.2	2.36	2.80
Max	4.8	4.8	13	3.8	4.6	49	52	150	78	49	7.0	4.6
Min	2.2	2.0	2.6	2.4	3.0	3.2	16	22	11	4.8	0.70	1.0
Ac-ft	224	223	275	173	205	1,390	1,790	5,060	2,590	690	145	166

Cal yr 1966: Total 9,488.2 Mean 26.0 Max 200 Min 0.20 Ac-ft 18,820

Wtr yr 1967: Total 6,519.20 Mean 17.9 Max 150 Min 0.70 Ac-ft 12,930

Peak discharge (base, 350 cfs).--No peak above base.

PLATEAU CREEK BASIN

261

9-0976. Brush Creek near Collbran, Colo.

Location.--Lat 39°19'30", long 107°50'30", in W½ sec.36, T.8 S., R.94 W., on right bank at site of former highway bridge, 1 mile downstream from West Brush Creek, 4 miles upstream from mouth, and 8½ miles northeast of Collbran.

Drainage area.--9.57 sq mi.

Records available.--October 1955 to September 1967 (discontinued).

Gage.--Water-stage recorder. Altitude of gage is 8,183 ft (from topographic map).

Average discharge.--12 years, 6.78 cfs (4,910 acre-ft per year).

Extremes.--Maximum discharge during year, 63 cfs May 23 (gage height, 3.17 ft); minimum daily, 0.60 cfs Feb. 8.
1955-67: Maximum discharge, 317 cfs June 7, 1957 (gage height, 4.35 ft); minimum daily determined, 0.10 cfs Apr. 1, 2, 1961.

Remarks.--Records good except those for winter period, which are poor. One small diversion for hay meadows above station.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.83	0.83	0.90	1.3	0.90	1.5	2.6	9.1	29	5.6	1.8	1.6
2	.83	.83	.90	1.3	.80	1.7	2.6	7.6	28	5.1	1.6	1.2
3	1.2	.90	.90	1.2	.90	1.7	3.0	6.5	28	4.8	1.8	1.2
4	1.1	.90	.90	1.2	1.0	1.6	3.5	5.6	28	4.4	1.6	1.1
5	1.0	.90	1.0	1.3	1.0	1.5	3.8	5.6	26	4.2	1.6	.97
6	1.0	.90	2.0	1.3	1.0	1.3	3.9	5.3	24	4.1	1.4	1.1
7	1.0	.90	1.8	1.2	.80	1.1	5.1	6.3	22	3.9	2.4	1.1
8	1.0	1.0	1.6	1.1	.60	1.1	6.5	9.4	20	4.4	2.2	1.1
9	1.0	1.0	1.4	1.1	.70	1.2	7.0	17	19	3.7	2.0	1.6
10	1.0	1.0	1.3	1.2	.70	1.5	6.5	22	17	3.5	2.8	1.2
11	1.2	1.0	1.3	1.3	.70	1.5	7.3	19	17	3.7	2.4	1.2
12	1.3	1.0	1.5	1.3	.80	1.5	6.8	17	17	3.3	1.8	1.3
13	1.2	1.0	1.6	1.3	1.0	1.4	6.0	19	15	3.0	1.6	1.1
14	1.2	1.1	1.6	1.3	.90	1.2	5.8	14	14	4.4	1.4	1.1
15	1.1	1.2	1.4	1.1	.90	1.2	5.8	12	13	4.4	1.4	1.1
16	1.2	1.2	1.4	1.0	1.0	1.5	5.6	15	13	3.9	1.4	1.1
17	1.2	1.2	1.5	.90	1.0	2.0	6.0	22	12	5.6	1.3	1.1
18	1.1	1.2	1.6	.90	.80	2.2	7.9	30	11	4.2	1.2	1.1
19	1.0	1.2	1.6	.90	.80	2.4	11	35	11	3.3	1.2	1.4
20	1.1	1.2	1.5	1.0	1.2	2.6	10	39	13	3.0	1.2	1.2
21	1.0	1.2	1.4	1.0	1.2	2.6	8.5	45	12	2.8	1.2	1.2
22	1.0	1.2	1.2	1.0	1.1	2.4	7.9	51	11	2.8	1.1	1.0
23	1.0	1.1	1.0	.90	1.1	2.4	7.0	54	9.4	3.7	1.1	.90
24	1.0	1.0	1.0	.80	1.2	2.6	6.3	53	8.5	3.5	1.1	.80
25	1.0	.90	1.0	.90	1.3	2.6	6.3	50	7.9	3.0	1.1	.80
26	1.0	1.0	1.1	.90	1.2	2.6	6.5	46	7.3	2.6	1.1	1.0
27	1.0	1.0	1.2	.90	1.2	2.4	7.9	51	6.8	2.4	1.1	1.1
28	1.0	.90	1.3	.90	1.2	2.4	12	47	6.8	2.4	1.1	1.1
29	1.0	1.0	1.2	1.0	-	2.6	13	44	6.3	2.0	1.3	1.1
30	.90	1.0	1.1	1.0	- - - - -	2.8	11	39	5.8	1.9	1.3	1.0
31	.90	- - - - -	1.2	1.0	- - - - -	2.8	- - - - -	34	- - - - -	1.9	1.4	- - - - -
Total	32.36	30.76	40.40	33.50	27.00	59.9	203.1	830.4	458.8	111.5	47.0	33.87
Mean	1.04	1.03	1.30	1.08	0.964	1.93	6.77	26.8	15.3	3.60	1.52	1.13
Max	1.3	1.2	2.0	1.3	1.3	2.8	13	54	29	5.6	2.8	1.6
Min	0.83	0.83	0.90	0.80	0.60	1.1	2.6	5.3	5.8	1.9	1.1	0.80
Ac-ft	64	61	80	66	54	119	403	1,650	910	221	93	67

Cal yr 1966: Total 1,877.52 Mean 5.14 Max 37 Min - Ac-ft 3,720

Wtr yr 1967: Total 1,908.59 Mean 5.23 Max 54 Min 0.60 Ac-ft 3,790

Peak discharge (base, 50 cfs).--May 23 (1715) 63 cfs (3.17 ft).

Note.--No gage-height record Dec. 8 to Apr. 5.

PLATEAU CREEK BASIN

9-1050. Plateau Creek near Cameo, Colo.

Location.--Lat 39°11'00", long 108°16'10", in NW¼SW¼ sec.18, T.10 S., R.97 W., on left bank 300 ft from State Highway 65, 1.1 miles upstream from mouth, and 4 miles northeast of Cameo.

Drainage area.--592 sq mi (revised).

Records available.--October 1935 to September 1967. Prior to May 1936 monthly discharge only, published in WSP 1313.

Gage.--Water-stage recorder. Altitude of gage is 4,836 ft (from topographic map). Prior to Aug. 27, 1936, staff gage at same site and datum.

Average discharge.--32 years, 183 cfs (132,500 acre-ft per year).

Extremes.--Maximum discharge during year, 1,090 cfs May 23 (gage height, 4.97 ft); minimum daily, 42 cfs May 4-6.

1935-67: Maximum discharge, 3,920 cfs May 27, 1942 (gage height, 7.73 ft), from rating curve extended above 3,000 cfs; minimum daily, 13 cfs July 31, 1959.

Remarks.--Records good except those for winter period, which are poor. Natural flow of stream affected by storage reservoirs, diversions for irrigation of about 25,000 acres, return flow from irrigated areas, and for power development.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	79	92	94	75	87	90	79	74	195	94	54	74
2	74	87	103	70	76	108	74	57	192	85	56	67
3	126	90	108	70	71	130	79	47	206	84	58	61
4	118	90	112	75	73	103	92	42	182	79	68	59
5	122	88	106	75	73	95	120	42	206	71	74	59
6	120	90	126	75	71	77	104	42	198	71	73	73
7	118	87	230	70	76	106	92	44	182	73	103	74
8	116	95	112	65	67	97	88	46	152	85	126	90
9	116	104	100	65	76	97	90	76	132	60	137	106
10	116	95	95	70	76	85	80	130	120	64	128	90
11	139	97	90	75	74	88	77	116	122	82	135	94
12	132	97	90	85	76	101	76	124	143	84	101	112
13	132	95	87	85	76	87	84	110	190	71	88	80
14	141	92	92	75	80	71	76	94	195	53	77	77
15	114	92	87	70	80	64	68	77	182	95	61	79
16	116	94	88	65	74	67	68	70	180	70	66	77
17	114	92	90	60	73	77	70	79	160	137	59	74
18	112	90	100	60	82	103	67	135	152	192	57	71
19	108	90	100	65	92	106	73	178	143	139	56	80
20	110	88	100	70	84	92	79	188	198	122	57	82
21	104	92	100	85	92	94	77	233	242	106	58	76
22	106	103	90	100	104	97	61	299	190	90	53	73
23	103	116	85	100	103	112	56	394	158	79	52	74
24	104	112	80	85	103	116	57	460	141	97	53	74
25	104	108	90	75	112	112	57	505	128	76	56	80
26	101	94	100	75	170	128	58	480	114	63	57	84
27	101	77	100	79	116	122	49	426	103	57	54	85
28	97	90	90	90	88	104	70	334	94	54	56	84
29	97	112	70	90	-	87	61	305	92	52	53	84
30	95	90	70	88	- - - - -	94	76	242	88	52	52	84
31	94	- - - - -	75	90	- - - - -	85	- - - - -	233	- - - - -	53	56	- - - - -
Total	3,429	2,839	3,060	2,377	2,425	2,995	2,258	5,682	4,780	2,590	2,234	2,377
Mean	111	94.6	98.7	76.7	86.6	96.6	75.3	183	159	83.5	72.1	79.2
Max	141	116	230	100	170	130	120	505	242	192	137	112
Min	74	77	70	60	67	64	49	42	88	52	52	59
Ac-ft	6,800	5,630	6,070	4,710	4,810	5,940	4,480	11,270	9,480	5,140	4,430	4,710
Cal yr 1966: Total	48,237		Mean 132	Max 784	Min 44	Ac-ft 95,680						
Wtr yr 1967: Total	37,046		Mean 101	Max 505	Min 42	Ac-ft 73,480						

9-1085. Taylor Park Reservoir at Taylor Park, Colo.

Location.--Lat 38°49'05", long 106°36'15", in sec.24, T.14 S., R.83 W., at dam on Taylor River just downstream from Taylor Park, 17 miles northeast of Almont.

Drainage area.--254 sq mi.

Records available.--October 1937 to September 1967. Prior to October 1938, published in WSP 1313.

Gage.--Staff gage read once or twice daily. Datum of gage is 9,187 ft above mean sea level (Bureau of Reclamation bench mark); gage readings have been reduced to elevations above mean sea level.

Extremes.--Maximum contents observed during year, 107,100 acre-ft July 17-19 (elevation, 9,330.40 ft); minimum, 41,650 acre-ft Dec. 16 (elevation, 9,289.00 ft).

1937-67: Maximum contents observed, 111,000 acre-ft July 1, 1957 (elevation, 9,332.35 ft); minimum (after first filling), 8,780 acre-ft Oct. 19, 20, 1956 (elevation, 9,240.70 ft).

Remarks.--Reservoir is formed by an earth- and rock-fill dam. Dam completed by Bureau of Reclamation in September 1937. Capacity of reservoir, 106,200 acre-ft between elevations 9,187 (bottom of outlet gates) and 9,330 ft (crest of spillway). No dead storage. Water used for irrigation in Uncompahgre Valley. Figures given herein are usable contents.

Cooperation.--Records furnished by Uncompahgre Valley Water Users Association.

Month-end elevation and contents, water year October 1966 to September 1967

Date	Elevation (feet)†	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.....	9,311.70	72,720	-
Oct. 31.....	9,301.00	56,420	-16,300
Nov. 30.....	9,389.70	42,470	-13,950
Dec. 31.....	9,289.50	42,230	-240
Calendar year 1966.....	-	-	-44,540
Jan. 31.....	9,290.50	43,400	+1,170
Feb. 28.....	9,291.40	44,470	+1,070
Mar. 31.....	9,292.30	45,560	+1,090
Apr. 30.....	9,297.70	52,260	+6,700
May 31.....	9,312.00	73,220	+20,960
June 30.....	9,328.10	102,300	+29,080
July 31.....	9,329.80	105,800	+3,500
Aug. 31.....	9,326.50	99,030	-6,770
Sept. 30.....	9,324.30	94,750	-4,280
Water year 1966-67.....	-	-	+22,030

† Elevation at 0800.

GUNNISON RIVER BASIN

9-1090. Taylor River below Taylor Park Reservoir, Colo.

Location.--Lat 38°48'50", long 106°36'40", in sec.24, T.14 S., R.83 W., on left bank 500 ft downstream from Taylor Park Reservoir Dam, 3½ miles upstream from Lottis Creek, and 16 miles northeast of Almont.

Drainage area.--254 sq mi.

Records available.---June 1929 to September 1934 (monthly discharge only, published in WSP 1313), October 1938 to September 1967.

Gage.---Water-stage recorder. Datum of gage is 9,169.67 ft above mean sea level (Bureau of Reclamation bench mark). Prior to Nov. 11, 1952, at site 1,000 ft downstream at datum 1.00 ft lower. Oct. 15, 1946, to May 4, 1952, supplementary chain and staff gages just downstream from reservoir outlet at different sites and datums used during winter months.

Average discharge.---34 years, 185 cfs (133,900 acre-ft per year).

Extremes.---Maximum discharge during year, 380 cfs Oct. 11 (gage height, 4.33 ft); minimum daily, 36 cfs June 20.

1938-67: Maximum discharge, 2,270 cfs July 1, 1957 (gage height, 7.56 ft); no flow May 1 to July 3, 1940, May 7-22, 1942, May 5-21, 1943.

Remarks.---Records good. Flow regulated by Taylor Park Reservoir (see preceding page) since 1937. One small diversion from Willow Creek above reservoir.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	370	300	130	49	47	46	47	70	143	149	244	235
2	370	296	90	49	47	47	47	85	151	149	244	235
3	370	300	90	49	47	47	47	85	155	149	241	235
4	366	300	90	49	47	47	47	85	155	149	241	235
5	366	300	90	49	47	47	46	85	153	205	241	235
6	366	300	90	49	47	48	46	85	149	235	241	235
7	370	300	90	49	47	48	46	85	149	235	241	235
8	366	300	90	49	47	48	46	90	149	235	241	235
9	366	300	90	49	47	48	46	105	149	238	238	235
10	366	296	90	49	47	49	45	105	149	238	238	235
11	370	296	90	48	47	49	45	105	149	235	238	235
12	377	300	90	48	47	49	45	105	149	241	238	235
13	377	296	90	48	46	49	45	105	149	253	238	235
14	374	296	90	48	46	50	44	105	149	259	241	235
15	374	296	65	48	46	50	44	105	149	286	241	235
16	374	296	50	48	46	50	44	106	149	307	241	235
17	370	296	50	48	46	50	44	106	149	310	241	235
18	370	296	50	48	46	50	44	106	149	310	241	244
19	370	296	50	48	46	50	44	106	90	296	238	247
20	370	300	50	48	46	50	44	106	36	276	238	241
21	370	300	50	48	46	50	44	106	74	259	238	238
22	370	300	50	48	46	50	44	106	153	247	238	238
23	370	300	50	47	46	50	44	111	153	241	238	238
24	324	300	50	47	46	49	44	108	155	241	238	238
25	300	300	50	47	46	49	44	105	155	238	238	238
26	300	296	50	47	46	49	44	106	155	238	238	238
27	300	296	50	47	46	49	44	105	145	238	238	238
28	300	295	50	47	46	48	44	105	149	241	238	238
29	300	300	50	47	-	48	44	106	149	241	238	238
30	300	290	50	47	- - - - -	48	44	106	149	241	235	238
31	300	- - - - -	50	47	- - - - -	48	- - - - -	106	- - - - -	241	235	- - - - -
Total	10,936	8,937	2,165	1,489	1,300	1,510	1,346	3,105	4,257	7,421	7,417	7,107
Mean	353	298	69.8	48.0	46.4	48.7	44.9	100	142	239	239	237
Max	377	300	130	49	47	50	47	111	155	310	244	247
Min	300	290	50	47	46	46	44	70	36	149	235	235
Ac-ft	21,690	17,730	4,290	2,950	2,580	3,000	2,670	6,160	8,440	14,720	14,710	14,100

Cal yr 1966: Total 81,245 Mean 223 Max 604 Min 49 Ac-ft 161,100
Wtr yr 1967: Total 56,990 Mean 156 Max 377 Min 36 Ac-ft 113,000

Note.---No gage-height record Nov. 28 to Mar. 16, Mar. 21 to May 8.

9-1100. Taylor River at Almont, Colo.

Location.--Lat 38°39'55", long 106°50'40", in SE¼ Sec.22, T.51 N., R.1 E., on left bank at Almont, 15 ft downstream from bridge on State Highway 306 and 800 ft upstream from confluence with East River.

Drainage area.--477 sq mi.

Records available.--July 1910 to September 1967. Monthly discharge only for some periods, published in WSP 1313.

Gage.--Water-stage recorder. Datum of gage is 8,010.76 ft above mean sea level, datum of 1929. Prior to Apr. 16, 1922, staff gage at same site and datum.

Average discharge.--57 years, 338 cfs (244,700 acre-ft per year).

Extremes.--Maximum discharge during year, 606 cfs June 5 (gage height, 2.57 ft); minimum daily, 85 cfs Jan. 25, 26, Feb. 9, 10.

1910-67: Maximum discharge observed, 3,760 cfs June 9, 1920, from rating curve extended above 2,300 cfs; maximum gage height, 5.32 ft July 1, 1957; minimum discharge observed before storage began in Taylor Park Reservoir, 50 cfs for several days in August 1913 (gage height, 1.2 ft); minimum daily, 24 cfs Mar. 12, 1938.

Remarks.--Records good except those for period of no gage-height record, which are poor. Flow regulated since September 1937 by Taylor Park Reservoir (see elsewhere in this report), 24 miles above station. Diversions for irrigation of about 360 acres above station.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	405	345	240	100	95	110	99	140	385	335	340	355
2	410	340	220	100	95	110	103	171	420	326	340	340
3	420	345	220	100	90	105	109	165	445	317	335	330
4	420	345	230	100	90	100	121	165	470	312	335	326
5	415	340	240	100	90	100	125	159	525	335	340	322
6	415	350	270	100	90	100	132	148	562	390	340	322
7	420	345	290	90	90	95	142	148	525	390	350	322
8	420	355	230	90	90	90	159	156	510	405	360	326
9	415	345	200	95	85	95	156	204	490	390	375	340
10	415	345	200	100	85	100	135	234	480	385	365	335
11	420	350	200	100	90	105	140	234	455	385	360	355
12	435	350	200	100	95	110	153	238	450	395	355	425
13	430	350	200	100	100	110	132	254	450	400	350	370
14	440	360	170	100	100	105	125	234	430	400	345	355
15	445	360	150	105	100	100	128	230	410	420	350	350
16	445	360	140	110	95	105	130	230	400	450	355	345
17	445	360	135	105	95	109	115	266	400	480	345	340
18	440	360	130	100	90	113	140	308	410	465	340	350
19	435	360	125	95	90	111	162	340	425	440	335	385
20	435	360	115	95	90	107	153	355	350	415	335	375
21	430	365	110	95	90	105	132	375	435	395	335	355
22	425	360	110	95	90	105	123	425	470	370	335	350
23	420	360	110	95	90	109	125	505	455	365	330	345
24	385	360	105	90	90	109	123	525	425	370	330	345
25	355	360	105	85	90	111	123	530	405	370	326	345
26	350	360	110	85	90	107	117	520	385	370	326	360
27	355	365	105	90	95	105	130	495	360	360	330	355
28	355	360	100	90	100	101	140	480	355	350	326	345
29	350	360	105	90	-	103	140	445	350	345	335	340
30	350	360	105	90	- - - -	99	145	420	340	345	345	335
31	350	- - - -	100	90	- - - -	97	- - - -	390	- - - -	345	355	- - - -
Total	12,650	10,635	5,070	2,980	2,580	3,231	3,955	9,489	12,972	11,820	10,623	10,443
Mean	408	354	164	96.1	92.1	104	132	306	432	381	343	348
Max	445	365	290	110	100	113	162	530	562	480	375	425
Min	350	340	100	85	85	90	99	140	340	312	326	322
Ac-ft	25,090	21,090	10,060	5,910	5,120	6,410	7,840	18,820	25,730	23,440	21,070	20,710

Cal yr 1966: Total 115,875 Mean 317 Max 952 Min 85 Ac-ft 229,800

Wtr yr 1967: Total 96,448 Mean 264 Max 562 Min 85 Ac-ft 191,300

Note.--No gage-height record Nov. 28 to Mar. 16.

GUNNISON RIVER BASIN

9-1122. East River below Cement Creek, near Crested Butte, Colo.

Location.--Lat 38°47'25", long 106°52'20", in sec.34, T.14 S., R.85 W., on left bank at downstream side of private bridge, 1.1 miles downstream from Cement Creek and 8 miles southeast of Crested Butte.

Drainage area.--235 sq mi.

Records available.--October 1963 to September 1967.

Gage.--Water-stage recorder. Altitude of gage is 8,450 ft (from topographic map).

Extremes.--Maximum discharge during year, 2,160 cfs May 24 (gage height, 7.56 ft); minimum daily, 48 cfs Jan. 9.
1963-67: Maximum discharge, 2,650 cfs June 21, 1965 (gage height, 7.96 ft); minimum daily, 38 cfs Jan. 14, 1964.

Remarks.--Records good except those for winter period, which are poor. Diversions for irrigation of about 4,500 acres above and below station.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	66	63	64	60	56	59	113	343	900	991	221	182
2	67	61	71	60	55	61	133	308	872	907	212	155
3	70	62	72	60	50	62	157	273	970	816	200	141
4	70	61	72	58	55	62	180	233	1,260	767	185	133
5	72	60	70	59	57	61	194	227	1,460	725	177	128
6	72	61	104	59	55	60	230	227	1,560	678	177	122
7	71	63	124	55	55	60	304	215	1,490	648	227	117
8	68	66	91	50	50	55	382	239	1,530	625	256	122
9	70	64	70	48	50	55	362	382	1,470	580	280	159
10	70	62	60	55	57	60	322	580	1,450	530	252	150
11	72	68	70	55	55	61	354	471	1,260	515	239	169
12	80	70	70	60	56	61	378	495	1,210	500	215	256
13	76	71	65	60	55	61	280	615	1,060	462	194	197
14	76	70	65	58	57	60	262	490	914	448	182	169
15	80	76	70	57	53	59	266	471	851	471	182	155
16	83	77	70	57	56	60	245	615	823	412	175	148
17	80	74	65	55	57	64	230	949	823	458	164	144
18	79	74	65	58	58	70	287	1,220	949	435	164	144
19	76	67	60	55	59	74	370	1,320	1,190	382	159	177
20	77	68	60	55	58	76	358	1,300	1,320	346	152	167
21	75	76	65	56	55	77	301	1,380	1,380	322	150	155
22	72	71	65	56	55	80	266	1,600	1,360	294	144	148
23	71	71	60	56	58	88	256	1,890	1,450	298	139	139
24	70	67	55	56	58	104	224	1,930	1,380	346	130	133
25	68	62	55	56	59	109	215	1,790	1,320	301	126	133
26	67	65	60	55	59	102	191	1,720	1,210	284	126	152
27	66	61	60	55	57	107	215	1,480	1,140	262	130	146
28	66	66	55	56	59	109	287	1,470	1,110	252	139	135
29	66	74	55	56	-	115	350	1,330	1,010	242	164	128
30	66	70	55	57	- - - -	106	374	1,170	1,010	236	162	122
31	66	- - - -	60	58	- - - -	106	- - - -	1,040	- - - -	236	175	- - - -
Total	2,228	2,021	2,103	1,751	1,564	2,344	8,086	27,773	35,732	14,769	5,598	4,526
Mean	71.9	67.4	67.8	56.5	55.9	75.6	270	896	1,191	476	181	151
Max	83	77	124	60	59	115	382	1,930	1,560	991	280	256
Min	66	60	55	48	50	55	113	215	823	236	126	117
Ac-ft	4,420	4,010	4,170	3,470	3,100	4,650	16,040	55,090	70,870	29,290	11,100	8,980

Cal yr 1966: Total 84,683 Mean 232 Max 1,460 Min 48 Ac-ft 168,000
Wtr yr 1967: Total 108,495 Mean 297 Max 1,930 Min 48 Ac-ft 215,200

Peak discharge (base, 1,500 cfs)

Date	Time	Gage height	Discharge	Date	Time	Gage height	Discharge
5-24	0400	7.56	2,160	6-23	0415	6.93	1,550
6-5	2345	7.09	1,690				

9-1125. East River at Almont, Colo.

Location.--Lat 38°39'55", long 106°50'50", in SE¼ sec.22, T.51 N., R.1 E., on left bank at Almont, 200 ft upstream from bridge on State Highway 135 and 400 ft upstream from confluence with Taylor River.

Drainage area.--289 sq mi.

Records available.--April to October 1905, July 1910 to September 1922, October 1934 to September 1967. Monthly discharge only for some periods, published in WSP 1313.

Gage.--Water-stage recorder. Datum of gage is 8,006.29 ft above mean sea level, datum of 1929. Apr. 16 to Sept. 30, 1905, and July 27, 1910, to Apr. 30, 1922, staff gages at bridge 200 ft downstream at different datums. Oct. 1, 1934, to Sept. 22, 1954, water-stage recorder at present site at datum 2.00 ft higher.

Average discharge.--45 years, 341 cfs (246,900 acre-ft per year).

Extremes.--Maximum discharge during year, 2,200 cfs May 24 (gage height, 5.65 ft); minimum daily, 50 cfs Jan. 9. 1905, 1910-22, 1934-67: Maximum discharge observed, 6,500 cfs June 15, 1921 (gage height, 6.6 ft, site and datum then in use), from rating curve extended above 3,000 cfs; minimum daily, 19 cfs Aug. 13, 1913.

Remarks.--Records good except those for winter period, which are poor. Diversions for irrigation of about 7,400 acres above station.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	70	89	70	65	60	64	125	360	825	1,010	280	200
2	70	78	80	65	55	66	140	298	776	908	260	170
3	72	80	83	65	55	66	167	274	876	804	246	152
4	72	72	83	65	60	66	188	249	1,180	762	235	146
5	78	68	83	70	60	66	210	235	1,450	714	228	140
6	80	65	122	65	60	66	250	232	1,660	660	235	137
7	78	68	161	60	60	68	320	224	1,560	648	277	131
8	75	75	122	55	55	66	400	224	1,580	618	302	128
9	72	70	80	50	55	64	380	390	1,520	575	316	149
10	72	62	60	55	60	62	340	580	1,520	540	294	149
11	75	75	80	60	60	64	370	540	1,280	515	277	164
12	83	72	75	65	60	66	380	500	1,210	515	252	242
13	78	75	75	65	60	66	277	620	1,070	491	228	204
14	80	75	75	70	60	66	246	560	884	460	214	179
15	86	83	80	70	60	66	260	500	790	486	210	164
16	101	89	75	65	58	70	242	620	762	443	200	158
17	98	83	70	60	60	80	221	624	741	473	185	155
18	98	80	70	60	60	85	290	964	846	451	182	152
19	95	72	70	60	60	95	400	1,120	1,140	411	179	167
20	95	78	70	60	60	100	380	1,120	1,340	383	170	167
21	95	89	70	60	60	104	320	1,250	1,510	358	164	155
22	92	80	70	65	58	104	300	1,600	1,440	319	158	152
23	89	83	65	65	60	113	260	1,880	1,550	312	152	146
24	86	80	60	65	62	128	228	1,980	1,440	354	146	143
25	89	75	60	60	62	134	214	1,820	1,380	330	137	137
26	89	72	65	60	62	122	194	1,740	1,270	312	137	152
27	86	72	65	60	62	128	210	1,450	1,170	298	140	152
28	83	72	60	60	62	125	263	1,440	1,170	280	146	140
29	80	80	60	60	-	134	360	1,290	1,030	270	164	134
30	83	80	65	65	- - - - -	122	390	1,140	1,010	280	170	131
31	92	- - - - -	65	65	- - - - -	119	- - - - -	980	- - - - -	288	176	- - - - -
Total	2,592	2,292	2,389	1,935	1,666	2,745	8,325	26,804	35,980	15,268	6,460	4,696
Mean	83.6	76.4	77.1	62.4	59.5	88.5	278	865	1,199	493	208	157
Max	101	89	161	70	62	134	400	1,980	1,660	1,010	316	242
Min	70	62	60	50	55	62	125	224	741	270	137	128
Ac-ft	5,140	4,550	4,740	3,840	3,300	5,440	16,510	53,160	71,370	30,280	12,810	9,310
Cal yr 1966: Total	84,343		Mean 231	Max 1,320	Min 50	Ac-ft 167,300						
Wtr yr 1967: Total	111,152		Mean 305	Max 1,980	Min 50	Ac-ft 220,500						

Peak discharge (base, 1,600 cfs)

Date	Time	Gage height	Discharge	Date	Time	Gage height	Discharge
5-24	0545	5.65	2,200	6-23	0400	5.06	1,700
6-6	0230	5.19	1,790				

Note.--Stage-discharge relation indefinite Feb. 15 to Mar. 20.

GUNNISON RIVER BASIN

9-1133. Ohio Creek at Baldwin, Colo.

Location.--Lat 38°45'55", long 107°03'30", in NE¼ sec.12, T.15 S., R.87 W., on left bank three quarters of a mile northwest of Baldwin and 0.2 mile downstream from Castle Creek.

Drainage area.--47.2 sq mi (revised).

Records available.--October 1958 to September 1967.

Gage.--Water-stage recorder. Altitude of gage is 8,600 ft (from topographic map).

Average discharge.--9 years, 44.0 cfs (31,850 acre-ft per year).

Extremes.--Maximum discharge during year, 350 cfs June 8 (gage height, 3.16 ft); minimum daily, 5.2 cfs Oct. 1.
1958-67: Maximum discharge, about 550 cfs May 9, 1962; maximum gage height, 3.77 ft May 12, 1962; minimum daily discharge determined, 3.8 cfs July 29, 1963.

Remarks.--Records good except those for winter period, which are poor. Diversions above station for irrigation of about 580 acres of hay meadows. Two diversions above station for irrigation of about 1,000 acres below station.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5.2	9.4	10	8.0	9.0	11	32	69	128	90	11	22
2	5.4	14	10	8.0	8.5	12	34	62	136	74	11	19
3	7.2	12	11	7.5	8.0	12	38	55	148	67	12	18
4	6.9	11	12	7.5	8.0	11	40	53	186	63	11	16
5	7.5	11	12	8.0	8.0	11	43	53	201	60	17	17
6	11	13	26	7.5	8.0	10	45	51	245	53	27	20
7	13	11	40	7.0	8.5	10	55	53	189	50	57	20
8	12	11	25	6.5	8.5	11	66	79	214	47	51	20
9	11	10	15	6.5	8.5	13	60	114	224	40	52	33
10	11	10	9.0	7.0	9.0	15	55	121	153	33	46	24
11	14	14	9.5	7.5	8.5	17	62	105	138	47	42	48
12	21	13	9.5	8.0	8.5	19	66	105	140	51	39	64
13	16	12	9.5	9.0	8.5	20	53	105	119	43	33	39
14	15	11	8.0	9.0	8.5	19	54	79	103	38	31	31
15	16	12	8.5	9.0	8.5	18	55	72	94	34	31	27
16	14	12	8.5	8.0	8.5	20	54	82	92	37	27	24
17	14	12	9.0	7.5	8.5	28	54	110	103	57	24	23
18	13	11	9.0	7.5	8.5	26	60	140	136	48	22	23
19	14	11	9.0	7.0	8.5	26	77	156	166	38	21	34
20	13	11	9.0	7.0	8.5	28	74	169	189	32	20	27
21	12	11	9.0	7.5	8.0	30	60	172	201	27	19	24
22	12	10	8.5	8.0	8.0	32	55	201	192	26	18	24
23	11	10	8.0	8.0	7.5	36	55	228	192	26	18	21
24	12	10	7.0	8.0	8.0	40	51	224	177	23	16	20
25	11	9.5	7.5	8.0	8.5	36	51	204	177	16	16	20
26	11	9.5	8.5	7.5	9.0	34	51	214	143	14	15	22
27	11	10	7.5	7.5	10	34	66	186	121	14	13	21
28	11	10	7.0	8.0	11	34	92	201	114	15	13	19
29	11	10	7.5	8.0	-	32	103	177	99	13	17	19
30	11	11	8.0	9.0	- - - - -	32	94	161	101	12	16	17
31	11	- - - - -	8.0	10	- - - - -	30	- - - - -	143	- - - - -	11	24	- - - - -
Total	364.2	332.4	346.0	242.5	239.0	707	1,755	3,944	4,621	1,199	770	756
Mean	11.7	11.1	11.2	7.82	8.54	22.8	58.5	127	154	38.7	24.8	25.2
Max	21	14	40	10	11	40	103	228	245	90	57	64
Min	5.2	9.4	7.0	6.5	7.5	10	32	51	92	11	11	16
Ac-ft	722	659	686	481	474	1,400	3,480	7,820	9,170	2,380	1,530	1,500

Cal yr 1966: Total 12,845.5 Mean 35.2 Max 201 Min 5.2 Ac-ft 25,480
Wtr yr 1967: Total 15,276.1 Mean 41.9 Max 245 Min 5.2 Ac-ft 30,300

Peak discharge (base, 300 cfs).--June 8 (2000) 350 cfs (3.16 ft).

Note.--No gage-height record Dec. 13 to Apr. 4.

9-1135. Ohio Creek near Baldwin, Colo.

Location.--Lat 38°42', long 107°00', in SW¼ sec.34, T.15 S., R.86 W., on right bank 600 ft upstream from bridge, 800 ft downstream from Mill Creek, 5½ miles southeast of Baldwin, and 11 miles upstream from mouth.

Drainage area.--121 sq mi (revised).

Records available.--April 1940 to September 1950, October 1958 to September 1967. Monthly discharge only for some periods, published in WSP 1313.

Gage.--Water-stage recorder. Altitude of gage is 8,180 ft (by barometer). Prior to Apr. 3, 1942, staff gage at present site and datum. Apr. 3, 1942, to Sept. 30, 1950, water-stage recorder at present site and datum.

Average discharge.--19 years, 87.2 cfs (63,130 acre-ft per year).

Extremes.--Maximum discharge during year, 744 cfs July 23 (gage height, 3.09 ft); minimum daily, 11 cfs Oct. 1, 2, Jan. 3, 4.
1940-50, 1958-67: Maximum discharge, 1,260 cfs May 19, 1948 (gage height, 4.65 ft), from rating curve extended above 560 cfs; minimum daily, 6.9 cfs Sept. 12, 1960.
Floods in May 1952 and June 1957 reached a stage of 5.5 ft, from floodmarks (discharge, about 1,500 cfs).

Remarks.--Records good except those for winter period, which are poor. Diversions for irrigation of 3,850 acres above station.

Cooperation.--One discharge measurement furnished by Bureau of Reclamation.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	11	16	18	12	18	19	56	111	225	137	37	43
2	11	18	19	12	17	21	66	95	225	128	40	36
3	16	17	21	11	17	22	75	86	255	116	36	31
4	16	17	22	11	17	21	79	80	306	102	31	28
5	15	17	22	12	18	20	81	83	342	97	31	29
6	17	18	63	13	18	19	84	80	374	88	37	35
7	18	18	72	13	18	18	97	79	333	87	81	32
8	16	16	50	13	17	18	110	108	318	88	74	33
9	16	15	26	12	16	19	108	144	306	79	79	50
10	15	15	16	12	16	22	93	156	270	68	68	37
11	16	17	16	12	16	26	100	137	246	87	59	66
12	26	20	16	12	16	30	107	135	255	98	57	91
13	21	19	15	13	17	30	88	142	234	86	48	54
14	19	18	15	14	18	28	83	117	202	72	46	44
15	18	19	16	15	18	26	88	104	198	75	48	40
16	18	20	16	15	18	36	93	120	198	74	45	37
17	18	19	14	14	18	42	88	158	205	104	40	35
18	18	18	14	14	17	40	98	202	237	86	38	35
19	18	18	14	14	16	40	125	216	273	66	37	48
20	20	18	14	15	15	44	122	231	300	60	37	40
21	20	19	14	16	15	50	105	252	303	55	36	35
22	19	21	14	17	15	60	97	297	279	52	34	35
23	19	20	14	17	15	70	94	327	270	145	33	33
24	18	19	14	17	15	75	90	348	252	77	30	32
25	19	19	14	17	15	70	97	342	225	60	29	31
26	19	18	14	16	16	67	84	370	178	55	29	33
27	18	18	14	16	17	62	100	333	172	54	30	30
28	18	19	14	16	18	63	130	342	160	51	32	29
29	18	20	13	17	-	61	138	312	140	40	36	29
30	17	20	12	18	- - - -	51	135	285	138	37	35	28
31	18	- - - -	12	18	- - - -	51	- - - -	261	- - - -	38	41	- - - -
Total	546	546	628	444	467	1,221	2,901	6,053	7,419	2,462	1,334	1,159
Mean	17.6	18.2	20.3	14.3	16.7	39.4	96.7	195	247	79.4	43.0	38.6
Max	26	21	72	18	18	75	138	370	374	145	81	91
Min	11	15	12	11	15	18	56	79	138	37	29	28
Ac-ft	1,080	1,080	1,250	881	926	2,420	5,750	12,010	14,720	4,880	2,650	2,300

Cal yr 1966: Total 21,202 Mean 58.1 Max 327 Min 11 Ac-ft 42,050
Wtr yr 1967: Total 25,180 Mean 69.0 Max 374 Min 11 Ac-ft 49,940

Peak discharge (base, 450 cfs).--June 5 (2130) 479 cfs (2.30 ft); July 23 (1845) 744 cfs (3.09 ft).

Note.--No gage-height record Dec. 17 to Mar. 17.

9-1145. Gunnison River near Gunnison, Colo.

Location.--Lat 38°32'50", long 106°57'00", on line between secs. 34 and 35, T.50 N., R.1 W., on right bank 1,570 ft downstream from Antelope Creek and 1 mile west of Gunnison.

Drainage area.--1,012 sq mi (revised).

Records available.--October 1910 to December 1928, October 1944 to September 1967. Monthly discharge only for some periods, published in WSP 1313.

Gage.--Water-stage recorder. Altitude of gage is 7,670 ft (from river-profile map). Nov. 25, 1910, to Dec. 31, 1928, staff or chain gages (supplementary water-stage recorder Apr. 28, 1916, to June 13, 1918) at bridge about 1 mile downstream at various datums. Oct. 1, 1944, to Mar. 23, 1965, water-stage recorder at site 70 ft upstream at same datum.

Average discharge.--41 years, 776 cfs (561,800 acre-ft per year).

Extremes.--Maximum discharge during year, 2,890 cfs May 24 (gage height, 3.90 ft); minimum daily, 135 cfs Jan. 8.

1910-28, 1944-67: Maximum discharge observed, 11,400 cfs June 13, 1918 (gage height, 4.05 ft, site and datum then in use), from rating curve extended above 5,000 cfs; minimum daily, 80 cfs Dec. 27, 1962.

Remarks.--Records good except those for period of no gage-height record, which are poor. Flow regulated by Taylor Park Reservoir (see sta. no. 9-1085), 37 miles above station. Diversions for irrigation of about 22,000 acres above station.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	390	450	345	150	190	240	286	456	1,370	1,320	631	554
2	414	438	274	150	170	280	310	432	1,310	1,250	645	510
3	432	444	266	150	160	260	366	384	1,430	1,160	631	468
4	438	444	278	155	170	240	420	355	1,730	1,060	610	432
5	450	432	282	160	160	220	420	325	2,060	1,020	589	420
6	468	432	390	155	160	210	486	310	2,460	1,020	596	426
7	462	432	522	150	160	200	547	290	2,260	1,020	680	408
8	486	456	384	135	155	200	659	290	2,230	1,050	750	384
9	492	444	294	140	150	220	680	335	2,160	970	766	420
10	492	432	260	150	150	250	561	568	2,160	902	750	426
11	516	456	270	160	155	270	582	528	1,910	875	715	468
12	540	456	263	160	160	280	659	498	1,770	930	687	659
13	534	450	263	155	165	280	528	645	1,700	920	638	561
14	540	444	263	160	170	260	450	554	1,500	884	610	504
15	561	450	214	170	170	221	468	522	1,370	960	603	486
16	568	462	190	180	165	232	450	582	1,360	970	603	462
17	561	456	182	170	160	302	378	822	1,300	1,070	568	450
18	547	450	179	160	160	320	438	1,180	1,380	1,010	554	444
19	547	438	179	150	160	310	554	1,370	1,720	866	554	528
20	554	444	176	155	155	290	554	1,430	1,860	774	534	540
21	540	462	168	160	150	290	444	1,570	2,230	736	528	486
22	534	444	160	160	150	290	366	1,980	2,060	687	504	474
23	528	456	160	160	155	315	355	2,460	2,160	715	498	462
24	516	450	150	160	165	335	335	2,640	2,020	830	474	450
25	474	444	160	155	175	345	315	2,520	1,880	736	456	462
26	474	444	170	150	185	306	278	2,470	1,760	722	456	480
27	468	444	160	155	200	306	290	2,150	1,550	715	462	486
28	468	444	150	160	220	302	390	2,100	1,520	680	456	456
29	456	462	160	160	-	315	438	1,940	1,430	652	486	438
30	450	462	160	160	- - - -	298	504	1,740	1,350	638	504	426
31	456	- - - -	155	170	- - - -	282	- - - -	1,520	- - - -	638	516	- - - -
Total	15,356	13,422	7,227	4,865	4,635	8,469	13,511	34,966	53,000	27,780	18,054	14,170
Mean	495	447	233	157	166	273	450	1,128	1,767	896	582	472
Max	568	462	522	180	220	345	680	2,640	2,460	1,320	766	659
Min	390	432	150	135	150	200	278	290	1,300	638	456	384
Ac-ft	30,460	26,620	14,330	9,650	9,190	16,800	26,800	69,350	105,100	55,100	35,810	28,110

Cal yr 1966: Total 205,215 Mean 562 Max 2,150 Min 150 Ac-ft 407,000
 Wtr yr 1967: Total 215,455 Mean 590 Max 2,640 Min 135 Ac-ft 427,300

Note.--No gage-height record Dec. 22 to Mar. 14.

9-1155. Tomichi Creek at Sargents, Colo.

Location.--Lat 38°23'45", long 106°25'20", in SW¼ sec.21, T.48 N., R.5 E., on right bank 300 ft from U. S. Highway 50, half a mile downstream from Marshall Creek, and three-quarters of a mile south of Sargents.

Drainage area.--149 sq mi (revised).

Records available.--October 1916 to September 1922, October 1937 to September 1967. Monthly discharge only for some periods, published in WSP 1313.

Gage.--Water-stage recorder. Altitude of gage is 8,416 ft (from topographic map). May 12 to Oct. 5, 1917, staff gage and Oct. 6, 1917, to Sept. 30, 1922, water-stage recorder, at railroad bridge 1,000 ft upstream at different datum. Apr. 18, 1938, to Sept. 9, 1953, water-stage recorder at present site at datum 1.00 ft higher.

Average discharge.--36 years, 62.4 cfs (45,180 acre-ft per year).

Extremes.--Maximum discharge during year, 128 cfs May 26 (gage height, 1.54 ft); minimum daily, 8.0 cfs Jan. 9. 1916-22, 1937-67: Maximum discharge, 804 cfs June 6, 1957 (gage height, 3.66 ft); maximum gage-height, 3.74 ft Mar. 24, 1963 (backwater from ice); minimum discharge recorded, 6 cfs Nov. 16, 1920.

Remarks.--Records good except those for winter period, which are poor. Diversion for irrigation of about 1,900 acres above station. Larkspur ditch diverts water above station to Arkansas River basin (see elsewhere in this report).

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	20	22	18	9.0	10	16	42	33	72	30	19	33
2	20	20	18	9.0	10	18	38	36	66	29	16	24
3	23	15	17	9.0	11	18	39	32	74	27	16	22
4	23	17	16	10	11	17	39	31	76	30	16	20
5	23	19	16	11	11	16	36	30	78	29	16	19
6	23	20	18	11	11	15	39	29	82	27	13	20
7	23	20	20	11	11	15	42	28	76	29	14	20
8	22	18	16	10	10	16	43	32	71	31	15	21
9	22	16	14	8.0	10	17	39	44	68	28	17	28
10	22	14	12	9.0	10	18	34	52	61	28	20	26
11	22	17	12	10	10	20	33	54	55	34	20	26
12	23	20	13	11	10	21	34	50	51	43	21	32
13	23	19	14	12	11	23	28	57	45	39	20	27
14	24	17	14	12	12	24	44	52	44	33	17	25
15	25	16	14	12	12	24	36	45	47	33	20	24
16	26	18	13	11	12	22	31	42	44	34	21	23
17	25	20	13	10	12	20	31	43	51	50	18	22
18	24	19	12	10	11	24	33	50	52	40	20	25
19	24	17	12	10	10	28	33	60	50	30	20	30
20	25	16	12	11	10	28	29	64	60	32	22	29
21	24	18	12	12	10	26	28	72	78	29	20	26
22	22	18	12	12	10	26	27	78	60	26	19	25
23	22	17	12	12	10	27	29	86	55	25	18	25
24	23	16	12	12	10	30	27	78	45	23	16	25
25	24	15	12	11	11	32	29	78	42	24	16	26
26	24	15	11	11	12	30	29	96	40	22	15	29
27	24	16	10	11	13	30	33	101	33	20	16	28
28	23	17	9.0	12	14	30	37	94	32	20	16	27
29	22	18	9.0	12	-	34	37	94	33	19	17	26
30	23	18	9.0	11	- - - -	38	34	80	32	18	21	26
31	23	- - - -	9.0	10	- - - -	40	- - - -	78	- - - -	18	32	- - - -
Total	716	528	411.0	332.0	305	743	1,033	1,799	1,673	900	567	759
Mean	23.1	17.6	13.3	10.7	10.9	24.0	34.4	58.0	55.8	29.0	18.3	25.3
Max	26	22	20	12	14	40	44	101	82	50	32	33
Min	20	14	9.0	8.0	10	15	27	28	32	18	13	19
Ac-ft	1,420	1,050	815	659	605	1,470	2,050	3,570	3,320	1,790	1,120	1,510

Cal yr 1966: Total 13,673.2 Mean 37.5 Max 136 Min 9.0 Ac-ft 27,120

Wtr yr 1967: Total 9,766.0 Mean 26.8 Max 101 Min 8.0 Ac-ft 19,370

Peak discharge (base, 200 cfs).--No peak above base.

Note.--No gage-height record Dec. 14 to Mar. 15.

9-1170. Tomichi Creek at Parlin, Colo.

Location.--Lat 38°29'50", long 106°43'30", in NW¼ sec.23, T.49 N., R.2 E., on left bank 70 ft upstream from bridge, 0.2 mile south of Parlin, and 0.4 mile upstream from Quartz Creek.

Drainage area.--427 sq mi.

Records available.--October 1944 to September 1951, October 1963 to September 1967.

Gage.--Water-stage recorder. Altitude of gage is 7,910 ft (from topographic map). Prior to October 1963 at site 800 ft downstream at different datum.

Average discharge.--11 years, 58.7 cfs (42,500 acre-ft per year).

Extremes.--Maximum discharge during year, 95 cfs May 29 (gage height, 2.93 ft), from rating curve extended above 60 cfs; maximum gage height, 3.13 ft Jan. 14 (backwater from ice); minimum daily discharge, 3.6 cfs Oct. 4.
1944-51, 1963-67: Maximum discharge, 669 cfs May 25, 1948 (gage height, 6.37 ft, site and datum then in use), from rating curve extended above 400 cfs; minimum daily, 0.5 cfs Sept. 10-12, 1950.

Remarks.--Records good except those for winter period, which are poor. Diversions for irrigation of about 11,000 acres above station.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	6.4	9.4	22	13	20	30	42	5.8	75	10	7.7	14
2	7.0	9.1	23	12	19	36	24	5.2	53	9.4	7.4	16
3	7.4	8.4	23	11	18	40	22	4.0	48	8.4	6.4	19
4	3.6	8.4	21	10	18	36	33	5.2	52	7.4	6.1	19
5	4.0	8.0	19	11	18	34	33	6.4	51	7.0	5.8	18
6	5.8	8.4	24	12	19	32	28	8.4	51	6.4	5.8	16
7	6.7	10	30	14	19	30	20	9.1	43	6.7	4.6	15
8	6.4	20	20	12	19	30	20	8.4	31	7.0	4.0	17
9	6.1	17	16	12	18	30	18	7.7	25	6.7	4.3	20
10	6.4	16	16	13	18	30	18	8.0	24	7.0	4.3	20
11	7.0	20	17	14	18	32	19	6.4	25	6.4	4.9	20
12	8.0	25	18	15	18	36	19	6.1	24	6.7	8.0	17
13	8.4	22	18	16	18	38	16	6.1	24	7.4	13	19
14	9.1	21	18	17	19	38	15	6.4	27	8.4	11	20
15	9.8	20	18	17	20	36	12	9.8	34	9.4	10	20
16	9.8	22	18	16	20	34	10	14	35	11	9.8	19
17	10	22	18	15	20	34	12	14	35	24	9.8	18
18	9.4	21	17	15	20	40	12	12	33	32	9.8	17
19	9.1	20	17	16	19	48	13	11	32	27	9.8	19
20	12	19	17	17	18	46	12	11	43	22	9.4	22
21	12	21	17	18	18	42	11	12	69	19	9.1	20
22	11	22	17	18	18	42	10	18	63	18	8.8	18
23	10	21	17	18	19	46	9.4	22	46	13	8.8	19
24	10	20	17	18	20	55	8.0	31	35	14	8.4	19
25	10	18	17	17	21	70	8.0	35	28	16	7.7	18
26	9.8	17	16	16	22	65	7.0	46	24	15	7.4	18
27	9.4	17	15	16	24	60	6.7	62	19	13	7.4	22
28	9.4	19	14	17	26	56	7.0	64	16	9.4	10	21
29	9.1	21	13	18	-	56	6.1	84	15	8.0	16	20
30	9.1	23	13	19	- - - - -	55	6.1	74	12	7.7	13	20
31	9.4	- - - - -	14	20	- - - - -	38	- - - - -	65	- - - - -	7.7	13	- - - - -
Total	261.6	525.7	560	473	544	1,295	477.3	678.0	1,092	371.1	261.5	560
Mean	8.44	17.5	18.1	15.3	19.4	41.8	15.9	21.9	36.4	12.0	8.44	18.7
Max	12	25	30	20	26	70	42	84	75	32	16	22
Min	3.6	8.0	13	10	18	30	6.1	4.0	12	6.4	4.0	14
Ac-ft	519	1,040	1,110	938	1,080	2,570	947	1,340	2,170	736	519	1,110

Cal yr 1966: Total 12,939.9 Mean 35.5 Max 271 Min 3.0 Ac-ft 25,670
Wtr yr 1967: Total 7,099.2 Mean 19.4 Max 84 Min 3.6 Ac-ft 14,080

Peak discharge (base, 250 cfs).--No peak above base.

9-1180. Quartz Creek near Ohio, Colo.

(Formerly published as Quartz Creek near Ohio City)

Location.--Lat 38°33'35", long 106°38'10", in SW¼SW¼ sec.27, T.50 N., R.3 E., on left bank 10 ft downstream from bridge on State Highway 162, 0.7 mile downstream from Willow Creek, 1.3 miles southwest of Ohio, and 1.4 miles downstream from Gold Creek.

Drainage area.--106 sq mi.

Records available.--October 1937 to September 1950, October 1959 to September 1967. Monthly discharge only for some periods, published in WSP 1313. Published as "near Ohio City," 1959-66.

Gage.--Water-stage recorder. Altitude of gage is 8,430 ft (from topographic map). Prior to Oct. 1, 1945, at site 75 ft upstream at datum 3.00 ft higher. Oct. 1, 1945, to Sept. 30, 1950, at site 75 ft upstream at datum 2.00 ft higher.

Average discharge.--21 years, 53.0 cfs (38,370 acre-ft per year). (20 years, 53.6 cfs, 38,800 acre-ft per year; figure previously published in error.)

Extremes.--Maximum discharge during year, 287 cfs May 23 (gage height, 2.90 ft); minimum daily, 12 cfs Dec. 10.
1937-50, 1959-67: Maximum discharge, 640 cfs May 26, 1942 (gage height, 5.90 ft, present datum), from rating curve extended above 470 cfs; maximum gage height, 7.73 ft (present datum) July 31, 1945 (backwater from Flick Gulch, 225 ft below station); minimum daily discharge, 8.5 cfs Sept. 30, 1950.

Remarks.--Records good except those for winter period, which are poor. Diversions for irrigation of about 700 acres above and 200 acres below station. Slight regulation prior to 1946 by small powerplant 3 miles above station

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	16	18	14	17	19	14	24	46	116	73	30	52
2	18	18	15	17	17	14	27	40	114	67	29	43
3	20	20	16	17	16	15	31	39	127	60	29	41
4	20	20	16	17	16	15	32	32	136	53	34	39
5	19	19	15	17	17	15	33	29	165	47	40	37
6	18	19	17	17	18	15	36	26	179	40	37	36
7	18	19	19	16	18	15	37	25	176	41	46	36
8	17	18	16	15	18	14	40	29	165	50	40	37
9	14	17	14	15	17	13	39	44	154	41	43	44
10	16	16	12	16	17	13	34	62	152	40	46	39
11	16	17	14	17	18	14	34	73	144	47	43	47
12	19	18	15	18	18	15	36	81	136	50	44	65
13	19	17	16	18	17	15	34	93	127	44	43	48
14	23	17	17	18	16	15	32	78	121	41	36	43
15	23	18	17	17	15	15	34	70	116	46	39	36
16	23	18	17	16	15	16	32	73	116	46	41	34
17	22	18	17	15	15	17	30	90	118	48	37	39
18	21	18	17	15	16	18	34	110	121	44	36	40
19	20	18	16	15	16	18	39	134	129	37	37	53
20	20	17	15	15	14	18	39	136	162	34	34	47
21	20	18	16	16	13	19	36	162	176	32	34	44
22	20	19	16	17	13	20	33	196	149	31	37	41
23	20	19	15	17	14	24	37	230	139	32	36	39
24	20	18	14	16	15	26	34	214	125	31	33	33
25	20	17	14	16	15	26	34	211	114	37	32	33
26	20	15	16	16	14	24	33	208	106	37	33	41
27	20	14	16	16	13	24	37	187	99	31	34	43
28	20	14	14	16	13	26	44	179	92	30	39	40
29	19	15	15	17	-	27	47	154	86	30	41	37
30	19	16	16	18	- - - - -	26	53	136	83	30	44	37
31	19	- - - - -	17	20	- - - - -	24	- - - - -	127	- - - - -	29	50	- - - - -
Total	599	525	484	513	443	570	1,065	3,314	3,943	1,299	1,177	1,244
Mean	19.3	17.5	15.6	16.5	15.8	18.4	35.5	107	131	41.9	38.0	41.5
Max	23	20	19	20	19	27	53	230	179	73	50	65
Min	14	14	12	15	13	13	24	25	83	29	29	33
Ac-ft	1,190	1,040	960	1,020	879	1,130	2,110	6,570	7,820	2,580	2,330	2,470

Cal yr 1966: Total 14,634 Mean 40.1 Max 162 Min 12 Ac-ft 29,030
Wtr yr 1967: Total 15,176 Mean 41.6 Max 230 Min 12 Ac-ft 30,100

Peak discharge (base, 220 cfs).--May 23 (0015) 287 cfs (2.90 ft).

Note.--No gage-height record Nov. 26 to Mar. 15.

9-1190. Tomichi Creek at Gunnison, Colo.

Location.--Lat 38°31'20", long 106°56'25", in NE¼SW¼ sec.11, T.49 N., R.1 W., on right bank 300 ft downstream from highway bridge, 1.8 miles southwest of post office in Gunnison, and 2 miles upstream from mouth.

Drainage area.--1,061 sq mi (revised).

Records available.--November and December 1910 (gage heights and discharge measurements only), October 1937 to September 1967. Monthly discharge only for some periods, published in WSP 1313. Published as "near Gunnison" 1910.

Gage.--Water-stage recorder. Datum of gage is 7,628.58 ft above mean sea level, datum of 1929. Nov. 25 to Dec. 24, 1910, staff gage 300 ft upstream at different datum. Apr. 20, 1938, to Oct. 2, 1940, water-stage recorder at present site at datum 1.00 ft higher.

Average discharge.--30 years, 167 cfs (120,900 acre-ft per year).

Extremes.--Maximum discharge during year, 432 cfs May 22 (gage height, 2.14 ft); minimum daily, 4.5 cfs Apr. 30. 1937-67: Maximum discharge, 1,900 cfs June 8, 1957 (gage height, 4.10 ft); minimum daily, that of Apr. 30, 1967.

Remarks.--Records good except those for winter period, which are poor. Diversions for irrigation of about 24,000 acres above station. Water diverted above station by Larkspur ditch to Arkansas River basin since 1935 and by Tarbell ditch to Rio Grande basin since 1914 (see elsewhere in this report).

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	26	59	84	40	60	75	93	14	231	75	98	73
2	26	54	91	40	58	85	89	10	204	71	93	67
3	28	59	98	40	54	85	80	8.0	201	50	89	60
4	29	62	102	38	54	80	93	6.0	210	44	89	56
5	29	59	93	38	56	75	100	5.0	231	45	95	52
6	30	58	107	40	58	70	98	10	252	47	100	52
7	30	60	159	50	56	70	87	8.0	244	50	116	48
8	30	75	125	47	54	70	82	12	225	64	118	48
9	30	82	89	45	54	75	78	6.0	207	56	118	58
10	30	80	60	45	54	80	78	6.0	183	53	123	59
11	30	95	55	47	54	90	75	8.0	180	56	120	64
12	34	114	55	50	54	95	75	7.0	177	56	123	73
13	29	100	55	55	54	100	71	6.0	180	54	138	69
14	30	91	55	58	56	95	66	10	174	56	120	60
15	29	89	60	58	60	90	62	14	171	82	116	56
16	29	100	55	56	60	80	53	20	183	102	116	60
17	34	100	50	50	58	87	47	26	180	140	102	59
18	35	93	50	50	56	98	47	35	171	153	104	60
19	38	91	50	50	54	118	39	69	180	138	109	71
20	46	87	50	50	52	110	36	100	220	123	109	75
21	54	100	50	54	52	100	34	93	268	109	84	69
22	53	100	50	58	52	100	32	139	240	102	73	62
23	53	98	50	60	52	109	26	177	222	98	73	59
24	47	93	50	60	54	118	26	207	189	104	66	56
25	47	82	50	60	56	135	28	204	165	123	50	50
26	46	76	48	58	58	116	30	222	153	125	42	48
27	46	75	46	56	60	116	29	252	140	116	36	48
28	48	80	44	56	65	104	26	268	125	107	39	59
29	56	93	42	58	-	111	10	276	98	95	46	50
30	60	109	42	60	- - - - -	111	4.5	256	80	89	52	50
31	59	- - - - -	40	60	- - - - -	89	- - - - -	234	- - - - -	93	59	- - - - -
Total	1,191	2,514	2,055	1,587	1,565	2,937	1,694.5	2,708.0	5,684	2,676	2,816	1,771
Mean	38.4	83.8	66.3	51.2	55.9	94.7	56.5	87.4	189	86.3	90.8	59.0
Max	60	114	159	60	65	135	100	276	268	153	138	75
Min	26	54	40	38	52	70	4.5	5.0	80	44	36	48
Ac-ft	2,360	4,990	4,080	3,150	3,100	5,830	3,360	5,370	11,270	5,310	5,590	3,510

Cal yr 1966: Total 37,607 Mean 103 Max 480 Min 24 Ac-ft 74,590
Wtr yr 1967: Total 29,198.5 Mean 80.0 Max 276 Min 4.5 Ac-ft 57,910

Note.--No gage-height record Dec. 21 to Mar. 15.

9-1245. Lake Fork at Gateview, Colo.

Location.--Lat 38°17'50", long 107°13'50", in sec.29, T.47 N., R.3 W., on left bank at old village of Gateview, 15 ft downstream from private bridge, a quarter of a mile upstream from Indian Creek, and 15 miles upstream from mouth.

Drainage area.--334 sq mi (revised).

Records available.--October 1937 to September 1967. Monthly discharge only for some periods, published in WSP 1313.

Gage.--Water-stage recorder. Datum of gage is 7,827.66 ft above mean sea level, datum of 1929. Prior to Oct. 1, 1938, at datum 2.00 ft higher and Oct. 1, 1938, to Sept. 30, 1945, at datum 1.00 ft higher.

Average discharge.--30 years, 241 cfs (174,500 acre-ft per year).

Extremes.--Maximum discharge during year, 1,290 cfs May 25 (gage height, 2.86 ft); minimum daily, 32 cfs Dec. 10.
1937-67: Maximum discharge, 2,700 cfs June 29, 1957 (gage height, 4.30 ft); minimum daily determined, 25 cfs Dec. 5, 1955, Jan. 10, 17, 18, 1957.

Remarks.--Records good except those for winter period, which are poor. Diversions for irrigation of about 1,600 acres above station.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	60	54	52	48	46	46	59	89	410	355	117	102
2	60	49	46	44	40	55	57	98	435	345	101	99
3	65	52	49	42	38	50	63	83	450	320	96	93
4	70	52	48	40	42	46	75	80	520	296	99	89
5	70	46	47	46	44	44	77	78	588	272	98	83
6	70	49	56	46	46	44	75	75	636	253	95	83
7	70	49	70	44	44	46	78	72	624	250	107	86
8	65	52	57	36	40	44	88	80	648	253	114	88
9	65	51	40	36	42	46	92	128	624	239	123	85
10	65	46	32	40	46	50	83	253	594	222	126	85
11	65	54	36	44	46	55	81	332	520	216	150	83
12	64	53	44	48	44	55	80	324	490	228	172	77
13	63	49	48	48	46	55	78	332	415	201	175	72
14	62	47	48	46	50	50	78	256	350	195	155	71
15	59	48	44	46	50	55	78	207	304	175	146	69
16	63	50	42	44	46	60	75	236	284	198	143	69
17	62	45	40	42	42	60	71	415	304	276	130	68
18	59	49	42	40	40	55	72	564	375	253	123	69
19	56	44	44	42	44	55	77	720	410	213	121	75
20	57	50	46	44	50	55	80	748	445	192	121	77
21	57	49	46	46	40	55	80	818	450	166	117	74
22	55	49	46	48	42	55	78	1,040	480	157	112	71
23	55	46	42	48	44	60	78	1,190	500	159	107	69
24	55	46	38	48	44	65	77	1,190	495	155	101	68
25	55	43	38	46	44	71	77	1,140	470	144	95	66
26	55	43	46	40	44	66	72	996	445	135	96	71
27	56	40	46	44	40	68	77	708	425	123	99	68
28	56	54	40	40	42	65	81	678	405	117	98	66
29	56	53	40	40	-	60	85	564	370	107	93	65
30	56	51	44	44	- - - - -	56	92	505	355	101	93	64
31	56	- - - - -	48	46	- - - - -	51	- - - - -	440	- - - - -	116	93	- - - - -
Total	1,882	1,463	1,405	1,356	1,226	1,698	2,314	14,429	13,821	6,402	3,616	2,305
Mean	60.7	48.8	45.3	43.7	43.8	54.8	77.1	465	461	207	117	76.8
Max	70	54	70	48	50	71	92	1,190	648	355	175	102
Min	55	40	32	36	38	44	57	72	284	101	93	64
Ac-ft	3,730	2,900	2,790	2,690	2,430	3,370	4,590	28,620	27,410	12,700	7,170	4,570

Cal yr 1966: Total 70,387 Mean 193 Max 1,080 Min - Ac-ft 139,600
Wtr yr 1967: Total 51,917 Mean 142 Max 1,190 Min 32 Ac-ft 103,000

Peak discharge (base, 1,400 cfs).--No peak above base.

9-1246. Blue Mesa Reservoir near Sapinero, Colo.

Location.--Lat 38°27'13", long 107°20'00", in NW¼ sec.4, T.48 N., R.4 W., in intake tower of Blue Mesa Dam, 0.5 mile upstream from Pine Creek and 1.7 miles west of Sapinero.

Drainage area.--3,426 sq mi.

Records available.--October 1965 to September 1967.

Gage.--Water-stage recorder. Datum of gage is at mean sea level (Bureau of Reclamation bench mark).

Extremes.--Maximum contents observed during water year, 574,900 acre-ft July 20 (elevation, 7,474.1 ft); minimum, 299,000 acre-ft Oct. 10-17 (elevation, 7424.4 ft).

1965-67: Maximum contents observed, that of July 20, 1967; minimum (after first year's storage), 299,000 acre-ft Oct. 10-17, 1966.

Remarks.--Reservoir is formed by earth- and rock-fill dam. Storage began Oct. 26, 1965. Capacity, 940,800 acre-ft at elevation 7,519.4 ft (top of radial spillway gates). Dead storage, 111,200 acre-ft below elevation 7,358.0 ft (sill of outlet gate). Reservoir is used for power development and to provide storage replacement to meet downstream requirements under the Colorado River Compact of 1922. Figures given herein represent total contents.

Cooperation.--Records furnished by Bureau of Reclamation.

Month-end elevation and contents, water year October 1966 to September 1967

Date	Elevation (feet)†	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.....	7,425.2	302,500	-
Oct. 31.....	7,428.0	314,700	+12,200
Nov. 30.....	7,434.7	344,800	+30,100
Dec. 31.....	7,437.9	360,100	+15,300
Calendar year 1966.....	-	-	+274,900
Jan. 31.....	7,439.2	366,600	+6,500
Feb. 28.....	7,440.4	372,500	+5,900
Mar. 31.....	7,443.8	390,000	+17,500
Apr. 30.....	7,441.0	375,300	-14,200
May 31.....	7,455.0	452,100	+76,800
June 30.....	7,472.5	564,000	+111,900
July 31.....	7,473.7	571,800	+7,800
Aug. 31.....	7,472.2	561,800	-10,000
Sept. 30.....	7,469.2	541,300	-20,500
Water year 1966-67.....	-	-	+238,800

† Elevation at 0800.

9-1247. Gunnison River below Blue Mesa Dam, Colo.

Location.--Lat 38°27'08", long 107°20'52", in NE 1/4 sec. 5, T.48 N., R.4 W., on left bank 0.2 mile downstream from Pine Creek, 0.7 mile downstream from Blue Mesa Dam, and 11 miles east of Cimarron.

Drainage area.--3,453 sq mi.

Records available.--May 1963 to September 1967.

Gage.--Water-stage recorder. Datum of gage is 7,149.30 ft above mean sea level (Bureau of Reclamation bench mark). Prior to Dec. 15, 1965, at datum 6.00 ft higher.

Extremes.--Maximum discharge during year, 2,140 cfs Sept. 1 (gage height, 9.59 ft); minimum daily, 127 cfs Oct. 28-30.

1963-67: Maximum discharge, 8,880 cfs June 21, 1965 (gage height, 17.71 ft, present datum); minimum daily, 10 cfs Nov. 29, Dec. 20, 21, 1965.

Remarks.--Records good. Flow regulated by Blue Mesa Reservoir (see sta. 9-1246) since Oct. 26, 1965, and Taylor Park Reservoir (see sta. 9-1085). Transmountain diversions and diversions for irrigation of about 56,000 acres above station.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,030	136	160	214	249	259	982	1,060	671	1,050	1,170	1,630
2	1,030	138	162	214	251	264	985	1,060	746	1,060	1,170	1,300
3	1,030	140	162	215	251	264	990	1,060	794	1,050	1,170	1,030
4	1,030	140	162	215	251	266	990	1,060	794	1,060	1,170	1,020
5	872	140	163	215	251	264	1,050	1,070	787	1,060	1,170	1,200
6	775	140	166	216	251	193	1,050	1,060	789	1,100	1,170	1,190
7	775	140	172	220	251	249	1,060	1,060	787	1,170	1,160	1,360
8	775	141	173	220	251	228	1,060	1,060	789	1,170	1,150	1,200
9	775	142	175	220	251	230	1,060	1,060	790	1,170	1,070	1,290
10	775	144	173	230	251	230	1,050	1,060	790	1,170	1,040	1,220
11	775	144	173	246	251	235	1,050	940	790	1,160	1,050	1,340
12	775	144	173	246	251	235	1,060	882	790	1,160	1,050	1,440
13	775	144	173	246	251	233	1,050	880	840	1,160	1,050	1,180
14	782	144	173	246	252	232	1,050	885	920	1,200	1,050	1,220
15	780	146	173	246	252	232	1,050	988	960	1,260	1,050	1,200
16	780	146	173	246	252	238	1,050	1,040	960	1,260	1,040	1,210
17	600	147	173	246	252	251	1,060	1,040	960	1,260	1,050	1,170
18	200	147	172	247	252	251	1,050	1,040	960	1,260	1,060	1,180
19	148	149	172	246	252	247	1,060	1,040	960	1,260	1,040	1,180
20	148	149	172	246	252	243	1,060	1,040	960	1,260	1,040	1,180
21	148	150	172	246	252	241	1,060	1,040	960	1,260	1,040	1,180
22	148	150	172	246	252	244	1,060	659	960	1,260	1,040	1,190
23	148	150	172	247	252	246	1,060	520	960	1,260	1,060	1,210
24	148	151	172	247	254	360	1,060	518	960	1,260	1,050	1,210
25	144	153	172	247	254	454	1,060	522	960	1,200	1,060	1,090
26	144	153	172	247	254	448	1,060	526	962	1,160	1,040	948
27	132	154	173	247	256	657	1,060	528	962	1,160	1,030	885
28	127	155	173	247	258	801	1,060	528	962	1,160	1,050	838
29	127	160	173	247	-	801	1,060	530	1,020	1,170	1,080	841
30	127	160	200	247	- - - - -	806	1,060	532	1,050	1,160	1,120	850
31	134	- - - - -	214	249	- - - - -	860	- - - - -	621	- - - - -	1,160	1,130	- - - - -
Total	16,157	4,397	5,360	7,357	7,057	10,762	31,417	26,909	26,573	36,510	33,620	34,982
Mean	521	147	173	237	252	347	1,047	868	886	1,178	1,085	1,166
Max	1,030	160	214	249	258	860	1,060	1,070	1,050	1,260	1,170	1,630
Min	127	136	160	214	249	193	982	518	671	1,050	1,030	838
Ac-ft	32,050	8,720	10,630	14,590	14,000	21,350	62,310	53,370	52,710	72,420	66,680	69,390
Cal yr 1966: Total	252,078		Mean 691	Max 2,940	Min -	Ac-ft 500,000						
Wtr yr 1967: Total	241,101		Mean 661	Max 1,630	Min 127	Ac-ft 478,200						

9-1250. Curecanti Creek near Sapinero, Colo.

Location.--Lat 38°29'15", long 107°24'55", in sec.21, T.49 N., R.5 W., on downstream side of left pier of bridge on State Highway 92, 2½ miles upstream from mouth and 6 miles west of Sapinero.

Drainage area.--35.0 sq mi.

Records available.--October 1945 to September 1967. Monthly discharge only for some periods, published in WSP 1313.

Gage.--Water-stage recorder. Datum of gage is 7,867.43 ft above mean sea level, datum of 1929. Prior to Oct. 1, 1947, at site 65 ft upstream at datum 3.00 ft higher. Oct. 1, 1947, to Sept. 17, 1952, at site 65 ft upstream at datum 1.00 ft higher.

Average discharge.--22 years, 32.4 cfs (23,460 acre-ft per year).

Extremes.--Maximum discharge during year, 142 cfs May 22 (gage height, 3.44 ft); minimum daily, 3.5 cfs Aug. 24-26.

1945-67: Maximum discharge, 480 cfs June 5, 1957; maximum gage height, 4.30 ft June 28, 1957; minimum daily discharge, 2.0 cfs Aug. 1-3, 1948, but may have been less during periods of ice effect.

Remarks.--Records good except those for winter period, which are poor. One diversion above station for irrigation in Smith Fork drainage.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4.2	4.0	5.0	5.0	4.8	9.0	15	48	64	20	4.1	7.4
2	4.5	4.2	4.8	4.0	4.6	10	17	36	63	18	4.0	5.6
3	6.3	4.4	4.8	4.4	4.4	10	21	30	67	16	3.8	4.6
4	6.5	4.0	4.8	5.0	4.2	10	29	26	86	14	3.7	4.3
5	6.3	4.0	4.8	5.0	4.2	9.5	30	25	108	13	3.7	4.1
6	6.1	4.2	6.0	5.0	4.2	9.0	33	23	122	11	3.8	4.0
7	5.7	4.4	8.0	4.2	4.4	8.5	39	22	110	11	7.0	4.3
8	5.3	4.6	5.0	3.6	4.6	8.5	49	30	98	12	8.6	6.2
9	5.1	4.6	4.6	3.8	4.4	8.5	50	48	86	9.8	7.4	7.8
10	5.1	4.6	4.0	4.2	4.4	10	39	69	76	9.0	5.6	5.9
11	5.3	5.0	4.2	4.4	4.4	12	36	64	64	9.4	5.4	9.4
12	9.2	5.0	4.4	4.6	4.4	15	41	72	60	9.8	4.8	18
13	6.8	4.8	4.6	4.8	4.4	15	38	78	54	7.8	4.3	8.6
14	6.5	4.6	4.6	4.8	4.8	14	34	62	50	6.7	4.0	6.7
15	6.3	4.4	4.6	4.8	4.6	13	30	53	46	7.0	3.8	5.9
16	6.5	4.4	4.6	4.6	4.4	15	27	62	44	7.4	3.8	5.6
17	6.3	4.4	4.6	4.4	4.2	20	24	78	44	14	3.8	5.4
18	5.7	4.4	4.8	4.0	4.2	23	27	95	49	12	3.8	5.6
19	5.5	4.4	4.8	3.8	4.2	22	36	105	54	8.2	3.8	13
20	5.5	4.6	4.8	3.8	4.4	20	44	105	63	6.7	3.8	11
21	5.5	4.8	4.6	4.0	4.6	20	40	110	72	6.2	4.0	8.6
22	5.3	4.6	4.6	4.4	5.0	26	35	118	64	5.9	3.8	7.0
23	5.3	4.6	4.6	4.4	5.5	32	33	125	58	6.7	3.7	6.5
24	5.1	4.6	4.4	4.4	5.5	31	29	122	52	6.2	3.5	5.9
25	5.1	4.6	4.4	4.4	5.5	30	28	118	44	5.6	3.5	6.2
26	5.1	4.4	4.4	4.0	5.5	25	26	120	40	5.1	3.5	6.5
27	5.3	4.4	4.4	4.0	6.5	22	29	122	35	5.1	4.8	5.9
28	5.3	4.6	4.2	4.4	7.5	19	44	125	31	4.3	4.3	5.6
29	5.3	5.0	4.2	4.2	-	18	50	118	28	4.1	7.8	5.4
30	5.0	5.5	4.6	4.6	- - - - -	17	54	93	24	4.0	7.8	5.1
31	4.6	- - - - -	5.0	5.0	- - - - -	18	- - - - -	76	- - - - -	4.1	6.7	- - - - -
Total	175.6	136.1	147.2	136.0	133.8	520.0	1,027	2,378	1,856	280.1	146.4	206.1
Mean	5.66	4.54	4.75	4.39	4.78	16.8	34.2	76.7	61.9	9.04	4.72	6.87
Max	9.2	5.5	8.0	5.0	7.5	32	54	125	122	20	8.6	18
Min	4.2	4.0	4.0	3.6	4.2	8.5	15	22	24	4.0	3.5	4.0
Ac-ft	348	270	292	270	265	1,030	2,040	4,720	3,680	556	290	409

Cal yr 1966: Total 10,147.1 Mean 27.8 Max 207 Min 2.6 Ac-ft 20,130

Wtr yr 1967: Total 7,142.3 Mean 19.6 Max 125 Min 3.5 Ac-ft 14,170

Peak discharge (base, 250 cfs).--No peak above base.

Note.--No gage-height record Nov. 5 to Mar. 17.

9-1260. Cimarron River near Cimarron, Colo.

Location.--Lat 38°15'30", long 107°32'40", in sec.8, T.46 N., R.6 W., on right bank 0.2 mile downstream from highway bridge, 0.5 mile upstream from headgate on Cimarron ditch, 2.5 miles downstream from West Fork, and 13 miles south of Cimarron.

Drainage area.--66.6 sq mi (revised).

Records available.--October 1954 to September 1967. Prior to October 1965, published as Cimarron Creek near Cimarron.

Gage.--Water-stage recorder. Altitude of gage is 8,650 ft (from topographic map).

Average discharge.--13 years, 86.3 cfs (62,480 acre-ft per year).

Extremes.--Maximum discharge during year, 610 cfs May 24 (gage height, 5.94 ft); maximum gage height, 6.09 ft Dec. 16 (backwater from ice); minimum daily discharge, 10 cfs Jan. 8, 9.

1954-67: Maximum discharge, 1,790 cfs June 28, 1957 (gage height, 8.32 ft); minimum daily, 8.0 cfs Dec. 27, 28, 1962, Jan. 13, 1963.

Remarks.--Records good except those for winter period, which are poor. Diversion above station through Owl Creek ditch into Uncompahgre River basin.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	19	14	15	14	16	19	23	43	170	124	44	33
2	21	14	14	13	15	20	29	44	200	112	39	29
3	24	16	14	13	14	20	37	39	230	96	35	26
4	25	14	14	14	14	19	39	36	257	86	33	24
5	27	14	16	14	17	18	44	37	248	78	30	24
6	24	14	31	13	17	16	54	37	251	70	37	26
7	22	14	26	12	16	15	71	41	260	72	54	26
8	22	16	19	10	15	15	72	65	245	72	58	29
9	20	16	16	10	15	16	64	112	210	61	44	29
10	19	17	13	11	15	18	48	144	172	55	47	26
11	20	19	12	12	16	20	47	156	164	54	59	26
12	21	18	12	13	17	20	44	160	140	59	54	25
13	21	17	13	13	18	20	34	142	114	55	47	24
14	19	16	14	14	19	19	42	92	108	51	42	22
15	21	16	15	14	19	19	38	76	108	52	39	22
16	22	16	16	13	19	20	35	77	130	68	38	22
17	23	16	16	12	18	22	34	122	162	92	35	22
18	21	14	16	12	18	26	37	156	174	61	32	22
19	21	15	15	13	18	20	48	195	172	49	31	38
20	21	17	14	14	18	22	47	228	208	49	30	29
21	21	16	13	14	17	20	39	298	215	41	29	26
22	19	16	12	15	17	22	39	378	228	44	28	24
23	19	16	12	15	17	26	39	394	205	43	28	24
24	18	15	12	13	18	30	38	410	200	43	26	24
25	19	15	13	12	19	33	36	410	168	55	26	25
26	19	14	13	12	20	27	38	302	164	42	27	24
27	18	15	12	13	20	24	43	230	146	38	26	23
28	17	23	11	14	19	23	58	236	128	35	30	22
29	17	20	11	14	-	23	59	198	120	33	29	22
30	16	18	13	15	-	22	54	174	130	32	28	21
31	16	- - - -	14	16	- - - -	22	- - - -	160	- - - -	41	30	- - - -
Total	632	481	457	407	481	656	1,330	5,192	5,427	1,863	1,135	759
Mean	20.4	16.0	14.7	13.1	17.2	21.2	44.3	167	181	60.1	36.6	25.3
Max	27	23	31	16	20	33	72	410	260	124	59	38
Min	16	14	11	10	14	15	23	36	108	32	26	21
Ac-ft	1,250	954	906	807	954	1,300	2,640	10,300	10,760	3,700	2,250	1,510

Cal yr 1966: Total 24,060 Mean 65.9 Max 398 Min 11 Ac-ft 47,720
Wtr yr 1967: Total 18,820 Mean 51.6 Max 410 Min 10 Ac-ft 37,330

Peak discharge (base, 400 cfs).--May 24 (1900) 610 cfs (5.94 ft).

Note.--No gage-height record Dec. 17 to Mar. 17.

9-1265. Cimarron River at Cimarron, Colo.

Location.--Lat 38°26'28", long 107°33'13", in SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.5, T.48 N., R.6 W., on left bank at Cimarron, 100 ft from U. S. Highway 50, 1,100 ft upstream from Squaw Creek, and 1.2 miles upstream from mouth.

Drainage area.--209 sq mi (revised).

Records available.--October 1902 to November 1905, April 1962 to September 1967 (discontinued). Prior to October 1965, published as Cimarron Creek at Cimarron.

Gage.--Water-stage recorder. Datum of gage is 6,890.07 ft above mean sea level, datum of 1929. Prior to Apr. 1, 1962, staff gage at site 100 ft downstream at different datum. Apr. 1, 1962, to Sept. 15, 1965, water-stage recorder at site 700 ft downstream at datum 5.10 ft lower.

Average discharge.--8 years, 106 cfs (76,740 acre-ft per year).

Extremes.--Maximum discharge during year, 710 cfs May 25 (gage height, 4.55 ft); minimum daily, 13 cfs Aug. 27, 30.

1902-5, 1962-67: Maximum discharge, about 1,600 cfs May 12, 13, 1962 (gage height not determined); minimum daily, 8.0 cfs Dec. 26, 27, 1962.

Remarks.--Records good except those for winter period, which are poor. Natural flow of stream affected by Cimarron and Owl Creek ditches for irrigation of about 5,000 acres in Uncompahgre River drainage, imported water from Blue Creek drainage, diversions for irrigation of about 3,000 acres, and return flow from irrigated areas.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	25	18	31	24	29	50	34	26	119	55	18	20
2	32	17	32	25	26	60	41	26	158	47	15	18
3	38	20	37	24	26	55	48	20	195	37	14	16
4	46	19	37	26	30	50	56	16	270	35	14	16
5	42	20	33	26	32	46	57	15	342	34	14	14
6	47	20	52	24	30	31	66	20	328	29	17	14
7	37	20	65	22	28	35	78	15	310	32	33	15
8	27	26	40	18	28	29	84	16	262	40	31	19
9	24	32	26	19	30	36	83	58	212	30	24	30
10	20	27	24	21	32	45	63	76	171	28	25	28
11	22	30	24	22	36	50	45	84	142	31	27	38
12	23	34	26	24	38	47	49	83	117	32	27	31
13	20	31	28	22	38	44	37	101	83	26	21	24
14	23	30	30	24	38	38	38	48	72	22	19	26
15	22	32	31	26	40	37	39	32	72	28	20	25
16	24	33	32	26	36	40	36	27	80	34	20	25
17	25	32	32	23	36	56	29	38	93	61	17	24
18	20	31	31	23	38	67	30	57	132	54	18	27
19	18	30	30	24	38	59	36	127	123	32	16	51
20	20	32	28	26	34	51	35	119	202	27	16	39
21	18	34	26	27	34	50	32	186	216	26	15	34
22	20	33	24	28	36	48	30	338	195	27	15	33
23	20	33	24	28	38	59	29	387	165	27	14	27
24	19	29	24	27	40	64	26	450	148	22	14	27
25	22	26	25	24	42	64	27	500	114	33	14	28
26	19	24	26	22	44	55	27	360	84	23	14	29
27	18	24	26	26	42	50	30	242	77	20	13	48
28	19	26	24	28	42	44	36	258	69	17	14	47
29	20	30	22	29	-	36	37	216	54	16	14	46
30	19	34	23	30	- - - - -	34	38	148	50	16	13	45
31	19	- - - - -	23	30	- - - - -	34	- - - - -	134	- - - - -	17	20	- - - - -
Total	768	827	936	768	981	1,464	1,296	4,223	4,655	958	566	864
Mean	24.8	27.6	30.2	24.8	35.0	47.2	43.2	136	155	30.9	18.3	28.8
Max	47	34	65	30	44	67	84	500	342	61	33	51
Min	18	17	22	18	26	29	26	15	50	16	13	14
Ac-ft	1,520	1,640	1,860	1,520	1,950	2,900	2,570	8,380	9,230	1,900	1,120	1,710

Cal yr 1966: Total 29,276 Mean 80.2 Max 530 Min 13 Ac-ft 58,070
Wtr yr 1967: Total 18,306 Mean 50.2 Max 500 Min 13 Ac-ft 36,310

9-1275. Crystal Creek near Maher, Colo.

Location.--Lat 38°33'05", long 107°30'20", in SE¼ sec.35, T.50 N., R.6 W., on left bank 640 ft downstream from private bridge, half a mile upstream from diversion dam for Cattleman's ditch, 0.7 mile downstream from Dyer Creek, 7 miles upstream from mouth, and 7 miles southeast of Maher.

Drainage area.--42.2 sq mi.

Records available.--July 1945 to September 1954, October 1960 to September 1967.

Gage.--Water-stage recorder. Altitude of gage is 8,070 ft (from topographic map). July 6, 1945, to Sept. 30, 1954, at site 140 ft upstream at datum 1.45 ft higher.

Average discharge.--16 years, 27.7 cfs (20,050 acre-ft per year).

Extremes.--Maximum discharge during year, 128 cfs May 22 (gage height, 2.56 ft), from rating curve extended above 150 cfs; maximum gage height, 2.73 ft Mar. 5 (backwater from ice); minimum daily discharge, 1.6 cfs Aug. 25.
1945-54, 1960-67: Maximum discharge, 542 cfs Apr. 29, 1948 (gage height, 5.05 ft, site and datum then in use), from rating curve extended above 200 cfs; minimum daily, that of Aug. 25, 1967.

Remarks.--Records good except those for winter period, which are poor. Small diversions for irrigation of hay meadows above station. Diversions above station for irrigation of about 800 acres below station and about 700 acres in Iron Creek basin.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.5	3.7	5.0	6.0	6.0	6.4	9.5	34	40	16	3.1	5.2
2	2.8	3.1	5.2	5.5	5.6	8.0	14	27	37	14	2.8	3.7
3	5.6	4.0	6.0	5.5	5.6	10	19	23	40	13	2.8	3.7
4	5.6	3.7	6.0	6.4	5.6	10	24	20	55	12	16	3.1
5	6.0	3.1	5.6	6.4	5.6	8.0	22	20	68	11	16	2.5
6	4.8	3.7	10	6.4	5.6	7.0	21	19	70	9.5	14	3.1
7	4.8	4.4	12	6.0	5.6	6.5	28	18	63	9.5	18	3.7
8	4.0	5.2	9.0	6.0	5.6	6.0	37	26	58	10	16	5.6
9	3.7	4.0	6.0	6.0	5.6	7.0	37	45	50	8.5	9.5	8.5
10	3.7	4.0	5.0	6.4	5.6	8.0	30	46	45	7.2	6.0	5.6
11	4.4	4.8	5.5	6.4	5.6	12	30	44	37	9.0	5.6	9.5
12	7.6	5.2	6.0	6.4	5.6	11	32	50	33	9.0	4.4	14
13	5.6	5.0	6.0	6.4	5.6	10	29	49	30	6.8	3.4	7.2
14	5.6	5.0	6.0	6.4	5.6	10	28	33	26	6.8	2.8	6.0
15	6.8	6.0	5.5	6.4	5.2	11	24	37	24	8.5	3.1	5.6
16	7.6	6.8	5.5	6.4	5.2	12	22	49	22	9.0	2.8	4.8
17	8.0	6.8	5.5	6.0	5.2	16	20	59	23	15	3.1	4.4
18	8.0	6.5	5.5	6.0	5.2	19	23	66	28	14	2.5	5.2
19	6.4	6.5	6.0	6.0	5.2	16	31	66	30	9.5	2.2	14
20	7.2	7.0	6.5	6.0	5.0	16	37	63	42	8.0	2.2	12
21	6.0	7.6	6.5	6.0	5.2	16	32	71	45	7.2	2.2	8.5
22	5.6	7.2	6.0	6.0	4.4	14	28	83	35	6.4	2.5	6.8
23	5.6	6.4	6.0	6.0	4.4	13	27	95	30	7.6	2.2	5.6
24	5.6	6.0	6.5	6.0	4.4	20	25	78	25	7.2	1.9	4.8
25	5.2	6.0	6.5	6.0	4.8	18	23	73	27	5.6	1.6	4.8
26	5.2	6.5	6.0	5.6	4.8	16	22	74	27	5.2	1.9	5.2
27	5.2	6.5	5.5	5.6	5.2	14	30	77	23	4.4	3.1	4.8
28	5.2	6.0	5.0	5.6	5.6	12	40	77	22	4.0	3.1	4.0
29	4.4	6.0	5.0	5.6	-	11	43	62	20	3.1	4.0	4.0
30	4.0	5.2	5.0	6.0	- - - - -	9.5	40	51	18	3.1	4.0	3.7
31	4.0	- - - - -	5.5	6.0	- - - - -	9.0	- - - - -	44	- - - - -	3.4	5.2	- - - - -
Total	166.7	161.9	191.3	187.4	148.6	362.4	827.5	1,579	1,093	263.5	168.0	179.6
Mean	5.38	5.40	6.17	6.05	5.31	11.7	27.6	50.9	36.4	8.50	5.42	5.99
Max	8.0	7.6	12	6.4	6.0	20	43	95	70	16	18	14
Min	2.5	3.1	5.0	5.5	4.4	6.0	9.5	18	18	3.1	1.6	2.5
Ac-ft	331	321	379	372	295	719	1,640	3,130	2,170	523	333	356

Cal yr 1966: Total 8,567.8 Mean 23.5 Max 197 Min 2.5 Ac-ft 16,990
Wtr yr 1967: Total 5,328.9 Mean 14.6 Max 95 Min 1.6 Ac-ft 10,570

Peak discharge (base, 160 cfs).--No peak above base.

9-1280. Gunnison River below Gunnison tunnel, Colo.

Location.--Lat 38°31'50", long 107°38'54", in NW¼ sec.10, T.49 N., R.7 W., on left bank a quarter of a mile downstream from east portal of Gunnison tunnel, 5 miles downstream from Crystal Creek, and 12 miles northeast of Montrose.

Drainage area.--3,965 sq mi (revised).

Records available.--October 1903 to September 1967. Monthly discharge only for some periods, published in WSP 1313. Published as "at east portal of Gunnison tunnel" 1905-6 and as "at River Portal" 1907-11.

Gage.--Water-stage recorder. Datum of gage is 6,526.06 ft above mean sea level, datum of 1929. Apr. 9, 1905, to Aug. 20, 1915, staff gage at site 300 ft upstream from diversion dam at east portal of Gunnison tunnel at different datum. Aug. 21, 1915, to Jan. 19, 1943, staff gage at site 500 ft downstream from diversion dam at east portal of Gunnison tunnel at different datum. Jan. 20, 1943, to Sept. 30, 1956, water-stage recorder at same site at datum 1.0 ft higher.

Average discharge.--64 years, 1,426 cfs, unadjusted (1,032,000 acre-ft per year).

Extremes.--Maximum discharge during year, 1,590 cfs June 6 (gage height, 4.13 ft); minimum daily, 27 cfs May 30.

1903-67: Maximum discharge observed, 19,000 cfs June 15, 1921 (gage height, about 15.8 ft, present datum), from rating curve extended above 14,000 cfs; no flow Sept. 25, 26, 1936, Oct. 8, 1949, Sept. 5, 6, 15, 16, 1950.

Remarks.--Records good except those for winter period, which are poor. Natural flow of stream affected by transmountain diversions, transbasin diversion through Gunnison tunnel for irrigation of about 75,000 acres in Uncompahgre Valley, Taylor Park Reservoir (see sta. 9-1085), Blue Mesa Reservoir (see sta. 9-1246), diversions for irrigation of about 63,000 acres, and return flow from irrigated areas.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	199	187	240	340	317	366	400	163	59	154	196	293
2	202	184	233	330	310	412	400	160	113	135	190	201
3	236	193	244	330	314	388	331	151	230	122	190	184
4	348	190	250	330	320	362	226	132	338	113	193	172
5	338	190	240	320	328	359	175	135	612	111	190	174
6	130	190	264	310	320	261	244	138	1,330	111	199	198
7	130	193	373	310	317	193	278	130	564	219	244	202
8	130	216	278	300	303	289	292	138	524	236	282	219
9	130	212	244	290	328	306	296	205	448	222	247	244
10	130	205	216	300	317	320	230	306	286	216	244	240
11	130	226	247	330	314	345	193	233	219	219	278	292
12	210	233	268	350	314	352	205	107	181	233	240	400
13	282	212	264	340	310	338	178	151	91	212	230	334
14	292	205	275	330	317	328	166	69	65	216	226	359
15	392	216	278	320	324	324	187	68	100	334	138	400
16	880	226	258	320	317	314	163	169	109	348	87	388
17	856	219	258	330	317	404	138	208	125	464	83	380
18	275	222	268	330	324	460	148	275	172	516	92	392
19	196	219	272	330	324	212	172	388	178	444	77	472
20	196	222	268	330	324	334	184	420	306	324	77	464
21	196	240	268	340	310	376	181	484	524	324	77	452
22	199	230	275	340	317	380	163	544	448	324	76	448
23	196	216	258	330	320	324	163	400	420	324	94	456
24	196	210	258	320	324	184	148	388	400	317	77	456
25	202	200	247	310	324	345	145	370	359	310	87	408
26	199	210	272	310	324	261	138	303	303	208	74	205
27	196	230	289	310	324	244	154	125	172	202	76	320
28	181	240	289	310	338	272	187	145	90	196	87	233
29	181	250	270	320	-	275	193	122	92	193	102	230
30	181	247	290	320	- - - - -	222	216	27	142	193	166	240
31	184	- - - - -	320	320	- - - - -	205	- - - - -	29	- - - - -	196	184	- - - - -
Total	7,793	6,433	8,274	10,000	8,940	9,755	6,294	6,683	8,990	7,736	4,803	9,456
Mean	251	214	267	323	319	315	210	216	300	250	155	315
Max	880	250	373	350	338	460	400	544	1,330	516	282	472
Min	130	184	216	290	303	184	138	27	59	111	74	172
Ac-ft	15,460	12,760	16,410	19,830	17,730	19,350	12,480	13,260	17,830	15,340	9,530	18,760
(†)	20,730	0	0	0	0	7,050	54,680	56,720	49,080	58,290	57,090	50,300
Cal yr 1966: Total	130,383			Mean 357		Max 2,570	Min 130	Ac-ft 258,600				
Wtr yr 1967: Total	95,157			Mean 261		Max 1,330	Min 27	Ac-ft 188,700				

† Diversions, in acre-feet, through Gunnison tunnel; furnished by Uncompahgre Valley Water Users Association.

9-1285. Smith Fork near Crawford, Colo.

Location.--Lat 38°43'40", long 107°30'20", in sec.24, T.15 S., R.91 W., on left bank 20 ft upstream from Forest Service bridge, 0.4 mile upstream from Second Creek, 6 miles northeast of Crawford, and 6½ miles upstream from Iron Creek.

Drainage area.--43.7 sq mi (revised).

Records available.--October 1935 to September 1967. Monthly discharge only for some periods, published in WSP 1313.

Gage.--Water-stage recorder. Altitude of gage is 7,091 ft (from topographic map). Prior to Nov. 16, 1938, staff gage at same site and datum.

Average discharge.--32 years, 41.6 cfs (30,120 acre-ft per year).

Extremes.--Maximum discharge during year, 129 cfs May 24 (gage height, 3.89 ft); maximum gage-height, 4.07 ft Feb. 4 (backwater from ice); minimum daily discharge, 2.6 cfs Oct. 1.

1935-67: Maximum discharge, about 1,050 cfs June 6, 1957; maximum gage height, 5.56 ft June 8, 1957; minimum daily discharge determined, 1.8 cfs July 30, 31, Aug. 1, 1963.

Remarks.--Records good except those for winter period, which are poor. Diversions for irrigation of a few acres of hay meadows above station. Saddle Mountain ditch diverts water above station for irrigation of about 800 acres below. One small ditch diverts from Virginia Creek to Iron Creek drainage, and Head and Ferrier ditch diverts water from Curecanti Creek drainage.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.6	6.6	6.6	5.5	6.5	10	15	64	88	31	8.7	11
2	3.0	5.7	6.6	6.0	6.5	11	16	54	83	29	8.7	9.9
3	4.0	6.3	7.2	6.5	6.5	11	20	46	82	26	9.0	9.6
4	7.5	6.3	7.8	6.5	6.5	10	28	42	95	24	8.4	9.0
5	8.4	5.7	6.0	6.0	6.5	9.5	30	41	101	22	8.1	8.4
6	7.8	6.9	17	5.5	6.0	3.0	25	37	110	21	8.4	8.4
7	6.6	5.7	28	5.0	6.0	8.5	26	34	106	21	15	8.4
8	6.6	7.5	17	5.0	8.0	8.5	36	40	100	22	17	9.0
9	6.6	6.5	9.0	5.5	10	9.0	43	64	92	20	20	12
10	6.0	5.5	5.0	6.0	9.5	10	38	90	84	19	16	11
11	6.6	6.5	5.0	6.5	9.0	11	37	98	79	18	16	12
12	8.4	7.0	6.0	6.5	8.5	10	40	92	77	18	15	15
13	6.9	6.0	7.0	6.5	8.5	10	35	89	75	16	14	12
14	7.8	5.5	7.0	6.0	9.5	9.6	29	68	70	15	13	12
15	6.9	6.0	7.0	5.5	9.0	9.0	25	61	65	15	13	11
16	6.9	7.0	6.5	5.5	8.5	9.5	22	61	62	18	12	11
17	6.6	7.0	6.5	5.5	8.5	12	19	77	62	23	9.3	10
18	6.3	6.5	6.5	5.5	8.5	17	28	98	65	22	7.5	10
19	6.3	6.5	7.0	5.5	9.0	17	43	108	72	19	6.9	16
20	6.0	7.2	7.5	6.0	8.5	14	56	110	76	19	6.9	13
21	6.6	7.5	7.5	6.3	8.0	14	52	110	72	18	6.9	11
22	6.6	7.5	7.0	6.3	8.0	15	48	113	68	17	6.6	10
23	6.6	7.2	6.5	6.3	8.0	20	44	121	66	16	7.8	10
24	6.6	6.9	6.5	6.6	8.5	24	41	123	61	16	8.4	10
25	6.3	6.3	6.5	6.6	9.0	20	38	115	56	14	8.1	10
26	6.3	6.9	6.0	6.0	9.0	18	34	115	52	12	8.1	10
27	6.3	6.5	5.5	6.3	8.0	17	41	106	45	12	9.0	9.9
28	6.3	6.5	5.0	6.0	8.5	16	56	113	40	10	9.9	9.9
29	6.0	6.9	4.6	6.6	-	16	66	96	33	9.6	11	9.6
30	6.3	6.9	4.8	6.6	- - - -	16	73	95	31	9.6	9.6	9.3
31	6.3	- - - -	5.0	6.9	- - - -	16	- - - -	89	- - - -	9.6	11	- - - -
Total	198.0	197.0	241.1	187.0	226.5	407.6	1104	2560	2168	561.8	329.3	318.4
Mean	6.39	6.57	7.78	6.03	8.09	13.1	36.8	82.6	72.3	18.1	10.6	10.6
Max	8.4	7.5	28	6.9	10	24	73	123	110	31	20	16
Min	2.6	5.5	4.6	5.0	6.0	8.5	15	34	31	9.6	6.6	8.4
Ac-ft	393	391	478	371	449	808	2,190	5,080	4,300	1,110	653	632

Cal yr 1966: Total 11,264.7 Mean 30.9 Max 220 Min 2.4 Ac-ft 22,340
 Wtr yr 1967: Total 8,498.7 Mean 23.3 Max 123 Min 2.6 Ac-ft 16,860

Peak discharge (base, 260 cfs).--No peak above base.

GUNNISON RIVER BASIN

9-1298. Clear Fork near Ragged Mountain, Colo.

Location--Lat 39°08'35", long 107°25'50", in sec.34, T.10 S., R.90 W., on left bank downstream wingwall of private bridge 700 ft upstream from Little Muddy Creek and 3 miles northwest of Ragged Mountain.

Drainage area--38.5 sq mi.

Records available--October 1965 to September 1967.

Gage--Water-stage recorder. Altitude of gage is 7,450 ft (from topographic map).

Extremes--Maximum discharge during year, 350 cfs May 21 (gage height, 2.83 ft), from rating curve extended above 220 cfs; minimum daily, 0.80 cfs Oct. 1.

1965-67: Maximum discharge, that of May 21, 1967; maximum gage height, 2.84 ft May 5, 1966; minimum daily discharge, 0.60 cfs Aug. 28, 29, 1966.

Remarks--Records good except those for periods of no gage-height record, which are poor. Transbasin diversion above station by Clear Fork ditch for irrigation in West Divide Creek basin.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.80	1.4	4.0	3.0	3.4	4.0	16	62	76	17	3.6	4.4
2	.90	1.0	4.0	3.2	3.2	4.4	19	49	64	16	3.4	2.8
3	1.6	1.4	3.8	3.3	3.1	4.6	22	43	64	14	3.8	2.4
4	2.4	1.6	4.0	3.4	3.0	4.5	26	40	74	12	4.2	2.1
5	2.2	1.8	4.4	3.5	2.9	4.4	30	39	74	11	4.7	1.9
6	2.4	2.0	5.0	3.3	2.8	4.2	36	37	75	9.6	4.5	1.8
7	2.3	2.1	6.0	3.2	2.7	4.0	40	42	75	9.3	6.8	1.8
8	2.2	2.3	5.0	3.1	2.7	4.0	40	69	70	13	14	1.8
9	2.1	2.5	3.6	3.1	2.6	4.2	38	116	62	9.0	8.0	3.3
10	2.0	2.7	3.2	3.1	2.6	4.5	36	185	51	7.5	8.5	3.8
11	2.1	2.7	3.3	3.2	2.6	5.5	37	182	48	7.5	6.5	3.6
12	2.2	2.8	3.4	3.4	2.7	6.3	37	192	46	11	5.5	4.7
13	2.4	3.0	3.5	3.5	2.8	6.5	34	160	40	8.0	4.7	2.9
14	2.7	3.4	3.6	3.5	2.9	6	34	105	37	7.0	3.8	2.5
15	3.0	3.8	3.7	3.5	3.0	5.5	40	92	33	12	3.6	2.4
16	3.0	4.3	3.7	3.4	3.0	6.0	44	85	32	10	3.6	2.4
17	2.9	4.5	3.6	3.4	2.9	8.0	43	172	33	20	2.9	2.5
18	2.8	4.5	3.5	3.5	2.9	9.0	46	223	36	17	2.6	2.6
19	2.6	4.2	3.4	3.6	3.0	12	55	235	38	12	2.6	5.7
20	2.5	4.0	3.2	3.6	2.8	13	60	239	47	10	2.6	4.9
21	2.4	3.8	3.0	3.6	2.5	13	60	247	44	9.3	2.5	3.8
22	2.3	3.7	3.0	3.6	2.6	12	55	255	43	8.0	2.4	3.2
23	2.2	3.6	3.1	3.5	2.8	12	50	239	38	7.5	2.2	2.9
24	2.1	3.5	3.2	3.3	3.0	13	47	203	35	7.0	2.1	3.0
25	2.0	3.4	3.2	3.2	3.0	15	40	192	30	6.1	2.0	5.7
26	2.1	3.4	3.2	3.1	2.9	16	49	203	28	5.3	2.0	6.1
27	2.1	3.5	3.0	3.1	2.8	16	86	169	26	5.1	2.4	4.7
28	2.1	3.6	2.9	3.1	3.2	16	113	150	26	4.9	2.7	3.6
29	2.1	3.6	2.8	3.3	-	15	126	120	23	4.4	2.4	3.4
30	2.0	3.7	2.8	3.5	- - - -	14	84	102	20	4.0	2.5	3.2
31	1.9	- - - -	2.9	3.5	- - - -	14	- - - -	89	- - - -	3.8	2.9	- - - -
Total	68.40	91.8	111.0	103.6	80.4	276.6	1,443	4,336	1,388	298.3	126.0	99.9
Mean	2.21	3.06	3.58	3.34	2.87	8.92	48.1	140	46.3	9.62	4.06	3.33
Max	3.0	4.5	6.0	3.6	3.4	16	126	255	76	20	14	6.1
Min	0.80	1.0	2.8	3.0	2.5	4.0	16	37	20	3.8	2.0	1.8
Ac-ft	136	182	220	205	159	549	2,860	8,600	2,750	592	250	198
(†)	0	0	0	0	0	0	0	0	1,430	427	0	0

Cal yr 1966: Total 9,367.0 Mean 25.7 Max 275 Min 0.60 Ac-ft 18,580

Wtr yr 1967: Total 8,423.0 Mean 23.1 Max 255 Min 0.80 Ac-ft 16,710

Peak discharge (base, 200 cfs)--May 12 (1800) 271 cfs (2.64 ft); May 21 (1900) 350 cfs (2.83 ft).

† Diversions, in acre-feet, by Clear Fork ditch; furnished by State engineer of Colorado.

Note.--No gage-height record Oct. 1 to Mar. 7, Mar. 13 to Apr. 24.

9-1312. West Muddy Creek near Somerset, Colo.

Location.--Lat 39°05'25", long 107°30'15", in N½ sec.24, T.11 S., R.91 W., on right bank 300 ft downstream from Cow Creek, 1½ miles southeast of West Muddy ranger station, and 13 miles north of Somerset.

Drainage area.--50.1 sq mi.

Records available.--October 1961 to September 1967.

Gage.--Water-stage recorder. Altitude of gage is 8,020 ft (from topographic map).

Average discharge.--6 years, 27.8 cfs (20,130 acre-ft per year).

Extremes.--Maximum discharge during year, 137 cfs May 9 (gage height, 1.72 ft); minimum daily, 0.83 cfs Nov. 2.
1961-67: Maximum discharge, about 900 cfs May 11, 1962 (gage height not determined); minimum daily, 0.10 cfs Aug. 1, 1963.

Remarks.--Records good except those for period of no gage-height record, which are poor. Small diversions above station for irrigation of hay meadows. Some regulation by Overland Reservoir (capacity, 6,280 acre-ft) on Cow Creek above station. Diversion above station for use outside Muddy Creek drainage by Overland ditch.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.8	1.5	4.0	3.8	4.2	4.4	16	55	44	9.5	7.5	11
2	2.8	.83	4.0	4.0	4.0	4.8	20	48	40	9.0	6.6	7.5
3	3.8	1.5	4.0	4.2	3.8	5.0	26	44	41	8.4	6.6	5.5
4	4.0	1.6	4.2	4.4	3.6	4.8	34	40	60	8.4	6.0	6.9
5	3.4	1.6	4.6	4.4	3.5	4.6	38	38	55	8.7	5.8	4.2
6	3.5	1.5	5.0	4.2	3.4	4.4	42	36	56	8.1	6.0	4.0
7	3.2	1.7	6.0	3.8	3.3	4.0	44	38	43	10	12	4.8
8	2.9	1.9	5.0	3.6	3.3	4.0	44	50	37	16	23	5.0
9	2.8	2.4	4.2	3.6	3.3	4.4	38	92	39	14	18	8.4
10	2.4	2.6	3.6	3.8	3.3	4.8	36	99	64	10	18	11
11	2.6	3.0	3.8	4.0	3.4	5.5	38	80	32	10	13	10
12	2.8	2.8	4.0	4.2	3.5	6.0	40	76	38	12	9.5	10
13	2.9	2.8	4.1	4.4	3.6	6.0	32	76	41	8.4	7.8	7.8
14	3.2	3.2	4.3	4.4	3.8	5.5	32	56	96	7.2	6.9	5.5
15	3.2	3.2	4.4	4.2	3.9	5.5	42	48	92	16	6.6	5.0
16	3.2	4.0	4.5	4.0	3.8	6.0	47	47	94	15	6.6	4.2
17	3.0	4.4	4.5	4.0	3.7	7.0	45	57	51	51	5.5	4.0
18	2.9	4.4	4.5	4.0	3.7	9.0	50	71	42	34	5.0	7.8
19	2.8	4.2	4.4	4.4	3.9	11	60	72	56	16	5.0	11
20	2.8	4.2	4.2	4.6	4.0	14	60	74	64	10	4.8	12
21	2.6	4.6	4.0	4.8	3.6	14	55	76	68	8.7	4.5	9.5
22	2.4	4.4	3.8	4.8	3.4	13	50	72	68	11	4.0	7.8
23	2.4	4.2	3.8	4.6	3.4	13	46	65	70	16	3.5	7.2
24	2.4	4.0	4.0	4.4	3.6	15	42	64	57	20	3.2	6.6
25	2.3	3.8	4.2	4.2	3.8	16	36	66	60	14	2.9	8.4
26	2.4	3.8	4.2	4.0	3.8	16	44	76	54	10	2.9	10
27	2.3	3.8	3.8	4.0	3.7	16	55	99	23	9.0	3.0	8.7
28	2.2	4.0	3.4	4.2	3.9	15	70	77	14	7.5	3.8	7.5
29	2.2	4.2	3.2	4.4	-	14	80	66	14	6.6	6.6	6.6
30	2.0	4.4	3.4	4.4	- - - - -	14	65	56	12	6.0	5.0	6.0
31	2.0	- - - - -	3.6	4.4	- - - - -	15	- - - - -	50	- - - - -	6.0	5.8	- - - - -
Total	86.2	94.53	128.7	130.2	102.2	281.7	1,327	1,954	1,515	396.5	225.4	223.9
Mean	2.78	3.15	4.15	4.20	3.65	9.09	44.2	63.0	50.5	12.8	7.27	7.46
Max	4.0	4.6	6.0	4.8	4.2	16	80	99	96	51	23	12
Min	2.0	0.83	3.2	3.6	3.3	4.0	16	36	12	6.0	2.9	4.0
Ac-ft	171	187	255	258	203	559	2,630	3,880	3,000	786	447	444

Cal yr 1966: Total 8,561.83 Mean 23.5 Max 240 Min 1.4 Ac-ft 16,980
Wtr yr 1967: Total 6,465.33 Mean 17.7 Max 99 Min 0.83 Ac-ft 12,820

Peak discharge (base, 250 cfs).--No peak above base.

Note.--No gage-height record Nov. 16 to Apr. 12.

9-1325. North Fork Gunnison River near Somerset, Colo.

Location.--Lat 38°55'45", long 107°26'55", in sec.9, T.13 S., R.90 W., on right bank 1½ miles east of Somerset and 4 miles upstream from Hubbard Creek.

Drainage area.--531 sq mi (revised).

Records available.--October 1933 to September 1967. Monthly discharge only for some periods, published in WSP 1313.

Gage.--Water-stage recorder. Datum of gage is 6,038.6 ft above mean sea level, datum of 1929.

Average discharge.--34 years, 430 cfs (311,300 acre-ft per year).

Extremes.--Maximum discharge during year, 2,730 cfs May 23 (gage height, 3.94 ft); minimum daily, 45 cfs Dec. 29.
1933-67: Maximum discharge, 7,860 cfs June 4, 1957 (gage height, 6.14 ft); minimum daily, 17 cfs Nov. 10, 1950.

Remarks.--Records good except those for winter period, which are poor. Natural flow of stream affected by small diversions for irrigation in nearby drainage areas, irrigation of about 3,000 acres above station, storage in Overland Reservoir (capacity, 6,280 acre-ft), and Paonia Reservoir (capacity, 18,300 acre-ft).

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	113	62	53	55	60	70	307	490	1,090	534	222	208
2	91	81	54	60	60	80	338	420	1,060	490	208	208
3	63	99	62	65	60	90	379	397	1,150	442	205	208
4	57	97	64	70	60	95	451	352	1,470	415	205	212
5	54	85	68	65	55	95	505	343	1,550	392	202	212
6	52	85	379	60	55	90	495	334	1,530	366	205	212
7	51	89	480	60	55	85	570	316	1,440	348	252	208
8	51	105	226	55	50	74	718	392	1,420	398	226	212
9	50	99	118	55	50	79	734	626	1,350	348	188	233
10	49	91	80	55	55	87	661	854	1,260	307	170	219
11	52	89	65	55	55	105	703	822	1,090	284	158	233
12	70	91	60	60	55	113	750	854	1,040	316	161	294
13	60	85	55	60	55	109	682	942	918	294	149	226
14	66	85	55	60	60	99	619	710	870	248	161	212
15	60	87	55	60	60	91	612	626	870	264	174	177
16	60	99	55	55	55	97	591	718	806	264	184	170
17	59	89	60	55	55	132	564	966	870	361	188	170
18	57	99	60	55	55	188	619	1,210	998	402	184	188
19	54	75	60	55	55	226	790	1,320	1,090	294	188	194
20	55	70	60	55	55	194	942	1,680	1,170	236	188	219
21	53	75	60	60	50	233	854	1,990	1,190	212	188	205
22	52	74	55	65	50	280	846	2,270	1,130	184	184	198
23	52	72	55	65	55	320	798	2,400	1,090	194	191	191
24	50	68	55	60	60	343	742	2,300	1,010	298	191	188
25	49	64	55	55	60	356	689	2,110	910	226	191	184
26	48	69	55	50	60	361	626	2,050	830	202	191	184
27	48	56	55	50	60	343	605	1,970	758	188	194	184
28	48	60	50	50	65	325	480	1,840	703	198	198	188
29	48	68	45	55	-	338	577	1,580	591	212	205	188
30	48	57	50	60	- - - -	352	612	1,360	558	219	205	130
31	48	- - - -	55	60	- - - -	312	- - - -	1,210	- - - -	222	208	- - - -
Total	1,768	2,385	2,759	1,800	1,580	5,762	18,859	35,442	31,812	9,338	5,964	6,055
Mean	57.0	79.5	89.0	58.1	56.4	186	629	1,143	1,060	301	192	202
Max	113	105	480	70	65	361	942	2,400	1,550	534	252	294
Min	48	56	45	50	50	70	307	316	558	184	149	130
Ac-ft	3,510	4,730	5,470	3,570	3,130	11,430	37,410	70,300	63,100	18,520	11,830	12,010
(†)	1,070	626	2,940	3,460	4,020	7,180	5,490	18,840	18,600	18,530	15,480	9,380

Cal yr 1966: Total 113,960 Mean 312 Max 2,000 Min 45 Ac-ft 226,000
Wtr yr 1967: Total 123,524 Mean 338 Max 2,400 Min 45 Ac-ft 245,000

† Month-end contents, in acre-feet, in Paonia Reservoir (contents on Sept. 30, 1966, 1,230 acre-ft); furnished by North Fork Conservancy District.

Note.--No gage-height record Dec. 23 to Mar. 7.

9-1327. Main Hubbard Creek near Paonia, Colo.

Location.--Lat 39°03'25", long 107°37'44", in NE¼ sec.35, T.11 S., R.92 W., on left bank 100 ft upstream from Overland ditch crossing, 2 miles southwest of Hubbard Park, and 13 miles north of Paonia.

Drainage area.--1.31 sq mi.

Records available.--October 1960 to September 1967.

Gage.--Water-stage recorder. Altitude of gage is 9,710 ft (from topographic map).

Average discharge.--7 years, 1.61 cfs (1,170 acre-ft per year).

Extremes.--Maximum discharge, 18 cfs Aug. 2 (gage height, 3.21 ft); minimum daily, 0.15 cfs Dec. 29.

1960-67: Maximum discharge, 24 cfs May 6, 1963, June 17, 1965; maximum gage height, 4.77 ft May 1, 1965 (backwater from ice); minimum daily discharge determined, 0.10 cfs Oct. 1-8, 1961, many days in September to December 1963, January to March 1964, and February 1965.

Remarks.--Records good except those for winter period and period of no gage-height record, which are poor. No diversion above station.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.20	0.30	0.50	0.30	0.40	0.40	0.30	0.45	3.0	5.2	0.90	0.76
2	.30	.25	.45	.35	.40	.40	.30	.40	5.0	4.7	.68	.63
3	.37	.25	.40	.40	.35	.40	.30	.35	9.0	4.4	.72	.50
4	.34	.30	.40	.40	.30	.35	.35	.30	14	4.0	.63	.39
5	.34	.30	.45	.40	.30	.25	.35	.30	14	3.5	1.5	.34
6	.34	.30	.60	.35	.25	.20	.40	.30	14	3.0	1.5	.34
7	.34	.30	.70	.30	.20	.20	.40	.40	12	3.2	2.5	.32
8	.34	.30	.55	.30	.20	.25	.30	.55	11	3.7	3.0	.32
9	.32	.30	.35	.30	.20	.30	.25	.90	11	2.5	2.4	.76
10	.28	.35	.30	.30	.20	.30	.20	1.2	10	2.0	4.2	1.1
11	.34	.35	.30	.35	.20	.30	.20	1.0	9.0	2.1	3.2	.90
12	.37	.35	.35	.40	.25	.30	.20	1.2	8.5	1.7	1.6	.86
13	.37	.40	.40	.40	.30	.30	.20	1.1	8.0	1.5	1.2	.50
14	.40	.45	.40	.40	.30	.25	.20	.90	9.0	1.7	.98	.43
15	.50	.45	.40	.35	.30	.20	.25	.90	8.0	2.9	.98	.41
16	.50	.50	.40	.30	.30	.20	.20	2.0	9.4	3.2	.90	.37
17	.50	.50	.45	.30	.25	.25	.20	4.5	11	7.9	.72	.41
18	.50	.50	.50	.30	.20	.30	.20	6.0	13	4.7	.68	.41
19	.50	.50	.50	.35	.20	.35	.25	7.0	12	2.4	.63	1.3
20	.45	.55	.50	.40	.20	.40	.30	7.0	13	2.4	.58	.76
21	.40	.60	.50	.40	.20	.40	.25	8.0	11	1.7	.58	.54
22	.40	.60	.45	.40	.25	.40	.20	9.5	11	1.3	.58	.45
23	.40	.55	.40	.40	.30	.40	.20	11	10	1.1	.54	.41
24	.40	.50	.40	.40	.35	.40	.20	12	9.0	2.2	.45	.39
25	.40	.50	.40	.35	.35	.40	.20	12	7.3	1.8	.43	.45
26	.40	.45	.35	.30	.35	.40	.25	12	6.6	1.4	.54	.68
27	.40	.40	.30	.30	.35	.40	.35	11	6.6	1.1	.58	.43
28	.40	.40	.25	.30	.35	.40	.45	9.0	6.0	.86	.58	.37
29	.40	.40	.15	.35	-	.35	.50	6.5	5.4	.72	.63	.36
30	.35	.50	.20	.40	- - - -	.30	.50	4.5	4.9	.63	.50	.25
31	.35	- - - -	.25	.40	- - - -	.30	- - - -	3.0	- - - -	.86	.54	- - - -
Total	11.90	12.40	12.55	10.95	7.80	10.05	8.45	135.25	281.7	80.37	35.45	16.14
Mean	0.384	0.413	0.405	0.353	0.278	0.324	0.282	4.36	9.39	2.59	1.14	0.538
Max	0.50	0.60	0.70	0.40	0.40	0.40	0.50	12	14	7.9	4.2	1.3
Min	0.20	0.25	0.15	0.30	0.20	0.20	0.20	0.30	3.0	0.63	0.43	0.25
Ac-ft	24	25	25	22	15	20	17	268	559	159	70	32

Cal yr 1966: Total 428.15 Mean 1.17 Max 9.0 Min - Ac-ft 849
Wtr yr 1967: Total 623.01 Mean 1.71 Max 14 Min 0.15 Ac-ft 1,240

Peak discharge (base, 20 cfs).--No peak above base.

Note.--No gage-height record Oct. 28 to Apr. 11, Apr. 22 to June 15.

GUNNISON RIVER BASIN

9-1328. Middle Hubbard Creek near Paonia, Colo.

Location.--Lat 39°02'58", long 107°37'13", in SW¼ sec.36, T.11 S., R.92 W., on left bank 100 ft upstream from Overland ditch crossing, 2 miles southwest of Hubbard Park, and 12 miles north of Paonia.

Drainage area.--1.34 sq mi.

Records available.--October 1960 to September 1967.

Gage.--Water-stage recorder. Altitude of gage is 9,650 ft (from topographic map).

Average discharge.--7 years, 1.82 cfs (1,320 acre-ft per year).

Extremes.--Maximum discharge during year, 35 cfs July 17 (gage height, 4.02 ft); minimum daily, 0.25 cfs Dec. 29.

1960-67: Maximum discharge, 36 cfs June 21, 1962 (gage height, 4.10 ft); maximum gage height, 4.67 ft May 21, 1964 (backwater from ice); minimum daily discharge determined, 0.10 cfs for many days in most years.

Remarks.--Records good except those for period of no gage-height record, which are poor. No diversion above station.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.36	0.40	0.70	0.40	0.50	0.50	0.40	0.66	4.1	7.8	1.2	0.80
2	.55	.30	.65	.45	.45	.50	.40	.51	6.8	7.1	.95	.85
3	.75	.30	.60	.50	.40	.50	.40	.43	10	6.4	1.0	.66
4	.80	.35	.60	.50	.40	.45	.40	.40	16	6.2	.95	.55
5	.85	.40	.70	.50	.40	.40	.45	.40	16	5.4	2.9	.51
6	.80	.40	.80	.50	.35	.35	.50	.36	16	4.6	2.6	.51
7	.66	.40	.90	.45	.30	.30	.50	.47	15	5.0	3.1	.55
8	.59	.40	.70	.40	.30	.30	.40	.90	13	5.2	3.1	.62
9	.51	.40	.55	.40	.30	.35	.35	1.8	13	3.8	1.8	1.2
10	.47	.40	.40	.40	.30	.40	.30	2.2	12	3.1	4.0	1.9
11	.55	.45	.45	.45	.30	.40	.30	1.6	11	3.1	2.9	1.5
12	.66	.45	.50	.50	.30	.40	.32	2.1	9.0	2.8	1.6	1.3
13	.59	.50	.50	.50	.35	.35	.32	2.3	8.1	2.6	1.2	.85
14	.70	.55	.50	.50	.40	.30	.32	1.4	10	4.6	1.0	.70
15	.70	.60	.50	.50	.40	.30	.36	1.3	9.0	7.1	1.0	.66
16	.70	.70	.50	.45	.40	.35	.32	1.8	10	5.4	1.0	.62
17	.70	.70	.55	.40	.40	.40	.32	3.6	12	13	.80	.59
18	.70	.70	.60	.40	.35	.45	.43	6.0	14	5.4	.70	.62
19	.70	.70	.60	.45	.30	.50	.70	6.2	14	3.1	.70	1.7
20	.65	.70	.60	.50	.30	.50	.62	6.4	17	3.0	.66	1.2
21	.60	.80	.60	.50	.30	.50	.47	8.7	16	2.6	.70	.85
22	.55	.80	.55	.50	.30	.50	.36	11	14	1.9	.66	.66
23	.50	.75	.50	.50	.30	.50	.36	12	14	1.8	.62	.59
24	.50	.70	.50	.50	.35	.50	.36	13	13	3.3	.59	.55
25	.50	.70	.50	.50	.40	.50	.32	13	9.4	2.6	.55	.70
26	.50	.65	.50	.45	.40	.50	.32	12	9.4	1.8	.75	.95
27	.50	.60	.40	.40	.40	.50	.40	14	9.4	1.5	.70	.66
28	.50	.60	.35	.40	.45	.50	.70	11	8.4	1.2	.75	.55
29	.45	.60	.25	.45	-	.45	1.0	7.8	7.4	1.0	.80	.47
30	.45	.70	.30	.50	- - - -	.40	1.0	5.2	7.8	1.0	.62	.43
31	.45	- - - -	.35	.50	- - - -	.40	- - - -	4.0	- - - -	1.1	.62	- - - -
Total	18.49	16.70	16.70	14.35	10.10	13.25	13.40	152.53	344.8	124.5	40.52	24.30
Mean	0.596	0.557	0.539	0.463	0.361	0.427	0.447	4.92	11.5	4.02	1.31	0.810
Max	0.85	0.80	0.90	0.50	0.50	0.50	1.0	14	17	13	4.0	1.9
Min	0.36	0.30	0.25	0.40	0.30	0.30	0.30	0.36	4.1	1.0	0.55	0.43
Ac-ft	37	33	33	28	20	26	27	303	684	247	80	48

Cal yr 1966: Total 562.69 Mean 1.54 Max 12 Min - Ac-ft 1,120
 Wtr yr 1967: Total 789.64 Mean 2.16 Max 17 Min 0.25 Ac-ft 1,570

Peak discharge (base, 20 cfs)

Note.--No gage-height record Oct. 14 to Apr. 11.

Date	Time	Gage height	Discharge	Date	Time	Gage height	Discharge
5-27	1130	3.82	20	7-17	1115	4.02	35
6-6	1800	3.84	21	8-10	1630	3.85	20
6-18	1800	3.86	24				

9-1329. West Hubbard Creek near Paonia, Colo.

Location.--Lat 39°01'56", long 107°36'47", in NE¼ sec.12, T. 12 S., R.92 W., on left bank 75 ft upstream from Overland ditch crossing, 3 miles south of Hubbard Park, and 11 miles north of Paonia.

Drainage area.--2.36 sq mi (revised).

Records available.--October 1960 to September 1967.

Gage.--Water-stage recorder. Altitude of gage is 9,640 ft (from topographic map).

Average discharge.--7 years, 3.43 cfs (2,480 acre-ft per year).

Extremes.--Maximum discharge during year, 40 cfs June 6;(gage height, 4.08 ft); minimum daily, 0.30 cfs Dec. 29.
1960-67: Maximum discharge, 52 cfs July 8, 1965; maximum gage height, 4.35 ft June 15, 1965; minimum daily discharge determined, 0.10 cfs Apr. 4, 8, 1964.

Remarks.--Records good except those for winter period, which are poor. No diversion above station.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.48	0.40	0.65	0.50	0.60	0.55	0.50	1.1	9.6	12	2.2	1.2
2	.50	.35	.60	.55	.55	.60	.50	1.1	16	11	2.0	1.2
3	.60	.40	.60	.60	.50	.60	.50	1.0	21	9.3	1.9	1.0
4	.70	.40	.65	.60	.50	.55	.55	.90	32	8.3	1.9	.95
5	.70	.40	.75	.60	.50	.50	.60	.85	30	7.6	2.6	.90
6	.60	.40	.85	.60	.40	.45	.70	.80	32	6.5	2.5	.90
7	.55	.40	1.0	.60	.40	.40	.70	.90	30	6.5	3.4	.85
8	.50	.40	.80	.55	.40	.40	.50	1.2	26	6.2	4.4	.90
9	.50	.45	.60	.50	.40	.45	.45	2.0	26	4.6	3.2	1.1
10	.48	.50	.50	.50	.40	.50	.40	3.0	26	4.1	3.9	1.6
11	.55	.50	.55	.55	.40	.50	.40	2.3	23	3.9	3.4	1.4
12	.55	.50	.60	.60	.40	.50	.40	2.9	21	3.5	2.5	1.3
13	.50	.55	.60	.60	.45	.50	.40	3.0	18	3.2	2.2	1.1
14	.65	.60	.60	.60	.50	.45	.40	2.2	21	3.4	2.0	1.0
15	.65	.65	.60	.60	.50	.40	.45	1.8	18	10	1.9	.95
16	.65	.70	.65	.50	.50	.40	.45	2.4	19	5.6	1.9	.95
17	.65	.70	.70	.50	.50	.45	.45	4.1	23	9.3	1.6	.95
18	.65	.70	.70	.50	.50	.50	.50	7.6	28	6.5	1.5	.95
19	.65	.70	.70	.55	.45	.55	.60	8.6	27	4.3	1.5	1.5
20	.60	.75	.70	.60	.40	.60	.90	9.6	30	3.9	1.5	1.3
21	.55	.80	.65	.60	.40	.60	.75	13	28	3.4	1.5	1.1
22	.50	.80	.60	.60	.40	.55	.60	17	26	2.9	1.5	.95
23	.50	.70	.60	.60	.45	.55	.60	20	26	2.8	1.4	.90
24	.50	.70	.60	.60	.50	.55	.60	22	23	5.6	1.4	.90
25	.48	.70	.60	.60	.50	.60	.50	26	19	4.3	1.3	.95
26	.48	.60	.55	.50	.50	.60	.50	28	18	3.4	1.3	1.1
27	.48	.60	.50	.50	.50	.60	.60	32	17	2.8	1.3	.95
28	.45	.60	.45	.55	.50	.60	.80	24	15	2.4	1.4	.90
29	.45	.65	.30	.60	-	.60	1.0	19	13	2.2	1.3	.90
30	.48	.70	.40	.60	-	.55	1.4	13	13	2.2	1.2	.85
31	.48	- - - -	.45	.60	- - - -	.50	- - - -	9.3	- - - -	2.3	1.2	- - - -
Total	17.06	17.30	19.10	17.55	13.00	16.15	17.70	280.65	674.6	164.0	62.8	31.50
Mean	0.550	0.577	0.616	0.566	0.464	0.521	0.590	9.05	22.5	5.29	20.3	1.05
Max	0.70	0.80	1.0	0.60	0.60	0.60	1.4	32	32	12	4.4	1.6
Min	0.45	0.35	0.30	0.50	0.40	0.40	0.40	0.80	9.6	2.2	1.2	0.85
Ac-ft	34	34	38	35	26	32	35	557	1,340	325	125	62

Cal yr 1966: Total 963.46 Mean 2.64 Max 25 Min 0.30 Ac-ft 1,910

Wtr yr 1967: Total 1,331.41 Mean 3.65 Max 32 Min 0.30 Ac-ft 2,640

Peak discharge (base, 40 cfs).--June 6 (1800) 40 cfs (4.08 ft).

Note.--No gage-height record Nov. 1 to Apr. 11.

GUNNISON RIVER BASIN

9-1345. Leroux Creek near Cedaredge, Colo.

Location.--Lat 38°55'35", long 107°47'35", in NW¼ sec.16, T.13 S., R.93 W., on right bank 200 ft upstream from headgate of Overland ditch, 400 ft upstream from Cow Creek, and 7 miles northeast of Cedaredge.

Drainage area.--35.1 sq mi.

Records available.--October 1936 to September 1956, October 1960 to September 1967. Monthly discharge only for some periods, published in WSP 1313.

Gage.--Water-stage recorder. Altitude of gage is 7,255 ft (from topographic map).

Average discharge.--27 years, 47.1 cfs (34,100 acre-ft per year).

Extremes.--Maximum discharge during year, 810 cfs May 24 (gage height, 4.10 ft); minimum daily, 4.4 cfs Feb. 8, 9.
1936-56, 1960-67: Maximum discharge, 1,310 cfs May 26, 1942 (gage height, 4.95 ft), from rating curve extended above 650 cfs; maximum gage height, 5.10 ft May 10, 1937 (backwater from diversion dam); minimum daily discharge, 1.8 cfs Nov. 10, 1950.

Remarks.--Records good except those for winter period, which are poor. One small diversion and several small reservoirs above station for irrigation below.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	7.1	12	4.5	7.0	4.8	5.4	7.8	48	200	53	37	27
2	8.8	15	5.0	7.0	4.8	5.9	9.5	43	218	49	32	26
3	13	18	5.4	7.1	4.6	5.9	12	38	238	42	32	27
4	12	17	5.7	6.9	4.6	5.4	18	34	272	40	33	31
5	12	17	5.5	6.9	4.6	5.2	20	34	255	28	33	32
6	11	18	16	6.7	4.6	5.0	15	32	258	22	33	32
7	11	16	15	6.5	4.6	5.0	17	33	232	22	35	34
8	15	13	10	6.3	4.4	5.0	20	68	206	26	35	33
9	14	11	6.0	6.1	4.4	5.2	19	125	190	29	31	32
10	14	10	5.0	6.3	4.8	5.2	14	150	178	31	35	35
11	15	11	5.5	6.5	4.8	5.4	12	123	160	29	35	32
12	15	12	6.0	6.5	4.6	5.4	12	143	154	29	32	30
13	11	9.2	6.5	6.5	4.6	5.4	10	137	143	29	31	29
14	10	8.8	7.1	6.3	4.6	5.2	9.5	102	148	29	29	27
15	11	7.8	7.0	6.1	4.6	5.0	11	114	125	34	28	26
16	12	6.7	7.5	6.1	4.6	5.4	9.5	176	118	34	30	25
17	11	8.8	8.0	5.9	4.8	6.9	11	250	118	57	29	25
18	12	8.2	8.0	5.9	4.8	9.8	18	305	119	53	27	24
19	12	7.8	8.0	5.4	4.8	10	26	287	116	39	24	24
20	18	8.2	7.8	5.0	4.8	9.0	24	317	128	33	24	23
21	20	7.8	7.1	5.0	4.6	10	20	398	134	31	23	21
22	21	5.9	6.5	5.0	4.6	14	18	506	107	28	22	20
23	22	5.7	6.0	5.0	4.6	18	18	520	99	26	21	19
24	22	5.2	6.0	5.0	4.6	18	16	500	84	28	22	18
25	15	4.5	7.0	5.0	4.6	13	15	468	69	27	22	20
26	15	4.5	7.0	4.6	4.8	11	12	472	72	24	21	26
27	16	4.5	6.5	4.8	4.8	9.5	20	464	69	28	22	20
28	16	5.0	5.5	4.8	4.9	8.8	43	359	66	27	27	18
29	13	5.0	6.0	4.8	-	8.5	65	266	61	26	29	18
30	13	5.0	6.5	4.8	- - - -	8.0	65	235	56	26	29	17
31	12	- - - -	7.0	4.9	- - - -	8.0	- - - -	206	- - - -	36	28	- - - -
Total	429.9	288.6	220.6	180.7	130.7	247.5	587.3	6,953	4,393	1,015	891	771
Mean	13.9	9.62	7.12	5.83	4.67	7.98	19.6	224	146	32.7	28.7	25.7
Max	22	18	16	7.1	4.9	18	65	520	272	57	37	35
Min	7.1	4.5	4.5	4.6	4.4	5.0	7.8	32	56	22	21	17
Ac-ft	853	572	438	358	259	491	1,160	13,790	8,710	2,010	1,770	1,530

Cal yr 1966: Total 13,278.7 Mean 36.4 Max 342 Min 4.5 Ac-ft 26,340

Wtr yr 1967: Total 16,108.3 Mean 44.1 Max 520 Min 4.4 Ac-ft 31,950

Peak discharge (base, 600 cfs).--May 24 (1930) 810 cfs (4.10 ft).

9-1347. Cow Creek near Cedaredge, Colo.

Location.--Lat 38°55'35", long 107°47'30", in N½ sec.16, T.13 S., R.93 W., on right bank at mouth 300 ft upstream from Overland ditch diversion headgate and 7 miles northeast of Cedaredge.

Drainage area.--6.90 sq mi.

Records available.--October 1960 to September 1967.

Gage.--Water-stage recorder. Altitude of gage is 7,268 ft (from topographic map).

Average discharge.--7 years, 12.5 cfs (9,050 acre-ft per year).

Extremes.--Maximum discharge during year, 95 cfs May 18 (gage height, 2.90 ft), from rating curve extended above 61 cfs; no flow for many days.

1960-67: Maximum discharge, about 350 cfs May 17, 1964 (gage height, 4.20 ft, backwater from debris); no flow for many days in most years.

Remarks.--Records good except those for winter period, which are poor. Natural flow of stream affected by one small diversion above station to Dever Creek drainage. Most of flow is water imported by Overland ditch from Overland Reservoir (capacity, 6,280 acre-ft) in West Muddy Creek drainage. Overland ditch also intercepts intermediate tributaries to North Fork Gunnison River during high flows.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	0.02	0.10	0.05		0.05	4.1	12	15	33	32	34
2	0	.02	.05	.05		.10	4.8	10	16	36	38	34
3	0	.04	.05	.05		.10	7.3	9.4	28	34	38	33
4	0	.04	.10	.05		.10	11	9.7	46	34	38	31
5	0	.02	.20	0		.10	12	9.7	40	34	38	33
6	0	.04	1.3	0		.05	9.4	8.8	44	32	40	34
7	0	.04	1.2	0		.05	10	11	31	32	42	36
8	0	.08	.20	0		.05	12	17	26	33	45	38
9	0	.05	.10	0		.10	11	28	23	30	36	40
10	0	.05	.05	0		.30	11	55	29	30	40	40
11	0	.05	.05	0		.80	13	45	27	29	42	38
12	0	.05	.05	0		.80	12	45	34	28	39	38
13	0	.05	.05	0		.60	9.4	40	32	28	39	36
14	.02	.05	.05	0		.40	8.8	30	38	22	39	31
15	0	.05	0	0		.20	9.4	24	32	15	39	26
16	0	0	0	0		.40	8.5	42	24	8.0	39	17
17	0	0	0	0		.80	12	57	26	9.0	38	12
18	0	0	0	0		1.4	18	61	39	8.5	38	6.0
19	0	0	0	0		2.4	20	61	42	3.2	38	2.7
20	0	0	0	0		3.0	15	48	39	5.0	39	1.0
21	0	0	0	0		3.6	11	40	40	29	39	.40
22	0	0	0	0		4.6	11	45	34	29	42	.30
23	0	0	0	0		5.8	10	44	33	29	42	.20
24	.02	0	0	0		6.6	7.6	44	32	32	39	.20
25	.02	0	0	0		6.4	7.6	45	30	34	38	.20
26	.02	0	0	0		6.4	8.2	45	32	32	38	.40
27	.02	0	0	0		5.0	14	57	38	30	38	.30
28	.02	0	0	0		4.6	19	45	36	31	38	.20
29	.02	0	0	0	-	4.6	22	33	34	32	24	.20
30	.02	0	0	0	- - - - -	4.4	16	18	39	32	39	.20
31	.02	- - - - -	0	0	- - - - -	4.2	- - - - -	17	- - - - -	33	38	- - - - -
Total	0.18	0.65	3.55	0.20	0	68.00	345.1	1056.6	979	826.7	1192	563.30
Mean	0.006	0.022	0.115	0.006	0	2.19	11.5	34.1	32.6	26.7	38.5	18.8
Max	0.02	0.08	1.3	0.05	0	6.6	22	61	46	36	45	40
Min	0	0	0	0	0	0.05	4.1	8.8	15	3.2	24	0.20
Ac-ft	0.4	1.3	7.0	0.4	0	135	684	2,100	1,940	1,640	2,360	1,120

Cal yr 1966: Total 4,527.98 Mean 12.4 Max 108 Min 0 Ac-ft 8,980
Wtr yr 1967: Total 5,035.28 Mean 13.8 Max 61 Min 0 Ac-ft 9,990

Note.--No gage-height record Nov. 9 to Mar. 10.

GUNNISON RIVER BASIN

9-1362. Gunnison River near Lazear, Colo.

Location.--Lat 38°47'00", long 107°50'15", in NE¼ sec.1, T.15 S., R.94 W., on left bank 300 ft downstream from North Fork Gunnison River and 3 miles west of Lazear.

Drainage area.--5,241 sq mi (revised).

Records available.--May 1962 to September 1967.

Gage.--Water-stage recorder. Altitude of gage is 5,090 ft (from topographic map).

Average discharge.--5 years, 1,214 cfs (878,900 acre-ft per year).

Extremes.--Maximum discharge during year, 3,300 cfs May 22 (gage height, 3.07 ft); minimum daily, 194 cfs Aug. 25, 27.

1962-67: Maximum discharge, 14,800 cfs May 13, 1962 (gage height, 6.30 ft); minimum daily, 115 cfs Oct. 6, 1963.

Remarks.--Records good. Natural flow of stream affected by transmountain and transbasin diversions, storage reservoirs, and diversions for irrigation of about 150,000 acres, part of which is in the Uncompahgre River basin.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	330	318	392	480	447	510	660	720	1,160	630	342	330
2	340	310	398	460	422	538	793	585	1,140	576	336	468
3	365	314	416	440	404	573	815	558	1,340	532	336	245
4	380	318	440	440	404	517	918	484	1,830	476	325	218
5	503	314	428	460	416	510	1,000	439	2,160	453	325	198
6	345	306	636	480	416	454	954	439	2,980	404	325	222
7	314	310	1,390	460	410	350	1,050	404	2,430	432	372	315
8	302	350	804	420	398	422	1,270	446	2,120	532	760	330
9	294	386	580	400	410	422	1,330	790	1,990	524	612	432
10	286	350	461	420	440	454	1,150	1,330	1,740	468	524	390
11	294	345	475	430	416	398	1,160	1,180	1,420	446	524	404
12	322	360	482	440	410	496	1,230	1,000	1,330	532	500	524
13	398	350	454	450	404	489	1,120	1,150	1,190	432	460	603
14	392	335	454	470	416	475	952	874	1,040	404	411	468
15	398	335	454	470	416	454	1,000	670	1,060	516	354	532
16	720	345	434	440	416	447	940	750	952	576	260	508
17	859	345	416	420	410	496	830	1,050	964	690	235	508
18	517	340	440	430	410	644	885	1,560	1,070	1,020	226	500
19	355	335	447	450	434	628	1,090	1,810	1,270	830	222	650
20	330	330	447	482	422	552	1,300	2,160	1,560	585	218	650
21	335	345	447	475	410	628	1,140	2,570	1,920	524	222	594
22	330	350	447	475	416	700	1,010	3,040	1,750	492	226	576
23	335	350	422	468	422	782	964	2,920	1,690	460	210	576
24	330	340	410	454	428	660	918	2,910	1,570	576	214	567
25	335	330	410	447	440	690	820	2,740	1,400	558	194	576
26	340	340	422	434	447	750	740	2,710	1,270	384	202	439
27	335	340	440	428	447	588	750	2,670	1,120	354	194	460
28	330	335	447	428	454	750	690	2,380	800	342	206	418
29	326	392	454	422	-	750	790	2,100	680	342	230	390
30	330	398	480	428	-	660	896	1,630	630	336	270	397
31	326	-	480	447	-	596	-	1,390	-	336	305	-
Total	11,696	10,216	15,307	13,848	11,785	17,383	29,165	45,459	43,576	15,762	10,140	13,488
Mean	377	341	494	447	421	561	972	1,466	1,453	508	327	450
Max	859	398	1,390	482	454	782	1,330	3,040	2,980	1,020	760	650
Min	286	306	392	400	398	350	660	404	630	336	194	198
Ac-ft	23,200	20,260	30,360	27,470	23,380	34,480	57,850	90,170	86,430	31,260	20,110	26,750
Cal yr 1966: Total	269,189		Mean 738		Max 3,400	Min 260	Ac-ft 533,900					
Wtr yr 1967: Total	237,825		Mean 652		Max 3,040	Min 194	Ac-ft 471,700					

9-1378. Dirty George Creek near Grand Mesa, Colo.

Location--Lat 38°56'40", long 108°01'40", in SE¼SE¼ sec.5, T.13 S., R.95 W., on left bank 200 ft upstream from falls on Cedar Park ditch, 3½ miles upstream from confluence with Sara Creek, 7½ miles northwest of Cedaredge, and 8 miles southwest of Grand Mesa.

Drainage area--8.57 sq mi (revised).

Records available--October 1957 to September 1967. Prior to October 1965, published as George Creek near Grand Mesa.

Gage--Water-stage recorder.

Average discharge--10 years, 6.54 cfs (4,730 acre-ft per year).

Extremes--Maximum discharge during year, 45 cfs Aug. 10 (gage height, 1.52 ft); minimum daily, 0.40 cfs Mar. 6.

1957-67: Maximum discharge, 86 cfs May 1, 1965 (gage height, 2.08 ft), from rating curve extended above 23 cfs; maximum gage height, 3.02 ft Aug. 4, 1964 (backwater from debris); minimum daily discharge, that of Mar. 6, 1967.

Remarks--Records fair except those for winter period, which are poor. Natural flow of stream affected by storage reservoirs, diversions above station for municipal water supply of town of Delta, and three small diversions above station for irrigation below.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5.0	4.0	3.2	1.6	0.80	0.90	2.8	3.8	9.4	6.7	9.0	8.3
2	5.2	3.6	3.1	1.7	.70	1.1	3.2	3.5	8.5	6.7	8.6	7.4
3	5.3	3.4	3.0	1.7	.70	1.2	3.6	2.8	8.8	5.6	9.0	7.2
4	5.3	3.3	3.0	1.7	.70	1.2	4.2	2.5	9.1	5.0	8.0	7.1
5	5.2	3.3	3.1	1.6	.70	.80	4.6	3.0	8.8	5.4	8.0	7.2
6	5.3	3.4	3.4	1.4	.70	.40	5.0	3.0	7.6	6.7	8.6	7.2
7	5.3	3.4	3.6	1.2	.60	.60	4.8	3.4	7.6	6.7	10	7.2
8	5.5	3.3	2.8	1.0	.50	.60	5.0	5.4	7.6	6.1	10	7.4
9	5.5	3.1	2.2	1.0	.50	.50	3.8	8.5	7.3	5.6	9.9	8.0
10	5.3	3.0	2.0	1.2	.50	.60	3.1	8.8	7.3	5.6	11	9.0
11	5.3	3.1	2.0	1.3	.60	.80	3.8	8.8	7.0	5.6	10	8.3
12	5.3	3.2	2.1	1.4	.65	.90	3.8	8.8	7.3	5.8	8.3	8.0
13	5.2	3.4	2.2	1.4	.70	1.0	3.2	8.5	7.0	5.8	7.2	7.7
14	5.3	3.5	2.3	1.4	.75	1.0	2.7	7.9	6.4	5.6	7.4	8.3
15	5.3	3.6	2.3	1.3	.75	1.0	3.0	7.3	7.0	7.6	8.3	8.3
16	5.2	3.7	2.3	1.2	.65	1.1	2.4	7.6	7.0	7.0	8.3	8.3
17	5.0	3.7	2.3	1.0	.60	1.4	2.3	8.8	5.6	8.2	7.7	7.7
18	5.3	3.6	2.3	.90	.60	1.6	3.1	9.8	5.2	8.0	7.7	8.0
19	5.0	3.6	2.3	1.0	.60	1.8	4.4	10	5.0	7.8	8.6	8.3
20	4.8	3.7	2.2	1.0	.55	2.0	4.4	10	5.4	7.6	8.6	7.7
21	4.7	3.7	2.0	1.0	.50	2.2	3.5	10	5.4	7.4	9.0	7.4
22	4.8	3.6	1.6	1.2	.50	2.6	3.2	9.4	5.6	8.0	9.6	7.4
23	4.7	3.4	1.5	1.2	.55	3.0	3.4	8.5	5.6	8.3	8.6	7.2
24	4.2	3.2	1.5	1.0	.65	3.0	2.8	7.0	5.0	8.0	8.3	7.2
25	4.4	3.0	1.7	.90	.75	2.8	2.7	8.5	5.0	8.0	8.3	7.2
26	4.4	2.8	1.9	.80	.75	2.6	2.5	10	5.2	7.7	8.6	7.2
27	4.4	2.8	1.5	.80	.75	2.5	2.8	10	7.0	8.3	7.4	7.1
28	4.5	2.8	1.3	.80	.70	2.5	3.8	11	6.7	8.3	7.7	7.1
29	4.8	3.0	1.3	.80	-	2.5	4.8	11	6.7	8.3	8.0	6.9
30	4.8	3.2	1.4	.90	- - - - -	2.5	4.8	9.4	7.0	8.6	7.7	6.8
31	4.5	- - - - -	1.5	1.0	- - - - -	2.6	- - - - -	10	- - - - -	8.6	8.0	- - - - -
Total	154.8	100.4	68.9	36.40	18.00	49.30	107.5	237.0	204.1	218.6	265.4	228.1
Mean	4.99	3.35	2.22	1.17	0.643	1.59	3.58	7.65	6.80	7.05	8.56	7.60
Max	5.5	4.0	3.6	1.7	0.80	3.0	5.0	11	9.4	8.6	11	9.0
Min	4.2	2.8	1.3	0.80	0.50	0.40	2.3	2.5	5.0	5.0	7.2	6.8
Ac-ft	307	199	137	72	36	98	213	470	405	434	526	452

Cal yr 1966: Total 2,766.1 Mean 7.58 Max 29 Min 1.3 Ac-ft 5,490
Wtr yr 1967: Total 1,688.50 Mean 4.63 Max 11 Min 0.40 Ac-ft 3,350

Note--No gage-height record Nov. 10 to Mar. 8.

9-1392. Ward Creek near Grand Mesa, Colo.

Location (revised).--Lat 38°59'01", long 107°58'17", in NE¼ sec.26, T.12 S., R.95 W., on left bank 300 ft upstream from headgate of Lake Fork and Surface Creek Canal, 3.7 miles upstream from Williams Creek, 4.1 miles south of Grand Mesa, and 6.2 miles northwest of Cedaredge.

Drainage area.--14.3 sq mi (revised).

Records available.--October 1957 to September 1967.

Gage.--Water-stage recorder. Altitude of gage is 8,090 ft (from topographic map). Prior to June 4, 1958, at site half a mile upstream at different datum.

Average discharge.--10 years, 11.6 cfs (8,400 acre-ft per year).

Extremes.--Maximum discharge during year, 41 cfs July 10 (gage height, 3.23 ft); minimum daily, 0.50 cfs Jan. 8.
1957-67: Maximum discharge, about 150 cfs May 25, 1958; minimum daily, that of Jan. 8, 1967.

Remarks.--Records fair except those for periods of no gage-height record, which are poor. Flow regulated by numerous small storage reservoirs. At times water is exported from Hotel Lake above station to Baron Lake in Kiser Creek basin.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.81	7.0	1.2	0.90	1.2	1.6	1.4	8.8	25	22	26	24
2	.81	7.0	1.2	1.0	1.1	1.8	1.6	11	24	22	26	24
3	.81	6.0	1.3	1.1	1.0	2.2	1.8	8.8	24	22	26	24
4	.74	5.0	1.4	1.2	1.0	2.2	2.0	9.1	28	21	25	24
5	.67	3.0	1.3	1.2	1.0	2.0	2.0	8.8	26	20	25	23
6	.67	2.0	1.5	1.0	.90	1.9	2.0	8.5	24	20	25	23
7	.67	1.2	2.1	.80	.80	1.9	2.0	9.1	22	23	26	23
8	.67	.60	1.7	.50	.80	2.0	2.1	14	20	19	25	24
9	.67	.60	1.3	.70	.85	2.2	2.1	19	20	19	25	24
10	.67	.70	1.0	.90	.95	1.6	2.1	20	18	19	26	25
11	.74	.90	1.0	1.1	1.0	1.6	2.0	18	18	21	25	25
12	.74	.90	1.1	1.2	1.0	1.6	2.0	19	26	20	24	25
13	.81	.80	1.2	1.2	1.1	1.6	2.0	18	26	20	24	24
14	.95	.90	1.2	1.2	1.2	1.6	2.0	16	25	21	24	23
15	1.6	1.0	1.1	1.2	1.1	1.4	1.8	18	22	29	24	22
16	2.3	1.0	1.0	1.1	1.0	1.6	1.6	19	21	28	24	21
17	2.2	.95	1.0	1.0	1.1	1.9	2.0	21	20	29	24	22
18	2.2	.85	1.1	1.0	1.2	2.0	2.4	24	18	26	24	22
19	2.3	.85	1.2	1.0	1.2	1.8	3.5	25	18	26	24	22
20	3.4	.95	1.2	1.0	1.2	1.6	3.4	26	20	26	25	21
21	3.3	1.2	1.2	1.1	1.3	1.9	3.2	28	20	27	25	18
22	4.2	1.3	1.1	1.3	1.5	2.2	3.0	29	20	27	25	18
23	4.2	1.3	1.0	1.4	1.6	2.2	2.9	30	18	27	24	18
24	4.4	1.3	1.0	1.3	1.8	2.3	3.0	22	22	27	24	18
25	6.6	1.2	1.0	1.2	1.8	2.2	3.3	21	22	26	25	18
26	6.8	1.1	1.0	1.1	1.8	2.1	3.8	25	22	26	25	18
27	8.0	1.0	.95	1.0	1.6	1.9	4.4	27	22	26	25	18
28	7.0	1.1	.80	1.0	1.4	1.7	7.6	27	23	26	25	11
29	7.0	1.2	.80	1.1	-	1.6	9.4	32	26	26	24	11
30	7.0	1.2	.80	1.2	- - - - -	1.5	9.1	27	26	26	24	10
31	7.0	- - - - -	.85	1.4	- - - - -	1.4	- - - - -	28	- - - - -	26	24	- - - - -
Total	89.93	54.10	35.60	33.40	33.50	57.1	91.5	617.1	666	743	767	623
Mean	2.90	1.80	1.15	1.08	1.20	1.84	3.05	19.9	22.2	24.0	24.7	20.8
Max	8.0	7.0	2.1	1.4	1.8	2.3	9.4	32	28	29	26	25
Min	0.67	0.60	0.80	0.50	0.80	1.4	1.4	8.5	18	19	24	10
Ac-ft	178	107	71	66	66	113	181	1,220	1,320	1,470	1,520	1,240

Cal yr 1966: Total 4,298.43 Mean 11.8 Max 49 Min 0.60 Ac-ft 8,530
Wtr yr 1967: Total 3,811.23 Mean 10.4 Max 32 Min 0.50 Ac-ft 7,560

Note.--No gage-height record Oct. 27 to Mar. 9, Mar. 24 to Apr. 27.

9-1402. Kiser Creek near Grand Mesa, Colo.

Location (revised).--Lat 38°59'12", long 107°56'35", in NW¼ sec.30, T.12 S., R.94 W., on left bank 400 ft upstream from unnamed tributary, 3½ miles south of Grand Mesa, 4.4 miles upstream from Cottonwood Creek, and 6 miles north of Cedaredge.

Drainage area.--5.28 sq mi (revised).

Records available.--October 1957 to September 1967.

Gage.--Water-stage recorder. Altitude of gage is 7,970 ft (from topographic map).

Average discharge.--10 years, 7.97 cfs (5,770 acre-ft per year).

Extremes.--Maximum discharge during year, 45 cfs Aug. 28 (gage height, 3.12 ft); minimum daily, 0.20 cfs Mar. 7. 1957-67: Maximum discharge, 83 cfs June 7, 1958 (gage height, 3.40 ft); from rating curve extended above 33 cfs; maximum gage height, 4.59 ft Mar. 11, 1964 (backwater from ice); minimum daily discharge determined, 0.10 cfs for many days in 1963-65.

Remarks.--Records good except those for winter period, which are poor. No diversion above station. Flow regulated by numerous small storage reservoirs. At times water is imported from Hotel Lake in Ward Creek basin to Baron Lake above station.

Revisions.--Revised figures of discharge, in cubic feet per second, for the water year 1966, superseding those previously published, are given herewith:

1966	1966-Con.	1966-Con.	1966-Con.
Aug. 5..... 17	Aug. 20..... 37	Sept. 4..... 24	Sept. 19..... 6.2
6..... 24	21..... 37	5..... 24	20..... 6.2
7..... 24	22..... 37	6..... 17	21..... 6.2
8..... 24	23..... 37	7..... 17	22..... 6.2
9..... 34	24..... 38	8..... 19	23..... 6.2
10..... 37	25..... 37	9..... 19	24..... 7.8
11..... 35	26..... 37	10..... 23	25..... 7.8
12..... 35	27..... 31	11..... 23	26..... 7.8
13..... 25	28..... 31	12..... 24	27..... 6.5
14..... 25	29..... 31	13..... 14	
15..... 25	30..... 33	14..... 14	
16..... 34	31..... 35	15..... 8.9	
17..... 35	Sept. 1..... 35	16..... 8.4	
18..... 37	2..... 35	17..... 5.9	
19..... 35	3..... 25	18..... 6.2	

Month	Cfs-days	Maximum	Minimum	Mean	Runoff in acre-feet
August 1966.....	950	38	17	30.6	1,880
September 1966.....	420.7	35	5.6	14.0	834
Water year 1965-66.....	3,617.5	41	-	9.91	7,180

GUNNISON RIVER BASIN

9-1402. Kiser Creek near Grand Mesa, Colo.--Continued

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5.8	1.6	1.2	1.3	0.90	0.80	1.1	2.7	5.4	9.2	18	36
2	5.8	1.1	1.0	1.2	.80	.80	1.2	2.7	4.9	9.2	17	37
3	5.8	.90	.90	1.2	.70	.75	1.5	2.4	4.9	9.2	25	37
4	6.2	.80	.80	1.4	.70	.60	2.2	2.4	6.7	16	24	37
5	6.2	.80	.90	1.4	.70	.40	2.2	1.3	7.6	16	21	35
6	6.2	.70	1.2	1.0	.65	.30	2.2	1.3	7.6	13	21	35
7	6.2	.50	1.4	.80	.60	.20	2.2	1.2	6.7	13	22	35
8	5.8	.45	1.2	.60	.50	.25	2.4	2.9	5.8	20	12	36
9	5.4	.40	.60	.70	.50	.35	2.0	4.9	5.4	24	12	28
10	5.4	.40	.40	.85	.60	.64	2.2	5.8	4.9	25	6.7	29
11	6.2	.55	.60	.90	.70	.64	2.2	6.2	4.5	23	4.9	28
12	6.2	.70	.80	1.0	.80	.64	2.2	6.7	5.8	23	4.9	7.6
13	6.2	.75	.90	.95	1.0	.64	1.8	6.2	6.7	25	4.5	7.6
14	6.2	.80	.95	.90	1.2	.64	1.5	4.9	6.2	26	4.5	4.0
15	4.9	.80	1.0	.80	1.1	.64	1.5	5.4	5.4	27	12	4.5
16	2.4	.80	1.2	.70	.90	.75	.97	7.1	4.9	27	12	4.5
17	2.4	.75	1.3	.60	.80	.97	1.8	8.0	4.5	27	13	4.5
18	2.2	.70	1.4	.65	.90	1.3	2.4	9.2	4.5	20	13	4.5
19	2.2	.65	1.4	.70	.80	1.3	2.4	9.2	4.5	19	24	4.9
20	2.2	.65	1.4	.80	.60	1.3	2.9	9.8	6.7	25	28	4.9
21	2.0	.75	1.4	1.0	.40	1.5	3.4	10	7.1	25	30	4.9
22	2.0	.80	1.2	1.0	.40	2.0	2.4	9.8	6.7	19	25	5.4
23	2.0	.80	1.0	.80	.40	2.4	1.2	8.0	10	18	25	13
24	2.0	.70	.90	.85	.50	2.4	1.8	7.1	13	20	35	13
25	2.0	.60	.90	.90	.60	2.2	1.8	8.6	13	27	36	14
26	2.0	.60	1.0	.80	.60	2.0	1.6	9.8	13	26	40	13
27	2.0	.60	1.0	.90	.60	1.8	1.6	10	13	26	41	13
28	2.0	.60	.60	.80	.70	1.5	2.7	9.8	12	26	42	7.6
29	2.0	.80	.80	1.0	-	1.3	3.1	8.0	12	17	33	7.1
30	2.0	1.0	1.0	1.2	- - - - -	1.2	3.1	6.2	12	18	32	4.0
31	2.0	- - - - -	1.2	1.2	- - - - -	1.1	- - - - -	5.8	- - - - -	19	36	- - - - -
Total	121.9	22.05	31.55	28.90	19.65	33.31	61.57	193.4	225.4	637.6	674.5	515.0
Mean	3.93	0.735	1.02	0.932	0.702	1.07	2.05	6.24	7.51	20.6	21.8	17.2
Max	6.2	1.6	1.4	1.4	1.2	2.4	3.4	10	13	27	42	37
Min	2.0	0.40	0.40	0.60	0.40	0.20	0.97	1.2	4.5	9.2	4.5	4.0
Ac-ft	242	44	63	57	39	66	122	384	447	1,260	1,340	1,020

Cal yr 1966: Total 3,425.70 Mean 9.39 Max 41 Min 0.40 Ac-ft 6,790
Wtr yr 1967: Total 2,564.83 Mean 7.03 Max 42 Min 0.20 Ac-ft 5,090

Note.--No gage-height record Nov. 8 to Mar. 9.

9-1407. Cottonwood Creek near Grand Mesa, Colo.

Location (revised).--Lat 38°58'39", long 107°56'59", in SW¼ sec.30, T.12 S., R.94 W., on left bank 200 ft upstream from culvert on county highway, 3.5 miles upstream from mouth, 4.3 miles south of Grand Mesa, and 5.4 miles northwest of Cedaredge.

Drainage area.--2.53 sq mi (revised).

Records available.--October 1957 to September 1967.

Gage.--Water-stage recorder and timber weir. Altitude of gage is 7,620 ft (from topographic map).

Average discharge.--10 years, 1.31 cfs (948 acre-ft per year).

Extremes.--Maximum discharge during year, 37 cfs May 23 (gage height, 2.11 ft); no flow for many days.

1957-67: Maximum discharge, 38 cfs May 7, 1966; maximum gage height, 2.11 ft May 23, 1967; no flow for many days in most years.

Remarks.--Records good except those for winter period, which are poor. Flow regulated by numerous small storage reservoirs.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	0.01	0.02	0	0.06	0.06	0.44	1.1	3.9	5.3	0.10	0.07
2	0	.01	.02	0	.06	.06	.92	.92	3.3	5.0	.07	.05
3	0	.01	.02	0	.04	.06	1.4	.82	3.3	5.2	.08	.02
4	.03	.01	.04	0	.04	.04	2.0	.82	3.7	5.3	.08	0
5	.03	.01	.40	0	.04	.04	2.7	1.0	3.7	5.2	.07	0
6	.03	.01	.80	0	.02	.02	3.0	1.0	3.5	5.3	.07	0
7	.03	.01	1.0	0	.02	.02	2.4	.92	2.8	5.4	.54	0
8	.03	.01	.80	0	.02	.04	2.6	1.6	2.4	3.7	.72	.02
9	.03	.05	.40	0	.02	.08	2.1	2.6	2.2	3.1	.44	.13
10	.02	.08	.10	.02	.02	.06	1.9	2.8	2.0	3.5	.82	.16
11	.03	.10	.05	.02	.02	.06	2.1	2.7	1.9	1.6	.54	.13
12	.04	.10	.05	.02	.02	.07	2.0	2.8	2.3	1.5	.20	.13
13	.04	.08	.05	.02	.02	.07	1.9	2.6	2.6	.92	.11	.08
14	.04	.05	0	.02	.04	.05	1.8	2.0	2.4	1.1	.07	.06
15	.04	.05	0	.02	.04	.05	1.6	2.1	2.3	1.3	.07	.06
16	.04	.05	0	.02	.04	.08	1.5	2.8	2.2	1.2	.06	.05
17	.05	.05	0	.02	.02	.20	1.3	3.5	1.8	1.9	.04	.05
18	.04	.02	0	.02	.02	.34	1.6	4.4	1.4	1.4	.04	.06
19	.04	.02	0	.02	.04	.54	1.9	4.9	1.3	1.2	.04	.13
20	.04	0	0	.04	.04	.63	1.6	5.0	1.4	1.2	.03	.11
21	.04	.05	0	.04	.04	.92	1.3	5.2	1.4	1.1	.02	.07
22	.03	.05	0	.04	.04	1.2	1.3	5.4	1.0	.92	.02	.06
23	.02	0	0	.04	.04	1.3	1.2	18	.82	.72	.01	.05
24	.01	0	0	.02	.04	1.2	1.0	12	.63	.92	.01	.04
25	.01	0	0	.02	.06	1.0	.92	9.0	.54	.72	0	.06
26	.01	0	0	.02	.06	.82	.92	9.0	.34	.25	0	.13
27	.01	0	0	.02	.04	.63	.92	9.4	5.7	.16	.03	.07
28	.01	0	0	.02	.04	.44	1.3	8.4	6.3	.11	.05	.05
29	.01	.02	0	.02	-	.44	1.5	6.8	6.3	.08	.03	.04
30	.01	.02	0	.04	- - - - -	.54	1.4	5.0	6.5	.08	.02	.04
31	.01	- - - - -	0	.06	- - - - -	.34	- - - - -	4.5	- - - - -	.10	.04	- - - - -
Total	0.77	0.87	3.75	0.58	1.00	11.40	48.52	139.08	79.93	65.48	4.42	1.92
Mean	0.025	0.029	0.121	0.019	0.036	0.368	1.62	4.49	2.66	2.11	0.143	0.064
Max	0.05	0.10	1.0	0.06	0.06	1.3	3.0	18	6.5	5.4	0.82	0.16
Min	0	0	0	0	0.02	0.02	0.44	0.82	0.34	0.08	0	0
Ac-ft	1.5	1.7	7.4	1.2	2.0	23	96	276	159	130	8.8	3.8
Cal yr 1966: Total	386.09			Mean 1.06	Max 16	Min 0		Ac-ft 766				
Wtr yr 1967: Total	357.72			Mean 0.980	Max 18	Min 0		Ac-ft 710				

Note.--No gage-height record Nov. 8 to Mar. 9.

GUNNISON RIVER BASIN

9-1412. Youngs Creek near Grand Mesa, Colo.

Location (revised).--Lat 38°57'29", long 107°55'05", in NE¼ sec.5, T.13 S., R.94 W., on left bank 200 ft upstream from bridge, 0.2 mile downstream from Horse Creek, 3.9 miles north of Cedaredge, and 5.9 miles southeast of Grand Mesa.

Drainage area.--10.3 sq mi (revised).

Records available.--October 1957 to September 1967.

Gage.--Water-stage recorder. Altitude of gage is 7,160 ft (from topographic map).

Average discharge.--10 years, 6.86 cfs (4,970 acre-ft per year).

Extremes.--Maximum discharge during year, 68 cfs May 27 (gage height, 2.54 ft); minimum daily, 0.20 cfs Feb. 8.
1957-67: Maximum discharge, 86 cfs June 6, 1958 (gage height, 2.77 ft); minimum daily determined, that of Feb. 8, 1967.

Remarks.--Records good except those for winter period, which are poor. Flow regulated by numerous small storage reservoirs. At times water is diverted from Eureka Reservoirs No. 1 and 2 above station to Milk Creek in Surface Creek basin. Three small diversions above station for irrigation below.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.3	1.5	1.2	0.50	0.65	0.90	1.7	7.3	25	9.2	6.8	3.5
2	1.3	1.2	1.2	.60	.60	1.0	1.9	5.6	24	8.3	5.8	2.6
3	1.8	1.0	2.0	.70	.60	1.0	2.6	5.1	25	11	5.8	2.4
4	1.8	.80	3.0	.75	.55	.80	3.6	4.8	26	11	3.8	3.1
5	1.7	.60	4.0	.80	.50	.60	4.8	5.3	27	9.2	3.8	3.1
6	1.6	.60	5.5	.70	.40	.50	3.8	5.1	27	8.3	3.8	3.0
7	1.7	.80	7.0	.60	.30	.50	4.8	5.0	25	7.5	13	3.0
8	1.7	.80	5.0	.30	.20	.60	5.3	8.0	22	7.8	13	5.0
9	1.7	.60	2.5	.50	.30	1.0	4.6	16	20	6.8	11	5.8
10	1.4	.60	1.0	.70	.35	1.6	3.8	20	19	9.2	12	6.3
11	1.3	.60	.60	.90	.40	1.8	4.6	19	17	10	7.3	4.2
12	1.4	.65	.70	.80	.45	1.9	4.8	19	19	13	6.1	4.0
13	1.2	.75	.80	.75	.50	1.6	3.9	19	20	13	5.4	2.5
14	1.4	.80	.85	.70	.45	1.4	3.7	13	19	13	8.0	2.3
15	1.2	.95	.90	.70	.45	1.5	4.2	13	17	15	8.3	2.0
16	1.3	.95	.90	.70	.50	1.8	3.6	17	17	15	11	1.9
17	1.3	.90	.95	.50	.60	2.5	4.0	20	15	19	11	1.9
18	1.2	.85	.90	.45	.60	2.4	5.8	29	14	17	8.3	3.8
19	1.1	.70	.80	.50	.50	3.4	7.5	35	14	8.6	7.5	5.3
20	1.2	.70	.75	.60	.50	3.0	7.0	32	16	6.8	7.0	9.2
21	1.2	.80	.70	.65	.55	2.8	5.3	36	16	7.5	10	9.2
22	1.2	.80	.60	.70	.60	2.8	4.6	41	14	6.6	9.8	6.6
23	1.2	.80	.50	.70	.65	3.2	4.8	38	13	6.6	8.3	6.6
24	1.2	.70	.45	.75	.70	3.2	4.2	39	12	10	7.8	6.6
25	1.2	.70	.45	.65	.75	2.6	4.6	46	11	9.2	8.3	4.6
26	1.2	.65	.50	.60	.80	2.3	4.3	49	10	8.9	8.6	4.3
27	1.2	.55	.40	.55	.80	2.1	5.4	54	9.5	8.6	8.9	2.5
28	1.2	.70	.30	.55	.80	2.0	8.6	49	9.8	8.0	6.6	2.0
29	1.2	1.2	.30	.55	-	2.0	10	42	9.5	8.0	6.1	2.6
30	1.2	1.3	.35	.60	- - - - -	1.8	9.2	35	9.8	7.5	5.8	2.8
31	1.7	- - - - -	.40	.70	- - - - -	1.7	- - - - -	28	- - - - -	6.8	5.8	- - - - -
Total	42.3	24.55	45.50	19.75	15.05	56.30	147.0	755.2	522.6	306.4	244.7	122.7
Mean	1.36	0.818	1.47	0.637	0.538	1.82	4.90	24.4	17.4	9.88	7.89	4.09
Max	1.8	1.5	7.0	0.90	0.80	3.4	10	54	27	19	13	9.2
Min	1.1	0.55	0.30	0.30	0.20	0.50	1.7	4.8	9.5	6.6	3.8	1.9
Ac-ft	84	49	90	39	30	112	292	1,500	1,040	608	485	243

Cal yr 1966: Total 2,565.45 Mean 7.03 Max 41 Min 0.30 Ac-ft 5,090
Wtr yr 1967: Total 2,302.05 Mean 6.31 Max 54 Min 0.20 Ac-ft 4,570

Note.--No gage-height record Nov. 8 to Mar. 9.

9-1430. Surface Creek near Cedaredge, Colo.

Location.--Lat 38°59'05", long 107°51'15", in NW¼ sec.25, T.12 S., R.94 W., on left bank 5 ft downstream from private bridge, 1½ miles downstream from Caesar Creek, and 7 miles northeast of Cedaredge.

Drainage area.--26.7 sq mi.

Records available.--June 1939 to September 1967. Monthly discharge only for some periods, published in WSP 1313.

Gage.--Water-stage recorder. Altitude of gage is 8,261 ft (from topographic map).

Average discharge.--28 years, 41.2 cfs (29,830 acre-ft per year).

Extremes.--Maximum discharge during year, 284 cfs May 21 (gage height, 2.65 ft); minimum daily, 2.5 cfs Dec. 18.

1939-67: Maximum discharge, 578 cfs May 12, 1941 (gage height, 3.62 ft), from rating curve extended above 300 cfs; maximum gage height, 5.10 ft Apr. 13, 1958 (ice jam); minimum daily discharge determined, 1.8 cfs Dec. 8, 1963.

Remarks.--Records good except those for winter period, which are poor. Flow regulated by many small reservoirs. Some water imported from Leon Lake in Plateau Creek drainage.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	20	13	4.4	3.3	3.6	4.2	4.0	34	92	86	50	80
2	17	17	4.3	3.2	3.5	4.4	4.6	27	96	78	48	73
3	14	18	4.5	3.2	3.4	4.5	5.0	24	104	74	52	71
4	15	18	4.8	3.3	3.4	4.4	6.0	24	117	68	50	71
5	15	23	4.8	3.3	3.4	4.4	6.5	23	121	62	69	65
6	13	22	9.0	3.1	3.3	4.2	5.5	21	125	61	66	64
7	11	23	9.5	2.9	3.2	4.0	7.0	26	116	60	73	51
8	11	4.0	7.0	2.8	3.2	3.8	9.0	51	103	68	74	49
9	11	4.4	3.6	2.9	3.2	3.7	8.0	92	94	62	69	62
10	12	4.8	4.4	3.0	3.3	3.5	7.5	91	94	58	64	59
11	13	4.6	4.8	3.2	3.4	3.5	17	86	94	69	54	59
12	14	4.4	4.8	3.3	3.5	3.5	17	88	106	70	43	47
13	13	4.2	4.6	3.5	3.5	3.5	14	76	128	58	38	30
14	12	4.2	4.2	3.6	3.6	3.5	14	54	128	57	36	28
15	12	4.5	3.6	3.6	3.5	3.5	16	60	110	74	34	28
16	11	4.5	3.2	3.5	3.1	3.7	15	86	106	74	35	26
17	11	4.5	2.7	3.5	3.1	4.4	20	106	101	94	39	25
18	11	4.4	2.5	3.6	3.2	5.5	33	123	99	69	38	25
19	12	4.4	2.7	3.7	3.3	5.0	41	125	99	52	42	34
20	18	4.6	2.9	3.8	3.2	4.6	33	150	106	48	43	31
21	21	5.0	3.3	3.8	3.1	4.4	24	186	110	46	43	26
22	21	5.0	3.5	3.7	3.1	5.0	23	207	96	51	64	26
23	20	4.8	5.0	3.6	3.1	6.0	23	162	89	52	71	24
24	21	3.8	4.8	3.6	3.2	6.0	20	148	86	54	74	24
25	21	3.0	4.4	3.6	3.4	6.0	19	177	80	64	74	24
26	22	3.6	4.8	3.5	3.6	5.5	20	183	77	60	74	25
27	19	4.4	4.8	3.4	3.8	4.6	35	207	80	59	73	25
28	18	5.5	4.4	3.4	4.0	4.4	54	192	78	54	73	41
29	12	5.2	4.0	3.5	-	4.3	60	148	77	60	74	43
30	11	5.0	3.6	3.6	- - - - -	4.2	46	117	76	60	73	58
31	11	- - - - -	3.4	3.6	- - - - -	4.1	- - - - -	103	- - - - -	61	78	- - - - -
Total	463	236.8	138.3	105.6	94.2	136.3	607.1	3,197	2,988	1,963	1,788	1,294
Mean	14.9	7.89	4.46	3.41	3.36	4.40	20.2	103	99.6	63.3	57.7	43.1
Max	22	23	9.5	3.8	4.0	6.0	60	207	128	94	78	80
Min	11	3.0	2.5	2.8	3.1	3.5	4.0	21	76	46	34	24
Ac-ft	918	470	274	209	187	270	1,200	6,340	5,930	3,890	3,550	2,570

Cal yr 1966: Total 13,869.2 Mean 38.0 Max 214 Min 2.5 Ac-ft 27,510

Wtr yr 1967: Total 13,011.3 Mean 35.6 Max 207 Min 2.5 Ac-ft 25,810

9-1435. Surface Creek at Cedaredge, Colo.

Location.--Lat 38°54'05", long 107°55'15", in SE¼ sec.20, T.13 S., R.94 W., on left bank at Cedaredge, 700 ft east of State Highway 65 and 8½ miles upstream from mouth.

Drainage area.--39.5 sq mi.

Records available.--October 1916 to September 1967. Monthly discharge only for some periods, published in WSP 1313.

Gage.--Water-stage recorder and concrete control. Altitude of gage is 6,220 ft (from topographic map). Prior to June 8, 1917, staff gage at same site at datum 0.5 ft higher.

Average discharge.--51 years, 27.1 cfs (19,620 acre-ft per year).

Extremes.--Maximum discharge during year, 148 cfs May 21 (gage height, 1.55 ft); minimum daily, 2.0 cfs Nov. 25.

1916-67: Maximum discharge, 1,190 cfs May 13, 1941 (gage height, 2.50 ft), from rating curve extended above 640 cfs; no flow Sept. 25, 1939, and practically no flow at times in some winters.

Remarks.--Records good except those for winter period, which are poor. Natural flow of stream affected by diversion to and from nearby streams, many small storage reservoirs, diversions for irrigation, and return flow from irrigated areas.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	11	9.3	3.5	4.1	4.8	3.8	5.1	4.4	70	48	31	37
2	10	12	4.1	4.1	4.4	4.0	6.5	37	74	46	28	33
3	11	13	4.1	3.2	4.6	4.4	11	31	72	42	26	32
4	11	15	4.1	3.7	5.0	4.1	17	32	74	39	24	32
5	11	17	4.4	3.7	5.0	3.7	20	34	77	37	31	30
6	10	16	13	4.0	4.8	3.7	16	32	81	34	32	31
7	9.3	18	18	4.0	4.6	3.8	22	33	79	31	34	18
8	8.0	15	7.0	3.6	4.4	4.1	27	53	83	39	37	15
9	6.5	2.2	4.0	3.4	4.8	3.8	24	77	70	39	31	24
10	6.5	4.8	4.4	3.6	4.4	3.2	19	84	69	34	33	30
11	8.0	4.8	5.0	3.6	4.0	3.5	26	76	62	32	30	30
12	11	4.4	5.0	3.7	3.6	3.0	25	81	72	34	24	28
13	11	3.5	5.0	3.2	3.5	3.0	19	72	77	25	17	24
14	11	3.0	4.8	3.0	3.5	3.0	19	69	77	22	14	21
15	13	3.2	4.1	2.5	3.4	2.7	22	67	69	34	17	19
16	11	3.5	3.8	2.5	3.4	3.0	20	74	67	37	20	16
17	11	3.5	3.7	2.5	3.4	4.4	26	77	67	50	20	14
18	11	3.0	3.5	2.5	3.4	6.0	42	93	69	47	19	15
19	11	3.0	3.5	2.5	3.5	6.5	50	90	72	35	21	19
20	9.3	3.2	3.5	2.5	3.5	5.5	38	99	72	30	20	15
21	9.3	4.4	3.5	2.5	3.4	5.1	30	110	79	27	20	14
22	8.6	4.4	3.5	2.7	3.4	6.5	25	120	67	30	31	14
23	9.3	4.1	3.4	2.7	3.4	8.6	27	84	64	32	32	12
24	9.3	2.7	3.2	3.2	3.4	9.3	24	90	60	34	35	11
25	11	2.0	3.2	3.2	3.5	8.6	24	99	56	40	35	12
26	11	2.6	4.0	3.7	3.5	8.0	23	103	53	38	34	14
27	10	2.7	3.8	3.7	3.6	7.5	37	120	54	33	34	13
28	9.3	5.0	3.6	3.7	3.6	6.5	52	106	54	31	34	13
29	8.6	4.8	3.6	3.7	-	6.5	59	84	54	37	38	14
30	7.0	4.4	3.8	4.4	- - - - -	6.0	58	83	52	37	38	14
31	7.5	- - - - -	4.0	4.8	- - - - -	5.5	- - - - -	76	- - - - -	37	38	- - - - -
Total	302.5	194.5	148.1	104.2	109.8	157.3	813.6	2,330	2,046	1,111	878	614
Mean	9.76	6.48	4.78	3.36	3.92	5.07	27.1	75.2	68.2	35.8	28.3	20.5
Max	13	18	18	4.8	5.0	9.3	59	120	83	50	38	37
Min	6.5	2.0	3.2	2.5	3.4	2.7	5.1	31	52	22	14	11
Ac-ft	600	386	294	207	218	312	1,610	4,620	4,060	2,200	1,740	1,220

Cal yr 1966: Total 9,001.1 Mean 24.7 Max 103 Min 2.0 Ac-ft 17,850
Wtr yr 1967: Total 8,809.0 Mean 24.1 Max 120 Min 2.0 Ac-ft 17,470

9-1442. Tongue Creek at Cory, Colo.

Location.--Lat 38°47'15", long 107°59'40", in SE¼ sec.34, T.14 S., R.95 W., on left bank at downstream side of bridge, 500 ft upstream from North Delta Canal headgate, half a mile west of Cory, and 1 mile upstream from mouth.

Drainage area.--196 sq mi (revised).

Records available.--October 1957 to September 1967.

Gage.--Digital water-stage recorder. Altitude of gage is 5,030 ft (from topographic map). Prior to Jan. 28, 1964, graphic water-stage recorder at same site and datum.

Average discharge.--10 years, 27.3 cfs (19,760 acre-ft per year).

Extremes.--Maximum discharge during year, 162 cfs Aug. 10; maximum gage height, 3.59 ft July 15; minimum daily discharge, 0.60 cfs Apr. 17.

1957-67: Maximum discharge, 748 cfs June 7, 1958; maximum gage height, 5.40 ft July 29, 1965; minimum daily discharge, 0.50 cfs July 15, 16, 21, 1964.

Remarks.--Records good except those for winter period, which are poor. Natural flow of stream affected by diversions to and from nearby streams, many small storage reservoirs, diversions for irrigation, and return flow from irrigated areas.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	8.5	30	22	18	26	23	12	2.9	10	8.2	15	7.1
2	9.0	28	22	19	22	24	11	2.7	7.3	6.8	7.9	9.4
3	15	29	24	20	21	27	9.6	1.7	8.0	5.7	7.2	7.6
4	18	27	25	20	21	24	10	1.7	16	6.9	7.6	7.3
5	14	25	23	20	22	23	12	1.9	16	6.5	8.5	6.8
6	12	25	37	21	20	21	8.3	1.8	18	5.3	9.0	7.7
7	13	26	53	20	20	23	5.2	1.5	13	6.8	10	8.6
8	14	32	26	19	21	21	3.8	4.5	10	7.2	35	11
9	13	32	22	19	21	23	2.3	12	7.6	4.2	13	16
10	13	26	20	19	21	22	2.3	11	9.0	5.0	23	14
11	17	27	21	20	20	23	2.6	1.8	8.0	5.3	48	28
12	25	30	21	21	20	23	3.0	9.6	14	3.8	20	26
13	24	28	21	21	20	22	1.9	5.1	35	2.3	20	23
14	25	27	22	20	22	21	1.3	1.6	29	1.8	20	24
15	26	27	21	20	20	20	1.3	1.5	22	15	18	23
16	28	27	20	20	20	20	1.2	1.8	25	5.0	14	24
17	29	27	20	21	19	22	.60	1.8	24	17	11	24
18	30	27	20	21	21	24	1.4	5.6	22	17	9.3	25
19	29	27	21	21	23	25	1.5	11	28	4.3	7.1	30
20	30	27	21	20	21	27	.88	13	27	3.7	6.1	27
21	29	26	21	20	20	24	.78	18	29	3.3	5.6	27
22	29	25	20	22	20	21	.80	14	20	4.2	5.8	24
23	28	24	21	21	21	23	.81	5.9	19	4.9	7.0	23
24	27	23	24	20	21	28	.83	5.6	20	8.0	5.8	26
25	28	23	23	21	22	24	1.2	6.2	15	9.5	4.8	28
26	28	24	20	20	22	22	.95	10	13	8.0	3.8	27
27	28	21	19	20	22	21	.83	53	12	7.3	4.1	27
28	28	22	18	20	22	17	1.4	29	10	7.7	4.6	27
29	29	24	18	21	-	15	5.3	21	9.4	6.9	4.7	28
30	28	23	18	21	- - - -	15	3.4	12	6.2	6.4	5.4	29
31	29	- - - -	18	30	- - - -	13	- - - -	9.0	- - - -	7.8	7.4	- - - -
Total	703.5	789	702	636	591	681	108.48	278.2	502.5	211.8	368.7	615.5
Mean	22.7	26.3	22.6	20.5	21.1	22.0	3.62	8.97	16.8	6.83	11.9	20.5
Max	30	32	53	30	26	28	12	53	35	17	48	30
Min	8.5	21	18	18	19	13	.60	1.5	6.2	1.8	3.8	6.8
Ac-ft	1,400	1,560	1,390	1,260	1,170	1,350	215	552	997	420	731	1,220

Cal yr 1966: Total 9,815.0 Mean 26.9 Max 239 Min 2.3 Ac-ft 19,470
Wtr yr 1967: Total 6,187.68 Mean 17.0 Max 53 Min .60 Ac-ft 12,270

GUNNISON RIVER BASIN

9-1462. Uncompahgre River near Ridgway, Colo.

Location.--Lat 38°11'05", long 107°44'40", in NE¼ sec.4, T.45 N., R.8 W., on right bank 15 ft upstream from bridge, 0.7 mile upstream from Dallas Creek, and 2 miles north of Ridgway.

Drainage area.--149 sq mi (revised).

Records available.--October 1958 to September 1967.

Gage.--Water-stage recorder. Datum of gage is 6,877.58 ft above mean sea level (levels by Bureau of Reclamation).

Average discharge.--9 years, 152 cfs (110,000 acre-ft per year).

Extremes.--Maximum discharge during year, 1,300 cfs July 31 (gage height, 4.77 ft); minimum daily, 30 cfs Jan. 7.
1958-67: Maximum discharge, 1,500 cfs July 12, 1965 (gage height, 4.89 ft); minimum daily, 26 cfs Jan. 13, 1963.

Remarks.--Records good except those for winter period, which are poor. Diversions for irrigation above station. Water is imported above station in some years by Red Mountain ditch from Mineral Creek in San Juan River basin.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	55	54	51	34	52	62	55	64	258	350	258	64
2	57	54	52	34	44	77	57	62	274	330	197	61
3	72	56	56	32	42	71	68	52	330	306	185	58
4	75	56	58	33	42	59	78	43	387	280	168	57
5	68	54	58	37	45	55	74	48	434	269	155	54
6	68	56	82	36	44	44	82	45	446	256	164	51
7	66	56	96	30	45	46	98	44	442	250	263	55
8	68	61	69	32	38	44	102	92	470	263	256	64
9	68	61	56	34	40	46	101	195	438	248	256	71
10	68	57	50	38	43	48	75	245	430	217	243	77
11	69	64	50	40	43	54	69	240	390	202	250	82
12	71	66	48	40	44	54	69	230	356	235	248	78
13	68	61	48	41	46	50	62	227	303	232	235	75
14	80	59	48	41	50	49	72	168	280	237	204	74
15	95	59	46	41	46	48	69	134	258	272	188	71
16	90	61	50	41	45	51	64	142	243	306	173	71
17	85	58	50	40	42	74	68	230	245	350	155	72
18	80	57	50	38	44	83	71	272	294	286	138	77
19	80	57	48	40	45	64	78	315	330	248	126	114
20	78	57	46	40	45	59	72	359	398	219	120	108
21	74	58	44	43	40	62	68	484	446	195	110	90
22	74	58	44	45	42	66	66	614	450	190	104	85
23	71	57	40	44	45	83	64	646	479	192	98	88
24	58	54	38	45	47	78	65	660	462	214	91	93
25	59	52	40	44	54	78	65	650	422	240	86	94
26	59	55	42	43	54	66	61	569	383	209	78	90
27	61	51	40	44	50	64	72	438	390	190	71	86
28	61	52	36	45	52	59	88	438	373	173	65	85
29	61	55	34	45	-	59	77	363	337	164	62	83
30	56	52	34	50	- - - -	59	69	321	356	183	68	83
31	56	- - - -	34	58	- - - -	56	- - - -	288	- - - -	282	64	- - - -
Total	2,151	1,708	1,538	1,248	1,269	1,868	2,179	8,678	11,104	7,588	4,879	2,311
Mean	69.4	56.9	49.6	40.3	45.3	60.3	72.6	280	370	245	157	77.0
Max	95	66	96	58	54	83	102	660	479	350	263	114
Min	55	51	34	30	38	44	55	43	243	164	62	51
Ac-ft	4,270	3,390	3,050	2,480	2,520	3,710	4,320	17,210	22,020	15,050	9,680	4,580

Cal yr 1966: Total 49,164 Mean 135 Max 560 Min 34 Ac-ft 97,520
Wtr yr 1967: Total 46,521 Mean 127 Max 660 Min 30 Ac-ft 92,270

Peak discharge (base, 1,000 cfs).--July 31 (1940) 1,300 cfs (4.77 ft).

9-1464. West Fork Dallas Creek near Ridgway, Colo.

Location.--Lat 38°04'30", long 107°51'10", in SE¼ sec.9, T.44 N., R.9 W., on right bank 100 ft downstream from unnamed tributary, 5 miles upstream from confluence with East Fork Dallas Creek, and 7½ miles southwest of Ridgway.

Drainage area.--13.1 sq mi (revised).

Records available.--October 1955 to September 1967.

Gage.--Water-stage recorder. Altitude of gage is 8,400 ft (from topographic map).

Average discharge.--12 years, 12.6 cfs (9,120 acre-ft per year).

Extremes.--Maximum discharge during year, 41 cfs June 22 (gage height, 2.64); minimum daily, 3.4 cfs Feb. 26-28.
1955-67: Maximum discharge, about 200 cfs July 19, 1965 (gage height, 2.98 ft); maximum gage height, 4.07 ft Apr. 11, 1965; (backwater from ice); minimum daily discharge, 2.4 cfs Jan. 14, 1961, Mar. 14, 1964.

Remarks.--Records good except those for winter period, which are poor. One diversion above station for irrigation below.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	8.2	5.5	4.9	4.9	4.0	3.6	4.3	5.5	13	19	17	12
2	8.2	5.5	5.2	4.9	3.8	3.8	4.5	5.5	14	18	14	11
3	8.2	6.0	5.2	4.6	3.8	3.6	5.2	5.0	17	18	12	9.8
4	8.2	5.8	5.2	4.6	3.8	3.6	5.5	4.5	19	17	11	9.4
5	8.2	5.5	5.5	4.6	3.8	3.6	5.8	4.0	22	17	11	10
6	7.8	5.8	9.8	4.3	3.8	3.6	5.8	4.0	23	17	11	12
7	7.8	5.8	6.4	4.0	3.8	3.6	5.5	4.3	24	18	17	12
8	7.4	5.8	4.2	4.0	3.8	3.6	5.8	4.9	25	18	17	10
9	7.4	5.5	5.5	4.0	3.8	3.6	5.5	6.4	23	17	20	10
10	7.4	5.5	5.0	4.0	3.8	3.6	5.5	8.6	23	17	17	9.8
11	7.4	6.1	5.0	4.0	3.6	3.6	4.9	8.6	22	19	17	9.4
12	7.4	6.1	5.2	4.0	3.6	3.6	4.6	8.2	21	19	16	9.0
13	7.4	6.0	4.9	4.0	3.6	3.6	4.6	8.6	18	17	14	8.6
14	7.0	6.0	4.6	4.0	3.6	3.6	4.6	7.0	17	17	12	8.6
15	7.4	6.1	4.9	4.0	3.6	3.6	4.6	6.4	17	17	12	8.2
16	7.0	5.8	5.8	3.8	3.6	4.3	4.6	6.1	17	16	12	8.2
17	7.0	5.8	6.4	3.8	3.6	5.8	5.0	7.4	17	15	11	7.8
18	7.0	5.5	6.4	3.8	3.6	5.2	4.9	9.4	20	15	10	8.2
19	7.0	5.0	6.7	3.8	3.6	5.2	5.2	10	24	14	10	10
20	6.4	5.8	6.7	3.8	3.6	4.6	5.0	12	28	14	9.8	9.0
21	6.4	5.8	6.0	3.8	3.6	4.6	4.9	14	22	12	9.4	7.8
22	6.4	5.5	5.5	3.8	3.6	4.6	5.0	18	22	13	9.0	7.4
23	6.4	5.5	5.0	3.8	3.6	4.6	5.0	20	22	13	8.6	7.4
24	6.4	5.2	4.4	3.8	3.6	4.9	4.9	20	27	13	8.6	7.8
25	6.4	5.0	4.6	3.8	3.6	4.6	4.6	22	27	13	8.2	8.2
26	6.4	5.5	4.2	3.8	3.4	4.3	4.6	21	22	13	9.0	8.6
27	6.4	4.6	4.8	3.8	3.4	4.6	4.9	18	20	12	9.0	8.2
28	6.4	5.0	4.8	3.8	3.4	4.3	5.2	18	19	12	8.6	7.8
29	6.4	5.5	4.4	3.8	-	4.3	5.5	17	17	11	8.6	7.8
30	6.1	5.5	4.8	3.8	- - - -	4.2	5.2	16	19	12	11	7.4
31	6.1	- - - -	4.8	3.8	- - - -	4.0	- - - -	14	- - - -	14	9.8	- - - -
Total	219.6	168.0	166.8	124.7	102.4	128.3	151.2	334.4	621	477	370.6	271.4
Mean	7.08	5.60	5.38	4.02	3.66	4.14	5.04	10.8	20.7	15.4	12.0	9.05
Max	8.2	6.1	9.8	4.9	4.0	5.8	5.8	22	28	19	20	12
Min	6.1	4.6	4.2	3.8	3.4	3.6	4.3	4.0	13	11	8.2	7.4
Ac-ft	436	333	331	247	203	254	300	663	1,230	946	735	538

Cal yr 1966: Total 4,489.1 Mean 12.3 Max 50 Min 4.0 Ac-ft 8,900

Wtr yr 1967: Total 3,135.4 Mean 8.59 Max 28 Min 3.4 Ac-ft 6,220

Peak discharge (base, 30 cfs).--June 8 (0300) 33 cfs (2.58 ft); June 22 (2300) 41 cfs (2.64 ft).

GUNNISON RIVER BASIN

9-1465. East Fork Dallas Creek near Ridgway, Colo.

Location--Lat 38°05'40", long 107°48'40", in SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec.2, T.44 N., R.9 W., on right bank 300 ft below private bridge, 2 miles upstream from Beaver Creek, and 5 miles southwest of Ridgway.

Drainage area--16.8 sq mi.

Records available--October 1947 to September 1953, October 1960 to September 1967.

Gage--Water-stage recorder. Altitude of gage is 7,980 ft (from topographic map). Prior to Oct. 1, 1960, water-stage recorder at two sites three-quarters of a mile downstream at different datums. Datum raised 3.00 ft Oct. 1, 1949.

Average discharge--13 years, 24.5 cfs (17,740 acre-ft per year).

Extremes--Maximum discharge during year, 142 cfs June 27 (gage height, 3.12 ft), from rating curve extended above 120 cfs; maximum gage height, 3.36 ft Dec. 13 (backwater from ice); minimum daily discharge, 2.6 cfs Mar. 6.
1947-53, 1960-67: Maximum discharge, 297 cfs June 18, 1949 (gage height, 3.43 ft, site and datum then in use), from rating curve extended above 100 cfs; maximum gage height, 4.28 ft Dec. 13, 1961 (ice jam); minimum daily discharge, that of Mar. 6, 1967.

Remarks--Records good except those for winter period, which are poor. One small diversion above station diverts water to Beaver Creek drainage for irrigation of about 50 acres of hay meadows.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	14	9.0	4.6	8.5	6.6	4.0	5.4	7.0	31	98	69	23
2	14	8.5	4.6	8.0	3.4	4.2	5.0	6.5	31	96	46	22
3	15	7.5	5.4	7.5	5.0	4.2	6.6	6.0	38	98	41	22
4	15	7.5	5.8	7.5	5.4	3.8	6.2	7.0	47	77	35	20
5	14	7.5	6.6	7.5	6.6	3.8	6.6	7.0	64	72	33	19
6	11	7.5	14	7.5	5.4	2.6	6.6	6.6	64	69	34	21
7	11	7.5	10	6.2	5.8	2.8	7.0	6.6	64	74	69	20
8	11	8.0	9.0	6.6	5.8	3.6	7.5	7.0	73	72	62	23
9	10	7.5	8.0	7.5	6.2	4.0	7.0	7.5	80	68	63	24
10	10	9.0	7.0	7.5	6.2	4.6	5.5	10	82	62	50	22
11	10	9.0	7.5	7.0	5.8	4.6	6.2	13	65	55	52	21
12	10	8.5	8.0	7.0	6.2	3.8	6.2	13	55	69	51	19
13	10	7.5	8.5	7.0	5.8	3.8	5.0	14	43	64	42	18
14	10	8.0	9.0	7.0	5.4	3.8	6.0	14	37	57	36	18
15	9.0	7.0	10	7.0	4.2	3.8	6.6	12	31	60	32	17
16	9.0	7.0	10	7.0	4.6	5.0	6.6	11	28	57	29	16
17	8.5	7.0	10	6.2	4.2	6.2	5.5	11	30	56	27	16
18	8.5	7.0	10	6.2	4.2	6.2	6.6	13	38	51	25	16
19	8.5	7.5	10	7.0	5.4	5.8	7.5	19	52	46	25	18
20	8.5	8.0	10	7.5	5.0	5.4	6.0	26	73	43	24	16
21	9.0	8.0	9.0	7.0	4.6	5.8	7.0	36	78	42	23	15
22	10	8.0	7.5	6.6	5.0	6.2	6.0	49	86	41	22	15
23	10	8.0	7.0	6.6	5.4	6.2	6.0	80	102	37	22	16
24	10	8.5	7.5	7.0	4.2	6.6	7.0	88	104	40	22	16
25	10	8.0	8.0	7.0	5.0	5.8	7.0	86	106	44	21	17
26	10	8.0	8.5	6.6	5.0	5.0	6.0	80	104	42	21	17
27	10	6.0	9.0	6.6	4.6	6.2	7.5	57	94	37	21	16
28	9.5	8.0	8.5	6.6	3.4	5.8	7.5	55	104	36	21	16
29	9.5	6.5	8.0	6.6	-	5.8	7.5	43	90	34	21	16
30	9.5	4.6	9.0	6.6	-	5.0	7.0	38	96	43	22	15
31	9.5	-	9.0	7.0	-	5.0	-	35	-	53	22	-
Total	324.0	229.6	259.0	217.4	144.4	149.4	194.1	864.2	1,990	1,783	1,083	550
Mean	10.5	7.65	8.35	7.01	5.16	4.82	6.47	27.9	66.3	57.5	34.9	18.3
Max	15	9.0	14	8.5	6.6	6.6	7.5	88	106	98	69	24
Min	8.5	4.6	4.6	6.2	3.4	2.6	5.0	6.0	28	34	21	15
Ac-ft	643	455	514	431	286	296	385	1,710	3,950	3,540	2,150	1,090

Cal yr 1966: Total 9,422.7 Mean 25.8 Max 140 Min 4.2 Ac-ft 18,690
Wtr yr 1967: Total 7,788.1 Mean 21.3 Max 106 Min 2.6 Ac-ft 15,450

Peak discharge (base, 120 cfs)

Date	Time	Gage height	Discharge	Date	Time	Gage height	Discharge
6-27	2300	3.12	142	7-31	2200	3.07	126
6-30	2315	3.07	128				

9-1465.5. Beaver Creek near Ridgway, Colo.

Location.--Lat 38°07'00", long 107°49'00", in SW¼SW¼ sec.25, T.45 N., R.9 W., on left bank 10 ft below private bridge, 300 ft upstream from mouth, and 4 miles southwest of Ridgway.

Drainage area.--12.0 sq mi.

Records available.--October 1960 to September 1967.

Gage.--Water-stage recorder and concrete control. Altitude of gage is 7,680 ft (from topographic map).

Average discharge.--7 years, 4.11 cfs (2,980 acre-ft per year).

Extremes.--Maximum discharge during year, 13 cfs Sept. 5 (gage height, 2.63 ft); maximum gage height, 3.39 ft Mar. 6 (backwater from ice); minimum daily discharge, 0.38 cfs May 4.
1960-67: Maximum discharge, 132 cfs Aug. 5, 1964 (gage height, 3.43 ft), from rating curve extended above 27 cfs by logarithmic plotting; maximum gage height recorded, 3.82 ft Feb. 24, 1965 (backwater from ice); minimum daily discharge, 0.38 cfs May 4, 1967.

Remarks.--Records good except those for winter period, which are poor. Two small diversions above station for irrigation of 130 acres of hay meadows. Water imported above station from East Fork Dallas Creek for irrigation of about 50 acres of hay meadows above station.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.2	2.8	3.1	2.4	3.0	3.3	3.3	2.0	2.5	3.6	2.5	2.2
2	2.0	2.5	3.1	2.6	2.6	3.4	3.3	2.0	2.3	3.6	2.0	2.6
3	2.6	2.6	3.1	2.4	2.5	3.3	3.3	4.0	2.2	3.6	2.0	2.6
4	2.6	2.6	3.1	2.6	2.5	3.4	3.3	3.8	2.5	3.6	2.0	2.3
5	2.5	2.6	3.3	2.8	2.6	3.1	3.4	5.6	2.6	3.8	2.3	2.5
6	2.6	2.6	3.8	2.4	2.6	3.0	3.3	2.5	2.8	4.0	2.2	2.6
7	2.6	2.6	4.0	2.2	2.4	3.0	3.1	2.6	3.1	4.3	2.8	2.3
8	2.6	3.0	3.3	2.2	2.4	3.0	3.1	2.6	3.4	4.0	2.6	2.5
9	2.5	3.0	3.0	2.4	2.6	3.2	3.1	2.6	3.8	3.6	3.4	2.3
10	2.5	2.4	3.0	2.4	2.6	3.3	3.1	2.8	4.7	3.4	3.6	2.3
11	2.5	2.8	2.6	2.6	2.6	3.6	3.1	3.0	4.5	3.4	3.4	1.8
12	2.3	3.0	2.7	2.6	2.8	3.6	3.1	3.0	4.3	3.4	3.3	1.7
13	2.2	3.0	2.6	2.4	3.0	3.4	2.6	3.1	4.0	3.1	3.4	1.7
14	2.2	3.0	2.6	2.4	3.0	3.4	2.8	3.4	3.8	3.3	3.4	1.7
15	2.6	3.0	2.6	2.4	2.8	3.4	3.3	3.3	4.0	3.8	3.3	1.7
16	3.0	3.0	2.8	2.4	2.6	3.8	3.1	3.0	3.6	3.4	3.3	1.8
17	3.0	3.0	2.8	2.2	2.6	4.3	2.8	2.8	3.3	3.4	3.1	1.8
18	3.0	3.0	2.8	2.2	2.8	3.6	2.8	2.8	3.4	4.0	3.1	2.0
19	3.0	3.0	2.6	2.4	2.8	3.6	2.8	3.0	3.4	4.0	3.1	2.6
20	3.0	3.0	2.5	2.6	2.6	3.6	2.8	3.3	4.0	4.0	3.0	2.6
21	3.0	3.1	2.4	2.8	2.5	3.4	2.8	4.3	3.6	3.8	2.6	2.8
22	3.0	3.1	2.3	3.0	2.6	3.4	2.8	4.5	3.4	3.8	2.5	2.0
23	3.0	3.1	2.2	3.0	2.8	3.4	2.4	4.5	3.8	3.8	2.3	1.8
24	3.0	3.0	2.1	2.8	3.0	3.4	2.8	4.3	3.8	3.3	2.2	1.8
25	3.0	3.0	2.1	2.8	3.4	3.4	2.8	3.3	4.5	3.1	2.0	1.8
26	3.0	3.0	2.1	2.6	3.4	3.3	2.8	3.1	4.7	3.0	2.0	1.8
27	3.0	2.8	2.1	2.6	3.2	3.4	2.8	3.0	4.5	3.0	2.0	1.7
28	3.0	2.2	2.1	2.8	3.2	3.4	2.6	3.0	4.0	2.8	1.8	1.7
29	3.1	2.4	2.0	2.8	-	3.4	2.0	3.0	3.8	2.6	1.7	1.7
30	3.0	3.1	2.2	3.0	- - - - -	3.3	2.2	3.0	3.6	2.6	1.7	1.7
31	3.0	- - - - -	2.3	3.2	- - - - -	3.3	- - - - -	2.8	- - - - -	2.5	2.0	- - - - -
Total	84.6	85.3	83.3	80.0	77.5	105.4	87.5	87.94	107.9	107.6	80.6	62.4
Mean	2.73	2.84	2.69	2.58	2.77	3.40	2.92	2.84	3.60	3.47	2.60	2.08
Max	3.1	3.1	4.0	3.2	3.4	4.3	3.4	4.5	4.7	4.3	3.6	2.8
Min	2.0	2.2	2.0	2.2	2.4	3.0	2.0	0.38	2.2	2.5	1.7	1.7
Ac-ft	168	169	165	159	154	209	174	174	214	213	160	124

Cal yr 1966: Total 1,625.6 Mean 4.45 Max 17 Min 0.70 Ac-ft 3,220
Wtr yr 1967: Total 1,050.04 Mean 2.88 Max 4.7 Min 0.38 Ac-ft 2,080

Peak discharge (base, 25 cfs)--No peak above base.

Note.--No gage-height record Dec. 14 to Feb. 28.

GUNNISON RIVER BASIN

9-1466. Pleasant Valley Creek near Noel, Colo.

Location.--Lat 38°08'50", long 107°55'00", in SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec.13, T.45 N., R.10 W., on right bank 3 miles north of Noel and 7 miles upstream from mouth.

Drainage area.--7.98 sq mi (revised).

Records available.--October 1955 to September 1967 (discontinued).

Gage.--Water-stage recorder and concrete control. Altitude of gage is 8,680 ft (from topographic map).

Average discharge.--12 years, 2.22 cfs (1,610 acre-ft per year).

Extremes.--Maximum discharge during year, 55 cfs Mar. 17 (gage height, 2.73 ft); minimum daily, 0.04 cfs Jan. 8.

1955-67: Maximum discharge, about 500 cfs July 29, 1957 (gage height, 4.60 ft), from rating curve extended above 140 cfs; no flow at times in 1958-59, 1963.

Remarks.--Records good except those for winter period, which are poor. Small diversions above station for irrigation.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.08	0.08	0.06	0.06	0.10	0.20	0.86	0.20	0.13	0.10	0.10	0.09
2	.08	.08	.07	.06	.08	.20	1.1	.19	.10	.10	.10	.09
3	.08	.08	.07	.06	.08	.30	.84	.16	.10	.10	.10	.09
4	.08	.07	.07	.08	.08	.30	.64	.13	.10	.10	.09	.09
5	.08	.08	.07	.08	.08	.40	.82	.19	.28	.10	.13	.10
6	.08	.07	.62	.06	.08	.40	.64	.22	.16	.10	.09	.09
7	.08	.07	.35	.06	.08	.31	.64	.16	.10	.10	.19	.11
8	.08	.07	.13	.04	.06	.25	.46	.13	.10	.10	.16	.08
9	.08	.07	.10	.06	.06	.22	.37	.10	.09	.10	.13	.07
10	.08	.08	.08	.06	.06	.19	.31	.10	.09	.10	.09	.08
11	.08	.07	.08	.08	.06	.25	.28	.10	.10	.13	.09	.08
12	.08	.07	.08	.08	.08	.40	.25	.10	.10	.13	.09	.07
13	.08	.08	.08	.08	.08	.40	.22	.10	.10	.10	.09	.07
14	.08	.08	.08	.08	.10	.50	.64	.10	.10	.13	.09	.07
15	.08	.07	.08	.08	.08	.88	.82	.10	.10	.13	.09	.07
16	.08	.07	.08	.08	.06	8.9	.52	.10	.16	.13	.09	.08
17	.08	.07	.08	.06	.06	20	.34	.10	.10	.13	.09	.08
18	.08	.07	.08	.06	.08	7.6	.31	.09	.10	.10	.09	.08
19	.08	.07	.10	.06	.08	4.8	.31	.09	.10	.09	.09	.10
20	.08	.07	.10	.06	.06	3.2	.28	.09	.10	.09	.09	.08
21	.08	.07	.10	.08	.06	2.8	.25	.09	.10	.09	.09	.08
22	.08	.07	.08	.10	.08	3.4	.22	.09	.10	.10	.09	.08
23	.08	.07	.08	.10	.08	2.6	.20	.09	.10	.10	.09	.08
24	.08	.07	.08	.08	.10	1.4	.22	.09	.10	.10	.09	.08
25	.08	.07	.08	.08	.10	.82	.25	.10	.10	.20	.09	.08
26	.08	.07	.08	.06	.12	.90	.22	.10	.10	.10	.09	.08
27	.08	.08	.08	.08	.14	.70	.19	.10	.10	.10	.09	.07
28	.08	.07	.06	.08	.16	.40	.16	.19	.10	.10	.09	.07
29	.08	.06	.06	.08	-	.25	.19	.19	.10	.10	.09	.07
30	.08	.06	.06	.08	-	.19	.22	.25	.10	.10	.09	.07
31	.08	-	.06	.10	-	.16	-	.28	-	.10	.10	-
Total	2.48	2.16	3.28	2.26	2.34	63.32	12.77	4.12	3.31	3.35	3.08	2.43
Mean	0.080	0.072	0.106	0.073	0.084	2.04	0.426	0.133	0.110	0.108	0.099	0.081
Max	0.08	0.08	0.62	0.10	0.16	.20	1.1	0.28	0.28	0.20	0.19	0.11
Min	0.08	0.06	0.06	0.04	0.06	0.16	0.16	0.09	0.09	0.09	0.09	0.07
Ac-ft	4.9	4.3	6.5	4.5	4.6	126	25	8.2	6.6	6.6	6.1	4.8

Cal yr 1966: Total 386.72 Mean 1.06 Max 32 Min - Ac-ft 767

Wtr yr 1967: Total 104.90 Mean 0.287 Max 20 Min 0.04 Ac-ft 208

Peak discharge (base, 50 cfs).--Mar. 17 (1630) 55 cfs (2.73 ft).

Note.--No gage-height record Dec. 11 to Mar. 5.

9-1470. Dallas Creek near Ridgway, Colo.

Location--Lat 38°10'30", long 107°45'40", in SE½ sec.5, T.45 N., R.8 W., on right bank 20 ft downstream from highway bridge, 1½ miles upstream from mouth, and 1½ miles northwest of Ridgway.

Drainage area--96.2 sq mi.

Records available--March 1922 to October 1927, October 1955 to September 1967. Monthly discharge only for some periods, published in WSP 1313.

Gage--Water-stage recorder and concrete control. Altitude of gage is 6,980 ft (from topographic map). Mar. 1, 1922, to Oct. 31, 1927, staff gage at different datum.

Average discharge--17 years, 38.0 cfs (27,510 acre-ft per year).

Extremes--Maximum discharge during year, 269 cfs Sept. 6 (gage height, 4.05 ft), from rating curve extended above 52 cfs by logarithmic plotting; maximum gage height, 4.64 ft Jan. 1 (backwater from ice); minimum daily discharge, 0.50 cfs June 17. 1922-27, 1955-67: Maximum discharge observed, 1,120 cfs Aug. 15, 1923 (gage height, 4.40 ft, datum then in use), from rating curve extended above 160 cfs; maximum gage height, 5.14 ft Jan. 31, 1963 (backwater from ice); minimum daily discharge, that of June 17, 1967.

Remarks--Records good except those for winter period, which are poor. Diversions above station for irrigation of about 4,500 acres above and 700 acres below station. One small diversion from Leopard Creek (Dolores River basin).

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.8	22	22	14	19	20	17	1.2	0.65	26	51	30
2	2.8	21	21	13	18	23	18	1.2	.65	23	29	28
3	5.0	23	22	13	17	18	20	1.0	.91	16	20	30
4	6.5	23	23	13	17	18	20	1.0	3.1	10	24	32
5	5.3	22	23	14	18	18	20	1.2	16	8.0	25	28
6	10	21	32	14	18	16	12	1.2	20	8.0	32	53
7	18	22	44	12	17	18	6.6	1.2	12	9.5	73	27
8	18	23	24	13	15	17	6.6	1.2	11	10	80	32
9	18	23	18	14	16	18	6.2	1.2	11	9.5	84	31
10	17	20	17	15	19	18	5.5	1.0	13	6.5	70	28
11	18	26	18	16	17	19	5.1	.91	4.6	4.6	68	22
12	18	27	19	16	18	18	5.1	.91	2.2	16	68	18
13	16	24	20	16	19	17	5.1	.91	.90	15	62	19
14	18	24	19	16	20	16	5.5	.91	.80	17	54	19
15	18	24	18	16	18	17	5.5	.91	1.5	55	47	18
16	19	24	19	16	18	23	9.0	.91	.80	35	40	17
17	20	24	20	15	17	44	12	.91	.50	34	34	16
18	22	23	20	15	18	39	12	.91	.70	25	29	16
19	22	23	19	16	18	29	8.3	.91	1.6	23	29	23
20	23	23	18	16	18	26	7.0	1.0	10	16	27	20
21	23	23	17	17	16	25	4.3	1.2	33	13	24	20
22	23	22	16	17	17	26	2.2	1.2	21	20	23	24
23	22	22	15	18	18	28	2.6	7.2	40	23	20	29
24	23	21	14	18	19	28	2.6	12	40	24	20	29
25	23	19	13	17	18	25	1.9	2.5	47	34	21	30
26	23	19	13	16	18	22	1.5	9.8	51	23	20	30
27	23	18	13	17	18	23	1.2	2.2	29	18	24	29
28	23	20	13	17	20	22	1.2	1.3	31	12	24	23
29	23	23	12	18	-	20	1.2	.91	21	9.5	23	20
30	23	23	14	20	- - - - -	18	1.2	.78	26	12	21	20
31	23	- - - - -	13	27	- - - - -	17	- - - - -	.78	- - - - -	15	25	- - - - -
Total	549.4	672	589	495	499	686	226.4	60.46	450.91	570.6	1,191	761
Mean	17.7	22.4	19.0	16.0	17.8	22.1	7.55	1.95	15.0	18.4	38.4	25.4
Max	23	27	44	27	20	44	20	12	51	55	84	53
Min	2.8	18	12	12	15	16	1.2	0.78	0.50	4.6	20	16
Ac-ft	1,090	1,330	1,170	982	990	1,360	449	120	894	1,130	2,360	1,510

Cal yr 1966: Total 9,258.2 Mean 25.4 Max 111 Min 1.4 Ac-ft 18,360
 Wtr yr 1967: Total 6,750.77 Mean 18.5 Max 84 Min 0.50 Ac-ft 13,390

GUNNISON RIVER BASIN

9-1471. Cow Creek near Ridgway, Colo.

Location.--Lat 38°08'55", long 107°38'40", in NW¼SW¼ sec.16, T.45 N., R.7 W., on left bank 165 ft upstream from Sneva ditch siphon, 700 ft upstream from Plume Creek, and 6½ miles east of Ridgway. Prior to July 28, 1967, at site 0.8 mile upstream.

Drainage area.--45.4 sq mi. Area at site used prior to July 28, 1967, 43.0 sq mi (revised).

Records available.--October 1955 to September 1967.

Gage.--Water-stage recorder. Altitude of gage is 7,620 ft (from topographic map). Prior to July 28, 1967, at site 0.8 mile upstream at different datum. Supplementary water-stage recorder on Sneva ditch.

Average discharge.--12 years, 60.7 cfs (43,940 acre-ft per year).

Extremes.--Maximum discharge during year, 632 cfs May 24, from rating curve extended above 200 cfs; maximum gage height, 3.95 ft May 23; minimum daily discharge, 3.9 cfs Jan. 26.

1955-67: Maximum discharge, 1,360 cfs June 28, 1957 (gage height, 7.70 ft); minimum daily, 2.0 cfs Jan. 9, 1957.

Remarks.--Records fair. Sneva ditch diverts water above station for irrigation below. Records after July 27 show combined flow of Creek and Sneva ditch.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	8.0	6.5	5.8	6.5	6.0	1.0	1.4	22	210	97	34	26
2	8.8	7.5	5.8	6.5	5.0	1.0	1.7	20	224	89	27	22
3	12	7.0	6.0	6.0	5.5	8.5	20	18	267	79	26	18
4	14	6.8	6.4	6.0	5.5	8.0	22	19	327	73	24	14
5	14	7.0	6.4	6.0	6.0	7.0	23	19	323	70	22	14
6	11	7.5	8.4	6.0	5.5	6.5	26	18	335	62	39	17
7	12	7.5	11	6.2	6.4	7.0	31	22	327	66	60	17
8	12	8.0	9.5	5.6	5.2	7.0	31	36	287	63	59	18
9	10	7.5	8.0	5.8	6.4	7.5	27	59	227	57	48	18
10	9.6	6.5	6.0	6.0	5.6	8.0	20	75	185	50	54	16
11	9.6	8.0	7.0	5.5	5.6	9.0	20	92	170	52	59	14
12	11	8.2	8.0	6.0	5.5	10	20	99	140	51	47	13
13	9.9	8.0	8.0	6.0	5.5	9.5	18	75	110	45	39	12
14	11	8.0	8.0	5.8	6.0	9.0	19	52	97	45	32	11
15	18	8.5	7.5	5.8	5.8	9.0	20	47	89	48	30	11
16	14	8.2	7.5	5.5	6.2	12	18	48	99	61	27	11
17	13	7.8	8.0	5.4	5.0	20	18	67	128	66	25	11
18	11	7.5	8.0	5.4	5.5	18	22	107	148	54	24	20
19	10	7.0	8.0	5.4	5.4	16	25	132	155	45	23	35
20	11	7.0	8.5	6.0	5.6	15	23	150	176	39	22	18
21	10	7.0	8.5	6.2	5.6	15	22	200	188	36	22	16
22	9.6	6.8	8.0	6.0	5.0	18	19	340	179	33	20	14
23	9.6	6.8	7.0	5.6	5.5	19	20	420	179	33	20	12
24	8.8	6.5	6.0	5.4	5.8	18	20	470	161	31	20	11
25	9.0	6.0	6.5	5.2	6.0	17	21	490	140	36	21	11
26	9.3	6.0	6.0	3.9	7.0	15	19	362	128	34	20	18
27	8.8	5.5	6.5	5.5	6.5	14	26	263	124	30	19	12
28	8.8	6.0	7.0	6.0	7.5	13	31	248	110	29	18	10
29	8.4	6.5	6.0	6.5	-	13	31	210	101	26	17	10
30	8.2	6.2	6.5	7.0	- - - -	12	27	192	105	27	17	9.2
31	8.0	- - - -	6.5	8.0	- - - -	13	- - - -	167	- - - -	45	22	- - - -
Total	328.4	213.3	226.3	182.7	162.1	374	670	4,539	5,439	1,572	937	459.2
Mean	10.6	7.11	7.30	5.89	5.79	12.1	22.3	146	181	50.7	30.2	15.3
Max	18	8.5	11	8.0	7.5	20	31	490	335	97	60	35
Min	8.0	5.5	5.8	3.9	5.0	6.5	14	18	89	26	17	9.5
Ac-ft	651	423	449	362	322	742	1,330	9,000	10,790	3,120	1,860	911

Cal yr 1966: Total 17,708.7 Mean 48.5 Max 355 Min 5.5 Ac-ft 35,120

Wtr yr 1967: Total 15,103.3 Mean 41.4 Max 490 Min 3.9 Ac-ft 29,960

Peak discharge (base, 500 cfs).--May 24 (1900) 632 cfs (3.82 ft); June 4 (1810) 510 cfs (3.58 ft).

9-1475. Uncompahgre River at Colona, Colo.

Location.--Lat 38°19'50", long 107°46'40", in NW¼ sec.17, T.47 N., R.8 W., on right bank 15 ft downstream from county highway bridge, a quarter of a mile north of Colona, and 1 mile upstream from Beaton Creek.

Drainage area.--443 sq mi (revised).

Records available.--April 1903 to November 1905, April to June 1906 (gage heights and discharge measurements only), October 1912 to September 1967. Monthly discharge only for some periods, published in WSP 1313. Published as "near Colona" 1904-6, 1922-34.

Gage.--Water-stage recorder. Datum of gage is 6,318.80 ft above mean sea level, datum of 1929. Supplementary water-stage recorder on left bank at same datum. Prior to June 24, 1921, staff or chain gages and June 24, 1921, to Oct. 28, 1938, water-stage recorder, at several sites within 5 miles of present site at various datums. Oct. 29, 1938, to Aug. 2, 1949, water-stage recorder at present site at datum 3.00 ft higher and Aug. 3 to Sept. 30, 1949, at datum 1.00 ft higher.

Average discharge.--57 years (1903-5, 1912-67), 268 cfs (194,000 acre-ft per year).

Extremes.--Maximum discharge during year, 990 cfs May 25 (gage height, 3.93 ft); minimum daily, 12 cfs May 7. 1903-5, 1915-67: Maximum daily discharge, 4,080 cfs June 13, 14, 1921; minimum daily, 12 cfs Sept. 19, 1956, May 7, 1967.

Remarks.--Records fair except those for winter period, which are poor. Natural flow of stream affected by water diverted from West Fork Cimarron Creek, Mineral Creek (San Juan River basin), and Leopard Creek (Dolores River basin), diversions for irrigation of about 19,000 acres (part of which is below station) and return flow from irrigated areas.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	33	78	74	55	78	93	71	37	275	384	354	67
2	32	73	76	55	60	122	73	35	336	354	226	64
3	48	76	82	52	56	122	78	26	390	310	194	62
4	58	82	91	52	57	99	100	17	492	275	193	64
5	51	90	91	56	62	70	91	15	598	250	166	58
6	52	82	110	60	60	55	98	14	612	235	172	67
7	60	82	155	58	58	60	120	12	564	222	305	51
8	67	91	105	52	50	55	125	21	582	245	336	57
9	69	93	85	50	64	55	125	146	558	235	330	67
10	69	80	62	52	62	60	87	198	516	202	300	71
11	67	100	60	58	60	58	74	214	456	166	330	82
12	71	105	60	62	60	56	76	169	408	202	325	73
13	69	93	70	64	65	55	67	169	315	202	310	71
14	78	96	70	69	71	55	71	93	260	210	250	71
15	100	96	70	74	67	55	80	57	230	255	218	65
16	102	96	65	67	64	65	67	51	222	325	194	64
17	105	93	70	66	58	78	64	98	226	384	166	64
18	102	89	70	67	55	102	65	149	290	315	149	65
19	98	85	70	70	54	112	76	240	342	260	131	96
20	102	82	65	72	54	98	64	290	426	226	125	110
21	105	87	65	72	56	100	46	450	522	194	118	96
22	100	87	65	78	64	96	38	651	516	180	110	89
23	100	85	60	71	65	120	36	708	564	190	100	96
24	87	76	60	67	65	115	36	740	552	198	89	102
25	85	73	65	64	74	112	41	780	516	245	82	105
26	85	74	65	62	80	96	48	724	480	206	73	105
27	85	67	60	57	73	89	56	528	456	194	73	98
28	95	74	55	60	76	80	76	528	444	169	71	89
29	85	82	50	60	-	78	64	444	360	155	67	89
30	80	82	50	67	- - - -	85	51	360	384	149	62	85
31	80	- - - -	55	91	- - - -	78	- - - -	305	- - - -	202	62	- - - -
Total	2,410	2,539	2,251	1,960	1,768	2,564	2,164	8,269	12,882	7,339	5,671	2,343
Mean	77.7	84.6	72.6	63.2	63.1	82.7	72.1	267	429	237	183	78.1
Max	105	105	155	91	80	122	125	780	612	384	354	110
Min	32	67	50	50	50	55	36	12	222	149	62	51
Ac-ft	4,780	5,040	4,460	3,890	3,510	5,090	4,290	16,400	25,550	14,560	11,250	4,650
Cal yr 1966: Total	66,136		Mean 181	Max 790	Min 32	Ac-ft 131,200						
Wtr yr 1967: Total	52,160		Mean 143	Max 780	Min 12	Ac-ft 103,500						

9-1495. Uncompahgre Rivér at Delta, Colo.

Location.--Lat 38°44'30", long 108°04'50", in SW¼ sec.13, T.15 S., R.96 W., on right bank 525 ft downstream from State Highway 92 bridge at west edge of Delta and 1.1 miles upstream from mouth.

Drainage area.--1,129 sq mi (revised).

Records available.--April 1903 to October 1931 (no winter records in most years), September 1938 to September 1967. Monthly discharge only for some periods, published in WSP 1313. Published as "near Delta" 1907-24.

Gage.--Digital water-stage recorder. Datum of gage is 4,926.49 ft above mean sea level, datum of 1929. Prior to Oct. 31, 1923, staff gage at several sites a half to 2½ miles upstream at various datums. Apr. 26, 1924, to Nov. 2, 1931, graphic water-stage recorder at site 800 ft upstream at different datum. Sept. 1, 1938, to May 5, 1941, graphic water-stage recorder at site 420 ft upstream at datum 3.43 ft higher. May 9, 1941, to Apr. 25, 1946, chain gage at site 500 ft upstream at datum 3.43 ft higher. Apr. 26, 1946, to Feb. 17, 1960, graphic water-stage recorder at site 600 ft upstream at datum 3.43 ft higher. Feb. 18, 1960, to Mar. 26, 1963, graphic water-stage recorder at site 750 ft upstream at datum 3.43 ft higher. Mar. 27, 1963, to Jan. 28, 1964, graphic water-stage recorder and Jan. 29, 1964, to May 12, 1965, digital water-stage recorder at site 1,050 ft upstream at datum 6.08 ft higher.

Average discharge.--31 years (1907-8, 1920-21, 1938-67), 273 cfs (197,600 acre-ft per year).

Extremes.--Maximum discharge during year, 1,500 cfs June 21; maximum gage height, 5.58 ft Aug. 8; minimum daily discharge, 45 cfs Apr. 12.

1903-31, 1938-67: Maximum discharge recorded, 3,730 cfs May 5, 1941 (gage height, 5.90 ft, site and datum then in use), from rating curve extended above 1,900 cfs; no flow at times in 1908; minimum daily determined since beginning of diversion through Gunnison tunnel, 7 cfs July 10-15, 17, 21, 24-28, 1910.

Remarks.--Records good. Natural flow of stream affected by water diverted from Gunnison River (see record of diversion for Gunnison River below Gunnison tunnel elsewhere in this report) and other adjacent basins, diversions for irrigation of about 90,000 acres above station, and return flow from irrigated areas.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	225	148	162	141	156	95	228	103	470	221	306	165
2	234	148	150	137	131	112	168	90	463	180	252	135
3	326	145	147	108	109	152	154	82	478	156	179	137
4	419	137	154	134	104	133	90	74	698	123	142	145
5	306	131	155	114	108	109	104	80	874	115	121	134
6	269	128	154	110	108	98	99	83	714	95	118	135
7	280	128	412	85	106	97	88	84	380	95	412	134
8	296	155	310	80	96	93	72	84	706	308	762	146
9	297	164	216	105	95	84	58	116	638	163	553	340
10	310	137	161	124	108	91	67	178	478	136	534	295
11	333	128	173	119	101	97	48	245	378	104	539	352
12	416	127	175	124	100	102	45	217	337	119	522	458
13	365	124	175	121	101	101	57	206	273	102	494	418
14	403	119	178	130	105	83	128	199	260	97	386	406
15	474	118	174	128	114	65	85	142	339	128	276	346
16	398	117	163	141	112	57	63	110	460	264	234	328
17	247	114	156	148	103	74	59	106	404	706	191	328
18	239	111	154	157	110	97	50	132	432	618	160	352
19	211	113	155	139	108	113	47	182	486	244	147	556
20	206	112	151	139	114	205	52	231	528	198	159	549
21	197	112	149	127	116	101	55	309	1,040	173	163	542
22	195	110	144	126	107	89	48	493	730	135	134	535
23	188	116	131	141	117	79	55	405	714	157	106	507
24	182	118	125	130	109	109	56	403	666	151	100	507
25	171	123	124	122	100	170	52	527	593	181	105	535
26	165	137	131	120	111	157	59	786	488	168	98	521
27	168	131	128	115	111	225	54	667	295	132	101	418
28	174	129	115	111	93	186	61	464	338	112	103	328
29	170	137	147	112	-	215	69	646	269	109	102	310
30	157	151	151	118	- - - - -	355	87	562	240	110	104	295
31	154	- - - - -	130	133	- - - - -	267	- - - - -	528	- - - - -	119	123	- - - - -
Total	8,175	3,868	5,150	3,839	3,053	4,011	2,358	8,534	15,169	5,719	7,726	10,357
Mean	264	129	166	124	109	129	78.6	275	506	184	249	345
Max	474	164	412	157	156	355	228	786	1,040	706	762	556
Min	154	110	115	80	93	57	45	74	240	95	98	134
Ac-ft	16,210	7,670	10,210	7,610	6,060	7,960	4,680	16,930	30,090	11,340	15,320	20,540
Cal yr 1966: Total	79,110			Mean 217	Max 700	Min 59		Ac-ft 156,900				
Wtr yr 1967: Total	77,959			Mean 214	Max 1,040	Min 45		Ac-ft 154,600				

9-1520. Kannah Creek near Whitewater, Colo.

Location.--Lat 38°59', long 108°14', in sec.34, T.12 S., R.97 W., on right bank at downstream side of private bridge, a quarter of a mile downstream from intake of pipeline for Grand Junction water supply and 12 miles east of Whitewater.

Drainage area.--61.9 sq mi.

Records available.--October 1917 to September 1921, September 1922 to September 1967. Monthly discharge only for some periods, published in WSP 1313. Prior to October 1962, published as Kannah Creek near Whitewater.

Gage.--Water-stage recorder and concrete control. Prior to Sept. 30, 1932, staff gage and Sept. 30, 1932, to Oct. 14, 1935, water-stage recorder, at site 300 ft upstream at different datum.

Average discharge (combined flow).--49 years, 38.9 cfs (28,160 acre-ft per year).

Extremes (combined flow).--Maximum discharge during year, 304 cfs May 21; minimum daily, 5.5 cfs Dec. 9.

1917-21, 1922-67: Maximum discharge observed, 1,640 cfs June 6, 1921 (gage height, 4.5 ft, site and datum then in use), from rating curve extended above 700 cfs; minimum daily, 4.3 cfs Dec. 19, 1939.

Remarks.--Records good except those for winter period, which are poor. Diversions above station for municipal supply of Grand Junction and by Raber ditch for irrigation of about 60 acres below station. Records of these diversions furnished by State engineer and monthly figures are adjusted to show total flow of stream. Regulation by a few small reservoirs above station.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5.4	7.5	0.88	0.50	0.50	0.40	0.58	1.2	65	11	14	12
2	5.4	9.0	.88	.40	.40	.70	.76	1.2	52	10	10	10
3	9.5	9.0	.88	.30	.40	.70	1.2	1.0	56	9.5	9.5	7.5
4	10	10	.94	.40	.40	.60	2.2	.94	74	10	10	5.1
5	10	10	.88	.50	.60	.20	2.0	.94	67	10	10	10
6	10	10	3.0	.50	.60	1.3	1.2	1.2	58	10	10	19
7	10	10	3.9	.40	.50	.60	1.4	1.4	48	20	17	20
8	10	10	.88	.30	.40	1.3	1.6	2.0	42	22	18	15
9	10	10	.38	.30	.60	.40	1.0	3.6	34	19	10	9.5
10	9.0	7.5	.60	.40	.60	.40	.76	16	31	17	8.0	10
11	9.0	4.5	.60	.50	.40	.38	.76	31	30	18	8.5	9.5
12	9.0	4.8	.50	.60	.30	.38	1.0	49	31	16	6.5	8.0
13	9.0	4.5	.30	.50	.30	.34	1.0	46	34	16	5.1	6.5
14	9.5	4.5	.20	.50	.50	.34	1.0	34	34	15	4.5	6.5
15	9.0	2.6	.40	.60	.40	.34	.94	39	32	16	4.2	9.0
16	9.0	1.8	.50	.40	.40	.38	.82	75	31	16	5.4	7.0
17	8.5	1.6	.40	.30	.30	.70	.76	107	27	18	5.7	6.5
18	7.5	1.4	.50	.20	.40	.88	.76	118	25	16	5.7	6.5
19	9.0	1.2	.60	.40	.50	.70	1.2	107	22	13	5.4	8.5
20	11	1.0	.60	.50	.30	.58	1.2	104	27	11	4.2	7.5
21	9.5	1.2	.40	.70	.20	.70	.88	145	31	9.5	3.0	9.5
22	9.5	1.4	.20	.70	.30	1.6	.76	162	25	12	9.0	9.0
23	9.5	1.2	.20	.60	.40	2.0	.64	116	22	13	15	8.5
24	9.5	.94	.20	.50	.30	2.0	.58	94	19	13	15	8.5
25	9.0	.82	.30	.50	.30	1.4	.64	94	16	22	19	9.0
26	8.5	.94	.50	.40	.40	.94	.58	150	15	19	19	8.5
27	7.5	.70	.20	.50	.30	.82	.58	168	13	16	15	7.5
28	6.5	1.4	.10	.50	.20	.64	.88	145	13	19	13	6.5
29	6.5	2.0	.20	.50	-	.64	1.6	125	12	18	13	6.0
30	7.0	1.0	.40	.50	- - - - -	.70	1.4	98	12	16	11	3.6
31	7.0	- - - - -	.50	.60	- - - - -	.52	- - - - -	90	- - - - -	16	11	- - - - -
Total	269.8	132.50	21.02	14.50	11.20	23.58	30.68	2126.48	998	467.0	314.7	270.2
Mean	8.70	4.42	0.678	0.468	0.400	0.761	1.02	68.6	33.3	15.1	10.2	9.01
Max	11	10	3.9	0.70	0.60	2.0	2.2	168	74	22	19	20
Min	5.4	0.70	0.10	0.20	0.20	0.20	0.58	0.94	12	9.5	3.0	3.6
Ac-ft	535	263	42	29	22	47	61	4,220	1,980	926	624	536

Adjusted for diversions

	Mean	13.0	9.87	8.26	7.79	7.37	7.89	8.76	78.6	42.6	27.5	21.1	16.8
Ac-ft	798	587	508	479	409	485	522	4,830	2,540	1,690	1,290	1,000	

Observed

Adjusted

Cal yr 1966: Total	6,757.22	Mean	18.5	Max	253	Min	0.10	Ac-ft	13,400	Mean	27.1	Ac-ft	19,590
Wtr yr 1967: Total	4,679.66	Mean	12.8	Max	168	Min	0.10	Ac-ft	9,280	Mean	20.9	Ac-ft	15,130

Note.--No gage-height record Dec. 13 to Mar. 10.

9-1525. Gunnison River near Grand Junction, Colo.

Location.--Lat 38°59', long 108°27', near center of sec.14, T.2 S., R.1 E., Ute meridian, on right bank 180 ft upstream from bridge on State Highway 141, 0.4 mile downstream from Whitewater Creek, 0.5 mile south of Whitewater, and 8 miles southeast of Grand Junction.

Drainage area.--7,928 sq mi (revised).

Records available.--October 1894 to December 1895 (gage heights only), October 1896 to September 1899, October 1901 to October 1906, October 1916 to September 1967. Monthly discharge only for some periods, published in WSP 1313. Published as "at Whitewater" 1901-6.

Gage.--Water-stage recorder. Datum of gage is 4,628.12 ft above mean sea level, datum of 1929. Prior to Apr. 11, 1895, staff gage 13 miles downstream near mouth at different datum. Apr. 11, 1895, to July 6, 1901, and Apr. 10, 1902, to October 1906 staff or chain gage at present site at datum 1.04 ft lower. Apr. 1, 1917, to June 24, 1934, staff gage and June 25, 1934, to Sept. 30, 1959, water-stage recorder, at site 11½ miles downstream at datum 72.98 ft lower.

Average discharge.--59 years (1896-99, 1901-6, 1916-67), 2,567 cfs (1,858,000 acre-ft per year).

Extremes.--Maximum discharge during year, 4,900 cfs May 26 (gage height, 5.59 ft); minimum daily, 500 cfs Aug. 27.

1896-99, 1901-6, 1916-67: Maximum discharge observed, 35,700 cfs May 23, 1920 (gage height, 14.95 ft, site and datum then in use), from rating curve extended above 22,000 cfs; minimum daily, 106 cfs July 20, 1934.

Remarks.--Records good except those for winter period, which are poor. Records show flow that enters Colorado River from Gunnison River basin except for about 60 cfs diverted below gage during irrigation season. Natural flow of river affected by diversions for irrigation of about 233,000 acres above station, storage reservoirs, and return flow from irrigated lands. Records of chemical analyses and water temperatures for the water year 1967 are published in Part 2 of this report.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	860	743	780	650	840	830	1,270	1,390	2,620	980	1,020	680
2	860	725	770	680	800	914	1,310	1,160	2,300	958	1,060	725
3	925	725	752	700	770	1,000	1,350	992	2,280	860	958	810
4	1,220	725	800	700	743	1,040	1,320	914	2,770	800	830	638
5	1,220	725	820	700	743	903	1,640	860	3,710	734	761	624
6	1,230	716	830	680	743	860	1,760	881	4,270	680	743	617
7	1,040	716	2,740	620	743	780	1,600	850	4,100	645	947	631
8	1,040	743	2,370	580	707	652	1,700	881	3,490	860	2,810	743
9	1,020	958	1,480	600	680	707	1,830	1,080	3,400	1,020	2,200	969
10	1,020	870	1,020	600	734	716	1,770	1,860	3,050	860	1,890	1,170
11	1,040	820	830	620	761	761	1,630	2,350	2,570	790	1,690	1,060
12	1,180	800	892	700	734	790	1,660	2,130	2,330	734	1,670	1,340
13	1,250	820	860	850	743	830	1,670	1,920	2,330	830	1,530	1,460
14	1,320	800	830	880	752	820	1,630	1,890	2,020	725	1,340	1,410
15	1,430	770	810	880	770	761	1,420	1,490	2,000	734	1,080	1,280
16	1,520	770	790	800	752	725	1,410	1,220	2,120	947	840	1,300
17	1,760	780	761	750	725	734	1,280	1,340	2,000	1,590	725	1,270
18	1,620	770	752	750	725	870	1,230	1,780	1,950	2,150	659	1,290
19	1,090	752	780	750	734	1,120	1,380	2,300	2,170	1,740	592	1,410
20	947	743	770	750	780	1,100	1,670	2,600	2,400	1,410	574	1,840
21	914	734	752	800	743	1,120	1,740	3,220	3,350	1,150	574	1,660
22	914	743	752	860	707	1,090	1,520	3,890	3,270	1,000	568	1,590
23	892	752	734	880	725	1,170	1,360	4,190	4,910	958	550	1,550
24	881	743	650	880	761	1,280	1,320	4,030	2,710	980	525	1,530
25	860	734	600	900	770	1,220	1,200	3,980	2,480	1,090	525	1,530
26	830	716	650	880	810	1,410	1,110	4,190	2,230	1,050	505	1,550
27	830	707	650	820	840	1,380	1,030	4,520	1,830	840	500	1,310
28	830	698	650	880	800	1,340	1,100	3,910	1,500	770	510	1,210
29	800	689	600	880	-	1,460	1,150	4,010	1,300	734	515	1,090
30	770	761	650	860	-	1,560	1,300	3,460	1,080	725	525	1,030
31	752	-	650	840	-	1,460	-	2,940	-	752	568	-
Total	32,865	22,748	27,775	23,720	21,135	31,403	43,360	72,228	76,540	30,096	29,784	35,307
Mean	1,060	758	896	765	755	1,013	1,445	2,330	2,551	971	961	1,177
Max	1,760	958	2,740	900	840	1,560	1,830	4,520	4,270	2,150	2,810	1,840
Min	752	689	600	580	680	652	1,030	850	1,080	645	500	617
Ac-ft	65,190	45,120	55,090	47,050	41,920	62,290	86,000	143,300	151,800	59,690	59,080	70,030
Cal yr 1966: Total	489,674		Mean	1,342	Max	5,360	Min	540	Ac-ft	971,300		
Wtr yr 1967: Total	446,961		Mean	1,225	Max	4,520	Min	500	Ac-ft	886,500		

9-1635. Colorado River near Colorado-Utah State line

Location.--Lat 39°09', long 108°57', in sec.25, T.10 S., R.104 W., on right bank 4.8 miles downstream from Salt Creek, 6½ miles southwest of Mack, Colo., and 7½ miles upstream from Colorado-Utah State line.

Drainage area.--17,900 sq mi, approximately.

Records available.--May 1951 to September 1967.

Gage.--Water-stage recorder. Altitude of gage is 4,370 ft (from river-profile map).

Average discharge.--16 years, 5,591 cfs (4,048,000 acre-ft per year).

Extremes.--Maximum discharge during year, 19,400 cfs May 27 (gage height, 9.22 ft); minimum daily, 1,570 cfs Aug. 28.

1951-67: Maximum discharge, 56,800 cfs June 9, 1957 (gage height, 16.40 ft); minimum daily, 960 cfs Sept. 7, 1956.

Remarks.--Records good. Natural flow of stream affected by transmountain diversions, storage reservoirs, power developments, and diversions for irrigation. (Records include all return flow from irrigated areas.) Records of chemical analyses and water temperatures for the water year 1967 are published in Part 2 of this report as "below Colorado-Utah State line."

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2,090	2,710	2,610	2,130	2,660	2,440	3,340	2,030	11,100	7,570	2,590	2,060
2	2,130	2,660	2,620	2,190	2,740	2,540	3,040	3,110	10,200	7,600	2,740	2,300
3	2,340	2,590	2,570	2,280	2,730	2,570	2,900	2,640	10,600	7,060	2,640	2,440
4	2,800	2,510	2,540	2,220	2,570	2,880	2,930	2,190	11,800	6,490	2,440	2,360
5	2,930	2,490	2,660	2,100	2,380	2,740	3,320	1,950	14,100	6,000	2,340	2,150
6	3,080	2,460	3,670	2,300	2,290	2,570	3,710	1,850	15,300	5,720	2,230	2,080
7	2,930	2,480	5,160	2,300	2,300	2,430	3,650	1,810	15,800	5,450	3,100	2,030
8	2,800	2,480	5,700	2,100	2,290	2,230	3,530	1,690	14,500	5,770	4,320	2,160
9	2,830	2,760	4,090	1,800	2,290	2,230	3,770	1,670	14,100	5,620	4,470	2,660
10	2,740	2,880	3,340	1,650	2,240	2,150	3,830	2,080	13,300	5,480	4,450	2,990
11	2,730	2,740	2,680	1,700	2,170	2,360	3,710	3,390	12,800	4,970	4,140	3,060
12	2,930	2,640	2,440	1,800	2,280	2,460	3,530	4,300	11,300	4,430	3,870	3,530
13	3,060	2,710	2,490	2,150	2,340	2,660	4,010	4,110	11,000	4,450	3,650	3,430
14	3,200	2,730	2,510	2,200	2,320	2,620	3,770	4,430	10,200	4,370	3,350	3,490
15	3,340	2,640	2,460	2,300	2,240	2,510	3,530	4,180	9,240	4,280	2,970	3,550
16	3,490	2,620	2,380	2,300	2,340	2,400	3,150	3,490	8,890	4,340	2,460	3,390
17	3,730	2,610	2,350	2,400	2,280	2,350	3,130	3,060	8,830	5,500	2,280	3,260
18	3,550	2,610	2,290	2,500	2,170	2,540	2,760	3,490	8,830	5,360	2,230	3,110
19	3,300	2,570	2,200	2,300	2,240	2,920	2,570	4,760	9,460	6,320	2,120	2,990
20	2,900	2,560	2,200	2,200	2,300	3,200	3,020	6,300	11,300	5,480	2,010	3,020
21	2,810	2,510	2,200	2,200	2,300	3,280	3,590	7,540	12,600	4,740	1,940	3,300
22	2,800	2,520	2,150	2,200	2,190	3,170	3,590	9,300	13,600	4,160	1,900	3,340
23	2,690	2,640	2,150	2,200	2,100	3,200	3,130	12,000	12,600	3,970	1,810	3,220
24	2,730	2,490	2,100	2,300	2,190	3,220	2,850	14,000	12,600	3,990	1,730	3,200
25	2,680	2,510	2,050	2,600	2,340	3,080	2,640	15,900	12,000	4,300	1,650	3,200
26	2,620	2,480	1,950	2,590	2,510	3,280	2,460	17,000	11,400	4,110	1,640	3,150
27	2,540	2,380	2,000	2,590	2,900	3,610	2,320	18,200	10,100	3,790	1,630	3,240
28	2,540	2,350	2,050	2,560	2,590	3,390	2,130	16,100	9,370	3,350	1,570	3,060
29	2,570	2,290	2,000	2,540	-	3,260	2,190	15,300	8,960	3,040	1,590	3,060
30	2,740	2,410	1,950	2,570	- - - -	3,410	2,280	13,800	8,020	2,830	1,690	2,920
31	2,560	- - - -	1,950	2,610	- - - -	3,550	- - - -	12,200	- - - -	2,620	1,820	- - - -
Total	88,180	77,030	81,510	69,880	66,290	87,250	94,380	213,870	343,900	153,160	79,370	87,750
Mean	2,845	2,568	2,629	2,254	2,368	2,815	3,146	6,899	11,460	4,941	2,560	2,925
Max	3,730	2,880	5,700	2,610	2,900	3,610	4,010	18,200	15,800	7,600	4,470	3,550
Min	2,090	2,290	1,950	1,650	2,100	2,150	2,130	1,670	8,020	2,620	1,570	2,030
Ac-ft	174,900	152,800	161,750	138,600	131,500	173,100	187,200	424,200	682,100	303,800	157,400	174,000

Cal yr 1966: Total 1,358,770 Mean 3,723 Max 13,700 Min 1,620 Ac-ft 2,695,000
Wtr yr 1967: Total 1,442,570 Mean 3,952 Max 18,200 Min 1,570 Ac-ft 2,861,000

DOLORES RIVER BASIN

9-1650. Dolores River below Rico, Colo.

Location.--Lat 37°38'20", long 108°03'35", in SW¼ sec.15, T.39 N., R.11 W., on left bank at upstream side of bridge, at Dolores-Montezuma County line, half a mile upstream from Ryman Creek, and 4 miles southwest of Rico.

Drainage area.--105 sq mi.

Records available.--October 1951 to September 1967.

Gage.--Water-stage recorder. Datum of gage is 8,422.23 ft above mean sea level, datum of 1929.

Average discharge.--16 years, 129 cfs (93,390 acre-ft per year).

Extremes.--Maximum discharge during year, 769 cfs May 21 (gage height, 4.40 ft); minimum daily, 12 cfs Feb. 12, 17, 18.

1951-67: Maximum discharge, 2,120 cfs June 10, 1952 (gage height, 6.15 ft); minimum daily, 7.0 cfs Nov. 16, 17, 1956, Feb. 6, 7, 1961.

Maximum flood known occurred Oct. 5, 1911.

Remarks.--Records good except those for winter period, which are poor. No diversion above station.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	25	16	16	18	15	20	37	121	248	104	57	119
2	26	14	18	18	14	26	38	98	242	95	49	91
3	33	17	19	17	14	28	55	81	275	86	45	69
4	33	17	18	17	13	22	74	77	370	81	43	57
5	35	15	22	16	14	18	77	81	420	75	42	62
6	35	17	51	15	16	18	71	71	425	71	48	142
7	32	19	49	14	16	19	95	93	362	75	162	117
8	30	17	33	14	15	17	129	198	318	69	164	133
9	29	16	24	15	13	16	136	292	282	61	164	123
10	27	18	22	16	13	24	100	342	257	57	175	111
11	28	20	26	14	13	25	100	346	225	62	202	89
12	29	22	28	14	12	25	109	330	212	65	191	80
13	29	17	26	14	13	28	86	303	202	77	162	71
14	25	20	24	15	15	25	75	230	208	75	125	64
15	25	20	24	15	18	23	71	245	186	104	104	59
16	28	20	22	14	15	25	62	326	196	81	86	54
17	25	20	22	13	12	41	64	370	182	133	75	53
18	22	19	22	13	12	48	85	390	198	100	68	53
19	22	18	22	13	13	45	133	430	215	78	61	78
20	23	20	22	13	14	42	142	450	230	67	57	77
21	23	22	22	14	13	44	140	535	230	62	54	65
22	22	21	22	14	13	48	140	594	202	60	50	57
23	22	20	18	13	13	56	125	582	193	64	46	53
24	19	18	17	14	14	61	129	564	175	77	43	48
25	21	16	19	13	15	59	133	582	162	85	41	57
26	20	16	18	13	16	47	105	570	147	65	41	65
27	20	14	18	13	15	46	147	460	133	57	46	54
28	20	18	18	14	17	42	208	480	129	56	62	48
29	20	19	19	14	-	41	202	400	113	50	69	45
30	19	16	20	14	- - - -	37	160	318	107	56	71	43
31	19	- - - -	19	15	- - - -	34	- - - -	282	- - - -	61	80	- - - -
Total	786	542	720	449	396	1,050	3,228	10,241	6,834	2,309	2,683	2,237
Mean	25.4	18.1	23.2	14.5	14.1	33.9	108	330	228	74.5	86.5	74.6
Max	35	22	51	18	18	61	208	594	425	133	202	142
Min	19	14	16	13	12	16	37	71	107	50	41	43
Ac-ft	1,560	1,080	1,430	891	785	2,080	6,400	20,310	13,560	4,580	5,320	4,440

Cal yr 1966: Total 39,988 Mean 110 Max 762 Min 14 Ac-ft 79,320
Wtr yr 1967: Total 31,475 Mean 86.2 Max 594 Min 12 Ac-ft 62,430

Peak discharge.--(base, 800 cfs).--No peak above base.

Note.--No gage-height record Jan. 2 to Mar. 3.

9-1665. Dolores River at Dolores, Colo.

Location.--Lat 37°28'15", long 108°30'15", in NE¼ sec.16, T.37 N., R.15 W., on left bank 70 ft downstream from bridge on State Highway 184 in Dolores and a quarter of a mile upstream from Lost Canyon Creek.

Drainage area.--556 sq mi.

Records available.--June 1895 to October 1903, August 1910 to November 1912, October 1921 to September 1967. Monthly discharge only for some periods, published in WSP 1313.

Gage.--Water-stage recorder. Datum of gage is 6,918.74 ft above mean sea level, datum of 1929. June 23, 1895, to Oct. 31, 1903, staff gage at site a quarter of a mile upstream at different datum. Aug. 27, 1910, to Nov. 30, 1912, and Apr. 11, 1922, to Mar. 26, 1934, chain gage, staff gage, or water-stage recorder on downstream side of bridge 70 ft upstream at different datums. Mar. 27, 1934, to Oct. 7, 1952, water-stage recorder at site 340 ft upstream at datum 6.17 ft higher.

Average discharge.--56 years, 431 cfs (312,000 acre-ft per year).

Extremes.--Maximum discharge during year, 1,860 cfs May 26 (gage height, 7.09 ft); minimum daily, 36 cfs Nov. 2, 3, 27, Dec. 1. 1895-1903, 1910-12, 1921-67: Maximum discharge, 10,000 cfs Oct. 5, 1911 (gage height, 10.2 ft, site and datum then in use), from rating curve extended above 2,800 cfs; minimum daily, 8 cfs Aug. 16, 1896.

Remarks.--Records good except those for winter period and for periods of no gage-height record, which are poor. Diversions for irrigation of about 2,000 acres above station. Flow partly regulated by Ground Hog Reservoir (capacity, 21,710 acre-ft).

Discharge, in cubic feet per second; water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	74	41	36	55	55	85	160	402	786	237	175	300
2	75	36	42	55	55	95	160	339	708	225	145	340
3	86	36	52	55	48	110	182	299	768	215	128	230
4	96	42	54	55	48	100	259	279	954	231	155	180
5	90	39	60	50	55	90	347	283	1,020	222	148	170
6	93	38	194	50	55	85	327	252	1,110	212	160	250
7	80	43	420	48	50	75	339	259	954	208	323	390
8	68	65	195	44	46	75	416	450	852	215	430	320
9	65	49	111	48	50	80	460	822	750	198	416	360
10	60	41	63	50	55	85	359	954	696	185	540	310
11	59	46	65	48	55	100	355	1,000	600	182	672	260
12	63	48	70	46	50	100	388	954	540	228	630	220
13	63	50	65	46	55	98	323	954	515	237	535	200
14	60	48	60	48	60	92	287	684	535	228	380	170
15	60	54	55	50	55	86	311	636	480	263	307	160
16	60	59	49	48	60	93	259	804	430	271	249	150
17	59	55	65	46	50	132	240	968	416	351	230	130
18	56	53	65	44	50	195	275	1,020	445	311	210	123
19	52	48	70	44	60	205	388	1,090	480	215	190	148
20	51	50	70	46	60	192	440	1,110	505	185	180	210
21	52	56	70	48	55	190	430	1,230	550	190	160	168
22	51	55	70	50	50	195	425	1,350	460	180	150	150
23	49	53	60	55	55	237	398	1,390	430	200	140	135
24	49	50	55	50	60	271	402	1,390	398	192	130	121
25	45	40	55	46	65	255	435	1,500	367	208	120	125
26	44	38	50	44	70	205	355	1,660	339	208	120	162
27	43	36	55	46	70	210	393	1,290	307	178	140	155
28	43	38	55	48	75	188	570	1,300	287	162	170	138
29	43	42	50	50	-	192	636	1,140	255	145	200	121
30	43	40	55	50	- - - -	178	530	919	240	160	210	107
31	42	- - - -	55	55	- - - -	142	- - - -	852	- - - -	192	240	- - - -
Total	1,874	1,389	2,491	1,518	1,572	4,436	10,849	27,580	17,177	6,634	7,983	6,003
Mean	60.5	46.3	80.4	49.0	56.1	143	362	890	573	214	258	200
Max	96	65	420	55	75	271	636	1,660	1,110	351	672	390
Min	42	36	36	44	46	75	160	252	240	145	120	107
Ac-ft	3,720	2,760	4,940	3,010	3,120	8,800	21,520	54,700	34,070	13,160	15,830	11,910

Cal yr 1966: Total 129,836 Mean 356 Max 2,260 Min 36 Ac-ft 257,500

Wtr yr 1967: Total 89,506 Mean 245 Max 1,660 Min 36 Ac-ft 177,500

Peak discharge (base, 1,800 cfs).--May 26 (0645) 1,860 cfs (7.09 ft).

Note.--No gage-height record Jan. 1 to Feb. 15, Aug. 17 to Sept. 17.

DOLORES RIVER BASIN

9-1681. Disappointment Creek near Dove Creek, Colo.

Location.--Lat 37°52'35" (revised), long 108°34'55", in SE¼ sec.25, T.42 N., R.16 W., a quarter of a mile downstream from ford, 6½ miles southeast of Cedar, and 19 miles northeast of town of Dove Creek.

Drainage area.--145 sq mi.

Records available.--August 1957 to September 1967.

Gage.--Water-stage recorder. Altitude of gage is 6,420 ft (from topographic map).

Average discharge.--10 years, 15.2 cfs (11,000 acre-ft per year).

Extremes.--Maximum discharge during year, 1,580 cfs Sept. 7 (gage height, 9.67 ft); no flow Oct. 1, 2, July 10, 11, 13-15.

1957-67: Maximum discharge, 4,360 cfs July 13, 1965 (gage height, 13.54 ft), from rating curve extended above 250 cfs on basis of slope-area measurements at gage heights 7.18, 9.86, 10.95, and 13.54 ft; no flow for several days in 1959-64, 1966, 1967.

Remarks.--Records fair except those for period of no gage-height record, which are poor. Several small reservoirs and ponds above station. Small diversions for irrigation above station.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	0.60	0.80			26	3.6	12	27	2.6	4.0	1.9
2	0	.70	.85			27	2.9	9.6	24	2.0	1.7	1.8
3	12	.70	.85			25	2.9	8.6	23	1.6	1.5	1.2
4	1.1	.70	.90			15	3.4	7.8	24	1.3	1.3	.90
5	15	.65	.95			8.2	1.4	7.0	35	1.3	7.0	.85
6	2.6	.65	44			6.0	9.0	7.0	28	1.2	115	1.0
7	2.0	.70	156			5.4	6.4	6.0	24	.95	213	135
8	1.6	6.9	12			6.4	5.4	7.2	20	.70	34	7.0
9	1.4	2.6	7.0			5.0	5.6	26	17	.25	134	3.4
10	1.4	1.4	4.0			7.0	6.0	42	15	0	38	2.3
11	16	1.3	3.4			12	5.4	45	13	0	107	1.3
12	3.0	1.2	3.0			9.5	4.8	44	12	.05	18	.60
13	2.0	1.1	2.8		4.8	7.2	5.6	42	13	0	10	.50
14	1.4	1.1	2.6			5.6	5.6	30	14	0	7.8	.45
15	1.4	1.0	2.6			5.0	6.4	28	12	0	5.2	.40
16	1.2	1.0	2.4			6.0	5.2	35	9.2	48	4.6	.35
17	1.0	1.0	2.4			8.2	4.6	38	8.0	64	4.2	.35
18	1.0	1.0	2.4			7.6	3.8	36	7.8	10	3.8	.30
19	.90	1.0	2.2			6.6	3.9	33	7.8	4.6	3.8	.30
20	.70	1.0	2.2			4.0	4.8	32	8.6	3.8	3.6	.35
21	.70	1.0	2.2			3.6	5.8	32	8.8	4.1	3.5	.45
22	.90	.95	2.2			3.4	6.2	33	7.6	3.4	3.4	.50
23	.90	.95	2.0			3.4	6.4	31	6.8	3.8	3.3	.40
24	.80	.95	1.8			3.9	6.4	32	6.0	2.4	3.2	.35
25	1.0	.90	1.6			4.6	7.2	34	5.8	120	2.9	.40
26	1.0	.90	1.4		15	4.6	8.2	54	5.4	18	3.6	.20
27	.80	.90	1.2		7.6	3.9	7.2	51	4.8	10	2.1	.15
28	.70	.85	1.0		12	3.5	9.4	41	4.2	6.0	2.1	.15
29	.60	.90	1.2		-	3.4	14	39	3.8	3.0	1.9	.15
30	.60	.75	.60		- - - -	3.8	15	31	2.9	55	7.3	.10
31	.60	- - - -	.40		- - - -	3.5	- - - -	33	- - - -	20	4.5	- - - -
Total	74.30	35.35	268.95	55.8	154.6	242.3	195.1	907.2	398.5	388.05	755.3	172.10
Mean	2.40	1.18	8.68	1.80	5.52	7.82	6.50	29.3	13.3	12.5	24.4	5.74
Max	16	6.9	156	-	15	27	15	54	35	120	213	135
Min	0	0.60	0.40	-	-	3.4	2.9	6.0	2.9	0	1.3	0.10
Ac-ft	147	70	533	111	307	481	387	1,800	790	770	1,500	341

Cal yr 1966: Total 5,072.80 Mean 13.9 Max 156 Min 0 Ac-ft 10,060
Wtr yr 1967: Total 3,647.55 Mean 9.99 Max 213 Min 0 Ac-ft 7,230

Peak discharge (base, 560 cfs)

Note.--No gage-height record Dec. 9 to Feb. 25.

Date	Time	Gage height	Discharge	Date	Time	Gage height	Discharge
12- 7	0215	6.33	626	8- 7	1650	7.31	838
7-25	0230	8.21	1,070	8-11	1600	6.66	692
7-30	1530	6.10	580	9- 7	1545	9.67	1,580
8- 6	1530	8.25	1,080				

9-1725. San Miguel River near Placerville, Colo.

Location.--Lat 38°02'05", long 108°07'15", in NW¼SW¼ sec.30, T.44 N., R.11 W., on right bank 0.7 mile downstream from Specie Creek and 4 miles northwest of Placerville.

Drainage area.--308 sq mi.

Records available.--January to December 1909, September 1910 to December 1912, April 1930 to September 1934, April 1942 to September 1967. Monthly discharge only for some periods, published in WSP 1313. Published as "at Placerville" 1910-12.

Gage.--Water-stage recorder. Datum of gage is 7,055.80 ft above mean sea level (Bureau of Reclamation bench mark). Jan. 1 to Dec. 31, 1909, staff gage at site 3.3 miles downstream at different datum. Aug. 27, 1910, to Nov. 30, 1912, staff gage and Apr. 25, 1930, to Sept. 30, 1934, water-stage recorder, at site 3.2 miles upstream at different datums. Apr. 1, 1942, to Oct. 21, 1958, at site 0.7 mile upstream at datum 40.64 ft higher.

Average discharge.--31 years (1910-12, 1930-34, 1942-67), 227 cfs (164,300 acre-ft per year).

Extremes.--Maximum discharge during year, 963 cfs May 24 (gage height, 4.69 ft); maximum gage height, 5.71 ft Dec. 24 (backwater from ice); minimum daily discharge, 36 cfs Dec. 24.

1909-12, 1930-34, 1942-67: Maximum discharge, 10,000 cfs Sept. 5, 1909 (result of failure of Trout and Middle Reservoir Dams); minimum daily, 26 cfs Jan. 5, 1960.

Remarks.--Records good except those for winter period, which are poor. Diversions for irrigation of about 1,700 acres above station. One diversion from Fall Creek for irrigation of about 2,000 acres in Beaver and Saltado Creek basins. One small ditch diverts water from Leopard Creek to Uncompahgre River basin. Slight regulation by Lake Hope and Trout Lake of Western Colorado Power Co. (combined capacity, 5,040 acre-ft).

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	74	67	52	46	55	63	80	101	307	365	212	207
2	75	75	55		48	72	84	97	300	334	165	188
3	90	79	57		44	75	94	103	334	318	150	155
4	90	82	60		44	68	108	110	436	300	140	142
5	94	68	62		46	74	108	112	537	283	140	145
6	103	59	92		46	55	105	108	614	273	142	196
7	96	59	136		46	63	108	99	558	279	300	188
8	85	75	94		40	51	116	131	572	273	342	178
9	87	70	65		42	49	110	226	544	249	334	185
10	85	57	46		46	54	103	276	516	235	326	160
11	87	65	55		46	67	99	296	418	240	355	145
12	90	65	55		46	62	108	300	370	307	350	145
13	87	59	55		48	57	107	314	310	290	286	120
14	90	62	55		50	62	107	258	290	290	264	110
15	84	67	55		50	54	108	235	258	322	255	103
16	82	65	60	46	46	60	94	276	252	279	218	97
17	77	62	60		42	84	101	360	243	360	185	94
18	70	60	60		44	105	107	406	303	334	170	94
19	67	65	55		46	96	107	436	375	267	162	116
20	68	70	55		46	74	94	481	436	229	145	116
21	79	63	55		40	84	94	621	448	207	142	107
22	77	70	50		44	92	94	733	474	221	142	107
23	74	65	48		46	110	92	780	523	207	133	105
24	70	59	36		50	107	92	804	488	207	122	103
25	84	55	46		57	99	92	812	460	215	118	110
26	68	57	44	46	57	87	89	756	412	201	114	120
27	60	44	46		54	84	90	579	390	193	120	110
28	65	52	46		57	92	105	600	380	180	158	103
29	65	57	44		-	92	114	488	322	160	155	97
30	62	54	50		- - - -	90	112	400	342	165	170	94
31	62	- - - -	50		- - - -	84	- - - -	346	- - - -	193	162	- - - -
Total	2,447	1,907	1,799	1,426	1,326	2,366	3,022	11,644	12,212	7,976	6,177	3,940
Mean	78.9	63.6	58.0	46.0	47.4	76.3	101	376	407	257	199	131
Max	103	82	136	-	57	110	116	812	614	365	355	207
Min	60	44	36	-	40	49	80	97	243	160	114	94
Ac-ft	4,850	3,780	3,570	2,830	2,630	4,690	5,990	23,100	24,220	15,820	12,250	7,810

Cal yr 1966: Total 63,728 Mean 175 Max 733 Min 36 Ac-ft 126,400
Wtr yr 1967: Total 56,242 Mean 154 Max 812 Min 36 Ac-ft 111,600

Peak discharge (base, 900 cfs).--May 24 (2400) 963 cfs (4.69 ft).

Note.--No gage-height record Dec. 25 to Feb. 1.

9-1730. Beaver Creek near Norwood, Colo.

Location.--Lat 37°58'10", long 108°11'40", in SW¼ sec.21 (revised), T.43 N., R.12 W., on left bank 20 ft downstream from county highway bridge, 805 ft upstream from Goat Creek and 13 miles southeast of Norwood.

Drainage area.--35.2 sq mi.

Records available.--October 1941 to September 1961, October 1962 to September 1967 (discontinued). Monthly discharge only for some periods, published in WSP 1313.

Gage.--Water-stage recorder and concrete control. Datum of gage is 8,016.81 ft above mean sea level (Bureau of Reclamation bench mark). Prior to Oct. 1, 1948, at site 335 ft downstream at datum 6.00 ft lower. Oct. 1, 1948, to July 16, 1952, at site 335 ft downstream at datum 8.00 ft lower. July 17, 1952, to Sept. 30, 1961, at site 285 ft downstream at datum 8.00 ft lower.

Average discharge.--25 years, 16.2 cfs (11,730 acre-ft per year).

Extremes.--Maximum discharge during year, 39 cfs May 26 (gage height, 3.37 ft); maximum gage height, 4.35 ft Mar. 17 (backwater from ice); minimum daily discharge, 0.07 cfs Dec. 23.

1941-61, 1962-67: Maximum discharge, 750 cfs June 9 or 10, 1952 (gage height, 5.67 ft, from floodmarks, site and datum then in use), from rating curve extended above 370 cfs; no flow at times in 1946, 1950-51, 1954, 1956, 1959, 1963-64, 1966.

Remarks.--Records good except those for winter period, which are poor. Gurley ditch diverts water above station to Gurley Reservoir (capacity, 8,800 acre-ft, 3,200 acre-ft prior to September 1948) for irrigation of about 12,000 acres in Naturita Creek drainage.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.35	0.58	0.98	1.2	2.0	2.2	7.5	6.6	9.5	0.78	0.78	1.8
2	2.8	.55	1.2	1.4	2.0	2.6	7.5	7.0	8.0	1.2	.50	2.5
3	6.0	.62	1.2	1.8	2.0	2.6	10	7.5	7.0	2.4	.41	.98
4	2.2	.65	1.2	1.6	2.0	2.2	14	5.8	7.5	1.8	.35	.48
5	6.6	.60	1.7	1.8	2.2	2.2	15	5.8	8.5	1.7	.31	.31
6	6.6	.68	1.1	1.8	2.2	2.0	13	5.8	9.0	1.5	.33	.27
7	6.0	.74	1.5	1.6	2.2	1.8	13	5.4	7.0	1.6	4.4	.22
8	5.6	.70	8.0	1.3	2.2	1.8	12	6.0	6.6	1.5	6.8	.27
9	5.4	.70	4.2	1.2	2.0	1.8	11	8.0	6.2	1.3	3.7	.27
10	5.0	.60	3.6	1.4	2.0	1.8	10	10	5.6	1.2	6.8	.25
11	3.2	.90	3.0	1.6	2.0	2.0	9.5	11	5.6	1.3	9.9	.24
12	2.2	1.4	2.6	1.7	2.0	2.2	9.5	10	5.6	2.1	8.5	.24
13	1.1	1.2	2.0	1.4	2.0	2.0	6.8	10	6.2	1.4	4.0	.21
14	1.1	1.2	1.2	1.4	1.8	2.0	9.0	8.0	6.4	1.3	2.5	.19
15	1.0	1.3	1.4	1.6	2.0	2.2	9.5	6.8	5.6	2.5	1.3	.18
16	1.1	2.0	1.2	1.6	2.0	4.0	9.5	7.5	4.2	2.1	.82	.17
17	1.0	1.7	1.2	1.4	2.0	12	8.0	10	3.4	2.7	.58	.14
18	.94	1.5	1.4	1.3	2.0	9	8.5	9.5	3.0	1.8	.48	.17
19	.82	1.3	1.4	1.2	2.0	10	10	10	4.2	1.2	.41	.39
20	.82	1.5	1.4	1.3	1.8	8.5	9.5	9.5	3.8	.78	.35	.65
21	.78	1.7	1.2	1.5	2.0	8.0	7.5	10	3.6	.58	.33	.55
22	.78	1.6	.58	1.6	2.0	9.0	7.5	10	2.9	.62	.25	.39
23	.74	1.5	.07	1.7	2.0	11	7.0	10	2.4	.86	.22	.33
24	.70	1.0	.20	1.4	2.0	12	7.0	10	1.7	.74	.15	.24
25	.70	.86	.10	1.5	2.0	11	7.5	10	1.5	1.5	.10	.33
26	.70	1.0	.40	1.5	1.6	10	6.5	26	1.3	1.0	.09	.43
27	.68	.60	.80	1.4	2.0	10	6.8	16	1.1	.62	.13	.58
28	.68	.90	1.0	1.6	2.0	9.0	7.5	16	.94	.45	.12	.45
29	.70	1.3	1.2	1.7	-	7.5	8.0	14	.82	.35	.11	.39
30	.68	.98	1.4	1.6	- - - -	8.0	7.0	12	.70	.48	.34	.33
31	.65	- - - -	1.2	1.8	- - - -	8.0	- - - -	12	- - - -	1.1	1.1	- - - -
Total	67.62	31.86	73.03	46.9	56.0	178.4	275.1	306.2	139.86	40.46	56.16	13.95
Mean	2.18	1.06	2.36	1.51	2.00	5.75	9.17	9.88	4.66	1.31	1.81	0.465
Max	6.6	2.0	15	1.8	2.2	12	15	26	9.5	2.7	9.9	2.5
Min	0.35	0.55	0.07	1.2	1.6	1.8	6.5	5.4	0.70	0.35	0.09	0.14
Ac-ft	134	63	145	93	111	354	546	607	277	80	111	28

Cal yr 1966: Total 3,067.31 Mean 8.40 Max 137 Min 0 Ac-ft 6,080
Wtr yr 1967: Total 1,285.54 Mean 3.52 Max 26 Min 0.07 Ac-ft 2,550

Note.--No gage-height record Jan. 17 to Feb. 28.

9-1755. San Miguel River at Naturita, Colo.

Location.--Lat 38°13'05", long 108°33'55", in NE¼NW¼ sec.30 (revised), T.46 N., R.15 W., on left bank 20 ft downstream from bridge on State Highway 97 in Naturita and 1.2 miles downstream from Naturita Creek.

Drainage area.--1,080 sq mi, approximately.

Records available.--October 1917 to September 1929, May 1940 to September 1967. Monthly discharge only for some periods, published in WSP 1313.

Gage.--Water-stage recorder. Datum of gage is 5,392.85 ft above mean sea level, datum of 1929. Apr. 26, 1918, to Sept. 2, 1926, chain gage and Sept. 3, 1926, to Sept. 30, 1929, water-stage recorder, at same site at different datums. Oct. 1, 1940, to Dec. 9, 1941, staff gage at same site and datum.

Average discharge.--39 years, 344 cfs (249,000 acre-ft per year).

Extremes.--Maximum discharge during year, 1,010 cfs Aug. 11; maximum gage height, 3.85 ft May 26; minimum daily discharge, 23 cfs Dec. 24.
1917-29, 1940-67: Maximum discharge, 7,100 cfs Apr. 15, 1942 (gage height, 9.80 ft), from rating curve extended above 3,800 cfs; minimum daily, 5.8 cfs Sept. 25-28, 30, 1956.

Remarks.--Records good except those for winter period, which are poor. Natural flow of stream affected by storage reservoirs, diversions for irrigation of about 22,000 acres above station and 4,000 acres below, and return flow from irrigated areas.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	29	76	73	52	83	57	121	78	367	288	117	118
2	28	81	73	52	74	72	120	69	315	260	99	136
3	37	86	78	57	63	120	121	64	323	236	75	107
4	54	88	88	46	61	101	136	72	416	218	66	84
5	49	85	86	61	66	109	165	76	524	195	60	93
6	54	70	97	60	70	85	123	83	645	173	85	145
7	96	70	275	46	68	81	96	74	568	186	271	120
8	104	93	179	50	55	76	99	68	568	200	434	132
9	96	103	118	55	49	75	100	132	514	175	388	128
10	99	83	76	60	70	80	92	248	474	151	307	115
11	99	78	76	65	74	95	85	307	406	139	496	103
12	104	86	93	65	64	95	85	299	343	198	402	97
13	99	84	89	65	73	85	99	319	288	210	284	86
14	99	75	89	65	81	95	89	260	254	210	225	72
15	99	78	84	70	72	80	103	205	225	251	225	57
16	92	75	79	65	66	95	94	208	210	267	181	48
17	90	52	78	60	57	130	83	295	193	288	149	42
18	88	30	70	60	67	200	80	363	212	335	125	41
19	80	28	66	60	72	160	85	420	299	242	113	57
20	78	47	62	65	75	140	83	452	363	186	101	81
21	80	88	70	75	56	141	72	546	406	147	86	73
22	85	83	63	75	57	137	70	640	393	128	80	66
23	86	89	44	70	63	163	68	730	465	155	74	61
24	84	79	23	75	75	179	66	735	411	141	64	58
25	85	76	79	70	76	163	66	775	384	153	53	58
26	88	78	76	65	83	147	66	878	343	136	47	69
27	81	75	62	70	74	134	60	685	311	121	46	63
28	78	64	53	75	64	134	66	640	315	100	55	58
29	79	74	45	70	-	139	78	582	239	86	81	53
30	79	75	55	75	- - - -	139	86	478	248	70	86	48
31	76	- - - -	55	80	- - - -	121	- - - -	434	- - - -	84	104	- - - -
Total	2,475	2,249	2,554	1,979	1,908	3,628	2,757	11,215	11,022	5,729	4,979	2,469
Mean	79.8	75.0	82.4	63.8	68.1	117	91.9	362	367	185	161	82.3
Max	104	103	275	80	83	200	165	878	645	335	496	145
Min	28	28	23	46	49	57	60	64	193	70	46	41
Ac-ft	4,910	4,460	5,070	3,930	3,780	7,200	5,470	22,240	21,860	11,360	9,880	4,900

Cal yr 1966: Total 77,204.5 Mean 212 Max 1,070 Min 6.5 Ac-ft 153,100

Wtr yr 1967: Total 52,964 Mean 145 Max 878 Min 23 Ac-ft 105,100

Peak discharge (base, 1,800 cfs).--No peak above base.

DOLORES RIVER BASIN

9-1759. Dry Creek near Naturita, Colo.

Location--Lat 38°05'32", long 108°37'17", in NE¼NW¼ sec.10, T.44 N., R.16 W., on right bank 50 ft upstream from ford, 0.3 mile upstream from unnamed tributary, 1.2 miles downstream from Dead Horse Creek, 5 miles northwest of Basin, and 14 miles south of Naturita.

Drainage area--85.9 sq mi.

Records available--July 1966 to September 1967.

Gage--Water-stage recorder. Altitude of gage is 6,270 ft (from topographic map).

Extremes--1966: Maximum discharge during period July to September, 224 cfs Aug. 3 (gage height, 3.07 ft); no flow for many days.
1966-67: Maximum discharge during water year, 506 cfs Aug. 7 (gage height, 4.64 ft), from rating curve extended above 140 cfs on basis of slope-area measurement at gage height 4.57 ft; no flow for many days.

Remarks--Records good except those for winter period, which are poor. Diversions for irrigation above station. Water is imported above station from Naturita Creek.

Discharge, in cubic feet per second, July to September 1966

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1										12	0	9.8
2										.07	4.5	.82
3										.01	57	.05
4										0	2.0	.03
5										0	0	.01
6										0	0	0
7										0	0	.01
8										0	0	0
9										0	0	0
10										0	0	0
11										0	0	0
12										0	0	14
13										0	0	.08
14										0	0	7.3
15										0	0	28
16										.16	0	.31
17										0	0	.07
18										0	0	.04
19										.11	.01	.03
20										1.1	0	.01
21										.33	0	0
22										.60	0	0
23										.02	0	0
24										0	0	0
25										0	0	0
26										0	0	0
27										0	0	0
28										0	0	0
29					-					0	0	0
30					- - - - -					0	0	0
31		- - - - -			- - - - -		- - - - -		- - - - -	0	13	- - - - -
Total										14.40	76.51	60.56
Mean										0.465	2.47	2.02
Max										12	57	28
Min										0	0	0
Ac-ft										29	152	120

Cal yr 1965: Total - Mean - Max - Min - Ac-ft -
Wtr yr 1966: Total - Mean - Max - Min - Ac-ft -

9-1759. Dry Creek near Naturita, Colo.--Continued

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	0.02	0.09	}	}	2.3	0.16	0	4.4	0	0.07	2.7
2	0	.01	.10			2.3	.07	0	1.8	0	0	3.8
3	25	.03	.09			1.9	.06	0	.76	0	0	.06
4	1.0	.04	.22			.70	.08	0	.52	0	0	0
5	2.1	.04	.19			.52	.25	.02	19	0	0	0
6	9.9	.04	.55	}	}	.28	.13	.04	2.9	0	1.3	18
7	.76	.04	.31			.22	.06	.01	.40	0	69	15
8	.10	35	.22			.28	.03	.01	.09	0	58	7.4
9	.07	5.3	.34			.22	.04	0	.01	0	6.7	2.0
10	.07	.64	.19			.25	.04	0	0	0	14	.50
11	.07	.31	.16	}	}	.28	.04	0	0	0	37	.10
12	.10	1.4	.13			.34	.04	0	0	0	14	0
13	.06	.64	.10			.16	.12	0	0	0	.09	0
14	.05	.22	.13			.37	.09	.06	0	0	0	0
15	.05	.16	.13			.40	.08	.02	0	42	0	0
16	.05	.13	.13	}	}	.34	.08	.01	0	76	0	0
17	.04	.16	.16			.09	.19	0	0	37	0	0
18	.05	.10	.13			.09	.25	0	0	2.0	0	0
19	.07	.10	.10			.10	.10	0	.01	.19	0	0
20	.07	.09	.10			.22	.06	0	.44	.05	0	0
21	.08	.09	.16	}	}	.19	.05	0	.12	.04	0	0
22	.08	.08				.09	.05	0	0	.37	0	0
23	.06	.08				.08	.03	0	0	20	0	0
24	.05	.07				.08	.03	0	0	9.8	0	0
25	.06	.07				.19	.04	0	4.0	81	0	0
26	.05	.09	.10	}	}	.30	.04	0	24	2.2	0	0
27	.04	.08				.50	.02	0	3.6	.52	.02	0
28	.04	.08				1.1	.04	0	.46	.10	26	0
29	.03	.10				-	.07	0	.88	.05	0	0
30	.03	.10				- - - - -	.31	0	.58	2.0	0	0
31	.02	- - - - -				- - - - -	.25	- - - - -	16	2.4	0	- - - - -
Total	40.15	45.31	37.40	11.0	19.42	11.53	1.21	49.60	30.45	275.72	200.44	49.56
Mean	1.30	1.51	1.21	0.4	0.694	0.372	0.040	1.60	1.02	8.89	6.47	1.65
Max	25	35	31	-	-	2.3	0.25	24	19	81	69	18
Min	0	0.01	0.09	0	0.08	0.02	0	0	0	0	0	0
Ac-ft	80	90	74	22	39	23	2.4	98	60	547	398	98

Cal yr 1966: Total - Mean - Max - Min - Ac-ft -
Wtr yr 1967: Total 771.79 Mean 2.11 Max 81 Min 0 Ac-ft 1,530

Peak discharge (base, 300 cfs)

Note---No gage-height record Dec. 22 to Feb. 12.

Date	Time	Gage height	Discharge	Date	Time	Gage height	Discharge
7-16	0630	3.93	378	8- 7	2345	4.64	506
7-25	0030	4.57	494				

9-1775. Taylor Creek near Gateway, Colo.

Location--Lat 38°31', long 109°07', in sec.24, T.26 S., R.25 E., in Utah, on left bank at downstream side of bridge, a quarter of a mile downstream from South Taylor Creek and 12 miles southwest of Gateway.

Drainage area--12 sq mi, approximately.

Records available--October 1944 to September 1967 (discontinued). Monthly discharge only for some periods, published in WSP 1313.

Gage--Water-stage recorder and plank control. Altitude of gage is 8,120 ft (by barometer). Prior to Aug. 31, 1949, at site 770 ft downstream at datum 6.00 ft lower.

Average discharge--23 years, 3.17 cfs (2,290 acre-ft per years), unadjusted.

Extremes--Maximum discharge during year, 48 cfs Mar. 16 (gage height, 2.97 ft); minimum daily, 0.10 cfs Dec. 25.

1944-67: Maximum discharge, 555 cfs Apr. 18, 1948, from rating curve extended above 220 cfs; maximum gage height, 5.72 ft Aug. 6, 1945, site and datum then in use; no flow at times June to August 1946, Sept. 29, 1949, May 17, 18, 1964.

Remarks--Records good except those for winter period, which are fair. Transbasin diversion above station by Hubbard ditch for irrigation in John Brown Creek basin began in spring of 1956. Since May 1962 water imported from Beaver Creek basin enters Taylor Creek above Hubbard ditch (quantities unknown prior to October 1965).

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.36	0.46	0.36	0.67	0.25	1.5	0.98	2.2	2.0	0.46	0.20	0.18
2	.36	.46	.36	.67	.20	2.2	.98	2.4	1.3	.25	.20	.20
3	.46	.46	.36	.50	.20	3.5	1.1	2.4	1.2	.22	.22	.18
4	.46	.46	.46	.46	.25	4.5	1.5	2.4	1.5	.20	.22	.18
5	.36	.46	.56	.46	.30	3.0	2.0	2.7	1.7	.20	.22	.15
6	.46	.46	1.4	.46	.30	2.2	1.3	2.9	1.7	.20	.36	.15
7	.67	.46	1.1	.36	.25	1.7	1.1	2.7	1.7	.20	.67	.15
8	.56	.56	3.1	.25	.20	1.5	1.1	2.4	1.5	.25	.25	.18
9	.46	.56	2.4	.20	.25	1.7	.98	2.6	1.3	.25	.20	.18
10	.25	.67	1.5	.15	.36	2.4	.98	3.4	1.1	.25	.20	.15
11	.36	.67	1.2	.20	.36	6.9	.98	3.6	1.2	.36	.15	.12
12	.56	.78	1.1	.25	.36	9.6	.78	3.4	1.3	.25	.15	.12
13	.46	.46	.98	.30	.36	5.7	.98	3.4	1.3	.25	.15	.15
14	.46	.36	.88	.30	.36	1.7	.78	3.1	1.7	.67	.12	.15
15	.46	.36	.78	.30	.46	2.2	.67	2.9	1.5	1.3	.12	.15
16	.46	.56	.67	.25	.46	1.0	.78	2.7	1.2	.36	.12	.15
17	.46	.46	.67	.30	.30	1.2	.67	2.6	.98	.98	.12	.15
18	.46	.36	.67	.30	.30	6.6	.67	2.6	.88	.46	.12	.12
19	.36	.36	.78	.25	.25	4.9	.56	2.9	1.5	.22	.12	.12
20	.25	.36	.67	.25	.20	3.6	.56	2.9	2.7	.18	.12	.12
21	.25	.36	.50	.25	.25	3.1	.56	2.7	2.6	.15	.12	.15
22	.36	.36	.40	.25	.30	3.1	.56	2.9	1.8	.12	.12	.15
23	.36	.25	.30	.36	.46	3.1	.56	2.9	1.3	.12	.12	.15
24	.25	.22	.20	.46	.56	2.6	.56	2.9	1.1	.12	.12	.15
25	.36	.22	.10	.46	.67	2.0	.67	3.1	1.1	.15	.12	.15
26	.46	.25	.15	.46	.67	1.7	.56	4.9	.98	.15	.12	.18
27	.46	.22	.20	.35	.67	1.7	.67	4.7	.98	.15	.15	.12
28	.46	.25	.20	.30	.88	1.3	1.7	6.0	.88	.15	.18	.12
29	.46	.36	.25	.25	-	1.1	2.2	3.6	.78	.15	.18	.12
30	.46	.36	.30	.30	- - - -	1.1	2.4	2.9	.67	.15	.18	.15
31	.46	- - - -	.35	.35	- - - -	.98	- - - -	2.7	- - - -	.18	.15	- - - -
Total	13.03	12.59	45.45	10.67	10.43	109.18	29.89	95.5	41.45	9.10	5.59	4.49
Mean	0.420	0.420	1.47	0.344	0.372	3.52	0.996	3.08	1.38	0.294	0.180	0.150
Max	0.67	0.78	1.4	0.67	0.88	12	2.4	6.0	2.7	1.3	0.67	0.20
Min	0.25	0.22	0.10	0.15	0.20	0.98	0.56	2.2	0.67	0.12	0.12	0.12
Ac-ft	26	25	90	21	21	217	59	189	82	18	11	8.9
(†)	0	0	7.3	0	0	46	112	11	41	1.5	6.9	0
Cal yr 1966: Total	1,023.97			Mean 2.81	Max 65	Min 0.10	Ac-ft 2,030					
Wtr yr 1967: Total	387.37			Mean 1.06	Max 14	Min 0.10	Ac-ft 768					

† Diversions, in acre-feet, by Hubbard ditch.

9-2360. Yampa River near Toponas, Colo.

Location.--Lat 40°03', long 107°04', in NW¼ sec.20, T.1 N., R.86 W., on right bank just downstream from Yampa Reservoir Dam at Stillwater campground, three-quarters of a mile downstream from Mandall Creek, three-quarters of a mile upstream from Dome Creek, and 14 miles west of Toponas. Prior to Oct. 1, 1966, at site 50 ft upstream.

Drainage area.--23 sq mi, approximately.

Records available.--October 1952 to September 1965, October 1966 to September 1967.

Gage.--Water-stage recorder and Parshall flume. Altitude of gage is 9,700 ft (from river-profile map). Oct. 28, 1952, to Sept. 30, 1965, at site 50 ft upstream at different datum.

Average discharge.--14 years, 39.7 cfs (28,740 acre-ft per year).

Extremes.--Maximum discharge during year, 123 cfs June 20 (gage height, 1.84 ft); minimum daily, 1.6 cfs Oct. 6-24, Nov. 18 to Dec. 8. 1952-65, 1966-67: Maximum discharge, 436 cfs July 2, 1957 (gage height, 6.39 ft, site and datum then in use); minimum daily, that of Oct. 6-24, Nov. 18 to Dec. 8, 1966.

Remarks.--Records good except those for period of no gage-height record, which are poor. Flow regulated by Stillwater Reservoir and Yampa Reservoir (total capacity, 6,820 acre-ft).

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	7.5	11	1.6	11	10	12	13	16	62	90	66	39
2	10	11	1.6	11	10	12	13	14	74	103	64	37
3	18	11	1.6	11	10	12	13	13	81	110	59	35
4	18	11	1.6	11	10	12	14	12	84	111	56	34
5	15	11	1.6	11	10	12	14	12	86	109	55	34
6	1.6	11	1.6	11	10	12	14	12	93	107	52	34
7	1.6	11	1.6	11	10	12	14	13	89	109	51	35
8	1.6	11	1.6	11	10	12	14	14	86	115	50	40
9	1.6	12	10	11	11	12	14	16	82	112	43	40
10	1.6	40	12	11	11	12	14	24	78	115	40	30
11	1.6	88	12	10	11	12	14	23	78	116	40	30
12	1.6	68	12	10	11	12	15	22	88	112	38	33
13	1.6	76	12	10	11	12	14	21	87	104	37	30
14	1.6	73	12	10	11	12	14	18	92	108	36	28
15	1.6	38	12	10	12	12	14	16	103	108	37	28
16	1.6	15	12	10	12	12	14	18	102	105	35	28
17	1.6	6.0	12	10	11	12	14	23	103	103	34	28
18	1.6	1.6	12	10	12	12	14	30	105	100	33	29
19	1.6	1.6	12	10	12	12	14	37	107	94	34	32
20	1.6	1.6	12	10	12	12	14	38	115	91	33	30
21	1.6	1.6	12	10	12	12	14	40	92	92	33	29
22	1.6	1.6	12	10	12	12	13	52	89	88	32	27
23	1.6	1.6	12	10	12	12	12	66	88	90	31	27
24	1.6	1.6	12	10	12	12	12	81	86	89	31	28
25	14	1.6	12	10	12	13	12	87	84	81	31	44
26	14	1.6	12	10	12	13	12	81	82	77	33	46
27	14	1.6	12	10	12	13	12	72	82	74	34	44
28	14	1.6	12	10	12	13	13	72	86	73	35	44
29	12	1.6	12	10	-	12	14	70	84	70	36	43
30	12	1.6	12	10	- - - -	13	16	63	88	68	37	43
31	12	- - - -	12	10	- - - -	13	- - - -	59	- - - -	68	38	- - - -
Total	190.9	524.8	286.8	320	313	378	408	1,135	2,656	2,992	1,264	1,029
Mean	6.16	17.5	9.25	10.3	11.2	12.2	13.6	36.6	88.5	96.5	40.8	34.3
Max	18	88	12	11	12	13	16	87	115	116	66	46
Min	1.6	1.6	1.6	10	10	12	12	12	62	68	31	27
Ac-ft	379	1,040	569	635	621	750	809	2,250	5,270	5,930	2,510	2,040

Cal yr 1966: Total - Mean - Max - Min - Ac-ft -
Wtr yr 1967: Total 11,497.5 Mean 31.5 Max 116 Min 1.6 Ac-ft 22,800

Note.--No gage-height record Nov. 17 to Feb. 8.

9-2375. Yampa River near Oak Creek, Colo.

Location.--Lat 40°17', long 106°50', in SE¼ sec.29, T.4 N., R.84 W., on left bank just upstream from Upper Yampa damsite, 1 mile upstream from Morrison Creek, and 6½ miles east of town of Oak Creek.

Drainage area.--227 sq mi.

Records available.--September 1939 to September 1944, October 1956 to September 1967. Monthly discharge only for some periods, published in WSP 1313.

Gage.--Water-stage recorder. Altitude of gage is 7,100 ft (from river-profile map). Prior to Nov. 16, 1939, staff gage at same site and datum.

Average discharge.--16 years, 80.2 cfs (58,060 acre-ft per year).

Extremes.--Maximum discharge during year, 218 cfs June 22 (gage height, 3.96 ft), from rating curve extended above 160 cfs; maximum gage height, 4.79 ft Mar. 22 (backwater from ice); minimum daily discharge, 25 cfs Oct. 1.

1939-44, 1956-67: Maximum discharge, 1,400 cfs Apr. 16, 1962 (gage height, 7.56 ft), from rating curve extended above 540 cfs; minimum daily, 8.9 cfs May 22, 1963.

Remarks.--Records good except those for winter period, which are poor. Diversions for irrigation of about 12,000 acres above station. Natural flow of stream affected by 2 diversions for irrigation to Egeria Creek in Colorado River basin and by storage in Stillwater and Yampa Reservoirs (total capacity, 6,820 acre-ft).

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	25	49	40	38	40	48	99	54	103	92	80	49
2	30	53	40	38	36	46	117	64	95	76	76	39
3	61	56	35	36	34	46	114	61	90	73	83	38
4	54	52	35	36	34	50	128	62	92	68	87	38
5	60	48	35	40	36	50	136	57	94	72	81	36
6	56	50	31	40	36	46	119	56	98	70	83	34
7	48	52	34	36	28	44	96	47	92	103	89	33
8	42	53	44	34	34	44	98	51	80	130	98	30
9	39	51	36	36	38	44	92	64	70	101	89	47
10	35	62	32	38	40	46	90	74	58	89	90	43
11	36	110	44	40	42	50	76	74	60	80	81	43
12	45	112	42	42	44	55	80	64	81	89	74	51
13	42	103	44	42	44	60	80	58	78	78	73	47
14	44	117	44	40	40	65	73	52	78	74	74	43
15	45	98	44	38	40	65	70	44	114	81	98	47
16	48	67	40	36	44	60	80	40	142	103	99	47
17	49	56	40	36	42	70	76	36	134	108	83	51
18	49	45	40	36	40	80	89	42	123	119	74	54
19	44	38	42	38	38	95	81	45	125	101	68	81
20	48	38	42	40	36	100	90	56	160	90	68	66
21	48	38	42	41	34	95	70	52	160	92	68	57
22	42	35	42	42	34	100	64	73	176	87	70	53
23	43	36	38	42	36	110	61	101	162	89	68	52
24	43	30	34	40	38	116	56	116	126	90	64	51
25	43	30	36	38	42	128	57	126	119	93	47	56
26	51	34	38	36	42	89	57	142	136	74	45	57
27	57	40	40	36	40	91	53	138	125	74	40	64
28	56	46	34	40	40	94	45	132	119	73	44	61
29	54	51	32	44	-	174	49	126	119	74	40	52
30	54	49	32	46	- - - -	121	57	119	105	74	39	51
31	53	- - - -	36	46	- - - -	95	- - - -	121	- - - -	66	43	- - - -
Total	1,444	1,699	1,188	1,211	1,072	2,357	2,433	2,347	3,304	2,673	2,216	1,471
Mean	46.6	56.6	38.3	39.1	38.3	76.0	81.1	75.7	110	86.2	71.5	49.0
Max	61	117	44	46	44	174	136	142	176	130	99	81
Min	25	30	31	34	28	44	45	36	58	66	39	30
Ac-ft	2,860	3,370	2,360	2,400	2,130	4,680	4,830	4,660	6,550	5,300	4,400	2,920
Cal yr 1966: Total	18,596		Mean 50.9	Max 218	Min 23	Ac-ft 36,880						
Wtr yr 1967: Total	23,415		Mean 64.2	Max 176	Min 25	Ac-ft 46,440						

9-2378. Service Creek near Oak Creek, Colo.

Note.--Records for the 1967 water year are being withheld pending further study of base data. They will be published in a subsequent annual report.

GREEN RIVER BASIN

9-2385. Walton Creek near Steamboat Springs, Colo.

Note.--Records for the 1967 water year are being withheld pending further study of base data. They will be published in a subsequent annual report.

9-2389. Fish Creek at upper station, near Steamboat Springs, Colo.

Location.--Lat 40°28'30", long 106°47'10", in SE¼ sec.15, T.6 N., R.84 W., on right bank 2½ miles upstream from mouth and 2½ miles east of Steamboat Springs.

Drainage area.--25.8 sq mi.

Records available.--October 1966 to September 1967.

Gage.--Water-stage recorder and concrete control. Altitude of gage is 7,100 ft (from topographic map). Records collected 1918-20 near mouth not equivalent due to diversions. Supplementary water-stage recorder on Welch and Waters ditch.

Extremes.--Maximum discharge during year, 750 cfs (estimated) May 25; minimum daily, 49 cfs Aug. 27, 28.

Remarks.--Records fair. Records show combine flow of creek and Welch and Waters ditch. Welch and Waters ditch diverts water a quarter of a mile above station for irrigation below station. Natural flow of stream affected by storage in Fish Creek and Long Lake Reservoirs.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	11	7.2	8.4	8.1	8.4	6.9	14	36	340	254	14	12
2	15	8.4	8.4	8.4	8.4	7.2	15	32	400	224	14	8.8
3	20	9.0	8.7	8.4	8.4	7.2	19	29	440	186	13	7.7
4	18	8.4	8.7	8.1	8.1	7.2	23	27	420	194	13	7.0
5	16	7.5	8.7	8.4	8.1	6.9	26	27	400	163	12	6.5
6	18	8.4	8.7	8.1	7.8	6.6	28	27	380	136	11	6.4
7	18	8.1	9.0	8.4	7.8	6.3	31	29	377	151	17	6.4
8	18	8.1	9.0	7.5	7.5	6.3	37	40	311	148	23	7.0
9	16	6.9	8.7	7.2	7.5	6.3	33	58	269	106	16	11
10	14	8.7	9.0	6.9	7.2	6.3	32	71	255	82	16	9.2
11	15	8.4	9.4	7.5	7.2	6.6	37	67	355	76	14	10
12	19	8.4	9.0	7.5	7.2	7.2	39	65	355	76	12	21
13	17	8.4	8.7	7.8	6.9	7.2	33	60	361	70	11	14
14	16	8.1	8.4	7.8	6.9	6.6	30	49	385	58	9.1	10
15	13	8.4	8.4	8.1	6.9	6.6	30	44	331	58	9.1	9.1
16	13	8.4	8.4	8.1	7.2	7.2	29	47	301	58	9.0	8.6
17	14	8.7	8.4	7.8	7.5	9.0	28	52	355	102	8.6	9.4
18	12	8.7	8.4	7.8	8.1	12	33	85	457	139	7.6	10
19	11	8.4	8.4	7.8	7.8	12	40	112	480	71	7.2	18
20	12	8.4	8.4	7.8	7.2	10	40	135	520	53	7.2	17
21	12	8.7	8.4	7.8	7.2	9.8	33	180	500	43	7.2	13
22	9.6	8.7	8.4	7.8	7.5	9.8	29	260	543	38	6.8	10
23	11	8.4	8.1	8.1	7.5	11	26	360	473	36	6.3	8.9
24	11	8.1	8.1	8.7	7.5	13	23	460	413	42	5.8	8.2
25	11	6.3	8.1	8.7	7.5	15	22	550	425	38	5.4	9.0
26	11	7.2	8.1	9.0	7.2	14	21	560	401	30	5.3	9.1
27	11	6.0	8.1	8.7	6.9	13	22	520	395	25	4.9	8.8
28	11	8.1	8.1	8.7	6.6	13	28	480	324	20	4.9	7.7
29	11	9.0	8.1	8.7	-	15	39	440	294	18	7.7	7.4
30	11	9.0	8.1	8.7	- - - -	16	44	420	279	16	11	7.0
31	9.8	- - - -	8.1	8.4	- - - -	14	- - - -	380	- - - -	15	10	- - - -
Total	425.4	244.5	262.9	250.8	210.0	295.2	884	5,702	11,539	2,726	319.1	298.2
Mean	13.7	8.15	8.48	8.09	7.50	9.52	29.5	184	385	87.9	10.3	9.94
Max	20	9.0	9.4	9.0	8.4	16	44	560	543	254	23	21
Min	9.6	6.0	8.1	6.9	6.6	6.3	14	27	255	15	4.9	6.4
Ac-ft	844	485	521	497	417	586	1,750	11,310	22,890	5,410	633	591

Cal yr 1966: Total - Mean - Max - Min - Ac-ft -
 Wtr yr 1967: Total 23,157.1 Mean 63.4 Max 560 Min 4.9 Ac-ft 45,930

Peak discharge (base, 500 cfs).--May 25 (time and gage-height unknown) 750 cfs (estimated); June 18 (1830) 713 cfs (2.64 ft).

Note.--No gage-height record May 21 to June 6.

9-2394. Spring Creek near Steamboat Springs, Colo.

Location.--Lat 40°29'30", long 106°48'20", in NE¼SE¼ sec.9, T.6 N., R.84 W., on left bank 1.5 miles east of Steamboat Springs and 1.6 miles upstream from mouth.

Drainage area.--6.96 sq mi.

Records available.--October 1965 to September 1967.

Gage.--Water-stage recorder and concrete control. Supplementary water-stage recorder on Steamboat Garden ditch since October 1966.

Extremes.--Maximum discharge during year, 93 cfs May 25 (gage height, 2.98 ft), minimum daily, 0.17 cfs Oct. 16.
1965-67: Maximum discharge, that of May 25, 1967; minimum daily, that of Oct. 16, 1966.

Remarks.--Records good. Records show combined flow of creek and Steamboat Garden ditch since October 1966. Steamboat Garden ditch diverts water 1.3 miles above station for irrigation in Soda Creek drainage.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.49	0.64	0.90	0.80	0.90	1.2	4.8	25	59	17	2.2	1.3
2	1.1	.85	.95	.80	.90	1.2	6.0	22	62	15	2.3	.98
3	2.2	.90	1.0	.80	.90	1.3	8.3	21	69	12	2.2	.87
4	1.2	.90	1.0	.80	.95	1.2	1.0	20	68	12	2.0	.77
5	1.4	.66	.95	.85	.95	1.2	1.3	19	69	11	1.9	.71
6	1.4	.90	.90	.85	.90	1.2	1.5	20	66	9.8	1.8	.72
7	1.3	.95	1.1	.85	.85	1.1	1.5	23	63	11	2.6	.67
8	1.1	.95	1.0	.80	.76	1.0	1.6	32	58	10	2.6	.81
9	1.0	.90	.95	.80	.85	1.1	1.6	32	52	8.4	2.0	1.1
10	.90	.95	.85	.80	.90	1.2	1.7	24	48	7.2	2.0	.98
11	.90	1.0	.90	.80	.90	1.3	1.8	26	46	6.6	1.8	1.1
12	.98	1.0	.90	.85	.85	1.6	1.8	26	44	6.4	1.8	1.6
13	1.0	1.0	.90	.85	.90	1.7	1.4	24	43	5.9	1.8	1.2
14	1.1	.95	.90	.85	.90	1.5	1.3	19	42	5.6	1.5	1.1
15	.55	.95	.90	.90	.85	1.5	1.3	17	38	5.7	1.5	1.0
16	.17	1.0	.90	.90	.90	1.7	1.3	17	36	5.6	1.4	1.0
17	.40	1.0	.85	.90	.90	2.3	1.4	21	37	7.9	1.4	1.0
18	1.1	1.2	.85	.90	.90	3.3	1.5	27	42	9.0	1.2	1.3
19	.90	1.0	.85	.85	.90	4.0	1.6	33	44	5.5	1.2	1.8
20	.98	.95	.85	.85	.90	3.2	1.6	36	50	4.6	1.3	1.3
21	.98	1.0	.85	.85	.85	2.8	1.2	43	42	4.2	1.3	1.0
22	.78	1.0	.85	.90	.90	2.9	1.2	49	41	3.9	1.1	.96
23	.98	1.0	.80	.90	.90	3.3	1.1	59	36	4.0	1.1	.90
24	.94	.85	.80	.90	.90	3.8	1.1	65	32	4.7	1.0	.99
25	.98	.52	.80	.90	.90	4.5	1.2	76	30	4.0	.96	1.2
26	.94	.85	.80	.90	.90	3.8	1.2	82	28	3.3	.92	1.1
27	.94	.70	.80	.90	.90	3.5	1.2	76	26	2.9	.90	1.0
28	.94	.76	.80	.90	.95	3.8	1.6	76	24	2.9	.86	.92
29	.98	.90	.76	.90	-	5.5	2.3	77	21	2.5	1.0	.89
30	.94	.95	.80	.90	- - - - -	5.7	2.6	68	19	2.3	1.2	.89
31	.98	- - - - -	.80	.90	- - - - -	4.7	- - - - -	64	- - - - -	2.3	1.2	- - - - -
Total	30.55	27.18	27.26	26.65	24.96	78.1	418.1	1,219	1,335	213.2	48.04	31.16
Mean	0.985	0.906	0.879	0.860	0.891	2.52	13.9	39.3	44.5	6.88	1.55	1.04
Max	2.2	1.2	1.1	0.90	0.95	5.7	26	82	69	17	2.6	1.8
Min	0.17	0.52	0.76	0.80	0.76	1.0	4.8	17	19	2.3	0.86	0.67
Ac-ft	61	54	54	53	50	155	829	2,420	2,650	423	95	62

Cal yr 1966: Total 2,060.29 Mean 5.64 Max 51 Min 0.10 Ac-ft 4,090
Wtr yr 1967: Total 3,479.20 Mean 9.53 Max 82 Min 0.17 Ac-ft 6,900

Peak discharge (base, 50 cfs)

Date	Time	Gage height	Discharge	Date	Time	Gage height	Discharge
5-25	2315	2.98	93	6-20	1500	2.76	67
6-5	1830	2.84	77				

9-2395. Yampa River at Steamboat Springs, Colo.

Location.--Lat 40°29', long 106°50', in sec.17, T.6 N., R.84 W., on right bank 30 ft downstream from First Street Bridge in Steamboat Springs and a quarter of a mile upstream from Soda Creek.

Drainage area.--604 sq mi.

Records available.--May 1904 to October 1906, October 1909 to September 1967. Monthly discharge only for some periods, published in WSP 1313.

Gage.--Water-stage recorder. Datum of gage is 6,695.47 ft above mean sea level, datum of 1929. Prior to May 8, 1905, staff gage at bridge a quarter of a mile upstream at datum 4.16 ft higher. May 8, 1905, to Oct. 31, 1906, chain gage on bridge 30 ft upstream at datum 0.44 ft higher. Mar. 8, 1910, to Sept. 11, 1934, water-stage recorder at present site at datum 0.44 ft higher.

Average discharge.--60 years, 463 cfs (335,200 acre-ft per year).

Extremes.--Maximum discharge during year, 2,940 cfs May 26 (gage height, 4.91 ft); minimum daily, 63 cfs Oct. 1.

1904-6, 1909-67: Maximum discharge, 6,820 cfs June 14, 1921 (gage height, 7.08 ft, present datum), from rating curve extended above 4,800 cfs; minimum daily, 4 cfs Sept. 8, 1934, Sept. 10-13, 1944.

Remarks.--Records good except those for winter period, which are poor. Natural flow of stream affected by 2 diversions for irrigation to Egeria Creek in Colorado River basin, 1 diversion for irrigation from Trout Creek drainage to Oak Creek drainage, irrigation of about 19,700 acres above station and storage reservoirs.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	63	100	81	80	98	90	400	430	1,990	755	148	109
2	78	88	98	80	90	95	534	410	2,130	659	150	102
3	160	104	98	75	80	104	550	365	2,250	578	150	88
4	150	106	100	80	80	108	653	360	2,160	588	160	80
5	128	90	93	90	80	100	737	331	2,180	534	150	75
6	145	104	69	85	75	95	611	350	2,170	451	152	70
7	160	102	96	75	85	98	512	322	2,050	528	162	66
8	150	104	102	70	80	96	517	390	1,810	653	202	65
9	138	100	111	75	75	95	495	544	1,650	500	182	88
10	117	98	80	80	84	98	415	671	1,500	380	182	104
11	115	126	85	85	88	104	435	683	1,520	322	172	93
12	128	170	95	90	93	117	484	689	1,530	340	155	126
13	140	162	90	90	85	126	435	641	1,440	283	148	138
14	140	162	90	90	95	131	380	550	1,560	252	135	106
15	131	162	95	90	86	125	360	473	1,520	248	150	93
16	131	140	90	85	85	120	395	425	1,380	259	160	90
17	131	117	95	80	90	152	355	506	1,450	345	148	95
18	122	109	90	85	86	202	425	713	1,540	600	133	100
19	108	96	85	80	84	283	430	941	1,660	355	117	150
20	111	90	85	75	80	287	462	1,070	1,970	275	115	172
21	115	98	85	80	75	283	395	1,200	1,650	241	115	135
22	104	93	90	80	80	271	345	1,550	1,700	214	115	117
23	108	96	80	80	83	300	318	1,930	1,560	208	111	106
24	102	88	70	85	84	322	287	2,160	1,340	217	106	95
25	102	68	75	90	91	340	287	2,510	1,260	217	93	100
26	104	66	80	90	93	300	271	2,810	1,280	205	88	106
27	117	70	90	91	90	271	263	2,570	1,130	180	80	111
28	117	75	75	91	85	248	295	2,560	990	170	81	109
29	115	95	70	96	-	517	410	2,450	906	158	93	104
30	111	100	75	93	- - - -	517	500	2,180	837	155	106	98
31	108	- - - -	80	96	- - - -	331	- - - -	2,000	- - - -	145	96	- - - -
Total	3,749	3,179	2,698	2,612	2,380	6,326	12,956	34,784	48,113	11,015	4,155	3,091
Mean	121	106	87.0	84.3	85.0	204	432	1,122	1,604	355	134	103
Max	160	170	111	96	98	517	737	2,810	2,250	755	202	172
Min	63	66	69	70	75	90	263	322	837	145	80	65
Ac-ft	7,440	6,310	5,350	5,180	4,720	12,550	25,700	68,990	95,430	21,850	8,240	6,130

Cal yr 1966: Total 95,397 Mean 261 Max 1,780 Min 45 Ac-ft 189,200

Wtr yr 1967: Total 135,058 Mean 370 Max 2,810 Min 63 Ac-ft 267,900

Peak discharge (base, 3,000 cfs).--No peak above base.

9-2410. Elk River at Clark, Colo.

Location.--Lat 40°43'03", long 106°54'55", in NW 1/4 sec. 27, T.9 N., R.85 W., on left bank 30 ft downstream from bridge on State Highway 129, 0.8 mile north of Clark, and 2 miles upstream from Cottonwood Gulch.

Drainage area.--206 sq mi.

Records available.--May 1910 to September 1922 (published as "near Clark"), April 1930 to September 1967. Monthly discharge only for some periods, published in WSP 1313.

Gage.--Water-stage recorder. Datum of gage is 7,267.75 ft above mean sea level (State Highway Department bench mark). May 1910 to September 1922, chain gage at site 30 ft upstream at datum 0.15 ft lower. Apr. 23, 1930, to Sept. 27, 1934, water-stage recorder at present site at datum 0.15 ft lower.

Average discharge.--49 years, 338 cfs (244,700 acre-ft per year).

Extremes.--Maximum discharge during year, 2,400 cfs May 25 (gage height, 4.67 ft); minimum daily, 33 cfs Nov. 25, Jan. 8.

1910-22, 1930-67: Maximum daily discharge, 4,470 cfs June 6, 9, 1912; minimum daily determined, 22 cfs Dec. 12, 1963, but a lesser discharge may have occurred during periods of no gage-height record prior to 1939.

Remarks.--Records good except those for winter period, which are poor. Diversions above station for irrigation of about 230 acres above and about 460 acres below station.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	36	39	55	40	45	50	67	266	1,310	1,370	197	86
2	46	43	50	38	47	50	66	217	1,480	1,260	192	79
3	88	47	50	36	46	49	67	199	1,630	1,140	182	71
4	72	46	55	37	45	48	80	199	1,710	1,100	172	67
5	73	40	55	39	45	47	92	207	1,720	1,070	163	65
6	84	47	76	38	45	44	95	241	1,800	988	157	62
7	80	45	65	35	44	44	102	370	1,670	973	180	61
8	76	45	55	33	43	48	124	654	1,520	917	194	65
9	67	43	45	35	45	50	144	720	1,480	834	170	71
10	59	49	42	38	47	49	152	738	1,280	756	155	80
11	59	46	48	40	49	50	187	690	1,200	690	148	73
12	61	46	50	44	50	49	215	624	1,160	630	141	116
13	66	45	49	45	52	50	202	540	1,180	570	130	82
14	68	43	47	45	52	49	192	425	1,220	564	126	71
15	58	49	48	44	50	47	197	360	1,200	588	128	67
16	62	51	47	43	47	46	210	380	1,130	530	126	79
17	58	49	46	41	48	50	189	570	1,230	570	116	102
18	56	49	46	40	46	55	226	780	1,420	696	108	144
19	48	44	44	40	45	60	330	882	1,630	510	99	157
20	54	43	42	40	42	65	330	980	1,860	455	97	128
21	55	49	43	42	42	65	254	1,070	1,750	400	99	124
22	41	47	44	45	46	62	204	1,340	1,730	365	95	116
23	52	46	43	47	48	65	194	1,560	1,720	350	92	101
24	49	43	39	47	52	65	180	1,760	1,640	390	85	99
25	49	33	40	47	52	69	163	2,010	1,420	330	82	184
26	48	40	41	47	52	66	146	1,970	1,370	290	80	152
27	48	45	42	48	51	66	161	1,730	1,370	266	79	120
28	48	50	39	48	50	66	238	1,700	1,340	241	80	104
29	47	55	38	47	-	68	410	1,770	1,220	238	80	95
30	45	55	38	46	-	66	420	1,560	1,320	210	93	90
31	46	-	39	45	-	63	-	1,520	-	202	93	-
Total	1,799	1,372	1,461	1,300	1,326	1,721	5,637	28,032	43,710	19,483	3,939	2,911
Mean	58.0	45.7	47.1	41.9	47.4	55.5	188	904	1,457	628	127	97.0
Max	88	55	76	48	52	69	420	2,010	1,860	1,370	197	184
Min	36	33	38	33	42	44	66	199	1,130	202	79	61
Ac-ft	3,570	2,720	2,900	2,580	2,630	3,410	11,180	55,600	86,700	38,640	7,810	5,770

Cal yr 1966: Total 84,466 Mean 231 Max 1,520 Min 32 Ac-ft 167,500

Wtr yr 1967: Total 112,691 Mean 309 Max 2,010 Min 33 Ac-ft 223,500

Peak discharge (base, 1,900 cfs)

Date	Time	Gage height	Discharge	Date	Time	Gage height	Discharge
5-25	2200	4.67	2,400	6-20	2030	4.45	2,140
6-5	2230	4.28	1,950				

Note.--No gage-height record Dec. 11 to Mar. 21.

GREEN RIVER BASIN

9-2441. Fish Creek near Milner, Colo.

Location.--Lat 40°20'10", long 107°08'20", in NW¼ sec.11, T.4 N., R.87 W., on left bank 200 ft downstream from highway bridge, a quarter of a mile upstream from Coyote Creek, and 12 miles southwest of Milner.

Drainage area.--34.5 sq mi.

Records available.--October 1955 to September 1967.

Gage.--Water-stage recorder. Altitude of gage is 6,930 ft (from topographic map). Prior to Apr. 8, 1958, at site 200 ft upstream at different datum. Apr. 8 to Aug. 14, 1958, at site 200 ft upstream at datum 3.15 ft higher.

Average discharge.--12 years, 11.8 cfs (8,540 acre-ft per year).

Extremes.--Maximum discharge during year, 115 cfs May 21 (gage height, 4.26 ft); minimum daily, 1.2 cfs Aug. 26, 27.

1955-67: Maximum discharge, 255 cfs Mar. 27, 1960 (gage height, 5.63 ft), from rating curve extended above 110 cfs; maximum gage height, 6.13 ft Feb. 1, 1963 (ice jam); minimum daily discharge, 0.40 cfs Sept. 22, 1964, July 30 to Aug. 1, 1966.

Remarks.--Records good except those for winter period, which are poor. Diversions above station for irrigation.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.4	2.4	3.6	3.2	4.8	3.8	11	25	23	7.8	2.1	2.1
2	3.2	2.2	3.4	3.2	4.6	3.6	12	22	23	7.5	1.8	2.1
3	8.4	2.4	3.4	3.4	4.4	3.8	13	21	23	7.5	2.4	1.8
4	4.1	2.6	3.4	3.6	4.0	4.0	21	20	26	8.1	2.2	1.5
5	3.7	2.8	3.6	3.6	3.8	4.0	20	20	26	6.7	2.1	1.4
6	3.7	3.0	5.0	3.4	3.6	3.9	17	21	22	5.3	2.1	1.4
7	3.2	3.1	4.0	3.2	3.6	3.8	17	22	19	9.1	2.6	1.4
8	3.1	3.2	3.0	3.0	3.6	3.8	17	30	16	14	2.4	1.6
9	2.8	3.0	2.6	3.0	3.6	3.8	16	45	14	10	2.4	1.8
10	2.5	3.0	2.4	3.2	3.4	4.0	14	54	14	8.4	3.2	1.8
11	2.6	3.2	2.6	3.4	3.4	4.2	16	56	15	8.1	2.6	1.9
12	3.1	3.4	2.8	3.4	3.4	4.4	18	52	15	8.4	1.9	2.4
13	3.1	3.4	3.0	3.7	3.6	4.6	16	41	15	8.8	1.8	2.4
14	3.9	3.0	3.0	3.7	3.8	5.5	13	30	15	8.4	1.6	2.2
15	3.4	3.2	2.8	3.7	3.8	5.5	16	26	20	8.4	1.8	1.8
16	3.4	3.2	2.6	3.6	3.8	5.0	19	28	18	9.5	1.7	2.0
17	2.9	3.2	2.8	3.6	3.6	7.0	19	42	17	10	1.4	2.6
18	3.1	3.4	3.0	3.6	3.4	10	17	54	16	9.8	1.4	3.4
19	2.8	3.0	3.2	3.6	3.2	12	19	61	15	7.8	1.4	5.0
20	3.1	3.0	3.2	3.9	3.2	11	19	66	19	5.5	1.4	7.5
21	2.9	3.4	3.2	3.9	3.2	11	16	60	20	4.6	1.5	7.0
22	2.5	3.2	3.0	3.9	3.2	11	15	52	24	4.8	1.4	6.0
23	2.9	3.0	2.8	3.9	3.4	13	14	41	22	4.4	1.4	5.5
24	2.6	2.4	2.8	3.9	3.6	15	14	37	18	4.4	1.4	5.0
25	2.4	2.4	3.0	3.9	3.6	14	15	42	16	3.9	1.4	4.2
26	2.4	2.4	3.4	3.9	3.6	12	14	46	14	3.4	1.2	4.4
27	2.6	2.8	3.6	4.1	3.8	9.5	17	50	9.8	3.2	1.2	4.8
28	2.8	3.6	3.4	4.1	3.8	11	25	71	10	3.1	1.8	4.8
29	2.8	4.6	3.2	4.6	-	16	35	58	8.8	2.5	1.6	4.6
30	2.6	4.6	3.4	4.8	- - - - -	14	33	39	8.4	2.4	1.7	4.4
31	2.6	- - - - -	3.4	4.8	- - - - -	14	- - - - -	31	- - - - -	2.5	2.2	- - - - -
Total	96.6	92.1	98.6	114.8	102.8	248.2	528	1,263	522.0	208.3	57.1	98.8
Mean	3.12	3.07	3.18	3.70	3.67	8.01	17.6	40.7	17.4	6.72	1.84	3.29
Max	8.4	4.6	5.0	4.8	4.8	16	35	71	26	14	3.2	7.5
Min	1.4	2.2	2.4	3.0	3.2	3.6	11	20	8.4	2.4	1.2	1.4
Ac-ft	192	183	196	228	204	492	1,050	2,510	1,040	413	113	196

Cal yr 1966: Total 2,187.0 Mean 5.99 Max 37 Min 0.40 Ac-ft 4,340

Wtr yr 1967: Total 3,430.3 Mean 9.40 Max 71 Min 1.2 Ac-ft 6,800

Peak discharge (base, 180 cfs).--No peak above base.

9-2444. Yampa River near Hayden, Colo.

Location.--Lat 40°29'20", long 107°09'30", in sec.9, T.6 N., R.87 W., in bay of Colorado-Ute Electric Co. pumphouse on left bank 300 ft downstream from U. S. Highway 40, 0.1 mile upstream from Sage Creek, 0.2 mile downstream from diversion point of Gibraltar Canal, and 4.7 miles east of Hayden.

Drainage area.--1,430 sq mi, approximately.

Records available.--October 1965 to September 1967.

Gage.--Water-stage recorders on river and on Gibraltar Canal. Altitude of river gage is 6,380 ft (from topographic map).

Extremes.--1965-66: Maximum discharge during water year, 4,500 cfs May 9; minimum daily, 58 cfs Sept. 24.

1966-67: Maximum discharge during water year, 7,030 cfs May 26; minimum daily, 88 cfs Oct. 1, Sept. 8.

1965-67: Maximum discharge, 7,030 cfs May 26, 1967; minimum daily, 58 cfs Sept. 24, 1966.

Remarks.--Records fair except those for winter period, which are poor. Records show combined flow of river and Gibraltar Canal.

Natural flow of stream affected by diversions for irrigation of about 30,000 acres above and 200 acres below station, transbasin diversions, storage reservoirs, and return flow from irrigated areas.

Discharge, in cubic feet per second, water year October 1965 to September 1966

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	676	276	234	220	176	186	1,640	1,730	3,120	638	157	119
2	718	275	254	200	166	176	1,870	2,010	3,070	742	180	109
3	742	255	253	169	156	166	1,780	2,410	2,940	644	231	102
4	698	249	252	158	156	156	1,200	2,770	2,760	562	610	102
5	634	249	291	178	157	136	941	3,120	2,490	486	554	89
6	592	260	310	199	168	146	955	3,420	2,090	418	378	78
7	550	254	290	230	168	158	1,010	3,820	1,820	374	272	68
8	528	259	290	230	168	168	1,060	4,130	1,890	325	223	62
9	507	264	291	220	167	190	1,140	4,160	1,800	272	200	66
10	486	285	292	209	156	199	1,280	4,190	1,790	216	191	65
11	464	275	292	198	156	210	1,270	4,010	1,960	178	171	63
12	443	294	311	198	167	250	1,130	3,260	1,860	202	171	68
13	430	336	270	209	168	271	1,030	2,620	1,590	273	212	81
14	411	356	249	209	168	294	961	2,320	1,500	246	203	85
15	398	377	229	199	157	356	1,050	2,210	1,590	214	161	91
16	386	399	210	188	146	458	1,230	2,470	1,520	168	143	104
17	380	419	200	178	146	820	1,450	2,760	1,520	241	129	117
18	380	460	178	178	146	718	1,490	2,740	1,670	239	112	114
19	443	439	178	188	156	617	1,300	2,720	1,490	212	110	102
20	430	399	178	188	167	568	1,110	2,890	1,400	281	133	87
21	411	378	188	178	167	670	1,010	3,190	1,250	208	153	77
22	386	336	199	168	156	574	978	3,420	1,180	183	154	72
23	379	317	210	167	146	522	925	3,170	1,190	183	152	67
24	361	299	210	177	146	520	995	2,730	1,040	185	134	58
25	348	320	189	178	156	574	1,210	2,940	883	174	119	71
26	330	335	198	168	166	728	1,580	3,230	784	186	116	92
27	312	286	198	168	176	936	1,910	2,840	723	190	109	119
28	312	247	188	167	186	1,260	1,530	2,870	659	183	98	109
29	291	220	209	168	-	1,420	1,430	2,870	607	173	85	98
30	291	236	232	178	- - - -	1,500	1,500	3,250	613	159	82	89
31	286	- - - -	242	177	- - - -	1,510	- - - -	3,440	- - - -	154	97	- - - -
Total	14,003	9,354	7,315	5,840	4,514	16,457	37,965	93,700	48,799	8,909	5,840	2,624
Mean	452	312	236	188	161	531	1,266	3,023	1,627	287	188	87.5
Max	742	460	311	230	186	1,510	1,910	4,190	3,120	742	610	119
Min	286	220	178	158	146	136	925	1,730	607	154	82	58
Ac-ft	27,770	18,550	14,510	11,580	8,950	32,640	75,300	185,900	96,790	17,670	11,580	5,200

Cal yr 1965: Total - Mean - Max - Min - Ac-ft -
Wtr yr 1966: Total 255,320 Mean 700 Max 4,190 Min 58 Ac-ft 506,400

Note.--No gage-height record Nov. 12 to Dec. 20.

GREEN RIVER BASIN

9-2444. Yampa River near Hayden, Colo.--Continued

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	88	188	160	139	198	200	538	1,160	4,390	3,200	431	240
2	98	157	170	140	198	210	738	1,040	4,630	2,950	419	234
3	250	160	188	129	198	220	838	919	5,060	2,670	412	180
4	316	188	196	149	198	230	1,080	858	5,060	2,460	400	147
5	218	160	188	170	188	230	1,320	823	5,030	2,550	386	126
6	217	157	240	150	198	220	1,270	891	5,290	2,200	386	104
7	257	188	200	139	198	209	947	916	5,170	2,120	410	99
8	252	184	180	139	208	199	997	1,240	4,620	2,430	562	88
9	236	230	170	160	208	200	972	2,030	4,460	2,040	498	103
10	216	168	150	170	228	200	842	2,130	3,910	1,730	448	148
11	196	205	165	180	208	221	916	2,050	3,810	1,510	422	170
12	204	265	190	181	219	242	1,070	1,940	3,720	1,400	372	218
13	230	270	201	181	218	263	1,020	1,820	3,700	1,290	360	328
14	246	260	190	181	204	303	860	1,530	3,700	1,140	329	242
15	225	265	191	180	199	312	851	1,310	3,870	1,210	316	196
16	215	260	180	170	198	293	979	1,180	3,410	1,200	347	180
17	215	235	170	170	208	335	880	1,340	3,620	1,190	323	209
18	202	215	160	170	188	400	999	1,960	3,890	2,020	276	257
19	182	200	150	180	188	528	1,130	2,480	4,690	1,420	255	426
20	168	172	140	180	178	528	1,240	2,860	5,220	1,130	249	476
21	181	176	150	189	178	498	1,080	3,050	5,170	968	254	406
22	174	184	140	199	188	488	896	3,610	4,950	856	254	334
23	161	180	130	209	198	530	837	4,610	4,810	804	238	303
24	171	172	130	209	198	682	751	5,090	4,610	816	209	267
25	164	140	129	189	199	880	743	5,680	4,080	809	204	333
26	165	120	149	190	209	728	697	6,590	4,040	690	178	445
27	175	100	150	190	210	680	720	5,860	3,820	634	168	376
28	192	110	150	190	200	653	758	5,680	3,690	578	150	324
29	196	150	150	200	-	1,050	1,040	5,790	3,190	529	168	300
30	196	190	130	230	- - - -	1,030	1,440	5,140	3,140	492	200	270
31	192	- - - -	140	210	- - - -	551	- - - -	4,840	- - - -	461	224	- - - -
Total	6,198	5,649	5,127	5,463	5,608	13,313	28,449	86,417	128,750	45,497	9,848	7,529
Mean	200	188	165	176	200	429	948	2,788	4,292	1,468	318	251
Max	316	270	240	230	228	1,050	1,440	6,590	5,290	3,200	562	476
Min	88	100	129	129	178	199	538	823	3,140	461	150	88
Ac-ft	12,290	11,200	10,170	10,840	11,120	26,410	56,430	171,400	255,400	90,240	19,530	14,930
Cal yr 1966: Total	241,622		Mean 662	Max 4,190	Min 58	Ac-ft 479,300						
Wtr yr 1967: Total	347,848		Mean 953	Max 6,590	Min 88	Ac-ft 689,900						

9-2445. Elkhead Creek near Clark, Colo.

Location.--Lat 40°44'00", long 107°10'20", in SE¼ sec.17, T.9 N., R.87 W., on left bank 0.5 mile downstream from South Fork, 13 miles west of Clark, and 17 miles north of Hayden.

Drainage area.--45.4 sq mi.

Records available.--October 1942 to March 1943 (monthly discharge only, published in WSP 1313), July 1943 to September 1944, October 1958 to September 1967.

Gage.--Water-stage recorder. Altitude of gage is 7,800 ft (from topographic map). Prior to October 1958, water-stage recorder at site 40 ft downstream at different datum.

Average discharge.--10 years (1943-44, 1958-67), 31.1 cfs (22,520 acre-ft per year).

Extremes.--Maximum discharge during year, 480 cfs May 8 (gage height, 4.14 ft), from rating curve extended above 240 cfs; maximum gage height, 4.78 ft Apr. 9 (backwater from ice); minimum daily discharge, 1.2 cfs Sept. 6-8.
1942-44, 1958-67: Maximum discharge, 977 cfs May 17, 1964 (gage height, 5.92 ft), from rating curve extended above 240 cfs; maximum gage height, 7.05 ft May 5, 1965 (backwater from ice); minimum daily discharge, 0.30 cfs Aug. 23, 28, 29, 1961.

Remarks.--Records good except those for winter period, which are poor. No diversion above station.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.7	2.8	3.8	2.2	2.8	3.5	5.5	70	164	27	5.9	2.6
2	3.0	2.6	3.6	2.1	2.8	3.3	6.0	57	154	23	6.2	2.4
3	8.2	2.7	3.7	2.0	3.0	3.2	7.5	61	144	22	6.9	2.1
4	5.1	2.8	3.9	2.0	3.0	3.1	9.0	63	140	24	5.4	1.7
5	4.8	3.0	4.4	2.1	2.9	3.0	11	65	146	21	4.8	1.4
6	5.1	3.0	4.8	2.1	2.9	2.9	13	76	140	18	4.6	1.2
7	5.4	3.0	4.2	2.1	2.8	2.9	15	154	122	20	6.9	1.2
8	6.2	2.8	3.6	2.0	2.7	3.1	19	274	112	20	8.2	1.2
9	4.3	2.8	3.0	2.0	2.9	3.2	24	287	106	19	6.2	2.1
10	3.5	3.4	2.8	2.2	3.0	3.2	30	283	89	16	5.4	3.3
11	3.3	3.6	2.9	2.4	3.1	3.2	35	244	81	16	5.1	3.0
12	3.3	3.9	3.0	2.6	3.2	3.1	45	210	90	15	4.6	4.0
13	4.0	4.0	3.0	2.7	3.2	3.2	35	180	110	14	4.0	3.0
14	4.8	4.1	2.8	2.8	3.1	3.1	35	130	112	16	3.5	2.6
15	4.3	4.3	3.0	2.8	3.0	3.0	40	105	89	18	3.5	2.6
16	4.3	4.2	2.7	2.8	3.0	3.0	45	154	75	15	3.8	3.0
17	4.0	4.0	2.5	2.7	3.0	3.2	38	200	66	18	3.0	3.5
18	3.5	4.0	2.4	2.6	2.9	3.5	50	240	63	23	3.0	4.6
19	3.5	3.7	2.5	2.5	2.8	3.8	65	240	57	14	2.6	6.9
20	3.5	3.7	2.6	2.5	2.7	4.2	65	232	69	12	2.6	5.1
21	3.5	4.0	2.7	2.6	2.7	4.2	50	238	57	11	2.4	3.8
22	3.0	4.0	2.4	2.8	2.9	4.2	40	263	57	10	2.4	3.0
23	3.3	3.8	2.2	2.9	3.1	4.4	34	274	50	10	2.6	2.8
24	3.3	3.4	2.2	3.0	3.3	4.8	28	274	49	11	2.1	2.6
25	3.0	2.6	2.2	3.0	3.4	5.5	26	281	40	9.5	1.9	2.6
26	3.0	2.8	2.4	3.0	3.5	6.0	26	283	36	8.8	1.7	3.3
27	3.0	3.2	2.4	3.1	3.6	6.0	45	250	34	7.8	1.7	3.0
28	3.0	3.6	2.2	3.2	3.6	5.5	65	228	41	7.5	2.1	2.6
29	3.0	3.7	2.2	3.2	-	6.5	100	218	36	7.2	2.8	2.6
30	3.0	3.8	2.2	3.1	- - - -	6.5	114	192	28	6.5	4.3	2.6
31	3.3	- - - -	2.2	3.0	- - - -	6.0	- - - -	186	- - - -	5.9	3.0	- - - -
Total	120.2	103.3	90.5	80.1	84.9	124.3	1121.0	6012	2557	466.2	123.2	86.4
Mean	3.88	3.44	2.92	2.58	3.03	4.01	37.4	194	85.2	15.0	3.97	2.88
Max	8.2	4.3	4.8	3.2	3.6	6.5	114	287	164	27	8.2	6.9
Min	1.7	2.6	2.2	2.0	2.7	2.9	5.5	57	28	5.9	1.7	1.2
Ac-ft	238	205	180	159	168	247	2,220	11,920	5,070	925	244	171

Cal yr 1966: Total 10,195.1 Mean 27.9 Max 336 Min 0.90 Ac-ft 20,220
Wtr yr 1967: Total 10,969.1 Mean 20.1 Max 287 Min 1.2 Ac-ft 21,760

Peak discharge (base, 300 cfs).--May 8 (1800) 480 cfs (4.14 ft); May 26 (0030) 353 cfs (3.62 ft).

Note.--No gage-height record Nov. 26 to Mar. 22.

9-2450. Elkhead Creek near Elkhead, Colo.

Location.--Lat 40°40'15", long 107°17'10", in NW¼ sec.8, T.8 N., R.88 W., on right bank 0.2 mile upstream from North Fork Elkhead Creek, 4½ miles northwest of Elkhead, and 12 miles north of Hayden.

Drainage area.--64.2 sq mi.

Records available.--January to November 1910 and May to November 1920 (monthly discharge only, published in WSP 1313; published as "at Hayes Ranch"), April 1953 to September 1967.

Gage.--Water-stage recorder. Altitude of gage is 6,830 ft (from topographic map). Prior to Nov. 30, 1920, staff gage or water-stage recorder at site 675 ft upstream at different datum.

Average discharge.--14 years (1953-67), 46.6 cfs (33,740 acre-ft per year).

Extremes.--Maximum discharge during year, 620 cfs May 8 (gage height, 5.10 ft); minimum daily, 2.0 cfs Sept. 6-9. 1910, 1920, 1953-67: Maximum daily discharge, 1,660 cfs May 22, 1920; no flow Sept. 1, 1954, Sept. 12-19, 24, 1955, Aug. 27-29, 1961.

Remarks.--Records good except those for winter period, which are poor. No diversion above station.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	7.6	2.9	4.1	3.0	3.4	7.0	11	110	223	33	5.8	3.4
2	9.4	2.6	3.9	3.0	3.4	7.0	14	86	206	30	5.8	3.0
3	20	2.8	4.1	2.9	3.6	6.5	16	78	193	28	8.3	2.8
4	14	2.9	4.4	2.8	3.8	6.0	20	72	185	30	6.6	2.6
5	5.8	3.2	4.6	2.8	3.8	5.5	24	80	190	28	5.0	2.2
6	5.5	3.0	4.8	2.9	3.8	5.5	29	108	180	23	5.3	2.0
7	5.3	2.8	4.6	2.8	3.6	6.0	37	177	153	23	8.3	2.0
8	7.2	2.8	4.0	2.6	3.6	6.5	57	343	141	26	13	2.0
9	5.5	2.8	3.4	2.5	3.8	7.0	64	418	141	24	8.6	2.0
10	3.9	3.2	3.0	2.6	4.2	7.0	77	411	116	20	7.2	3.4
11	3.2	3.6	3.2	2.7	4.4	7.0	92	374	102	17	6.6	3.7
12	3.0	3.8	3.4	3.0	4.4	7.0	114	326	110	17	5.8	4.6
13	3.9	3.8	3.4	3.1	4.6	6.5	97	266	139	15	5.0	4.6
14	5.5	3.9	3.2	3.3	4.8	6.0	75	204	148	16	4.6	3.4
15	5.0	4.2	3.4	3.4	5.0	6.0	83	170	118	20	4.6	3.0
16	5.0	4.4	3.2	3.3	5.0	6.0	112	190	99	18	5.0	3.2
17	4.6	4.4	3.0	3.2	4.8	6.5	83	294	88	15	4.4	4.1
18	4.4	4.2	2.8	3.1	4.6	7.0	90	357	82	26	3.7	4.8
19	3.7	4.0	2.9	3.0	4.4	7.5	162	360	74	18	3.4	10
20	3.9	3.9	3.1	3.0	4.0	8.0	160	343	85	14	3.2	7.6
21	4.1	4.2	3.5	3.1	4.5	8.5	95	347	77	12	3.2	5.5
22	3.0	4.2	3.2	3.3	5.5	9.0	72	374	74	11	3.0	4.4
23	3.4	4.0	3.0	3.5	6.0	9.5	64	398	65	10	3.0	3.9
24	3.4	3.2	2.9	3.5	6.5	10	54	384	62	12	3.0	3.4
25	3.7	2.6	3.0	3.5	7.0	11	50	401	52	9.9	2.8	3.4
26	3.2	3.0	3.2	3.5	7.0	11	46	415	47	8.6	2.6	3.9
27	3.2	3.9	3.2	3.5	7.0	10	64	364	45	8.0	2.4	4.1
28	3.2	4.4	3.1	3.5	7.0	9.9	126	319	47	7.2	2.4	3.7
29	3.2	4.4	3.0	3.5	-	13	209	306	51	6.2	3.2	3.2
30	3.0	4.1	3.0	3.6	- - - - -	13	180	266	38	5.8	4.6	3.2
31	3.4	- - - - -	3.0	3.5	- - - - -	11	- - - - -	251	- - - - -	5.8	5.0	- - - - -
Total	163.2	107.2	106.6	97.0	133.5	247.4	2,377	8,592	3,331	537.5	155.4	113.1
Mean	5.26	3.57	3.44	3.13	4.77	7.98	79.2	277	111	17.3	5.01	3.77
Max	20	4.4	4.8	3.6	7.0	13	209	418	223	33	13	10
Min	3.0	2.6	2.8	2.5	3.4	5.5	11	72	38	5.8	2.4	2.0
Ac-ft	324	213	211	192	265	491	4,710	17,040	6,610	1,070	308	224

Cal yr 1966: Total 15,281.6 Mean 41.9 Max 499 Min 0.60 Ac-ft 30,310

Wtr yr 1967: Total 15,960.9 Mean 43.7 Max 418 Min 2.0 Ac-ft 31,660

Peak discharge (base, 800 cfs).--No peak above base.

9-2455. North Fork Elkhead Creek near Elkhead, Colo.

Location.--Lat 40°40'50", long 107°17'10", in NW¼ sec.5, T.8 N., R.88 W., on right bank 70 ft upstream from small tributary, 0.8 mile upstream from mouth, and 13 miles north of Hayden.

Drainage area.--21 sq mi, approximately.

Records available.--January to November 1910 and May to November 1920 (monthly discharge only, published in WSP 1313; published as "at Hayes Ranch"), October 1958 to September 1967.

Gage.--Water-stage recorder. Altitude of gage is 6,990 ft (from topographic map). January to November 1910 and May to September 1920, staff gage and October to November 1920, water-stage recorder, at site 0.6 mile downstream at different datum.

Average discharge.--9 years (1958-67), 14.4 cfs (10,400 acre-ft per year).

Extremes.--Maximum discharge during year, 248 cfs May 25 (gage height, 3.54 ft); minimum daily, 0.01 cfs Sept. 8. 1910, 1920, 1958-67: Maximum discharge, 575 cfs May 19, 1964; no flow at times in 1910, 1959-63, 1966.

Remarks.--Records good except those for winter period, which are poor. Diversions above station for irrigation of about 100 acres of hay meadows.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.48	0.93	2.0	1.4	1.6	3.0	5.8	30	56	7.0	0.57	0.48
2	.93	.93	1.8	1.2	1.5	3.0	8.6	23	54	5.8	.48	.39
3	4.0	1.2	1.8	1.2	1.6	3.0	12	21	53	5.4	.48	.28
4	1.8	1.1	2.0	1.6	1.8	2.8	16	22	48	5.4	.57	.20
5	1.5	1.1	2.2	1.6	1.8	2.7	20	22	52	4.6	.39	.12
6	1.8	1.0	2.3	1.2	1.6	2.6	21	30	51	3.8	.39	.20
7	1.6	.90	2.3	1.0	1.4	2.6	28	43	42	3.8	.66	.22
8	1.6	.90	1.8	.60	1.2	2.6	31	77	37	4.3	1.5	.01
9	1.2	1.0	1.4	.50	1.2	2.9	26	93	36	5.1	1.2	.25
10	1.0	1.2	1.2	.50	1.2	3.2	28	93	30	3.2	1.0	.75
11	.93	1.4	1.2	.80	1.4	3.4	38	79	29	2.7	.84	.57
12	1.0	1.8	1.4	1.1	1.6	3.4	36	69	32	2.7	.75	1.0
13	1.5	1.6	1.2	1.4	1.8	3.2	28	66	45	2.1	.57	.93
14	2.0	1.6	1.2	1.5	2.0	3.2	20	43	50	2.1	.48	.57
15	1.5	1.8	1.4	1.5	2.0	3.3	28	37	38	2.7	.39	.75
16	1.6	1.8	1.4	1.5	2.0	4.0	32	54	31	3.0	.39	.66
17	1.5	1.6	1.2	1.4	1.9	5.5	25	83	28	2.2	.28	.84
18	1.5	1.4	1.2	1.3	1.8	8.0	36	93	25	2.4	.22	1.1
19	1.0	1.4	1.2	1.2	1.6	8.5	47	96	23	2.0	.18	2.2
20	1.2	1.6	1.4	1.2	1.4	8.5	39	90	27	1.6	.18	1.6
21	1.1	1.8	1.4	1.2	1.3	8.0	26	91	23	1.4	.18	1.1
22	.84	1.6	1.3	1.3	1.3	7.5	19	110	24	1.4	.20	.93
23	1.2	1.2	1.2	1.4	1.3	7.0	17	123	20	1.2	.22	.75
24	.93	1.0	1.0	1.5	1.3	7.8	16	119	17	1.4	.20	.75
25	1.1	.80	1.0	1.7	1.4	8.2	14	138	13	1.2	.18	.75
26	1.1	1.0	1.0	1.8	1.8	6.6	14	148	11	.93	.15	.75
27	1.0	1.6	1.2	2.0	2.1	4.9	27	140	10	.84	.18	.75
28	1.0	2.0	1.3	2.0	2.5	5.1	41	112	11	.66	.18	.75
29	.93	2.2	1.2	2.0	-	7.4	50	93	10	.57	.48	.84
30	.93	2.2	1.0	2.0	- - - - -	6.2	42	74	8.2	.57	.75	.84
31	1.1	- - - - -	1.2	1.8	- - - - -	6.6	- - - - -	65	- - - - -	.48	.66	- - - - -
Total	40.87	41.66	44.4	42.40	45.4	154.7	791.4	2377	934.2	82.55	14.90	21.33
Mean	1.32	1.39	1.43	1.37	1.62	4.99	26.4	76.7	31.1	2.66	0.48	0.71
Max	4.0	2.2	2.3	2.0	2.5	8.5	50	148	56	7.0	1.5	2.2
Min	0.48	0.80	1.0	0.50	1.2	2.6	5.8	21	8.2	0.48	0.15	0.01
Ac-ft	81	83	88	84	90	307	1,570	4,710	1,850	164	30	42

Cal yr 1966: Total 4,180.23 Mean 11.5 Max 125 Min 0 Ac-ft 8,290

Wtr yr 1967: Total 4,590.81 Mean 12.6 Max 148 Min 0.01 Ac-ft 9,110

Peak discharge (base, 200 cfs).--May 25 (2330) 248 cfs (3.54 ft).

Note.--No gage-height record Nov. 26 to Mar. 22.

9-2486. East Fork of Williams Fork above Willow Creek, Colo.

Location.--Lat 40°15'40", long 107°17'35", in NE¼ sec.5, T.3 N., R.88 W., on right bank 3.8 miles upstream from Willow Creek, and 16 miles south of Hayden.

Drainage area.--108 sq mi.

Records available.--October 1956 to September 1967.

Gage.--Water-stage recorder. Altitude of gage is 7,100 ft (from topographic map).

Average discharge.--11 years, 107 cfs (77,460 acre-ft per year).

Extremes.--Maximum discharge during year, 1,020 cfs May 23 (gage height, 6.33 ft); minimum daily, 10 cfs Nov. 26.
1956-67: Maximum discharge, about 1,500 cfs June 25, 1957; maximum gage height, 6.85 ft May 12, 1962; minimum daily discharge, that of Nov. 26, 1966.

Remarks.--Records good except those for winter period, which are poor. Diversions for irrigation of about 800 acres above station.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	17	16	19	19	16	19	32	107	390	200	61	38
2	23	15	18	19	15	20	35	92	420	190	61	32
3	41	19	18	20	15	20	41	83	480	170	60	30
4	32	18	18	22	15	20	58	83	520	162	59	29
5	30	15	19	22	16	19	61	83	520	156	56	28
6	30	18	18	20	15	19	53	83	550	140	58	28
7	31	18	25	18	14	22	58	84	480	160	54	27
8	29	18	21	18	14	22	66	128	420	153	54	27
9	27	15	18	19	15	22	62	188	390	134	55	36
10	23	18	16	20	15	20	56	240	340	120	64	30
11	25	19	18	20	15	24	69	228	320	120	55	30
12	27	19	20	20	15	24	74	210	290	120	49	49
13	28	18	19	20	16	23	64	175	290	107	44	34
14	25	16	19	19	17	23	58	140	300	109	43	31
15	27	18	19	18	16	20	62	118	300	124	43	30
16	26	18	20	19	16	22	69	118	280	116	42	29
17	21	18	19	18	17	32	62	162	290	116	40	30
18	24	18	18	17	16	38	69	258	310	111	39	32
19	21	16	17	17	15	36	81	351	380	92	38	42
20	24	17	17	18	15	31	83	368	480	85	38	40
21	22	18	18	18	15	32	70	415	420	91	38	34
22	17	18	18	18	17	31	64	545	462	78	36	30
23	21	18	16	17	18	34	61	720	415	84	35	28
24	20	13	16	16	18	34	59	657	339	95	34	28
25	21	11	18	16	18	34	60	671	303	75	34	34
26	22	10	18	16	17	30	55	600	272	72	33	35
27	21	12	18	17	17	32	62	560	272	72	34	30
28	21	18	17	17	17	36	86	520	272	68	36	29
29	21	21	17	16	-	40	126	460	234	64	34	27
30	20	20	20	17	- - - -	37	136	400	208	63	34	27
31	20	- - - -	20	17	- - - -	32	- - - -	380	- - - -	62	36	- - - -
Total	757	506	572	568	445	848	1,992	9,227	10,947	3,489	1,397	954
Mean	24.4	16.9	18.5	18.3	15.9	27.4	66.4	298	365	113	45.1	31.8
Max	41	21	25	22	18	40	136	720	550	200	64	49
Min	17	10	16	16	14	19	32	83	208	62	33	27
Ac-ft	1,500	1,000	1,130	1,130	883	1,680	3,950	18,300	21,710	6,920	2,770	1,890

Cal yr 1966: Total 21,626 Mean 59.2 Max 396 Min 10 Ac-ft 42,890
Wtr yr 1967: Total 31,702 Mean 86.9 Max 720 Min 10 Ac-ft 62,880

Peak discharge (base, 450 cfs)

Date	Time	Gage height	Discharge	Date	Time	Gage height	Discharge
5-23	2000	6.33	1,020	6-20	0200	6.11	†600
6-6	2130	6.32	†660				

† Estimated.

9-2490. East Fork of Williams Fork near Pagoda, Colo.

Location.--Lat 40°18'45", long 107°19'15", in SW¼ sec.18, T.4 N., R.88 W., on right bank 20 ft downstream from private road bridge, half a mile upstream from Dowden Gulch, 1½ miles downstream from Willow Creek, and 5½ miles southeast of Pagoda.

Drainage area.--150 sq mi, approximately.

Records available.--October 1953 to September 1967.

Gage.--Water-stage recorder. Altitude of gage is 6,830 ft (from topographic map).

Average discharge.--14 years, 109 cfs (78,910 acre-ft per year).

Extremes.--Maximum discharge during year, 890 cfs May 23 (gage height, 3.48 ft); maximum gage height, 4.07 ft Dec. 11 (backwater from ice); minimum daily discharge, 15 cfs Feb. 3.

1953-67: Maximum discharge, 1,620 cfs June 26, 1957; maximum gage height, 4.82 ft June 6, 1957; minimum daily discharge, 12 cfs Aug. 28, Sept. 22, 1954.

Remarks.--Records good except those for winter period, which are poor. Diversions for irrigation of about 900 acres above station.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	21	22	25	26	18	18	42	124	424	212	62	44
2	27	24	24	24	17	18	46	103	498	206	62	36
3	52	26	24	24	15	20	53	94	543	195	61	32
4	38	25	24	26	16	22	78	92	543	179	61	31
5	37	21	26	26	17	22	87	94	552	171	58	30
6	37	24	26	24	16	22	76	94	590	154	58	30
7	38	25	32	22	16	22	76	94	534	174	57	29
8	37	25	30	22	16	24	87	128	472	165	57	29
9	35	22	24	22	16	24	86	209	432	144	57	39
10	31	24	20	22	17	22	73	274	370	132	64	34
11	32	26	22	22	16	22	90	258	352	135	60	34
12	33	26	24	22	17	22	99	235	320	135	51	56
13	36	24	24	22	18	24	84	206	305	118	49	39
14	34	21	24	22	19	28	73	165	325	116	46	36
15	33	25	22	22	18	34	76	142	325	130	46	34
16	33	25	22	20	18	40	92	140	290	126	45	34
17	27	24	22	20	19	41	86	194	310	126	44	36
18	31	24	20	19	20	46	92	325	335	120	42	38
19	26	21	20	19	19	46	106	424	358	103	41	51
20	31	21	20	20	18	39	108	424	489	96	41	51
21	30	25	22	20	18	38	92	464	416	92	41	42
22	25	24	22	20	18	37	81	600	456	87	39	37
23	28	24	20	19	19	40	74	703	400	90	39	34
24	25	19	20	18	20	44	72	681	346	90	38	33
25	25	18	22	18	20	44	76	692	320	82	36	40
26	26	16	24	18	19	38	70	670	295	74	36	45
27	25	20	24	19	18	38	73	600	292	78	36	38
28	26	28	22	19	18	42	103	590	278	70	40	35
29	27	36	22	18	-	53	142	516	246	67	38	34
30	26	29	24	19	- - - -	48	157	440	227	64	38	33
31	26	- - - -	26	19	- - - -	41	- - - -	394	- - - -	66	39	- - - -
Total	958	714	723	653	496	1,019	2,550	10,169	11,633	3,787	1,482	1,114
Mean	30.9	23.8	23.3	21.1	17.7	32.9	85.0	328	388	122	47.8	37.1
Max	52	36	32	26	20	53	157	703	590	212	64	56
Min	21	16	20	18	15	18	42	92	227	64	36	29
Ac-ft	1,900	1,420	1,430	1,300	984	2,020	5,060	20,170	23,070	7,510	2,940	2,210

Cal yr 1966: Total 24,469 Mean 67.0 Max 416 Min 16 Ac-ft 48,530
 Wtr yr 1967: Total 35,298 Mean 96.7 Max 703 Min 15 Ac-ft 70,010

Peak discharge (base, 500 cfs)

Date	Time	Gage height	Discharge	Date	Time	Gage height	Discharge
5-23	2230	3.48	890	6-20	0130	3.17	543
6-6	2130	3.30	692				

9-2492. South Fork of Williams Fork near Pagoda, Colo.

Location (revised).--Lat 40°12'44", long 107°26'31", in sec.24, T.3 N., R.90 W., on left bank at downstream side of private bridge, 1½ miles upstream from Pine Creek and 8 miles south of Pagoda.

Drainage area.-- 46.7 sq mi (revised).

Records available.--October 1965 to September 1967.

Gage.--Water-stage recorder. Altitude of gage is 7,230 ft (from topographic map).

Extremes.--Maximum discharge during year, 666 cfs May 23 (gage height, 3.91 ft), from rating curve extended above 290 cfs; minimum daily, 1.7 cfs Oct. 1.

1965-67: Maximum discharge, that of May 23, 1967; minimum daily, 0.20 cfs for many days in August and September 1966.

Remarks.--Records good except those for winter period, which are poor. Diversions above station for irrigation of about 100 acres above and 50 acres below station.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.7	3.4	4.8	4.4	5.7	6.2	8.6	52	250	44	6.2	4.6
2	3.1	4.1	4.8	4.4	5.7	6.4	10	39	290	30	5.9	3.4
3	8.6	4.1	5.1	4.2	5.5	6.6	15	34	332	24	6.2	3.0
4	4.8	3.1	5.1	4.2	5.5	6.0	26	33	314	25	5.9	2.6
5	6.6	3.4	5.3	4.2	5.7	5.9	26	33	302	20	5.3	2.3
6	7.2	3.2	6.0	4.2	5.5	5.5	21	34	314	24	5.3	2.3
7	7.2	3.4	7.0	4.4	5.5	5.7	26	40	275	26	6.2	2.3
8	6.0	3.7	5.0	4.2	5.3	5.7	32	108	225	20	6.6	3.7
9	5.3	3.0	4.6	4.4	5.5	5.7	29	166	178	15	6.8	5.5
10	4.6	3.8	4.4	4.6	5.3	5.9	28	186	147	13	7.4	3.7
11	4.6	4.2	4.4	4.8	5.3	6.2	43	182	132	13	7.7	4.2
12	5.3	4.5	4.6	4.8	5.3	6.8	44	141	129	10	5.9	8.9
13	5.9	4.6	4.6	4.8	5.3	7.0	33	108	126	9.6	4.8	4.6
14	5.5	4.0	4.6	4.6	5.3	6.4	26	83	132	9.9	4.2	3.6
15	6.0	4.3	4.4	4.6	5.3	7.0	28	69	138	16	4.1	3.3
16	5.1	4.6	4.4	4.6	5.3	7.5	30	74	112	20	3.9	3.1
17	4.6	4.5	4.4	4.6	5.3	9.0	24	123	118	22	3.6	3.4
18	4.8	4.6	4.4	4.8	5.3	9.5	30	182	126	20	3.4	3.9
19	4.1	3.7	4.4	4.8	5.3	9.5	49	210	135	13	3.1	7.7
20	5.1	3.7	4.4	5.0	5.1	9.2	47	225	200	10	3.1	7.2
21	5.1	4.8	4.2	5.5	5.1	8.4	33	270	150	8.9	3.1	5.1
22	4.1	4.6	4.0	5.0	5.1	8.4	29	332	154	8.4	3.1	3.6
23	4.5	4.1	3.6	4.8	5.3	9.0	28	410	135	12	2.8	3.3
24	3.8	3.1	3.6	4.6	5.3	9.8	25	410	110	9.4	2.8	3.0
25	4.3	4.0	3.8	4.6	5.5	9.8	24	434	98	7.0	2.7	3.3
26	4.5	4.4	4.2	5.0	5.9	8.2	22	416	87	5.9	2.8	3.4
27	4.5	4.8	4.2	5.5	5.7	8.0	28	410	70	7.4	2.8	3.3
28	4.5	5.0	4.0	5.7	5.9	9.2	53	374	65	6.4	3.0	3.0
29	4.5	5.0	4.0	5.7	-	11	87	308	65	6.8	3.1	2.7
30	4.3	4.8	4.2	5.9	- - - - -	9.0	77	240	55	6.2	3.4	2.8
31	4.3	- - - - -	4.4	5.9	- - - - -	8.0	- - - - -	215	- - - - -	6.2	3.4	- - - - -
Total	154.5	122.5	140.9	148.8	151.8	236.5	981.6	5,941	4,964	469.1	138.6	116.8
Mean	4.98	4.08	4.55	4.80	5.42	7.63	32.7	192	165	15.1	4.47	3.89
Max	8.6	5.0	7.0	5.9	5.9	11	87	434	332	44	7.7	8.9
Min	1.7	3.0	3.6	4.2	5.1	5.5	8.6	33	55	5.9	2.7	2.3
Ac-ft	306	243	279	295	301	469	1,950	11,780	9,850	930	275	232

Cal yr 1966: Total 8,516.1 Mean 23.3 Max 280 Min 0.20 Ac-ft 16,890.

Wtr yr 1967: Total 13,566.1 Mean 37.2 Max 434 Min 1.7 Ac-ft 26,910

Peak discharge (base, 400 cfs).--May 23 (2100) 666 cfs (3.91 ft); June 3 (2100) 452 cfs (3.49 ft).

9-2497. Morapos Creek near Hamilton, Colo.

Location.--Lat 40°13'40", long 107°35'10", on line between secs. 14 and 15, T.3 N., R.91 W., on right bank 10 ft upstream from private bridge, 8 miles upstream from Deer Creek, and 10 miles south of Hamilton.

Drainage area.--13.7 sq mi.

Records available.--October 1965 to September 1967 (discontinued).

Gage.--Water-stage recorder.

Extremes.--Maximum discharge during year, 109 cfs May 25 (gage height, 4.00 ft), from rating curve extended above 60 cfs; minimum daily, 0.35 cfs Oct. 1.

1965-67: Maximum discharge, that of May 25, 1967; no flow Aug. 17-19, 26, 28, 1966.

Remarks.--Records good except those for winter period, which are poor. One diversion above station for irrigation of a few acres of hay meadows below.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.35	0.60	0.87	0.90	0.69	1.0	1.8	12	37	9.7	1.1	2.8
2	1.1	.60	.78	.80	.69	1.1	2.1	9.7	38	8.8	1.2	2.1
3	3.3	.60	.87	.70	.69	1.1	2.6	9.1	39	7.6	1.1	1.8
4	1.3	.60	1.0	.60	.69	1.0	4.8	8.5	38	7.0	1.1	1.4
5	1.2	.69	.96	.50	.69	1.0	6.3	8.8	36	6.1	.96	1.3
6	1.2	.60	2.4	.50	.69	.96	5.7	8.5	36	5.5	.96	1.3
7	1.1	.55	3.4	.50	.60	.96	6.3	9.1	32	6.6	2.1	1.4
8	.96	.78	2.0	.50	.69	.96	6.8	16	29	6.1	1.8	1.6
9	.78	.80	1.1	.60	.60	.96	6.6	26	26	4.8	1.4	1.9
10	.60	.87	1.0	.69	.60	.96	6.3	38	24	3.7	1.1	1.3
11	.60	.87	1.0	.60	.55	1.0	8.5	35	24	3.7	1.3	.96
12	.87	.87	1.0	.60	.55	1.0	8.5	28	23	3.5	1.1	1.6
13	1.0	1.0	1.0	.55	.55	1.0	7.0	22	24	2.9	.87	1.1
14	1.6	.96	1.0	.60	.69	1.0	5.9	17	24	2.6	.69	.96
15	1.4	.87	.96	.60	.78	1.0	7.0	14	27	2.8	.78	.87
16	1.1	.96	.96	.60	.69	.96	8.2	17	23	2.8	.78	.87
17	1.2	.96	.96	.60	.69	1.3	9.1	29	22	3.1	.60	.87
18	1.0	.96	.96	.55	.69	1.9	8.5	33	22	2.9	.50	.96
19	.96	.78	.96	.55	.69	2.1	11	43	23	2.2	.50	2.3
20	1.1	.78	.96	.55	.69	1.9	11	44	30	2.1	.50	1.5
21	1.2	.96	1.0	.55	.69	1.3	8.8	46	28	1.8	.45	1.3
22	.78	.96	.80	.55	.69	1.7	7.6	51	28	1.8	.40	1.1
23	.87	.78	.70	.55	.60	1.9	6.8	63	24	3.1	.45	.96
24	.78	.69	.70	.55	.60	2.1	6.6	65	20	2.3	.45	.78
25	.78	.80	.90	.55	.69	1.9	6.3	72	18	1.8	.40	1.2
26	.78	.87	.90	.55	.87	1.8	5.9	58	16	1.4	.40	.96
27	.78	.65	.70	.55	.78	1.6	7.0	58	14	1.6	.45	.69
28	.87	.60	.70	.55	.96	1.9	10	54	13	1.3	.45	.69
29	.87	.69	.70	.60	-	2.5	15	50	12	1.2	.60	.69
30	.87	.70	.80	.60	- - - -	2.5	14	44	11	1.0	1.1	.55
31	.69	- - - -	.90	.60	- - - -	2.2	- - - -	41	- - - -	1.0	1.4	- - - -
Total	31.99	23.40	32.94	18.29	19.08	44.56	222.0	1,029.7	761	112.8	26.99	37.81
Mean	1.03	0.780	1.06	0.590	0.681	1.44	7.40	33.2	25.4	3.64	0.871	1.26
Max	3.3	1.0	3.4	0.90	0.96	2.5	15	72	39	9.7	2.1	2.8
Min	0.35	0.55	0.70	0.50	0.55	0.96	1.8	8.5	11	1.0	0.40	0.55
Ac-ft	63	46	65	36	38	88	440	2,040	1,510	224	54	75

Cal yr 1966: Total 2,185.23 Mean 5.99 Max 58 Min 0 Ac-ft 4,330
Wtr yr 1967: Total 2,360.56 Mean 6.47 Max 72 Min 0.35 Ac-ft 4,680

Peak discharge (base, 100 cfs)--May 25 (2130) 109 cfs (4.00 ft).

9-2500. Milk Creek near Thornburg, Colo.

Location--Lat 40°12', long 107°44', in NE¼ sec.32, T.3 N., R.92 W., on right bank 2½ miles northwest of Thornburg and 3 miles upstream from Little Creek.

Drainage area--65 sq mi, approximately.

Records available--October 1952 to September 1967.

Gage--Water-stage recorder. Altitude of gage is 6,450 ft (by barometer).

Average discharge--15 years, 21.1 cfs (15,280 acre-ft per year).

Extremes--Maximum discharge during year, 325 cfs May 26 (gage height, 4.67 ft), from rating curve extended above 130 cfs; minimum daily, 0.40 cfs Oct. 1.

1952-67: Maximum discharge, 491 cfs May 10, 1957; maximum gage height, 5.52 ft June 1, 1957; minimum daily discharge, 0.20 cfs Oct. 5-7, 1956, Aug. 10, 11, Oct. 15, 1963, Aug. 26-30, Sept. 2-10, 1966.

Remarks--Records good except those for winter period, which are poor. Diversions for irrigation of about 2,000 acres above station.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.40	1.7	3.4	2.8	3.2	5.0	11	43	94	14	4.9	3.7
2	.95	1.7	2.8	2.6	3.0	5.0	9.6	37	86	12	4.7	3.7
3	1.5	1.5	3.0	2.6	3.0	5.0	10	33	81	12	5.3	3.2
4	2.6	1.7	4.0	2.6	3.0	4.4	16	32	79	13	4.9	3.2
5	2.1	1.5	3.7	2.8	3.2	4.0	32	30	72	12	4.4	2.5
6	1.3	1.7	3.4	2.6	3.0	4.2	29	32	73	12	4.4	2.2
7	.95	1.9	3.4	2.4	2.8	4.4	28	30	64	16	6.0	2.5
8	.73	2.0	3.0	2.4	2.8	4.2	34	43	55	26	6.7	2.7
9	1.1	2.0	2.6	2.8	2.8	4.6	32	69	49	17	6.0	3.5
10	1.1	2.1	2.6	2.8	2.6	4.6	28	95	42	15	6.0	3.0
11	1.1	2.4	3.0	2.8	2.6	5.0	34	102	43	14	4.9	3.2
12	1.1	2.8	3.0	3.2	2.8	5.0	42	90	42	13	4.4	6.0
13	1.3	2.8	2.8	3.2	3.0	5.0	36	88	51	13	4.2	5.6
14	1.9	2.8	2.8	3.2	3.2	6.0	31	74	55	11	3.7	4.4
15	1.7	2.4	3.0	3.2	3.2	6.8	30	67	61	11	3.7	4.2
16	1.9	2.4	2.8	3.2	3.0	6.8	34	61	55	12	3.2	4.4
17	2.3	2.6	2.6	3.0	3.0	9.1	31	77	47	15	3.2	3.7
18	1.9	2.8	2.8	3.2	3.0	11	32	97	42	15	2.7	4.2
19	1.9	2.6	2.8	3.4	2.8	13	39	113	38	13	2.5	5.3
20	1.7	2.4	2.8	3.7	2.8	11	41	126	55	10	2.4	4.7
21	1.7	2.6	2.8	4.0	2.6	9.6	36	128	64	9.0	2.2	4.2
22	1.7	2.8	2.8	3.7	2.4	8.2	30	139	58	9.6	2.2	3.5
23	1.7	3.2	2.6	3.0	2.4	10	27	144	55	15	1.9	3.0
24	1.7	3.0	2.4	3.0	2.8	11	24	142	42	12	1.9	3.2
25	1.7	2.4	2.6	3.0	3.2	11	24	145	36	11	1.6	3.7
26	1.7	2.3	2.8	3.0	3.4	9.6	23	220	32	9.6	1.6	3.9
27	1.7	2.6	2.8	3.0	3.6	9.6	23	174	30	9.0	1.4	3.5
28	1.9	2.6	2.6	3.0	4.2	9.1	27	157	28	8.5	1.4	2.7
29	1.9	3.0	2.6	3.0	-	12	43	138	19	7.4	1.6	2.4
30	1.9	3.7	2.8	3.0	- - - -	14	54	117	20	6.7	2.0	2.4
31	1.9	- - - -	2.8	3.2	- - - -	9.1	- - - -	106	- - - -	6.7	3.0	- - - -
Total	49.03	72.0	89.9	93.4	83.4	237.3	890.6	2,949	1,568	380.5	109.0	108.4
Mean	1.58	2.40	2.90	3.01	2.98	7.65	29.7	95.1	52.3	12.3	3.52	3.61
Max	2.6	3.7	4.0	4.0	4.2	14	54	220	94	26	6.7	6.0
Min	0.40	1.5	2.4	2.4	2.4	4.0	9.6	30	19	6.7	1.4	2.2
Ac-ft	97	143	178	185	165	471	1,770	5,850	3,110	755	216	215

Cal yr 1966: Total 6,093.73

Mean 16.7

Max 125

Min 0.20

Ac-ft 12,090

Wtr yr 1967: Total 6,630.53

Mean 18.2

Max 220

Min 0.40

Ac-ft 13,150

Peak discharge (base, 250 cfs)--May 26 (0630) 325 cfs (4.67 ft).

9-2510. Yampa River near Maybell, Colo.

Location.--Lat 40°30'10", long 108°01'45", in NW¼ sec.2, T.6 N., R.95 W., on left bank 100 ft downstream from bridge on U. S. Highway 40, 2 miles downstream from Lay Creek, and 3 miles east of Maybell.

Drainage area.--3,410 sq mi, approximately.

Records available.--April 1904 to October 1905, June 1910 to November 1912, April 1916 to September 1967. Monthly discharge only for some periods, published in WSP 1313. No winter records prior to 1917.

Gage.--Water-stage recorder. Datum of gage is 5,900.23 ft above mean sea level, datum of 1929. Prior to Apr. 24, 1916, staff or chain gage at Thornburgh Bridge 14 miles downstream at different datum. Apr. 24, 1916, to Nov. 3, 1917, chain gage and Nov. 4, 1917, to Mar. 8, 1937, water-stage recorder, at site 700 ft downstream, at datum 0.92 ft higher prior to Oct. 1, 1932, and at present datum thereafter.

Average discharge.--51 years (1916-67), 1,537 cfs (1,113,000 acre-ft per year).

Extremes.--Maximum discharge during year, 8,890 cfs May 27 (gage height, 7.69 ft); minimum daily, 93 cfs Oct. 1. 1904-5, 1910-12, 1916-67: Maximum discharge observed, 17,900 cfs May 19, 1917 (gage height, 10.4 ft, from floodmarks, site and datum then in use), from rating curve extended above 12,000 cfs; minimum daily, 2 cfs July 17-19, 1934.

Remarks.--Records good except those for winter period, which are poor. Natural flow of stream affected by transbasin diversions, numerous storage reservoirs, and diversions above station for irrigation of about 65,000 acres above and about 800 acres below station. Records of chemical analyses and water temperatures for the water year 1967 are published in Part 2 of this report.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	93	226	219	160	220	340	1,200	2,320	6,430	3,610	522	184
2	100	212	252	150	220	360	1,080	1,890	5,920	3,610	480	202
3	264	202	230	160	220	380	1,190	1,740	6,070	3,310	469	216
4	276	184	264	150	220	380	1,350	1,610	6,370	3,070	452	212
5	390	170	256	170	220	370	1,600	1,550	6,330	2,830	436	180
6	355	191	284	180	210	340	1,910	1,570	6,350	2,880	420	155
7	294	191	302	170	220	320	2,150	1,610	6,490	2,610	425	132
8	307	184	244	160	220	320	1,910	1,740	6,270	2,530	447	130
9	340	216	230	160	230	320	1,790	2,020	5,770	2,770	504	152
10	330	222	200	180	230	360	1,780	3,120	5,370	2,340	576	140
11	312	222	210	190	240	400	1,680	3,590	4,760	1,960	564	118
12	294	216	220	200	260	450	1,560	3,660	4,630	1,720	594	143
13	284	233	220	200	250	534	1,620	3,390	4,540	1,590	442	184
14	320	272	220	200	240	492	1,670	3,170	4,620	1,440	395	219
15	330	284	210	200	230	480	1,570	2,610	4,720	1,250	370	268
16	330	276	220	200	200	564	1,430	2,160	4,720	1,330	340	230
17	307	276	210	190	220	564	1,380	1,890	4,250	1,340	325	202
18	294	272	200	190	230	582	1,340	2,020	4,390	1,480	330	191
19	284	272	190	190	230	747	1,500	3,410	4,670	2,210	302	236
20	268	256	180	200	200	901	1,670	4,200	5,450	1,600	276	272
21	236	240	170	210	200	929	1,840	4,530	6,270	1,240	248	395
22	233	226	180	220	200	950	1,680	4,850	6,110	1,070	233	410
23	236	216	170	220	210	1,020	1,420	5,810	5,960	990	230	355
24	240	233	160	220	220	1,010	1,260	6,810	5,690	950	216	320
25	222	222	160	210	230	1,040	1,180	7,200	5,300	908	194	284
26	226	205	160	200	240	1,170	1,140	8,000	4,780	852	177	252
27	219	158	170	200	280	998	1,080	8,720	4,620	768	174	312
28	219	120	170	200	300	990	1,040	8,360	4,350	691	170	385
29	222	158	170	200	-	936	1,060	7,900	4,270	642	149	330
30	233	177	170	220	- - - -	1,380	1,500	7,590	3,670	600	140	298
31	233	- - - -	150	240	- - - -	1,780	- - - -	6,920	- - - -	558	170	- - - -
Total	8,295	6,532	6,391	5,950	6,390	21,407	44,580	125,960	159,140	54,749	10,770	7,107
Mean	268	218	206	192	228	691	1,486	4,063	5,305	1,766	347	237
Max	390	284	302	240	300	1,780	2,150	8,720	6,490	3,610	594	410
Min	93	120	150	150	200	320	1,040	1,550	3,670	558	140	118
Ac-ft	16,450	12,960	12,680	11,800	12,670	42,460	88,420	249,800	315,600	108,600	21,360	14,100

Cal yr 1966: Total 334,091 Mean 915 Max 5,580 Min 24 Ac-ft 662,700
Wtr yr 1967: Total 457,271 Mean 1,253 Max 8,720 Min 93 Ac-ft 907,000

Peak discharge (base, 7,000 cfs).--May 27 (1500) 8,890 cfs (7.69 ft).

9-2530. Little Snake River near Slater, Colo.

Location.--Lat 41°00'00", long 107°08'35", in NW¼ sec.15, T.12 N., R.87 W., on left bank just downstream from highway bridge at Focus Ranch, a quarter of a mile downstream from Spring Creek and 12 miles east of Slater.

Drainage area.--285 sq mi.

Records available.--October 1942 to September 1947, October 1950 to September 1967.

Gage.--Water-stage recorder. Datum of gage is 6,831.00 ft above mean sea level, datum of 1929.

Average discharge.---22 years, 211 cfs (152,800 acre-ft per year).

Extremes.--Maximum discharge during year, 1,930 cfs May 25 (gage height, 7.17 ft); minimum daily, 9.0 cfs Nov. 26.
1942-47, 1950-67: Maximum discharge, 3,230 cfs June 7, 1957 (gage height, 8.27 ft); minimum daily, 8.6 cfs Sept. 10, 1944.

Remarks.--Records good except those for winter period, which are poor. Diversions for irrigation of about 2,000 acres above station.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	14	15	36	28	34	28	58	217	1,200	510	54	22
2	19	10	32	26	32	30	61	198	1,200	455	48	20
3	46	14	29	28	30	32	65	177	1,200	415	48	18
4	38	16	31	30	28	32	84	174	1,300	410	44	18
5	36	14	32	32	28	32	108	177	1,400	350	41	17
6	38	22	50	30	28	32	112	201	1,600	320	39	17
7	35	24	40	26	30	30	120	240	1,480	330	54	17
8	32	27	34	20	30	28	143	430	1,350	306	81	18
9	29	25	30	22	28	28	143	590	1,310	270	55	25
10	25	28	26	24	26	30	151	674	1,170	208	51	32
11	24	31	32	26	26	32	201	668	1,100	234	50	31
12	24	28	40	26	28	32	214	566	1,050	265	45	38
13	40	27	38	26	30	32	192	470	1,030	180	41	34
14	42	24	34	28	28	34	154	375	1,030	151	38	28
15	31	27	32	28	28	36	177	296	1,010	174	37	27
16	34	32	32	26	30	36	180	315	960	186	39	35
17	30	31	30	24	28	36	154	485	981	154	35	54
18	32	32	30	26	28	40	186	701	1,050	168	30	84
19	22	28	30	30	28	42	251	778	1,060	127	28	107
20	29	22	30	32	28	44	234	820	1,080	107	29	84
21	32	32	30	30	26	46	174	925	1,030	92	28	67
22	21	32	28	30	24	51	143	1,130	1,010	85	27	53
23	28	25	26	32	24	51	143	1,220	960	90	25	48
24	23	12	24	32	26	57	129	1,350	890	120	22	39
25	23	10	28	32	28	58	125	1,500	785	89	20	37
26	24	9.0	30	30	30	51	112	1,600	715	76	20	54
27	24	16	30	28	30	49	116	1,500	680	74	19	41
28	24	22	28	28	28	46	201	1,300	650	65	18	35
29	22	30	26	30	-	57	296	1,300	596	61	18	32
30	19	34	28	34	- - - - -	55	335	1,300	555	57	25	32
31	20	- - - - -	30	36	- - - - -	50	- - - - -	1,200	- - - - -	55	25	- - - - -
Total	880	699.0	976	880	792	1,237	4,762	22,877	31,432	6,184	1,134	1,164
Mean	28.4	23.3	31.5	28.4	28.3	39.9	159	738	1,048	199	36.6	38.8
Max	46	34	50	36	34	58	335	1,600	1,600	510	81	107
Min	14	9.0	24	20	24	28	58	174	555	55	18	17
Ac-ft	1,750	1,390	1,940	1,750	1,570	2,450	9,450	45,380	62,340	12,270	2,250	2,310

Cal yr 1966: Total 50,638 Mean 139 Max 1,150 Min 9.0 Ac-ft 100,400
Wtr yr 1967: Total 73,017 Mean 200 Max 1,600 Min 9.0 Ac-ft 144,800

Peak discharge (base, 1,600 cfs)--May 25 (1930) 1,930 cfs (7.17 ft); June 6 (2100) 1,750 cfs (6.83 ft).

9-2550. Slater Fork near Slater, Colo.

Location.--Lat 40°59', long 107°23', in SW¼ sec.21, T.12 N., R.89 W., on right bank 25 ft downstream from highway bridge, 1 mile upstream from mouth, and 1½ miles south of Slater.

Drainage area.--161 sq mi.

Records available.--May to October, December 1910, March to October 1911, and April to May 1912 (published as Slater Creek), July 1931 to September 1967. Monthly discharge only for some periods, published in WSP 1313.

Gage.--Water-stage recorder. Altitude of gage is 6,600 ft (from river-profile map). May 28, 1910, to May 25, 1912, staff gage at site 1½ miles upstream at different datum. July 9, 1931, to May 6, 1932, chain gage at site a quarter of a mile downstream at different datum.

Average discharge.--36 years (1931-67), 69.6 cfs (50,390 acre-ft per year).

Extremes.--Maximum discharge during year, 788 cfs May 26 (gage height, 7.59 ft), from rating curve extended above 550 cfs; minimum daily, 0.75 cfs Sept. 5.

1910-12, 1931-67: Maximum discharge observed, 1,700 cfs May 19, 1912 (gage height, 5.00 ft, site and datum then in use); no flow Aug. 2-10, 1934, Aug. 18, 25-27, 1936, Aug. 29 to Sept. 3, 1954.

Remarks.--Records good except those for winter period, which are poor. Diversions for irrigation of about 500 acres above station.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3.1	11	18	17	12	15	28	92	342	97	12	1.7
2	4.8	8.8	18	17	11	16	28	79	350	87	11	1.7
3	20	13	17	22	14	17	27	70	372	74	11	1.9
4	19	11	18	22	14	17	39	69	366	68	12	.90
5	13	9.6	18	20	13	15	54	68	368	62	9.6	.75
6	13	14	15	20	13	14	53	80	458	52	9.2	1.2
7	14	12	23	20	13	14	52	92	362	48	8.6	1.5
8	14	14	18	17	12	15	63	188	309	50	12	3.1
9	13	9.8	14	16	13	16	61	260	308	52	12	4.5
10	9.8	12	15	17	14	16	60	350	248	41	12	7.6
11	8.8	14	16	18	14	17	79	300	201	34	14	8.4
12	8.8	16	18	18	14	17	87	220	223	52	14	13
13	14	16	17	18	14	16	78	190	316	34	9.8	13
14	20	14	17	18	15	16	66	170	382	28	9.2	11
15	14	17	17	18	14	15	66	150	298	26	8.2	9.6
16	15	17	17	17	13	18	92	180	242	28	7.2	9.8
17	13	17	17	16	15	20	67	200	218	25	6.2	14
18	14	17	15	17	16	23	73	250	238	31	5.8	18
19	11	15	15	18	15	25	101	290	248	26	5.2	33
20	14	14	15	18	13	24	104	260	322	21	5.0	32
21	13	18	15	16	12	23	80	320	274	18	5.0	23
22	9.6	18	15	16	13	23	60	360	248	17	5.0	18
23	15	17	14	17	14	27	60	398	227	16	4.5	16
24	12	12	13	17	16	26	54	440	201	21	4.2	15
25	12	8.0	15	17	17	30	52	494	153	21	4.0	14
26	12	10	16	16	16	23	46	652	138	18	4.0	15
27	12	12	17	15	15	26	49	618	137	16	3.8	17
28	12	15	19	15	15	25	79	506	140	14	3.5	15
29	12	19	19	16	-	29	126	500	138	14	2.2	14
30	12	19	18	17	- - - -	29	141	408	107	13	3.5	14
31	12	- - - -	18	18	- - - -	27	- - - -	386	- - - -	13	4.1	- - - -
Total	389.9	420.2	517	544	390	634	2,025	8,640	7,934	1,117	237.8	347.65
Mean	12.6	14.0	16.7	17.5	13.9	20.5	67.5	279	264	36.0	7.67	11.6
Max	20	19	23	22	17	30	141	652	458	97	14	33
Min	3.1	8.0	13	15	11	14	27	68	107	13	2.2	0.75
Ac-ft	773	833	1,030	1,080	774	1,260	4,020	17,140	15,740	2,220	472	690

Cal yr 1966: Total 18,567.5 Mean 50.9 Max 536 Min 0.4 Ac-ft 36,830
Wtr yr 1967: Total 23,196.55 Mean 63.6 Max 652 Min 0.75 Ac-ft 46,010

Peak discharge (base, 430 cfs)

Date	Time	Gage height	Discharge	Date	Time	Gage height	Discharge
5-10	-	-	†500	6- 6	0430	6.52	554
5-26	0500	7.59	788	6-14	2000	5.81	442

† Estimated.

9-2580. Willow Creek near Dixon, Wyo.

Location.--Lat 40°55'00", long 107°31'10", in SW¼ sec.8, T.11 N., R.90 W., in Colorado on right bank 6 miles south of Colorado-Wyoming State line, 7 miles south of Dixon, and 8 miles upstream from mouth.

Drainage area.--24 sq mi, approximately.

Records available.--October 1953 to September 1967.

Gage.--Water-stage recorder. Altitude of gage is 6,700 ft (from topographic map).

Average discharge.--14 years, 8.40 cfs (6,080 acre-ft per year).

Extremes.--Maximum discharge during year, 98 cfs May 28 (gage height, 3.82 ft); minimum daily, 0.40 cfs Nov. 2.

1953-67: Maximum discharge, 210 cfs Apr. 20, 1965 (gage height, 4.80 ft); maximum gage height, 4.97 ft May 10, 1957; no flow Sept. 17-19, 1955.

Remarks.--Records good except those for winter period, which are poor. No diversion above station. Regulation by Elk Lake (capacity, 400 acre-ft).

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.49	1.2	1.8	1.8	2.0	3.2	5.8	6.5	36	26	4.8	1.4
2	1.2	.40	1.8	2.0	1.8	3.4	5.6	6.7	39	24	4.8	1.1
3	3.0	.85	1.6	2.2	1.6	3.4	6.0	6.2	45	21	5.4	1.1
4	.94	.67	1.4	2.4	1.6	3.2	12	6.7	46	20	5.4	.94
5	.85	.49	1.6	2.4	1.6	3.0	18	7.4	51	18	5.0	.85
6	1.0	.85	1.8	2.2	1.8	2.8	11	13	61	16	5.0	.85
7	1.0	.85	2.2	2.0	2.0	2.6	11	12	47	16	5.4	1.0
8	1.1	1.1	1.6	1.7	2.2	2.6	11	13	39	14	5.8	1.0
9	.94	.76	1.6	1.6	2.2	2.6	8.7	18	38	12	5.4	2.1
10	.58	1.2	1.8	1.6	2.0	2.5	8.7	18	34	10	4.8	1.4
11	.67	1.2	1.8	1.8	2.0	3.2	11	16	30	9.7	4.8	1.3
12	.76	1.3	1.7	1.6	2.2	3.0	11	14	32	8.9	4.8	2.6
13	1.5	1.3	1.6	1.6	2.2	3.0	11	15	45	8.2	4.4	1.8
14	1.9	1.3	1.6	1.8	2.0	3.1	8.4	13	58	5.8	4.0	1.5
15	1.4	1.3	1.9	1.8	2.2	3.0	8.7	11	40	4.2	3.8	1.4
16	1.3	1.3	2.0	1.6	2.4	3.1	9.7	11	34	5.8	3.8	1.4
17	1.0	1.5	1.8	1.4	2.4	4.0	6.5	13	37	7.2	3.7	2.0
18	1.2	1.5	1.7	1.4	2.2	4.6	8.7	20	43	7.0	3.7	3.0
19	1.0	1.5	1.6	1.6	2.2	5.0	9.7	22	41	5.8	3.6	5.0
20	1.2	1.4	1.6	2.0	2.4	4.0	8.2	22	58	5.2	3.6	3.6
21	1.3	1.7	1.8	1.8	2.4	4.0	5.2	22	44	5.0	3.6	2.4
22	1.0	1.8	1.8	1.8	2.2	3.8	4.0	29	44	4.6	3.4	1.9
23	1.3	1.7	1.8	2.0	2.2	5.2	5.0	34	41	4.6	3.2	1.5
24	1.4	.94	1.4	2.0	2.4	5.6	4.4	36	37	5.4	3.2	1.4
25	1.5	.58	1.7	2.0	2.8	5.0	4.8	47	35	5.2	3.2	1.3
26	1.5	.94	2.0	1.8	3.2	3.1	4.2	59	34	6.7	3.2	1.4
27	1.8	1.2	2.0	1.6	3.2	3.4	5.6	66	32	6.5	3.0	1.4
28	1.8	1.4	1.8	1.6	3.0	5.0	8.7	54	34	6.2	3.0	1.4
29	1.8	1.6	1.7	1.8	-	6.2	10	58	31	6.0	3.0	1.4
30	1.8	1.8	2.0	2.0	- - - - -	5.4	9.4	41	28	5.8	3.1	1.3
31	1.8	- - - - -	2.0	2.2	- - - - -	5.6	- - - - -	36	- - - - -	5.8	1.5	- - - - -
Total	40.03	35.63	54.5	57.1	62.4	117.6	252.0	746.5	1214	306.6	125.4	50.74
Mean	1.29	1.19	1.76	1.84	2.23	3.79	8.40	24.1	40.5	9.89	4.05	1.69
Max	3.0	1.8	2.2	2.4	3.2	6.2	18	66	61	26	5.8	5.0
Min	0.49	0.40	1.4	1.4	1.6	2.5	4.0	6.2	28	4.2	1.5	0.85
Ac-ft	79	71	108	113	124	233	500	1,480	2,410	608	249	101

Cal yr 1966: Total 2,057.76 Mean 5.64 Max 40 Min 0.40 Ac-ft 4,080
 Wtr yr 1967: Total 3,062.50 Mean 8.39 Max 66 Min 0.40 Ac-ft 6,070

Peak discharge (base, 70 cfs)

Date	Time	Gage height	Discharge	Date	Time	Gage height	Discharge
5-28	2130	3.82	98	6-14	0615	3.55	71
6-5	2330	3.65	81				

9-2597. Little Snake River near Baggs, Wyo.

Location.--Lat 41°00'00", long 107°55'10", in NE¼ sec.24, T.12 N., R.94 W., in Wyoming, on left bank 600 ft upstream from Wyoming-Colorado State line, half a mile upstream from Scandinavian Wash, and 15 miles west of Baggs.

Drainage area.--3,020 sq mi, approximately.

Records available.--October 1961 to September 1967.

Gage.--Water-stage recorder. Altitude of gage is 6,050 ft (from topographic map). Prior to Apr. 12, 1962, at site 800 ft downstream at datum 3.00 ft lower.

Average discharge.--6 years, 502 cfs (363,400 acre-ft per year).

Extremes.--Maximum discharge during year, 3,910 cfs May 27 (gage height, 5.17 ft); minimum daily, 0.05 cfs Oct. 1.
1961-67: Maximum discharge, about 10,000 cfs Mar. 28, 1962 (gage height, 8.0 ft, from floodmark, present datum); no flow Sept. 12, 30, 1966.

Remarks.--Records fair except those for winter period, which are poor. Diversions for irrigation of about 15,000 acres above station.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.05	52	88	65	75	160	280	916	2,670	1,060	33	4.2
2	.82	52	88	65	70	170	319	668	2,430	932	15	14
3	95	50	92	60	65	170	324	592	2,500	825	15	5.5
4	13	45	95	75	65	170	308	525	2,730	720	10	4.6
5	8.0	47	92	65	60	170	512	486	2,980	705	7.5	4.2
6	7.0	52	110	60	55	180	712	506	3,220	608	6.5	2.2
7	8.0	48	101	55	55	200	652	480	3,480	512	11	2.2
8	9.0	66	70	50	50	240	585	742	3,200	492	47	2.6
9	10	100	60	46	55	260	682	1,340	2,680	525	37	3.4
10	14	85	70	50	60	280	675	1,830	2,520	486	47	4.2
11	24	80	80	50	60	300	668	2,060	2,280	382	27	6.0
12	16	76	90	55	60	450	802	1,780	2,170	362	17	34
13	466	80	95	55	65	450	832	1,540	2,360	460	12	20
14	350	78	85	60	70	400	780	1,420	2,430	330	13	9.5
15	140	76	85	55	80	380	630	1,120	2,360	252	16	7.5
16	120	72	90	50	75	340	682	948	2,320	266	16	10
17	100	74	80	50	70	320	668	972	2,390	292	13	12
18	90	78	75	50	75	400	570	1,580	2,460	266	12	133
19	80	80	75	50	80	600	675	2,040	2,180	286	11	810
20	70	80	80	55	85	500	870	2,210	2,120	226	9.0	434
21	60	78	80	60	75	408	780	1,980	2,770	180	6.5	209
22	60	76	70	65	75	428	578	2,140	2,630	150	5.5	147
23	60	88	65	70	80	302	447	2,470	2,180	132	4.2	122
24	50	90	60	65	90	343	402	2,700	2,240	132	4.2	101
25	40	86	65	60	100	388	336	2,740	1,940	135	3.4	90
26	45	60	70	55	120	454	330	3,230	1,690	125	3.4	84
27	45	50	70	55	140	356	270	3,610	1,550	76	3.0	74
28	50	40	65	60	150	343	308	3,360	1,470	70	3.0	88
29	55	68	60	70	-	292	668	3,130	1,300	66	4.6	88
30	60	84	60	80	- - - -	350	1,000	3,080	1,090	44	14	82
31	50	- - - -	65	80	- - - -	369	- - - -	2,800	- - - -	37	7.0	- - - -
Total	2,195.87	2,091	2,431	1,841	2,160	10,173	17,345	54,995	70,340	11,134	433.8	2,608.1
Mean	70.8	69.7	78.4	59.4	77.1	328	578	1,774	2,345	359	14.0	86.9
Max	466	100	110	80	150	600	1,000	3,610	3,480	1,060	47	810
Min	0.05	40	60	46	50	160	270	480	1,090	37	3.0	2.2
Ac-ft	4,360	4,150	4,820	3,650	4,280	20,180	34,400	109,100	139,500	22,080	860	5,170

Cal yr 1966: Total 144,010.47 Mean 395 Max 3,500 Min 0 Ac-ft 285,600
Wtr yr 1967: Total 177,747.77 Mean 487 Max 3,610 Min 0.05 Ac-ft 352,600

Peak discharge (base, 3,400 cfs)--May 27 (0100) 3,910 cfs (5.17 ft); June 6 (1900) 3,890 cfs (5.00 ft).

9-2600. Little Snake River near Lily, Colo.

Location.--Lat 40°32'50", long 108°25'25", in NW¼ sec.20, T.7 N., R.98 W., on left bank 170 ft downstream from highway bridge, 6 miles north of Lily, and 10 miles upstream from mouth.

Drainage area.--3,730 sq mi, approximately.

Records available.--June to August 1904 (published as "near Maybell"), October 1921 to September 1967. Monthly discharge only for some periods, published in WSP 1313.

Gage.--Water-stage recorder. Altitude of gage is 5,685 ft (from river-profile map) June 9 to Aug. 14, 1904, chain gage and May 5, 1922, to Nov. 30, 1935, water-stage recorder, at site 300 ft upstream at different datums.

Average discharge.--46 years (1921-67), 558 cfs (404,000 acre-ft per year). (45 years, 560 cfs, 405,400 acre-ft per year; figure previously published in error.)

Extremes.--Maximum discharge during year, 3,780 cfs May 27 (gage height, 4.95 ft); no flow Oct. 1. 1904, 1921-67: Maximum discharge, 14,200 cfs May 27, 1926 (gage height, 10.5 ft, site and datum then in use), from rating curve extended above 3,600 cfs; maximum gage height, 11.1 ft (from floodmark, backwater from ice), Feb. 13, 1962; no flow at times in most years.

Remarks.--Records good except those for winter period, which are poor. Diversions for irrigation of about 21,000 acres above station. Records of chemical analyses and water temperatures for the water year 1967 are published in Part 2 of this report as "above Lily."

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	48	90	70	80	150	390	890	2,940	1,250	60	15
2	30	45	107	70	80	170	338	966	2,800	1,140	55	9.9
3	20	49	112	65	75	180	343	714	2,570	1,010	47	7.7
4	50	49	116	65	70	180	330	641	2,720	880	35	5.1
5	15	45	114	80	65	180	325	580	2,990	790	28	4.4
6	22	42	121	70	65	180	352	580	3,470	722	26	4.8
7	19	40	138	65	60	200	536	565	3,370	714	23	4.4
8	15	53	107	60	55	220	618	572	3,200	625	50	3.6
9	11	37	90	55	55	260	522	615	2,800	572	176	4.0
10	8.2	55	70	50	60	280	595	1,240	2,580	536	80	3.3
11	5.5	74	75	50	65	348	588	1,680	2,390	536	55	4.0
12	4.4	105	85	55	65	356	536	1,940	2,130	450	64	27
13	11	90	95	55	65	480	649	1,730	2,120	375	51	8.8
14	127	76	100	60	70	450	748	1,530	2,170	380	29	5.1
15	285	82	95	65	75	438	689	1,370	2,280	444	24	8.2
16	130	82	95	60	85	330	595	1,120	2,280	321	18	5.1
17	110	84	95	55	80	278	565	975	2,090	285	16	3.3
18	90	82	85	55	80	334	681	890	1,950	313	14	8.2
19	80	80	80	55	80	432	543	1,320	1,900	309	13	41
20	70	84	80	55	90	558	565	1,850	1,990	301	12	288
21	60	94	85	55	85	625	730	2,000	2,020	309	9.4	343
22	60	92	85	65	80	468	739	2,060	2,290	254	5.1	232
23	60	90	75	70	85	450	618	2,160	2,120	215	3.6	164
24	50	86	70	75	90	390	515	2,490	2,040	203	2.9	125
25	40	80	65	70	100	375	501	2,680	2,010	182	7.2	103
26	45	70	70	65	120	385	456	3,040	1,800	164	6.0	76
27	45	50	75	60	130	438	420	3,310	1,560	167	4.4	64
28	50	32	75	60	140	400	395	3,370	1,450	150	4.8	70
29	55	38	70	65	-	352	375	3,230	1,450	107	17	58
30	60	70	65	70	- - - -	352	474	3,160	1,450	96	9.4	64
31	55	- - - -	65	85	- - - -	338	- - - -	3,150	- - - -	78	6.6	- - - -
Total	1,683.1	2,004	2,750	1,955	2,250	10,577	15,731	52,418	68,930	13,878	952.4	1,759.9
Mean	54.3	66.8	88.7	63.1	80.4	341	524	1,691	2,298	448	30.7	58.7
Max	285	105	138	85	140	625	748	3,370	3,470	1,250	176	343
Min	0	32	65	50	55	150	325	565	1,450	78	2.9	3.3
Ac-ft	3,340	3,970	5,450	3,880	4,460	20,980	31,200	104,000	136,700	27,530	1,890	3,490

Cal yr 1966: Total 145,445.5 Mean 398 Max 4,430 Min 0 Ac-ft 288,500

Wtr yr 1967: Total 174,888.4 Mean 479 Max 3,470 Min 0 Ac-ft 346,900

Peak discharge (base, 3,500 cfs)--May 27 (1800) 3,780 cfs (4.95 ft); June 7 (1900) 3,550 cfs (4.78 ft).

Note.--No gage-height record Jan. 4 to Feb. 7.

9-3024.2. White River above Ripple Creek, near Trapper's Lake, Colo.

Location.--Lat 40°02'50", long 107°18'30", in NW¼ sec.19, T.1 N., R.88 W., on right bank 10 ft downstream from private bridge, 0.7 mile downstream from Bear Creek, 2 miles upstream from Ripple Creek, and 6 miles northwest of Trapper's Lake.

Drainage area.--62.3 sq mi.

Records available.--October 1965 to September 1967.

Gage.--Water-stage recorder.

Extremes.--Maximum discharge during year, 328 cfs June 7 (gage height, 4.17 ft); minimum daily, 36 cfs Mar. 7-9. 1965-67: Maximum discharge, that of June 7, 1967; minimum daily, that of Mar. 7-9, 1967.

Remarks.--Records good except those for winter period, which are poor. No diversions above station. Natural regulation by Trapper's Lake.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	45	45	46	44	41	39	39	51	192	220	91	66
2	50	44	46	42	40	39	39	48	206	212	88	66
3	56	44	46	40	40	39	40	48	230	206	88	64
4	50	44	46	43	40	39	40	47	265	192	88	64
5	50	44	46	42	41	39	40	47	279	189	88	62
6	50	44	50	42	40	38	40	48	300	177	91	62
7	50	44	50	42	41	36	41	48	320	168	93	62
8	50	44	47	38	40	36	41	56	296	171	88	68
9	48	45	44	40	40	36	41	61	282	156	88	73
10	48	45	40	42	41	37	41	71	272	150	88	68
11	48	47	48	43	41	37	43	68	254	144	86	73
12	50	48	47	43	40	37	44	68	240	135	82	77
13	51	45	50	43	40	37	44	66	220	132	82	71
14	51	45	50	43	41	38	42	61	212	130	82	68
15	50	45	48	43	40	37	42	59	209	132	84	68
16	50	45	44	43	40	38	43	62	198	138	84	68
17	50	45	48	42	40	39	42	71	206	141	93	68
18	50	45	48	42	41	39	43	77	209	135	77	71
19	50	45	46	42	41	39	46	84	223	130	77	77
20	50	45	46	42	40	39	46	84	262	125	77	71
21	48	45	48	42	40	39	45	93	262	122	77	66
22	48	46	46	42	40	38	44	108	262	120	75	62
23	48	47	44	42	41	38	44	122	265	118	73	62
24	47	46	42	42	40	38	43	144	268	118	71	64
25	47	46	44	43	40	39	44	165	262	112	73	64
26	47	47	46	42	41	39	44	183	254	110	73	64
27	46	46	46	42	40	39	44	192	251	108	71	64
28	46	46	44	42	39	39	46	202	254	103	73	64
29	45	47	42	42	-	39	51	202	240	98	73	62
30	45	47	42	42	- - - - -	40	53	198	226	93	68	61
31	45	- - - - -	44	43	- - - - -	40	- - - - -	192	- - - - -	93	66	- - - - -
Total	1,509	1,361	1,424	1,305	1,129	1,186	1,295	3,026	7,419	4,378	2,508	2,000
Mean	48.7	45.4	45.9	42.1	40.3	38.3	43.2	97.6	247	141	80.9	66.7
Max	56	48	50	44	41	40	53	202	320	220	93	77
Min	45	44	40	38	39	36	39	47	192	93	66	61
Ac-ft	2,990	2,700	2,820	2,590	2,240	2,350	2,570	6,000	14,720	8,680	4,970	3,970
Cal yr 1966: Total	24,310			Mean 66.6	Max 202	Min 40		Ac-ft 48,220				
Wtr yr 1967: Total	28,540			Mean 78.2	Max 320	Min 36		Ac-ft 56,610				

9-3024.5 Lost Creek near Buford, Colo.

Location.--Lat 40°03'00", long 107°28'05", in SE¼ sec.15, T.1 N., R.90 W., on left bank at downstream side of highway bridge, 540 ft upstream from mouth, 0.5 mile downstream from Long Creek, and 9 miles northeast of Buford.

Drainage area.--21.6 sq mi.

Records available.--October 1964 to September 1967.

Gage.--Water-stage recorder.

Extremes.--Maximum discharge during year, 230 cfs May 22 (gage height, 3.86 ft); minimum daily, 0.98 cfs Sept. 5-7.
1964-67: Maximum discharge, 655 cfs May 21, 1965 (gage height, 4.65 ft); minimum daily, 0.80 cfs Aug. 17, 18, 1966.

Remarks.--Records good except those for winter period, which are poor. No diversion above station.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.0	1.5	2.5	2.2	1.9	2.6	4.2	51	64	9.3	1.6	1.6
2	1.8	1.3	2.0	2.2	1.9	2.6	4.8	40	63	8.2	1.6	1.4
3	3.8	1.7	2.1	2.4	2.0	2.6	6.8	36	63	7.2	1.6	1.1
4	2.3	1.5	2.1	2.5	2.1	2.4	9.0	34	59	7.2	1.5	1.0
5	2.7	1.4	2.1	2.7	2.1	2.2	9.6	34	61	6.5	1.4	.98
6	3.0	1.5	1.7	2.5	2.3	2.0	1.2	34	53	5.5	1.4	.98
7	2.7	1.7	2.4	2.3	2.5	2.0	21	49	45	6.0	1.9	.98
8	2.3	1.8	2.2	2.1	2.7	2.2	33	89	40	6.8	2.3	1.0
9	2.0	1.4	1.6	2.1	2.7	2.2	36	137	36	5.2	2.1	1.3
10	1.7	1.6	1.2	2.1	2.5	2.2	38	159	31	4.0	2.5	1.2
11	1.8	2.0	1.4	2.1	2.3	2.2	63	138	31	4.0	2.0	1.8
12	2.0	2.1	1.6	2.1	2.3	2.3	64	113	31	3.8	1.8	3.0
13	2.0	2.1	1.8	2.1	2.5	2.5	43	90	29	3.6	1.5	1.6
14	2.3	2.0	1.8	2.0	2.3	2.3	38	69	29	3.2	1.4	1.4
15	2.0	2.1	1.6	2.0	2.5	2.0	41	66	35	3.4	1.4	1.3
16	2.1	2.5	1.2	2.1	2.1	2.3	38	94	29	5.2	1.4	1.3
17	2.0	2.3	1.4	2.0	2.0	3.8	31	129	26	8.2	1.4	1.4
18	2.3	2.1	1.6	1.8	2.1	4.8	46	138	24	8.6	1.3	1.5
19	1.7	2.0	1.6	1.8	2.1	5.0	75	144	24	4.5	1.3	2.7
20	2.3	2.0	1.6	2.0	1.8	4.2	62	142	40	3.4	1.3	2.3
21	2.3	2.3	1.5	2.1	1.8	5.0	44	146	31	2.9	1.3	1.6
22	1.8	2.5	1.4	2.3	2.0	4.2	36	160	28	2.5	1.3	1.4
23	2.0	2.1	1.3	2.1	2.2	5.2	29	155	23	4.5	1.2	1.3
24	1.8	1.9	1.1	2.0	2.4	5.5	26	144	20	3.4	1.2	1.3
25	1.8	1.7	1.5	2.1	2.6	5.2	23	147	18	2.7	1.1	1.4
26	1.8	2.0	1.7	2.0	2.6	4.5	25	142	16	2.1	1.2	1.4
27	1.7	1.7	1.8	2.1	2.5	4.8	36	129	14	2.1	1.2	1.3
28	1.8	2.1	2.0	2.0	2.4	4.5	68	108	13	1.7	1.3	1.3
29	1.8	2.3	2.2	2.0	-	5.0	90	95	12	1.5	1.2	1.3
30	1.7	2.3	2.2	2.0	- - - -	4.0	74	83	10	1.5	1.3	1.3
31	1.7	- - - -	2.2	2.1	- - - -	3.6	- - - -	70	- - - -	1.5	1.4	- - - -
Total	64.0	57.5	54.4	65.9	63.2	105.9	1,126.4	3,165	998	140.2	46.4	43.44
Mean	2.06	1.92	1.75	2.13	2.26	3.42	37.5	102	33.3	4.52	1.50	1.45
Max	3.8	2.5	2.5	2.7	2.7	5.5	90	160	64	9.3	2.5	3.0
Min	1.0	1.3	1.1	1.8	1.8	2.0	4.2	34	10	1.5	1.1	0.98
Ac-ft	127	114	108	131	125	210	2,230	6,280	1,980	278	92	86

Cal yr 1966: Total 4,430.6 Mean 12.1 Max 110 Min 0.80 Ac-ft 8,790
Wtr yr 1967: Total 5,930.34 Mean 16.2 Max 160 Min 0.98 Ac-ft 11,760

Peak discharge (base, 150 cfs).--May 10 (1830) 212 cfs (3.76 ft); May 22 (1800) 230 cfs (3.86 ft).

9-3028. White River near Buford, Colo.

Location.--Lat 40°02', long 107°31', in SW¼ sec.20, T.1 N., R.90 W., on right bank a third of a mile upstream from highway bridge, three-quarters of a mile downstream from Ute Creek, and 6½ miles northeast of Buford.

Drainage area.--223 sq mi.

Records available.--July 1903 to December 1906, October 1956 to September 1967. Monthly discharge only for some periods, published in WSP 1313. Published as North Fork White River near Buford prior to 1956. Records for May 1910 to December 1915 and July 1919 to December 1920 at site 6½ miles downstream not equivalent owing to inflow between the sites.

Gage.--Water-stage recorder. Prior to October 1956, staff gage at highway bridge a third of a mile downstream at different datum.

Average discharge.--14 years, 292 cfs (211,400 acre-ft per year).

Extremes.--Maximum discharge during year, 1,120 cfs June 6 (gage height, 4.52 ft); maximum gage height, 4.85 ft Jan. 4 (backwater from ice); minimum daily discharge, 95 cfs Dec. 10.

1903-6, 1956-67: Maximum daily discharge, 1,950 cfs June 8, 1905; minimum daily, 90 cfs Jan. 13, 14, 1964.

Remarks.--Records good except those for winter period, which are poor. Diversion above station for irrigation of a few hay meadows.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	112	112	118	110	120	115	118	205	674	422	193	154
2	127	115	115	110	110	115	124	177	721	385	189	144
3	181	115	118	100	110	112	134	162	802	365	185	137
4	148	112	124	110	110	112	148	162	859	350	189	134
5	144	115	121	120	110	112	151	151	877	330	185	130
6	148	115	130	120	115	109	144	154	949	310	185	130
7	144	115	144	110	110	115	162	162	958	305	189	130
8	140	115	130	110	100	118	181	255	913	305	189	144
9	137	112	110	100	110	115	173	325	842	290	189	154
10	137	115	95	100	120	112	173	422	778	275	193	140
11	137	121	110	100	110	112	205	390	742	260	189	148
12	140	121	110	110	110	112	232	365	700	270	177	169
13	144	115	120	100	100	109	197	325	668	255	177	144
14	148	112	120	110	110	106	173	270	635	255	169	140
15	137	112	110	120	110	109	177	255	648	275	173	137
16	137	115	100	110	100	106	185	305	605	285	169	137
17	130	115	110	100	100	115	162	395	635	300	177	140
18	130	115	110	110	110	130	181	473	648	300	158	148
19	130	112	110	110	110	124	232	551	674	280	154	165
20	130	112	120	110	100	118	232	575	778	265	154	154
21	130	112	120	120	100	112	189	648	742	246	154	144
22	124	115	110	130	110	115	169	778	728	241	151	134
23	124	115	110	130	110	121	165	859	694	250	144	134
24	124	112	100	120	110	121	158	868	654	246	140	137
25	124	106	100	110	110	124	151	895	623	223	144	140
26	124	118	110	110	110	118	148	895	581	223	137	144
27	124	109	120	110	110	118	162	868	557	223	134	140
28	124	134	110	110	110	118	218	859	551	214	134	134
29	124	124	100	110	-	121	280	802	509	210	134	134
30	121	121	110	120	- - - -	121	265	721	461	201	137	134
31	121	- - - -	110	127	- - - -	118	- - - -	674	- - - -	197	144	- - - -
Total	4,145	3,457	3,525	3,467	3,045	3,583	5,389	14,946	21,206	8,556	5,136	4,254
Mean	134	115	114	112	109	116	180	482	707	276	166	142
Max	181	134	144	130	120	130	280	895	958	422	193	169
Min	112	106	95	100	100	106	118	151	461	197	134	130
Ac-ft	8,220	6,860	6,990	6,880	6,040	7,110	10,690	29,640	42,060	16,970	10,190	8,440

Cal yr 1966: Total 66,801 Mean 183 Max 629 Min 95 Ac-ft 132,500
Wtr yr 1967: Total 80,709 Mean 221 Max 958 Min 95 Ac-ft 160,100

Peak discharge (base, 1,000 cfs).--May 22 (2130) 1,090 cfs (4.50 ft); June 6 (2330) 1,120 cfs (4.52 cfs).

9-3030. White River at Buford, Colo.

Location.--Lat 39°59', long 107°37', in NW¼ sec.9, T.1 S., R.91 W., on right bank 600 ft east of Buford and 1½ miles upstream from South Fork White River.

Drainage area.--254 sq mi.

Records available.--May 1910 to December 1915, July 1919 to December 1920, October 1951 to September 1967. Monthly discharge only for some periods, published in WSP 1313. Published as North Fork White River near Buford prior to 1951. Records for July 1903 to December 1906 at site 6½ miles upstream not equivalent owing to inflow between sites.

Gage.--Water-stage recorder. Altitude of gage is 7,010 ft (from topographic map). May 24, 1910, to May 27, 1914, staff gage at site 1½ miles upstream at different datum. May 28, 1914, to Dec. 7, 1915, and July 1, 1919, to Oct. 9, 1920, staff gage at present site at different datum.

Average discharge.--22 years, 309 cfs (223,700 acre-ft per year).

Extremes.--Maximum discharge during year, 1,190 cfs May 26 (gage height, 5.75 ft); maximum gage height, 6.37 ft Jan. 10 (backwater from ice); minimum daily discharge, 105 cfs Dec. 10, 1910-15, 1919-20, 1951-67; Maximum daily discharge, 3,150 cfs May 30, 1912; maximum gage height, 7.22 ft Jan. 9, 1961 (backwater from ice); minimum daily discharge, 90 cfs Feb. 21, 1955.

Remarks.--Records good except those for winter period, which are poor. Diversions above station for irrigation of about 900 acres above and 300 acres below station.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	141	135	134	130	131	119	139	286	722	462	208	166
2	162	139	134	130	120	122	143	254	789	426	205	162
3	197	139	137	120	120	122	153	230	852	406	205	160
4	166	137	139	130	120	121	169	216	880	386	200	155
5	166	137	137	130	120	121	166	212	894	370	197	155
6	164	139	151	130	120	121	162	222	964	346	194	151
7	164	139	160	130	120	128	186	250	985	350	200	151
8	160	141	140	130	110	123	216	390	929	354	197	160
9	157	143	120	120	120	125	208	502	845	326	192	169
10	155	143	105	120	120	123	200	560	789	310	202	155
11	155	143	120	120	120	125	264	520	740	303	197	169
12	160	145	130	130	120	126	286	475	710	303	189	197
13	164	139	140	120	110	123	244	430	668	289	183	173
14	166	137	140	130	120	126	205	378	656	282	178	169
15	157	139	130	140	120	127	212	350	662	292	183	164
16	157	139	120	130	120	127	219	398	620	306	186	166
17	155	137	130	120	110	137	189	525	638	322	199	169
18	155	137	130	130	110	157	208	610	650	322	178	181
19	153	135	130	130	120	151	289	668	674	289	173	197
20	155	137	140	130	120	141	230	662	824	278	173	183
21	151	137	130	140	110	141	230	728	740	268	178	171
22	151	137	130	150	120	147	200	873	728	261	173	166
23	151	137	120	140	120	151	192	943	692	268	171	164
24	151	134	120	130	122	153	178	964	656	261	169	173
25	149	130	120	130	121	153	178	985	620	240	169	176
26	147	140	130	130	120	145	171	999	590	240	166	173
27	147	130	140	130	120	145	181	957	565	240	164	169
28	145	160	130	130	120	143	261	929	555	230	162	164
29	145	139	120	130	-	147	358	859	525	226	162	162
30	143	137	130	140	- - - -	147	354	768	484	219	162	164
31	141	- - - -	130	130	- - - -	139	- - - -	722	- - - -	216	160	- - - -
Total	4,830	4,161	4,067	4,030	3,324	4,176	6,391	17,865	21,646	9,391	5,675	5,034
Mean	156	139	131	130	119	135	213	576	722	303	183	168
Max	197	160	160	150	131	157	358	999	985	462	208	197
Min	141	130	105	120	110	119	139	212	484	216	160	151
Ac-ft	9,580	8,250	8,070	7,990	6,590	8,280	12,680	35,430	42,930	18,630	11,260	9,980

Cal yr 1966: Total 75,182 Mean 206 Max 662 Min 105 Ac-ft 149,100
 Wtr yr 1967: Total 90,590 Mean 248 Max 999 Min 105 Ac-ft 179,700

Peak discharge (base, 1,000 cfs).--May 26 (0030) 1,190 cfs (5.75 ft); June 6 (2230) 1,130 cfs (5.68 ft).

9-3035. South Fork White River near Buford, Colo.

Location.--Lat 39°55'19", long 107°33'03", in SE¼ sec.36, T.1 S., R.91 W., on left bank at upstream side of county bridge, 10 ft downstream from Peltier Creek, and 6 miles southeast of Buford.

Drainage area.--157 sq mi.

Records available.--August 1903 to October 1906, June 1910 to December 1915, October 1942 to September 1947, April to September 1967. Monthly discharge only for some periods, published in WSP 1313.

Gage.--Water-stage recorder. Altitude of gage is 7,460 ft (from topographic map). July 26, 1903, to Oct. 31, 1906, staff gage, and Oct. 1, 1942, to Sept. 30, 1947, water-stage recorder at site 60 ft upstream at different datum. June 25, 1910, to Nov. 30, 1915, staff gage at site half a mile upstream at different datum. Records for 1919-20 at site 6 miles downstream not equivalent.

Average discharge.--13 years (1903-6, 1910-15, 1942-47), 266 cfs (192,600 acre-ft per year).

Extremes.--Maximum discharge during water year, 1,560 cfs June 4 (gage height, 6.14 ft); minimum daily during period April to September, 90 cfs Apr. 1.

1903-6, 1910-15, 1942-47, 1967: Maximum discharge observed, 3,230 cfs June 17, 1906 (gage height, 8.2 ft, site and datum then in use), from rating curve extended above 1,600 cfs; minimum discharge recorded, 56 cfs Dec. 18, 1946 (gage height, 1.01 ft, site and datum then in use), but may have been less during periods of no gage-height record.

Remarks.--Records good. Diversions for irrigation of about 600 acres of hay meadows above station.

Discharge, in cubic feet per second, April to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1							90	144	900	412	155	122
2							95	132	1,100	378	155	113
3							95	124	1,300	348	155	107
4							95	120	1,400	327	156	102
5							100	116	1,300	315	150	99
6							95	115	1,390	288	146	99
7							95	111	1,350	270	154	97
8							95	132	1,280	273	152	102
9							100	166	1,100	258	156	138
10							100	228	995	240	150	116
11							100	238	905	232	144	111
12							110	235	804	255	136	140
13							110	248	736	225	128	122
14							105	240	716	216	126	113
15							105	218	712	214	126	107
16							100	250	692	216	126	106
17							100	348	744	235	118	106
18							110	444	780	258	115	110
19							120	568	825	216	113	120
20							120	540	925	204	109	110
21							110	664	804	194	113	105
22							110	900	760	186	109	105
23							105	1,150	728	184	107	105
24							105	1,350	676	212	104	105
25							100	1,500	636	192	102	111
26							110	1,440	556	176	102	107
27							116	1,360	532	170	106	100
28							126	1,250	504	160	107	99
29							146	1,200	465	156	111	97
30					- - - - -		166	1,000	437	150	116	95
31		- - - - -			- - - - -		- - - - -	1,050	- - - - -	146	122	- - - - -
Total							3,234	17,581	26,042	7,306	3,969	3,269
Mean							108	567	868	236	128	109
Max							166	1,500	1,400	412	156	140
Min							90	111	437	146	102	95
Ac-ft							6,410	34,870	51,650	14,490	7,870	6,480

Cal yr : Total Mean Max Min Ac-ft
Wtr yr 1967: Total - Mean - Max - Min - Ac-ft -

Peak discharge (base, 1,200 cfs).--May 26 (0030) 1,540 cfs (6.10 ft); June 4 (time unknown) 1,560 cfs (6.14 ft).

Note.--No gage-height record May 28 to June 5.

9-3040. South Fork White River at Buford, Colo.

Location.--Lat 39°58', long 107°38', in NE¼ sec.17, T.1 S., R.91 W., on left bank 300 ft downstream from highway bridge, three-quarters of a mile upstream from mouth, and 1 mile south of Buford.

Drainage area.--170 sq mi, approximately.

Records available.--July 1919 to December 1920 (monthly discharge only, published in WSP 1313), October 1951 to September 1967.

Gage.--Water-stage recorder. Altitude of gage is 6,970 ft (from topographic map). Prior to Nov. 30, 1920, staff gage at site 300 ft upstream at different datum.

Average discharge.--17 years, 253 cfs (183,200 acre-ft per year).

Extremes.--Maximum discharge during year, 1,580 cfs May 26 (gage height, 5.92 ft); minimum daily, 65 cfs Dec. 10.

1919-20, 1951-67: Maximum discharge, about 3,000 cfs June 30, 1957; maximum gage height, 7.07 ft June 30, 1957; minimum daily discharge, 60 cfs Feb. 21, 1955.

Remarks.--Records good except those for winter period, which are poor. Diversions above station for irrigation of about 1,100 acres above station and a few acres below.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	94	90	93	75	90	97	100	138	896	384	147	114
2	101	86	92	75	75	100	96	131	1,040	352	138	116
3	126	93	92	70	80	97	97	126	1,260	306	135	114
4	106	90	93	75	85	97	103	120	1,360	286	135	110
5	104	88	93	75	85	97	106	120	1,260	274	131	107
6	106	91	97	75	85	84	100	122	1,290	254	129	108
7	106	92	106	75	85	92	100	119	1,280	244	133	107
8	103	92	86	75	80	84	106	131	1,160	240	135	116
9	99	88	78	70	85	91	107	151	1,010	228	138	140
10	97	93	65	70	85	89	104	212	896	215	138	122
11	97	94	70	70	85	91	112	228	824	200	131	118
12	101	94	75	75	90	91	118	212	740	228	127	135
13	103	93	80	70	85	91	118	228	604	203	122	122
14	106	90	80	75	85	91	112	221	638	191	120	114
15	97	92	75	80	80	86	113	206	650	188	122	112
16	101	93	70	75	85	93	116	237	626	188	119	110
17	99	93	75	70	85	97	107	314	686	221	114	108
18	99	92	75	75	85	104	114	420	734	231	113	110
19	94	90	75	75	80	103	127	525	770	194	110	126
20	99	91	80	75	80	99	127	520	878	194	107	120
21	96	93	75	80	80	100	120	609	764	188	110	113
22	94	92	75	80	90	100	116	824	722	180	107	108
23	94	92	75	85	95	103	114	1,080	674	178	104	108
24	93	91	70	85	95	103	110	1,250	626	209	101	110
25	93	81	70	80	95	101	112	1,480	592	185	101	114
26	92	93	70	80	101	97	110	1,440	535	170	100	114
27	92	82	70	80	94	100	108	1,290	505	162	101	112
28	92	88	75	80	93	100	116	1,210	480	155	103	110
29	92	101	70	80	-	99	133	1,140	438	151	107	107
30	92	96	75	85	- - - - -	97	151	987	411	142	107	107
31	92	- - - - -	75	85	- - - - -	86	- - - - -	1,040	- - - - -	144	112	- - - - -
Total	3,060	2,734	2,450	2,375	2,408	2,960	3,373	16,831	24,349	6,685	3,697	3,432
Mean	98.7	91.1	79.0	76.6	86.0	95.5	112	543	812	216	119	114
Max	126	101	106	85	101	104	151	1,480	1,360	384	147	140
Min	92	81	65	70	75	84	96	119	411	142	100	107
Ac-ft	6,070	5,420	4,860	4,710	4,780	5,870	6,690	33,380	48,300	13,260	7,330	6,810

Cal yr 1966: Total 63,797 Mean 175 Max 1,150 Min 65 Ac-ft 126,500
Wtr yr 1967: Total 74,354 Mean 204 Max 1,480 Min 65 Ac-ft 147,500

Peak discharge (base, 1,300 cfs).--May 26 (0200) 1,580 cfs (5.92 ft); June 4 (0400) 1,510 cfs (5.88 ft).

9-3042. White River above Coal Creek, near Meeker, Colo.

Location.--Lat 40°00'20", long 107°49'30", on base line between sec.33, T.1 N., and sec.3, T.1 S., R.93 W., on right bank 16 ft upstream from county road bridge, 2 miles upstream from Coal Creek, and 5 miles southeast of Meeker.

Drainage area.--660 sq mi, approximately.

Records available.--October 1961 to September 1967.

Gage.--Water-stage recorder. Altitude of gage is 6,400 ft (from topographic map).

Average discharge.--6 years, 526 cfs (380,800 acre-ft per year).

Extremes.--Maximum discharge during year, 2,870 cfs May 26 (gage height, 4.76 ft); minimum daily, 85 cfs Aug. 25.
1961-67: Maximum discharge, 3,580 cfs May 13, 1962 (gage height, 5.41 ft); minimum daily, 66 cfs Aug. 26, 1966.

Remarks.--Records good except those for winter period, which are poor. Diversions above station for irrigation of about 8,000 acres above station and about 4,000 acres below.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	148	260	255	240	280	255	285	458	1,690	757	198	145
2	190	250	260	240	260	275	280	410	1,880	680	187	125
3	350	270	260	220	260	260	290	380	2,150	614	163	125
4	310	226	270	220	260	260	330	360	2,390	584	133	125
5	310	198	265	240	280	260	340	340	2,250	536	120	122
6	315	226	290	240	260	218	320	345	2,270	494	178	128
7	310	218	335	210	260	270	330	340	2,290	470	222	125
8	305	218	285	202	240	240	370	452	2,130	440	245	130
9	295	245	285	222	260	255	370	584	1,890	398	250	169
10	295	255	200	240	280	260	350	771	1,660	365	295	151
11	295	260	280	240	260	255	416	764	1,590	340	285	142
12	305	265	270	240	260	260	482	694	1,450	340	275	178
13	320	255	260	260	240	255	446	662	1,350	280	255	181
14	330	240	260	240	260	255	398	590	1,270	255	245	206
15	295	240	260	260	260	250	392	536	1,320	315	214	202
16	300	240	220	260	255	260	416	572	1,250	305	181	202
17	295	240	240	240	245	275	365	792	1,350	335	178	202
18	300	240	260	240	265	325	380	970	1,360	416	163	210
19	280	230	260	260	265	315	458	1,190	1,460	355	139	280
20	290	230	260	260	240	280	488	1,250	1,700	335	125	270
21	290	235	260	260	235	280	434	1,400	1,520	330	120	275
22	270	235	270	280	265	280	386	1,700	1,490	315	101	280
23	275	245	230	280	275	300	370	2,080	1,450	295	91	280
24	270	240	220	280	260	295	355	2,420	1,360	325	89	285
25	270	214	220	260	260	295	355	2,620	1,330	295	85	285
26	270	245	240	260	275	275	330	2,690	1,190	270	99	275
27	270	222	260	260	255	285	290	2,540	1,120	255	154	265
28	270	245	240	260	250	285	355	2,430	1,050	226	125	250
29	270	270	220	260	-	295	476	2,300	962	210	118	245
30	270	265	240	280	- - - -	300	530	2,010	841	202	118	235
31	270	- - - -	260	280	- - - -	265	- - - -	1,900	- - - -	202	115	- - - -
Total	8,833	7,222	7,935	7,734	7,265	8,438	11,387	36,550	47,013	11,539	5,266	6,093
Mean	285	241	256	249	259	272	380	1,179	1,567	372	170	203
Max	350	270	335	280	280	325	530	2,690	2,390	757	295	285
Min	148	198	200	202	235	218	280	340	841	202	85	122
Ac-ft	17,520	14,320	15,740	15,340	14,410	16,740	22,590	72,500	93,250	22,890	10,440	12,090

Cal yr 1966: Total 125,961 Mean 345 Max 1,600 Min 66 Ac-ft 249,800

Wtr yr 1967: Total 165,275 Mean 453 Max 2,690 Min 85 Ac-ft 327,800

Peak discharge (base, 2,000 cfs)--May 26 (0430) 2,870 cfs (4.76 ft); June 4 (0700) 2,500 cfs (4.43 ft).

Note.--No gage-height record Jan. 10 to Feb. 15.

9-3043. Coal Creek near Meeker, Colo.

Location.--Lat 40°05'30", long 107°46'05", in NE¼ sec.1, T.1 N., R.93 W., on right bank 200 ft downstream from unnamed tributary, 300 ft above headgate of ditch, 1.3 miles below Ninemile Draw, and 8 miles northeast of Meeker.

Drainage area.--25 sq mi, approximately.

Records available.--October 1957 to September 1967.

Gage.--Water-stage recorder. Altitude of gage is 6,820 ft (from topographic map).

Average discharge.--10 years, 5.15 cfs (3,730 acre-ft per year).

Extremes.--Maximum discharge during year, 81 cfs May 26 (gage height, 4.10 ft); minimum daily, 0.64 cfs Sept. 29, 30.

1957-67: Maximum discharge, 102 cfs May 11, 1958 (gage height, 4.37 ft); minimum daily, 0.40 cfs Sept. 9, 10, Nov. 20-23, 1959, Aug. 24, 1961.

Remarks.--Records good except those for winter period, which are poor. Slight regulation by two small storage reservoirs above station. Diversions for irrigation of a few acres of hay meadows above station.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.88	1.1	1.4	1.7	2.0	1.9	1.9	5.6	18	3.6	1.2	1.4
2	1.4	1.1	1.5	1.6	2.0	2.0	2.0	5.6	16	3.0	1.3	1.4
3	2.0	1.2	1.5	1.5	1.9	2.0	1.9	5.0	14	3.0	.72	1.3
4	1.2	1.2	1.4	1.6	1.8	1.8	1.8	5.4	14	3.0	.72	1.1
5	1.1	1.1	1.4	1.8	1.7	1.7	1.6	5.6	13	2.9	.72	1.0
6	1.0	1.1	1.8	1.6	1.6	1.6	1.6	5.6	11	2.6	.80	1.0
7	1.0	1.1	1.6	1.5	1.6	1.7	1.7	5.2	9.8	2.6	1.3	1.0
8	.96	1.2	1.4	1.4	1.8	1.6	2.3	6.7	9.1	3.4	1.4	1.2
9	.96	1.2	1.3	1.5	1.8	1.7	2.3	9.3	8.9	2.6	1.4	1.4
10	.96	1.2	1.4	1.6	1.7	1.9	2.3	11	8.2	2.3	1.1	1.3
11	1.0	1.2	1.6	1.7	1.6	2.0	2.9	11	8.2	2.3	1.1	1.4
12	1.1	1.3	1.7	1.7	1.6	2.0	4.2	10	8.0	2.0	1.0	1.5
13	1.2	1.3	1.7	1.8	1.7	1.9	4.4	10	13	1.9	1.0	1.3
14	1.4	1.3	1.6	1.8	1.8	1.8	3.4	8.9	12	1.7	1.4	1.3
15	1.3	1.3	1.5	1.7	1.7	1.8	3.2	8.2	12	1.9	2.6	1.3
16	1.4	1.3	1.5	1.8	1.8	1.9	3.4	7.8	9.8	1.9	2.6	1.3
17	1.3	1.3	1.6	1.8	1.8	2.0	3.4	9.3	12	2.2	2.4	1.0
18	1.2	1.3	1.7	1.7	1.7	2.3	3.0	12	11	2.3	2.3	1.0
19	1.2	1.3	1.7	1.7	1.7	2.3	3.8	14	11	1.9	2.3	1.6
20	1.3	1.3	1.7	1.7	1.6	2.3	4.6	16	13	1.5	2.2	1.4
21	1.3	1.3	1.7	1.8	1.7	2.1	4.8	17	13	1.7	2.0	1.3
22	1.2	1.3	1.6	1.9	1.7	1.9	4.2	18	11	1.7	1.9	1.2
23	1.2	1.3	1.5	1.9	1.6	1.9	4.0	19	8.2	1.7	1.9	1.0
24	1.2	1.3	1.5	1.9	1.6	1.9	3.8	20	7.3	2.0	1.9	.88
25	1.2	1.2	1.6	1.8	1.7	1.9	3.8	29	6.3	1.7	1.9	1.3
26	1.2	1.3	1.7	1.7	1.8	1.9	3.4	50	5.6	1.5	1.9	1.3
27	1.2	1.2	1.7	1.7	1.8	1.8	2.9	45	5.2	1.5	1.9	1.0
28	1.2	1.2	1.6	1.7	1.8	1.8	2.4	37	4.8	1.4	1.9	.76
29	1.2	1.3	1.6	1.8	-	1.9	5.4	32	4.6	1.4	1.9	.64
30	1.1	1.4	1.6	1.9	- - - - -	1.9	7.1	25	4.0	1.3	1.6	.64
31	1.1	- - - - -	1.7	2.0	- - - - -	1.8	- - - - -	21	- - - - -	1.2	1.4	- - - - -
Total	36.96	37.2	48.8	53.3	48.6	59.0	97.5	485.2	302.0	65.7	49.76	35.22
Mean	1.19	1.24	1.57	1.72	1.74	1.90	3.25	15.7	10.1	2.12	1.61	1.17
Max	2.0	1.4	1.8	2.0	2.0	2.3	7.1	50	18	3.6	2.6	1.6
Min	0.88	1.1	1.3	1.4	1.6	1.6	1.6	5.0	4.0	1.2	0.72	0.64
Ac-ft	73	74	97	106	96	117	193	962	599	130	99	70

Cal yr 1966: Total 1,373.66 Mean 3.76 Max 25 Min 0.60 Ac-ft 2,720.
 Wtr yr 1967: Total 1,319.24 Mean 3.61 Max 50 Min 0.64 Ac-ft 2,620

Peak discharge (base, 50 cfs).--May 26 (0030) 81 cfs (4.10 ft).

Note.--No gage-height record Nov. 30 to Mar. 22.

9-3045. White River near Meeker, Colo.

Location.--Lat 40°02'00", long 107°51'35", in NE¼ sec.30, T.1 N., R.93 W., on left bank 1 mile upstream from Curtis Creek and 2½ miles east of Meeker.

Drainage area.--762 sq mi.

Records available.--June 1901 to December 1906, October 1909 to September 1967. Monthly discharge only for some periods, published in WSP 1313. Published as "at Meeker" 1901-13.

Gage.--Water-stage recorder. Altitude of gage is 6,320 ft (from topographic map). Prior to Oct. 31, 1906, and May 7 to Aug. 13, 1910, staff gage and Aug. 14, 1910, to Oct. 19, 1913, water-stage recorder, at site 2½ miles downstream at different datum. Oct. 20, 1913, to Sept. 30, 1933, water-stage recorder at present site at datum 1.00 ft higher.

Average discharge.--63 years, 623 cfs (451,000 acre-ft per year).

Extremes.--Maximum discharge during year, 2,830 cfs May 26 (gage height, 3.18 ft, from recorded range in stage); minimum daily, 151 cfs Aug. 25.

1901-6, 1909-67: Maximum discharge observed, 6,370 cfs June 16, 1921 (gage height, 5.60 ft, present datum), from rating curve extended above 4,700 cfs; minimum daily, 112 cfs July 17, 1934.

Remarks.--Records good except those for periods of no gage-height record, which are poor. Diversions above station for irrigation of about 12,000 acres above station and about 3,000 acres below.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	185	277	277	260	300	270	289	437	1,700	807	262	198
2	212	265	277	260	280	280	286	380	1,900	729	250	188
3	410	286	274	240	280	280	292	353	2,200	657	244	188
4	325	259	289	240	280	270	319	325	2,300	609	232	185
5	319	230	283	260	300	270	333	310	2,300	561	230	183
6	316	262	298	260	280	250	319	313	2,300	498	295	185
7	316	256	353	240	260	280	325	301	2,300	476	325	188
8	310	253	274	220	260	260	370	370	2,100	464	345	198
9	307	271	265	240	260	280	370	531	1,860	432	329	232
10	310	280	202	260	280	280	357	717	1,670	390	365	215
11	307	296	292	260	260	270	405	723	1,590	357	357	210
12	313	289	274	280	260	270	481	681	1,470	365	333	247
13	325	283	244	260	240	270	459	627	1,400	310	319	235
14	349	271	247	260	260	270	385	555	1,340	295	304	247
15	316	274	274	280	280	260	380	514	1,370	337	286	241
16	319	274	228	280	260	280	415	549	1,320	357	241	235
17	316	271	235	260	240	280	365	771	1,400	390	230	235
18	316	271	244	260	260	340	380	950	1,410	486	218	241
19	298	265	250	260	260	320	486	1,150	1,500	400	190	307
20	307	265	253	280	240	300	525	1,210	1,750	370	181	295
21	304	271	241	280	260	300	437	1,350	1,620	353	181	295
22	295	271	262	300	280	300	375	1,690	1,540	337	169	295
23	298	277	190	300	280	304	357	2,030	1,480	325	163	286
24	298	265	220	280	260	295	337	2,380	1,380	357	157	289
25	292	241	240	280	280	304	345	2,600	1,320	341	151	292
26	292	271	260	260	280	286	325	2,700	1,220	313	155	292
27	292	244	260	260	260	292	280	2,500	1,140	295	215	283
28	292	247	240	260	260	283	345	2,400	1,070	277	192	274
29	292	295	240	280	-	289	470	2,300	985	259	173	268
30	289	292	260	300	- - - -	301	514	2,100	879	256	173	262
31	286	- - - -	260	300	- - - -	259	- - - -	2,000	- - - -	256	171	- - - -
Total	9,406	8,062	8,006	8,260	7,500	8,793	11,326	35,817	47,814	12,659	7,436	7,289
Mean	303	269	258	266	268	284	378	1,155	1,594	408	240	243
Max	410	295	353	300	300	340	525	2,700	2,300	807	365	307
Min	185	230	190	220	240	250	280	301	879	256	151	183
Ac-ft	18,660	15,990	15,880	16,380	14,880	17,440	22,460	71,040	94,840	25,110	14,750	14,460

Cal yr 1966: Total 137,545 Mean 377 Max 1,670 Min 124 Ac-ft 272,800

Wtr yr 1967: Total 172,368 Mean 472 Max 2,700 Min 151 Ac-ft 341,900

Peak discharge (base, 2,100 cfs).--May 26 (time unknown) 2,830 cfs (3.18 ft); June 4 (time unknown) 2,400 cfs (estimated) (gage height unknown).

Note.--No gage-height record Dec. 24 to Mar. 22, May 25 to June 6.

GREEN RIVER BASIN

9-3048. White River below Meeker, Colo.

Location.--40°00'30", long 108°06'00", in center of sec.31, T.1 N., R.95 W., on left bank 30 ft downstream from county bridge, 3½ miles downstream from Strawberry Creek, and 10 miles west of Meeker.

Drainage area.--1,040 sq mi, approximately.

Records available.--October 1961 to September 1967.

Gage.--Water-stage recorder. Altitude of gage is about 5,900 ft (estimated from nearby level line).

Average discharge.--6 years, 588 cfs (425,700 acre-ft per year).

Extremes.--Maximum discharge during year, 2,920 cfs May 26 (gage height, 3.57 ft); minimum daily, 186 cfs Aug. 25.
1961-67: Maximum discharge, 4,010 cfs June 15, 1965; minimum daily, 141 cfs July 8, 1966.

Remarks.--Records good except those for winter period, which are poor. Diversion above station for irrigation of about 22,000 acres above and a few acres below.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	238	321	321	300	340	400	330	532	1,670	934	312	261
2	285	312	321	300	340	440	321	484	1,810	802	290	242
3	662	326	312	280	340	400	326	460	2,060	746	295	242
4	472	308	330	260	320	350	345	430	2,340	697	265	242
5	430	281	330	260	320	340	370	410	2,240	634	261	234
6	415	303	355	280	320	269	360	415	2,260	514	312	242
7	410	308	400	260	300	308	350	405	2,290	502	380	238
8	400	298	340	240	300	281	375	466	2,140	508	390	249
9	390	321	316	260	300	303	395	613	1,920	496	375	312
10	390	326	249	280	320	326	375	781	1,720	472	405	308
11	385	335	316	300	300	335	405	823	1,650	448	395	303
12	390	335	340	300	300	365	466	767	1,530	436	390	365
13	395	335	303	320	300	335	472	725	1,420	380	375	360
14	442	321	303	320	300	312	425	662	1,390	360	360	355
15	410	316	330	300	320	294	400	592	1,460	405	345	345
16	395	321	280	320	300	321	425	585	1,370	478	303	340
17	395	316	280	300	320	335	395	746	1,400	526	290	345
18	380	316	300	300	320	380	400	918	1,400	606	269	345
19	365	316	300	300	320	395	442	1,110	1,490	490	245	430
20	365	312	300	300	300	375	514	1,240	1,810	442	224	395
21	365	316	280	320	320	345	478	1,320	1,740	442	228	385
22	350	316	280	340	340	335	425	1,620	1,580	410	220	380
23	350	316	260	340	340	345	410	1,990	1,540	395	204	370
24	345	316	260	320	340	340	395	2,260	1,430	420	198	365
25	345	290	280	320	360	345	390	2,430	1,350	420	186	370
26	345	308	300	300	340	330	385	2,630	1,250	375	192	365
27	340	294	300	300	340	335	360	2,490	1,160	350	242	365
28	340	273	280	300	360	330	385	2,350	1,080	326	245	345
29	335	350	280	300	-	330	478	2,240	1,050	298	242	335
30	330	340	300	320	- - - - -	345	585	1,990	934	290	245	321
31	330	- - - - -	300	340	- - - - -	308	- - - - -	1,920	- - - - -	303	224	- - - - -
Total	11,779	9,446	9,446	9,280	9,020	10,552	12,182	36,404	48,484	14,905	8,887	9,754
Mean	380	315	305	299	322	340	406	1,174	1,616	481	287	325
Max	662	350	400	340	360	440	585	2,630	2,340	934	405	430
Min	238	273	249	240	300	269	321	405	934	290	186	234
Ac-ft	23,360	18,740	18,740	18,410	17,890	20,930	24,160	72,210	96,170	29,560	17,630	19,350
Cal yr 1966: Total	152,783			Mean 419	Max 1,690	Min 141	Ac-ft 303,000					
Wtr yr 1967: Total	190,139			Mean 521	Max 2,630	Min 186	Ac-ft 377,100					

Peak discharge (base, 2,000 cfs)

Date	Time	Gage height	Discharge	Date	Time	Gage height	Discharge
5-26	0930	3.57	2,920	6-20	1830	3.06	2,110
6-7	0930	3.30	2,470				

Note.--No gage-height record Dec. 27 to Mar. 2.

9-3062. Piceance Creek below Ryan Gulch, near Rio Blanco, Colo.

Location.--Lat 39°55'16", long 108°17'49", in sec.32, T.1 S., R.97 W., on left bank at downstream side of bridge 40 ft below Ryan Gulch and 23 miles northwest of Rio Blanco.

Drainage area.--485 sq mi.

Records available.--October 1964 to September 1967.

Gage.--Water-stage recorder and concrete control. Altitude of gage is 6,070 ft (from topographic map).

Extremes.--Maximum discharge during year, 75 cfs Feb. 25 (gage height, 3.93 ft); maximum gage height, 5.55 ft Jan. 18 (backwater from ice); minimum daily discharge, 1.0 cfs May 10, 11.

1964-67: Maximum discharge, 400 cfs (estimated) Mar. 9, 1966 (gage height, 6.23 ft); minimum daily, 0.80 cfs Apr. 27, 28, May 3, 5, 6, 1966.

Remarks.--Records good except those for winter period, which are poor. Diversions for irrigation above station.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3.4	4.3	14	12	15	25	6.0	1.9	5.5	2.4	4.0	19
2	3.8	5.5	13	12	15	22	5.7	1.7	4.5	2.0	4.0	6.9
3	6.5	5.5	13	12	15	20	5.2	1.8	5.0	1.9	4.0	5.2
4	3.4	6.0	14	13	14	17	5.2	1.8	5.2	1.9	4.8	5.0
5	5.0	6.9	15	14	14	16	5.2	1.7	4.8	2.2	6.9	4.5
6	7.5	7.2	16	13	14	14	5.0	1.5	4.3	2.4	8.5	4.3
7	6.9	7.8	18	12	14	15	3.6	1.4	4.0	2.5	14	4.5
8	6.9	8.2	16	11	15	14	2.9	1.3	4.3	2.7	13	9.5
9	6.2	8.8	15	10	16	15	2.4	1.1	3.8	2.7	11	31
10	5.2	8.8	12	11	15	15	2.4	1.0	3.4	2.7	14	28
11	5.0	8.2	13	11	14	15	2.5	1.0	3.4	3.1	13	13
12	5.5	9.9	14	12	15	14	2.5	1.3	2.9	3.1	13	7.8
13	5.5	12	13	12	15	13	2.7	3.3	3.1	2.9	12	6.9
14	6.5	12	13	13	16	13	2.7	4.8	3.4	8.2	12	6.5
15	6.5	12	13	12	16	12	2.5	4.8	5.2	5.5	11	3.6
16	7.2	11	12	12	16	13	2.5	5.2	4.5	3.6	11	3.3
17	6.2	11	12	11	14	13	2.5	5.0	3.8	8.2	9.5	2.7
18	6.0	11	12	12	16	13	2.5	4.8	3.4	9.2	12	2.7
19	4.5	11	12	12	16	9.9	2.4	5.2	3.1	6.2	11	3.1
20	4.5	11	13	13	14	9.5	2.4	6.0	3.1	4.5	10	3.1
21	4.5	11	12	14	14	9.9	2.4	4.8	2.7	4.5	9.5	3.1
22	5.0	11	12	15	14	9.5	2.2	4.3	2.0	4.5	8.8	2.9
23	6.9	11	11	15	16	9.2	2.4	3.6	1.7	3.8	8.5	3.3
24	9.5	11	11	14	16	6.0	2.4	3.6	1.8	3.8	8.5	3.6
25	9.5	12	11	13	25	5.7	1.9	5.5	2.2	3.4	7.8	3.6
26	9.9	12	12	12	28	6.9	1.6	6.9	2.4	3.4	7.8	3.3
27	9.9	12	13	13	20	7.8	1.5	6.0	2.4	3.6	7.2	2.7
28	8.5	12	12	14	20	6.5	1.6	5.0	2.9	4.0	11	2.5
29	5.7	14	11	14	-	6.2	1.6	5.2	3.8	4.0	4.0	2.9
30	3.8	14	12	15	- - - - -	6.2	1.8	5.7	2.7	4.5	3.4	4.0
31	3.8	- - - - -	12	15	- - - - -	6.0	- - - - -	6.0	- - - - -	5.0	7.8	- - - - -
Total	189.2	298.1	402	394	452	378.3	88.2	113.2	105.3	122.4	283.0	202.5
Mean	6.10	9.94	13.0	12.7	16.1	12.2	2.94	3.65	3.51	3.95	9.13	6.75
Max	9.9	14	18	15	28	25	6.0	6.9	5.5	9.2	14	31
Min	3.4	4.3	11	10	14	5.7	1.5	1.0	1.7	1.9	3.4	2.5
Ac-ft	375	591	797	781	897	750	175	225	209	243	561	402
Cal yr 1966: Total	4,511.3		Mean 12.4	Max 200	Min 0.80	Ac-ft 8,950						
Wtr yr 1967: Total	3,028.2		Mean 8.30	Max 31	Min 1.0	Ac-ft 6,010						

9-3065. White River near Watson, Utah

Location.--Lat 39°59', long 109°11', in sec.2, T.10 S., R.24 E., Salt Lake meridian, on right bank 350 ft downstream from bridge on State Highway 45, 1 mile downstream from Evacuation Creek, and 7 miles north of Watson.

Drainage area.--4,020 sq mi, approximately.

Records available.--April 1904 to October 1906 (no winter records), May to November 1918, April 1923 to September 1967. Monthly discharge only for some periods, published in WSP 1313. Published as "near Dragon" 1906 and as "near Rangely, Colo." 1904-5, 1918.

Gage.--Water-stage recorder. Datum of gage is 4,946.78 ft above mean sea level, datum of 1929. Apr. 15, 1904, to Oct. 31, 1905, and May 19 to Nov. 23, 1918, staff gage at site 25 miles upstream (half a mile northwest of Rangely, Colo.) at different datum. Apr. 1 to Oct. 31, 1906, staff or chain gages at site 350 ft upstream at different datum. Apr. 1, 1923, to Oct. 3, 1938, water-stage recorder at site 350 ft upstream at datum 4.48 ft higher; Oct. 4, 1938, to Apr. 17, 1939, at site 1,450 ft upstream at different datum; Apr. 18, 1939, to Sept. 6, 1956, at site 100 ft upstream at datum 3.00 ft higher; Sept. 7, 1956, to Oct. 26, 1959, at site 250 ft upstream at datum 3.00 ft higher.

Average discharge.--44 years (1923-67), 702 cfs (508,200 acre-ft per year).

Extremes.--Maximum discharge during year, 3,340 cfs May 26 (gage height, 5.89 ft, from recorded range in stage); minimum daily, 100 cfs Dec. 11.

1904-6, 1918, 1923-67: Maximum daily discharge, 8,160 cfs July 15, 1929; maximum gage height, 13.1 ft Feb. 11, 1962, from floodmark in well (backwater from ice); minimum discharge, 52 cfs July 19, 20, 1934; minimum daily, 53 cfs July 19, 1934.

Remarks.--Records fair except those for winter period and those for period of no gage-height record, which are poor. Diversions for irrigation of about 30,000 acres above station. Records of chemical analyses and water temperatures for the water year 1967 are published in Part 2 of this report.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	190	314	302	300	320	500	314	520	1,970	898	218	202
2	215	308	296	290	320	500	326	500	1,690	826	245	198
3	1,000	302	285	260	300	580	338	440	1,840	754	240	235
4	750	290	308	260	300	600	362	420	2,170	738	230	210
5	600	308	302	300	280	560	374	400	2,690	684	222	206
6	450	270	362	280	280	500	398	400	2,350	642	206	202
7	416	275	380	260	280	540	404	390	2,250	648	320	194
8	362	290	398	240	280	500	392	390	2,270	824	516	198
9	290	302	410	260	280	460	416	450	2,250	594	474	214
10	240	314	205	280	300	560	464	550	2,020	504	372	270
11	215	320	100	280	280	700	440	700	1,800	468	510	402
12	200	320	140	300	280	858	428	800	1,720	426	456	564
13	260	320	240	300	300	898	422	700	1,680	396	408	462
14	658	320	320	300	280	642	422	650	1,660	372	378	378
15	440	320	320	320	280	500	428	600	1,660	360	336	354
16	404	320	320	340	280	340	416	600	1,580	408	320	342
17	368	300	300	340	280	360	416	600	1,400	504	285	330
18	362	300	320	320	300	400	400	650	1,410	697	255	342
19	344	300	320	300	300	380	440	700	1,400	588	245	360
20	350	300	320	280	320	360	500	1,000	1,500	486	230	426
21	332	290	320	300	320	340	480	1,200	2,050	414	198	432
22	326	290	300	320	300	340	440	1,300	1,780	384	186	384
23	308	290	300	300	300	350	400	1,590	1,610	366	183	372
24	296	285	300	300	340	356	380	2,000	1,500	360	183	360
25	320	290	320	300	440	362	360	2,290	1,380	348	162	360
26	332	275	320	280	400	362	340	2,870	1,300	348	155	372
27	332	255	320	280	440	356	360	2,810	1,200	330	149	366
28	332	296	320	280	520	338	380	2,570	1,130	290	149	360
29	326	265	320	300	-	320	460	2,400	1,080	265	202	348
30	326	260	320	320	- - - - -	314	550	2,350	993	245	198	378
31	320	- - - - -	320	320	- - - - -	296	- - - - -	2,160	- - - - -	226	218	- - - - -
Total	11,664	8,889	9,408	9,110	8,900	14,472	12,250	35,000	51,333	15,393	8,449	9,821
Mean	376	296	303	294	318	467	408	1,129	1,711	497	273	327
Max	1,000	320	410	340	520	898	550	2,870	2,690	898	516	564
Min	190	255	100	240	280	296	314	390	993	226	149	194
Ac-ft	23,140	17,630	18,660	18,070	17,650	28,700	24,300	69,420	101,800	30,530	16,760	19,480

Cal yr 1966: Total 169,518 Mean 464 Max 3,160 Min 78 Ac-ft 336,200
 Wtr yr 1967: Total 194,689 Mean 533 Max 2,870 Min 100 Ac-ft 386,200

Peak discharge (base, 2,900 cfs).--May 26 (1630) 3,340 cfs (5.89 ft); June 4 (1800) 2,930 cfs (5.55 ft).

Note.--No gage-height record Jan. 9 to Feb. 23, Apr. 18 to June 3.

9-3399. East Fork San Juan River above Sand Creek, near Pagosa Springs, Colo.

Location.--Lat 37°23'25", long 106°50'25", in NE¼ sec.4, T.36 N., R.1 E., on right bank 0.3 mile upstream from Sand Creek, 4 miles upstream from West Fork San Juan River, and 13 miles northeast of Pagosa Springs.

Drainage area.--64.1 sq mi.

Records available.--October 1956 to September 1967. Prior to October 1959, published as San Juan River above Sand Creek, near Pagosa Springs.

Gage.--Water-stage record. Altitude of gage is 8,900 ft (from topographic map).

Average discharge.--11 years, 86.6 cfs (62,700 acre-ft per year).

Extremes.--Maximum discharge during year, 485 cfs June 5 (gage height, 4.44 ft); minimum daily, 8.0 cfs Dec. 29.

1956-67: Maximum discharge, 1,210 cfs June 6, 1957 (gage height, 6.32 ft); minimum daily determined, 3.4 cfs Dec. 26, 1958.

Maximum flood known occurred Oct. 5, 1911.

Remarks.--Records good except those for winter period, which are poor. Diversions above station for irrigation of about 500 acres of hay meadows above station.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	16	11	11			15	32	86	159	101	73	107
2	20	10	11			18	31	76	165	95	66	90
3	37	9.6	12			20	37	71	220	92	61	80
4	24	9.9	12			19	46	64	342	85	69	69
5	23	9.0	13			16	52	68	405	79	132	63
6	22	9.0	51			12	50	66	430	72	150	63
7	20	10	104			13	53	89	395	69	145	66
8	19	11	52			12	62	148	352	75	137	66
9	18	10	22			12	64	204	324	64	193	66
10	18	9.6	16			14	57	212	280	73	228	63
11	19	10	15			17	61	196	236	78	236	57
12	19	12	14			15	66	196	208	80	182	52
13	18	11	15			16	57	176	182	66	159	49
14	16	10	14			16	54	135	193	61	154	44
15	14	11	13			14	55	118	176	63	154	42
16	14	12	12	11	12	16	51	151	154	82	143	40
17	16	12	12			26	52	200	151	240	120	41
18	14	12	12			32	63	240	182	200	107	40
19	14	12	13			33	73	248	288	130	113	61
20	14	12	13			26	75	276	276	105	101	53
21	14	13	13			29	71	312	268	99	90	47
22	14	13	12			31	73	342	248	99	86	42
23	13	13	10			38	75	365	240	86	79	39
24	12	14	9.5			45	75	410	204	96	69	40
25	12	14	9.5			46	71	410	182	101	63	43
26	12	13	10			41	64	380	165	93	61	41
27	12	8.5	10			40	79	360	145	83	64	40
28	12	8.5	9.5			37	101	316	140	71	61	36
29	12	11	8.0		-	40	111	252	123	63	57	35
30	12	11	10		- - - - -	37	105	212	111	62	76	33
31	11	- - - - -	10		- - - - -	33	- - - - -	190	- - - - -	89	95	- - - - -
Total	511	332.1	548.5	341	336	779	1,916	6,569	6,944	2,852	3,524	1,608
Mean	16.5	11.1	17.7	11	12	25.1	63.9	212	231	92.0	114	53.6
Max	37	14	104	-	-	46	111	410	430	240	236	107
Min	11	8.5	8.0	-	-	12	31	64	111	61	57	33
Ac-ft	1,010	659	1,090	676	666	1,550	3,800	13,030	13,770	5,660	6,990	3,190

Cal yr 1966: Total 31,777.6 Mean 87.1 Max 530 Min - Ac-ft 63,030

Wtr yr 1967: Total 26,260.6 Mean 71.9 Max 430 Min 8.0 Ac-ft 52,090

Peak discharge (base, 500 cfs)--No peak above base.

Note.--No gage-height record Dec. 30 to Mar. 8.

SAN JUAN RIVER BASIN

9-3400. East Fork San Juan River near Pagosa Springs, Colo.

Location.--Lat 37°22'10", long 106°53'30", in NW¼SW¼ sec.7, T.36 N., R.1 E., on right bank a quarter of a mile upstream from private highway bridge, half a mile upstream from West Fork, and 9.5 miles northeast of Pagosa Springs.

Drainage area.--86.9 sq mi.

Records available.--May 1935 to September 1967. Prior to October 1959, published as San Juan River near Pagosa Springs.

Gage.--Water-stage recorder. Datum of gage is 7,597.63 ft above mean sea level, datum of 1929. Prior to Sept. 8, 1938, at site a quarter of a mile downstream at different datum.

Average discharge.--32 years, 119 cfs (86,150 acre-ft per year).

Extremes.--Maximum discharge during year, 1,070 cfs July 17 (gage height, 4.09 ft); minimum daily, 13 cfs Dec. 29.

1935-67: Maximum discharge, 2,070 cfs May 12, 1941 (gage height, 4.84 ft), from rating curve extended above 1,300 cfs; minimum daily, 5.5 cfs Dec. 20, 1939.

Maximum flood known occurred Oct. 5, 1911.

Remarks.--Records good except those for winter period, which are poor. Diversions above station for irrigation of about 500 acres of hay meadows above station and a few hundred acres of hay meadows below station.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	19	15	18	16	20	24	47	121	238	140	84	150
2	23	14	18	16	19	32	44	104	248	138	91	117
3	55	14	18	15	17	34	54	98	312	129	69	102
4	30	15	19	16	18	30	72	84	490	117	83	88
5	28	15	19	15	19	27	93	90	520	110	143	81
6	26	14	130	16	19	20	81	88	615	102	158	91
7	25	15	202	14	20	20	90	130	545	98	172	88
8	23	18	68	14	18	19	108	220	475	108	156	96
9	22	17	32	15	18	20	108	300	423	90	220	96
10	22	16	24	15	20	22	88	340	364	94	248	96
11	23	16	24	16	19	26	98	316	312	100	248	79
12	23	18	22	17	18	26	108	304	280	102	201	72
13	22	17	24	17	18	26	88	280	252	92	196	66
14	20	18	22	17	20	26	79	220	262	84	175	58
15	18	19	20	18	20	25	78	201	252	83	175	56
16	18	20	19	17	18	26	69	234	217	115	158	52
17	19	19	18	17	16	39	71	288	217	417	133	52
18	19	19	18	16	17	52	98	324	266	280	121	50
19	18	19	19	15	18	53	108	356	378	172	133	86
20	19	19	20	16	17	43	115	382	348	140	124	76
21	18	19	20	17	17	44	110	428	332	126	108	64
22	18	19	18	18	18	49	110	485	308	121	104	57
23	17	19	16	17	18	63	108	555	292	108	96	54
24	17	19	14	17	19	74	108	570	259	110	81	53
25	17	19	15	18	20	74	96	565	234	130	74	63
26	16	19	14	16	19	62	88	530	217	117	72	58
27	16	17	16	16	18	60	117	465	198	100	93	57
28	16	16	14	16	19	53	153	455	189	86	74	52
29	16	18	13	17	-	57	169	378	166	76	71	49
30	16	19	16	18	- - - -	54	164	316	153	76	84	47
31	16	- - - -	16	22	- - - -	48	- - - -	284	- - - -	102	124	- - - -
Total	655	521	926	510	517	1,229	2,900	9,501	9,362	3,862	4,039	2,186
Mean	21.1	17.4	29.9	16.5	18.5	39.6	96.7	306	312	125	130	72.9
Max	55	20	202	22	20	74	169	570	615	417	248	150
Min	16	14	13	14	16	19	44	84	153	76	69	47
Ac-ft	1,300	1,030	1,840	1,010	1,030	2,440	5,750	18,840	18,570	7,660	8,010	4,340

Cal yr 1966: Total 44,269 Mean 121 Max 766 Min 13 Ac-ft 87,810
Wtr yr 1967: Total 36,207 Mean 99.2 Max 615 Min 13 Ac-ft 71,820

Peak discharge (base, 600 cfs)

Date	Time	Gage height	Discharge	Date	Time	Gage height	Discharge
5-24	2000	3.31	635	7-17	2200	4.09	1,070
6-5	2230	3.43	661				

9-3425. San Juan River at Pagosa Springs, Colo.

Location.--Lat 37°15'58", long 107°00'37", NE¼SW¼ sec.13, T.35 N., R.2 W., on right bank at former bridge site in Pagosa Springs, 0.2 mile upstream from McCabe Creek, 0.6 mile downstream from bridge on U. S. Highway 160, and 2 miles upstream from Mill Creek.

Drainage area.--298 sq mi.

Records available.--October 1910 to December 1914, May 1935 to September 1967. Monthly discharge only for some periods, published in WSP 1313.

Gage.--Water-stage recorder. Datum of gage is 7,052.04 ft above mean sea level, datum of 1929. Jan. 29 to Mar. 6, 1911, staff gage at site half a mile upstream at different datum. Mar. 7 to Oct. 4, 1911, staff gage at present site at different datum. Nov. 23, 1911, to Nov. 14, 1914, staff gage at site 300 ft downstream at different datum.

Average discharge.--36 years, 371 cfs (268,600 acre-ft per year).

Extremes.--Maximum discharge during year, 1,680 cfs May 23 (gage height, 4.92 ft); minimum daily, 24 cfs Nov. 2, 3.

1910-14, 1935-67: Maximum discharge, about 25,000 cfs Oct. 5, 1911 (gage height, 17.8 ft, from floodmarks), from velocity-area study; minimum daily, 9.7 cfs Oct. 5, 6, 1956.

Maximum stage known, that of Oct. 5, 1911. Flood of June 29, 1927, reached at stage of 13.5 ft (discharge, about 16,000 cfs), from information by local residents.

Remarks.--Records good. Diversions for irrigation of several thousand acres above station.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	32	27	56	52	56	103	159	329	635	317	274	421
2	36	24	56	52	55	126	157	266	625	284	235	321
3	79	24	60	50	49	137	182	232	811	274	210	266
4	60	29	62	51	51	120	229	207	1,200	235	235	229
5	51	29	65	51	56	99	252	226	1,280	210	349	213
6	44	29	304	52	57	81	235	204	1,480	193	353	220
7	38	35	642	46	61	84	246	284	1,410	198	498	223
8	38	54	196	43	50	78	277	538	1,250	201	421	220
9	37	42	108	43	52	84	291	775	1,090	171	650	213
10	35	38	79	46	55	92	238	908	967	159	720	201
11	39	42	79	48	55	112	238	829	829	171	742	204
12	51	45	70	49	52	106	280	775	720	176	595	182
13	38	46	75	46	58	108	238	758	630	162	516	164
14	37	48	68	48	62	105	216	600	676	157	484	148
15	34	50	66	48	57	99	220	538	650	150	466	134
16	34	54	61	48	60	103	190	650	580	184	448	128
17	37	52	61	46	49	148	196	799	590	841	357	126
18	34	50	61	43	52	198	242	883	665	687	309	126
19	30	50	62	43	61	213	294	995	921	408	325	162
20	31	54	65	44	63	176	309	1,080	859	329	317	176
21	31	54	65	48	54	171	288	1,160	847	277	277	145
22	34	54	63	49	52	176	284	1,230	764	277	256	128
23	37	52	52	49	56	220	270	1,440	720	242	249	112
24	40	54	46	45	63	256	280	1,480	640	220	207	108
25	32	52	49	46	72	256	249	1,430	575	263	193	122
26	31	54	45	46	75	216	216	1,360	520	302	182	132
27	29	44	52	45	73	213	284	1,170	462	252	223	124
28	29	50	52	48	81	190	416	1,140	421	220	198	108
29	29	57	46	48	-	196	444	960	365	169	184	96
30	29	57	52	50	- - - -	198	457	817	317	229	196	92
31	29	- - - -	51	54	- - - -	166	- - - -	748	- - - -	361	321	- - - -
Total	1,165	1,350	2,869	1,477	1,637	4,630	7,877	24,811	23,499	8,319	10,990	5,244
Mean	37.6	45.0	92.5	47.6	58.5	149	263	800	783	268	355	175
Max	79	57	642	54	81	256	457	1,480	1,480	841	742	421
Min	29	24	45	43	49	78	157	204	317	150	182	92
Ac-ft	2,310	2,680	5,690	2,930	3,250	9,180	15,620	49,210	46,610	16,500	21,800	10,400

Cal yr 1966: Total 116,665 Mean 320 Max 1,880 Min 24 Ac-ft 231,400

Wtr yr 1967: Total 93,868 Mean 257 Max 1,480 Min 24 Ac-ft 186,200

Peak discharge (base, 1,500 cfs).--May 23 (2200) 1,680 cfs (4.92 ft); June 6 (2245) 1,590 cfs (4.80 ft).

SAN JUAN RIVER BASIN

9-3430. Rio Blanco near Pagosa Springs, Colo.

Location.--Lat 37°12'46", long 106°47'38", in center of sec.1, T.34 N., R.1 E., on right bank 40 ft downstream from highway bridge, 0.4 mile upstream from Leche Creek, 1½ miles downstream from Fish Creek, and 12.5 miles southeast of Pagosa Springs.

Drainage area.--58.0 sq mi.

Records available.--May 1935 to September 1967.

Gage.--Water-stage recorder. Altitude of gage is 7,950 ft (from topographic map).

Average discharge.--32 years, 84.9 cfs (61,470 acre-ft per year).

Extremes.--Maximum discharge during year, 1,100 cfs July 17 (gage height, 3.06 ft), from rating curve extended above 630 cfs; minimum daily, 8.8 cfs Nov. 6.

1935-67: Maximum discharge, about 1,600 cfs July 26 or 27, 1957; maximum gage height, 4.12 ft June 18, 1949; minimum daily discharge, 3.0 cfs Oct. 10, 1956.

Maximum flood known occurred Oct. 5, 1911

Remarks.--Records fair except those for winter period and those for period May 10 to July 20, which are poor. Diversions for irrigation of about 1,400 acres above station.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	11	10	14	14	15	34	42	80	142	70	69	184
2	18	9.4	14	13	14	40	45	70	159	66	66	114
3	38	9.1	14	13	13	40	66	59	210	59	52	90
4	21	9.1	14	13	14	35	73	59	434	55	69	75
5	18	9.1	14	13	15	28	68	61	442	48	125	66
6	17	8.8	143	13	16	20	68	66	434	45	122	66
7	16	9.1	130	12	15	20	86	130	346	50	136	81
8	16	10	50	10	14	19	94	225	277	89	111	100
9	15	9.4	30	12	14	22	84	258	251	59	156	132
10	13	9.4	20	12	15	24	66	200	210	52	224	90
11	14	10	22	13	15	26	75	180	167	48	208	78
12	14	11	18	13	15	26	75	180	134	55	139	66
13	13	11	20	12	16	26	61	167	104	50	150	55
14	12	12	18	13	17	25	59	119	134	68	172	50
15	12	13	17	13	16	24	55	119	146	52	188	42
16	12	14	16	13	15	30	46	167	112	114	146	38
17	13	13	16	12	14	50	48	200	108	448	114	35
18	13	13	16	11	13	61	59	232	146	228	122	34
19	12	14	16	11	15	55	66	244	290	146	125	72
20	12	13	17	12	15	46	63	251	225	136	118	60
21	12	13	17	13	14	48	63	264	195	122	97	42
22	12	13	16	13	13	61	63	284	185	111	84	35
23	12	13	14	13	14	84	61	330	163	87	72	32
24	11	13	12	12	15	92	61	322	138	104	58	30
25	11	13	13	12	16	78	55	298	127	100	52	48
26	11	13	12	12	16	63	61	290	116	111	78	42
27	11	12	13	12	18	59	97	251	97	90	69	48
28	11	12	12	13	24	55	123	258	89	69	58	35
29	10	13	11	14	-	57	123	205	75	69	60	32
30	10	14	12	15	- - - -	50	97	175	70	81	66	30
31	10	- - - -	13	17	- - - -	43	- - - -	171	- - - -	94	114	- - - -
Total	431	346.4	764	394	426	1,341	2,103	5,915	5,726	2,976	3,420	1,902
Mean	13.9	11.5	24.6	12.7	15.2	43.3	70.1	191	191	96.0	110	63.4
Max	38	14	143	17	24	92	123	330	442	448	224	184
Min	10	8.8	11	10	13	19	42	59	70	45	52	30
Ac-ft	855	687	1,520	781	845	2,660	4,170	11,730	11,360	5,900	6,780	3,770

Cal yr 1966: Total 29,351.4 Mean 80.4 Max 546 Min 8.8 Ac-ft 58,220
 Wtr yr 1967: Total 25,744.4 Mean 70.5 Max 448 Min 8.8 Ac-ft 51,060

Peak discharge (base, 800 cfs)---July 17 (2250) 1,100 cfs (3.06 ft).

9-3440. Navajo River at Banded Peak Ranch, near Chromo, Colo.

Location.--Lat 37°05'07", long 106°41'20", in NW¼ sec.24, T.33 N., R.2 E., on left bank at downstream side of private bridge on Banded Peak Ranch, half a mile downstream from Aspen Creek, 4 miles downstream from East Fork, and 9 miles northeast of Chromo.

Drainage area.--69.8 sq mi.

Records available.--October 1936 to September 1967. Monthly discharge only for some periods, published in WSP 1313.

Gage.--Water-stage recorder. Datum of gage is 7,940.6 ft above mean sea level (river-profile survey). Prior to Oct. 1, 1949, at datum 3.00 ft higher.

Average discharge.--31 years, 103 cfs (74,570 acre-ft per year).

Extremes.--Maximum discharge during year, 470 cfs June 6 (gage height, 2.85 ft); minimum daily, 18 cfs Nov. 27.

1936-67: Maximum discharge, 1,340 cfs May 13, 1941 (gage height, 7.02 ft, present datum); minimum daily, 8.4 cfs Sept. 29, 1960, result of temporary blockage by channel alteration upstream.
Maximum flood known occurred Oct. 5, 1911.

Remarks.--Records good except those for winter period, which are poor. Diversions for irrigation of about 430 acres above station.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	33	26	21	28	30	37	66	111	168	145	75	142
2	34	24	21	28	30	45	69	94	183	132	76	118
3	39	25	24	26	28	46	79	88	219	128	72	105
4	34	24	23	28	30	40	89	84	344	120	67	94
5	33	22	26	28	32	36	95	88	368	105	79	90
6	32	24	144	28	30	32	90	89	430	94	95	84
7	32	24	149	26	30	34	99	120	389	97	97	83
8	32	26	62	22	30	30	105	192	352	125	86	82
9	31	23	36	26	30	34	99	228	340	92	105	90
10	31	23	36	30	32	34	89	228	304	83	178	79
11	32	24	34	30	30	36	90	201	260	84	216	75
12	31	25	34	28	30	35	97	201	236	92	142	72
13	30	24	28	28	30	34	89	195	204	80	162	67
14	30	21	30	30	30	34	86	158	242	118	174	67
15	28	21	28	30	28	32	82	142	246	83	162	61
16	28	22	30	28	29	37	76	158	222	98	142	58
17	32	24	30	26	28	49	76	183	236	250	120	56
18	29	21	32	24	30	62	82	242	256	155	125	56
19	29	21	30	26	30	62	88	256	356	122	118	62
20	30	22	30	28	26	53	84	264	336	107	107	57
21	29	22	32	30	26	56	84	284	312	97	103	53
22	28	21	32	29	28	64	86	320	308	94	103	50
23	27	22	28	29	28	79	88	372	292	86	92	49
24	28	23	24	28	30	86	88	380	260	95	82	47
25	28	23	26	28	28	79	84	372	239	94	79	56
26	30	21	26	26	28	74	83	360	222	104	84	52
27	29	18	24	24	27	74	89	316	210	95	86	50
28	29	19	22	28	30	72	113	340	174	80	84	48
29	29	21	24	30	-	78	140	268	148	73	86	47
30	28	21	26	29	- - - -	72	145	222	148	72	119	46
31	27	- - - -	28	32	- - - -	67	- - - -	198	- - - -	80	132	- - - -
Total	942	677	1,140	861	818	1,603	2,730	6,754	8,004	3,280	3,448	2,096
Mean	30.4	22.6	36.8	27.8	29.2	51.7	91.0	218	267	106	111	69.9
Max	39	26	149	32	32	86	145	380	430	250	216	142
Min	27	18	21	22	26	30	66	84	148	72	67	46
Ac-ft	1,870	1,340	2,260	1,710	1,620	3,180	5,410	13,400	15,880	6,510	6,840	4,160

Cal yr 1966: Total 35,766 Mean 98.0 Max 515 Min 18 Ac-ft 70,940
 Wtr yr 1967: Total 32,353 Mean 88.6 Max 430 Min 18 Ac-ft 64,170

Peak discharge (base, 500 cfs).--No peak above base.

SAN JUAN RIVER BASIN

9-3443. Navajo River above Chromo, Colo.

Location.--Lat 37°01'55", long 106°43'56", in NW¼ sec.9, T.32 N., R.2 E., on right bank 5 ft downstream from private road bridge, 6 miles east of Chromo, and 7 miles upstream from Little Navajo River.

Drainage area.--96.4 sq mi.

Records available.--October 1956 to September 1967. Published as "near Chromo" 1956-58.

Gage.--Water-stage recorder. Altitude of gage is 7,700 ft (from topographic map).

Average discharge.--11 years, 115 cfs (83,260 acre-ft per year).

Extremes.--Maximum discharge during year, 482 cfs June 6 (gage height, 4.87 ft); minimum daily, 18 cfs Oct. 19.

1956-67: Maximum discharge, 1,340 cfs June 7, 1957 (gage height, 5.95 ft); maximum gage height, 6.13 ft during period Feb. 1-8, 1957 (ice jam); minimum daily discharge, 6.4 cfs Sept. 2, 1962.

Maximum flood known occurred Oct. 5, 1911.

Remarks.--Records good except those for winter period, which are poor. Diversions above station for irrigation of about 750 acres above station and about 250 acres below.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	31	26	31	30	31	44	71	119	176	131	71	172
2	33	26	31	30	30	50	73	105	168	128	70	137
3	36	25	32	28	30	52	88	90	204	122	67	116
4	34	26	32	30	32	47	100	85	344	113	63	100
5	34	26	35	30	33	44	105	90	386	100	73	92
6	32	26	149	30	35	39	95	90	446	95	90	90
7	33	28	164	28	35	39	102	120	410	95	95	90
8	32	31	73	24	33	39	113	200	374	128	82	88
9	31	28	56	28	32	42	110	250	362	95	100	105
10	30	27	46	32	33	44	90	260	326	83	171	85
11	32	28	44	32	33	48	90	220	285	76	265	82
12	32	29	40	30	33	46	105	210	240	83	160	75
13	31	29	40	30	34	48	95	200	204	70	175	71
14	31	29	36	32	33	47	88	170	240	114	192	70
15	30	29	34	32	35	47	90	150	240	83	180	65
16	30	31	34	30	36	50	82	160	212	83	160	64
17	33	31	34	28	34	63	80	190	230	300	128	62
18	24	30	34	26	35	75	88	260	260	180	125	62
19	18	30	34	28	35	82	95	285	362	128	122	68
20	25	30	36	30	34	71	95	290	356	113	108	63
21	29	31	36	32	33	73	98	310	326	108	105	59
22	29	32	34	32	33	78	98	338	315	105	102	56
23	28	33	30	32	34	92	98	386	295	92	92	54
24	28	34	26	30	36	108	98	404	260	92	82	53
25	28	34	28	30	38	98	92	386	235	83	78	62
26	28	32	28	28	37	88	88	368	220	96	82	62
27	28	26	26	26	36	82	102	332	200	92	88	59
28	28	28	24	30	39	83	137	344	164	73	85	54
29	28	31	26	32	-	88	160	280	137	70	85	52
30	27	31	28	32	- - - -	82	144	235	137	67	128	51
31	27	- - - -	30	34	- - - -	75	- - - -	212	- - - -	76	168	- - - -
Total	920	877	1,331	926	952	1,964	2,970	7,139	8,114	3,274	3,592	2,319
Mean	29.7	29.2	42.9	29.9	34.0	63.4	99.0	230	270	106	116	77.3
Max	36	34	164	34	39	108	160	404	446	300	265	172
Min	18	25	24	24	30	39	71	85	137	67	63	51
Ac-ft	1,820	1,740	2,640	1,840	1,890	3,900	5,890	14,160	16,090	6,490	7,120	4,600

Cal yr 1966: Total 40,767 Mean 112 Max 524 Min 18 Ac-ft 80,860
Wtr yr 1967: Total 34,378 Mean 94.2 Max 446 Min 18 Ac-ft 68,190

Peak discharge (base, 550 cfs).--No peak above base.

9-3460. Navajo River at Edith, Colo.

Location.--Lat 37°00'10", long 106°54'25", in NW¼ sec.24, T.32 N., R.1 W., on right bank 290 ft downstream from highway bridge, 0.15 mile southeast of Edith, 0.5 mile upstream from Colorado-New Mexico State line, and 1.3 miles upstream from Coyote Creek.

Drainage area.--172 sq mi.

Records available.--September 1912 to September 1967. Monthly or yearly discharge only for some periods, published in WSP 1313.

Gage.--Water-stage recorder. Datum of gage is 7,033.00 ft above mean sea level (Bureau of Reclamation bench mark). Prior to Jan. 1, 1929, staff gage at site 240 ft upstream at different datum. June 2, 1935, to June 27, 1941, water-stage recorder at sites 200 and 240 ft upstream at datum 2.0 ft higher. June 28, 1941, to June 20, 1961, at site 50 ft downstream at same datum.

Average discharge.--55 years, 157 cfs (113,700 acre-ft per year).

Extremes.--Maximum discharge during year, 565 cfs June 6 (gage height, 4.67 ft); maximum gage height, 5.03 ft Feb. 26 (backwater from ice); minimum daily discharge, 26 cfs Oct. 19, 20.

1935-67: Maximum discharge, 2,840 cfs Apr. 23, 1942 (gage height, 6.55 ft), from rating curve extended above 1,100 cfs; minimum daily, 8 cfs Sept. 25, 1953.

Maximum flood known occurred Oct. 5, 1911.

Remarks.--Records good except those for winter period, which are poor. Diversions for irrigation of about 1,700 acres above station.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	33	30	33	40	44	90	88	130	206	138	66	173
2	34	29	32	40	42	95	85	110	194	121	68	145
3	38	31	36	40	40	90	99	95	240	121	66	132
4	38	30	37	40	38	70	121	85	375	115	60	112
5	37	28	40	40	40	63	130	92	435	103	68	106
6	37	30	208	40	42	54	121	87	518	94	82	99
7	34	31	282	38	44	54	123	115	460	95	104	97
8	33	38	104	32	44	50	140	200	410	130	88	95
9	34	34	68	36	40	56	138	270	366	101	104	112
10	34	33	52	40	44	61	115	282	334	84	153	95
11	30	33	51	40	44	90	110	240	286	92	309	92
12	27	34	47	38	44	76	132	232	254	92	167	84
13	33	33	47	38	42	71	117	232	209	82	152	74
14	34	33	46	40	46	67	108	200	232	112	200	73
15	34	33	47	40	46	61	110	158	278	90	176	70
16	34	35	43	38	46	67	103	164	236	94	167	66
17	34	36	45	36	40	87	97	200	243	338	132	63
18	34	35	51	34	40	104	103	262	274	191	121	63
19	26	35	48	36	46	119	110	294	385	128	130	68
20	26	35	50	38	50	92	115	302	410	117	112	68
21	32	35	50	40	46	88	112	322	366	104	106	61
22	31	35	50	40	42	94	110	318	346	101	104	57
23	31	36	44	40	44	110	108	375	334	94	95	55
24	30	37	38	38	48	126	110	395	282	97	87	55
25	31	37	38	38	55	128	103	390	250	92	80	63
26	31	35	36	36	60	108	90	395	226	95	90	66
27	31	30	38	36	60	104	94	358	200	106	95	61
28	28	31	36	38	75	99	121	380	182	80	88	57
29	29	33	34	40	-	104	150	306	150	67	90	56
30	30	33	38	40	- - - - -	104	164	262	140	66	118	55
31	30	- - - - -	40	42	- - - - -	88	- - - - -	243	- - - - -	76	179	- - - - -
Total	998	998	1,809	1,192	1,292	2,670	3,427	7,494	8,821	3,406	3,657	2,473
Mean	32.2	33.3	58.4	38.5	46.1	86.1	114	242	294	110	118	82.4
Max	38	38	282	42	75	128	164	395	518	338	309	173
Min	26	28	32	32	38	50	85	85	140	66	60	55
Ac-ft	1,980	1,980	3,590	2,360	2,560	5,300	6,800	14,860	17,500	6,760	7,250	4,910

Cal yr 1966: Total 47,017 Mean 129 Max 593 Min 26 Ac-ft 93,260
Wtr yr 1967: Total 38,237 Mean 105 Max 518 Min 26 Ac-ft 75,840

Peak discharge (base, 600 cfs).--No peak above base.

SAN JUAN RIVER BASIN

9-3464. San Juan River near Carracas, Colo.

Location.--Lat 37°00'47", long 107°18'39", in SE¼SW¼ sec.17, T.32 N., R.4 W., on right bank just above flow line of Navajo Reservoir and 3 miles northwest of Carracas, 7.2 miles upstream from Piedra River, and at mile 178.8.

Drainage area.--1,230 sq mi, approximately.

Records available.--October 1961 to September 1967.

Gage.--Digital water-stage recorder. Altitude of gage is 6,090 ft (from river-profile map). Prior to May 16, 1963, graphic water-stage recorder at same site and datum.

Average discharge.--6 years, 624 cfs (451,800 acre-ft per year).

Extremes.--Maximum discharge during year, 3,620 cfs Dec. 7 (gage height, 5.51 ft); minimum, 55 cfs Dec. 26.

1961-67: Maximum discharge, 6,120 cfs May 22, 1965 (gage height, 6.85 ft); minimum, about 5 cfs Dec. 10, 1961, result of freezeup. Maximum flood known occurred Oct. 5, 1911. Major floods occurred Sept. 5 or 6, 1909 and June 29, 1927.

Remarks.--Records good except those for winter period, which are poor. Diversions for irrigation of about 11,000 acres above station.

Cooperation.--Records furnished by New Mexico district.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	76	86	107	90	134	530	335	628	1,320	623	569	945
2	76	78	104	80	135	663	311	564	1,140	592	443	778
3	93	74	116	80	125	719	333	485	1,400	577	437	606
4	165	77	141	90	125	570	424	425	1,950	626	410	506
5	125	78	149	110	125	338	461	440	2,240	629	571	471
6	123	81	706	108	130	240	485	420	2,660	612	572	486
7	106	79	2,330	100	139	198	472	455	2,440	602	809	591
8	93	115	749	90	130	191	530	804	2,070	618	764	688
9	93	178	367	90	130	184	560	1,220	1,850	707	986	598
10	90	108	235	90	150	215	484	1,490	1,700	706	1,180	481
11	77	101	201	100	150	328	450	1,350	1,480	568	1,740	492
12	83	103	181	110	160	404	505	1,260	1,340	352	1,140	423
13	96	108	169	120	160	315	486	1,290	1,160	352	999	376
14	87	106	167	110	190	269	438	1,060	1,110	329	1,050	306
15	92	111	167	120	223	242	435	900	1,310	366	936	326
16	88	115	150	120	200	211	396	980	1,110	362	938	303
17	86	122	127	110	200	284	361	1,160	1,040	1,850	718	259
18	90	123	133	100	191	402	395	1,340	1,180	1,630	630	252
19	82	115	124	86	204	455	460	1,560	1,520	892	635	282
20	79	116	127	82	220	425	505	1,640	1,650	752	656	414
21	78	122	128	89	200	348	495	1,740	1,580	618	588	327
22	83	122	126	110	200	329	490	1,780	1,410	574	514	281
23	84	117	107	130	230	382	490	2,120	1,360	551	494	257
24	90	117	98	130	300	449	490	2,220	1,220	498	432	235
25	96	120	110	130	405	475	485	2,230	1,070	502	391	237
26	87	114	110	113	505	413	435	2,110	976	629	367	312
27	86	103	90	100	649	409	470	2,000	862	569	661	295
28	86	80	76	100	465	388	635	1,960	762	506	634	260
29	85	104	70	105	-	381	712	1,840	719	384	437	233
30	79	106	70	118	- - - -	403	796	1,540	633	386	483	218
31	81	- - - -	80	123	- - - -	351	- - - -	1,440	- - - -	883	955	- - - -
Total	2,835	3,179	7,615	3,234	6,175	11,511	14,324	40,451	42,262	19,845	22,139	12,238
Mean	91.5	106	246	104	221	371	477	1,305	1,409	640	714	408
Max	165	178	2,330	130	649	719	796	2,230	2,660	1,850	1,740	945
Min	76	74	70	80	125	184	311	420	633	329	367	218
Ac-ft	5,620	6,310	15,100	6,410	12,250	22,830	28,410	80,230	83,830	39,360	43,910	24,270

Cal yr 1966: Total 238,280 Mean 653 Max 3,350 Min 70 Ac-ft 472,600
 Wtr yr 1967: Total 185,808 Mean 509 Max 2,660 Min 70 Ac-ft 368,500

Peak discharge (base, 2,500 cfs, revised)

Date	Time	Gage height	Discharge	Date	Time	Gage height	Discharge
12-7	0900	5.51	3,620	7-17	1100	4.76	2,560
6-7	0330	4.82	2,530				

9-3495. Piedra River near Piedra, Colo.

Location.--Lat 37°13'20", long 107°20'30", in NW¼NW¼ sec.17, T.34 N., R.4 W., on right bank 0.1 mile downstream from bridge on U. S. Highway 160, 0.4 mile upstream from Yellow Jacket Creek, and 1½ miles northwest of Piedra.

Drainage area.--371 sq mi.

Records available.--October 1911 to September 1912, October 1938 to September 1967. Monthly discharge only for some periods, published in WSP 1313. Published as "at Piedra" 1912.

Gage.--Water-stage recorder. Altitude of gage is 6,510 ft (from topographic map). Nov. 26, 1911, to July 22, 1912, staff gages near present site at different datums. Jan. 11, 1939, to Mar. 19, 1940, chain gage 0.3 mile upstream at different datum. Mar. 20, 1940, to May 9, 1941, water-stage recorder at site 2 miles upstream at different datum. May 10 to Sept. 27, 1941, chain gage and Sept. 28, 1941, to Sept. 18, 1962, water-stage recorder, 0.3 mile upstream at different datum.

Average discharge.--30 years, 313 cfs (226,600 acre-ft per year).

Extremes.--Maximum discharge during year, 1,490 cfs June 5 (gage height, 4.05 ft, from highwater mark in gage well); minimum daily, 32 cfs Nov. 28.

1911-12, 1938-67: Maximum discharge not determined, occurred Oct. 5, 1911. Maximum discharge determined, 6,870 cfs July 26, 1957 (gage height, 8.60 ft, site and datum then in use), from rating curve extended above 2,800 cfs; minimum daily, 17 cfs Nov. 11, 1950.

Maximum flood known, that of Oct. 5, 1911. Another major flood occurred June 29, 1927.

Remarks.--Records good except those for winter period, which are poor. Diversions for irrigation of about 2,220 acres above station. Also two small ditches divert water above station for irrigation below. Piedra Pass and Squaw Pass ditches (see elsewhere in this report) export small amount of water above station to Rio Grande basin. Slight regulation at times by Williams Creek Reservoir (capacity, 1,080 acre-ft).

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	49	41	45	55	51	64	170	298	425	192	206	362
2	51	38	45	55	51	89	168	270	401	175	162	298
3	152	38	56	55	44	113	206	236	594	160	172	239
4	148	40	53	55	46	115	260	215	796	145	224	203
5	142	38	62	55	48	95	284	218	914	132	254	172
6	148	37	127	50	48	73	274	206	1,170	121	248	188
7	140	43	360	50	48	68	284	245	962	109	340	180
8	130	56	172	44	44	64	312	389	796	105	337	218
9	60	47	84	46	46	64	330	607	684	107	510	195
10	51	49	70	48	48	72	274	768	588	87	558	185
11	51	45	70	50	46	85	260	754	505	85	628	206
12	56	45	65	55	44	113	284	656	458	85	510	182
13	51	45	65	48	46	123	248	635	425	80	445	160
14	49	44	60	50	49	111	242	490	445	66	365	145
15	47	47	60	50	45	113	248	445	429	76	348	135
16	45	51	55	50	42	111	227	500	401	105	326	128
17	45	53	55	48	44	209	233	582	389	583	274	125
18	47	50	60	46	44	248	278	628	409	417	245	125
19	45	48	60	44	48	224	323	705	540	288	239	138
20	47	50	65	46	47	180	316	754	525	239	254	178
21	48	53	65	48	43	182	292	775	510	203	236	148
22	47	51	60	44	44	188	284	803	445	175	206	128
23	45	50	60	47	44	227	274	906	405	165	195	119
24	43	50	55	47	49	251	278	914	365	152	170	109
25	41	49	50	48	51	254	267	874	334	158	158	117
26	41	48	48	48	55	218	242	834	312	142	150	150
27	41	38	46	46	51	224	274	740	288	188	165	135
28	41	32	44	48	54	198	340	656	264	155	175	117
29	41	50	48	49	-	198	362	594	236	117	170	109
30	43	47	50	48	- - - -	203	358	505	209	195	152	99
31	42	- - - -	55	50	- - - -	178	- - - -	468	- - - -	200	190	- - - -
Total	2,027	1,373	2,270	1,523	1,320	4,655	8,192	17,670	15,224	5,207	8,612	4,993
Mean	65.4	45.8	73.2	49.1	47.1	150	273	570	507	168	278	166
Max	152	56	360	55	55	254	362	914	1,170	583	628	362
Min	41	32	44	44	42	64	168	206	209	66	150	99
Ac-ft	4,020	2,720	4,500	3,020	2,620	9,230	16,250	35,050	30,200	10,330	17,080	9,900

Cal yr 1966: Total 109,006 Mean 299 Max 1,910 Min 32 Ac-ft 216,200

Wtr yr 1967: Total 73,066 Mean 200 Max 1,170 Min 32 Ac-ft 144,900

Peak discharge (base, 1,300 cfs).--June 5 (about 2300) 1,490 cfs (4.05 ft).

9-3498. Piedra River near Arboles, Colo.

Location.--Lat 37°05'17", long 107°23'52", in NE¼SW¼ sec.21, T.33 N., R.5 W., on left bank 3 miles downstream from Ignacio Creek, 5.2 miles northeast of Arboles Post Office, 8 miles upstream from mouth.

Drainage area.--629 sq mi.

Records available.--August 1962 to September 1967. Gage operated 1895-1899, 1910-1927 at a site 7½ miles downstream at altitude 6,000 ft. Low-flow records probably not equivalent.

Gage.--Digital water-stage recorder. Datum of gage is 6,147.52 ft above mean sea level (from Colorado State Highway Department bench mark). Prior to May 16, 1963, graphic water-stage recorder at same site and datum.

Average discharge.--5 years (1962-67), 308 cfs (223,000 acre-ft per year).

Extremes.--Maximum discharge during year, 1,520 cfs Dec. 7 (gage height, 3.46 ft); minimum, 11 cfs Oct. 1.

1962-67: Maximum discharge, 4,000 cfs Apr. 23, 1965 (gage height, 5.20 ft); minimum, 11 cfs Dec. 9, 1963, Oct. 1, 1966.

Maximum flood known occurred Oct. 5, 1911. A major flood occurred Sept. 5 or 6, 1909

Remarks.--Records good except those for winter period, which are poor. Diversions for irrigation of about 2,800 acres above station.

Cooperation.--Records furnished by New Mexico district.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	41	45	49	60	62	122	194	302	474	188	185	375
2	44	42	50	60	62	177	185	273	418	171	151	320
3	105	40	56	58	57	228	211	233	629	156	154	248
4	138	40	64	58	58	222	267	214	828	133	185	208
5	133	42	68	58	64	172	294	207	930	124	229	182
6	138	39	345	58	64	127	304	203	1,330	117	229	182
7	136	41	1,030	54	64	103	295	225	1,110	108	300	225
8	131	62	346	52	62	96	320	351	896	101	330	201
9	87	65	167	52	57	92	345	589	770	103	490	198
10	55	54	104	54	59	101	296	776	666	89	604	188
11	52	52	86	57	59	126	268	782	561	87	746	208
12	57	50	80	60	62	171	286	688	487	83	562	188
13	59	52	80	60	71	190	259	665	439	79	496	168
14	55	51	82	54	49	200	243	525	469	68	385	154
15	54	52	74	54	43	180	245	447	460	70	355	143
16	52	56	66	58	42	170	227	503	414	85	335	133
17	52	55	64	58	40	330	225	592	404	625	276	128
18	54	54	64	50	43	446	260	653	443	472	244	131
19	54	51	67	50	47	387	310	724	587	292	229	131
20	52	52	70	54	47	297	312	759	612	233	244	174
21	53	54	70	55	43	272	285	819	594	195	237	151
22	52	55	66	56	43	255	276	823	504	165	204	136
23	50	54	66	56	45	271	267	934	454	156	188	126
24	48	54	60	56	52	296	267	939	380	141	171	115
25	45	54	56	56	58	304	267	927	340	146	154	115
26	46	53	56	54	89	260	238	873	305	128	151	146
27	45	48	57	50	104	259	260	809	280	174	156	133
28	44	36	53	54	105	233	324	730	248	149	171	124
29	45	49	52	56	-	224	359	666	221	117	168	112
30	46	50	54	59	- - - - -	237	363	568	198	162	182	103
31	47	- - - - -	57	60	- - - - -	211	- - - - -	514	- - - - -	179	182	- - - - -
Total	2,070	1,502	3,659	1,731	1,651	6,759	8,252	13,313	16,451	5,096	8,693	5,146
Mean	66.8	50.1	118	55.8	59.0	218	275	591	548	164	280	172
Max	138	65	1,030	60	105	446	363	939	1,330	625	746	375
Min	41	36	49	50	40	92	185	203	198	68	151	103
Ac-ft	4,110	2,980	7,260	3,430	3,270	13,410	16,370	36,320	32,630	10,110	17,240	10,210

Cal yr 1966: Total 133,172 Mean 365 Max 1,870 Min 36 Ac-ft 264,100
 Wtr yr 1967: Total 79,323 Mean 217 Max 1,330 Min 36 Ac-ft 157,300

Peak discharge (base, 1,500 cfs, revised).--Dec. 7 (0830) 1,520 cfs (3.46 ft).

9-3529. Vallecito Creek near Bayfield, Colo.
(Hydrologic bench-mark station)

Location.--Lat 37°28'39", long 107°32'35", in NW¼ sec.16, T.37 N., R.6 W. (projected), on right bank 60 ft upstream from Fall Creek, 0.7 mile downstream from Bear Creek, 7 miles north of Vallecito Dam, and 18 miles north of Bayfield.

Drainage area.--72.1 sq mi.

Records available.--October 1962 to September 1967.

Gage.--Water-stage recorder and concrete control. Datum of gage is 7,906.08 ft above mean sea level, datum of 1929.

Average discharge.--5 years, 131 cfs (94,840 acre-ft per year).

Extremes.--Maximum discharge during year, 1,000 cfs May 22 (gage height, 2.90 ft), from rating curve extended above 790 cfs; minimum daily, 14 cfs Feb. 17, 21, 22.

1962-67: Maximum discharge, 1,530 cfs June 19, 1965 (gage height, 3.43 ft); minimum daily, 11 cfs for several days in January, February, March, 1964.

Major floods occurred in October 1911 and June 1927.

Remarks.--Records good except those for winter period or those for period of no gage-height record, which are poor. No diversion above station. Records of chemical analyses and water temperatures for the water year 1967 are published in Part 2 of this report.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	40	22	21	23	18	22	45	104	180	235	109	160
2	46	22	22	23	17	28	42	90	183	214	109	130
3	63	21	22	22	19	31	48	79	245	194	102	110
4	61	22	22	21	17	28	58	72	354	176	124	95
5	66	19	23	20	19	25	61	71	414	158	112	85
6	63	20	25	19	18	20	60	71	590	146	137	85
7	62	22	39	19	19	23	66	126	450	138	320	85
8	61	20	36	19	16	20	79	305	414	135	260	95
9	58	20	36	19	18	20	88	478	384	129	348	90
10	56	26	37	19	16	22	79	520	342	116	320	85
11	57	26	39	18	16	22	77	478	285	135	372	95
12	60	28	32	18	16	22	80	432	245	143	310	85
13	56	25	33	17	17	22	76	390	202	126	260	75
14	49	26	30	17	17	21	69	260	183	121	198	65
15	48	27	31	17	17	20	74	315	169	121	172	60
16	45	28	28	17	15	22	71	432	180	126	143	55
17	43	28	28	16	14	29	71	520	206	378	121	55
18	39	26	28	16	16	40	82	590	275	206	109	55
19	38	26	28	16	15	39	98	660	330	152	104	65
20	38	26	28	16	16	36	94	632	360	129	96	75
21	36	27	29	17	14	38	92	660	360	121	92	65
22	34	26	28	17	14	41	92	716	354	114	82	60
23	32	26	23	17	15	52	88	676	354	104	76	55
24	31	25	22	16	17	61	88	660	330	112	69	50
25	30	23	24	16	17	62	86	618	305	119	66	55
26	30	23	23	16	18	56	77	506	285	112	68	65
27	28	18	23	18	17	57	98	384	280	102	79	60
28	28	23	22	18	18	54	129	372	255	92	76	55
29	27	24	24	18	-	54	132	290	214	82	72	48
30	26	22	26	17	- - - - -	51	126	235	226	170	71	44
31	26	- - - - -	24	18	- - - - -	46	- - - - -	202	- - - - -	121	86	- - - - -
Total	1,377	717	856	560	466	1,084	2,426	11,944	8,954	4,527	4,663	2,262
Mean	44.4	23.9	27.6	18.1	16.6	35.0	80.9	385	298	146	150	75.4
Max	66	28	39	23	19	62	132	716	590	378	372	160
Min	26	18	21	16	14	20	42	71	169	82	66	44
Ac-ft	2,730	1,420	1,700	1,110	924	2,150	4,810	23,690	17,760	8,980	9,250	4,490

Cal yr 1966: Total 49,604 Mean 136 Max 792 Min 17 Ac-ft 98,390
Wtr yr 1967: Total 39,836 Mean 109 Max 716 Min 14 Ac-ft 79,010

Peak discharge (base, 1,000 cfs)--May 22 (1830) 1,000 cfs (2.90 ft).

Note.--No gage-height record Sept. 1-30.

9-3530. Vallecito Reservoir near Bayfield, Colo.

Location.--Lat 37°23'00", long 107°34'30", in SW¼SW¼ sec.18, T.36 N., R.6 W., in gatehouse above outlet gates at Vallecito Dam on Los Pinos (Pine) River, 300 ft left of spillway, a quarter of a mile upstream from Little Red Creek, and 11 miles northeast of Bayfield.

Records available.--April 1941 to September 1967.

Gage.--Float gage read once a day. Datum of gage is 7,580 ft above mean sea level (Bureau of Reclamation bench mark); gage readings have been reduced to elevations above mean sea level.

Extremes.--Maximum contents observed during year, 78,120 acre-ft June 25 (elevation, 7,645.89 ft); minimum observed, 39,480 acre-ft Sept. 30 (elevation, 7,626.39).
1941-67: Maximum contents observed, 128,200 acre-ft July 27, 1957 (elevation, 7,665.72 ft); minimum observed, 1,520 acre-ft Oct. 24, 25, 1944 (elevation, 7,584.10 ft). No usable storage prior to April 1941.

Remarks.--Reservoir is formed by an earth- and rock-fill dam; dam completed in March 1941. Capacity of reservoir, 126,300 acre-ft between elevations 7,580 (sill of outlet gate) and 7,665 ft (top of spillway gates). Dead storage, 3,395 acre-ft. Figures given herein represent usable contents. Reservoir is used to store water for irrigation in Los Pinos (Pine) River basin.

Cooperation.--Records furnished by Bureau of Reclamation.

Month-end elevation and contents, water year October 1966 to September 1967

Date	Elevation (feet)†	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.....	7,634.46	53,850	-
Oct. 31.....	7,627.77	41,760	-12,090
Nov. 30.....	7,629.30	44,370	+2,610
Dec. 31.....	7,631.60	48,470	+4,100
Calendar year 1966.....	-	-	-23,440
Jan. 31.....	7,632.75	50,600	+2,130
Feb. 28.....	7,633.55	52,110	+1,510
Mar. 31.....	7,635.58	56,040	+3,930
Apr. 30.....	7,635.80	56,470	+430
May 31.....	7,643.11	71,850	+15,380
June 30.....	7,645.50	77,230	+5,380
July 31.....	7,637.79	60,480	-16,750
Aug. 31.....	7,634.04	53,040	-7,440
Sept. 30.....	7,626.39	39,480	-13,560
Water year 1966-67.....	-	-	-14,370

† Elevation at 0800.

9-3535, Los Pinos River near Bayfield, Colo.
(Locally known as Pine River)

Location.--Lat 37°23'00", long 107°34'30", in SW¼ sec.18, T.36 N., R.6 W., on left side of outlet flume from Vallecito Reservoir, a quarter of a mile upstream from Little Red Creek, 2 miles upstream from Red Creek, and 11 miles north of Bayfield.

Drainage area.--270 sq mi, approximately.

Records available.--October 1927 to September 1967. Monthly discharge only for some periods, published in WSP 1313.

Gage.--Water-stage recorder and concrete weir. Datum of gage is 7,582.54 ft above mean sea level (Bureau of Reclamation bench mark). Oct. 26, 1927, to Aug. 17, 1956, at sites 2½ miles downstream with datum of gage at 7,415.58 ft above mean sea level, adjustment of 1912, prior to July 8, 1934, and at 7,415.08 ft above mean sea level July 9, 1934, to Aug. 17, 1956. Since Aug. 18, 1956, supplementary water-stage recorder at former site 2½ miles downstream for use when upper spillway at Vallecito Reservoir is operating.

Average discharge.--40 years, 347 cfs (251,200 acre-ft per year).

Extremes.--Maximum daily discharge during year, 644 cfs May 23, 24, July 14 (gage height, 2.05 ft); minimum daily, 31 cfs Oct. 31 to Dec. 2.

1927-67: Maximum discharge, 13,800 cfs July 27, 1957 (gage height, 12.2 ft, from floodmarks at supplementary gage), from rating curve extended above 2,500 cfs on basis of slope-area measurement of peak flow (result of automatic spillway gates releasing from Vallecito Reservoir); minimum daily, 3.2 cfs Feb. 11, 1951 (result of storage in Vallecito Reservoir); minimum daily prior to construction of Vallecito Reservoir, 38 cfs Dec. 21, 22, 1937.

Maximum flood known prior to Construction of Vallecito Reservoir occurred Oct. 5, 1911.

Remarks.--Records good. Flow regulated by storage in Vallecito Reservoir (see preceding page). Transmountain diversions above station by Raber-Lohr and Fuchs ditches (see elsewhere in this report).

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	478	31	31	33	33	33	33	522	618	580	532	522
2	474	31	31	33	33	33	33	518	536	599	536	504
3	469	31	33	33	33	35	35	518	491	594	541	504
4	469	31	33	33	33	35	35	527	504	594	536	500
5	469	31	33	33	33	35	35	565	527	599	536	500
6	465	31	33	33	33	35	35	565	478	618	536	496
7	460	31	33	33	33	35	35	560	460	618	536	491
8	460	31	33	33	33	35	35	560	522	633	536	469
9	460	31	33	33	33	35	35	565	536	628	541	456
10	456	31	33	33	33	35	35	570	551	628	532	452
11	340	31	33	33	33	35	35	570	556	628	496	447
12	381	31	33	33	33	35	93	570	575	638	478	414
13	381	31	33	33	33	35	154	575	589	638	460	414
14	310	31	33	33	33	35	154	575	570	644	447	409
15	233	31	33	33	33	35	154	575	560	623	434	409
16	233	31	33	33	33	35	167	580	560	608	426	409
17	186	31	33	33	33	35	183	580	551	556	381	405
18	154	31	33	33	33	35	192	575	536	504	369	430
19	154	31	33	33	33	35	216	560	536	513	369	414
20	154	31	33	33	33	35	236	575	536	482	369	414
21	179	31	33	33	33	35	258	594	536	482	369	409
22	192	31	33	33	33	35	272	599	541	478	369	409
23	192	31	33	33	33	36	322	644	541	482	418	409
24	192	31	33	33	33	33	345	644	541	496	452	405
25	192	31	33	33	33	33	393	638	541	509	452	405
26	192	31	33	33	33	33	443	633	541	509	447	405
27	192	31	33	33	33	33	500	628	541	509	447	401
28	192	31	33	33	33	33	500	618	565	513	456	401
29	192	31	33	33	-	33	504	618	580	532	487	401
30	79	31	33	33	- - - - -	33	522	618	580	536	513	401
31	31	- - - - -	33	33	- - - - -	33	- - - - -	618	- - - - -	532	532	- - - - -
Total	9,011	930	1,019	1,023	924	1,066	5,989	18,057	16,299	17,503	14,533	13,105
Mean	291	31.0	32.9	33.0	33.0	34.4	200	582	543	565	469	437
Max	478	31	33	33	33	36	522	644	618	644	541	522
Min	31	31	31	33	33	33	33	518	460	478	369	401
Ac-ft	17,870	1,840	2,020	2,030	1,830	2,110	11,880	35,820	32,330	34,720	28,830	25,990
Cal yr 1966: Total	129,418		Mean	355	Max	1,710	Min	31	Ac-ft	256,700		
Wtr yr 1967: Total	99,459		Mean	272	Max	644	Min	31	Ac-ft	197,300		

SAN JUAN RIVER BASIN

9-3545. Los Pinos River at La Boca, Colo.
(Locally known as Pine River)

Location.--Lat 37°00'40", long 107°35'55", in S½ sec.15, T.32 N., R.7 W., on downstream end of right abutment of the Denver & Rio Grande Western Railroad Co. bridge at southeast edge of La Boca, 0.1 mile upstream from Spring Creek and 13 miles upstream from mouth.

Drainage area.--510 sq mi, approximately.

Records available.--October 1950 to September 1967. Monthly discharge only for some periods, published in WSP 1733.

Gage.--Digital water-stage recorder. Datum of gage is 6,143.58 ft above mean sea level, datum of 1929. Prior to Sept. 14, 1966, graphic water-stage recorder at same site and datum.

Average discharge.--17 years, 189 cfs (136,800 acre-ft per year).

Extremes.--Maximum discharge during year, 1,260 cfs July 17 (gage height, 5.69 ft); minimum, about 25 cfs Dec. 29, result of freezeup. 1950-67: Maximum discharge, 6,400 cfs July 27, 1957 (gage height, 8.95 ft); minimum determined, 13 cfs Apr. 23, 1951 (may have been lower during periods of freezeup).
Maximum flood known occurred Oct. 5, 1911.

Remarks.--Records good except those for winter period, which are poor. Flow regulated by Vallecito Reservoir (see sta. 9-3530).
Divisions for irrigation of about 33,000 acres above station.

Cooperation.--Records furnished by New Mexico district.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	145	56	38	45	80	74	65	125	185	112	131	198
2	155	43	38	45	90	78	64	125	180	112	123	176
3	183	40	40	35	65	76	64	115	172	112	127	154
4	182	43	58	35	60	74	67	102	217	106	126	193
5	173	41	67	45	60	65	72	110	202	122	120	170
6	173	39	508	50	60	57	72	220	217	174	177	172
7	170	40	866	35	60	64	62	102	148	125	245	172
8	170	65	271	35	56	67	59	98	145	129	204	166
9	161	92	124	50	56	65	56	92	148	127	209	147
10	140	59	92	60	60	60	60	88	130	128	240	144
11	146	48	90	70	69	50	53	84	122	140	241	143
12	120	47	82	80	60	76	47	180	132	143	236	131
13	112	47	85	80	70	72	57	214	142	144	221	119
14	143	45	77	70	86	68	72	120	168	155	231	120
15	191	43	72	70	98	65	72	122	160	152	188	118
16	179	43	64	70	82	64	72	199	145	170	173	115
17	173	44	61	56	70	70	70	100	150	690	169	113
18	122	45	55	45	60	78	60	98	165	258	147	98
19	110	44	50	45	60	86	53	95	160	170	135	119
20	105	44	46	60	72	82	48	98	160	162	135	129
21	108	45	41	80	56	76	59	98	150	162	133	115
22	128	45	60	90	54	74	52	105	130	148	137	112
23	138	44	55	90	54	76	57	102	120	138	111	113
24	152	42	61	90	59	80	70	112	110	135	114	114
25	158	40	66	80	64	80	67	125	105	155	119	145
26	152	38	75	60	67	78	72	120	98	165	120	155
27	135	36	60	60	67	74	86	130	88	150	127	134
28	132	36	38	65	67	72	92	155	90	140	120	133
29	138	37	30	72	-	68	86	208	108	135	111	132
30	138	36	30	76	- - - -	72	90	160	120	140	126	129
31	86	- - - -	35	80	- - - -	68	- - - -	190	- - - -	150	167	- - - -
Total	4,518	1,367	3,335	1,924	1,862	2,209	1,976	3,992	4,367	5,049	4,963	4,179
Mean	146	45.6	108	62.1	66.5	71.3	65.9	129	146	163	160	139
Max	191	92	866	90	98	86	92	220	217	690	245	198
Min	86	36	30	35	54	50	47	84	88	106	111	98
Ac-ft	8,960	2,710	6,610	3,820	3,690	4,380	3,920	7,920	8,660	10,010	9,840	8,290
Cal yr 1966: Total	73,957			203								
Wtr yr 1967: Total	39,741			Mean 109		Max 1,420	Min 30	Ac-ft 146,700				
						Max 866	Min 30	Ac-ft 78,830				

9-3550. Spring Creek at La Boca, Colo.

Location.--Lat 37°00'50", long 107°35'40", in S½ sec.15, T.32 N., R.7 W., on right bank in an excavated channel, a quarter of a mile upstream from mouth and a quarter of a mile east of La Boca.

Drainage area.--58 sq mi, approximately.

Records available.--October 1950 to September 1967. Monthly discharge only for some periods, published in WSP 1733.

Gage.--Digital water-stage recorder. Altitude of gage is 6,160 ft (from topographic map). Prior to Sept. 14, 1966, graphic water-stage recorder at same site and datum.

Average discharge.--17 years, 27.7 cfs (20,050 acre-ft per year).

Extremes.--Maximum discharge during year, 365 cfs Aug. 12 (gage height, 2.50 ft); minimum, about 1.0 cfs Dec. 29, result of freezeup. 1951-67: Maximum discharge, 580 cfs Aug. 12, 1964 (gage height, 4.35 ft), from rating curve extended above 260 cfs by logarithmic plotting; maximum gage height, 5.98 ft Mar. 9, 1960 (ice jam); minimum discharge, 0.6 cfs Nov. 27, 1960.

Remarks.--Records good except those for winter period, which are poor. Part of flow is return waste from irrigation.

Cooperation.--Records furnished by New Mexico district.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	41	9.8	7.5	2.0	11	5.0	3.3	35	66	31	46	69
2	42	9.5	6.6	3.0	10	4.5	2.9	33	91	30	38	60
3	46	9.1	6.8	2.0	6.9	4.5	2.9	34	96	32	40	52
4	44	9.1	17	2.0	5.7	6.0	2.8	29	79	33	39	66
5	45	10	25	4.9	6.0	6.0	2.6	31	67	31	39	58
6	46	10	70	6.0	6.7	5.0	2.5	20	70	19	65	60
7	46	12	65	4.0	6.1	3.0	2.4	27	61	29	102	64
8	45	22	11	3.0	7.0	3.5	2.9	49	57	33	71	67
9	46	24	6.7	3.0	6.1	4.0	4.9	73	65	39	79	63
10	47	14	5.0	4.0	7.0	3.9	4.5	34	60	42	115	58
11	50	14	5.0	5.7	8.0	15	3.4	31	60	39	116	56
12	44	14	5.4	7.0	6.8	10	2.6	36	56	43	125	52
13	48	12	6.3	6.0	7.6	4.9	2.7	16	56	44	100	43
14	49	12	4.6	6.0	8.5	4.8	29	22	85	48	86	40
15	31	11	5.6	7.0	9.0	4.5	7.8	36	65	52	80	40
16	19	10	4.9	7.0	5.0	4.2	8.0	23	58	65	73	43
17	17	9.0	5.4	4.1	5.0	4.2	8.7	27	53	128	59	44
18	14	8.4	5.3	2.0	6.0	4.4	15	30	54	52	58	47
19	14	7.4	4.1	2.0	5.5	4.5	10	31	56	48	53	67
20	15	9.1	4.0	4.0	5.7	4.3	11	27	44	51	52	62
21	14	8.9	5.1	6.0	5.0	3.9	9.9	27	39	47	55	56
22	13	8.7	4.5	8.0	5.0	3.7	10	33	38	48	48	54
23	13	8.2	4.0	8.0	5.0	3.6	14	35	34	48	39	51
24	13	8.1	5.0	8.0	5.0	3.6	20	41	36	48	39	47
25	13	7.7	6.0	7.0	6.0	3.7	9.2	42	36	67	41	66
26	12	8.0	7.0	3.8	8.0	3.6	14	44	37	67	39	59
27	12	7.6	4.7	2.0	5.0	3.7	17	46	31	62	38	52
28	12	7.6	3.0	3.0	5.0	3.7	24	60	29	57	36	52
29	12	8.2	2.0	3.0	-	3.8	24	56	31	46	38	47
30	10	8.1	1.9	6.0	- - - - -	3.8	29	53	36	49	46	42
31	10	- - - - -	2.0	8.0	- - - - -	3.5	- - - - -	83	- - - - -	50	59	- - - - -
Total	883	317.5	316.4	147.5	183.6	146.8	301.0	116.4	164.6	147.8	191.4	163.7
Mean	28.5	10.6	10.2	4.76	6.56	4.74	10.0	37.5	54.9	47.7	61.7	54.6
Max	50	24	70	8.0	11	15	29	83	96	128	125	69
Min	10	7.4	1.9	2.0	5.0	3.0	2.4	16	29	19	36	40
Ac-ft	1,750	630	628	293	364	291	597	2,310	3,260	2,930	3,800	3,250
Cal yr 1966: Total	10,216.4			Mean 28.0	Max 126	Min 1.9		Ac-ft 20,260				
Wtr yr 1967: Total	10,134.8			Mean 27.8	Max 128	Min 1.9		Ac-ft 20,100				

Peak discharge (base, 180 cfs)

Date	Time	Gage height	Discharge	Date	Time	Gage height	Discharge
7-7	0745	2.79	302	8-12	1900	2.50	365
7-26	1515	2.38	293				

SAN JUAN RIVER BASIN

9-3575. Animas River at Howardsville, Colo.

Location.--Lat 37°50'00", long 107°36'00", in sec.12, T.41 N., R.7 W., on right bank 1,000 ft downstream from bridge on State Highway 110, 0.4 mile southwest of Howardsville, and half a mile downstream from Cunningham Creek.

Drainage area.--55.9 sq mi.

Records available.--October 1935 to September 1967. Monthly discharge only for some periods, published in WSP 1313.

Gage.--Water-stage recorder. Datum of gage is 9,616.98 ft above mean sea level, adjustment of 1912. Prior to Aug. 18, 1939, at datum 1.00 ft higher.

Average discharge.--32 years, 104 cfs (75,290 acre-ft per year).

Extremes.--Maximum discharge during year, 938 cfs May 22 (gage height, 3.38 ft); minimum daily, 10 Feb. 12, 17, 21, 22.

1935-67: Maximum discharge, 1,980 cfs June 18, 1949 (gage height, 4.36 ft), from rating curve extended above 950 cfs; maximum gage height, 5.24 ft Feb. 18, 1958 (backwater from snowslide); minimum daily discharge, 9 cfs Jan. 10, 1957, Feb. 15, Mar. 9, 1964, Feb. 13, 1965.

Maximum flood known occurred Oct. 5, 1911.

Remarks.--Records good except those for winter period, which are poor. No diversion above station.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	28	18	15	16	13	14	20	54	180	208	46	46
2	31	18	15	16	12	15	18	45	199	188	44	39
3	34	18	15	15	12	16	24	38	229	172	44	37
4	34	18	15	14	11	16	25	35	282	160	41	35
5	34	17	16	13	13	15	24	37	341	145	38	35
6	33	17	16	13	13	14	25	35	357	136	51	37
7	32	18	16	14	13	12	27	43	365	136	78	36
8	31	18	17	14	11	13	29	98	370	136	69	34
9	30	17	20	14	12	13	31	182	357	122	64	36
10	29	18	18	13	11	14	30	229	325	108	74	37
11	30	18	16	13	11	16	32	229	285	118	92	34
12	30	18	17	13	10	15	32	229	241	112	98	33
13	30	18	18	13	12	16	28	229	199	102	93	31
14	25	18	19	13	12	15	28	172	175	95	80	30
15	24	18	20	12	12	14	27	165	152	108	73	30
16	24	19	20	12	11	15	29	223	138	100	66	30
17	24	19	19	12	10	19	29	321	168	124	60	30
18	23	18	19	12	11	19	35	370	217	102	56	31
19	22	18	19	12	11	18	41	396	241	93	51	35
20	22	18	20	12	12	17	38	420	271	83	49	34
21	22	19	20	13	10	19	38	475	285	78	44	33
22	22	18	19	13	10	18	37	588	321	74	44	33
23	22	18	16	13	11	22	37	637	321	68	41	33
24	20	17	15	13	12	22	37	612	297	64	38	33
25	20	16	17	13	13	22	37	546	274	62	37	35
26	20	16	16	12	13	22	30	415	257	58	36	36
27	20	16	16	13	12	21	43	349	247	54	35	34
28	20	15	16	13	13	20	66	333	220	49	36	33
29	20	16	17	13	-	20	69	260	196	47	37	33
30	20	15	18	13	- - - - -	20	66	226	217	47	37	33
31	20	- - - - -	16	13	- - - - -	20	- - - - -	193	- - - - -	50	38	- - - - -
Total	796	525	536	408	327	532	1,032	8,184	7,727	3,199	1,690	1,026
Mean	25.7	17.5	17.3	13.2	11.7	17.2	34.4	264	258	103	54.5	34.2
Max	34	19	20	16	13	22	69	637	370	208	98	46
Min	20	15	15	12	10	12	18	35	138	47	35	30
Ac-ft	1,580	1,040	1,060	809	649	1,060	2,050	16,230	15,330	6,350	3,350	2,040

Cal yr 1966: Total 32,400 Mean 88.8 Max 516 Min 14 Ac-ft 64,260
 Wtr yr 1967: Total 25,982 Mean 71.2 Max 637 Min 10 Ac-ft 51,530

Peak discharge (base, 700 cfs).--May 22 (1910) 938 cfs (3.38 ft).

9-3610. Hermosa Creek near Hermosa, Colo.

Location.--Lat 37°25'20", long 107°50'40", in NW¼ sec.3, T.36 N., R.9 W., on right bank 20 ft downstream from private bridge, 1 mile northwest of Hermosa, and 2 miles upstream from mouth.

Drainage area.--172 sq mi.

Records available.--November and December 1911 (gage heights and discharge measurements only), January 1912 to September 1914, October 1919 to September 1928, October 1939 to September 1967. Monthly discharge only for some periods, published in WSP 1313.

Gage.--Water-stage recorder. Datum of gage is 6,705.88 ft above mean sea level, datum of 1929. Prior to September 1914, staff gage and April 1920 to September 1928, water-stage recorder (staff or chain gages for short periods), within half a mile at different datums.

Average discharge.--39 years, 138 cfs (99,910 acre-ft per year).

Extremes.--Maximum discharge during year, 318 cfs May 22 (gage height, 2.06 ft); maximum gage height, 2.34 ft Jan. 9 (backwater from ice); minimum daily discharge, 13 cfs Jan. 7, 8.

1912-14, 1919-28, 1939-67: Maximum discharge, 2,980 cfs May 12, 1941 (gage height, 6.02 ft); maximum gage height, 8.50 ft Sept. 12, 1927, from floodmarks, site and datum then in use; minimum daily discharge, 4.0 cfs Dec. 9, 1956.

Remarks.--Records good except those for winter period, which are poor. Diversions for irrigation of a few acres above station.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	21	18	17	17	18	28	48	85	142	46	29	85
2	23	17	18	17	17	33	48	75	132	44	25	84
3	25	18	20	16	16	37	58	70	137	42	26	68
4	26	19	20	16	17	36	75	67	156	40	28	58
5	25	17	24	15	18	33	80	66	174	38	28	55
6	26	17	29	16	18	30	77	62	201	37	36	88
7	24	19	34	13	19	30	85	66	171	38	50	72
8	25	23	31	13	16	26	101	98	147	39	49	74
9	24	18	28	14	17	26	102	177	127	36	51	73
10	23	17	20	15	18	31	84	222	114	35	75	68
11	23	19	28	16	18	34	82	222	104	36	87	60
12	24	20	26	16	18	34	90	208	99	38	101	55
13	23	18	24	15	18	36	75	198	101	37	96	50
14	23	18	22	16	20	35	70	156	106	36	74	47
15	23	20	22	16	18	34	70	147	101	43	66	45
16	23	21	22	16	18	35	66	177	94	43	58	44
17	23	21	22	16	16	45	66	208	91	67	51	42
18	22	20	22	15	18	60	75	226	96	47	48	40
19	21	18	22	14	20	60	94	226	112	38	47	47
20	22	19	22	15	20	54	93	240	120	36	46	52
21	22	21	22	15	18	52	98	246	122	36	47	42
22	21	20	19	16	17	56	87	266	101	36	43	38
23	21	20	15	16	18	67	82	282	90	36	41	37
24	20	18	17	16	20	72	81	278	82	35	38	35
25	21	17	18	15	22	70	81	286	74	36	37	38
26	21	17	18	14	22	62	72	270	69	33	36	45
27	19	15	17	15	22	60	81	232	62	30	39	44
28	19	17	17	15	22	54	101	246	58	30	61	37
29	19	18	18	16	-	54	104	212	55	28	49	35
30	19	17	19	17	- - - -	54	98	190	50	29	55	34
31	20	- - - -	18	18	- - - -	48	- - - -	165	- - - -	29	60	- - - -
Total	691	557	671	480	519	1,386	2,414	5,659	3,288	1,174	1,577	1,592
Mean	22.3	18.6	21.6	15.5	18.5	44.7	80.5	183	110	37.9	50.9	53.1
Max	26	23	34	18	22	72	104	286	201	67	101	88
Min	19	15	15	13	16	26	48	62	50	28	25	34
Ac-ft	1,370	1,100	1,330	952	1,030	2,750	4,790	11,220	6,520	2,330	3,130	3,160

Cal yr 1966: Total 45,995 Mean 126 Max 900 Min 15 Ac-ft 91,230

Wtr yr 1967: Total 20,008 Mean 54.8 Max 286 Min 13 Ac-ft 39,690

Peak discharge (base, 800 cfs).--No peak above base.

SAN JUAN RIVER BASIN

9-3615. Animas River at Durango, Colo.

Location.--Lat 37°16'45", long 107°52'47", in SW¼ sec.20, T.35 N., R.9 W., on left bank at Western Colorado Power Co.'s plant at Durango, three-quarters of a mile upstream from Lightner Creek.

Drainage area.--692 sq mi.

Records available.--June to December 1895, April 1896 to December 1898, April 1899 to December 1900, March to May 1901, April to November 1902, March to April 1903 (gage heights only, erroneously stated as discredited in WSP 1563), May to October 1903, July 1904 to December 1905, January to December 1910 (gage heights only), January to September 1911, January 1912 to September 1967. Monthly or yearly discharge only for some periods, published in WSP 1313.

Gage.--Water-stage recorder. Datum of gage is 6,501.57 ft above mean sea level, datum of 1929. Prior to Dec. 31, 1905, staff gages at several sites three-quarters of a mile downstream at various datums. Jan. 1, 1910, to Aug. 12, 1911, staff gage at present site at different datum. Jan. 1, 1912, to Mar. 2, 1921, staff gage or water-stage recorder at present site and datum.

Average discharge.--62 years (1896-1900, 1904-5, 1910-67), 847 cfs (613,200 acre-ft per year).

Extremes.--Maximum discharge during year, 3,730 cfs May 23 (gage height, 5.34 ft); minimum daily, 110 cfs Jan. 7.

1895-1905, 1910-67: Maximum discharge, 25,000 cfs Oct. 5, 1911 (gage height, 11 ft, present site and datum), from rating curve extended above 13,000 cfs; minimum daily, 94 cfs Mar. 2, 1913.

Maximum flood known, that of Oct. 5, 1911.

Remarks.--Records good except those for winter period, which are fair. Diversions for irrigation of about 4,000 acres above station. Natural regulation by many lakes and regulation for power above station.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	208	196	180	130	204	192	260	486	1,090	1,020	400	491
2	204	196	180	136	192	212	256	424	990	970	376	564
3	224	192	188	120	176	232	265	370	1,100	890	358	491
4	256	200	208	130	180	236	322	322	1,320	800	370	421
5	248	200	216	140	192	216	370	305	1,620	737	370	376
6	270	180	295	150	192	208	364	285	2,090	692	358	400
7	260	188	472	110	196	200	370	300	1,990	647	519	414
8	248	232	358	120	180	196	406	493	1,900	692	683	421
9	236	248	295	140	170	180	444	1,090	1,740	647	604	421
10	232	224	248	170	200	196	418	1,520	1,660	588	638	400
11	232	208	236	176	184	208	388	1,610	1,420	564	782	398
12	236	212	236	176	176	208	394	1,500	1,250	674	940	352
13	240	216	232	176	188	208	382	1,550	1,060	604	930	330
14	244	208	216	180	192	200	352	1,130	990	572	800	310
15	232	208	208	192	184	204	328	980	940	612	692	300
16	232	212	196	170	173	200	322	1,310	881	656	620	285
17	240	212	192	170	176	216	300	1,640	900	881	548	280
18	232	208	196	159	170	275	316	1,870	1,100	890	491	270
19	232	204	196	162	180	310	388	2,180	1,300	728	463	270
20	228	212	204	188	176	295	444	2,350	1,440	638	449	330
21	224	208	208	204	170	285	430	2,580	1,660	564	421	305
22	216	204	204	204	162	285	418	2,920	1,600	519	394	280
23	208	204	192	192	176	310	406	3,140	1,610	512	382	255
24	204	204	162	196	184	352	376	3,080	1,550	484	364	236
25	196	192	173	204	184	370	364	3,140	1,430	463	340	240
26	204	184	173	180	196	352	352	2,680	1,300	456	330	275
27	204	184	176	188	184	328	346	2,020	1,220	435	310	290
28	196	173	150	196	184	295	437	1,990	1,200	407	340	280
29	188	188	130	188	-	285	556	1,670	1,030	382	352	270
30	192	192	130	192	- - - - -	280	564	1,420	980	358	358	255
31	192	- - - - -	130	208	- - - - -	270	- - - - -	1,260	- - - - -	388	370	- - - - -
Total	6,958	6,089	6,580	5,247	5,121	7,804	11,338	47,615	40,361	19,470	15,352	10,200
Mean	224	203	212	169	183	252	378	1,536	1,345	628	495	340
Max	270	248	472	208	204	370	564	3,140	2,090	1,020	940	564
Min	188	173	130	110	162	180	256	285	881	358	310	236
Ac-ft	13,800	12,080	13,050	10,410	10,160	15,480	22,490	94,440	80,050	38,620	30,450	20,230

Cal yr 1966: Total 242,784 Mean 665 Max 3,360 Min 130 Ac-ft 481,600

Wtr yr 1967: Total 182,135 Mean 499 Max 3,140 Min 110 Ac-ft 361,300

Peak discharge (base, 4,000 cfs).--No peak above base.

9-3635. Animas River near Cedar Hill, N. Mex.

Location.--Lat 37°02'15", long 107°52'25", in sec.7, T.32 N., R.9 W., on right bank three-quarters of a mile downstream from Florida River, 2.5 miles upstream from Colorado-New Mexico State line, and 8.5 miles north of Cedar Hill, N. Mex.

Drainage area.--1,090 sq mi, approximately.

Records available.--October 1933 to September 1967. Monthly discharge only for October and November 1933, published in WSP 1313.

Gage.--Digital water-stage recorder. Altitude of gage is 5,960 ft (from topographic map). Prior to Sept. 14, 1937, at datum between 1.52 and 1.36 ft higher. Sept. 15, 1937, to Sept. 30, 1946, at datum 1.36 ft higher. Oct. 1, 1946, to Sept. 12, 1966, graphic water-stage recorder at same site.

Average discharge.--34 years, 889 cfs (643,600 acre-ft per year).

Extremes.--Maximum discharge during year, 5,260 cfs Aug. 13 (gage height, 7.60 ft); minimum, about 140 cfs Dec. 29, result of freezeup. 1933-67: Maximum discharge, 13,100 cfs June 19, 1949 (gage height, 11.45 ft); minimum, 63 cfs Jan. 21, 1935. Maximum flood known occurred Oct. 5 or 6, 1911.

Remarks.--Records good except those for winter period, which are poor. Diversions for irrigation of about 20,000 acres above station. During water years 1944-49, Twin Rocks Canal diverted above station for irrigation below. Possible regulation by Lemon Dam on Florida River (capacity, 40,100 acre-ft), storage started in November 1963.

Cooperation.--Records furnished by New Mexico district.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	250	234	224	162	255	252	292	568	1,160	1,010	391	536
2	248	236	222	168	240	267	295	495	1,070	962	372	639
3	258	234	228	155	222	286	296	434	1,130	899	357	561
4	272	236	255	160	222	298	354	378	1,350	788	372	473
5	282	237	261	174	235	282	402	349	1,630	719	371	416
6	286	232	390	186	238	260	404	329	2,150	658	359	416
7	292	232	450	140	240	249	455	322	2,220	609	464	488
8	284	282	449	150	230	249	434	439	2,110	633	688	450
9	278	303	342	175	212	235	422	955	1,960	610	657	462
10	270	279	306	208	245	246	390	1,400	1,850	558	659	437
11	276	264	289	218	238	263	385	1,520	1,630	557	787	415
12	276	258	281	220	228	263	390	1,460	1,390	611	1,000	387
13	278	262	275	222	248	256	400	1,470	1,120	613	1,350	358
14	278	255	267	226	254	252	410	1,160	1,040	560	1,010	343
15	278	252	261	238	237	249	368	944	1,000	556	819	330
16	276	254	246	212	218	246	367	1,170	901	661	718	318
17	280	253	242	212	218	252	345	1,490	897	1,060	646	317
18	270	250	242	200	217	290	344	1,700	1,070	984	563	313
19	266	246	245	200	221	346	378	1,920	1,300	778	560	318
20	272	247	250	228	237	338	451	2,350	1,440	680	532	357
21	270	247	260	250	220	318	447	2,580	1,680	598	477	355
22	264	244	258	250	209	318	441	2,800	1,640	518	443	336
23	260	244	240	240	216	342	447	3,130	1,670	497	420	316
24	256	241	208	240	237	386	416	3,080	1,580	463	412	302
25	252	238	214	250	244	404	409	3,190	1,480	456	387	317
26	252	231	216	225	260	395	406	2,830	1,360	455	372	342
27	254	227	200	230	255	364	380	2,350	1,240	442	351	355
28	250	224	192	238	245	345	445	1,990	1,210	401	379	349
29	246	226	162	230	-	327	572	1,700	1,070	384	382	334
30	242	230	150	240	- - - -	320	618	1,400	986	346	389	319
31	240	- - - -	150	256	- - - -	304	- - - -	1,250	- - - -	369	403	- - - -
Total	8,256	7,398	7,975	6,503	6,541	9,202	12,163	47,153	42,334	19,435	17,090	11,659
Mean	266	247	257	210	234	297	405	1,521	1,411	627	551	389
Max	292	303	450	256	260	404	618	3,190	2,220	1,060	1,350	639
Min	240	224	150	140	209	235	292	322	897	346	351	302
Ac-ft	16,380	14,670	15,820	12,900	12,970	18,250	24,120	93,530	83,970	38,550	33,900	23,130

Cal yr 1966 : Total 281,699 Mean 772 Max 3,860 Min 150 Ac-ft 558,700
 Wtr yr 1967 : Total 195,709 Mean 536 Max 3,190 Min 140 Ac-ft 338,200

Peak discharge (base, 4,000 cfs, revised)--Aug. 13 (1630) 5,260 cfs (7.60 ft).

9-3655. La Plata River at Hesperus, Colo.

Location.--Lat 37°17'20", long 108°02'05", in sec.14, T.35 N., R.11 W., on right bank at Hesperus 700 ft downstream from U. S. Highway 160.

Drainage area.--37 sq mi, approximately.

Records available.--June to August 1904, May 1905 to September 1906, August to November 1910, June 1917 to September 1967. Monthly discharge only for some periods, published in WSP 1313. Records for Nov. 11 to Dec. 31, 1910, published in WSP 289, have been found to be unreliable and should not be used.

Gage.--Water-stage recorder. Datum of gage is 8,104.71 ft above mean sea level, datum of 1929. Prior to May 1, 1920, staff gage and May 1, 1920, to May 24, 1927, water-stage recorder, at several sites about 600 ft downstream at different datums. May 25, 1927, to Sept. 30, 1938, water-stage recorder at site 60 ft downstream and Oct. 1, 1938, to Sept. 30, 1941, at present site at datum 1.00 ft higher.

Average discharge.--51 years (1905-6, 1917-67), 45.2 cfs (32,720 acre-ft per year).

Extremes.--Maximum discharge during year, 235 cfs May 22 (gage height, 2.24 ft); no flow part of Oct. 24, caused by filling of pond upstream.

1904-6, 1910, 1917-67: Maximum discharge, 1,880 cfs Sept. 22, 1941 (gage height, 4.30 ft, present datum), from rating curve extended above 620 cfs on basis of slope-area measurement of peak flow; minimum, that of Oct. 24, 1966.

Maximum flood known occurred Oct. 5, 1911.

Remarks.--Records good except those for winter period, which are poor. One diversion above station for irrigation of about 2,000 acres along Cherry Creek below station.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4.7	2.5					25	33	35	40	22	83
2	4.7	3.0					25	29	28	39	18	86
3	5.2	3.0					24	27	43	35	18	68
4	5.2	3.0					27	25	68	33	19	50
5	6.4	2.5					28	25	80	29	16	43
6	6.4	2.5				14	28	24	113	28	16	39
7	5.8	3.0					29	26	99	27	29	36
8	5.8	4.7					35	48	96	22	27	36
9	5.2	4.2					42	115	83	24	42	35
10	4.7	3.6					35	121	75	23	68	30
11	4.7	4.2				18	36	112	66	23	60	29
12	4.7	4.2				18	40	106	56	22	80	27
13	4.2	4.7				18	35	103	46	17	88	24
14	5.2	4.7				18	33	70	39	16	66	23
15	5.2	4.2				18	30	72	26	18	52	20
16	5.2	4.2	6.0	4.5	9.0	18	27	103	22	24	43	20
17	5.2	4.2				18	25	127	28	74	33	19
18	5.2	4.2				19	26	138	39	33	44	18
19	5.2	4.2				20	35	127	46	22	39	18
20	5.2	4.2				20	35	130	54	19	30	18
21	5.2	4.2				23	30	150	60	20	27	17
22	5.2	4.7				29	34	162	49	19	26	15
23	5.2	5.2				47	30	150	49	35	24	15
24	2.1	5.2				51	35	138	43	20	21	14
25	4.2	5.2				49	38	138	37	19	21	15
26	4.2	5.2				44	34	123	35	19	20	15
27	3.0	5.8				42	36	91	42	17	20	19
28	2.5	5.2				37	47	93	30	15	25	15
29	2.5	5.8				35	46	75	28	15	24	12
30	2.2	5.8				30	41	62	30	17	27	11
31	2.2	- - - -				26	- - - -	46	- - - -	18	33	- - - -
Total	142.6	127.3	186.0	139.5	252.0	738	991	2,789	1,545	782	1,078	870
Mean	4.60	4.24	6.0	4.5	9.0	23.8	33.0	90.0	51.5	25.2	34.8	29.0
Max	6.4	5.8	-	-	-	51	47	162	113	74	88	86
Min	2.1	2.5	-	-	-	-	24	24	22	15	16	11
Ac-ft	283	252	369	277	500	1,460	1,970	5,530	3,060	1,550	2,140	1,730

Cal yr 1966: Total 13,593.4 Mean 37.2 Max 300 Min 2.1 Ac-ft 26,960
Wtr yr 1967: Total 9,640.4 Mean 26.4 Max 162 Min 2.1 Ac-ft 19,120

Peak discharge (base, 230 cfs)--May 22 (2200) 235 cfs (2.24 ft).

Note.--No gage-height record Dec. 1 to Mar. 12.

9-3665, La Plata River at Colorado-New Mexico State line

Location.--Lat 36°59'59", long 108°11'17", in NW¼SE¼ sec.10, T.32 N., R.13 W., on right bank at Colorado-New Mexico State line, 0.2 mile downstream from Ponds Arroyo and 4.8 miles north of La Plata, N. Mex.

Drainage area.--331 sq mi.

Records available.--January 1920 to September 1967. Monthly discharge only for some periods, published in WSP 1313.

Gage.--Water-stage recorder. Datum of gage is 5,975.15 ft above mean sea level, datum of 1929. Prior to Apr. 30, 1920, staff gage at site 2 miles upstream at different datum. May 1 to June 18, 1920, staff gage and June 19, 1920, to Sept. 30, 1924, water-stage recorder, at present site at datum 1.26 ft higher. Oct. 1, 1924, to Mar. 16, 1934, water-stage recorder at present site at datum 0.26 ft higher.

Average discharge.--47 years, 33.4 cfs (24,180 acre-ft per year).

Extremes.--Maximum discharge during year, 219 cfs Aug. 11 (gage height, 2.41 ft); maximum gage height, 4.13 ft Jan. 31 (backwater from ice); no flow July 15-17.

1920-67: Maximum discharge, 4,750 cfs Aug. 24, 1927 (gage height, 11.36 ft, present datum), from rating curve extended above 750 cfs on basis of slope-area measurement of peak flow; no flow at times in many years.

Remarks.--Records fair except those for winter period, which are poor. Diversions above station for irrigation of about 15,000 acres, mostly above station.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.8	2.8	4.5		12	13	15	23	46	80	2.6	7.2
2	2.0	2.8	3.6		14	15	11	17	25	11	2.0	3.1
3	2.2	3.0	2.6		16	18	10	14	23	12	2.0	2.9
4	1.8	3.3	2.6		17	14	11	11	36	11	1.8	2.1
5	2.0	3.3	4.8		17	10	11	10	35	9.2	3.3	1.5
6	2.0	3.6	12		15	11	9.6	9.6	59	11	3.0	9.2
7	1.8	3.3	4.8		15	8.8	8.8	9.2	51	9.6	2.8	2.7
8	2.0	5.4	30		18	8.8	11	9.6	62	5.1	4.2	1.2
9	2.0	5.1	7.0		18	8.4	17	35	56	4.8	7.6	1.2
10	2.0	4.2	6.0		15	7.6	21	50	56	8.4	7.6	9.6
11	2.2	3.9			15	7.6	18	51	47	10	2.1	8.4
12	2.4	3.9			16	7.6	17	63	41	8.4	1.4	7.2
13	2.4	3.9			15	7.6	23	69	36	5.1	3.3	5.4
14	2.6	4.5			15	7.2	18	52	31	.30	4.3	4.5
15	2.8	4.5		5.5	17	7.2	17	37	27	0	3.6	4.2
16	3.0	4.2			16	6.0	16	49	15	0	3.4	3.9
17	2.0	3.9			17	6.0	12	77	9.6	0	1.2	3.6
18	2.0	3.9			17	6.4	9.6	83	9.6	2.0	7.6	3.6
19	2.0	4.2			15	6.8	11	64	17	3.9	2.1	3.9
20	1.8	4.2			15	9.6	18	81	25	3.0	1.3	4.2
21	2.0	4.2	4.5		15	10	21	88	37	3.3	7.2	3.9
22	1.8	4.5			15	8.8	22	94	33	3.0	6.8	3.0
23	1.4	4.5			15	14	24	85	26	6.8	3.9	2.8
24	1.6	4.5			14	25	22	69	23	4.8	5.1	2.4
25	1.8	4.5			14	25	22	87	19	3.9	5.1	1.8
26	1.6	4.8			15	23	22	73	15	4.8	5.4	2.4
27	1.6	5.7			12	19	17	58	14	4.2	4.8	2.6
28	2.2	5.7			12	18	19	70	14	3.6	4.2	2.6
29	2.6	5.1			-	16	24	64	11	3.0	5.1	2.4
30	2.0	4.8			- - - -	18	25	66	8.0	3.3	4.5	2.2
31	2.2	- - - -			- - - -	18	- - - -	58	- - - -	3.0	6.4	- - - -
Total	63.6	126.2	215.6	170.5	427	381.4	503.0	1,626.4	907.2	166.5	367.8	248.0
Mean	2.05	4.21	6.95	5.5	15.2	12.3	16.8	52.5	30.2	5.37	11.9	8.27
Max	3.0	5.7	48	-	18	25	25	94	62	12	43	31
Min	1.4	2.8	2.6	-	12	6.0	8.8	9.2	8.0	0	1.8	1.8
Ac-ft	126	250	428	338	847	756	998	3,230	1,800	330	730	492
Cal yr 1966: Total	10,923.1		Mean	29.9	Max	186	Min	0	Ac-ft	21,670		
Wtr yr 1967: Total	5,203.2		Mean	14.3	Max	94	Min	0	Ac-ft	10,320		

9-3710. Mancos River near Towaoc, Colo.

Location.--Lat 37°02', long 108°43', in NW¼ sec.18, T.32 N., R.17 W., on left bank 750 ft upstream from bridge on U. S. Highway 666, 6 miles upstream from Aztec Creek, and 12 miles south of Towaoc.

Drainage area.--550 sq mi, approximately.

Records available.--October 1920 to September 1943, February 1951 to September 1967. Monthly discharge only for some periods published in WSP 1313.

Gage.--Water-stage recorder at present site Oct. 13, 1941, to Sept. 30, 1943, and since Mar. 11, 1954. Datum of gage is 5,055.98 ft above mean sea level, datum of 1929. Prior to Mar. 15, 1940, staff gage or water-stage recorder 2½ miles downstream at different datum. Mar. 15, 1940, to Oct. 12, 1941, and Feb. 16, 1951, to Mar. 10, 1954, water-stage recorder at site 600 ft downstream at datum 4.95 ft lower.

Average discharge.--39 years, 51.1 cfs (36,990 acre-ft per year).

Extremes.--Maximum discharge during year, 1,740 cfs Sept. 8 (gage height, 4.86 ft); no flow July 5-10.

1920-43, 1951-67: Maximum discharge, 5,300 cfs Oct. 14, 1941 (gage height, 7.30 ft, present site and datum), from rating curve extended above 200 cfs on basis of slope-area measurement of peak flow; no flow at times in most years.

Remarks.--Records fair except those for winter period, which are poor. Diversions for irrigation of about 10,000 acres above station. One diversion above station for irrigation of about 100 acres below. Flow regulated by Jackson Gulch Reservoir (capacity, 10,000 acre-ft) since March 1949.

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3.2	10	11	10	34	19	13	0.10	17	0.10	1.4	17
2	2.6	10	9.8	11	30	22	11	.10	12	.07	.82	12
3	3.2	10	11	11	26	21	10	.10	8.6	.06	.64	6.8
4	4.7	9.8	17	12	24	20	9.8	.10	12	.02	39	2.6
5	6.2	10	20	13	22	20	10	.10	22	0.0	9.2	1.2
6	5.0	9.8	37	14	24	17	14	.10	26	0	6.8	.73
7	4.7	10	217	10	22	14	13	.10	23	0	105	116
8	5.6	15	122	11	17	15	10	.09	16	0	34	146
9	5.6	62	53	12	19	13	12	.09	14	0	50	22
10	4.4	20	28	14	20	14	12	9.9	11	0	221	25
11	4.1	14	26	15	19	15	10	1.8	12	.07	318	4.7
12	4.4	12	24	16	20	15	9.2	.55	9.8	.04	180	1.5
13	4.4	11	22	16	20	15	6.8	.09	8.0	.28	136	1.0
14	5.6	11	22	16	28	14	4.7	.08	8.0	.37	49	.73
15	8.6	10	22	17	21	12	4.7	.08	8.6	.08	15	.64
16	8.0	10	20	16	16	11	4.4	.08	6.8	38	9.2	1.2
17	8.6	11	19	15	16	12	3.8	.08	4.4	106	6.2	3.2
18	9.2	10	19	14	15	13	2.6	.07	3.5	94	17	2.9
19	9.8	10	19	15	17	19	1.7	2.1	4.4	46	6.8	3.2
20	9.2	10	19	17	20	21	1.6	1.0	16	16	5.6	3.2
21	9.8	10	19	22	19	18	.91	.07	40	2.9	2.9	3.2
22	10	12	18	24	16	16	.28	.07	26	1.6	12	2.3
23	9.8	13	17	24	16	14	.28	3.5	23	4.3	15	1.6
24	11	12	16	22	17	16	.28	.55	8.0	1.7	3.5	1.4
25	11	12	15	18	19	18	.19	.07	6.2	5.1	.28	1.3
26	12	11	14	15	23	19	.19	.28	5.6	.91	.20	1.1
27	11	11	16	16	22	17	.19	9.5	4.4	15	.01	53
28	11	9.0	16	18	18	15	.19	8.6	3.2	8.0	.72	23
29	11	9.8	14	17	-	14	.19	9.8	1.0	6.3	40	8.6
30	11	12	9.8	17	-	11	.10	9.8	.10	8.6	6.8	5.6
31	11	- - - -	10	20	- - - -	13	- - - -	15	- - - -	4.4	14	- - - -
Total	235.7	387.4	902.6	488	580	493	167.10	73.95	360.60	359.90	1,306.07	472.70
Mean	7.60	12.9	29.1	15.7	20.7	15.9	5.57	2.39	12.0	11.6	42.1	15.8
Max	12	62	217	24	34	22	14	15	40	106	318	146
Min	2.6	9.0	9.8	10	15	11	0.10	0.07	0.10	0	0.01	0.64
Ac-ft	468	768	1,790	968	1,150	978	331	147	715	714	2,590	938

Cal yr 1966: Total 14,350.5 Mean 39.3 Max 233 Min 0 Ac-ft 28,460
Wtr yr 1967: Total 5,827.02 Mean 16.0 Max 318 Min 0 Ac-ft 11,560

Peak discharge (base, 700 cfs).--Aug. 11 (1940) 747 cfs (3.89 ft); Sept. 8 (1930) 1,740 cfs (4.86 ft).

9-3720. McElmo Creek near Colorado-Utah State line

Location.--Lat 37°19'27", long 109°00'54", in NE¼ sec.2, T.35 N., R.20 W., on right bank 1½ miles upstream from Colorado-Utah State line, 2 miles upstream from Yellowjacket Creek, and 2 miles west of former town of McElmo.

Drainage area.--350 sq mi, approximately.

Records available.--March 1951 to September 1967.

Gage.--Water-stage recorder. Altitude of gage is 4,890 ft (from topographic map).

Average discharge.--16 years, 41.4 cfs (29,970 acre-ft per year).

Extremes.--Maximum discharge during year, 3,040 cfs Aug. 7 (gage height, 7.58 ft, from high-water mark in well), from rating curve extended above 2,100 cfs; minimum daily, 6.0 cfs Aug. 3.
1951-67: Maximum discharge, that of Aug. 7, 1967; minimum daily, 0.1 cfs for several days in 1951, 1956.

Remarks.--Records good except those for winter period, which are poor. Diversions for irrigation of about 1,000 acres above station. One diversion above station for irrigation of about 60 acres below. Part of flow is return water from irrigated lands of Montezuma irrigation district (water imported from Dolores River basin).

Discharge, in cubic feet per second, water year October 1966 to September 1967

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	24	30	34	24	55	26	20	34	119	34	15	83
2	22	30	34	24	53	25	19	39	84	29	7.0	43
3	22	30	37	22	43	25	19	39	84	23	6.0	33
4	25	30	79	22	40	25	18	26	99	21	7.0	25
5	27	30	84	24	39	25	25	16	107	15	13	24
6	28	30	140	24	43	23	28	15	106	15	21	20
7	30	34	365	18	40	24	22	15	79	14	1,200	62
8	30	44	165	20	30	22	19	12	73	9.0	170	133
9	28	50	79	24	33	23	15	12	70	7.5	505	59
10	26	60	53	26	36	22	20	11	65	8.0	790	44
11	28	35	47	28	35	23	17	14	62	10	616	40
12	28	30	43	28	32	25	20	9.0	62	64	296	34
13	28	29	40	28	36	23	22	10	75	53	300	28
14	26	36	43	28	40	23	20	26	86	35	177	29
15	24	34	42	30	33	21	18	25	75	30	91	29
16	24	37	39	28	32	20	18	26	71	58	73	32
17	26	37	35	26	30	21	19	27	53	232	70	34
18	28	42	36	26	29	22	15	24	58	133	59	34
19	28	42	36	28	33	23	15	21	76	54	46	39
20	30	42	36	30	33	22	16	24	97	35	37	42
21	30	43	36	34	28	21	20	25	122	23	81	35
22	30	39	34	38	28	20	20	33	87	19	59	32
23	32	37	30	40	27	20	34	34	64	16	42	28
24	32	37	30	36	28	20	36	33	58	18	32	26
25	34	36	30	32	27	20	28	32	59	12	26	24
26	36	36	35	30	28	20	29	50	59	11	22	28
27	34	34	34	30	28	21	33	87	53	24	18	50
28	34	33	30	30	26	20	19	70	60	26	14	100
29	32	34	22	30	-	20	19	78	64	13	29	60
30	32	34	22	33	- - - -	20	22	86	49	33	59	50
31	32	- - - -	22	46	- - - -	21	- - - -	117	- - - -	33	65	- - - -
Total	890	1,095	1,792	887	965	686	645	1,070.0	2,276	1,107.5	4,946.0	1,300
Mean	28.7	36.5	57.8	28.6	34.5	22.1	21.5	34.5	75.9	35.7	160	43.3
Max	36	60	365	46	55	26	36	117	122	232	1,200	133
Min	22	29	22	18	26	20	15	9.0	49	7.5	6.0	20
Ac-ft	1,770	2,170	3,550	1,760	1,910	1,360	1,280	2,120	4,510	2,200	9,810	2,580
Cal yr 1966: Total	17,919.6			Mean 49.1	Max 365	Min 3.0	Ac-ft 35,540					
Wtr yr 1967: Total	17,659.5			Mean 48.4	Max 1,200	Min 6.0	Ac-ft 35,030					

Peak discharge (base, 500 cfs)

Note.--No gage-height record Aug. 7, 8.

Date	Time	Gage height	Discharge	Date	Time	Gage height	Discharge
12- 7	1830	5.42	674	9- 7	1745	5.61	755
7-17	1945	5.50	715	†9-27	-	5.07	528
8- 7	†1015	7.58	3,040				

† Estimated

TRANSMOUNTAIN DIVERSIONS

Transmountain diversions from Arkansas River basin to South Platte River basin in Colorado

7-0863. Aurora-Homestake pipeline diverts water from Arkansas River in sec.8, T.12 S., R.79 W., to Elevenmile Canyon Reservoir (South Platte River) in sec.29, T.13 S., R.72 W., in South Platte River basin. Diversion began Aug. 24, 1967. Pipeline is equipped with a discharge recorder and venturi meter. Records furnished by State engineer. Diversions for water year October 1966 to September 1967 are given below.

Month	Diversion in Acre-feet	Month	Diversion in Acre-feet	Water year	Diversion in Acre-feet
August	432	September	1,710	1966-67	2,140

Transmountain diversions from Colorado River basin in Colorado

There are 23 tunnels or ditches, all of which are equipped with water-stage recorders and Parshall flumes or sharp-crested weirs. Records furnished by State engineer. The locations of these diversions are given in the following list.

9-0100. Grand River ditch diverts water from tributaries of Colorado River to La Poudre Pass Creek (tributary to Cache la Poudre River) in NW $\frac{1}{4}$ sec.21, T.6 N., R.75 W., in Platte River basin. Two collection ditches beginning at headgates located in sec.28, T.5 N., R.76 W., and sec.29, T.6 N., R.75 W., intercept all tributaries upstream on each side of the Colorado River and converge at La Poudre Pass.

9-0120. Eureka ditch diverts water from tributaries of Tonahutu Creek between headgate in sec.7, T.4 N., R.74 W., and Sprague Pass, in Colorado River basin, to Spruce Creek (tributary to Big Thompson River) in sec.16, T.4 N., R.74 W., in Platte River basin.

9-0130. Alva B. Adams tunnel diverts water from Grand Lake and Shadow Mountain Lake in NW $\frac{1}{4}$ sec.9, T.3 N., R.75 W., in Colorado River basin, to Lake Estes (Big Thompson River) in sec.30, T.5 N., R.72 W., in Platte River basin. For daily discharge, see elsewhere in this report.

9-0215. Berthoud Pass ditch diverts water from tributaries of Fraser River between headgate in sec.33, T.2 S., R.75 W., and Berthoud Pass, in Colorado River basin, to Hoop Creek (tributary to West Fork Clear Creek) in sec.10, T.3 S., R.75 W., in Platte River basin.

9-0225. Moffat water tunnel diverts water from tributaries of Williams Fork (via August P. Gumlick and Vasquez tunnels, beginning in 1959) between headgates (in secs.20 and 29, T.3 S., R.76 W.) and west portal of August P. Gumlick tunnel (in sec.28, T.3 S., R.76 W.) and from the main stem and tributaries of Fraser River between headgates (in sec.8, T.2 S., R.76 W., and sec.24, T.1 S., R.75 W.) and west portal of Moffat tunnel (in sec.11, T.2 S., R.75 W.), in Colorado River basin, to South Boulder Creek, in sec.2, T.2 S., R.74 W., in Platte River basin. (See sta. 9-0360 for diversions by August P. Gumlick tunnel.)

9-0420. Hoosier Pass tunnel diverts water from tributaries of Blue River in Colorado River basin to Montgomery Reservoir (Middle Fork South Platte River) in sec.14, T.8 S., R.78 W., in Platte River basin; this water is again diverted to South Catamount Creek (tributary to Catamount Creek) in SE $\frac{1}{4}$ sec.14, T.13 S., R.69 W., in the Arkansas River basin. Collection conduits extending from the right bank of Crystal Creek (tributary to Spruce Creek) in sec.14, T.7 S., R.78 W., right bank of Spruce Creek in sec.23, T.7 S., R.78 W., right bank of McCullough Gulch in sec.26, T.7 S., R.78 W., right bank of Monte Cristo Creek in SW $\frac{1}{4}$ sec.2, T.8 S., R.78 W., left bank of Bemrose Creek in SW $\frac{1}{4}$ sec.6, T.8 S., R.77 W., and intercepting intermediate tributaries, transport diversions to north portal of the tunnel.

9-0460. Boreas Pass ditch diverts water from tributaries of Blue River between headgate in sec.26, T.7 S., R.77 W., and Boreas Pass, in Colorado River basin, to Tarryall Creek in sec.26, T.7 S., R.77 W., in Platte River basin.

9-0485. Fremont Pass ditch diverts water from tributaries of Tenmile Creek in secs.2 and 3, T.8 S., R.79 W., in Blue River basin, to East Fork Arkansas River in sec.11, T.8 S., R.79 W., in Arkansas River basin.

9-0505.9. Harold D. Roberts tunnel diverts water from Dillon Reservoir (Blue River) in sec.18, T.5 S., R.77 W., in Blue River basin, to North Fork South Platte River (tributary to South Platte River), in SW $\frac{1}{4}$ sec.4, T.7 S., R.74 W., in Platte River basin. Figures include a small amount of ground-water inflow between Dillon Reservoir and east portal of tunnel.

9-0615. Columbine ditch diverts water from tributaries of Eagle River in sec.5, T.8 S., R.79 W., in Colorado River basin to Chalk Creek (tributary to East Fork Arkansas River) in NW $\frac{1}{4}$ sec.9, T.8 S., R.79 W., in Arkansas River basin.

9-0620. Ewing ditch diverts water from Piney Creek in sec.11, T.8 S., R.80 W., in Eagle River basin, to Thayer Gulch (tributary to Tennessee Creek) in sec.11, T.8 S., R.80 W., in Arkansas River basin.

9-0625. Wurtz ditch diverts water from tributaries of Eagle River between headgate in sec.32, T.7 S., R.80 W., and Tennessee Pass, in Colorado River basin, to West Tennessee Creek (tributary to Tennessee Creek) in sec.17, T.8 S., R.80 W., in Arkansas River basin.

9-0637. Homestake tunnel diverts water from Homestake Lake (Middle Fork Homestake Creek), in sec.17, T.8 S., R.81 W., in Eagle River basin, to Lake Fork in sec.10, T.9 S., R.81 W., in Arkansas River basin. Water is imported to Homestake Lake from tributaries of Homestake Creek by collection conduits that extend from right bank of French Creek in sec.28, T.7 S., R.81 W., and left bank of East Fork Homestake Creek in sec.9, T.8 S., R.81 W., and intercept intermediate tributaries.

Transmountain diversions from Colorado River basin in Colorado--Continued

9-0730. Twin Lakes tunnel diverts water from tributaries of Roaring Fork River between headgates (in sec.21, T.11 S., R.83 W., and sec.2, T.11 S., R.83 W.), and west portal of Twin Lakes tunnel (in sec.24, T.11 S., R.83 W.), in Colorado River basin, to North Fork Lake Creek in sec.22, T.11 S., R.82 W., in Arkansas River basin.

9-0775. Busk-Ivanhoe tunnel diverts water from Ivanhoe Lake (Ivanhoe Creek), tributary to Fryingpan River in sec.13, T.9 S., R.82 W., in Roaring Fork River basin, to Busk Creek (tributary to Lake Fork) in sec.20, T.9 S., R.81 W., in Arkansas River basin.

9-1150. Larkspur ditch diverts water from tributaries of Tomichi Creek between headgates (in sec.11, T.48 N., R.6 E., and sec.1, T.47 N., R.6 E.), and Marshall Pass, in Gunnison River basin, to Poncha Creek (tributary to South Arkansas River) in SE $\frac{1}{4}$ sec.24, T.48 N., R.6 E., in Arkansas River basin.

9-1182. Tarbell ditch diverts water from Lake Fork Cochetopa Creek (tributary to Cochetopa Creek), in NW $\frac{1}{4}$ sec.18, T.43 N., R.2 E., in Gunnison River basin, to Lake Fork Saguache Creek (tributary to Middle Fork Saguache Creek) in NE $\frac{1}{4}$ sec.18, T.43 N., R.2 E., in Rio Grande basin. All records available prior to October 1960 published in WSP 1733.

9-1210. Tabor ditch diverts water from tributaries of Cebolla Creek in secs.29 and 36, T.43 N., R.3 W., in Gunnison River basin, to Big Spring Creek (tributary to North Clear Creek) in sec.35, T.43 N., R.3 W., in Rio Grande basin.

9-3410. Treasure Pass ditch diverts water from tributaries of Wolf Creek between headgates (in sec.31, T.38 N., R.2 E., and sec.6, T.37 N., R.2 E.), and Wolf Creek Pass, in San Juan River basin, to tributary of South Fork Rio Grande, in sec.31, T.38 N., R.2 E., in Rio Grande basin.

9-3470. Piedra Pass ditch (Harley Fuchs ditches 1 and 2) diverts water from tributaries of Piedra River between headgates (in NW $\frac{1}{4}$ sec.4, T.38 N., R.1 W., and SW $\frac{1}{4}$ sec.33, T.39 N., R.1 W.), and Piedra Pass, in San Juan River basin, to South River in sec.4, T.38 N., R.1 W., in Rio Grande basin.

9-3480. Squaw Pass ditch diverts water from Williams Creek (tributary to Piedra River) in sec.13, T.39 N., R.3 W., in San Juan River basin, to Squaw Creek in sec.10, T.39 N., R.3 W., in Rio Grande basin.

9-3510. Fuchs ditch diverts water from North Fork Los Pinos River (tributary to Los Pinos River) in sec.4, T.39 N., R.4 W., in San Juan River basin, to Weminuche Creek in sec.33, T.40 N., R.4 W., in Rio Grande basin.

9-3515. Raber-Lohr ditch diverts water from left bank of Rincon la Vaca Creek (tributary to Los Pinos River) in sec.5, T.39 N., R.4 W., in San Juan River basin, to Weminuche Creek in sec.33, T.40 N., R.4 W., in Rio Grande basin.

Transmountain Diversions from Colorado River basin in Colorado

Diversion in acre-feet, water year October 1966 to September 1967

Diversion	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Water year
TO PLATTE RIVER BASIN													
9-0100. Grand River ditch.....	0	0	0	0	0	0	0	33	4,220	2,860	1,420	404	8,950
9-0120. Eureka ditch.....	0	0	0	0	0	0	0	0	73	53	16	45	188
9-0130. Alva B. Adams tunnel.....	30,140	27,580	31,240	26,770	27,880	33,320	20,550	22,450	1,060	4,600	27,230	14,710	267,500
9-0215. Berthoud Pass ditch.....	0	0	0	0	0	0	0	0	339	396	58	0	793
9-0225. Moffat water tunnel.....	2,070	1,610	1,210	1,090	950	932	1,700	10,700	21,900	2,910	4,610	2,530	52,210
9-0460. Boreas Pass ditch.....	0	0	0	0	0	0	0	0	0	0	0	0	0
9-0505.9. Harold D. Roberts tunnel.	5,890	908	3,000	3,240	2,860	3,260	8,260	5,140	1,360	2,570	7,640	8,810	52,950
Total.....	38,100	30,100	35,450	31,100	31,690	37,510	30,510	38,320	28,950	13,390	40,970	26,500	382,600
TO ARKANSAS RIVER BASIN													
9-0420. Hoosier Pass tunnel.....	0	0	0	0	0	0	62	1,050	3,180	3,440	1,230	964	9,930
9-0485. Fremont Pass ditch.....	0	0	0	0	0	0	0	0	0	0	0	0	0
9-0615. Columbine ditch.....	0	0	0	0	0	0	0	252	1,080	203	31	0	1,570
9-0620. Ewing ditch.....	0	0	0	0	0	0	0	216	345	140	57	0	1,757
9-0625. Wurtz ditch.....	0	0	0	0	0	0	0	640	762	153	0	0	1,560
9-0637. Homestake tunnel.....	0	0	0	0	0	0	0	0	2,780	742	324	569	4,420
9-0730. Twin Lakes tunnel.....	451	345	349	238	222	240	499	9,740	21,640	10,760	2,350	725	47,550
9-0775. Busk-Ivanhoe tunnel.....	0	0	0	0	0	0	0	407	3,350	567	439	68	4,830
9-1150. Larkspur ditch.....	0	0	0	0	0	0	0	0	0	0	0	0	0
Total.....	451	345	349	238	222	240	561	12,300	33,140	16,000	4,430	2,330	70,620
TO RIO GRANDE BASIN													
9-1182. Tarbell ditch.....	50	0	0	0	0	0	0	102	0	0	89	96	337
9-1210. Tabor ditch.....	0	0	0	0	0	0	0.4	121	110	59	49	57	397
9-3410. Treasura Pass ditch.....	0	0	0	0	0	0	0	49	192	14	0	0	255
9-3470. Piedra Pass ditch.....	0	0	0	0	0	0	0	0	24	30	0	0	54
9-3480. Squaw Pass ditch.....	0	0	0	0	0	0	0	0	23	19	0	0	42
9-3510. Fuchs ditch.....	0	0	0	0	0	0	0	135	168	0	0	0	303
9-3515. Raber-Lohr ditch.....	0	0	0	0	0	0	0	378	417	0	0	0	795
Total.....	50	0	0	0	0	0	0.4	785	934	122	138	153	2,180
Grand Total.....	38,600	30,440	35,800	31,340	31,910	37,750	31,070	51,410	63,020	29,520	45,540	28,980	455,400

Transmountain diversions from Colorado River basin in Colorado--Continued

Revisions.--Revised figures of diversion, in acre-feet, for the water years 1963-66, superseding those previously published, are given herewith:

Diversion	Oct.	Nov.	May	June	July	Aug.	Water year
TO ARKANSAS RIVER BASIN							
1963							
9-0615. Columbine ditch.....			573	385			958
Total.....			16,540	15,890			48,050
Grand total.....			58,640	56,490			397,700
1964							
9-0615. Columbine ditch.....			450	764	218	55	1,490
Total.....			13,400	26,180	12,840	5,440	61,110
Grand total.....			52,470	78,030	55,350	53,800	490,700
1965							
9-0615. Columbine ditch.....			197	1,340			2,030
Total.....			6,090	33,150			66,800
Grand total.....			36,530	67,660			408,800
TO PLATTE RIVER BASIN							
1966							
9-0505.9. Harold D. Roberts tunnel.	682	101					26,580
Total.....	14,320	18,780					324,600
Grand total.....	16,450	19,430					382,400

As the number of streams on which streamflow information is likely to be desired far exceeds the number of stream-gaging stations feasible to operate at one time, the Geological Survey collects limited streamflow data at sites other than stream-gaging stations. When limited streamflow data are collected on a systematic basis over a period of years for use in hydrologic analyses, the site at which the data are collected is called a partial-record station. Data collected at these partial-record stations are usable in low-flow or flood-flow analyses, depending on the type of data collected. In addition, discharge measurements are made at other sites not included in the partial-record program. These measurements are generally made in times of drought or flood to give better areal coverage to those events. Those measurements and others collected for some special reason are called measurements at miscellaneous sites.

Records collected at partial-record stations are presented in two tables. The first is a table of discharge measurements at low-flow partial-record stations, and the second is a table of annual maximum stage and discharge at crest-stage stations. Discharge measurements made at miscellaneous sites for both low flow and high flow are given in a third table.

Low-flow partial-record stations

Measurements of streamflow in the area covered by this report made at low-flow, partial-record stations are given in the following table. Most of these measurements were made during periods of base flow when streamflow is primarily from ground-water storage. These measurements, when correlated with the simultaneous discharge of a nearby stream where continuous records are available, will give a picture of the low-flow potentiality of the stream. The column headed "Period of record" shows the water years in which measurements were made at the same, or practically the same, site.

Discharge measurements made at low-flow partial-record stations during water year 1967

Discharge measurements made at low-flow partial-record stations during water year 1967						
Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Measurements	
					Date	Discharge (cfs)
Piney River basin						
*9-0589	Moniger Creek near Minturn, Colo.	Lat 39°43'37", long 106°28'50", on left bank 1½ miles upstream from mouth and 7½ miles north of Minturn.	0.76	1965-67	10- 5-66 6- 7-67 6-20-67 7-11-67 8- 1-67 8-29-67	0.06 3.43 1.77 .20 .06 .06

* Also a crest-stage station.

Crest-stage partial-record stations

The following table contains annual maximum discharges for crest-stage stations. A crest-stage gage is a device which will register the peak stage occurring between inspections of the gage. A stage-discharge relation for each gage is developed from discharge measurements made by indirect measurements of peak flow or by current meter. The date of the maximum discharge is not always certain but is usually determined by comparison with nearby continuous-record stations, weather records, or local inquiry. Only the maximum discharge for each water year is given. Information on some lower floods may have been obtained but is not published herein. The years given in the period of record represent water years for which the annual maximum has been determined.

Annual maximum at crest-stage partial-record stations							
Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Dis-charge (cfs)
Piney River basin							
*9-0589	Moniger Creek near Minturn, Colo.	Lat 39°43'37", long 106°28'50", on left bank 1½ miles upstream from mouth and 7½ miles north of Minturn.	0.76	1965-67	5-27-67	(a)	b10

* Also a low-flow partial-record station.

a Gage height not determined. Maximum gage height, 1.57 ft (backwater from ice).

b Estimated.

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Measurements at miscellaneous sites

Measurements of streamflow at points other than gaging stations or partial-record stations are given in the following table. Those that are measurements of base flow are designated by an asterisk (*); measurements of peak flow by a dagger (†).

Discharge measurements made at miscellaneous sites during water year 1967

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
Roaring Fork River basin						
Rocky Fork Creek...	Fryingpan River.	NW $\frac{1}{4}$ sec.18, T.8 S., R.84 W., at mouth near private bridge, 1 $\frac{1}{4}$ miles west of Ruedi, Colo.	a12.3	1959-66	10-31-66	*1.29
					11-28-66	*1.07
					1- 3-67	*.77
					1-30-67	*1.11
					2-27-67	*1.35
					3-27-67	*1.78
					4-17-67	*2.21
					5- 8-67	*2.19
					5-22-67	11.8
					6- 5-67	34.9
					6-19-67	10.1
					7-10-67	*1.28

* Base flow.

a Revised.

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