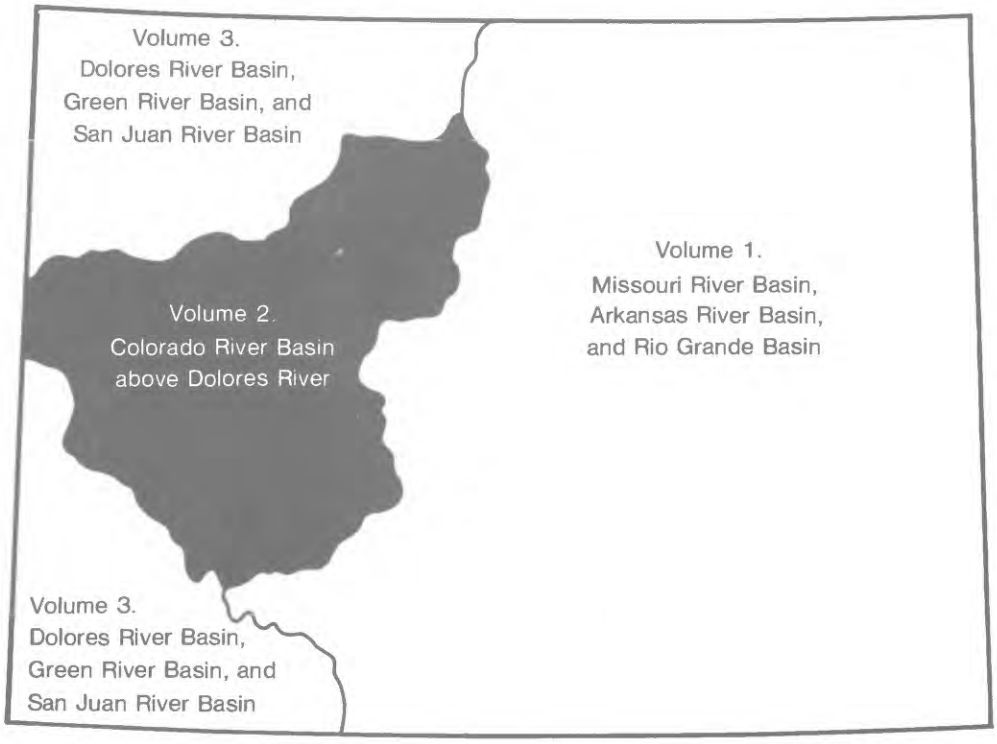
Water Resources Data Colorado Water Year 1984

Volume 2. Colorado River Basin above Dolores River



U.S. GEOLOGICAL SURVEY WATER-DATA REPORT CO-84-2
Prepared in cooperation with the State of Colorado
and with other agencies

CALENDAR FOR WATER YEAR 1984

1983

OCTOBER

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1984

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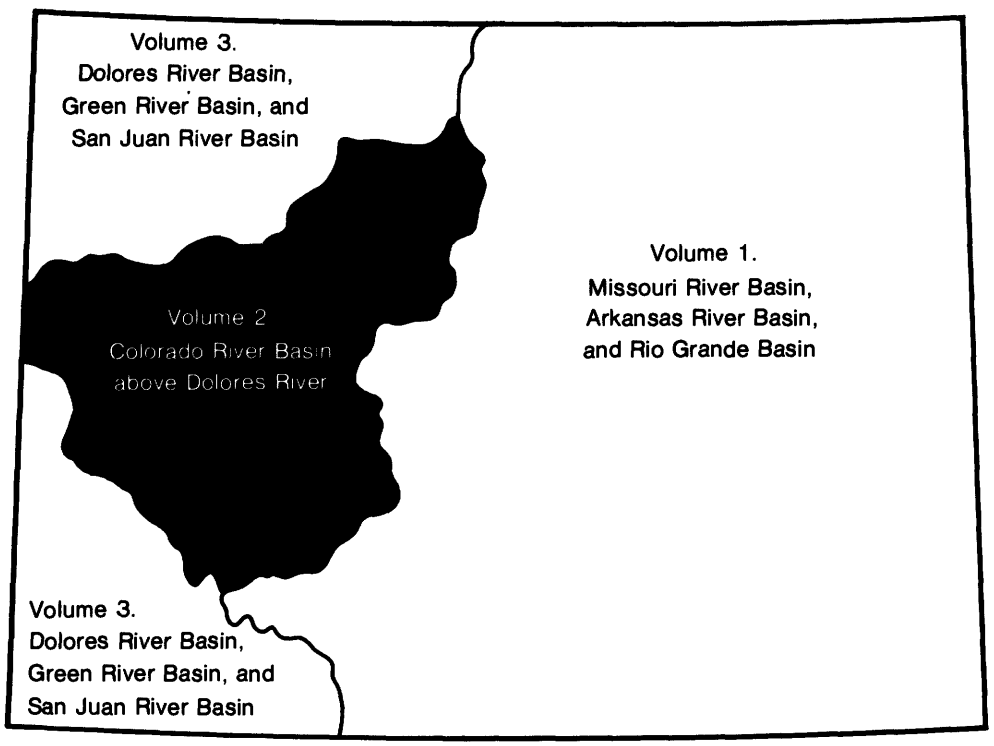
30						

Water Resources Data Colorado Water Year 1984

Volume 2. Colorado River Basin above Dolores River

by A.C. Duncan, R.C. Ugland, R.G. Kretschman, and J.L. Blattner



U.S. GEOLOGICAL SURVEY WATER-DATA REPORT CO-84-2
Prepared in cooperation with the State of Colorado
and with other agencies

UNITED STATES DEPARTMENT OF THE INTERIOR

DONALD PAUL HODEL, Secretary

GEOLOGICAL SURVEY

Dallas L. Peck, Director

For information on the water program in Colorado write to:

District Chief, Water Resources Division
U.S. Geological Survey
Box 25046, Mail Stop 415
Denver Federal Center
Lakewood, Co 80225

1985

PREFACE

This volume of the annual hydrologic data report of Colorado is one of a series of annual reports that document hydrologic data gathered from the U. S. Geological Survey's surface- and ground-water data-collection networks in each state, Puerto Rico, and the Trust Territories. These records of streamflow, ground-water levels, and quality of water provide the hydrologic information needed by State, local, and Federal agencies, and the private sector for developing and managing our Nation's land and water resources. Hydrologic data for Colorado are contained in three volumes:

Volume 1. Missouri River, Arkansas River, and Rio Grande basins in Colorado,
Volume 2. Colorado River Basin in Colorado, above the Dolores River, and
Volume 3. Dolores River, Green River, and San Juan River basins in Colorado.

This report is the culmination of a concerted effort by dedicated personnel of the U. S. Geological Survey who collected, compiled, analyzed, verified, and organized the data, and who typed, edited, and assembled the report. In addition to the authors, who had primary responsibility for assuring that the information contained herein is accurate, complete, and adheres to Geological Survey policy and established guidelines, the following individuals contributed significantly to the collection, processing, and tabulation of the data:

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This report was prepared in cooperation with the State of Colorado and with other agencies under the general supervision of J. F. Blakey, District Chief, Colorado.

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Volume 2. Colorado River basin above Dolores River

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June 1985

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16. Abstract (Limit: 200 words)

Water-resources data for Colorado for the 1984 water year consist of records of stage, discharge, and water quality of streams; stage, contents and water quality of lakes and reservoirs; and water levels and water quality of wells and springs. This report (Volumes 1, 2, and 3) contains discharge records for 352 gaging stations, stage and contents of 23 lakes and reservoirs, 4 partial-record low-flow stations, peak flow information for 32 crest-stage partial record stations, and 1 miscellaneous site; water quality for 126 gaging stations and 275 miscellaneous sites; and water levels for 55 observation wells. Six pertinent stations in bordering States also are included in this report. The records were collected and computed by the Water Resources Division of the U.S. Geological Survey under the direction of J. F. Blakey, District Chief. These data represent that part of the National Water Data System collected by the U.S. Geological Survey and cooperating State and Federal agencies.

17. Document Analysis a. Descriptors

*Colorado, *Hydrologic data, *Surface water, *Ground water, *Water quality; Flow rate, Gaging stations, Lakes, Reservoirs, Chemical analyses, Sediments, Water temperatures, Sampling sites, Water levels, Water analyses.

b. Identifiers/Open-Ended Terms

c. COSATI Field/Group

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Unclassified	

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TABLES

(Letter after station name designates type and frequency of published data.
Daily tables: (D) discharge, (C) specific conductance, (S) sediment, (T) temperature, (e) elevation or contents, (O) dissolved oxygen, (P) pH.

Partial tables: (c) chemical, (b) biological, (m) microbiological, (s) sediment, (t) temperature)

VIII GAGING STATIONS, IN DOWNSTREAM ORDER, FOR WHICH RECORDS ARE PUBLISHED

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XII OBSERVATION WELLS, BY COUNTY, FOR WHICH RECORDS ARE PUBLISHED

WATER RESOURCES DATA FOR COLORADO, 1984

VOLUME 2: COLORADO RIVER BASIN ABOVE THE DOLORES RIVER

By A.C. Duncan, R. C. Ugland, J. L. Blattner, and R. G. Kretschman

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INTRODUCTION

Water-resources data for the 1984 water year for Colorado consist of records of stage, discharge, and water quality of streams; stage, contents, and water quality of lakes and reservoirs; and water levels and water quality of wells and springs. This report (volumes 1, 2, and 3) contains discharge records for 352 streamflow-gaging stations, stage and contents of 23 lakes and reservoirs, low-flow data for 4 partial-record stations, peak flow information for 32 crest-stage partial-record stations and 1 miscellaneous site; water-quality data for 116 streamflow-gaging stations and 275 miscellaneous sites; and water levels for 55 observation wells. Locations of lake- and streamflow-gaging stations and water-quality stations are shown in figure 1, locations of crest-stage partial-record stations are shown in figure 2, and locations of observation wells are shown in figure 3. Six pertinent stations in bordering States also are included in this report. The records were collected and computed by the Colorado District. These data were collected by the U.S. Geological Survey and cooperating State and Federal agencies in Colorado and represent that part of the National Water Data System.

Records of discharge and stage of streams, and contents and stage of lakes and reservoirs are published in a series of U.S. Geological Survey Water-Supply Papers entitled, "Surface-water Supply of the United States." These water-supply papers were published in an annual series through September 30, 1960, and then in 5-year compilations for 1961-65 and 1966-70. Records of chemical quality, water temperatures, and suspended sediment were published from 1941 to 1970 in an annual series of water-supply papers entitled "Quality of Surface Waters of the United States." Records of ground-water levels were published from 1935 to 1955 in an annual series of water-supply papers entitled "Water Levels and Artesian Pressures in Wells in the United States," and from 1955 to the present time, in a 5-year series of water-supply papers entitled "Ground-Water Levels in the United States." Water-supply papers may be purchased from Eastern Distribution Branch Text Products Section, U.S. Geological Survey, 604 South Pickett Street, Alexandria, VA 22304.

For water years 1961 through 1970, streamflow data were released by the Survey in annual reports on a State-boundary basis. Water-quality records for water years 1964 through 1970 were similarly released either in separate reports or in conjunction with streamflow records.

Beginning with the 1971 water year, water data on streamflow, water quality, and ground water are published in official survey reports on a State-boundary basis. These official Survey reports carry an identification number consisting of the two-letter State abbreviation, the last two digits of the water year, and the volume number. For example, this volume is identified as "U.S. Geological Survey Water-Data Report CO-84-1." These water-data reports are for sale, in paper copy or in microfiche, by the National Technical Information Service, U.S. Department of Commerce, Springfield, VA 22161.

Additional information, including current prices, for ordering specific reports may be obtained from the District Chief at the address given on the back of the title page or by telephone (303) 236-4882.

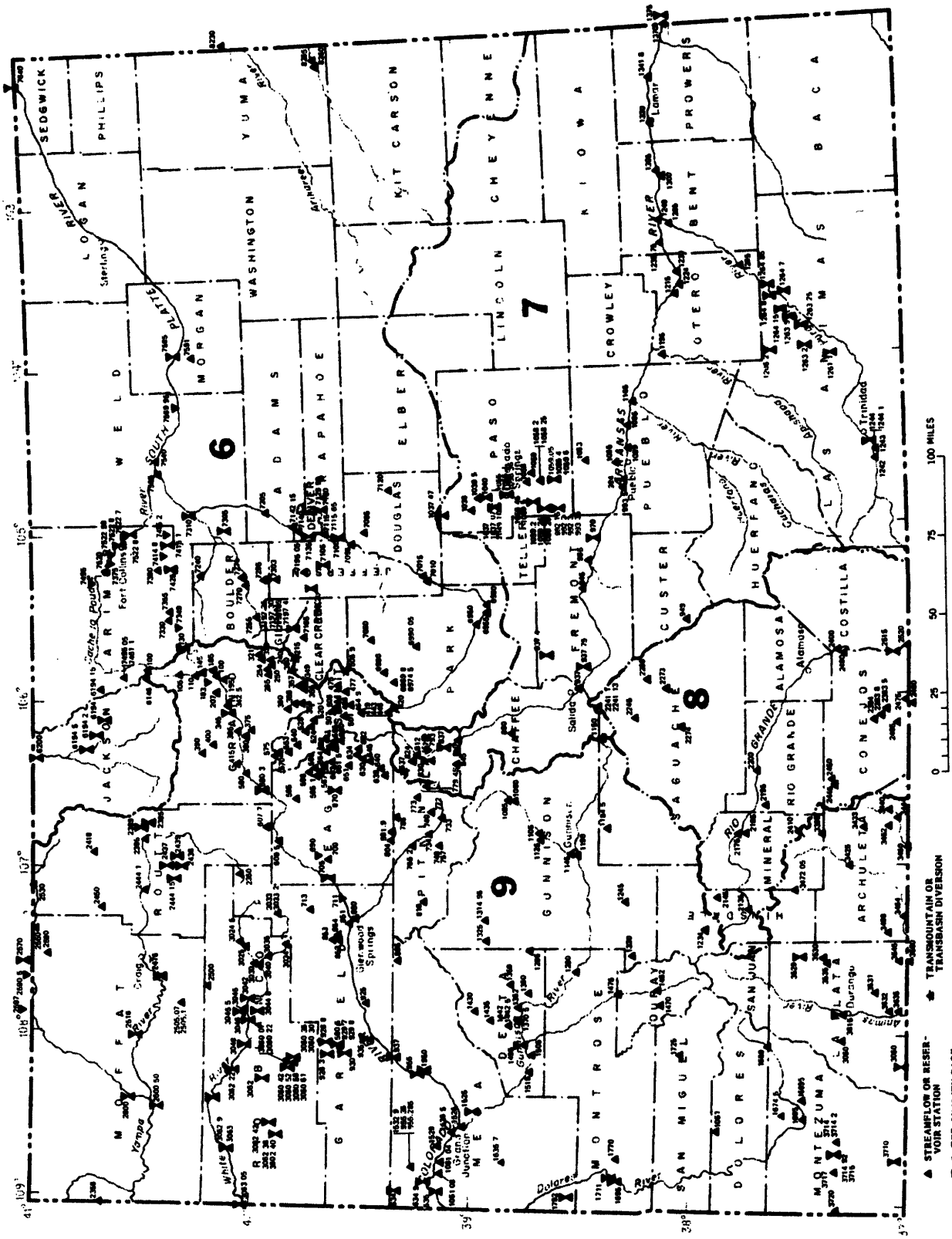


Figure 1.—Map showing locations of lakes and stream-gaging stations and water-quality stations in Colorado.

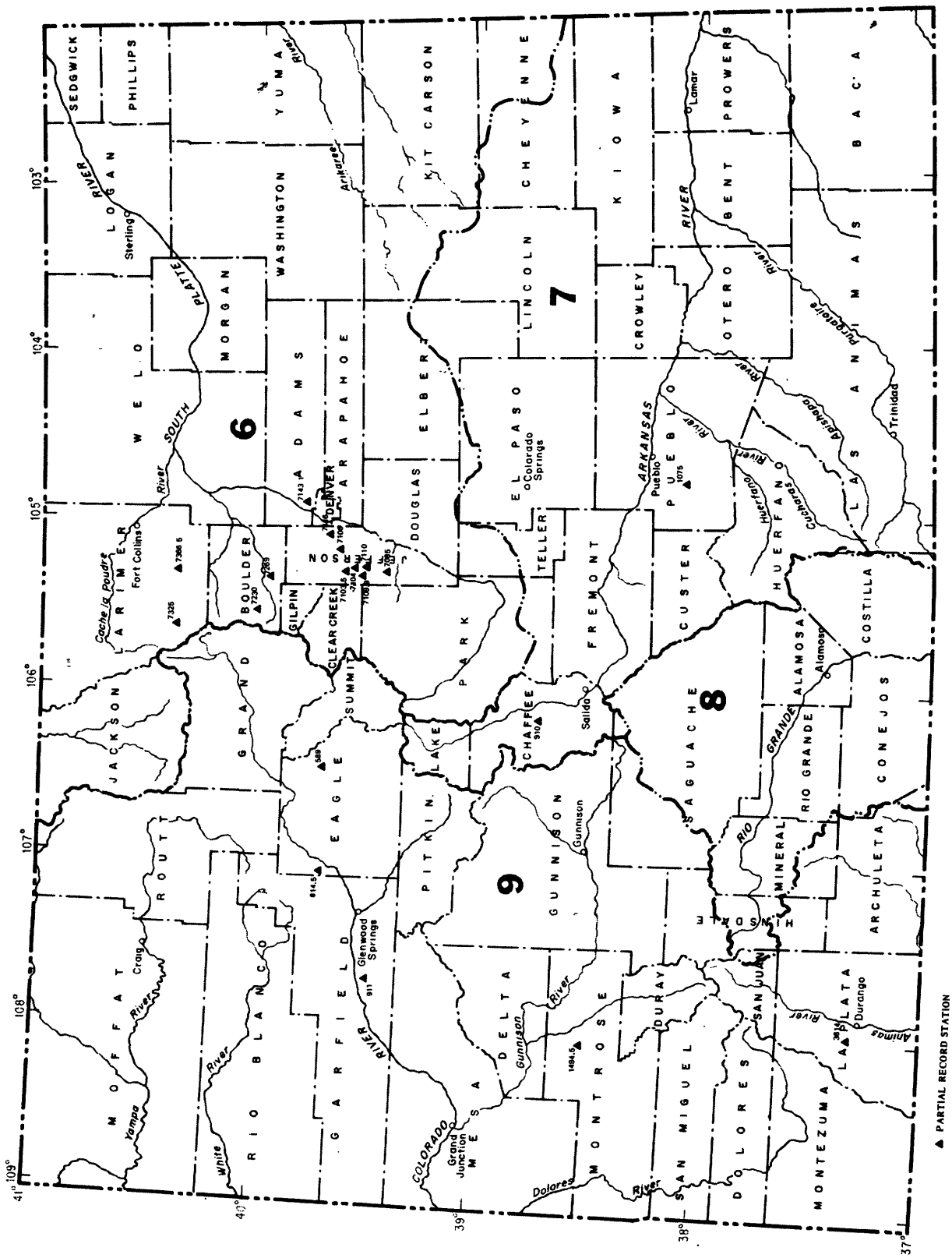


Figure 2.--Map showing locations of crest-stage partial-record stations in Colorado.

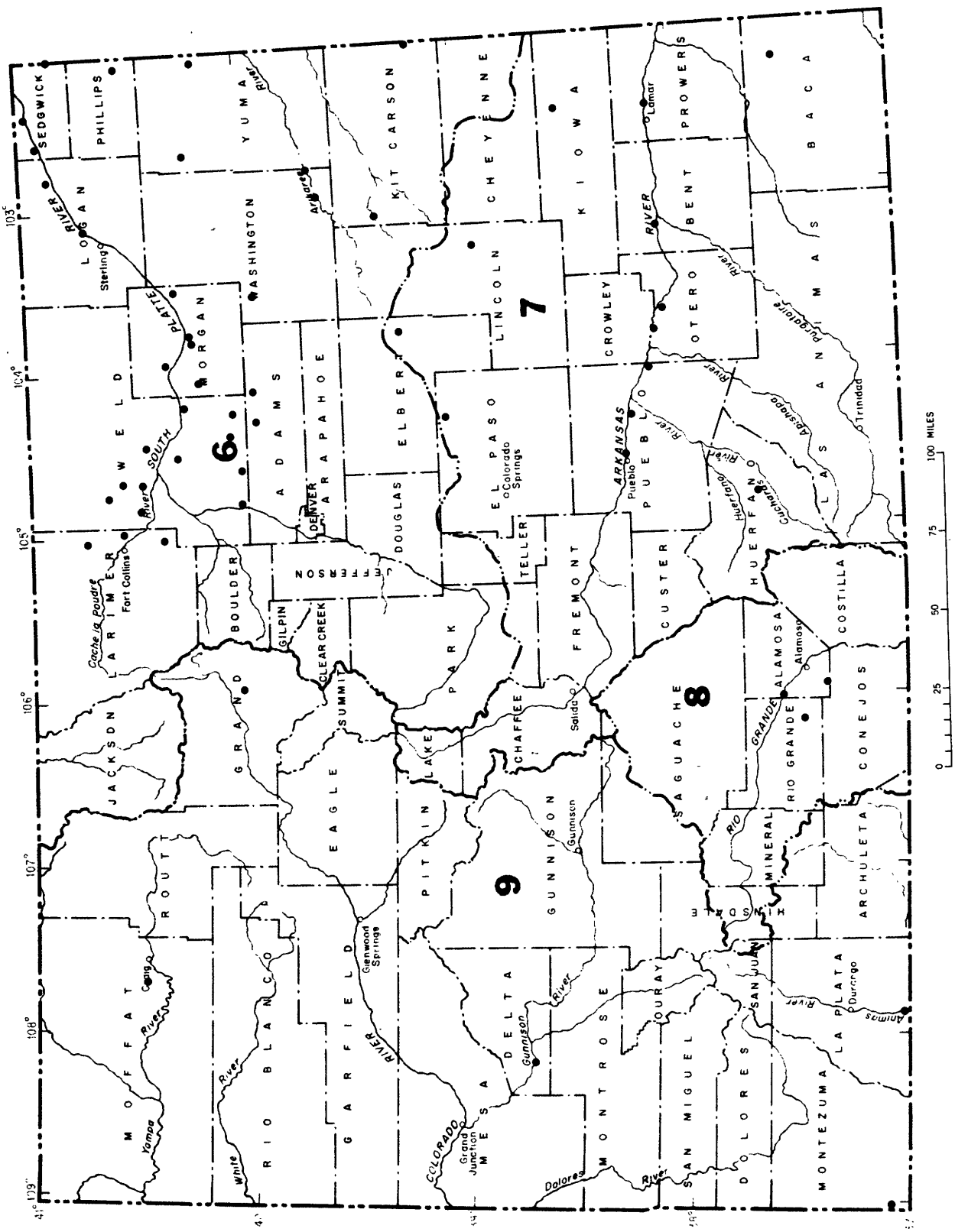


Figure 3.--Location of observation wells in Colorado.

COOPERATION

The U.S. Geological Survey and organizations of the State of Colorado have had cooperative agreements for the systematic collection of surface-water records since 1895 and for water-quality records since 1941. Organizations that assisted in collecting data for this report through cooperative agreement with the Survey are:

Arkansas River Compact Administration, L. Idler, Secretary.
City and County of Denver, Board of Water Commissioners, J. A. Yelenick, President.
City of Aspen, Wayne Chapman, City Manager.
City of Aurora, C. A. Wemlinger, Director of Utilities.
City of Colorado Springs, Department of Public Utilities, James D. Phillips, Director.
City of Englewood, Dr. W. F. Owen, Director, Wastewater Treatment Plant.
City of Fruita, W. G. Downer, Mayor.
City of Glendale, Robert Taylor.
City of Steamboat Springs, J. Zimmerman.
Colorado Division of Water Resources, J. A. Danielson, State Engineer.
Colorado River Water Conservation District, Roland C. Fischer, Secretary-Engineer.
Custer County, Leonard Reis, Chairman.
Denver Regional Council of Governments, Robert D. Farley, Executive Director.
Eagle County Board of Commissioners, D. E. Mott, Commissioner.
Evergreen Metropolitan District, G. O. Schulte, General Manager.
Fountain Valley Authority, Ed Bailey, Secretary.
Garfield County, Rodger Ludwig.
Grand County, R. Howard Moody, County Commissioner.
Larimer-Weld Regional Council of Governments, L. L. Pearson, Executive Director.
Metropolitan Denver Sewage Disposal District No. 1, Jack B. Enger, Manager.
Pitkin County Board of County Commissioners, C. Stewart, County Manager.
Pueblo Civil Defense, Betty Jo Hopper, Director.
Purgatoire River Water Conservancy District, C. Latuda, President.
Rio Blanco County Board of County Commissioners, A. J. Jones.
Southeastern Colorado Water Conservancy District, C. L. Thomson, General Manager.
Southwestern Water Conservation District, Edward Searle, Manager.
Town of Breckenridge, J. A. Humphreys, Acting Town Manager.
Town of Castle Rock, Tom Gallier, Director of Utilities.
Uncompahgre Valley Water Users Association, James Herbit, Manager.
Upper Yampa Water Conservancy District, J. Fetcher.
Urban Drainage and Flood Control District, L. Scott Tucker, Executive Director.
Yellow Jacket Water Conservancy District, F. G. Cooley, Secretary-Council.

Financial assistance was also provided by the U.S. Army, Corps of Engineers, U.S. Army; U.S. Air Force; Bureau of Indian Affairs, Bureau of Land Management, Bureau of Mines, Bureau of Reclamation, the National Park Service, and the U.S. Environmental Protection Agency. Organizations that supplied data are acknowledged in station descriptions.

HYDROLOGIC CONDITIONS

Precipitation

Precipitation during the water year was, in general, greater than normal throughout the Colorado River basin. This represents a continuation of the the high precipitation pattern of the preceding water year. The snowpack in the mountains varied from 114 to 207 percent of normal. Precipitation data from published reports of the U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Weather Service, for five major basins in Colorado are shown in table 1.

Table 1.--Precipitation during 1984 and departures from normal precipitation, in inches

	OCTOBER--MARCH		APRIL--SEPTEMBER		WATER YEAR	
DRAINAGE BASIN	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure
Colorado River-----	10.31	+2.70	11.71	+2.70	22.02	+6.66

Streamflow

Streamflow in the upper Colorado River Basin was, in general, greater than normal throughout the entire year. Monthly and annual mean discharges for the 1984 water year are compared with the median monthly and annual mean discharges for the 1951-80 water years as shown in figure 4. The monthly mean discharge for 1984 water year at station 09070000, Eagle River below Gypsum, ranged from 98 percent of normal in April to 325 percent of normal in July and August. The 1984 annual mean was 196 percent of normal as compared to 151 percent of normal for the 1983 water year. For station 09112500, East River at Almont, the monthly mean discharges for the 1984 water year varied from 80 percent of normal in April to 521 percent of normal in July. The 1984 annual mean discharge was 170 percent of normal as compared to 122 percent of normal for the 1983 water year.

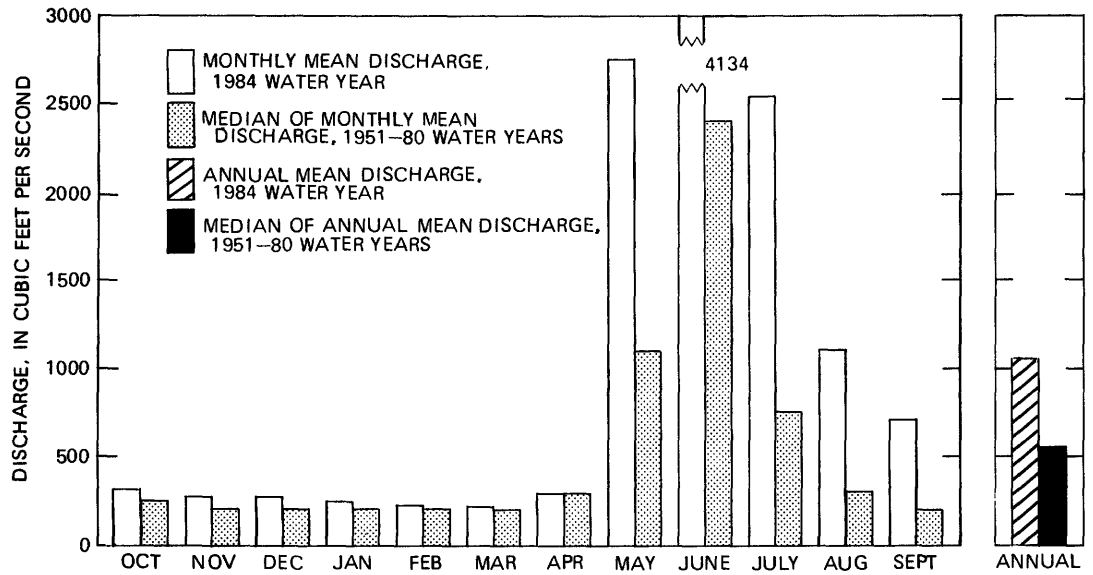
Runoff from the large snowpack produced numerous new peak discharges. The Colorado River near Colorado-Utah State Line, 09163500, (period of record 1951-84) had an instantaneous peak discharge of 68,000 cubic feet per second (recurrence interval of about 200 years); this exceeded the previous peak discharge of 62,100 cubic feet per second in 1983. The Uncompahgre River at Delta, 09149500, (period of record 1903-31, 1938-84) had a peak discharge of 57,100 cubic feet per second (recurrence interval of about 500 years); this exceeded the previous peak discharge of 3,370 cubic ft per second in 1941.

Storage in most of the major reservoirs was about 94 to 99 percent of capacity inSeptember. Year-end storage in Taylor Park Reservoir increased from 63,600 acre-feet for the 1983 water year to 97,100 acre-feet for the 1984 water year.

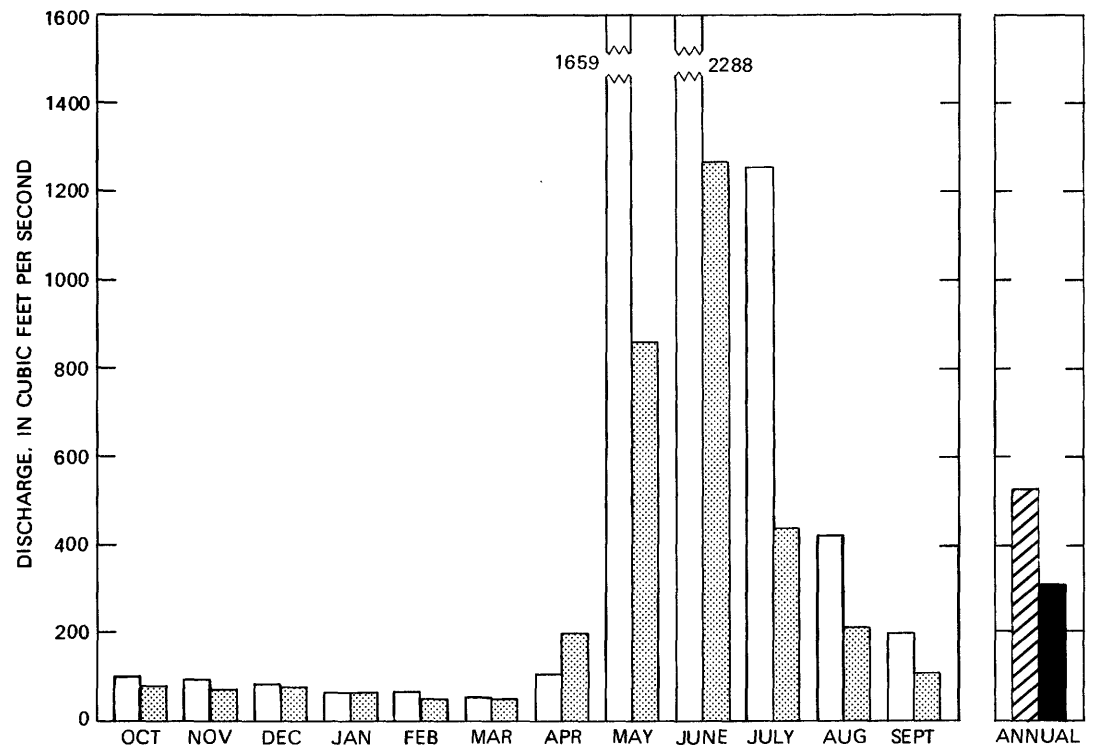
Table 2.--Summary of flood stage and discharge at gaging stations where new peak discharges for the period of record occurred during the 1984 water year

(mi^2, square mile; ft, feet; ft^3/s, cubic foot per second)

Station number	Station name	Drainage area (mi^2)	Period of record	Maximum previously known			Maximum during 1984 Water year		
				Date	Gage height (ft)	Discharge (ft^3/s)	Date	Gage height (ft)	Discharge (ft^3/s)
09025400	Elk Creek near Fraser	7.15	1970-84	6-27-83	3.03	91	5-24	3.13	106
09034250	Colorado River at Windy Gap	789	1981-84	7-11-83	7.00	4,480	5-25	7.34	5,260
09035800	Darling Creek near Leal	8.21	1965-84	6-27-83	4.28	234	6-30	4.30	241
09050700	Blue River below Dillon	335	1960-84	5-22-83	3.95	1,990	5-25	3.88	2,010
09058030	Colorado River near Radium	2,412	1981-84	7-12-83	11.30	10,600	5-26	12.91	13,800
09070000	Eagle River below Gypsum	944	1946-84	6-25-83	9.13	6,660	5-25	9.46	7,020
09070500	Colorado River near Dotsero	4,394	1940-84	6-08-52	11.56	19,100	5-25	14.20	22,200
09072550	Roaring Fork above Lost Man near Aspen	9.10	1980-84	6-24-83	3.13	158	6-30	3.46	258
09073005	Lincoln Creek below Grizzly Reservoir	15.2	1980-84	9-26-83	3.28	305	6-01	3.16	319
09073300	Roaring Fork River above Difficult Creek	75.8	1979-84	7-08-83	4.13	1,550	7-01	4.65	1,820
09073400	Roaring Fork River near Aspen	108	1964-84	6-25-83	4.45	1,370	6-30	5.17	1,730
09076520	Owl Creek near Aspen	6.60	1974-84	5-30-83	2.30	54	5-21	2.39	90
09078600	Fryingpan River near Thomasville	134	1975-84	6-20-83	4.16	1,220	5-25	4.23	1,330
09085100	Colorado River below Glenwood Springs	6,013	1966-84	6-25-83	11.74	27,900	5-25	12.49	31,500
09089500	West Divide Creek near Raven	64.6	1955-84	5-28-83	6.00	847	5-14	5.83	1,410
09093700	Colorado River near DeBeque	7,370	1966-84	6-26-83	13.89	32,300	5-26	14.83	38,200
09095500	Colorado River near Cameo	8,050	1933-84	6-16-35	10.91	36,000	5-26	14.36	39,300
09118450	Cochetopa Creek below Rock Creek	334	1981-84	5-31-83	3.65	388	5-23	4.49	1,120
09119000	Tomichi Creek near Gunnison	1,061	1937-84	6-08-57	4.10	1,900	5-23	5.49	4,620
09123400	Lake Fork below Mill Gulch	57.5	1981-84	6-20-84	6.22	853	5-23	6.72	1,380
09132500	N.F. Gunnison River near Somerset	526	1933-84	6-04-57	5.83	7,860	5-24	8.20	9,220
09136200	Gunnison River near Lazear	5,241	1962-84	6-26-83	8.27	19,700	6-07	8.57	19,800
09144250	Gunnison River near Delta	5,628	1976-84	6-26-83	12.74	20,800	6-06	13.15	25,500
09149500	Uncompahgre River at Delta	1,129	1903-84	5-05-41	5.90	3,730	5-15	8.85	5,800
09163500	Colorado River at CO-NM State Line	17,843	1951-84	6-27-83	15.02	62,100	5-27	16.12	69,800



A. Eagle River below Gypsum. Drainage area 944 square miles



B. East River at Almont. Drainage area 289 square miles

Figure 4.--Discharge for 1984 water year compared with median discharge for 1951-80 water years at two representative streamflow-gaging stations.

Chemical Quality of Streamflow

Water-quality conditions for the 1984 water year were characterized by smaller-than-normal salinity (loads) in the Colorado River Basin. Large streamflows resulted in record or near record minimum daily specific-conductance values at quality-of-water stations on the Colorado River from Dotsero to the Colorado-Utah State line during late May and early June.

At the Colorado River gaging station near the Colorado-Utah State line, station 09163500, the minimum daily specific conductance of 279 micromhos per centimeter at 25° Celsius recorded on June 3, 1984, was 27 micromhos per centimeter less than the previous minimum at that site. No unusual concentrations of nutrients or trace elements were noted this year.

Ground Water

Water levels indicate the response of an aquifer to recharge and discharge. Recharge and discharge can be either natural or manmade. Water levels will rise when recharge is plentiful and discharge is small and will decline when recharge is small and discharge is large. Water levels also are used to help define hydrologic units.

The aquifers within the Colorado River Basin can be grouped into two categories: Unconsolidated aquifers and consolidated aquifers. The unconsolidated aquifers receive recharge from precipitation, return flow from applied irrigation water and leakage from canals and streams. Discharge of ground water may be by seepage to streams, seeps, or springs, by loss to evapotranspiration, or by withdrawal by wells. The consolidated aquifers receive recharge from precipitation and streams crossing outcrop areas. These aquifers primarily discharge water to springs and streams, although locally some discharge is by wells.

West of the Continental Divide, where withdrawals are small, water-level fluctuations reflect mostly changes in natural conditions.
Most of the aquifers in the Colorado River Basin are still under natural conditions except where ground water is being pumped for the production and development of oil, gas, and coal.

DEFINITION OF TERMS

Terms related to streamflow, water quality, and other hydrologic data, as used in this report, are defined below. See also the table for converting inch-pound units to International System of units (SI) on the inside of the back cover.

Acre-foot (AC-FT, acre-ft) is the quantity of water required to cover 1 acre to a depth of 1 foot and is equivalent to 43,560 cubic feet or about 326,000 gallons or 1,233 cubic meters.

Algae are mostly aquatic single-celled, colonial or multi-celled plants, containing chlorophyll and lacking roots, stems, and leaves.

Algal-growth potential (AGP) refers to the results of an algal assay test which determines the nutrients that are limiting to growth, as well as to quantify the biological response to changes in concentrations of algal growth-limiting nutrients. These measurements are made by inoculating a water sample with an algal test organism and evaluating its growth response to various additions of nutrients overtime. The water samples are spiked with .005 mg/L phosphorus and .075 mg/L nitrogen, and the algal growth potential results are reported in milligrams per liter.

Aquifer is a geologic formation, group of formations, or part of a formation that contains sufficient saturated permeable material to yield significant quantities of water to wells and springs.

Bacteria are microscopic unicellular organisms, typically spherical, rod like, of spiral and threadlike in shape, often clumped into colonies. Some bacteria cause disease, others perform an essential role in nature in the recycling of materials; for example, by decomposing organic matter into a form available for reuse by plants.

Total coliform bacteria are a particular group of bacteria that are used as indicators of possible sewage pollution. They are characterized as aerobic or facultative anaerobic, gram-negative, nonspore-forming, rod-shaped bacteria which ferment lactose with gas formation within 48 hours at 35°C. In the laboratory these bacteria are defined as all the organisms which produce colonies with a golden-green metallic sheen within 24 hours when incubated at 35°C ± 1.0°C on M-Endo medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

Fecal coliform bacteria are bacteria that are present in the intestines or feces of warm-blooded animals. They are often used as indicators of the sanitary quality of the water. In the laboratory they are defined as all organisms which produce blue colonies within 24 hours when incubated at 44.5°C ± 0.2C° on M-FC medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

Fecal streptococcal bacteria are bacteria found also in the intestines of warm-blooded animals. Their presence in water is considered to verify fecal pollution. They are characterized as gram-positive, cocci bacteria which are capable of growth in brain-heart infusion broth. In the laboratory they are defined as all the organisms which produce red or pink colonies within 48 hours at 35°C ± 1.0°C on M-enterrococcus medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

Bed material is the unconsolidated material of which the bottom of a streambed, lake, pond, reservoir, or estuary is composed.

Biochemical oxygen demand (BOD) is a measure of the quantity of dissolved oxygen, in milligrams per liter (mg/L), necesssary for the decomposition of organic matter by microorganisms, such as bacteria.

Biomass is the amount of living matter present at any given time, expressed as the mass per unit area of volume of habitat.

Ash mass is the mass of amount of residue present after the residue from the dry mass determination has been ashed in a muffle furnace at a temperature of 500°C for 1 hour. The ash mass values of zooplankton and phytoplankton are expressed in grams per cubic meter (g/m^3), and those for periphyton and benthic organisms in grams per square meter (g/m^2).

Dry mass refers to the mass of residue present after drying in an oven at 60°C for zooplankton and 105°C for periphyton, until the mass remains unchanged. This mass represents the total organic matter, ash and sediment, in the sample. Dry mass values are expressed in the same units as ash mass.

Organic mass or volatile mass of the living substance is the difference between the dry mass and the ash mass, and represents the actual mass of the living matter. The organic mass is expressed in the same units as for ash mass and dry mass.

Wet mass is the mass of living matter plus contained water.

Bottom material: See Bed material.

Cells/volume refers to the number of cells of any organism which is counted by using a microscope and grid or counting cell. Many planktonic organisms are multicelled and are counted according to the number of contained cells per sample, usually milliliters (mL) or liters (L).

Cfs-day is the volume of water represented by flow of 1 cubic foot per second for 24 hours. It is equivalent to 86,400 cubic feet, approximately 1.9835 acre-feet, about 646,000 gallons or 2,447 cubic meters. It represents a runoff of approximately 0.0372 inch from 1 square mile, or 0.3468 millimeter from 1 square kilometer.

Chemical oxygen demand (COD) is a measure of the chemically oxidizable material in the water, and furnishes an approximation of the amount of organic and reducing material present. The determined value may correlate with natural water color or with carbonaceous organic pollution from sewage or industrial wastes.

Chlorophyll refers to the green pigments of plants. Chlorophyll a and b are the two most common pigments in plants.

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.

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, an artificial structure, or a uniform cross section over a long reach of the channel.

Cubic foot per second (cfs, ft^3/s) is the rate of discharge representing a volume of 1 cubic foot passing a given point during 1 second and is equivalent to approximately 7.48 gallons per second, or 448.8 gallons per minute, or 0.02832 cubic meters per second.

Discharge is the volume of water (or more broadly, volume of fluid plus suspended sediment), that passes a given point within a given period of time.

Mean discharge (MEAN) is the arithmetic mean of individual daily mean discharges during a specific period.

Instantaneous discharge is the discharge at a particular instant of time.

Dissolved refers to that material in a representative water sample which passes through a 0.45 um membrane filter. This may include some very small (colloidal) suspended particles as well as the amount of substance present in true chemical solution. It is a convenient operational definition used by Federal agencies that collect water data. Determinations of "dissolved" constituents are made on subsamples of the filtrate.

Dissolved oxygen (DO) is the dissolved-oxygen content of water in equilibrium with air and is a function of atmospheric pressure and temperature and dissolved-solids concentration of the water. The capacity of water for dissolved-oxygen decreases as dissolved solids or temperature increase or as atmospheric pressure decreases. Dissolved-solids concentration has the least effect on dissolved-oxygen concentration. Photosynthesis and respiration may cause diel variations in dissolved-oxygen concentration in water from some streams.

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

Gage height (G.H.) is the water-surface elevation referred to some arbitrary gage datum. Gage height is often used interchangeably with the more general term "stage," although gage height is more appropriate when used with a reading on a gage.

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

Hardness of water is the physical-chemical characteristic that is commonly recognized by the increased quantity of soap required to produce lather. It is attributable to the presence of alkaline earths (principally calcium anbd magnesium) and is expressed as equivalent calcium carbonate ($CaCO_3$).

Micrograms per liter (UG/L) is a unit expressing the concentration of chemical constituents in solution as mass (micrograms) of solute per unit volume (liter) of water. One thousand micrograms per liter is equivalent to one milligram per liter.

Milligrams per liter (MG/L, mg/L) is a unit for expressing the concentration of chemical constituents in solution. Milligrams per liter represent the mass of solute per unit volume (liter) of water. Concentration of suspended sediment also is expressed in mg/L, and is based on the mass of sediment per liter of water-sediment mixture.

National Geodetic Vertical Datum of 1929 (NGVD) is a geodetic datum derived from a general adjustment of the first order level nets of both the United States and Canada. It was formerly called "Sea Level Datum of 1929" or "mean sea level" in this series of reports. Although the datum was derived from the average sea level over a period of many years at 26 tide stations along the Atlantic, Gulf of Mexico, and Pacific Coasts, it does not necessarily represent local mean sea level at any particular place.

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

Particle size is the diameter, in millimeters (mm), of suspended sediment or bed material determined either by sieve or sedimentation methods. Sedimentation methods (pipet, bottom-withdrawal tube, visual-accumulaltion tube) determine fall diameter of particles in either distilled water (chemically dispersed) or in native water (the river water at the time and point of sampling).

Table 3.-- Factors for conversion of chemical constituents in milligrams or micrograms per liter to milliequivalents per liter

Ion	Multiply by	Ion	Multiply by
Aluminum (Al^{+3})*.....	0.11119	Iodide (I^{-1}).....	0.00788
Ammonia as N.....	.07139	Iron (Fe^{+3})*.....	.05372
Barium (Ba^{+2}).....	.01456	Lead (Pb^{+2})*.....	.00965
Bicarbonate (HCO_3^{-1})...	.01639	Lithium (Li^{+1})*.....	.14411
Bromide (Br^{-1}).....	.01251	Magnesium (Mg^{+2})*.....	.08226
Calcium (Ca^{+2}).....	.04990	Manganese (Mn^{+2})*.....	.03640
Carbonate (CO_3^{-2}).....	.03333	Nickel (Ni^{+2})*.....	.03406
Chloride (Cl^{-1}).....	.02821	Nitrate as N.....	.07139
Chronium (Cr^{+6})*.....	.11539	Nitrite as N.....	.07139
Cobalt (Co^{+2})*.....	.03394	Phosphate,ortho as P.....	.09686
Copper (Cu^{+2})*.....	.03148	Potassium (K^{+1}).....	.02557
Cyanide (CN^{-1}).....	.03844	Sodium (Na^{+1}).....	.04350
Fluoride (F^{-1}).....	.05264	Strontium (Sr^{+2}*.....	.02283
Hydrogen (H^{+1}).....	.99209	Sulfate (SO_4^{-2}).....	.02082
Hydroxide (OH^{-1}).....	.05880	Zinc (ZN^{+2})*.....	.03060

*Constituents reported in micrograms per liter; multiply by factor and divide results by 1,000.

Table 4.--Factors for conversion of sediment concentration in milligrams per liter to parts per million*

(All values calculated to three significant figures)

Range of concentration in 1000 mg/L	Divide by	Range of concentration in 1000 mg/L	Divide by	Range of concentration in 1000 mg/L	Divide by	Range of concentration in 1000 mg/L	Divide by
0 - 8	1.00	201-217	1.13	411-424	1.26	619-634	1.39
8.05- 24	1.01	218-232	1.14	427-440	1.27	639-650	1.40
24.2 - 40	1.02	234-248	1.15	443-457	1.28	652-666	1.41
40.5 - 56	1.03	250-264	1.16	460-473	1.29	668-682	1.42
56.5 - 72	1.04	266-280	1.17	476-489	1.30	684-698	1.43
72.5 - 88	1.05	282-297	1.18	492-506	1.31	700-715	1.44
88.5 -104	1.06	299-313	1.19	508-522	1.32	717-730	1.45
105 -120	1.07	315-329	1.20	524-538	1.33	732-747	1.46
121 -136	1.08	313-345	1.21	540-554	1.34	749-762	1.47
137 -152	1.09	347-361	1.22	556-570	1.35	765-780	1.48
153 -169	1.10	363-378	1.23	572-585	1.36	782-796	1.49
170 -185	1.11	380-393	1.24	587-602	1.37	798-810	1.50
186 -200	1.12	395-409	1.25	604-617	1.38		

*Based on water density of 1.000 g/mL and a specific gravity of sediment of 2.65.

Particle-size classification used in this report agrees with recommendations made by the American Geophysical Union Subcommittee on Sediment Terminology. The classification is as follows:

Classification	Size (mm)	Method of analysis
Clay.....	0.00024 - 0.004	Sedimentation
Silt.....	.004 - .062	Sedimentation
Sand.....	.062 - 2.0	Sedimentation or sieve
Gravel.....	2.0 - 64.0	Sieve

The particle-size distributions given in this report are not necessarily representative of all particles in transport in the stream. Most of the organic material is removed and the sample is subjected to mechanical and chemical dispersion before analysis in distilled water. Chemical dispersion is not used for native-water analysis.

Periphyton is the assemblage of microorganisms attached to, and growing upon, solid surfaces. While primarily consisting of algae, they also include bacteria, fungi, protozoa, rotifers, and other small organisms. Periphyton is a useful indicator of water quality.

Pesticide network is a network of regularly sampled water-quality stations where samples are collected to determine the concentration and distribution of pesticides in streams whose waters are used for irrigation or in streams in areas where potential contamination could result from the application of the commonly used insecticides and herbicides.

Pesticides are chemical compounds used to control undesirable plants and animals. Major categories of pesticides include insecticides, miticides, fungicides, herbicides, and rodenticides. Insecticides and herbicides, which control insects and plants respectively, are the two categories reported.

Phytoplankton is the plant part of the plankton. They are usually microscopic and their movement is subject to the water currents. Phytoplankton growth is dependent upon solar radiation and nutrient substances. Because they are able to incorporate as well as release materials to the surrounding water, the phytoplankton have a profound effect upon the quality of the water. They are the primary food producers in the aquatic environment, and are commonly known as algae.

Blue-green algae are a group of phytoplankton organisms having a blue pigment, in addition to the green pigment called chlorophyll. Blue-green algae often cause nuisance conditions in water.

Diatoms are the unicellular or colonial algae having a siliceous shell. Their concentrations are expressed as number of cells per mL of sample.

Green algae have chlorophyll pigments similar in color to those of higher green plants. Some forms produce algal mats or floating "moss" in lakes. Their concentrations are expressed as number of cells per mL of sample.

Picocurie (PC, pCi) is one trillionth (1×10^{-12}) of the amount of radioactivity represented by a curie (Ci). A curie is the amount of radioactivity that yields 3.7×10^{10} radioactive disintegrations per second. A picocurie yields 2.22 disintegrations per minute (dpm).

Polychlorinated biphenyls (PCB's) are industrial chemicals that are mixtures of chlorinated biphenyl compounds having various percentages of chlorine. They are similar in structure to organochlorine insecticides.

Radiochemical network is a network of regularly sampled water-quality stations where samples are collected monthly or twice a year (at high and low flow) to be

analyzed for radioisotopes. The streams that are sampled represent major drainage basins in the conterminous United States.

Radioisotopes are isotopic forms of an element that exhibit radioactivity. Isotopes are varieties of a chemical element that differ in atomic weight, but are very nearly alike in chemical properties. The difference arises because the atoms of the isotopic forms of an element differ in the number of neutrons in the nucleus. For example: Ordinary chlorine is a mixture of isotopes having atomic weights 35 and 37, with the natural mixture having atomic weight about 35.453. Many of the elements similarly exist as mixtures of isotopes, and a great many new isotopes have been produced in the operation of nuclear devices such as the cyclotron (Rose and Rose, 1966). There are 275 isotopes of the 81 stable elements in addition to over 800 radioactive isotopes.

Radioisotopes that are determined in this program are natural uranium in ug/L (micrograms per liter), radium as radium-226 in PC/L (pCi/L, picocuries per liter), gross beta radiation as equivalent strontium/yttrium-90 or cesium-137 in PC/L, and gross alpha radiation as micrograms of uranium equivalent per liter (ug/L). Gross alpha and beta radioactivity associated with the fine-grained (silt and clay-sized) sediments in the samples are also determined.

recoverable from bottom material the amount of a given constituent that is in solution after a representative sample of bottom material has been digested by a method (usually using an acid or mixture of acids) that results in dissolution of only readily soluble substances. Complete dissolution of all bottom material is not achieved by the digestion treatment and thus the determination represents less than the total amount (that is, less than 95 percent) of the constituent in the sample. To achieve comparability of analytical data, equivalent digestion procedures would be required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

Sediment is solid material that originates mostly from disintegrated rocks and is transported by, suspended in, or deposited from water; it includes chemical and biochemical precipitates and decomposed organic material, such as humus. The quantity, characteristics, and cause of the occurrence of sediment in streams are influenced by environmental factors. Some major factors are degree of slope, length of slope, soil characteristics, land usage, and quantity and intensity of precipitation.

Suspended sediment is the sediment that at any given time is maintained in suspension by the upward components of turbulent currents or that exists in suspension as a colloid.

Suspended-sediment concentration is the velocity-weighted concentration of suspended sediment in the sampled zone (from the water surface to a point approximately 0.3 ft (0.09 m) above the bed) expressed as milligrams of dry sediments per liter of water-sediment mixture (mg/L).

Suspended-sediment discharge (tons/day) is the rate at which dry weight of sediment passes a section of a stream or is the quantity of sediment, as measured by dry weight or volume, that passes a section in a given time. It is computed by multiplying discharge in cfs times concentration in mg/L times 0.0027.

Suspended-sediment load is that quantity of suspended sediment passing a section in a specified period.

Total sediment discharge or total sediment load is the sum of the suspended-sediment discharge and the bedload discharge. It is the total quantity of sediment, as measured by dry weight or volume, that passes a section during a given time.

Mean concentration is the time-weighted concentration of suspended sediment passing a stream section during a 24-hour day.

Sodium adsorption ratio (SAR) is the expression of relative activity of sodium ions in exchange reactions with soil and is an index of sodium or alkali hazard to the soil. This ratio should be known especially for water used for irrigating farmland.

Solute is any substance derived from the atmosphere, vegetation, soil, or rocks and is dissolved in water.

Specific conductance is a measure of the ability of a water to conduct an electrical current. It is expressed in micromhos per centimeter at 25°C. Specific conductance is related to the number and specific chemical types of ions in solution and can be used for approximating the dissolved-solids (in milligrams per liter) is about 65 percent of the specific conductance (in micromhos). This relation is not constant from stream to stream or from well to well, and it may vary in the same source with changes in the composition of the water.

Stage-discharge relation is the relation between gage height (stage) and volume of water per unit of time, flowing in a channel.

Streamflow is the discharge that occurs in a natural channel. Although the term "discharge" can be applied to the flow of a canal, the work "streamflow" uniquely describes the discharge in a surface stream course. The term "streamflow" is more general than "runoff" as streamflow may be applied to discharge whether or not it is affected by diversion or regulation.

Suspended, recoverable the amount of a given constituent that is in solution after the part of a representative water-suspended sediment sample that is retained on a 0.45 um membrane filter has been digested by a method (usually using a dilute acid solution) that results in dissolution of only readily soluble substances. Complete dissolution of all the particulate matter is not achieved by the digestion treatment and thus the determination represents something less than the "total" amount (that is, less than 95 percent) of the constituent present in the sample. To achieve comparability of analytical data, equivalent digestion procedures would be required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

Determinations of "suspended, recoverable" constituents are made either by analyzing portions of the material collected on the filter or, more commonly, by difference, based on determinations of (1) dissolved and (2) total recoverable concentrations of the constituent.

Suspended, total the total amount of a given constituent in the part of a representative water-suspended sediment sample that is retained on a 0.45 um membrane filter. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent determined. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to determine when the results should be reported as "suspended, total."

Determinations of "suspended, total" constituents are made either by analyzing portions of the material collected on the filter or, more commonly, by difference, based on determinations of (1) dissolved and (2) total concentrations of the constituent.

Thermograph is a thermometer that continuously and automatically records, on a chart, the water temperature of a stream. "Temperature recorder" is the term used to indicate the location of the thermograph.

Time-weighted average is computed by multiplying the number of days in the sampling period by the concentrations of individual constituents for the corresponding period and dividing the sum of the products by the total number of days. A time-weighted average represents the composition of water that would be contained in a vessel or reservoir that had received equal quantities of water from the stream each day for the water year.

Tons per acre-foot indicates the dry mass of dissolved solids in 1 acre-foot of water. It is computed by multiplying the concentration in milligrams per liter by 0.00136.

Tons per day is the quantity of a substance in solution or suspension that passes a stream section during a 24-hour period.

Total the total amount of a given constituent in a representative water-suspended sediment sample, regardless of the constituent's physical or chemical form. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent present in both the dissolved and suspended phases of the sample. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to judge when the results should be reported as "total." (note that the word "total" does double duty here, indicating both that the sample consists of a water-suspended sediment mixture and that the analytical method determines all of the constituent in the sample.)

Total in bottom material the total amount of a given constituent in a representative sample of bottom material. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent determined. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to judge when the results should be reported as "total in bottom material."

Total, recoverable the amount of a given constituent that is in solution after a representative water-suspended sediment sample has been digested by a method (usually using a dilute acid solution) that results in dissolution of only readily soluble substances. Complete dissolution of all particulate matter is not achieved by the digestion treatment, and thus the determination represents something less than the "total" amount (that is, less than 95 percent) of the constituent present in the dissolved and

suspended phases of the sample. To achieve comparability of analytical data, equivalent digestion procedures would be required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

Water year in the U.S. Geological Survey is the 12-month period, October 1 through September 30. The water year is designated by the calendar year in which it ends and which includes 9 of the 12 months. Thus, the year ending September 30, 1981, is called the "1981 water year."

Weighted average is used in this report to indicate the discharge-weighted average. It is computed by multiplying the discharge for a sampling period by the concentrations of individual constituents for the corresponding period and dividing the sum of the products by the sum of the discharges. A discharge-weighted average approximates the composition of water that would be found in a reservoir containing all the water passing a given location during the water year after thorough mixing in the reservoir.

WRD is an abbreviation for "Water-Resources Data" in the summary REVISIONS paragraph to refer to State annual basic-data reports published prior to 1975.

WDR is used as an abbreviation for "Water-Data Report" in the summary REVISIONS paragraph to refer to State annual basic-data reports published after 1975.

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

Zooplankton is the animal part of the plankton. Zooplankton are capable of extensive movements within the water column, and are often large enough to be seen with the unaided eye. Zooplankton are secondary consumers feeding upon bacteria, phytoplankton, and detritus. Because they are the grazers in the aquatic environment, the zooplankton are a vital part of the aquatic food web. The zooplankton community is dominated by small crustaceans and rotifers.

DOWNSTREAM ORDER AND STATION NUMBER

Stations are listed in a downstream direction along the main stream, and stations on tributaries are listed between stations on the main stream in the order in which those tributaries enter the main stream. Stations on tributaries entering above all mainstream stations are listed before the first mainstream station. Stations on tributaries to tributaries are listed in a similar manner. In the list of gaging stations in the front of this report the rank of tributaries is indicated by indention, each indention representing one rank.

As an added means of identification, each gaging station and each partial-record station has been assigned a station number. These are in the same downstream order used in this report. In assigning station numbers, no distinction is made between partial-record stations and continuous-record gaging stations; therefore, the station number for a partial-record station indicates downstream order position in a list made up of both types of stations. Water-quality stations located at or near gaging stations or partial-record stations have the same number as the gaging or partial-record station.

Gaps are left in the sequential allocation of 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 07083000, which appears just to the left of the station name, includes the 2-digit part number "07" plus the 6-digit downstream order number "083000." In this report the records are listed in downstream order by parts. The part number refers to an area whose boundaries coincide with certain natural drainage lines. Records in this report are for Part 6 (Missouri River basin), Part 7 (Lower Mississippi River basin), and Part 8 (Western Gulf of Mexico basins). Records for Part 9 (Colorado River Basin) are in Volumes 2 and 3. All records for a drainage basin encompassing more than one State can be arranged in downstream order by assembling pages from the various State reports by station number to include all records in the basin.

SPECIAL NETWORKS AND PROGRAMS

Some of the stations for which data are published in this report are included in special networks and programs. These stations are identified by their title, set in parentheses, under the station name.

Hydrologic bench-mark station is one that provides hydrologic data for a basin in which the hydrologic regimen 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.

National stream-quality accounting network (NASQAN) is a data collection network designed by the U.S. Geological Survey to meet many of the information demands of agencies or groups involved in national or regional water-quality planning and management. Both accounting and broad-scale monitoring objectives have been incorporated in the network design. Areal configuration of the network is based on river-basin accounting units (identified by 8-digit hydrologic-unit numbers) designated by the Office of Water Data Coordination in consultation with the Water Resources Council. Primary objectives of the network are: (1) To depict areal variability of streamflow and water-quality conditions nationwide on a year-by-year basis, and (2) to detect and assess long-term changes in streamflow and stream quality.

EXPLANATION OF STAGE AND WATER-DISCHARGE RECORDS

Collection and Computation of Data

The base data collected at gaging stations consist of records of stage and measurements of discharge of streams or canals, and stage, surface area, and contents of lakes or reservoirs. In addition, observations of factors affecting the stage-discharge relation or the stage-capacity relation, weather records, and other information are used to supplement base data in determining the daily flow or volume of water in storage. Records of stage are obtained from direct readings on a nonrecording gage or from a water-stage recorder that gives either a continuous graph of the fluctuations or a tape punched at 5-, 15-, 30- or 60-minute intervals. Measurements of discharge are made with a current meter, using the general methods adopted by the U.S. Geological Survey on the basis of experience in stream gaging since 1888. These methods are described in standard textbooks, in Water-Supply Paper 888, and in U.S. Geological Survey Techniques of Water Resources Investigations, book 3, chapter A6. Surface areas of lakes or reservoirs are determined from instrument surveys using standard methods. The configuration of the reservoir bottom is determined by sounding at many points.

For stream-gaging stations, rating tables giving the discharge for any stage are prepared from stage-discharge relation curves. If extensions to the rating curves are necessary to express discharge greater than measured, they are made on the basis of indirect measurements of peak discharge (such as slope-area or contracted-opening measurements, computation of flow over dams or weirs), step-backwater techniques, velocity-area studies, and logarithmic plotting. The daily mean discharge is computed from gage heights and rating tables, then the monthly and yearly mean discharge are computed from the daily figures. 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 computed by the shifting-control method, in which correction factors based on individual discharge measurements and notes by hydrologists 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 basically the shifting-control method.

At some stream-gaging stations the stage-discharge relation is affected by ice in 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 winter discharge measurements, consideration being given to the available information on temperature and precipitation, notes by gage observers and hydrologists, and comparable records of discharge for other stations in the same or nearby basins.

For a lake or reservoir station, capacity tables giving the contents for any stage are prepared from stage-area relation curves defined by surveys. The application of the stage to the capacity table gives the contents, from which the daily, monthly, or yearly change in contents is computed.

If the stage-capacity curve is subject to changes because of deposition of sediment in the reservoir, periodic resurveys of the reservoir are necessary to define new stage-capacity curves. During the period between reservoir surveys the computed contents may be increasingly in error due to the gradual accumulation of sediment.

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 daily discharge or contents. This happens when the recorder stops or otherwise fails to operate properly, intakes are plugged, the 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. Likewise, daily contents may be estimated on the basis of operator's log, adjoining good record, inflow-outflow studies, and other information.

The data in this report generally comprise a description of the station and tabulations of daily and monthly figures. For gaging stations on streams or canals a table showing the daily discharge and monthly and yearly discharge is given. For gaging stations on lakes and reservoirs a monthly summary table of stage and contents or a table showing the daily contents is given. Records are published for the water year, which begins on October 1 and ends on September 30. A calendar for the current water year is shown on the inside of the front cover to facilitate finding the day of the week for any date.

The description of the gaging station gives the location, drainage area, period of record, notations of revisions of previously published records, type and history of gages, general remarks, average discharge, and extremes of discharge or contents. The location of the gaging station and the drainage area are obtained from the most accurate maps available. Periods for which there are published records for the present station or for stations generally equivalent to the present one are given under "PERIOD OF RECORD."

Previously published streamflow records of some stations have been found to be in error on the basis of data or information later obtained. Revisions of such records are usually published along with the current records in one of the annual or compilation reports. In order to make it easier to find such revised records, a paragraph headed "REVISED RECORDS" has been added to the description of all stations for which revised records have been published. Listed therein are all the reports in which revisions have been published, each followed by the water years for which figures are revised in that report. In listing the water years only one number is given; for instance, 1933 stands for the water year October 1, 1932, to September 30, 1933. If no daily, monthly or annual figures of discharge are affected by the revisions, the fact is brought out by notations after the year dates as follows: "(M)" means that only the instantaneous maximum discharge was revised; "(m)" that only the instantaneous minimum was revised; and "(P)" that only peak discharges were revised. If the drainage area has been revised, the report in which the revised figure was first published is given.

The type of gage currently in use, the datum of the present gage above mean sea level, referred to National Geodetic Vertical Datum; and a condensed history of the types, locations, and datums of previous gages used during the period of record are given under "GAGE." In references to datum of gage, the phrase "mean sea level" denotes "Sea Level Datum of 1929" as used by the Topographic Division of the Geological Survey unless otherwise qualified. National Geodetic Vertical Datum is explained in "DEFINITION OF TERMS."

Information pertaining to the accuracy of the discharge records, to conditions which affect the natural flow of the gaging station, availability of water-quality

records, and reservoir stations information on the dam forming the reservoir, the capacity, outlet works and spillway, and purpose and use of the reservoir, is given under "REMARKS."

The average discharge for the number of years indicated is given under "AVERAGE DISCHARGE;" it is not given for stations having fewer than 5 complete years of record or for stations where changes in water development during the period of record cause the figure to have little significance.

The maximum discharge (or contents) and the maximum gage height, the minimum discharge if there is little or no regulation (or minimum contents), and the minimum gage height, if it is significant, are given under "EXTREMES." The minimum daily discharge is given if there is extensive regulation (also the minimum discharge and gage height if they are abnormally low). Under "EXTREMES" are given first, the extremes for the period of record, second, information available outside the period of record, and last, those for the current year. Unless otherwise qualified, the maximum discharge (or contents) is the instantaneous maximum corresponding to the crest stage obtained by use of a water-stage recorder (graphic or digital), a crest-stage gage, or a nonrecording gage read at the time of the crest. If the maximum gage height did not occur on the same day as the maximum discharge (or contents), it is given separately. Similarly, the minimum is the instantaneous minimum unless otherwise qualified. For some stations peak discharges are listed with EXTREMES FOR THE CURRENT YEAR; if they are, all independent peaks, including the maximum for the year, above the selected base with the time of occurrence and corresponding gage heights are published in tabular format. The base discharge, which is given in the table heading, is selected so that an average of about three peaks a year will be presented. Peak discharges are not published for any canals, ditches, drains, or 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. The minimums for these stations are published in a separate paragraph following the table of peaks.

The daily table for stream-gaging stations gives the mean discharge for each day and is followed by monthly and yearly summaries. In the monthly summary below the daily table, the line headed "TOTAL" gives the sum of the daily figures. The line headed "MEAN" gives the average flow in cubic feet per second (ft^3/s) during the month. The lines headed "MAX" and "MIN" give the maximum and minimum daily discharges, respectively, for the month. Discharge for the month also may be expressed in acre-feet (line headed "AC-FT"). In the yearly summary below the monthly summary, the figures shown are the appropriate daily discharges for the calendar and water years.

Footnotes to the table of daily discharge are introduced by the word "NOTE." Footnotes are used to indicate periods 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 site 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 and 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 for all reservoirs for which records are published on a daily basis, but is not published for reservoirs for which only monthly data are given.

Data collected at partial-record stations and at miscellaneous sites follow the information for continuous record sites. Data for partial-record discharge stations are presented in three tables. The first is a table of discharge measurements at low-flow partial-record stations, the second is a table of annual maximum stage and discharge at crest-stage stations, and the third is a table of discharge measurements at miscellaneous sites.

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 interpretations 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" means within 10 percent; and "fair" within 15 percent. "Poor" means that daily discharges have less than "fair" accuracy.

Figures of daily mean discharge in this report are shown to the nearest hundredth of a cubic foot per second (ft^3/s) for discharges of less than 1 ft^3/s; to tenths between 1.0 and 10 ft^3/s; to whole numbers between 10 and 1,000 ft^3/s; and to 3 significant figures above 1,000 ft^3/s. The number of significant figures used is based solely on the magnitude of the figure. The same rounding rules apply to discharge figures listed for partial-record stations and miscellaneous sites.

Discharge at many stations, as indicated by the monthly mean, may not reflect natural runoff due to the effects of diversion, consumption, regulation by storage, increase or decrease in evaporation due to artificial causes, or to other factors. However, because all the effects cannot be measured or evaluated, satisfactory adjustments generally cannot be made. For some stations, available figures of diversions or change in contents of reservoirs are included as supplemental data. Even at those stations where adjustments can be made, large errors in computed runoff may occur if adjustments or losses are large in comparison with the observed discharge.

Other data available

Information of a more detailed nature than that published for most of the gaging stations, such as observations of water temperatures, discharge measurements, gage-height records, and rating tables is on file in the district office. Also most gaging-station records are available in computer-usable form and many statistical analyses have been made.

Information on the availability of unpublished data or statistical analyses may be obtained from the district office.

Records of Discharge Collected by Agencies other than the Geological Survey

Records of discharge not published by the Geological Survey were collected at many sites in Colorado during the water year by the folowing agencies: City of Colorado Springs; Colorado Division of Water Resources; Forest Service, U.S. Department of Agriculture; City and County of Denver, Board of Water Commissioners; National Weather Service, Department of Commerce; and the Bureau of Reclamation.

Access to WATSTORE DATA

The National WAter Data STOrage and REtrieval System (WATSTORE) was established for handling water data collected through the activities of the U.S. Geological Survey and to provide for more effective and efficient means of releasing the data to the public. The system is operated and maintained on the central computer facilities of the Survey at its National Center in Reston, Virginia.

WATSTORE can provide a variety of useful products ranging from simple data tables to complex statistical analyses. A minimal fee, plus the actual computer cost incurred in producing a desired product, is charged to the requester. Information about the availability of specific types of data, the acquisition of data or products, and user charges can be obtained locally from each of the Water Resources Division's district offices (see address given on the back of the title page).

General inquiries about WATSTORE may be directed to:

Chief Hydrologist
U.S. Geological Survey
437 National Center
Reston, VA 22092

EXPLANATION OF WATER-QUALITY RECORDS

Collection and Examination of Data

Water samples for analyses usually are collected at or near streamflow-gaging stations. The quality-of-water records are given immediately following the discharge records at these stations.

The descriptive heading for water-quality records gives the period of record for all water-quality data, the period of daily record for parameters that are measured on a daily basis (such as, specific conductance, pH, dissolved oxygen, water temperature, sediment discharge), extremes for the period of daily record, extremes for current year, and general remarks.

For ground-water records, no descriptive statements are given; however, the well number, depth of well, date of sampling, or other pertinent data are given in the table containing the chemical analyses of the ground water.

Water Analysis

Most methods for collecting and analyzing water samples are described in "U.S. Geological Survey Techniques of Water-Resources Investigations," which are listed on page 39.

One sample can define adequately the water quality at a given time if the mixture of solutes throughout the stream cross section is homogeneous. However, the concentration of solutes at different locations in the cross section may vary widely with different rates of water discharge, depending on the source of material and the turbulence and mixing of the stream. Some streams must be sampled through several vertical sections to obtain a representative sample needed for an accurate mean concentration and for use in calculating load.

Chemical-quality data are considered to be the most representative values available for the stations listed. The values reported represent water-quality conditions at the time of sampling, as much as possible, consistent with available sampling techniques and methods of analysis. In the rare case where an apparent inconsistency exists between a reported pH value and the relative abundance of carbon dioxide species (carbonate and bicarbonate), the inconsistency is the result of a slight uptake of carbon dioxide from the air by the sample between measurement of pH in the field determination of carbonate and bicarbonate in the laboratory.

Prior to the 1968 water year, data for chemical constituents and concentrations of suspended sediment were reported in parts per million (ppm) and water temperatures were reported in degrees Fahrenheit (°F). In October 1967, the Geological Survey began reporting data for chemical constituents and concentrations of suspended sediment in milligrams per liter (mg/L) and water temperatures in degrees Celsius (°C). In waters with a density of 1.000 grams per milliliter (g/mL), parts per million and milligrams per liter can be considered equal. In waters with a density greater than 1.000 g/mL, values in parts per million should be multiplied by the density to convert to milligrams per liter. Temperature reported in degrees Celsius may be converted to degrees Fahrenheit by using table 3.

For chemical-quality stations equipped with digital monitors, the records consist of daily maximum, minimum, and mean values for each constituent measured and are based upon hourly punches beginning at 0100 hours and ending at 2400 hours for the day of record. More detailed records (hourly values) may be obtained from the district office.

REVISIONS--If errors in published water-quality records are discovered after publication, appropriate updates are made to the Water-Quality File in the U.S. Geological Survey's computerized data system, WATSTORE, and subsequently by monthly transfer of update transactions to the U.S. Environmental Protection Agency's STORET system. Because the usual volume of updates makes it impractical to document individual changes in the State data-report series or elsewhere, potential users of U.S. Geological Survey water-quality data are encouraged to obtain all required data from the appropriate computer file to ensure the most recent updates.

Water Temperatures

Water temperatures are measured at most of the water-quality stations. In addition, water temperatures are taken at the time of discharge measurements for surface-water stations. For stations where water temperatures are taken manually the water temperatures are taken about the same time each day. Large streams have a small diel temperature change; shallow streams may have a daily range of several degrees and may follow closely the changes in air temperature. Some streams may be affected by waste-heat discharges. At stations where recording instruments are used, either mean temperatures or maximum and minimum temperatures for each day are published.

Table 5.--Degrees Celsius (°C) to degrees Fahrenheit (°F)*
(Temperature reported to nearest 0.5°C)

°C	°F	°C	°F	°C	°F	°C	°F	°C	°F
0.0	32	10.0	50	20.0	68	30.0	86	40.0	104
.5	33	10.5	51	20.5	69	30.5	87	40.5	105
1.0	34	11.0	52	21.0	70	31.0	88	41.0	106
1.5	35	11.5	53	21.5	71	31.5	89	41.5	107
2.0	36	12.0	54	22.0	72	32.0	90	42.0	108
2.5	36	12.5	54	22.5	72	32.5	90	42.5	108
3.0	37	13.0	55	23.0	73	33.0	91	43.0	109
3.5	38	13.5	56	23.5	74	33.5	92	43.5	110
4.0	39	14.0	57	24.0	75	34.0	93	44.0	111
4.5	40	14.5	58	24.5	76	34.5	94	44.5	112
5.0	41	15.0	59	25.0	77	35.0	95	45.0	113
5.5	42	15.5	60	25.5	78	35.5	96	45.5	114
6.0	43	16.0	61	26.0	79	36.0	97	46.0	115
6.5	44	16.5	62	26.5	80	36.5	98	46.5	116
7.0	45	17.0	63	27.0	81	37.0	99	47.0	117
7.5	45	17.5	63	27.5	81	37.5	99	47.5	117
8.0	46	18.0	64	28.0	82	38.0	100	48.0	118
8.5	47	18.5	65	28.5	83	38.5	101	48.5	119
9.0	48	19.0	66	29.0	84	39.0	102	49.0	120
9.5	49	19.5	67	29.5	85	39.5	103	49.5	121

*°C equals 5/9(°F-32°) or °F equals 9/5(°C)+32°.

In October 1968, the Geological Survey began reporting many of the chemical constituents as well as the minor elements in micrograms per liter instead of milligrams per liter. See "Definition of Terms," and table 5 for converting English units to SI units.

The biological information includes qualitative and quantitative analyses of plankton, periphyton, Chlorophyll a and b, biomass and bottom organisms. Microbiological information includes quantitative identification of selected bacteriological indicator organisms.

Solutes

Most methods for collecting and analyzing water samples to determine the kinds and concentrations of solutes are described by Brown, Skougstad, and Fishman (1970). Analysis of pesticides and organic substances in water are described by Goerlitz and Lamar (1967), Lamar, Goerlitz, and Law (1965), and Goerlitz and Brown (1972). The collection and analysis of aquatic, biological, and microbiological samples are described by Slack and others (1973).

Sediment

Suspended-sediment concentrations are determined from samples collected by using depth-integrating samplers. Samples usually are obtained at several verticals in the cross section, or a single sample may be obtained at a fixed point and a coefficient applied to determine the mean concentration in the cross sections.

During periods of rapidly changing flow or rapidly changing concentration, samples may have been collected more frequently (twice daily or, in some instances, hourly). The published sediment discharges for days of rapidly changing flow or concentration were computed by the subdivided day method (time-discharge weighted average). Therefore, for those days when the published sediment discharge value differs from the value computed as the product of discharge times mean concentration times 0.0027, the reader can assume that the sediment discharge for that day was computed by the subdivided day method. For periods when no samples were collected, daily loads of suspended sediment were estimated on the basis of water discharge, sediment concentrations observed immediately before and after the periods, and suspended-sediment loads for other periods of similar discharge. A blank in the daily mean concentration column of the suspended-sediment discharge table indicates the value in the sediment discharge column was estimated. A zero value in the sediment-discharge column when there are nonzero values in the mean discharge and mean concentration columns indicates the load is less than 0.005 ton per day.

At other stations, suspended-sediment samples were collected periodically at many verticals in the stream cross section. Although data collected periodically may represent conditions only at the time of observations, such data are useful in establishing seasonal relations between quality and streamflow in predicting long-term sediment-discharge characteristics of the streams.

In addition to the records of the quantities of suspended sediment, records of the periodic measurements of the particle-size distribution of the suspended sediment and bed material are included.

WATER-SUPPLY PAPERS

The annual series of Water-Supply Papers that give information on quality of surface waters in Colorado are shown in the following table:

Table 6.--Water-Supply Paper numbers and parts, water years 1941-71

Year	Part 6	Part 7	Part 8	Part 9	Irrigation (1951-65)[1]
1941	942	942	942	942	----
1942	950	950	950	950	----
1943	970	970	970	970	----
1944	1022	1022	1022	1022	----
1945	1030	1030	1030	1030	----
1946	1050	1050	1050	1050	----
1947	1102	1102	1102	1102	----
1948	1132	1133	1133	1133	----
1949	1162	1163	1163	1163	----
1950	1187	1188	1188	1189	----
1951	1198	1199	1199	1200	1264
1952	1251	1252	1252	1253	1362
1953	1291	1292	1292	1293	1380
1954	1351	1352	1352	1353	1430
1955	1401	1402	1402	1403	1465
1956	1451	1452	1452	1453	1485
1957	1521	1522	1522	1523	1524
1958	1572	1573	1573	1574	1575
1959	1643	1644	1644	1645	1699
1960	1743	1744	1744	1745	1746
1961	1883	1884	1884	1885	1886
1962	1943	1944	1944	1945	1946
1963	1949	1950	1950	1951	1952
1964	1956	1957	1957	1958	1960
1965	1963	1964	1964	1965	1967
1966	1993	1994	1994	1995	----
1967	2013	2014	2014	2015	----
1968	2095	2096	2097	2098	----
1969	2145	2146	2147	2148	----
1970	2155	2156	2157	2158	----
1971	2165	[2]2166	[2]2167	[2]2168	----

[1]Annual series, "Quality of Surface Waters for Irrigation, Western States."
[2]In preparation.

Information about reports and other data on quality of water in Colorado may be obtained from the district office at the address given on the back of the title page of this report.

EXPLANATION OF GROUND-WATER-LEVEL RECORDS

Collection of Data

Only ground-water level data from a basic national network of observation wells are published herein. These water-level measurements are intended to provide a record of water-level changes in important aquifers.

The locations of wells are referenced by two systems. One system is based on latitude and longitude, and the second is based on the U.S. Bureau of Land Management system of land subdivision. The latitude and longitude grid system facilitates machine processing of data and plotting of data points.

The latitude and longitude grid system is used to provide the geographic location of each well. The number consists of 15 digits. The first six digits denote the degrees, minutes, and seconds of latitude; N designates north; the next seven digits denote degrees, minutes, and seconds of longitude; and the last two digits are sequential numbers for wells within a 1-second grid, as shown below in figure 6.

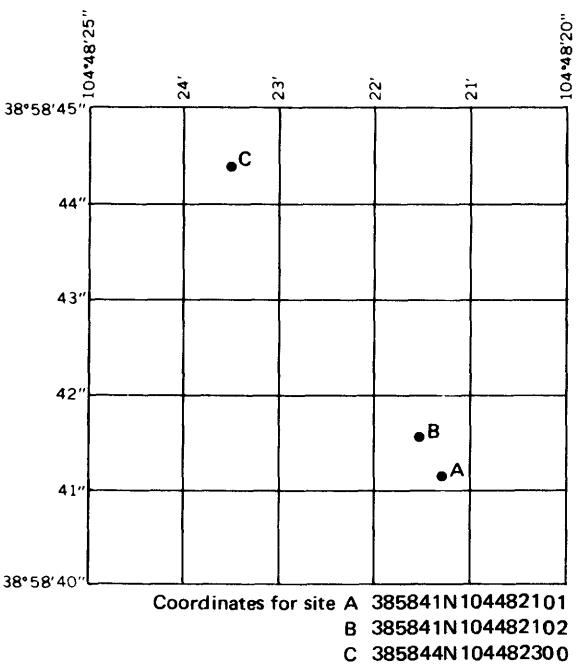


Figure 5.--System for numbering wells and miscellaneous sites (latitude and longitude).

The local well number locates a well within a 10-acre tract using the U.S. Bureau of Land Management system of land subdivision. The components of the local well number proceed from the largest to the smallest land subdivisions. This is in contrast to the legal description, which proceeds from the smallest to the largest land subdivision. The largest subdivision is the survey. Colorado is governed by three surveys: The Sixth Principal Meridian Survey (S), the New Mexico Survey (N), and the Ute Survey (U). Costilla County was not included in any of the above official surveys. This report follows the convention of the Costilla County Assessor in which the northern part of the county is governed by the Sixth Principal Meridian Survey and the southern part of the county is governed by a local system called the Costilla Survey (C). The first letter of the well location designates the survey.

A survey is subdivided into four quadrants formed by the intersection of the baseline and the principal meridian. The second letter of the well location designates the quadrant: A indicates the northeast quadrant, B the northwest, C the southwest, and D the southeast. A quadrant is subdivided in the north-south direction every 6 mi by townships and is subdivided in the east-west direction every 6 mi by ranges. The first number of the well location designates the township and the second number designates the range.

The 36-mi^2 area described by the township and range designation is subdivided into 1-mi^2 areas called sections. The sections are numbered sequentially. The third number of the well location designates the section. The section, which contains 640 acres, is subdivided into quarter sections. The 160-acre area is designated by the first letter following the section: A indicates the northeast quarter, B the northwest, C the southwest, and D the southeast. The quarter section is subdivided into quarter-quarter sections. The 40-acre area is designated in the same manner by the second letter following the section. The quarter-quarter section is subdivided into quarter-quarter-quarter sections. The 10-acre (4.0-ha) area is designated in the same manner by the third letter following the section. If more than one well is located within the 10-acre (4.0-ha) tract, the wells are numbered sequentially in the order in which they were originally inventoried. If this number is necessary, it will follow the three-letter designation.

The local number is provided for continuity with older reports.

Measurements are made in many types of wells under varying conditions, but the methods of measurement are standardized to the extent possible. The equipment and measuring techniques used at each observation well insure that measurements at each well are of consistent accuracy and reliability.

Water-level measurements in this report are given in feet with reference to either mean sea level (msl) or land-surface datum (lsd). Mean sea level is the datum plane on which the national network of precise levels is based; land-surface datum is a datum plane that is approximately at land surface at each well. If known, the altitude of the land-surface datum above mean sea level is given in the well description. The height of the meaasuring point (MP) above or below land-surface datum is given in each well description. Water levels in wells equipped with recording gages are reported for every fifth day and the end of each month (eom).

Water levels are reported to as many significant figures as can be justified by the local conditions. For example, in a measurement of a depth to water of several

hundred feet, the error of determining the absolute value of the total depth to water may be a few tenths of a foot, whereas the error in determining the net change of water level between successive measurements may be only a hundredth or a few hundredths of a foot. For lesser depths to water, the accuracy is greater. Accordingly, most measurements are reported to a hundredth of a foot, but some are given only to a tenth of a foot or a larger unit.

Publications

Publication of ground-water level data for the United States in water-supply papers was begun by the Geological Survey in 1935. From 1935 through 1939, a single water-supply paper covering the entire nation was issued each year (Water-Supply Papers 777, 817, 840, 845, and 886). From 1940 through 1974, separate water-supply papers were issued for six sections of the United States. Water-level data for Colorado are included in the water-supply papers listed below, each report containing one or more calendar years (January through December) of data. Data in this report are for the 12-month water year ending September 30.

Calendar year	WSP no.	Calendar year	WSP no.	Calendar year	WSP no.	Calendar year	WSP no.
1940	910	1945	1027	1950	1169	1955	1408
1941	940	1946	1075	1951	1195	1956-60	1760
1942	948	1947	1100	1952	1225	1961-65	1845
1943	990	1948	1130	1953	1269	1966-70	1980
1944	1020	1949	1160	1954	1325		

Information about reports and other data on ground water in Colorado may be obtained from the district office at the address given on the back of the title page of this report.

SELECTED REFERENCES

The following publications are available for background information on the methods for collecting, analyzing, and evaluating the chemical and physical properties of surface waters:

American Public Health Association, and others, 1980, Standard methods for the examination of water and waste water, 13th ed: American Public Health Assoc., New York, 1134 p.

Carter, R. W., and Davidian, Jacob, 1968, General procedures for gaging streams: U.S. Geological Survey Techniques of Water-Resources Investigations, Book 3, Chapter A6, 13 p.

Clarke, F. W., 1924, The composition of the river and lake waters of the United States: U.S. Geological Survey Professional Paper 135, 199 p.

Colby, B. R., 1963, Fluvial sediments--a summary of source, transportation, deposition, and measurements of sediment discharge: U.S. Geological Survey Bulletin 1181-A, 47 p.

Colby, B. R., and Hembree, C. H., 1955, Computations of total sediment discharge, Niobrara River near Cody, Nebraska: U.S. Geological Survey Water-Supply Paper 1357, 187 p.

Colby, B. R., and Hubbell, D. W., 1961, Simplified methods for computing total sediment discharge with the modified Einstein procedure: U.S. Geological Survey Water-Supply Paper 1593, 17 p.

Collins, W. D., and Howard, C. S., 1928, Quality of water of Colorado River in 1925-26: U.S. Geological Survey Water-Supply Paper 596-B, p. 33-43.

Corbett, D. M., and others, 1942, Stream-gaging procedure, a manual describing methods and practices of the Geological Survey: U.S. Geological Survey Water-Supply Paper 888, 245 p.

Fishman, M. J., and Bradford, W. L., 1982, A supplement to methods for the determination of inorganic substances in water and fluvial sediments: U.S. Geological Survey Techniques of Water-Resources Investigations, Book 5, Laboratory Analysis, Chapter A1, open-file report 82-272, 136 p.

Goerlitz, D. F., and Brown, Eugene, 1972, Methods for analysis of organic substances in water: U.S. Geological Survey Techniques of Water-Resources Investigations, Book 5, Chapter A3, 40 p.

Gregg, D. O., and others, 1961, Public water supplies of Colorado (1959-60): Fort Collins, Colorado State University Agricultural Experiment Station, General Service 757, 128 p.

Guy, H. P., 1970, Fluvial sediment concepts: U.S. Geological Survey Techniques of Water-Resources Investigation, Book 3, Chapter C1, 55 p.

_____1969, Laboratory theory and methods for sediment analysis: U.S. Geological Survey Techniques of Water-Resources Investigations, Book 5, Chapter C1, 57 p.

Guy, H. P., and Norman, V. W., 1970, Field methods for measurement of fluvial sediment: U.S. Geological Survey Techniques of Water-Resources Investigations, Book 3, Chapter C2, 59 p.

Hawley, Gessner G., 1981, The condensed chemical dictionary; Van Nostrand-Reinhold Publication Corporation, New York, 10th edition, 1135 p.

Hem, John D., 1970, Study and interpretation of the chemical characteristics of natural water, 2d ed.: U.S. Geological Survey Water-Supply Paper 1473, 363 p.

Howard, C. W., 1955, Quality of water of the Colorado River, 1925-40: U.S. Geological Survey open-file report, 103 p.

Iorns, W. V., and others, 1964, Water Resources of the Upper Colorado River basin--basic data: U.S. Geological Survey Professional Paper 442, 1,036 p.

_____1965, Water Resources of the Upper Colorado River basin--technical report: U.S. Geological Survey Professional Paper 441, 370 p.

Lane, E. W., and others, 1947, Reports of Subcommittee on terminology: American Geophysical Union Transaction, v. 28, p. 937.

Langbein, W. B., and Iseri, K. T., 1960, General introduction and hydrologic definitions: U.S. Geological Survey Water-Supply Paper 1541-A, 29 p.

Lohman, S. W., and others, 1972, Definitions of selected ground-water terms--revisions and conceptual refinements: U.S. Geological Survey Water-Supply Paper 1988, p. 2.

McGuinness, C. L., 1963, The role of ground water in the national water situation: U.S. Geological Survey Water-Supply Paper 1800, 1121 p.

Meinzer, O. E., 1923, The occurrence of ground water in the United States: U.S. Geological Survey Water-Supply Paper 489, 321 p.

_____1923, Outline of ground-water hydrology, with definitions: U.S. Geological Survey Water-Supply Paper 494, 71 p.

Moran, R. E., and Wentz, D. A., 1974, Effects of metal-mine drainage on water quality in selected areas of Colorado, 2 of 3, 1972-73: Colorado Water Conservation Board Circular 25, 250 p.

Porterfield, George, 1972, Computations of fluvial-sediment discharge: U.S. Geological Survey Techniques of Water-Resources Investigations, Book 3, Chapter C3, 66 p.

Ritter, J. R., and Helley, E. J., 1969, Optical method for determining particle sizes of coarse sediment: U.S. Geological Survey Techniques of Water-Resources Investigations, Book 5, Chapter C3, 33 p.

Slack, K. V., and others, 1973, Methods for collection and analysis of aquatic biological and microbiological samples: U.S. Geological Survey Techniques of Water-Resources Investigations, Book 5, Chapter A4, 165 p.

Stabler, Herman, 1911, Some stream waters of the Western United States: U.S. Geological Survey Water-Supply Paper 274, 188 p.

U.S. Inter-Agency Committee on Water Resources, A study of methods used in measurements and analysis of sediment loads in streams:

Report 11, 1957, The development and calibration of visual accumulation tube: St. Anthony Falls Hydraulic Lab., Minneapolis, Minn., 109 p.

Report 12, 1957, Some fundamentals of particle-size analysis: Washington, D. C., U.S. Government Printing Office, 55 p.

Report AA, 1959, Federal Inter-Agency sedimentation instruments and reports: St. Anthony Falls Hydraulic Laboratory, Minneapolis, Minn., 41 p.

Report 13, 1961, The single-stage sampler for suspended sediment: Washington, D. C., U.S. Government Printing Office, 105 p.

Report 14, 1963, Determinations of fluvial sediment discharge: Washington, D. C., U.S. Government Printing Office 151 p.

PUBLICATIONS ON TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS

Thirty-seven manuals by the U.S. Geological Survey have been published to date in the series on techniques describing procedures for planning and executing specialized work in water-resources investigations. The material is grouped under major subject headings called books and is further divided into sections and chapters. For example, Section A of Book 3 (Applications of Hydraulics) is on surface water. The chapter, the unit of publication, is limited to a narrow field of subject matter. This format permits flexibility in revision and publication as the need arises. The reports listed below are for sale by the U.S. Geological Survey, Branch of Distribution, 604 South Pickett St., Alexandria, VA 22304 (authorized agent of the Superintendent of Documents, Government Printing Office).

NOTE: When ordering any of these publications, please give the title, book number, chapter number, and "U.S. Geological Survey Techniques of Water-Resources Investigations".

1-D1. *Water temperature--influential factors, field measurement, and data presentation,* by H. H. Stevens, Jr., J. F. Ficke, and G. F. Smoot: USGS--TWRI Book 1, Chapter D1. 1975. 65 pages.

1-D2. *Guidelines for collection and field analysis of ground-water samples for selected unstable constituents,* by W. W. Wood: USGS--TWRI Book 1, Chapter D2. 1976. 24 pages.

2-D1. *Application of surface geophysics to ground-water investigations,* by A. A. R. Zohdy, G. P. Eaton, and D. R. Mabey: USGS--TWRI Book 2, Chapter D1. 1974. 116 pages.

2-E1. *Application of borehole geophysics to water-resources investigations,* by W. S. Keys and L. M. MacCary: USGS--TWRI Book 2, Chapter E1. 1971. 126 pages.

3-A1. *General field and office procedures for indirect discharge measurements,* by M. A. Benson and Tate Dalrymple: USGS--TWRI Book 3, Chapter A1. 1967. 30 pages.

3-A2. *Measurement of peak discharge by the slope-area method,* by Tate Dalrymple and M. A. Benson: USGS--TWRI Book 3, Chapter A2. 1967. 12 pages.

3-A3. *Measurement of peak discharge at culverts by indirect methods,* by G. L. Bodhaine: USGS--TWRI Book 3, Chapter A3. 1968. 60 pages.

3-A4. *Measurement of peak discharge at width contractions by indirect methods,* by H. F. Matthai: USGS--TWRI Book 3, Chapter A4. 1967. 44 pages.

3-A5. *Measurement of peak discharge at dams by indirect methods,* by Harry Hulsing: USGS--TWRI Book 3, Chapter A5. 1967. 29 pages.

3-A6. *General procedure for gaging streams,* by R. W. Carter and Jacob Davidian: USGS--TWRI Book 3, Chapter A6. 1968. 13 pages.

3-A7. *Stage measurements at gaging stations,* by T. J. Buchanan and W. P. Somers: USGS--TWRI Book 3, Chapter A7. 1968. 28 pages.

3-A8. *Discharge measurements at gaging stations,* by T. J. Buchanan and W. P. Somers: USGS--TWRI Book 3, Chapter A8. 1969. 65 pages.

3-A9. *Measurement of time of travel and dispersion in streams by dye tracing,* by E. F. Hubbard, F. A. Kilpatrick, L. A. Martens, and J. F. Wilson, Jr.: USGS--TWRI Book 3, Chapter A9. 1982. 44 pages.

3-A11. *Measurement of discharge by moving-boat method,* by G. F. Smoot and C. E. Novak: USGS--TWRI Book 3, Chapter A11. 1969. 22 pages.

3-B1. *Aquifer-test design, observation, and data analysis,* by R. W. Stallman: USGS--TWRI Book 3, Chapter B1. 1971. 26 pages.

3-B2. *Introduction to ground-water hydraulics, a programed text for self-instruction,* by G. D. Bennett: USGS--TWRI Book 3, Chapter B2. 1976. 172 pages.

3-B3. *Type curves for selected problems of flow to wells in confined aquifers,* by J. E. Reed: USGS--TWRI Book 3, Chapter B3. 1980. 106 pages.

3-C1. *Fluvial sediment concepts,* by H. P. Guy: USGS--TWRI Book 3, Chapter C1. 1970. 55 pages.

3-C2. *Field methods for measurement of fluvial sediment,* by H. P. Guy and V. W. Norman: USGS--TWRI Book 3, Chapter C2. 1970. 59 pages.

3-C3. *Computation of fluvial-sediment discharge,* by George Porterfield: USGS--TWRI Book 3, Chapter C3. 1972. 66 pages.

4-A1. *Some statistical tools in hydrology,* by H. C. Riggs: USGS--TWRI Book 4, Chapter A1. 1968. 39 pages.

4-A2. *Frequency curves,* by H. C. Riggs: USGS--TWRI Book 4, Chapter A2. 1968. 15 pages.

4-B1. *Low-flow investigations,* by H. C. Riggs: USGS--TWRI Book 4, Chapter B1. 1972. 18 pages.

4-B2. *Storage analyses for water supply,* by H. C. Riggs and C. H. Hardison: USGS--TWRI Book 4, Chapter B2. 1973. 20 pages.

4-B3. *Regional analyses of streamflow characteristics,* by H. C. Riggs: USGS--TWRI Book 4, Chapter B3. 1973. 15 pages.

4-D1. *Computation of rate and volume of stream depletion by wells,* by C. T. Jenkins: USGS--TWRI Book 4, Chapter D1. 1970. 17 pages.

5-A1. *Methods for determination of inorganic substances in water and fluvial sediments,* by M. W. Skougstad and others, editors: USGS--TWRI Book 5, Chapter A1. 1979. 626 pages.

5-A2. *Determination of minor elements in water by emission spectroscopy,* by P. R. Barnett and E. C. Mallory, Jr.: USGS--TWRI Book 5, Chapter A2. 1971. 31 pages.

5-A3. *Methods for analysis of organic substances in water,* by D. F. Goerlitz and Eugene Brown: USGS--TWRI Book 5, Chapter A3. 1972. 40 pages.

5-A4. *Methods for collection and analysis of aquatic biological and microbiological samples,* edited by P. E. Greeson, T. A. Ehlke, G. A. Irwin, B. W. Lium, and K. V. Slack: USGS--TWRI Book 5, Chapter A4. 1977. 332 pages.

5-A5. *Methods for determination of radioactive substances in water and fluvial sediments,* by L. L. Thatcher, V. J. Janzer, and K. W. Edwards: USGS--TWRI Book 5, Chapter A5. 1977. 95 pages.

5-C1. *Laboratory theory and methods for sediment analysis,* by H. P. Guy: USGS--TWRI Book 5, Chapter C1. 1969. 58 pages.

7-C1. *Finite difference model for aquifer simulation in two dimensions with results of numerical experiments,* by P. C. Trescott, G. F. Pinder, and S. P. Larson: USGS--TWRI Book 7, Chapter C1. 1976. 116 pages.

7-C2. *Computer model of two-dimensional solute transport and dispersion in ground water,* by L. F. Konikow and J. D. Bredehoeft: USGS--TWRI Book 7, Chapter C2. 1978. 90 pages.

7-C3. *A model for simulation of flow in singular and interconnected channels,* by R. W. Schaffranek, R. A. Baltzer, and D. E. Goldberg: USGS--TWRI Book 7, Chapter C3. 1981. 110 pages.

8-A1. *Methods of measuring water levels in deep wells,* by M. S. Garber and F. C. Koopman: USGS--TWRI Book 8, Chapter A1. 1968. 23 pages

8-B2. *Calibration and maintenance of vertical-axis type current meters,* by G. F. Smoot and C. E. Novak: USGS--TWRI Book 8, Chapter B2. 1968. 15 pages.

COLORADO RIVER MAIN STEM

09010500 COLORADO RIVER BELOW BAKER GULCH, NEAR GRAND LAKE, CO

LOCATION.--Lat 40°19'33", long 105°51'22", in NE¼NW¼ sec.12, T.4 N., R.76 W., Grand County, Hydrologic Unit 14010001, on left bank 500 ft downstream from Baker Gulch, 1.0 mi upstream from Bowen Gulch, and 5.5 mi northwest of town of Grand Lake.

DRAINAGE AREA.--53.4 mi^2.

PERIOD OF RECORD.--May 1953 to current year.

REVISED RECORDS.--WSP 2124: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 8,750 ft, from topographic map.

REMARKS.--Records good except those for winter period, which are poor. Transmountain diversion above station by Grand River ditch (see elsewhere in this report). Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--31 years, 64.0 ft^3/s; 46,370 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 976 ft^3/s, June 30, 1957, gage height, 7.19 ft; maximum gage height, 7.30 ft, June 25, 1971; minimum daily discharge, 3.0 ft^3/s, Jan. 13, 1963.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 780 ft^3/s at 0700 May 25, gage height, 7.13 ft; maximum gage height, 7.14 ft at 2400 June 30; minimum daily discharge, 5.6 ft^3/s, Mar. 16-31.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31	27	17	12	12	8.0	6.0	11	636	645	108	101
2	29	25	17	12	12	8.0	6.0	11	596	503	95	76
3	30	24	17	12	12	8.0	6.0	11	565	434	84	62
4	32	21	17	12	12	8.0	6.0	11	555	361	78	55
5	33	21	17	12	12	8.0	6.0	10	529	348	75	51
6	30	22	17	12	12	7.0	7.0	10	489	322	85	47
7	27	20	17	12	12	7.0	7.0	13	450	301	78	56
8	26	20	17	12	12	7.0	7.0	17	376	293	67	57
9	25	20	17	12	12	7.0	7.0	22	329	288	77	49
10	32	20	17	12	12	7.0	7.0	37	285	339	73	45
11	35	20	15	12	11	6.0	8.0	70	296	253	65	47
12	35	20	15	12	11	6.0	8.0	124	343	222	65	54
13	35	20	15	12	11	6.0	9.0	195	422	208	76	68
14	37	20	15	12	11	6.0	9.0	273	578	204	63	67
15	32	20	15	12	11	6.0	10	361	627	176	66	57
16	28	20	15	12	10	5.6	11	405	637	159	60	78
17	28	20	15	12	10	5.6	12	429	628	147	59	80
18	34	20	15	12	10	5.6	13	383	593	139	79	70
19	33	20	15	12	10	5.6	13	350	589	127	90	64
20	29	20	15	12	10	5.6	14	421	591	131	100	60
21	28	18	15	12	9.0	5.6	15	475	579	125	92	62
22	27	18	15	12	9.0	5.6	15	496	616	112	81	66
23	27	18	15	12	9.0	5.6	15	517	588	117	73	56
24	27	18	15	12	9.0	5.6	14	614	576	144	89	53
25	23	18	15	12	9.0	5.6	15	740	561	127	86	58
26	24	18	13	12	9.0	5.6	15	614	531	110	75	60
27	25	18	13	12	9.0	5.6	16	549	445	102	65	59
28	24	18	13	12	9.0	5.6	13	488	428	102	59	56
29	23	18	13	12	9.0	5.6	11	503	426	113	57	52
30	23	18	13	12	---	5.6	12	572	507	111	56	49
31	24	---	13	12	---	5.6	---	625	---	109	53	---
TOTAL	896	600	473	372	306.0	194.6	313.0	9357	15371	6872	2329	1815
MEAN	28.9	20.0	15.3	12.0	10.6	6.28	10.4	302	512	222	75.1	60.5
MAX	37	27	17	12	12	8.0	16	740	637	645	108	101
MIN	23	18	13	12	9.0	5.6	6.0	10	285	102	53	45
AC-FT	1780	1190	938	738	607	386	621	18560	30490	13630	4620	3600

CAL YR 1983	TOTAL	39182.9	MEAN	107	MAX	771	MIN	7.6	AC-FT	77720
WTR YR 1984	TOTAL	38898.6	MEAN	106	MAX	740	MIN	5.6	AC-FT	77160

NOTE.--NO GAGE-HEIGHT RECORD NOV. 8 TO APR. 20.

09011000 COLORADO RIVER NEAR GRAND LAKE, CO

LOCATION.--Lat 40°13'08", long 105°51'25", in NE¼SW¼ sec.13, T.3 N., R.76 W., Grand County, Hydrologic Unit 14010001, 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 3.0 mi southwest of town of Grand Lake.

DRAINAGE AREA.--102 mi².

PERIOD OF RECORD.--Streamflow records, July 1904 to September 1918, October 1933 to current year. 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. Water-quality data available 1970 to 1978.

REVISED RECORDS.--WSP 1213: 1914. WSP 2124: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 8,380 ft, from topographic map. Prior to June 15, 1934, nonrecording gage at present site and datum. June 15, 1934, to Sept. 26, 1944, water-stage recorder at site 1,100 ft downstream, at different datum.

REMARKS.--Records good except those for winter period, which are poor. 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). Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--65 years (water years 1905-18, 1934-84), 90.3 ft³/s; 65,420 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 1,840 ft³/s, June 15, 16, 1918, gage height, 7.0 ft, from rating curve extended above 1,100 ft³/s; maximum gage height, 8.21 ft, Apr. 20, 1971 (backwater from ice); minimum daily discharge, 1.7 ft³/s, July 18, 19, 1934.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,310 ft³/s at 1200 May 25, gage height, 6.81 ft; minimum daily, 14 ft³/s, Mar. 9, 10, 30, 31.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36	41	31	20	19	15	15	27	857	772	172	110
2	36	40	29	20	19	15	15	29	806	576	147	96
3	37	38	29	20	19	15	15	28	751	477	127	86
4	40	36	29	20	19	15	15	27	719	417	109	78
5	41	35	29	20	19	15	15	28	695	382	101	70
6	39	36	28	20	19	15	15	29	653	336	114	70
7	36	34	27	20	19	15	16	27	647	299	123	70
8	35	42	26	20	19	15	16	30	542	293	95	70
9	35	35	26	20	18	14	17	40	472	287	93	70
10	38	30	29	20	18	14	17	65	384	350	106	70
11	46	35	29	20	18	15	18	114	381	255	88	70
12	49	35	30	20	18	15	21	198	408	186	75	70
13	48	35	29	20	17	16	18	343	438	150	104	80
14	50	32	28	20	17	15	26	486	632	159	86	80
15	48	32	28	20	17	15	25	587	712	115	92	80
16	41	32	29	20	17	16	25	654	747	92	88	88
17	40	32	29	20	17	16	24	671	755	76	90	100
18	49	32	28	20	17	16	24	668	695	61	94	90
19	55	32	28	20	17	16	27	531	667	43	155	84
20	43	31	28	20	17	16	27	579	661	32	132	78
21	41	31	28	20	17	16	26	668	621	39	135	76
22	39	31	27	20	16	16	31	700	669	22	120	74
23	40	31	25	20	16	16	34	762	659	26	115	70
24	39	31	25	20	16	16	36	875	644	54	110	68
25	35	32	25	20	16	16	35	1200	635	57	105	66
26	35	32	23	20	16	17	31	935	590	40	98	64
27	36	32	22	20	15	17	38	769	534	27	94	64
28	36	32	22	20	15	16	36	692	491	28	92	62
29	36	31	22	20	15	15	27	671	486	29	90	60
30	36	31	22	20	---	14	29	731	499	109	90	60
31	36	---	22	20	---	14	---	805	---	170	90	---
TOTAL	1251	1009	832	620	502	477	714	13969	18450	5959	3330	2274
MEAN	40.4	33.6	26.8	20.0	17.3	15.4	23.8	451	615	192	107	75.8
MAX	55	42	31	20	19	17	38	1200	857	772	172	110
MIN	35	30	22	20	15	14	15	27	381	22	75	60
AC-FT	2480	2000	1650	1230	996	946	1420	27710	36600	11820	6610	4510

CAL YR 1983	TOTAL	54505	MEAN	149	MAX	1220	MIN	15	AC-FT	108100
WTR YR 1984	TOTAL	49387	MEAN	135	MAX	1200	MIN	14	AC-FT	97960

NOTE.--NO GAGE-HEIGHT RECORD DEC. 28 TO FEB. 8 AND AUG. 21 TO SEPT. 30.

09013000 ALVA B. ADAMS TUNNEL AT EAST PORTAL, NEAR ESTES PARK, CO

LOCATION.--Lat 40°19'40", long 105°34'39", in SW¼NW¼ sec.9, T.4 N., R.73W., Larimer County, Hydrologic Unit 10190006, on right bank at upstream end of Aspen Creek siphon, 700 ft downstream from east portal, and 4.5 mi southwest of Estes Park.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1946 to current year (monthly discharge only for August and September 1947).

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.

REMARKS.--Records excellent. This is a transmountain diversion from Grand Lake and Shadow Mountain Lake for power and irrigation developments 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 mi west of east portal.

COOPERATION.--Records collected and computed by Colorado Division of Water Resources and reviewed by Geological Survey.

AVERAGE DISCHARGE.--38 years, 273 ft^3/s; 197,800 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 592 ft^3/s June 30, 1962; no flow at times in most years.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	130	93	496	206	100	406	142	.00	.00	367	551	294
2	.75	100	491	206	258	348	156	.00	.00	537	551	292
3	216	109	477	201	280	350	203	.00	.00	540	549	292
4	217	102	463	201	155	348	203	.00	36	540	546	298
5	164	9.0	465	203	153	348	201	.00	186	538	546	248
6	155	117	463	203	253	351	203	.00	186	540	544	198
7	198	103	463	203	254	348	203	.00	246	541	550	151
8	130	185	465	203	252	344	203	.00	274	541	546	157
9	104	144	455	201	258	342	203	.00	350	543	544	147
10	112	178	461	203	255	349	203	134	390	543	552	155
11	130	104	451	203	254	249	201	210	395	540	550	143
12	259	118	455	233	258	349	201	144	275	542	550	103
13	263	163	457	206	255	350	350	143	239	542	550	181
14	156	174	459	204	255	351	126	148	333	544	499	246
15	146	153	496	205	259	350	.00	101	414	410	393	199
16	152	155	273	198	408	349	.00	93	416	393	296	265
17	100	169	206	223	408	351	.00	.00	267	395	291	276
18	127	170	209	219	405	355	.00	.00	92	393	191	248
19	151	402	312	194	403	356	.00	.00	46	314	216	251
20	156	407	401	207	407	352	.00	.00	.00	545	227	247
21	187	408	469	201	411	353	.00	.00	.00	546	304	300
22	202	408	516	148	408	356	.00	.00	.00	546	392	338
23	181	402	504	200	360	356	.00	.00	94	544	354	341
24	225	404	504	205	351	353	.00	.00	97	429	298	338
25	210	407	506	212	497	259	.00	.00	100	541	262	333
26	331	434	506	219	502	356	.00	.00	257	540	291	344
27	140	483	540	204	462	354	.00	.00	320	544	200	336
28	282	512	502	201	397	357	.00	.00	334	546	298	352
29	.90	504	461	101	406	356	.00	102	454	546	294	395
30	.52	502	443	101	---	352	.00	169	541	546	298	352
31	95	---	209	101	---	255	---	.00	---	549	298	---
TOTAL	4921.17	7619.0	13578	6015	9324	10653	2798.00	1244.00	6342.00	15725	12531	7820
MEAN	159	254	438	194	322	344	93.3	40.1	211	507	404	261
MAX	331	512	540	233	502	406	350	210	541	549	552	395
MIN	.52	9.0	206	101	100	249	.00	.00	.00	314	191	103
AC-FT	9760	15110	26930	11930	18490	21130	5550	2470	12580	31190	24860	15510

CAL YR 1983 TOTAL 88400.08 MEAN 242 MAX 548 MIN .00 AC-FT 175300
WTR YR 1984 TOTAL 98570.17 MEAN 269 MAX 552 MIN .00 AC-FT 195500

09013000 ALVA B. ADAMS TUNNEL AT EAST PORTAL, NEAR ESTES PARK, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--September 1970 to current year.

REMARKS.--Field data collected prior to 1974 water year are available in district office.

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)
OCT										
26...	0800	479	34	7.4	8.5	8.4	12	3.7	.69	1.5
DEC										
01...	0800	509	40	6.8	2.5	8.3	16	4.7	.92	1.7
JAN										
23...	1600	383	52	7.0	1.5	8.8	20	6.1	1.2	2.4
FEB										
22...	1630	542	52	7.6	2.0	8.8	22	6.5	1.3	2.2
MAR										
21...	1700	544	55	7.1	2.5	8.0	21	6.5	1.2	2.0
MAY										
24...	0800	9.6	32	7.5	5.0	8.3	10	2.8	.80	2.8
JUN										
26...	1030	257	26	7.1	8.0	10.0	9	2.8	.50	1.2
JUL										
16...	1730	396	19	7.4	15.0	8.5	6	1.8	.30	.90
AUG										
20...	1730	400	36	6.7	16.0	8.6	13	3.9	.80	1.3
SEP										
24...	1600	527	39	6.2	13.5	8.4	15	4.3	1.0	1.8

DATE	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)
OCT										
26...	.2	.60	16	3.9	.30	.10	3.4	24	31	<.100
DEC										
01...	.2	.60	18	5.1	.80	.10	4.2	29	40	<.100
JAN										
23...	.2	.70	24	4.8	.80	.10	4.3	35	36	<.100
FEB										
22...	.2	.80	25	5.4	.60	.20	4.8	37	54	.100
MAR										
21...	.2	.80	24	4.5	.60	.20	4.7	35	51	<.100
MAY										
24...	.4	.50	11	6.2	.60	.20	12	33	.84	<.100
JUN										
26...	.2	.20	8.0	4.5	.30	.10	4.3	19	13	<.100
JUL										
16...	.2	.20	6.0	3.6	<.20	<.10	3.3	--	--	<.100
AUG										
20...	.2	.50	13	4.6	.40	<.10	4.1	24	25	<.100
SEP										
24...	.2	.80	14	5.9	1.0	.10	4.2	28	39	<.100

09013000 ALVA B ADAMS TUN AT E PORTAL, NR ESTES PARK, CO--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	CADMIUM DIS-SOLVED (UG/L AS CD)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	NICKEL, DIS-SOLVED (UG/L AS NI)	ZINC, DIS-SOLVED (UG/L AS ZN)
OCT										
26...	<.100	.80	--	--	--	30	--	<1	--	--
DEC										
01...	<.100	.70	--	<1	1	40	1	3	<1	11
JAN										
23...	<.100	.20	--	--	--	44	--	1	--	--
FEB										
22...	.120	.70	.80	<1	7	63	<1	8	7	18
MAR										
21...	.120	.20	--	--	--	48	--	2	--	--
MAY										
24...	<.100	<.20	--	<1	3	74	<1	2	<1	10
JUN										
26...	<.100	.30	--	--	--	48	--	4	--	--
JUL										
16...	<.100	.50	--	--	--	37	--	2	--	--
AUG										
20...	<.100	.50	--	1	20	93	<1	3	2	16
SEP										
24...	<.100	.30	--	--	--	87	--	3	--	--

09014500 SHADOW MOUNTAIN LAKE NEAR GRAND LAKE, CO

LOCATION.--Lat 40°12'26", long 105°50'27", in SW¼NW¼ sec.19, T.3 N., R.75 W., Grand County, Hydrologic Unit 14010001, in gate house on left side of outlet gates near center of Shadow Mountain Dam on Colorado River, 1.0 mi upstream from Pole Creek and 3.2 mi south of town of Grand Lake.

DRAINAGE AREA.--185 mi^2.

PERIOD OF RECORD.--April 1947 to current year. Prior to October 1960, published as Shadow Mountain Reservoir near Grand Lake.

REVISED RECORDS.--WSP 1149: 1947-48. WSP 2124: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by U.S. Bureau of Reclamation); gage readings have been reduced to elevations NGVD. Supplementary water-stage recorder on Grand Lake, 800 ft north of outlet gates and 2.9 mi north of Shadow Mountain Dam.

REMARKS.--Lake is formed by earth and rockfill 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 elevation 8,347 ft, 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. Shadow Mountain Lake is used for stabilization of water level in Grand Lake. Usable capacity for diversion through Alva B. Adams tunnel, 3,660 acre-ft between elevations 8,365 ft, crest of tunnel inlet and 8,367 ft, maximum water surface. Figures given represent usable contents as determined from summation of individual contents of Grand Lake and Shadow Mountain Lake. 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 U.S. Bureau of Reclamation.

EXTREMES FOR PERIOD OF RECORD.--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.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 17,790 acre-ft, Aug. 20, elevation, 8,366.98 ft; minimum, 16,280 acre-ft, June 1, elevation, 8,366.04 ft.

MONTHEND ELEVATION IN FEET NGVD AND CONTENTS, AT 2400, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

Date	Elevation	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	8,366.75	17,410	-
Oct. 31	8,366.84	17,570	+160
Nov. 30	8,366.76	17,380	-190
Dec. 31	8,366.63	17,190	-190
CAL YR 1983			-90
Jan. 31	8,366.79	17,470	+280
Feb. 29	8,366.75	17,380	-90
Mar. 31	8,366.60	17,130	-250
Apr. 30	8,366.46	16,900	-230
May 31	8,366.14	16,410	-490
June 30	8,366.71	17,350	+940
July 31	8,366.66	17,220	-130
Aug. 31	8,366.67	17,270	+50
Sept. 30	8,366.56	17,080	-190
WTR YR 1984			-330

09018300 GRANBY PUMP CANAL NEAR GRAND LAKE, CO

LOCATION.--Lat 40°12'25", long 105°50'56", in SW¼NE¼ sec.24, T. 3 N., R.76 W., Grand County, Hydrologic Unit 14010001, at road crossing at south end of Shadow Mountain Lake, 4 mi southwest of Grand Lake, and 13.5 mi northeast of Granby.

PERIOD OF RECORD.--September 1970 to September 1975, March 1978 to current year.

REMARKS.--No flow at time of visit for April, May, June, and July of 1984 water year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	COLI-FORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)
OCT												
05...	0700	775	56	--	8.0	6.8	K14	K3	.100	.70	.80	<.010
NOV												
15...	0845	360	58	7.3	7.0	6.7	20	<1	<.100	1.1	--	.020
DEC												
21...	0745	400	50	7.5	2.0	8.2	K2	<1	<.100	.40	--	<.010
JAN												
31...	0650	352	54	7.2	2.5	7.4	--	<1	.100	<.20	--	<.010
FEB												
22...	0640	743	63	7.2	2.5	7.1	K2	<1	.200	.40	.60	.050
MAR												
28...	0650	770	61	7.5	3.0	7.0	K5	<1	.100	.30	.40	.020
AUG												
15...	0730	400	49	6.7	7.0	5.3	K12	K2	<.100	.30	--	.010
SEP												
14...	0730	367	51	7.1	6.5	4.0	22	<1	.100	<.20	--	.010

K BASED ON NON-IDEAL COLONY COUNT.

09018500 LAKE GRANBY NEAR GRANBY, CO

LOCATION.--Lat 40°10'55", long 105°52'14", in NW¼NE¼ sec.35, T.3 N., R.76 W., Grand County, Hydrologic Unit 14010001, in Granby pumping plant at north shore of lake, 2.5 mi north of Granby Dam on Colorado River and 7.5 mi northeast of Granby.

DRAINAGE AREA.--312 mi^2.

PERIOD OF RECORD.--October 1949 to current year. Prior to October 1955, published as Granby Reservoir near Granby.

REVISED RECORDS.--WSP 2124: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by U.S. Bureau of Reclamation); gage readings have been reduced to elevations NGVD. Prior to Apr. 9, 1951, nonrecording gage at dam at present datum.

REMARKS.--Lake is formed by earthfill dam and dikes. Regulation began Sept. 13, 1949, and usuable storage began June 14, 1950, while dam was under construction. Usable oapacity, 465,600 acre-ft, between elevations 8,186.00 ft, trash rack sill at outlet, and 8,280.00 ft, top of radial spillway gates. Dead storage, 74,190 acre-ft. Figures given represent usable contents. Lake is used to store water for pumping to Shadow Mountain Lake for transmountain diversion through Alva B. Adams tunnel for, power and irrigation in South Platte River basin.

COOPERATION.--Records furnished by U.S. Bureau of Reclamation.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 465,900 acre-ft, July 13, 1962, elevation, 8,280.05 ft; minimum since appreciable storage was attained, 13,070 aore-ft, Apr. 16, 1978, elevation, 8,190.93 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 464,800 acre-ft, July 10, elevation, 8,279.89 ft; minimum, 317,500 acre-ft, May 11, elevation, 8,258.08 ft.

MONTHEND ELEVATION IN FEET NGVD AND CONTENTS, AT 2400, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

Date	Elevation (feet)	Contents (aore-feet)	Change in oontents (acre-feet)
Sept. 30	8,277.84	450,000	-
Oct. 31	8,276.82	442,700	-7,300
Nov. 30	8,275.65	434,400	-8,300
Dec. 31	8,272.54	412,600	-21,800
CAL YR 1983			-165,900
Jan. 31	8,271.08	402,500	-10,100
Feb. 29	8,268.60	385,600	-16,900
Mar. 31	8,264.28	356,900	-28,700
Apr. 30	8,259.12	324,000	-32,900
May 31	8,269.99	395,000	+71,000
June 30	8,279.67	463,200	+68,200
July 31	8,279.78	464,000	+800
Aug. 31	8,279.57	462,500	-1,500
Sept. 30	8,279.11	459,100	-3,400
WTR YR 1984			+9,100

09018500 LAKE GRANBY NEAR GRANBY, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 1973 to June 1975, June 1979, June 1980, July 1981, June 1982, July 1983, and June 1984.

REMARKS.--A complete taxonomic identification with cell counts for phytoplankton available in district office.

WATER QUALITY DATA, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DATE	TIME	SAMPLING DEPTH (FEET)	SPECIFIC CONDUCTANCE (UMHOS)	PH (STANDARD UNITS)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)
JUL						
21...	1210	.10	<50	7.4	19.0	6.7
21...	1211	2.00	<50	7.8	18.0	6.8
21...	1212	5.00	<50	7.9	17.5	6.8
21...	1213	10.0	<50	7.9	17.0	6.6
21...	1214	20.0	50	8.0	15.5	6.7
21...	1215	25.0	--	--	14.0	6.3
21...	1216	30.0	50	8.0	11.0	6.3
21...	1217	40.0	50	8.0	9.5	6.2
21...	1218	50.0	50	7.8	8.0	6.2
21...	1219	60.0	60	7.8	6.5	5.8
21...	1220	70.0	60	7.7	5.5	5.3
21...	1221	75.0	--	--	5.5	5.0
21...	1222	80.0	60	7.6	5.0	5.0
21...	1223	90.0	65	7.6	5.0	4.9
21...	1224	100	65	7.6	5.0	4.9
21...	1225	110	65	7.5	5.0	4.8
21...	1226	120	65	7.5	5.0	4.8
21...	1227	125	--	--	5.0	4.8
21...	1228	130	65	7.5	5.0	4.8
21...	1229	140	65	7.5	5.0	4.8
21...	1230	150	65	7.4	5.0	4.8

DATE	TIME	SAMPLING DEPTH (FEET)	SPECIFIC CONDUCTANCE (UMHOS)	PH (STANDARD UNITS)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	COLIFORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLIFORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)
JUL										
21...	1210	.10	<50	7.4	19.0	6.7	<1	<1	<.100	.40
21...	1230	150	65	7.4	5.0	4.8	<1	<1	.100	.50

DATE	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	CADMIUM DISSOLVED (UG/L AS CD)	COPPER, DISSOLVED (UG/L AS CU)	LEAD, DISSOLVED (UG/L AS PB)	NICKEL, DISSOLVED (UG/L AS NI)	ZINC, DISSOLVED (UG/L AS ZN)	ALGAL GROWTH POTENTIAL, BOTTLE TEST (MG/L)	PHYTOPLANKTON, TOTAL (CELLS PER ML)
JUL									
21...	--	.020	<1	1	<1	<1	10	8.3	3900
21...	.60	.030	1	6	<1	<1	10	--	--

09018500 LAKE GRANBY NEAR GRANBY, CO--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	SAMPLING DEPTH (FEET)	SPECIFIC CONDUCTANCE (UMHOS)	PH (STANDARD UNITS)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)
JUN						
27...	0915	.10	44	7.6	14.0	8.6
27...	0916	5.00	44	7.6	14.0	8.8
27...	0917	10.0	44	7.6	13.5	8.7
27...	0918	20.0	44	7.6	12.0	8.3
27...	0919	25.0	44	7.6	10.5	8.1
27...	0920	30.0	44	7.6	9.0	7.4
27...	0921	40.0	44	7.6	8.0	7.4
27...	0922	50.0	44	7.6	7.5	7.4
27...	0923	60.0	44	7.6	7.0	7.0
27...	0924	70.0	44	7.6	6.5	7.0
27...	0925	75.0	44	7.6	6.0	6.8
27...	0926	80.0	44	7.6	6.0	6.7
27...	0927	90.0	44	7.6	6.0	6.6
27...	0928	100	44	7.6	6.0	6.5
27...	0929	110	44	7.6	6.0	6.5
27...	0930	120	44	7.6	6.0	6.5
27...	0931	125	44	7.6	6.0	6.5
27...	0932	130	44	7.6	6.0	6.5
27...	0933	140	44	7.6	6.0	6.4
27...	0934	150	52	6.8	6.0	6.4

DATE	TIME	SAMPLING DEPTH (FEET)	SPECIFIC CONDUCTANCE (UMHOS)	PH (STANDARD UNITS)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	COLIFORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLIFORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)
JUN									
27...	0915	.10	44	7.6	14.0	8.6	<1	<1	<.100
27...	0934	150	52	6.8	6.0	6.4	--	--	<.100

DATE	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	CADMIUM DISSOLVED (UG/L AS CD)	COPPER, DISSOLVED (UG/L AS CU)	LEAD, DISSOLVED (UG/L AS PB)	NICKEL, DISSOLVED (UG/L AS NI)	ZINC, DISSOLVED (UG/L AS ZN)	ALGAL GROWTH POTENTIAL, BOTTLE TEST (MG/L)	PHYTOPLANKTON, TOTAL (CELLS PER ML)
JUN									
27...	.30	.020	<1	<1	4	8	<10	17	19000
27...	<.20	.010	<1	2	<1	<1	10	--	--

09019500 COLORADO RIVER NEAR GRANBY, CO

LOCATION.--Lat 40°07'15", long 105°54'00", in SW¼NW¼ sec.22, T.2 N., R.76 W., Grand County, Hydrologic Unit 14010001, on right bank 0.3 mi upstream from bridge on U.S. Highway 34, 1.3 mi upstream from Willow Creek, and 3.2 mi northeast of Granby.

DRAINAGE AREA.--323 mi^2.

PERIOD OF RECORD.--October 1907 to September 1911 (published as Grand River near Granby), October 1933 to September 1953. May 1961 to current year (irrigation season only). Monthly discharge only for some periods,published in WSP 1313.

REVISED RECORDS.--WSP 2124: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 7,960 ft, from topographic map. June 10, 1908, to Sept. 30, 1911, and May 12 to June 10, 1934, nonrecording gage, at site 300 ft upstream at different datums. June 11, 1934, to Sept. 30, 1953, water-stage recorder at present site and datum.

REMARKS.--Records good. Flow regulated by Lake Granby (station 09018500) since Sept. 13, 1949. 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). Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

EXTREMES FOR PERIOD OF SEASONAL RECORD.--Maximum discharge, 2,510 ft^3/s, July 11, 1983, gage height, 5.39 ft; minimum daily, 9.6 ft^3/s, Sept. 21, 1981.

EXTREMES FOR PERIOD OF CONTINUOUS RECORD.--Maximum discharge observed, 4,100 ft^3/s, June 20, 1909, gage height, 5.5 ft, site and datum then in use; minimum daily, 6.6 ft^3/s, Jan. 29, 1950; minimum observed prior to starting construction of Shadow Mountain Lake, 20 ft^3/s, Apr. 6, 1936 (discharge measurement).

EXTREMES FOR CURRENT SEASON.--Maximum discharge, 2,140 ft^3/s at 1020 July 1, gage height, 5.04 ft; minimum daily, 17 ft^3/s, Sept. 2, 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1						---	928	470	1330	1920	38	19
2						---	886	474	1330	2110	31	17
3						---	958	474	1330	1940	29	17
4						---	1010	474	1330	1580	28	19
5						---	982	474	1340	1180	27	21
6						---	946	474	1120	808	29	21
7						---	916	474	970	820	27	22
8						---	838	474	630	916	27	21
9						---	766	484	438	1080	25	20
10						---	695	510	434	1310	24	18
11						---	650	551	329	1510	25	18
12						---	600	556	266	806	25	18
13						---	551	556	269	454	24	18
14						---	520	484	269	414	26	18
15						---	502	272	279	484	29	18
16						---	488	119	390	538	29	20
17						---	474	84	685	533	29	18
18						---	470	74	1180	434	29	18
19						---	474	64	1070	302	29	18
20						---	474	62	844	226	32	18
21						98	470	192	1000	108	30	19
22						206	470	442	1250	54	30	19
23						350	474	418	1450	62	38	19
24						402	479	332	1500	308	41	18
25						398	474	350	1580	326	40	20
26						402	479	406	1380	266	39	20
27						414	474	492	1080	108	39	20
28						556	470	695	1160	64	35	22
29						745	470	1000	1050	66	36	28
30						928	470	1190	1330	65	38	27
31						964	---	1300	---	52	26	---
TOTAL						---	18858	14421	28613	20844	954	589
MEAN						---	629	465	954	672	30.8	19.6
MAX						---	1010	1300	1580	2110	41	28
MIN						---	470	62	266	52	24	17
AC-FT						---	37400	28600	56750	41340	1890	1170

09020700 WILLOW CREEK RESERVOIR NEAR GRANBY, CO

LOCATION.--Lat 40°08'49", long 105°56'31", in SE¼ sec.7, T.2 N., R.76 W., Grand County, Hydrologic Unit 14010001, in shaft house near right end of Willow Creek Dam, 3.2 mi upstream from mouth, and 4.2 mi north of Granby.

DRAINAGE AREA.--134 mi².

PERIOD OF RECORD.--May 1953 to current year.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by U.S. Bureau of Reclamation); gage readings have been reduced to elevations NGVD.

REMARKS.--Reservoir is formed by earth and rockfill dam; storage began March 1953. Dead storage pool filled May 3, 1953. Usable capacity, 9,060 acre-ft between elevations 8,077.00 ft, trash rack sill at outlet, and 8,130.00 ft, crest of spillway. Dead storage, 1,490 acre-ft. Figures given represent usable contents. Water is pumped to Lake Granby for transmountain diversion for irrigation and power in South Platte River basin. Records are furnished by U.S. Bureau of Reclamation.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 9,100 acre-ft, May 24, 1984, elevation, 8,130.12 ft; minimum since first filling to spillway, 1,470 acre-ft, Apr. 24, 1974, elevation, 8,090.14 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 9,100 acre-ft, May 24, elevation, 8,130.12 ft; minimum, 1,610 acre-ft, Apr. 30, elevation, 8,091.27 ft.

MONTHEND ELEVATION IN FEET NGVD AND CONTENTS, AT 0800, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

Date	Elevation	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	8,123.02	7,140	-
Oct. 31	8,127.14	8,230	+1,090
Nov. 30	8,119.95	6,390	-1,840
Dec. 31	8,123.34	7,220	+830
CAL YR 1983			+1,070
Jan. 31	8,125.66	7,820	+600
Feb. 29	8,127.18	8,240	+420
Mar. 31	8,116.19	5,570	-2,670
Apr. 30	8,091.27	1,610	-3,960
May 31	8,128.25	8,550	+6,940
June 30	8,126.97	8,180	-370
July 31	8,128.49	8,620	+440
Aug. 31	8,128.16	8,520	-100
Sept. 30	8,128.86	8,730	+210
WTR YR 1984			+1,590

09024000 FRASER RIVER NEAR WINTER PARK, CO

LOCATION.--Lat 39°54'00", long 105°46'34", in SE¼ sec.4, T.2 S., R.75 W., Grand County, Hydrologic Unit 14010001, on left bank 500 ft downstream from bridge on U.S. Highway 40, 1.1 mi northwest of Winter Park, 2.0 mi upstream from Vasquez Creek, 3.5 mi downstream from point of diversion for Moffat water tunnel, and 3.9 mi southeast of Fraser.

DRAINAGE AREA.--27.6 mi².

PERIOD OF RECORD.--September 1910 to current year. 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.

REVISED RECORDS.--WSP 929: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 8,906.23 ft, Colorado State Highway Datum (levels by U.S. Geological Survey). Sept. 23, 1910, to May 12, 1916, nonrecording gage at trail bridge 0.6 mi upstream at different datum.

REMARKS.--Records good except those for winter period, which are poor. Transmountain diversions above station through Berthoud Pass ditch (see elsewhere in this report) and to Moffat water tunnel (not known since 1968). Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 820 ft³/s, June 13, 1918, gage height, 2.9 ft; minimum daily determined, 2 ft³/s, Mar. 30, Apr. 9, 1912, Jan 23, 1915.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 419 ft³/s at 2000 May 24, gage height, 2.39 ft; maximum gage height, 2.41 ft at 2300 June 26; minimum daily discharge, 6.4 ft³/s, Feb. 2-4, 8, 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.2	8.2	9.6	7.6	6.5	7.0	6.8	9.6	348	274	19	29
2	9.2	7.9	9.7	7.5	6.4	7.0	6.9	9.8	297	235	21	24
3	9.3	8.2	9.7	7.5	6.4	6.8	7.1	9.9	275	242	22	22
4	9.2	8.2	9.6	7.5	6.4	7.0	7.2	11	243	250	22	23
5	9.1	8.6	9.3	7.6	6.6	7.0	7.2	10	191	247	22	24
6	8.9	8.6	9.0	7.6	6.8	7.0	7.5	11	161	224	25	23
7	8.9	8.6	9.0	7.6	6.6	7.0	7.6	10	126	219	23	27
8	8.9	8.6	8.8	7.5	6.4	7.0	8.2	11	88	210	22	25
9	8.7	8.6	8.8	7.5	6.6	7.1	8.0	14	61	180	22	22
10	8.7	8.6	9.5	7.4	6.8	7.0	8.2	20	57	217	24	21
11	8.6	8.8	9.1	7.2	6.4	7.0	8.2	29	61	151	19	20
12	8.5	9.0	9.1	7.2	6.6	7.0	8.5	35	57	137	23	20
13	8.5	9.0	9.0	7.1	6.6	7.0	8.5	40	105	122	23	18
14	8.5	9.4	8.6	7.2	6.8	7.0	8.5	57	261	127	23	18
15	8.2	9.1	8.6	7.1	7.0	7.0	8.5	104	266	115	24	18
16	7.9	9.0	8.8	7.2	7.0	7.0	8.5	106	271	89	29	15
17	7.9	9.0	8.9	7.4	7.0	7.0	8.5	111	282	71	27	9.8
18	7.9	9.1	8.9	7.4	6.8	7.1	8.6	122	291	64	25	9.5
19	7.9	9.1	8.9	7.7	7.0	7.1	8.8	130	303	19	24	8.8
20	7.5	9.0	8.9	7.7	7.0	7.0	9.0	159	317	20	28	8.8
21	7.5	9.0	9.0	7.4	7.0	7.0	9.2	178	347	21	32	8.8
22	7.5	9.0	9.0	7.6	7.0	7.0	9.2	223	358	22	27	8.9
23	7.5	9.0	9.0	7.3	7.0	7.0	9.4	241	322	24	25	8.4
24	7.5	9.0	9.0	7.2	7.0	7.0	9.4	301	323	23	28	8.4
25	7.9	9.0	9.0	6.8	7.0	7.0	9.4	340	280	22	28	9.3
26	7.9	9.0	8.9	6.8	7.0	7.0	9.5	271	250	26	27	9.1
27	8.2	9.1	9.1	6.8	7.0	7.2	9.5	260	248	39	25	8.8
28	8.6	9.2	9.7	6.8	7.0	7.0	9.5	229	225	45	23	8.9
29	8.6	9.3	9.0	6.8	7.0	7.0	9.3	226	237	36	23	9.0
30	8.6	9.4	9.0	7.1	---	7.0	9.3	255	263	45	23	8.4
31	8.6	---	8.6	6.7	---	6.9	---	296	---	31	24	---
TOTAL	259.9	265.6	281.1	225.8	196.7	217.2	254.0	3829.3	6914	3547	752	473.9
MEAN	8.38	8.85	9.07	7.28	6.78	7.01	8.47	124	230	114	24.3	15.8
MAX	9.3	9.4	9.7	7.7	7.0	7.2	9.5	340	358	274	32	29
MIN	7.5	7.9	8.6	6.7	6.4	6.8	6.8	9.6	57	19	19	8.4
AC-FT	516	527	558	448	390	431	504	7600	13710	7040	1490	940

CAL YR 1983	TOTAL	15987.7	MEAN	43.8	MAX	440	MIN	4.5	AC-FT	31710
WTR YR 1984	TOTAL	17216.5	MEAN	47.0	MAX	358	MIN	6.4	AC-FT	34150

09025000 VASQUEZ CREEK NEAR WINTER PARK, CO

LOCATION.--Lat 39°55'13", long 105°47'05", in NE¼NW¼ sec.33. T.1 S., R.75 W., Grand County, Hydrologic Unit 14010001, on right bank 30 ft downstream from bridge on U.S. Highway 40, 0.2 mi upstream from mouth, 2.5 mi northwest of Winter Park, 2.5 mi southeast of Fraser, and 4.5 mi downstream from Moffat water tunnel diversion.

DRAINAGE AREA.--27.8 mi^2.

PERIOD OF RECORD.--June to August 1907, July to November 1909, October 1933 to current year. Monthly discharge only for some periods, published in WSP 1313. Records for June to October 1908, published in WSP 269, are unreliable and should not be used. Published as Vasquez River at lower station, near Fraser 1907-9, 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.

REVISED RECORDS.--See PERIOD OF RECORD.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 8,768.48 ft, National Geodetic Vertical Datum of 1929. June 1, 1907, to Oct. 31, 1909, nonrecording gage at site 0.8 mi upstream at different datum.

REMARKS.--Records good except those for winter period, which are poor. Transmountain diversions above station to Moffat water tunnel not known since 1959. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 526 ft^3/s, June 27, 1983, gage height, 4.14 ft, from rating curve extended above 286 ft^3/s; no flow at times in 1944, 1946, 1956, 1960, 1966.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 303 ft^3/s at 2000 May 24, gage height, 3.37 ft; minimum daily, 2.5 ft^3/s, Mar. 3-25.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.4	7.4	4.7	3.0	3.2	3.0	3.8	4.0	247	207	11	53
2	5.2	7.4	4.6	3.0	3.2	2.8	4.0	3.9	228	196	10	45
3	4.7	6.2	4.4	3.0	3.5	2.5	3.9	3.8	211	184	11	41
4	4.6	6.1	4.3	3.0	3.5	2.5	4.0	3.8	213	169	11	39
5	4.7	6.1	4.2	3.0	3.3	2.5	4.0	3.8	199	139	11	37
6	4.5	5.7	4.0	3.0	3.2	2.5	4.0	3.8	184	105	13	36
7	4.7	5.4	3.8	3.0	3.0	2.5	4.0	3.8	178	98	12	41
8	4.6	5.6	3.7	3.0	3.0	2.5	4.0	4.2	156	93	11	40
9	4.6	5.6	3.5	3.0	3.1	2.5	4.0	5.4	142	79	11	36
10	4.9	6.0	3.0	3.0	3.2	2.5	4.5	7.9	134	102	10	33
11	4.9	6.0	3.0	3.0	3.5	2.5	4.5	11	83	61	10	32
12	4.9	6.0	3.0	3.0	3.5	2.5	4.5	13	65	48	10	33
13	5.1	6.0	3.0	3.2	3.6	2.5	4.5	15	59	45	12	32
14	5.3	6.0	3.0	3.3	3.5	2.5	4.5	20	207	76	12	31
15	5.2	6.0	3.0	3.3	3.3	2.5	4.5	29	203	62	11	31
16	5.1	6.0	3.0	3.3	3.3	2.5	4.5	34	225	53	13	35
17	4.8	6.0	3.0	3.3	3.3	2.5	4.5	60	237	46	9.5	33
18	4.6	6.0	3.0	3.3	3.1	2.5	4.5	84	224	38	9.4	28
19	4.7	6.0	3.0	3.3	3.0	2.5	4.5	78	236	23	9.6	6.4
20	4.8	6.0	3.0	3.3	3.2	2.5	4.3	105	246	12	10	6.0
21	4.5	6.0	3.0	3.3	3.4	2.5	4.0	135	253	11	12	5.7
22	4.6	6.0	3.0	3.1	3.6	2.5	3.8	162	256	11	11	6.1
23	4.6	6.0	3.0	3.0	3.5	2.5	4.4	182	253	11	10	7.0
24	9.5	6.0	3.0	3.0	3.4	2.5	4.5	223	248	12	9.5	6.7
25	16	6.2	3.0	3.1	3.4	2.5	4.0	234	237	19	9.7	7.1
26	16	5.8	3.0	3.0	3.2	2.6	4.2	191	230	27	22	6.9
27	16	5.6	3.0	2.9	3.3	2.8	3.9	192	216	24	44	6.6
28	16	5.6	3.0	2.9	3.2	2.9	4.0	185	180	29	44	6.6
29	17	5.4	3.0	2.9	3.0	3.0	4.0	192	176	26	44	6.6
30	17	5.0	3.0	3.0	---	3.2	4.0	208	194	26	42	6.6
31	13	---	3.0	3.1	---	3.5	---	225	---	21	43	---
TOTAL	231.5	179.1	103.2	95.6	95.5	81.3	125.8	2622.4	5920	2053	508.7	734.3
MEAN	7.47	5.97	3.33	3.08	3.29	2.62	4.19	84.6	197	66.2	16.4	24.5
MAX	17	7.4	4.7	3.3	3.6	3.5	4.5	234	256	207	44	53
MIN	4.5	5.0	3.0	2.9	3.0	2.5	3.8	3.8	59	11	9.4	5.7
AC-FT	459	355	205	190	189	161	250	5200	11740	4070	1010	1460

CAL YR 1983	TOTAL	14236.0	MEAN	39.0	MAX	417	MIN	1.9	AC-FT	28240
WTR YR 1984	TOTAL	12750.4	MEAN	34.8	MAX	256	MIN	2.5	AC-FT	25290

NOTE.--NO GAGE-HEIGHT RECORD FEB. 29 TO APR. 19.

09025400 ELK CREEK NEAR FRASER, CO

LOCATION.--Lat 39°55'09", long 105°49'31", in SE¼NW¼ sec.31, T.1 S., R.75 W., Grand County, Hydrologic Unit 14010001, on right bank 100 ft upstream from unnamed tributary 1,150 ft downstream from West Elk Creek, 2.0 mi southwest of Fraser, and 2.5 mi upstream from mouth.

DRAINAGE AREA.--7.15 mi^2.

PERIOD OF RECORD.--September 1970 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 8,805 ft, from topographic map.

REMARKS.--Records good except those for winter period, which are poor. Transmountain diversions above station to Moffat water tunnel. Diversions for irrigation of about 100 acres of hay meadows above station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 106 ft^3/s, May 24, 1984, gage height, 3.13 ft; minimum daily, 0.10 ft^3/s, Jan. 13, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 106 ft^3/s at 1700 May 24, gage height, 3.13 ft; minimum daily, 0.20 ft^3/s, Nov. 6, 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.38	.22	.30	.34	.44	.45	.52	.74	71	35	3.8	4.5
2	.38	.22	.30	.34	.44	.48	.52	.76	65	28	3.6	3.5
3	.38	.22	.30	.36	.44	.48	.51	.72	58	25	3.4	3.1
4	.38	.23	.30	.36	.48	.45	.50	.72	56	23	3.3	2.9
5	.38	.21	.30	.38	.48	.45	.52	.77	50	14	3.2	2.7
6	.38	.20	.30	.38	.48	.45	.52	.85	45	3.3	4.9	2.6
7	.36	.22	.30	.38	.48	.46	.53	.79	47	12	4.3	3.5
8	.36	.24	.30	.38	.48	.46	.55	.84	26	5.0	3.3	3.4
9	.34	.30	.30	.38	.48	.46	.55	1.3	13	4.8	3.1	2.8
10	.34	.24	.30	.38	.48	.47	.54	2.2	11	7.3	2.8	2.6
11	.39	.20	.30	.38	.48	.45	.53	3.5	11	5.1	2.6	2.6
12	.37	.24	.30	.38	.48	.41	.52	6.1	10	5.8	3.3	2.6
13	.28	.26	.30	.38	.48	.42	.52	9.8	10	5.7	3.2	2.4
14	.29	.26	.30	.38	.48	.44	.50	13	28	5.6	2.1	2.3
15	.30	.28	.30	.40	.48	.44	.52	27	45	3.6	2.0	2.4
16	.31	.28	.30	.38	.46	.45	.60	33	44	3.3	5.3	3.1
17	.28	.28	.30	.38	.47	.46	.73	37	44	2.8	6.8	3.0
18	.26	.28	.30	.38	.48	.45	.84	37	39	3.4	3.6	2.5
19	.26	.28	.30	.38	.43	.45	.79	32	36	5.0	3.2	2.2
20	.24	.27	.30	.38	.41	.46	.74	37	36	4.8	3.7	2.2
21	.24	.26	.30	.38	.41	.48	.71	63	35	4.6	5.3	2.2
22	.24	.26	.31	.38	.42	.49	.68	80	33	4.3	4.5	2.4
23	.24	.26	.32	.38	.42	.48	.72	82	31	5.5	3.6	2.1
24	.24	.28	.32	.38	.43	.49	.87	86	28	5.3	4.0	2.1
25	.23	.27	.32	.41	.43	.47	.80	95	28	4.1	4.6	2.4
26	.22	.30	.34	.41	.43	.48	.85	79	30	3.6	4.1	2.4
27	.22	.30	.34	.44	.41	.48	.80	75	22	3.5	3.5	2.4
28	.24	.30	.34	.44	.41	.47	.79	68	27	4.0	3.2	2.3
29	.22	.30	.34	.44	.41	.47	.75	66	27	4.7	3.0	2.2
30	.22	.30	.34	.44	---	.49	.72	70	31	4.8	2.9	2.1
31	.22	---	.34	.44	---	.52	---	69	---	4.5	2.8	---
TOTAL	9.19	7.76	9.61	12.04	13.10	14.36	19.24	1078.09	1037	251.4	113.0	79.5
MEAN	.30	.26	.31	.39	.45	.46	.64	34.8	34.6	8.11	3.65	2.65
MAX	.39	.30	.34	.44	.48	.52	.87	95	71	35	6.8	4.5
MIN	.22	.20	.30	.34	.41	.41	.50	.72	10	2.8	2.0	2.1
AC-FT	18	15	19	24	26	28	38	2140	2060	499	224	158

CAL YR 1983	TOTAL	2510.34	MEAN	6.88	MAX	61	MIN	.20	AC-FT	4980
WTR YR 1984	TOTAL	2644.29	MEAN	7.22	MAX	95	MIN	.20	AC-FT	5240

09026500 ST. LOUIS CREEK NEAR FRASER, CO

LOCATION.--Lat 39°54'36", long 105°52'40", in SE¼SW¼ sec.34, T.1 S., R.76 W., Grand County, Hydrologic Unit 14010001, on left bank 300 ft downstream from West St. Louis Creek and 4.1 mi southwest of Fraser.

DRAINAGE AREA.--32.9 mi^2.

PERIOD OF RECORD.--October 1933 to current year. 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.

REVISED RECORDS.--WSP 2124: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 8,980.17 ft, National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter period, which are poor. Transmountain diversions above station to Moffat water tunnel not known since 1959. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 470 ft^3/s, 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.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 301 ft^3/s at 1900 June 1, gage height, 2.50 ft; minimum daily, 5.4 ft^3/s, Dec. 10 to Jan. 12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	8.6	8.0	5.4	7.2	7.0	10	7.0	274	237	30	25
2	17	8.8	8.0	5.4	7.2	7.0	9.6	6.9	264	199	31	21
3	18	9.3	7.7	5.4	7.2	7.4	10	6.4	247	187	30	20
4	19	8.3	7.4	5.4	7.1	7.6	10	6.8	247	177	28	19
5	18	8.0	7.0	5.4	6.9	8.0	10	6.6	239	132	31	19
6	17	8.9	6.8	5.4	7.0	8.0	10	6.6	221	91	34	18
7	17	7.9	6.4	5.4	7.0	8.0	10	7.0	213	90	23	21
8	17	9.0	6.0	5.4	7.0	8.0	11	8.0	178	88	23	20
9	16	9.0	5.6	5.4	7.0	8.0	10	8.4	130	80	22	19
10	18	9.0	5.4	5.4	7.0	8.0	10	11	96	103	22	18
11	19	8.8	5.4	5.4	7.0	8.4	10	12	84	86	21	18
12	18	8.5	5.4	5.4	7.0	8.6	10	15	70	81	23	19
13	17	8.2	5.4	5.6	7.0	9.0	9.4	18	63	86	22	18
14	18	8.0	5.4	5.8	7.0	9.4	9.0	28	181	82	21	18
15	16	8.0	5.4	6.0	7.0	9.4	9.0	56	262	72	21	19
16	15	8.0	5.4	6.2	7.0	9.8	9.0	63	278	67	23	19
17	15	8.0	5.4	6.2	7.0	10	9.0	66	262	64	23	11
18	15	8.0	5.4	6.4	7.0	10	9.0	68	250	33	22	10
19	14	8.1	5.4	6.8	7.0	10	8.6	66	262	31	22	9.3
20	9.9	8.0	5.4	7.0	7.0	10	7.7	89	270	32	23	9.2
21	9.6	8.0	5.4	7.0	7.0	10	8.0	115	292	32	24	9.3
22	9.2	8.0	5.4	7.0	7.0	10	8.0	149	265	31	22	10
23	9.4	8.0	5.4	7.0	7.0	10	7.1	180	262	34	21	9.6
24	9.2	8.0	5.4	7.0	7.0	10	7.6	230	262	39	22	9.1
25	9.4	8.0	5.4	7.0	7.0	10	7.4	257	253	32	32	11
26	8.9	8.0	5.4	7.4	7.0	10	8.2	233	253	47	58	13
27	8.9	8.0	5.4	7.2	7.0	10	8.0	230	245	67	51	11
28	9.0	8.0	5.4	7.2	7.0	10	8.0	221	216	74	22	9.6
29	8.9	8.0	5.4	7.2	7.0	10	8.0	225	183	71	21	9.3
30	8.9	8.0	5.4	7.2	---	10	7.5	243	203	60	20	8.9
31	8.6	---	5.4	7.2	---	9.5	---	253	---	30	20	---
TOTAL	430.9	248.4	181.7	193.2	203.6	281.1	269.1	2891.7	6525	2535	808	451.3
MEAN	13.9	8.28	5.86	6.23	7.02	9.07	8.97	93.3	218	81.8	26.1	15.0
MAX	19	9.3	8.0	7.4	7.2	10	11	257	292	237	58	25
MIN	8.6	7.9	5.4	5.4	6.9	7.0	7.1	6.4	63	30	20	8.9
AC-FT	855	493	360	383	404	558	534	5740	12940	5030	1600	895

CAL YR 1983	TOTAL	15743.0	MEAN	43.1	MAX	331	MIN	5.4	AC-FT	31230
WTR YR 1984	TOTAL	15019.0	MEAN	41.0	MAX	292	MIN	5.4	AC-FT	29790

NOTE.--NO GAGE-HEIGHT RECORD FEB. 6 TO MAR. 17.

09032000 RANCH CREEK NEAR FRASER, CO

LOCATION.--Lat 39°57'00", long 105°45'54", in NW¼NE¼ sec.22, T.1 S., R.75 W., Grand County, Hydrologic Unit 14010001, on right bank 450 ft downstream from Middle Fork and 2.7 mi east of Fraser.

DRAINAGE AREA.--19.9 mi².

PERIOD OF RECORD.--August 1934 to current year. Records since May 15, 1949, equivalent to earlier records if diversion to Moffat water tunnel is added to flow past station.

REVISED RECORDS.--WSP 1243: 1935.

GAGE.--Water-stage recorder. Altitude of gage is 8,685 ft, from topographic map.

REMARKS.--Records good except those for winter period, which are poor. Diversion above station for irrigation of hay meadows along Fraser River. Transmountain diversion above station to Moffat water tunnel (not furnished by Colorado Division of Water Resources). Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 451 ft³/s, June 27, 1983, gage height, 3.96 ft; minimum daily, 0.4 ft³/s, Sept. 21, Oct. 6, 1960.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 278 ft³/s at 1900 June 16, gage height, 3.27 ft; minimum daily, 2.2 ft³/s, Mar. 13, 14, 18-20, Mar. 29 to Apr. 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.6	3.7	3.1	3.5	3.5	2.8	2.2	2.6	237	199	7.5	8.2
2	3.7	3.7	3.1	3.5	3.5	2.7	2.2	2.7	224	181	7.4	7.1
3	3.8	3.7	3.0	3.5	3.5	2.6	2.2	2.5	215	165	7.8	6.2
4	4.1	3.5	2.9	3.5	3.5	2.5	2.3	2.5	213	151	7.8	5.9
5	3.9	3.5	3.0	3.5	3.5	2.5	2.4	2.5	198	139	9.1	5.6
6	3.7	3.5	3.0	3.5	3.5	2.5	2.4	2.4	170	100	11	5.4
7	3.5	3.4	3.0	3.5	3.9	2.5	2.4	2.4	98	68	8.8	7.1
8	3.5	3.5	3.1	3.5	3.7	2.5	2.6	2.5	59	66	7.7	6.8
9	3.4	3.5	3.0	3.5	3.3	2.4	2.7	3.2	54	60	7.6	6.2
10	3.4	3.5	2.9	3.5	3.3	2.4	2.6	4.6	49	76	7.2	9.1
11	3.5	3.5	2.9	3.5	3.3	2.4	2.6	6.7	41	56	6.9	9.0
12	3.5	3.2	2.9	3.5	3.5	2.4	2.5	8.9	39	50	6.7	5.9
13	3.7	3.1	2.9	3.5	3.5	2.2	2.4	13	43	49	6.8	5.4
14	3.9	3.5	2.9	3.5	3.3	2.2	2.6	17	105	49	6.2	5.1
15	3.9	3.4	3.0	3.5	3.3	2.3	2.8	21	166	42	6.3	5.0
16	3.8	3.6	3.0	3.5	3.3	2.4	3.0	35	234	37	8.6	4.8
17	3.8	3.7	3.1	3.5	3.3	2.4	3.1	86	250	32	8.4	3.7
18	3.9	3.3	3.1	3.5	3.0	2.2	3.4	78	239	22	6.7	3.4
19	3.9	3.3	3.1	3.5	2.9	2.2	3.2	75	241	17	6.3	3.7
20	3.7	3.3	3.1	3.5	2.9	2.2	3.3	94	244	5.1	7.3	3.7
21	3.7	3.3	3.2	3.5	2.9	2.3	3.3	118	245	5.1	8.9	3.7
22	3.7	3.2	3.3	3.5	2.9	2.4	3.3	143	246	5.9	7.1	3.9
23	3.7	3.2	3.3	3.5	2.9	2.4	3.0	170	242	7.3	6.3	3.8
24	3.7	3.3	3.5	3.5	2.9	2.4	3.4	209	234	5.5	7.1	3.6
25	3.7	3.2	3.5	3.5	2.9	2.4	3.2	231	221	4.8	12	3.9
26	4.0	3.1	3.5	3.5	2.9	2.4	3.3	199	219	8.5	18	4.1
27	3.8	3.4	3.5	3.5	2.9	2.4	3.2	196	200	20	16	4.3
28	3.6	3.4	3.5	3.5	2.8	2.4	3.0	188	176	33	7.1	3.9
29	3.5	3.3	3.7	3.5	2.8	2.2	2.9	195	179	31	5.9	3.9
30	3.5	3.3	3.7	3.5	---	2.2	2.6	214	187	30	6.4	3.9
31	3.6	---	3.7	3.5	---	2.2	---	231	---	19	6.3	---
TOTAL	114.7	102.1	98.5	108.5	93.4	74.0	84.1	2556.5	5268	1734.2	253.2	156.3
MEAN	3.70	3.40	3.18	3.50	3.22	2.39	2.80	82.5	176	55.9	8.17	5.21
MAX	4.1	3.7	3.7	3.5	3.9	2.8	3.4	231	250	199	18	9.1
MIN	3.4	3.1	2.9	3.5	2.8	2.2	2.2	2.4	39	4.8	5.9	3.4
AC-FT	228	203	195	215	185	147	167	5070	10450	3440	502	310

CAL YR 1983 TOTAL 11468.0 MEAN 31.4 MAX 342 MIN 1.8 AC-FT 22750
WTR YR 1984 TOTAL 10643.5 MEAN 29.1 MAX 250 MIN 2.2 AC-FT 21110

NOTE.--NO GAGE-HEIGHT RECORD JAN. 1 TO FEB. 6.

09032100 CABIN CREEK NEAR FRASER, CO

LOCATION.--Lat 39°59'09", long 105°44'40", in NW¼SE¼ sec.2, T.1 S., R.75 W., Grand County, Hydrologic Unit 14010001, on right bank 200 ft downstream from concrete diversion dam, 2.7 mi upstream from mouth and 4.6 mi northeast of Fraser.

DRAINAGE AREA.--4.87 mi^2.

PERIOD OF RECORD.--October 1983 to September 1984.

GAGE.--Water-stage recorder. Altitude of gage is 9,560 ft, from topographic map.

REMARKS.--Records good except those for winter period, which are poor. Transmountain diversion above station to Moffat water tunnel (not furnished by Colorado Division of Water resources). Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 126 ft^3/s June 13, 1984, gage height, 2.37 ft; minimum daily, 1.0 ft^3/s Mar. 29 to Apr. 9, 1984.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 126 ft^3/s at 2300 June 13, gage height, 2.37 ft; minimum daily, 1.0 ft^3/s Mar. 29 to Apr. 9.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.9	1.8	1.5	1.6	1.4	1.2	1.0	1.1	68	59	9.8	9.0
2	1.9	1.8	1.5	1.5	1.4	1.2	1.0	1.1	62	52	9.4	7.3
3	1.9	1.8	1.5	1.5	1.4	1.2	1.0	1.1	59	48	8.5	6.4
4	2.1	1.8	1.5	1.5	1.4	1.2	1.0	1.1	56	45	8.5	5.9
5	2.1	1.8	1.5	1.5	1.4	1.2	1.0	1.1	50	42	8.0	5.5
6	1.9	1.8	1.5	1.5	1.4	1.1	1.0	1.1	45	39	9.8	5.2
7	1.8	1.8	1.5	1.5	1.4	1.1	1.0	1.1	41	37	9.4	6.5
8	1.8	1.8	1.5	1.5	1.4	1.1	1.0	1.2	35	35	8.5	7.4
9	1.8	1.8	1.5	1.5	1.4	1.1	1.0	1.8	31	31	8.0	6.3
10	1.8	1.8	1.5	1.5	1.4	1.1	1.1	2.3	30	38	8.0	5.6
11	1.9	1.8	1.4	1.5	1.3	1.1	1.1	3.1	38	30	7.3	5.2
12	2.0	1.8	1.4	1.4	1.3	1.1	1.1	4.0	40	27	7.3	5.1
13	2.3	1.8	1.4	1.4	1.3	1.1	1.1	6.0	64	25	7.3	4.9
14	2.4	1.8	1.4	1.4	1.3	1.1	1.1	8.4	96	33	6.9	4.7
15	2.0	1.8	1.4	1.4	1.3	1.1	1.1	12	82	25	6.6	5.0
16	1.9	1.8	1.4	1.4	1.3	1.1	1.1	14	78	23	8.5	6.8
17	1.9	1.8	1.4	1.4	1.3	1.1	1.2	18	70	21	8.5	5.8
18	1.9	1.8	1.4	1.4	1.3	1.1	1.2	18	66	19	6.9	5.0
19	2.0	1.9	1.4	1.4	1.3	1.1	1.2	15	67	16	6.6	4.6
20	2.2	1.8	1.4	1.4	1.3	1.1	1.2	21	68	14	8.5	4.4
21	2.5	1.8	1.5	1.4	1.3	1.1	1.2	30	68	14	9.8	4.4
22	2.7	1.7	1.6	1.4	1.3	1.1	1.2	43	68	14	8.0	4.6
23	2.7	1.6	1.6	1.4	1.3	1.1	1.2	54	69	16	7.4	4.4
24	2.5	1.6	1.6	1.4	1.2	1.1	1.2	74	64	14	8.9	4.3
25	2.3	1.6	1.6	1.4	1.2	1.1	1.2	66	61	13	9.5	5.7
26	2.1	1.6	1.6	1.4	1.2	1.1	1.2	49	57	12	8.2	3.2
27	2.0	1.6	1.6	1.4	1.2	1.1	1.1	53	54	12	7.6	3.6
28	2.0	1.6	1.6	1.4	1.2	1.1	1.1	52	53	12	7.4	3.1
29	2.0	1.6	1.6	1.4	1.2	1.0	1.1	57	54	12	7.1	1.7
30	2.0	1.6	1.6	1.4	---	1.0	1.1	67	56	11	6.7	2.1
31	1.9	---	1.6	1.4	---	1.0	---	69	---	10	6.5	---
TOTAL	64.2	52.4	46.5	44.6	38.1	34.3	33.1	746.5	1750	799	249.4	153.7
MEAN	2.07	1.75	1.50	1.44	1.31	1.11	1.10	24.1	58.3	25.8	8.05	5.12
MAX	2.7	1.9	1.6	1.6	1.4	1.2	1.2	74	96	59	9.8	9.0
MIN	1.8	1.6	1.4	1.4	1.2	1.0	1.0	1.1	30	10	6.5	1.7
AC-FT	127	104	92	88	76	68	66	1480	3470	1580	495	305

WTR YR 1984 TOTAL 4011.8 MEAN 11.0 MAX 96 MIN 1.0 AC-FT 7960

NOTE.--NO GAGE-HEIGHT RECORD DEC. 1 TO MAY 14.

09034250 COLORADO RIVER AT WINDY GAP NEAR GRANBY, COLORADO

LOCATION.--Lat 40°06'30", long 106°00'13" in NW¼ sec.27, R.77 W., T.2 N., Grand County, Hydrologic Unit 14010001,on right bank 300 ft downstream from county highway bridge, 2.4 mi downstream from mouth of Fraser River and 3.8 mi northwest of Granby.

DRAINAGE AREA.--789 mi^2.

PERIOD OF RECORD.--October 1981 to current year.

GAGE.--Water-stage recorder. Datum of gage is 7,790 ft, from topographic map.

REMARKS.--Records good except those for winter period, which are poor. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,260 ft^3/s, May 25, 1984, gage height, 7.34 ft; minimum daily, 42 ft^3/s, Oct. 11, 2, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,260 ft^3/s at 1200 May 25, gage height, 7.34 ft; minimum daily, 75 ft^3/s, Jan. 19-24.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	107	115	95	90	85	80	1070	641	4440	3560	357	292
2	107	110	95	90	85	80	1160	686	4380	3640	301	296
3	107	107	95	90	85	80	1190	680	4160	3230	283	262
4	115	105	95	90	85	80	1180	686	3930	2750	270	249
5	115	105	95	90	85	80	1180	693	3720	2260	266	245
6	112	107	95	90	85	80	1060	700	3410	1710	292	241
7	107	105	95	90	85	80	1000	674	3400	1650	324	237
8	105	124	95	90	85	80	968	674	2850	1720	287	253
9	102	115	95	90	85	80	900	787	2380	1820	287	233
10	105	115	95	90	85	80	836	1060	2050	2200	270	217
11	112	110	95	90	85	80	787	1510	1930	2320	253	217
12	112	110	95	90	85	80	738	1880	1790	1560	249	225
13	110	109	95	90	85	87	693	2200	1770	1080	279	221
14	112	107	95	90	85	90	674	2420	2310	1170	283	213
15	118	108	95	90	85	94	674	2500	2590	1080	283	210
16	112	108	95	88	80	100	680	2530	2850	1060	274	229
17	107	108	95	84	80	108	712	2420	3090	1000	296	221
18	110	108	95	78	80	118	752	2480	3280	857	270	162
19	115	107	95	75	80	130	752	2180	3190	628	262	139
20	107	107	95	75	80	150	745	2380	2960	504	283	124
21	99	105	95	75	80	200	719	2790	2930	417	324	124
22	97	102	95	75	80	287	693	3240	3140	357	324	158
23	94	100	95	75	80	342	719	3580	3280	391	296	162
24	94	95	90	75	80	498	773	4160	3280	648	296	170
25	102	95	90	80	80	526	780	4930	3280	700	319	165
26	107	95	90	85	80	521	759	4160	3090	622	333	135
27	112	95	90	85	80	532	700	3870	2790	492	357	158
28	110	95	90	85	80	641	654	3750	2630	443	319	162
29	110	95	90	85	80	808	648	3750	2330	476	292	165
30	112	95	90	85	---	890	615	3870	2680	561	270	162
31	115	---	90	85	---	980	---	4220	---	433	262	---
TOTAL	3349	3162	2905	2640	2395	8062	24811	72101	89910	41339	9061	6047
MEAN	108	105	93.7	85.2	82.6	260	827	2326	2997	1334	292	202
MAX	118	124	95	90	85	980	1190	4930	4440	3640	357	296
MIN	94	95	90	75	80	80	615	641	1770	357	249	124
AC-FT	6640	6270	5760	5240	4750	15990	49210	143000	178300	82000	17970	11990

CAL YR 1983 TOTAL 181441 MEAN 497 MAX 4360 MIN 60 AC-FT 359900
WTR YR 1984 TOTAL 265782 MEAN 726 MAX 4930 MIN 75 AC-FT 527200

NOTE.--NO GAGE-HEIGHT RECORD DEC. 21 TO MAR. 21.

09034500 COLORADO RIVER AT HOT SULPHUR SPRINGS, CO

LOCATION.--Lat 40°05'00", long 106°05'15", in NE¼NE¼ sec.2, T.1 N., R.78W., Grand County, Hydrologic Unit 14010001, on left bank about 1,000 ft north of U.S. Highway 40, 1 mi northeast of Hot Sulphur Springs, and 4.5 mi upstream from Beaver Creek.

DRAINAGE AREA.--825 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1904 to current year. 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.

REVISED RECORDS.--WSP 1313: 1905. WSP 1924: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 7,670 ft, from railroad elevations. July 28, 1904, to Apr. 16, 1906, nonrecording gage on bridge 1.7 mi downstream at different datum. Apr. 17, 1906, to Sept. 18, 1930, nonrecording gage at bridge 1.4 mi downstream at datum 7,651.26 ft, National Geodetic Vertical Datum of 1929. Supplemental water-stage recorder (nonrecording gage prior to Jan. 1, 1963) at different datum at site 1.7 mi downstream, used for winter records some years.

REMARKS.--Records good except those for winter period, which are poor. Flow affected by transmountain diversions, storage reservoirs, and diversions above station for irrigation of about 13,000 acres.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 10,300 ft^3/s, June 15, 1921, gage height, 8.7 ft, site and datum then in use; minimum daily, 33 ft^3/s, Sept. 27, 1956.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,720 ft^3/s at 1400 May 25, gage height, 5.10 ft; minimum daily, 75 ft^3/s, Jan. 19-25.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	109	124	95	90	85	80	1060	703	4590	3610	377	287
2	106	118	95	90	85	80	1150	766	4530	3790	318	298
3	109	115	95	90	85	80	1180	760	4280	3400	277	253
4	115	113	95	90	85	80	1180	766	4010	2820	252	239
5	114	113	95	90	85	80	1160	769	3750	2290	258	234
6	113	113	95	90	85	80	1100	775	3430	1640	280	228
7	113	110	95	90	85	80	1050	742	3430	1550	332	218
8	110	127	95	90	85	80	1010	732	2830	1630	284	241
9	110	113	95	90	85	80	949	841	2260	1750	279	217
10	113	113	95	90	85	80	875	1110	1890	2150	268	201
11	124	124	96	90	85	82	837	1550	1790	2350	253	202
12	127	124	88	90	85	84	774	1900	1600	1570	240	216
13	124	118	95	90	85	88	733	2220	1600	1030	275	197
14	130	110	96	90	85	90	704	2540	2060	1150	280	191
15	137	110	96	90	85	95	702	2610	2400	1070	290	187
16	134	113	96	90	80	100	712	2680	2680	1040	278	209
17	127	110	96	84	80	106	750	2570	3030	1010	302	208
18	127	110	96	80	80	115	804	2630	3310	887	270	143
19	134	110	96	75	80	140	808	2260	3230	694	261	125
20	127	110	96	75	80	165	807	2410	2850	568	279	114
21	121	108	96	75	80	205	768	2800	2840	474	341	116
22	118	100	96	75	80	290	747	3240	3130	378	349	134
23	113	95	94	75	80	350	781	3560	3310	413	312	138
24	113	95	90	75	80	500	850	4150	3330	649	312	146
25	118	95	90	75	80	560	862	5310	3300	706	344	134
26	127	95	90	80	80	540	833	4590	3080	664	351	116
27	130	95	90	85	80	560	764	4090	2670	555	378	130
28	134	95	90	85	80	640	711	3830	2530	480	343	132
29	137	95	90	85	80	820	719	3800	2200	508	302	135
30	137	95	90	85	---	900	684	3890	2560	592	275	133
31	134	---	90	85	---	980	---	4280	---	474	263	---
TOTAL	3785	3266	2907	2634	2395	8210	26064	74874	88500	41892	9223	5522
MEAN	122	109	93.8	85.0	82.6	265	869	2415	2950	1351	298	184
MAX	137	127	96	90	85	980	1180	5310	4590	3790	378	298
MIN	106	95	88	75	80	80	684	703	1600	378	240	114
AC-FT	7510	6480	5770	5220	4750	16280	51700	148500	175500	83090	18290	10950

CAL YR 1983	TOTAL	179689	MEAN	492	MAX	4350	MIN	65	AC-FT	356400
WTR YR 1984	TOTAL	269272	MEAN	736	MAX	5310	MIN	75	AC-FT	534100

09034500 COLORADO RIVER AT HOT SULPHUR SPRINGS, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1947 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: April 1947 to current year.
WATER TEMPERATURES: April 1949 to current year.

REMARKS.--Limited temperature data available in district office.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum daily, 400 micromhos Feb. 5, 1974; minimum daily, 48 micromhos June 2, 1947.
WATER TEMPERATURES: Maximum, 29°C Aug. 3, 1981; minimum, freezing point on many days during winter months each year.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum daily, 186 micromhos Mar 15; minimum daily, 62 micromhos June 24.
WATER TEMPERATURES: Maximum, 24°C Aug. 8; minimum, freezing point on many days during winter months.

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	NITRO-GEN DIS-SOLVED (MG/L AS N)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)
DEC											
21...	1030	96	143	7.7	.0	9.6	.61	55	17	3.1	6.7
MAR											
28...	1340	685	88	7.6	3.5	10.3	.33	32	9.6	1.9	3.8
JUN											
26...	1245	3450	59	7.4	12.5	8.3	--	25	7.8	1.4	2.5
SEP											
14...	1045	191	118	8.0	13.5	8.7	--	51	16	2.7	5.3

DATE	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)
DEC												
21...	.4	1.1	63	7.9	3.0	.20	13	90	.12	23	.200	.210
MAR												
28...	.3	1.1	37	6.6	.80	.20	6.9	53	.07	98	.100	.130
JUN												
26...	.2	.90	26	5.8	.60	.20	6.8	42	.06	389	<.100	<.100
SEP												
14...	.3	1.2	55	7.0	1.1	.20	11	78	.11	40	<.100	<.100

DATE	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)
DEC												
21...	.50	.40	.70	.030	.030	<1	<1	<1	<1	<1	<1	3
MAR												
28...	<.20	.20	--	.040	.010	<1	<1	<1	<1	4	<1	9
JUN												
26...	.40	.40	--	.030	.020	<1	<1	<1	<1	4	<1	10
SEP												
14...	<.20	.20	--	.030	.020	<1	<1	<1	<1	<1	<1	2

DATE	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY DIS-SOLVED (UG/L AS HG)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)
DEC											
21...	7	70	1	<1	4	.1	<.1	<1	<1	10	5
MAR											
28...	1	50	4	<1	11	<.1	<.1	1	1	10	12
JUN											
26...	3	90	<1	<1	14	<.1	<.1	<1	<1	30	24
SEP											
14...	1	160	2	6	11	<.1	<.1	<1	<1	<10	17

09034500 COLORADO RIVER AT HOT SULPHUR SPRINGS, CO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	120	125	131	134	179	158	74	100	76	67	129	122
2	125	135	131	146	180	142	72	107	69	70	134	126
3	125	140	134	118	166	154	72	111	66	66	137	125
4	130	130	134	118	167	162	73	109	68	65	138	150
5	130	140	150	118	147	174	73	113	70	67	138	144
6	130	130	162	118	147	176	75	112	68	71	136	136
7	140	140	142	93	165	163	75	112	80	---	135	145
8	130	140	134	146	152	---	77	112	78	72	135	148
9	140	148	128	155	164	164	79	115	83	75	133	148
10	135	144	136	155	155	170	80	120	81	74	133	135
11	140	142	131	165	156	146	84	122	81	70	133	137
12	140	---	138	146	150	165	82	119	83	72	132	141
13	135	137	124	150	161	170	85	114	83	84	128	140
14	130	139	142	146	160	177	84	109	75	96	126	138
15	115	163	134	141	162	186	89	107	73	86	121	142
16	125	144	137	165	163	141	95	101	71	88	123	---
17	135	138	146	155	169	140	101	101	66	92	118	133
18	140	137	137	165	163	140	106	98	69	85	116	156
19	120	143	138	146	163	130	102	92	67	89	124	150
20	140	132	118	155	166	135	108	90	68	99	123	157
21	140	136	136	165	164	109	107	88	64	105	126	---
22	135	133	146	155	164	102	106	83	65	124	127	157
23	140	142	127	146	157	86	110	82	67	130	123	155
24	145	143	127	146	156	78	113	83	62	113	122	153
25	135	144	127	150	149	87	116	86	74	106	123	159
26	130	144	136	136	147	83	114	78	65	105	120	---
27	130	139	134	160	150	86	112	76	66	108	114	158
28	130	140	124	141	175	82	105	73	67	125	104	146
29	120	139	121	155	172	75	105	73	67	121	116	151
30	125	134	136	---	---	72	100	73	65	115	112	155
31	125	---	165	165	---	71	---	70	---	123	117	---
MEAN	132	139	136	145	161	131	92	98	71	92	126	145

WTR YR 1984 MEAN 122 MAX 186 MIN 62

09034900 BOBTAIL CREEK NEAR JONES PASS, CO

LOCATION.--Lat 39°45'37", long 105°54'21", in sec.28, T.3 S., R.76 W., Grand County, Hydrologic Unit 14010001, on left bank 320 ft upstream from diversion dam and 0.4 mi south of entrance to August P. Gumlick Tunnel.

DRAINAGE AREA.--5.49 mi^2.

PERIOD OF RECORD.--October 1965 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 10,430 ft, from topographic map.

REMARKS.--Records good except those for period of no gage-height record and those for winter period, which are poor. No diversion above station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--19 years, 10.3 ft^3/s; 7,460 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 199 ft^3/s, June 25, 1983, gage height, 4.80 ft; maximum recorded gage height, 7.57 ft, May 15, 1984 (backwater from ice); minimum daily discharge, 0.44 ft^3/s, Feb. 11, 1972.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 177 ft^3/s at 1945 June 30, gage height 4.73 ft; only peak above base of 90 ft^3/s; maximum gage height, 7.57 ft, at 0600 May 15 (backwater from ice); minimum daily discharge, 1.0 ft^3/s, Dec. 26-31.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.0	3.8	2.2	1.1	1.1	1.1	1.2	1.6	45	103	32	17
2	3.8	3.8	2.0	1.1	1.1	1.1	1.2	1.6	45	92	29	14
3	4.2	3.8	1.4	1.1	1.1	1.1	1.2	1.6	40	82	27	12
4	4.8	3.8	1.2	1.1	1.1	1.1	1.2	1.6	39	74	24	10
5	4.6	3.8	1.2	1.1	1.1	1.1	1.2	1.6	42	66	26	9.7
6	4.2	3.5	1.2	1.1	1.1	1.1	1.2	1.6	45	62	40	9.1
7	4.0	3.5	1.2	1.1	1.1	1.1	1.2	1.6	50	59	33	11
8	3.6	3.5	1.2	1.1	1.1	1.1	1.2	1.6	54	56	29	11
9	4.0	3.5	1.2	1.1	1.1	1.1	1.2	2.3	60	55	27	8.9
10	4.0	3.5	1.2	1.1	1.1	1.1	1.2	2.8	64	79	25	7.8
11	4.3	3.5	1.2	1.1	1.1	1.1	1.2	3.7	70	55	22	8.1
12	4.5	3.5	1.2	1.1	1.1	1.1	1.2	4.5	74	47	23	7.4
13	4.6	3.5	1.2	1.1	1.1	1.1	1.2	6.0	80	49	22	6.6
14	4.4	3.5	1.2	1.1	1.1	1.1	1.2	7.6	90	45	21	6.1
15	4.3	3.5	1.2	1.1	1.1	1.1	1.2	9.8	98	39	20	6.4
16	4.1	3.5	1.2	1.1	1.1	1.1	1.2	13	95	36	21	7.1
17	4.0	3.5	1.2	1.1	1.1	1.1	1.2	17	78	33	25	5.9
18	4.0	3.5	1.2	1.1	1.1	1.1	1.4	20	79	32	24	6.4
19	4.0	3.5	1.2	1.1	1.1	1.1	1.6	18	84	30	22	6.1
20	4.0	3.3	1.2	1.1	1.1	1.1	1.6	20	91	31	24	5.9
21	4.0	3.2	1.2	1.1	1.1	1.1	1.6	24	99	30	25	5.9
22	4.0	3.0	1.2	1.1	1.1	1.1	1.6	28	101	30	23	5.7
23	4.0	3.0	1.2	1.1	1.1	1.1	1.6	33	98	31	24	4.8
24	4.0	3.0	1.2	1.1	1.1	1.1	1.6	39	96	32	31	4.4
25	3.8	3.0	1.2	1.1	1.1	1.1	1.6	45	84	30	29	5.7
26	3.8	2.9	1.0	1.1	1.1	1.2	1.6	42	85	29	26	4.8
27	3.8	2.6	1.0	1.1	1.1	1.2	1.6	40	87	30	24	4.6
28	3.8	2.6	1.0	1.1	1.1	1.2	1.6	38	91	32	21	5.0
29	3.8	2.6	1.0	1.1	1.1	1.2	1.6	37	94	30	19	5.0
30	3.8	2.6	1.0	1.1	---	1.2	1.6	40	105	36	17	6.4
31	3.8	---	1.0	1.1	---	1.2	---	42	---	36	17	---
TOTAL	126.0	99.8	38.0	34.1	31.9	34.7	41.0	545.5	2263	1471	772	228.8
MEAN	4.06	3.33	1.23	1.10	1.10	1.12	1.37	17.6	75.4	47.5	24.9	7.63
MAX	4.8	3.8	2.2	1.1	1.1	1.2	1.6	45	105	103	40	17
MIN	3.6	2.6	1.0	1.1	1.1	1.1	1.2	1.6	39	29	17	4.4
AC-FT	250	198	75	68	63	69	81	1080	4490	2920	1530	454

CAL YR 1983	TOTAL	5662.40	MEAN	15.5	MAX	146	MIN	.68	AC-FT	11230
WTR YR 1984	TOTAL	5685.8	MEAN	15.5	MAX	105	MIN	1.0	AC-FT	11280

NOTE.--NO GAGE-HEIGHT RECORD NOV. 6 TO JUNE 14.

09035500 WILLIAMS FORK BELOW STEELMAN CREEK, CO

LOCATION.--Lat 39°46'44", long 105°55'40", in sec.20, T.3 S., R.75 W., Grand County, Hydrologic Unit 14010001, on right bank 700 ft downstream from Steelman Creek and 6.5 mi southeast of Leal.

DRAINAGE AREA.--16.3 mi².

PERIOD OF RECORD.--July 1933 to September 1941, published as Williams River below Steelman Creek, October 1965 to current year. Monthly discharge only for some periods, published in WSP 1313.

GAGE.--Water-stage recorder. Altitude of gage is 9,800 ft, from topographic map. Prior to July 21, 1933, nonrecording gage, and July 21, 1933, to Sept. 30, 1941, water-stage recorder at site 600 ft upstream at different datum.

REMARKS.--Records fair except those for winter period, which are poor. Transmountain diversions above station through August P. Gumlick Tunnel (station 09036000) since May 10, 1940. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--27 years, 26.1 ft³/s; 18,910 acre-ft/yr, including diversions to August P. Gumlick Tunnel.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 441 ft³/s, June 21, 1938, gage height, 2.48 ft, site and datum then in use, from rating curve extended above 260 ft³/s; maximum gage height, 6.96 ft, May 15, 1984 (backwater from ice); minimum daily discharge, 0.20 ft³/s, Mar. 6, 1967.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 409 ft³/s at 2000 June 30, gage height, 5.74 ft; maximum gage height, 6.96 ft, May 15 (backwater from ice); minimum daily discharge, 0.70 ft³/s, Dec. 22 to Jan. 14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.72	13	1.9	.70	1.4	2.4	2.5	3.3	205	268	69	53
2	.66	5.6	1.8	.70	1.5	2.4	2.5	3.3	185	244	63	42
3	.72	1.0	1.6	.70	1.7	2.4	2.5	3.2	169	226	57	38
4	.90	1.2	1.6	.70	1.9	2.4	2.5	3.0	161	207	52	34
5	.78	1.1	1.5	.70	2.0	2.4	2.5	2.8	140	196	54	32
6	.78	.96	1.4	.70	2.2	2.4	2.5	2.6	121	185	90	30
7	.72	1.3	1.3	.70	2.3	2.4	2.5	2.5	110	179	73	35
8	.72	1.3	1.3	.70	2.4	2.4	2.5	2.5	96	175	61	35
9	.72	2.3	1.2	.70	2.4	2.4	2.6	4.3	89	167	59	30
10	1.3	2.2	1.2	.70	2.4	2.4	2.6	5.8	85	205	55	26
11	1.0	2.2	1.2	.70	2.4	2.4	2.6	8.4	99	163	49	24
12	.90	2.2	1.2	.70	2.4	2.4	2.6	11	113	143	51	23
13	3.2	2.2	1.2	.70	2.4	2.4	2.6	14	159	138	28	22
14	1.0	2.2	1.1	.70	2.4	2.4	2.6	20	214	136	3.4	21
15	.90	2.2	1.0	.72	2.4	2.4	2.6	25	224	122	3.0	20
16	1.2	2.2	1.0	.76	2.4	2.4	2.6	35	231	111	2.6	23
17	3.2	2.2	.96	.78	2.4	2.4	2.6	50	205	104	2.6	20
18	3.0	2.2	.90	.82	2.4	2.4	2.6	65	203	96	2.5	18
19	1.8	2.2	.86	.86	2.4	2.4	2.6	90	214	92	2.5	6.2
20	1.5	2.2	.80	.90	2.4	2.4	2.6	85	224	89	3.0	1.9
21	.96	2.2	.72	.94	2.4	2.4	2.6	93	239	88	3.6	1.9
22	1.1	2.2	.70	.98	2.4	2.4	2.6	132	247	83	2.8	1.8
23	1.0	2.2	.70	1.0	2.4	2.4	2.7	143	244	88	3.0	1.6
24	5.3	2.2	.70	1.0	2.4	2.4	2.7	181	241	93	3.4	1.6
25	13	2.2	.70	1.0	2.4	2.4	2.8	177	229	82	14	1.7
26	14	2.2	.70	1.0	2.4	2.4	2.8	155	229	78	62	1.6
27	14	2.2	.70	1.0	2.4	2.4	2.9	161	234	79	55	1.6
28	13	2.2	.70	1.0	2.4	2.4	3.0	155	231	79	52	2.8
29	13	2.1	.70	1.1	2.4	2.4	3.1	163	244	72	48	1.8
30	13	2.0	.70	1.2	---	2.4	3.2	185	271	81	45	1.8
31	12	---	.70	1.3	---	2.4	---	194	---	82	46	---
TOTAL	126.08	73.66	32.74	26.16	65.8	74.4	79.6	2175.7	5656	4151	1115.4	552.3
MEAN	4.07	2.46	1.06	.84	2.27	2.40	2.65	70.2	189	134	36.0	18.4
MAX	14	13	1.9	1.3	2.4	2.4	3.2	194	271	268	90	53
MIN	.66	.96	.70	.70	1.4	2.4	2.5	2.5	85	72	2.5	1.6
AC-FT	250	146	65	52	131	148	158	4320	11220	8230	2210	1100

CAL YR 1983	TOTAL	12089.66	MEAN	33.1	MAX	316	MIN	.66	AC-FT	23980
WTR YR 1984	TOTAL	14128.84	MEAN	38.6	MAX	271	MIN	.66	AC-FT	28020

NOTE.--NO GAGE-HEIGHT RECORD NOV. 10 TO MAY 4.

09035700 WILLIAMS FORK ABOVE DARLING CREEK, NEAR LEAL, CO

LOCATION.--Lat 39°47'22", long 106°01'18", in NW¼SW¼ sec.16, T.3 S., R.77 W., Grand County, Hydrologic Unit 14010001, on left bank 1.0 mi upstream from Darling Creek and 1.9 mi southeast of Leal.

DRAINAGE AREA.--34.7 mi².

PERIOD OF RECORD.--October 1965 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 8,970 ft, from topographic map. Prior to Oct. 1, 1972, May 6, 1981 to Jan. 31, 1983, at site 0.6 mi downstream at different datum.

REMARKS.--Records fair except those for winter period, which are poor. Transmountain diversion above station through August P. Gumlick Tunnel (station 09036000). Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--19 years, 38.1 ft³/s; 27,600 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 677 ft³/s, June 24, 1971, gage height, 7.12 ft, site and datum then in use, from rating curve extended above 430 ft³/s; minimum daily, 2.7 ft³/s, Apr. 5, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 506 ft³/s at 2200 June 30, gage height, 5.37 ft; minimum daily, 5.0 ft³/s, Nov. 27-30, Dec. 5, 6, Jan. 19-23, Feb. 21-23, 27-29..

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	18	6.0	10	6.0	6.0	10	12	300	452	108	84
2	14	18	6.0	9.0	6.5	7.0	10	12	280	437	99	70
3	14	13	6.0	9.0	7.0	8.0	9.0	11	260	415	93	63
4	15	13	6.0	9.0	7.0	8.0	9.0	11	250	393	86	60
5	14	12	5.0	9.0	7.0	7.0	10	10	250	378	88	57
6	13	12	5.0	9.0	6.0	7.0	10	10	230	356	134	54
7	12	11	7.0	9.0	6.0	7.0	11	11	210	330	113	60
8	13	10	10	9.0	6.0	7.0	11	12	170	310	95	60
9	13	9.5	13	9.0	6.0	7.0	11	14	150	300	93	53
10	14	9.5	15	9.0	6.0	7.0	11	23	150	360	88	48
11	14	9.0	17	8.0	6.0	8.0	11	30	200	295	82	47
12	13	8.6	17	8.0	6.0	8.0	10	37	250	259	85	47
13	15	7.8	16	8.0	7.0	8.0	10	49	300	251	79	44
14	12	7.2	15	8.0	7.0	8.0	10	70	350	247	40	42
15	10	7.0	15	8.0	7.0	9.0	11	128	380	217	40	41
16	9.7	8.0	15	8.0	7.0	9.0	11	140	380	200	40	45
17	10	9.4	15	7.0	6.0	9.0	11	150	360	182	39	43
18	10	9.6	15	6.0	6.0	9.0	12	150	340	167	40	39
19	9.7	9.0	15	5.0	6.0	9.0	12	140	360	155	39	33
20	8.8	9.0	15	5.0	6.0	9.0	12	150	380	149	42	23
21	7.8	7.2	15	5.0	5.0	9.0	11	160	400	142	45	23
22	7.5	5.3	14	5.0	5.0	9.0	11	170	400	131	41	23
23	7.2	5.4	13	5.0	5.0	9.0	11	200	400	139	42	21
24	8.1	5.4	12	6.0	6.0	9.0	13	220	390	144	49	20
25	13	6.0	12	7.0	6.0	9.0	15	250	370	128	60	22
26	14	6.0	12	7.0	6.0	10	16	270	380	120	92	21
27	14	5.0	12	7.0	5.0	10	16	250	406	119	86	20
28	15	5.0	11	7.0	5.0	10	15	250	412	124	82	23
29	15	5.0	11	7.0	5.0	10	9.0	250	423	115	77	20
30	17	5.0	11	6.0	---	10	9.5	270	441	126	73	20
31	18	---	11	6.0	---	10	---	290	---	131	72	---
TOTAL	385.8	265.9	368.0	230.0	175.5	262.0	338.5	3750	9572	7272	2242	1226
MEAN	12.4	8.86	11.9	7.42	6.05	8.45	11.3	121	319	235	72.3	40.9
MAX	18	18	17	10	7.0	10	16	290	441	452	134	84
MIN	7.2	5.0	5.0	5.0	5.0	6.0	9.0	10	150	115	39	20
AC-FT	765	527	730	456	348	520	671	7440	18990	14420	4450	2430

CAL YR 1983 TOTAL 23794.3 MEAN 65.2 MAX 489 MIN 5.0 AC-FT 47200
WTR YR 1984 TOTAL 26087.7 MEAN 71.3 MAX 452 MIN 5.0 AC-FT 51740

NOTE.--NO GAGE-HEIGHT RECORD NOV. 25 TO APR. 4, MAY 16 TO JUNE 26.

09035800 DARLING CREEK NEAR LEAL, CO

LOCATION.--Lat 39°48'20", long 106°01'05", in NE¼SW¼ sec.9, T.3 S., R.77W., Grand County, Hydrologic Unit 14010001, on left bank 0.6 mi upstream from mouth and 1.4 mi southeast of Leal.

DRAINAGE AREA.--8.21 mi².

PERIOD OF RECORD.--October 1965 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 9,090 ft, from topographic map.

REMARKS.--Records good except those for period of no gage-height record, which are poor. No diversion above station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--19 years, 9.83 ft³/s; 7,120 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 241 ft³/s, June 30, 1984, gage height, 4.30 ft, from rating curve extended above 100 ft³/s; minimum daily, 1.0 ft³/s, Jan. 12, 1975.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 241 ft³/s at 2000 June 30, gage height, 4.30 ft; minimum daily, 1.9 ft³/s, Mar. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.6	3.4	3.0	2.5	2.2	1.9	2.2	2.1	73	136	22	17
2	4.4	3.4	3.0	2.5	2.2	2.1	2.2	2.1	70	119	20	15
3	4.6	3.4	3.0	2.5	2.2	2.2	2.2	2.1	68	106	18	13
4	4.9	3.2	3.0	2.5	2.2	2.2	2.2	2.1	67	95	16	12
5	4.8	3.2	3.0	2.5	2.2	2.2	2.2	2.1	62	85	19	11
6	4.6	3.2	3.0	2.5	2.2	2.2	2.4	2.0	57	80	22	10
7	4.4	3.4	3.0	2.5	2.2	2.2	2.4	2.0	54	72	18	12
8	4.4	3.4	3.0	2.5	2.2	2.2	2.5	2.1	48	68	16	11
9	4.3	3.4	3.0	2.5	2.2	2.2	2.4	2.6	43	61	15	10
10	4.6	3.4	3.0	2.5	2.2	2.2	2.4	3.7	42	75	14	10
11	4.5	3.4	3.0	2.5	2.2	2.2	2.4	5.5	47	55	13	9.5
12	4.7	3.4	3.0	2.5	2.2	2.2	2.4	7.5	51	50	16	9.7
13	4.8	3.4	3.0	2.5	2.2	2.2	2.4	11	62	49	15	9.0
14	4.8	3.4	3.0	2.5	2.2	2.2	2.4	15	80	48	15	8.7
15	4.5	3.2	3.0	2.2	2.2	2.2	2.4	18	91	42	15	8.4
16	4.3	3.0	3.0	2.2	2.2	2.2	2.7	17	103	39	16	9.9
17	4.2	3.0	3.0	2.2	2.2	2.2	3.0	19	98	36	15	9.6
18	4.3	3.0	3.0	2.2	2.2	2.2	3.0	19	96	33	17	8.4
19	4.2	3.0	3.0	2.2	2.2	2.2	2.5	19	99	31	17	8.2
20	4.1	3.0	3.0	2.2	2.2	2.2	2.3	24	103	31	19	8.0
21	4.1	3.0	3.0	2.2	2.2	2.2	2.2	29	111	29	20	8.0
22	4.1	3.0	3.0	2.2	2.2	2.2	2.2	33	120	27	18	8.1
23	4.1	3.0	2.7	2.2	2.2	2.2	2.3	42	127	27	17	7.5
24	3.8	3.0	2.5	2.2	2.2	2.2	2.4	57	116	28	20	7.6
25	3.8	3.0	2.5	2.2	2.2	2.2	2.3	56	106	25	20	8.3
26	3.8	3.0	2.5	2.2	2.1	2.2	2.2	51	105	23	17	8.2
27	3.8	3.0	2.5	2.2	2.0	2.2	2.1	52	108	22	16	7.8
28	3.6	3.0	2.5	2.2	2.0	2.2	2.1	51	110	23	15	8.0
29	3.6	3.0	2.5	2.2	2.0	2.2	2.1	57	112	23	15	7.7
30	3.6	3.0	2.5	2.2	---	2.2	2.1	63	125	27	14	7.5
31	3.6	---	2.5	2.2	---	2.2	---	66	---	25	14	---
TOTAL	131.9	95.2	88.7	72.4	63.1	67.8	70.6	734.9	2554	1590	524	289.1
MEAN	4.25	3.17	2.86	2.34	2.18	2.19	2.35	23.7	85.1	51.3	16.9	9.64
MAX	4.9	3.4	3.0	2.5	2.2	2.2	3.0	66	127	136	22	17
MIN	3.6	3.0	2.5	2.2	2.0	1.9	2.1	2.0	42	22	13	7.5
AC-FT	262	189	176	144	125	134	140	1460	5070	3150	1040	573

CAL YR 1983	TOTAL	6617.9	MEAN	18.1	MAX	175	MIN	1.5	AC-FT	13130
WTR YR 1984	TOTAL	6281.7	MEAN	17.2	MAX	136	MIN	1.9	AC-FT	12460

NOTE.--NO GAGE-HEIGHT RECORD NOV. 29 TO APR. 6.

09035900 SOUTH FORK OF WILLIAMS FORK NEAR LEAL, CO

LOCATION.--Lat 39°47'45", long 106°01'48", in NE¼ sec.17, T.3 S., R.77 W., Grand County, Hydrologic Unit 14010001, on left bank 800 ft upstream from highway bridge, 0.6 mi upstream from mouth, and 1.2 mi southeast of Leal.

DRAINAGE AREA.--27.3 mi^2.

PERIOD OF RECORD.--October 1965 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 8,950 ft, from topographic map.

REMARKS.--Records good except those for winter period, which are poor. No diversion above station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--19 years, 32.7 ft^3/s; 23,690 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 464 ft^3/s, June 15, 1978, gage height 3.37 ft; maximum gage height, 4.22 ft, Nov. 22, 1979 (backwater from ice); minimum daily discharge, 2.6 ft^3/s, Mar. 6, 1967.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 200 ft^3/s, and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
June 1	1800	310	3.20	June 30	2200	*350	3.29

Minimum daily discharge, 7.4 ft^3/s, Jan. 18-23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	16	13	10	8.6	8.6	8.6	10	282	292	65	59
2	17	16	13	9.4	8.6	8.6	8.6	9.8	257	276	60	51
3	17	16	12	8.6	8.6	8.6	8.6	9.3	249	261	59	47
4	18	16	12	8.6	8.6	8.6	8.6	8.8	245	239	54	43
5	18	16	11	8.6	8.6	8.6	8.6	8.8	235	219	56	40
6	17	17	11	8.6	8.6	8.6	9.0	8.6	213	205	76	37
7	17	16	11	8.6	8.6	8.6	9.4	8.4	188	196	65	44
8	17	16	11	8.6	8.6	8.6	9.6	8.9	160	191	57	41
9	17	16	11	8.6	8.6	8.6	9.6	9.1	136	188	56	36
10	18	16	11	8.6	8.6	8.6	9.6	14	123	221	54	33
11	18	16	11	8.6	8.6	8.6	9.6	12	142	175	52	33
12	18	16	11	8.6	8.6	8.6	9.6	40	158	154	57	33
13	18	16	11	8.6	8.6	8.6	9.6	49	196	148	57	31
14	19	15	11	8.6	8.6	8.6	9.6	74	258	146	51	29
15	18	14	11	8.2	8.6	8.6	10	98	267	137	50	29
16	17	13	11	7.8	8.6	8.6	11	96	281	126	52	33
17	18	13	11	7.6	8.6	8.6	12	95	262	116	56	29
18	18	13	11	7.4	8.6	8.6	13	90	262	109	55	27
19	17	13	11	7.4	8.6	8.6	13	80	262	103	52	25
20	17	13	11	7.4	8.6	8.6	12	99	272	99	56	26
21	17	13	11	7.4	8.6	8.6	12	117	290	96	64	26
22	17	13	11	7.4	8.6	8.6	13	135	290	91	59	26
23	17	13	11	7.4	8.6	8.6	11	163	290	93	56	24
24	17	13	11	7.8	8.6	8.6	12	227	285	92	74	23
25	16	13	11	8.0	8.6	8.6	11	250	281	86	69	25
26	16	13	11	8.0	8.6	8.6	11	211	277	82	66	24
27	16	13	11	8.0	8.6	8.6	11	220	282	75	61	23
28	16	13	11	8.0	8.6	8.6	11	214	280	74	59	25
29	17	13	11	8.2	8.6	8.6	10	214	283	71	56	24
30	17	13	11	8.6	---	8.6	10	231	294	74	51	24
31	17	---	11	8.6	---	8.6	---	268	---	76	51	---
TOTAL	534	433	347	255.8	249.4	266.6	311.6	3078.7	7300	4511	1806	970
MEAN	17.2	14.4	11.2	8.25	8.60	8.60	10.4	99.3	243	146	58.3	32.3
MAX	19	17	13	10	8.6	8.6	13	268	294	292	76	59
MIN	16	13	11	7.4	8.6	8.6	8.6	8.4	123	71	50	23
AC-FT	1060	859	688	507	495	529	618	6110	14480	8950	3580	1920

CAL YR 1983 TOTAL 18597.5 MEAN 51.0 MAX 355 MIN 7.5 AC-FT 36890
WTR YR 1984 TOTAL 20063.1 MEAN 54.8 MAX 294 MIN 7.4 AC-FT 39800

NOTE.--NO GAGE-HEIGHT RECORD DEC. 1 TO APR. 18.

09036000 WILLIAMS FORK NEAR LEAL, CO

LOCATION.--Lat 39°50'02", long 106°03'21", in sec.31, T.2 S., R.77 W., Grand County, Hydrologic Unit 14010001, on right bank at downstream side of bridge, 100 ft downstream from Kinney Creek, and 1.7 mi northwest of Leal.

DRAINAGE AREA.--89.5 mi^2.

PERIOD OF RECORD.--July 1933 to current year. 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.

REVISED RECORDS.--WSP 1733: 1951. WSP 2124: Drainage area. WRD Colo. 1973: 1972.

GAGE.--Water-stage recorder. Altitude of gage is 8,790 ft, from topographic map. Prior to Aug. 16, 1953, at site 15 ft downstream at present datum.

REMARKS.--Records good, except those for winter period, which are poor. Transmountain diversion above station through August P. Gumlick Tunnel (see table below for figures of diversion). Diversions for irrigation of about 200 acres of hay meadows above station and about 40 acres below. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

COOPERATION.--Diversions, in acre-feet, through August P. Gumlick Tunnel, furnished by Colorado Division of Water Resources.

AVERAGE DISCHARGE.--51 years, 104 ft^3/s; 75,350 acre-ft/yr, including diversions to August P. Gumlick Tunnel.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,720 ft^3/s, June 10, 1952, gage height, 4.23 ft; maximum gage height, 5.46 ft, June 29, 1971 (backwater from log); minimum daily discharge, 13 ft^3/s, at times in 1939, 1963, 1964, and 1967.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,250 ft^3/s at 2400 June 30, gage height, 4.53 ft; minimum daily discharge, 21 ft^3/s, Feb. 24-26, Feb. 29 to Mar. 5, Mar. 7-12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	41	45	38	29	27	21	25	36	885	922	225	175
2	38	44	38	27	25	21	25	37	838	831	209	151
3	43	40	35	27	23	21	24	35	775	779	198	135
4	45	38	34	27	23	21	25	35	767	735	180	126
5	45	38	33	27	23	21	25	35	734	701	182	120
6	42	38	33	27	23	22	26	35	661	658	247	115
7	49	37	33	27	23	21	28	34	630	634	228	127
8	48	39	34	27	23	21	28	35	537	606	193	129
9	47	35	34	27	23	21	28	37	481	587	188	118
10	49	39	33	27	23	21	28	46	438	720	180	107
11	53	41	33	27	23	21	28	63	490	592	171	104
12	51	39	33	27	23	21	26	88	542	506	180	104
13	51	38	32	27	23	22	26	143	641	487	182	99
14	54	36	32	27	23	22	26	193	877	510	134	95
15	50	36	33	27	23	22	27	302	917	449	133	93
16	47	38	33	27	23	23	28	346	947	411	133	104
17	48	38	32	27	23	22	30	386	922	386	139	98
18	49	37	32	27	23	23	35	375	887	360	133	90
19	48	36	32	27	23	23	38	321	932	337	128	84
20	46	36	32	27	22	22	37	409	937	322	132	73
21	45	36	32	27	22	23	36	507	957	314	146	73
22	44	33	32	27	22	24	34	592	982	294	137	74
23	43	33	32	27	22	24	36	648	952	296	125	69
24	43	34	32	27	21	24	40	794	942	298	154	66
25	45	37	32	27	21	24	40	856	917	282	164	70
26	46	35	32	27	21	23	38	704	887	261	184	69
27	47	33	32	27	23	24	35	706	897	250	169	67
28	46	35	32	27	22	24	32	675	931	255	161	70
29	46	35	32	27	21	24	37	682	961	240	155	68
30	46	35	32	27	---	25	35	745	1010	249	145	66
31	46	---	31	27	---	25	---	806	---	269	144	---
TOTAL	1441	1114	1020	839	660	696	926	10706	24274	14541	5179	2939
MEAN	46.5	37.1	32.9	27.1	22.8	22.5	30.9	345	809	469	167	98.0
MAX	54	45	38	29	27	25	40	856	1010	922	247	175
MIN	38	33	31	27	21	21	24	34	438	240	125	66
AC-FT	2860	2210	2020	1660	1310	1380	1840	21240	48150	28840	10270	5830
a	360	242	173	199	137	113	40	0	0	0	1270	307

CAL YR 1983 TOTAL 61367 MEAN 168 MAX 1240 MIN 17 AC-FT 121700
WTR YR 1984 TOTAL 64335 MEAN 176 MAX 1010 MIN 21 AC-FT 127600

a-DIVERSIONS, IN ACRE-FEET, THROUGH AUGUST P. GUMLICK TUNNEL, FURNISHED BY COLORADO DIVISION OF WATER RESOURCES.

NOTE.--NO GAGE-HEIGHT RECORD DEC. 22 TO FEB. 14.

09037500 WILLIAMS FORK NEAR PARSHALL, CO

LOCATION.--Lat 40°00'01", long 106°10'45", in SW¼SW¼ sec.31, T.1 N., R.78 W., Grand County, Hydrologic Unit 14010001, on right bank 150 ft downstream from bridge on State Highway 286, 3.7 mi downstream from Skylark Creek, 3.9 mi south of Parshall, and 4.2 mi upstream from Williams Fork Reservoir Dam.

DRAINAGE AREA.--184 mi^2.

PERIOD OF RECORD.--July 1904 to September 1924, June 1933 to current year. 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.

REVISED RECORDS.--WSP 1243: 1918. WSP 2124: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 7,808.95 ft, (Denver Board of Water Commissioners Datum). See WSP 1733 for history of changes prior to Aug. 9, 1938.

REMARKS.--Records good except those for winter period, which are poor. Transmountain diversion above station through August P. Gumlick Tunnel (station 09036000). 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. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--71 years, 138 ft^3/s; 99,980 acre-ft/yr, including diversion to August P. Gumlick Tunnel.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 2,620 ft^3/s, June 14, 1918, gage height, 6.05 ft, site and datum then in use, from rating curve extended above 1,400 ft^3/s; minimum daily, 4.8 ft^3/s, May 6, 8-10, 1972.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,850 ft^3/s at 0200 May 25, gage height, 5.08 ft; minimum daily, 28 ft^3/s, Mar. 10-13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	70	66	56	37	44	33	45	72	1340	1390	298	248
2	69	66	56	37	45	33	45	78	1270	1080	283	248
3	75	64	56	37	45	33	45	75	1140	974	265	220
4	78	58	56	37	45	33	45	75	1070	835	252	205
5	81	60	52	37	45	33	45	73	1000	746	252	190
6	78	61	50	37	45	33	46	75	884	695	313	176
7	70	57	47	37	44	33	54	73	1040	653	310	188
8	69	65	45	37	40	32	54	75	827	600	260	198
9	67	58	42	37	40	30	54	97	725	578	258	173
10	69	64	39	37	40	28	54	138	617	774	248	153
11	80	65	37	37	40	28	54	228	617	561	245	148
12	75	60	37	37	40	28	50	304	635	470	238	151
13	73	60	37	35	40	28	50	445	695	440	260	150
14	81	61	37	35	40	30	50	583	1020	520	218	150
15	76	63	37	35	39	30	54	867	1100	392	210	150
16	72	64	37	33	37	30	58	920	1160	342	205	155
17	72	64	37	30	34	30	64	875	1180	310	220	152
18	67	57	37	30	33	32	74	929	1080	304	200	145
19	66	56	37	30	33	32	86	753	1160	301	208	132
20	69	56	37	30	33	34	84	911	1140	289	212	120
21	69	56	37	30	33	35	76	1150	1160	283	238	112
22	66	56	37	33	33	37	75	1250	1170	268	230	112
23	65	56	37	35	33	40	76	1290	1180	277	215	110
24	64	56	37	35	33	40	88	1520	1160	283	248	104
25	65	56	37	35	33	40	88	1700	1120	350	265	104
26	66	56	37	36	33	40	88	1390	1040	328	265	104
27	69	56	37	37	33	40	78	1350	1040	295	255	104
28	67	56	37	38	33	40	73	1200	1020	289	245	103
29	67	56	37	40	33	42	75	1090	1010	292	245	102
30	67	56	37	40	---	44	70	1210	1140	310	225	100
31	67	---	37	41	---	45	---	1250	---	342	220	---
TOTAL	2189	1785	1276	1102	1099	1066	1898	22046	30740	15571	7606	4507
MEAN	70.6	59.5	41.2	35.5	37.9	34.4	63.3	711	1025	502	245	150
MAX	81	66	56	41	45	45	88	1700	1340	1390	313	248
MIN	64	56	37	30	33	28	45	72	617	268	200	100
AC-FT	4340	3540	2530	2190	2180	2110	3760	43730	60970	30890	15090	8940

CAL YR 1983	TOTAL	85161	MEAN	233	MAX	1940	MIN	32	AC-FT	168900
WTR YR 1984	TOTAL	90885	MEAN	248	MAX	1700	MIN	28	AC-FT	180300

NOTE.--NO GAGE-HEIGHT RECORD NOV. 21 TO APR. 18.

09038000 WILLIAMS FORK RESERVOIR NEAR PARSHALL, CO

LOCATION.--Lat 40°02'06", long 106°12'17", in SE¼ sec.23, T.1 N., R.79 W., Grand County, Hydrologic Unit 14010001, at dam on Williams Fork, 2.1 mi upstream from mouth, and 2.2 mi southwest of Parshall.

DRAINAGE AREA.--230 mi^2.

PERIOD OF RECORD.--April 1939 to current year. Prior to October 1948, published in WSP 1313.

REVISED RECORDS.--WSP 2124: Drainage area.

GAGE.--Nonrecording gage read once daily. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by city engineer of Denver); gage readings have been reduced to elevations NGVD.

REMARKS.--Reservoir is formed by concrete-arch dam completed in October 1938; storage began April 1939; dam was enlarged Dec. 5, 1956, to Apr. 22, 1959. Enlarged capacity, 96,820 acre-ft, between elevations 7,634 ft, invert of outlet, and 7,811 ft, top of radial gates on spillway. No dead storage. Figures given represent usable contents. Reservoir is used for power development and to store water to compensate for water diverted through August P. Gumlick Tunnel. Water is released during periods of low flow in Colorado River to supply decreed prior water rights. Records furnished by Denver Board of Water Commissioners.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 97,130 acre-ft July 9, 1962, elevation, 7,811.19 ft; no contents at times in 1958 (construction) and 1966 (drained for repairs).

EXTREMES FOR CURRENT YEAR.--Maximum contents observed, 97,070 acre-ft, July 9, elevation, 7,811.15 ft; minimum, 36,410 acre-ft, May 9, elevation, 7,759.45 ft.

MONTHEND ELEVATION IN FEET NGVD AND CONTENTS, AT 0800, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

Date	Elevation	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	7,803.68	85,560	-
Oct. 31	7,799.60	79,760	-5,800
Nov. 30	7,791.70	69,340	-10,420
Dec. 31	7,783.06	59,110	-10,230
CAL YR 1983			+1,460
Jan. 31	7,770.00	45,720	-13,390
Feb. 29	7,772.30	47,920	+2,200
Mar. 31	7,770.12	45,840	-2,080
Apr. 30	7,761.59	38,190	-7,650
May 31	7,786.10	62,560	+24,370
June 30	7,810.80	96,500	+33,940
July 31	7,810.99	96,810	+310
Aug. 31	7,810.83	96,550	-260
Sept. 30	7,807.46	91,220	-5,330
WTR YR 1984			+5,660

09038500 WILLIAMS FORK BELOW WILLIAMS FORK RESERVOIR, CO

LOCATION.--Lat 40°02'07", long 106°12'17", in SE¼ sec.23, T.1 N., R.79 W., Grand County, Hydrologic Unit 14010001, on left bank 400 ft downstream from Williams Fork Reservoir, 2.1 mi upstream from mouth, and 2.1 mi southwest of Parshall.

DRAINAGE AREA.--230 mi^2.

PERIOD OF RECORD.--October 1948 to September 1954, August 1958 to current year. Monthly discharge only for some periods, published in WSP 1313. Prior to October 1958, published as Williams River below Williams Fork Reservoir.

REVISED RECORDS.--WSP 2124: Drainage area.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 7,615.0 ft, (Denver Board of Water Commissioners Datum). See WSP 1713 or 1733 for history of changes prior to Oct. 21, 1959.

REMARKS.--Records good. Flow regulated by Williams Fork Reservoir (station 09038000). Transmountain diversion above station through August P. Gumlick Tunnel (station 09036000). 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. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--32 years, 129 ft^3/s; 93,460 acre-ft/yr, adjusted for storage in Williams Fork Reservoir.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,640 ft^3/s, June 20, 1953, gage height, 8.50 ft, site and datum then in use, from rating curve extended above 1,500 ft^3/s; no flow for part of Apr. 29, 1975.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,290 ft^3/s at 1245 July 1, gage height, 5.13 ft; minimum daily, 7.6 ft^3/s, Oct. 4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	230	242	254	257	15	15	191	211	573	1090	324	223
2	230	242	257	258	14	15	199	214	574	1150	308	223
3	73	242	258	259	13	15	202	214	569	871	267	225
4	7.6	242	258	260	13	15	204	212	570	865	205	227
5	12	244	258	260	13	15	203	211	572	829	199	228
6	13	245	257	260	13	16	204	213	570	626	261	228
7	14	245	258	260	13	16	204	212	372	651	367	224
8	16	245	258	262	13	15	204	213	237	707	277	225
9	16	243	258	263	14	25	204	214	246	597	232	226
10	16	242	40	265	14	40	205	214	246	832	230	229
11	16	242	16	265	14	54	208	214	248	738	234	230
12	125	244	16	268	14	68	209	214	244	444	224	229
13	235	248	137	267	14	83	206	211	216	513	219	228
14	234	248	251	266	14	98	206	209	240	598	218	228
15	233	247	250	266	14	106	206	208	241	450	219	228
16	233	247	251	267	14	112	209	206	241	426	221	229
17	223	247	252	270	14	112	211	203	237	347	222	233
18	236	249	252	270	15	113	211	190	238	325	222	232
19	238	250	252	272	15	113	210	201	235	322	225	232
20	238	250	252	274	15	110	211	199	322	330	226	232
21	238	250	252	268	15	110	210	369	497	322	227	230
22	239	250	254	266	14	110	210	579	563	361	226	230
23	240	251	255	272	14	110	211	588	532	339	228	230
24	241	252	256	272	14	112	211	588	528	299	229	230
25	242	254	255	272	14	112	211	582	887	429	230	230
26	234	255	255	272	14	112	211	581	1150	446	227	230
27	242	253	255	274	15	113	211	578	1010	329	226	230
28	242	252	257	274	15	112	213	577	931	372	228	230
29	242	252	258	274	15	123	214	574	839	374	229	230
30	240	252	258	274	---	144	213	573	782	284	228	230
31	243	---	256	188	---	167	---	571	---	344	228	---
TOTAL	5281.6	7425	7096	8195	408	2481	6222	10343	14710	16610	7406	6859
MEAN	170	248	229	264	14.1	80.0	207	334	490	536	239	229
MAX	243	255	258	274	15	167	214	588	1150	1150	367	233
MIN	7.6	242	16	188	13	15	191	190	216	284	199	223
AC-FT	10480	14730	14070	16250	809	4920	12340	20520	29180	32950	14690	13600

CAL YR 1983	TOTAL	89336.6	MEAN	245	MAX	1860	MIN	5.6	AC-FT	177200
WTR YR 1984	TOTAL	93036.6	MEAN	254	MAX	1150	MIN	7.6	AC-FT	184500

09039000 TROUBLESOME CREEK NEAR PEARMONT, CO

LOCATION.--Lat 40°13'03", long 106°18'45", in SE¼ sec.14, T.3 N., R.80 W., Grand County, Hydrologic Unit 14010001, on left bank 45 ft downstream from small tributary, 3 mi north of Pearmont, 4 mi downstream from Rabbit Ear Creek, 5.2 mi upstream from East Fork, and 12 mi northeast of Kremmling.

DRAINAGE AREA.--44.6 mi^2.

PERIOD OF RECORD.--October 1953 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 8,049 ft, from topographic map.

REMARKS.--Records good except those for winter period, which are poor. 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. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--31 years, 30.4 ft^3/s; 22,020 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 630 ft^3/s, June 25, 1983, gage height, 2.81 ft; maximum gage height, 3.93 ft, Mar. 31, 1965 (backwater from ice); minimum daily discharge, 4.5 ft^3/s, Dec. 20-24, 1976.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 558 ft^3/s at 2000 May 22, gage height, 2.90 ft; minimum daily, 10 ft^3/s, May 7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	12	13	13	13	13	15	11	319	79	34	33
2	17	12	13	13	13	13	15	11	283	71	32	32
3	18	11	13	13	13	13	15	11	249	65	30	30
4	15	11	13	13	13	12	15	11	231	63	30	29
5	12	11	13	13	13	12	15	11	217	58	32	28
6	12	11	13	13	13	12	16	11	205	53	35	28
7	12	11	13	13	13	12	17	10	198	49	37	28
8	12	12	13	13	13	12	18	11	163	47	35	28
9	12	11	13	13	13	12	19	16	142	48	35	27
10	12	13	13	13	13	12	19	25	126	55	34	26
11	13	11	13	13	13	12	19	29	128	46	33	26
12	12	12	13	13	13	12	19	40	136	43	28	27
13	12	11	13	13	13	13	19	55	148	43	28	28
14	13	11	13	13	13	14	20	73	179	46	28	27
15	12	13	13	13	13	15	22	226	208	43	28	26
16	12	12	13	13	13	15	22	240	206	41	28	27
17	12	13	13	13	13	15	23	277	190	39	28	27
18	12	12	13	13	13	15	24	299	173	36	32	26
19	12	12	13	13	13	15	24	270	155	37	31	25
20	12	12	13	13	13	15	25	259	154	37	38	24
21	12	12	13	13	13	15	24	349	146	38	34	25
22	12	13	13	13	13	15	22	366	139	37	32	25
23	11	13	13	13	13	15	22	385	129	36	31	25
24	11	13	13	13	13	15	24	437	120	37	34	24
25	11	13	13	13	13	15	22	440	114	37	31	24
26	11	13	13	13	13	15	18	362	108	40	30	24
27	11	13	13	13	13	15	17	307	98	36	28	24
28	11	13	13	13	13	15	19	271	91	37	28	24
29	11	13	13	13	13	15	14	260	86	36	26	23
30	11	13	13	13	---	15	12	281	84	34	26	23
31	11	---	13	13	---	15	---	299	---	35	25	---
TOTAL	384	363	403	403	377	429	575	5653	4925	1402	961	793
MEAN	12.4	12.1	13.0	13.0	13.0	13.8	19.2	182	164	45.2	31.0	26.4
MAX	18	13	13	13	13	15	25	440	319	79	38	33
MIN	11	11	13	13	13	12	12	10	84	34	25	23
AC-FT	762	720	799	799	748	851	1140	11210	9770	2780	1910	1570

CAL YR 1983	TOTAL	18240	MEAN	50.0	MAX	562	MIN	11	AC-FT	36180
WTR YR 1984	TOTAL	16668	MEAN	45.5	MAX	440	MIN	10	AC-FT	33060

NOTE.--NO GAGE-HEIGHT RECORD DEC. 28 TO MAR. 15.

09041500 MUDDY CREEK AT KREMMLING, CO

LOCATION.--Lat 40°03'37", long 106°23'48", in SW¼SE¼ sec. 7, T.1 N., R.80 W., Grand County, Hydrologic Unit 14010001, on left bank 450 ft upstream from U.S. Highway 40 bridge at Kremmling and 2.8 mi upstream from mouth.

DRAINAGE AREA.--290 mi^2.

PERIOD OF RECORD.--August to October 1904, April to October 1905. Monthly discharge only in WSP 1313. April 1982 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 7,340 ft, from topographic map. Supplementary recorder on diversion ditch about 2,000 ft downstream from point of diversion.

REMARKS.--Records good, except those for winter period, which are poor. Records include flow of diversion ditch. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

EXTREMES FOR PERIOD OF RECORD.--Maximum combined discharge, 1,670 ft^3/s, May 16, 1984, gage height, 12.67 ft; minimum daily, 1.0 ft^3/s, Sept. 24, 25, 1905.

EXTREMES FOR CURRENT YEAR.--Maximum combined discharge, 1,670 ft^3/s at 1800 May 16, gage height, 12.67 ft; minimum daily, 13 ft^3/s, Nov. 14-16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24	17	18	22	25	22	28	89	1240	269	104	50
2	24	17	18	22	24	22	29	126	1340	359	103	68
3	24	17	18	22	22	22	31	145	1230	356	74	52
4	24	17	19	22	22	22	33	151	1130	297	60	38
5	29	17	20	22	22	22	34	151	1000	258	58	33
6	23	17	21	22	22	22	36	162	900	197	70	29
7	22	17	21	22	22	22	38	156	1030	161	60	26
8	22	17	22	22	22	22	40	146	1060	163	61	25
9	22	16	22	22	22	22	44	182	924	162	47	27
10	22	15	22	22	22	24	49	287	754	264	42	26
11	22	15	22	22	22	25	54	469	660	299	40	24
12	22	15	22	22	22	25	58	657	636	220	36	24
13	21	14	22	22	22	25	61	918	608	158	33	29
14	21	13	21	22	22	25	65	1330	612	187	33	36
15	22	13	22	22	22	25	70	1480	601	173	32	34
16	22	13	22	22	22	25	82	1510	610	148	34	37
17	22	14	22	22	20	25	86	1590	580	124	38	49
18	22	15	22	22	20	25	138	1550	550	111	35	47
19	23	15	22	22	20	25	137	1450	498	106	35	36
20	27	15	22	22	20	25	136	1400	400	102	56	32
21	25	15	22	22	20	26	98	1460	378	125	88	32
22	22	15	22	22	20	27	95	1520	310	112	65	36
23	22	15	22	22	20	27	117	1520	282	101	58	37
24	22	16	22	25	20	27	157	1520	260	149	64	32
25	21	17	22	25	22	27	163	1580	238	174	68	29
26	21	18	22	25	22	28	138	1590	226	130	66	30
27	21	18	22	25	22	28	108	1440	221	121	53	32
28	20	18	22	25	22	28	93	1380	190	106	44	30
29	19	18	22	25	22	28	94	1290	169	111	39	27
30	18	18	22	25	---	28	87	1220	168	107	33	25
31	17	---	22	25	---	28	---	1210	---	106	30	---
TOTAL	688	477	662	706	627	774	2399	29679	18805	5456	1659	1032
MEAN	22.2	15.9	21.4	22.8	21.6	25.0	80.0	957	627	176	53.5	34.4
MAX	29	18	22	25	25	28	163	1590	1340	359	104	68
MIN	17	13	18	22	20	22	28	89	168	101	30	24
AC-FT	1360	946	1310	1400	1240	1540	4760	58870	37300	10820	3290	2050

CAL YR 1983	TOTAL	49977	MEAN	137	MAX	1210	MIN	13	AC-FT	99130
WTR YR 1984	TOTAL	62964	MEAN	172	MAX	1590	MIN	13	AC-FT	124900

09041900 MONTE CRISTO DIVERSION NEAR HOOSIER PASS, CO

LOCATION.--Lat 39°22'51", long 106°04'15", in NE¼SE¼ sec.2, T.8 S., R.78W., Summit County, Hydrologic Unit 14010002, on left bank at entrance to Hoosier Pass tunnel, 1,800 ft downstream from diversion point, 1.4 mi northwest of Hoosier Pass, and 7 mi southwest of Breckenridge.

PERIOD OF RECORD.--October 1957 to current year.

GAGE.--Water-stage recorder and Parshall flume. Altitude of gage is 10,986 ft, from topographic map.

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 from which 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 SW¼NE¼ sec.2, T.8 S., R.78 W. The entire flow is regulated by diversion gates.

COOPERATION.--Gage-height record collected in cooperation with city of Colorado Springs.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 73 ft^3/s, Aug. 12-14, 1980; no flow for most of each year.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	58	.00	.00	.00	.00	.00	.00	.00	14	.00	.00	7.7
2	58	.00	.00	.00	.00	.00	.00	.00	13	.00	.00	5.7
3	36	.00	.00	.00	.00	.00	.00	.00	12	.00	.00	4.8
4	.00	.00	.00	.00	.00	.00	.00	.00	9.5	.00	2.2	4.2
5	.00	.00	.00	.00	.00	.00	.00	.00	8.1	.00	26	3.6
6	.00	.00	.00	.00	.00	.00	.00	.00	4.8	.00	24	4.4
7	.00	.00	.00	.00	.00	.00	.00	.00	3.0	.00	.00	3.2
8	.00	.00	.00	.00	.00	.00	.00	.00	1.7	.00	.00	2.5
9	.00	.00	.00	.00	.00	.00	.00	.00	.84	.00	6.5	3.1
10	.00	.00	.00	.00	.00	.00	.00	.00	.76	.00	13	1.7
11	.00	.00	.00	.00	.00	.00	.00	.00	1.1	.00	11	.92
12	.00	.00	.00	.00	.00	.00	.00	.00	8.5	.00	11	3.4
13	.00	.00	.00	.00	.00	.00	.00	.00	17	.00	10	.92
14	.00	.00	.00	.00	.00	.00	.00	.00	16	.00	9.8	.92
15	.00	.00	.00	.00	.00	.00	.00	.00	13	.00	8.7	1.5
16	.00	.00	.00	.00	.00	.00	.00	3.9	12	.00	11	3.6
17	.00	.00	.00	.00	.00	.00	.00	11	5.9	.00	4.4	2.8
18	.00	.00	.00	.00	.00	.00	.00	13	6.5	15	.36	2.6
19	.00	.00	.00	.00	.00	.00	.00	13	7.1	14	6.1	12
20	.00	.00	.00	.00	.00	.00	.00	17	6.7	12	12	35
21	.00	.00	.00	.00	.00	.00	.00	22	7.1	8.7	.00	34
22	.00	.00	.00	.00	.00	.00	.00	27	6.3	8.7	.00	34
23	.00	.00	.00	.00	.00	.00	.00	29	5.0	7.9	.00	34
24	.00	.00	.00	.00	.00	.00	.00	33	5.5	22	.00	33
25	.00	.00	.00	.00	.00	.00	.00	32	5.0	10	.00	37
26	.00	.00	.00	.00	.00	.00	.00	26	3.4	8.3	.00	60
27	.00	.00	.00	.00	.00	.00	.00	15	.82	4.2	.00	59
28	.00	.00	.00	.00	.00	.00	.00	8.9	.00	4.4	4.5	53
29	.00	.00	.00	.00	.00	.00	.00	9.5	.00	3.7	9.5	40
30	.00	.00	.00	.00	---	.00	.00	12	.00	10	7.1	29
31	.00	---	.00	.00	---	.00	---	13	---	4.2	7.1	---
TOTAL	152.00	.00	.00	.00	.00	.00	.00	285.30	194.62	133.10	184.26	517.56
MEAN	4.90	.00	.00	.00	.00	.00	.00	9.20	6.49	4.29	5.94	17.3
MAX	58	.00	.00	.00	.00	.00	.00	33	17	22	26	60
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.92
AC-FT	301	.00	.00	.00	.00	.00	.00	566	386	264	365	1030

CAL YR 1983	TOTAL	1099.22	MEAN	3.01	MAX	60	MIN	.00	AC-FT	2180
WTR YR 1984	TOTAL	1466.84	MEAN	4.01	MAX	60	MIN	.00	AC-FT	2910

09044300 BEMROSE-HOOSIER DIVERSION NEAR HOOSIER PASS, CO

LOCATION.--Lat 39°22'50", long 106°04'13", in NE¼SE¼ sec.2, T.8 S., R.78W., Summit County, Hydrologic Unit 14010002, on right bank at entrance to Hoosier Pass tunnel, 1.4 mi northwest of Hoosier Pass, 1.6 mi downstream from diversion point on Bemrose Creek, and 7 mi southwest of Breckenridge.

PERIOD OF RECORD.--October 1957 to current year.

GAGE.--Water-stage recorder and Parshall flume. Altitude of gage is 10,986 ft, from topographic map.

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 from which 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 collected in cooperation with city of Colorado Springs.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 44 ft^3/s, June 21, 1965; no flow for most of each year.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	.00	5.2	13	7.8	8.0
2	.00	.00	.00	.00	.00	.00	.00	.00	5.2	12	7.2	7.4
3	.00	.00	.00	.00	.00	.00	.00	.00	4.7	11	7.0	6.7
4	.00	.00	.00	.00	.00	.00	.00	.00	3.5	10	7.0	6.5
5	.00	.00	.00	.00	.00	.00	.00	.00	2.1	9.5	7.0	5.9
6	.00	.00	.00	.00	.00	.00	.00	.00	1.1	12	7.0	5.7
7	.00	.00	.00	.00	.00	.00	.00	.00	.69	11	1.9	5.9
8	.00	.00	.00	.00	.00	.00	.00	.00	.42	9.7	1.4	5.2
9	.00	.00	.00	.00	.00	.00	.00	.00	.36	10	4.1	4.8
10	.00	.00	.00	.00	.00	.00	.00	.00	.24	13	8.0	4.7
11	.00	.00	.00	.00	.00	.00	.00	.00	.69	9.5	7.8	4.7
12	.00	.00	.00	.00	.00	.00	.00	.00	4.7	8.2	7.8	4.3
13	.00	.00	.00	.00	.00	.00	.00	.00	14	8.0	7.6	4.0
14	.00	.00	.00	.00	.00	.00	.00	.00	21	8.6	7.0	4.1
15	.00	.00	.00	.00	.00	.00	.00	.00	22	9.1	6.5	4.1
16	.00	.00	.00	.00	.00	.00	.00	.00	25	9.1	7.6	4.0
17	.00	.00	.00	.00	.00	.00	.00	2.2	23	7.8	7.2	3.7
18	.00	.00	.00	.00	.00	.00	.00	4.5	25	6.7	6.5	3.3
19	.00	.00	.00	.00	.00	.00	.00	4.5	27	6.5	5.2	3.2
20	.00	.00	.00	.00	.00	.00	.00	5.9	25	6.3	4.1	3.2
21	.00	.00	.00	.00	.00	.00	.00	8.4	26	6.1	1.0	2.7
22	.00	.00	.00	.00	.00	.00	.00	11	25	6.5	1.2	2.7
23	.00	.00	.00	.00	.00	.00	.00	12	23	7.4	1.1	2.7
24	.00	.00	.00	.00	.00	.00	.00	15	24	6.5	1.3	2.6
25	.00	.00	.00	.00	.00	.00	.00	16	23	8.6	1.5	2.5
26	.00	.00	.00	.00	.00	.00	.00	16	22	8.4	1.5	2.5
27	.00	.00	.00	.00	.00	.00	.00	8.0	18	7.6	1.3	2.3
28	.00	.00	.00	.00	.00	.00	.00	2.7	12	7.8	4.5	2.3
29	.00	.00	.00	.00	.00	.00	.00	3.3	12	7.8	8.9	2.2
30	.00	.00	.00	.00	---	.00	.00	5.2	13	9.1	8.4	2.2
31	.00	---	.00	.00	---	.00	---	5.7	---	8.2	8.2	---
TOTAL	.00	.00	.00	.00	.00	.00	.00	120.40	408.90	275.0	164.6	124.1
MEAN	.00	.00	.00	.00	.00	.00	.00	3.88	13.6	8.87	5.31	4.14
MAX	.00	.00	.00	.00	.00	.00	.00	16	27	13	8.9	8.0
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.24	6.1	1.0	2.2
AC-FT	.00	.00	.00	.00	.00	.00	.00	239	811	545	326	246

CAL YR 1983	TOTAL	1248.32	MEAN	3.42	MAX	36	MIN	.00	AC-FT	2480
WTR YR 1984	TOTAL	1093.00	MEAN	2.99	MAX	27	MIN	.00	AC-FT	2170

09044800 MCCULLOUGH-SPRUCE-CRYSTAL DIVERSION NEAR HOOSIER PASS, CO

LOCATION.--Lat 39°22'51", long 106°04'14", in NE¼SE¼ sec.2, T.8 S., R.78W., Summit County, Hydrologic Unit 14010002, on left bank at entrance to Hoosier Pass tunnel, 1.4 mi northwest of Hoosier Pass, 1.6 mi downstream from diversion point on McCullough Gulch, and 7 mi southwest of Breckenridge.

PERIOD OF RECORD.--October 1957 to current year. 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 topographic map.

REMARKS.--Records fair. This is a transmountain diversion from McCullough Gulch and Spruce and Crystal Creeks in Blue River basin through Hoosier Pass tunnel to South Platte River basin from which 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, and 26, T.7 S., R.78 W. The entire flow is regulated by diversion gates.

COOPERATION.--Gage-height record collected in cooperation with city of Colorado Springs.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 123 ft^3/s, June 20, 1968; June 19, 1983; no flow for most of each year.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	.00	30	.00	1.2	.40
2	.00	.00	.00	.00	.00	.00	.00	.00	23	.00	.83	.40
3	.00	.00	.00	.00	.00	.00	.00	.00	19	.47	.50	.40
4	.00	.00	.00	.00	.00	.00	.00	.00	11	1.3	.50	.40
5	.00	.00	.00	.00	.00	.00	.00	.00	.00	.83	.50	.40
6	.00	.00	.00	.00	.00	.00	.00	.00	.00	.94	2.7	.40
7	.00	.00	.00	.00	.00	.00	.00	.00	.00	1.5	1.9	.40
8	.00	.00	.00	.00	.00	.00	.00	.00	.00	1.3	.72	.45
9	.00	.00	.00	.00	.00	.00	.00	.00	.00	2.2	.50	.45
10	.00	.00	.00	.00	.00	.00	.00	.00	.00	2.4	.50	.40
11	.00	.00	.00	.00	.00	.00	.00	.00	.00	1.6	.45	.40
12	.00	.00	.00	.00	.00	.00	.00	.00	.00	.94	.45	.45
13	.00	.00	.00	.00	.00	.00	.00	.00	.03	.94	.40	.45
14	.00	.00	.00	.00	.00	.00	.00	.00	1.0	2.6	.40	.45
15	.00	.00	.00	.00	.00	.00	.00	.00	7.4	1.9	.40	.45
16	.00	.00	.00	.00	.00	.00	.00	.00	19	1.3	.40	.45
17	.00	.00	.00	.00	.00	.00	.00	.00	12	.94	.40	.45
18	.00	.00	.00	.00	.00	.00	.00	.00	12	.50	.40	.45
19	.00	.00	.00	.00	.00	.00	.00	.00	16	.72	.40	.40
20	.00	.00	.00	.00	.00	.00	.00	.00	17	1.4	.35	.40
21	.00	.00	.00	.00	.00	.00	.00	.00	19	1.0	.35	.40
22	.00	.00	.00	.00	.00	.00	.00	6.7	17	.94	1.7	.40
23	.00	.00	.00	.00	.00	.00	.00	19	18	.94	.40	.40
24	.00	.00	.00	.00	.00	.00	.00	24	22	2.6	.35	.40
25	.00	.00	.00	.00	.00	.00	.00	23	19	1.5	.40	.40
26	.00	.00	.00	.00	.00	.00	.00	18	20	.94	.35	.25
27	.00	.00	.00	.00	.00	.00	.00	16	17	.83	.35	.13
28	.00	.00	.00	.00	.00	.00	.00	17	.00	.94	.35	.00
29	.00	.00	.00	.00	.00	.00	.00	19	.00	.50	.35	.00
30	.00	.00	.00	.00	---	.00	.00	24	.00	2.4	.35	.00
31	.00	---	.00	.00	---	.00	---	26	---	2.3	.35	---
TOTAL	.00	.00	.00	.00	.00	.00	.00	192.70	299.43	38.67	19.20	10.83
MEAN	.00	.00	.00	.00	.00	.00	.00	6.22	9.98	1.25	.62	.36
MAX	.00	.00	.00	.00	.00	.00	.00	26	30	2.6	2.7	.45
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.35	.00
AC-FT	.00	.00	.00	.00	.00	.00	.00	382	594	77	38	21

CAL YR 1983	TOTAL	837.80	MEAN	2.30	MAX	123	MIN	.00	AC-FT	1660
WTR YR 1984	TOTAL	560.83	MEAN	1.53	MAX	30	MIN	.00	AC-FT	1110

09046490 BLUE RIVER AT BLUE RIVER, CO

LOCATION.--Lat 39°27'21", long 106°01'52", in NE¼SE¼ sec.7, T.7 S, R.77 W., Summit County, Hydrologic Unit 14010002 on left bank, 350 ft below spillway of Goose Pasture Tarn Dam, 2.0 mi southeast of Breckenridge.

DRAINAGE AREA.--22.6 mi².

PERIOD OF RECORD.--October 1983 to September 1984.

GAGE.--Water-stage recorder. Altitude of gage is 9,385 ft, from topographic map.

REMARKS.--Records good except those for period of no gage-height record, which are poor. Transmountain diversions above station by Boreas Pass ditch and Hoosier Pass tunnel (see elsewhere in this report). Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 506 ft³/s, July 1, gage-height, 2.84 ft, minimum daily, 5.8 ft³/s, March 20, 21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27	22	18	14	9.5	6.8	7.2	11	356	398	204	64
2	26	21	18	13	9.0	7.2	7.7	13	310	318	174	64
3	27	20	18	14	9.0	7.6	7.7	13	293	284	144	62
4	28	19	18	14	9.0	7.7	7.7	12	280	253	133	60
5	27	20	18	13	9.0	7.2	7.7	12	249	235	113	55
6	26	20	17	13	9.0	6.8	7.7	12	221	218	250	53
7	25	20	19	13	9.0	7.2	7.2	11	214	214	210	52
8	25	20	18	13	8.8	6.8	7.7	10	186	211	170	53
9	25	20	18	13	8.6	7.2	7.6	12	169	238	140	52
10	27	18	18	13	8.6	7.0	8.0	16	156	404	110	48
11	31	19	18	13	8.6	7.2	8.0	23	161	289	90	46
12	29	22	18	13	8.6	7.2	8.0	31	177	214	80	44
13	28	22	18	12	8.6	6.8	8.0	41	192	211	78	43
14	29	22	16	13	8.6	6.5	8.1	64	289	280	76	41
15	27	20	69	12	8.6	7.2	7.2	102	310	249	74	40
16	26	20	13	10	7.7	6.8	8.1	103	305	204	72	40
17	25	20	13	11	8.6	6.5	10	88	280	177	70	40
18	25	22	13	9.0	8.6	7.2	10	86	265	130	70	39
19	25	20	14	8.1	7.2	6.5	10	81	265	130	75	38
20	24	20	14	11	7.2	5.8	10	102	265	156	80	39
21	25	20	14	10	7.2	5.8	10	139	265	144	85	38
22	33	19	6.8	11	7.2	7.2	10	177	265	137	120	38
23	30	18	7.7	11	6.8	7.4	10	195	253	151	120	37
24	26	17	20	10	6.5	6.5	11	231	249	214	95	35
25	24	17	19	10	6.8	7.2	11	276	238	158	95	36
26	23	18	16	11	7.2	7.2	12	238	231	148	100	35
27	22	17	16	10	6.5	7.0	11	253	246	128	100	35
28	22	18	16	10	6.8	6.8	10	276	284	146	85	35
29	22	18	14	9.5	6.5	6.8	12	280	293	171	80	35
30	22	18	16	9.5	---	7.0	11	310	361	268	70	33
31	22	---	15	10	---	7.2	---	318	---	235	65	---
TOTAL	803	587	546.5	357.1	233.3	215.3	271.6	3536	7628	6713	3428	1330
MEAN	25.9	19.6	17.6	11.5	8.04	6.95	9.05	114	254	217	111	44.3
MAX	33	22	69	14	9.5	7.7	12	318	361	404	250	64
MIN	22	17	6.8	8.1	6.5	5.8	7.2	10	156	128	65	33
AC-FT	1590	1160	1080	708	463	427	539	7010	15130	13320	6800	2640

WTR YR 1984 TOTAL 25648.8 MEAN 70.1 MAX 404 MIN 5.8 AC-FT 50870

NOTE.--NO GAGE-HEIGHT RECORD AUG. 6 TO SEPT. 16.

09046600 BLUE RIVER NEAR DILLON, CO

LOCATION.--Lat 39°32'55", long 106°02'19", in NW¼NE¼ sec.7, T.6 S., R.77W., Summit County, Hydrologic Unit 14010002, on right bank 0.2 mi downstream from Swan River and 5.5 mi south of Dillon.

DRAINAGE AREA.--119 mi^2.

PERIOD OF RECORD.--October 1957 to current year.

REVISED RECORDS.--WSP 2124: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 9,120 ft, from topographic map.

REMARKS.--Records good except those for winter period, which are fair. Transmountain diversions above station by Boreas Pass ditch and Hoosier Pass tunnel (see elsewhere in this report). Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--27 years, 104 ft^3/s; 75,350 acre-ft/yr, including diversion to Hoosier Pass tunnel.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,250 ft^3/s, June 17, 1965, gage height, 5.38 ft, from rating curve extended above 610 ft^3/s; minimum daily, 17 ft^3/s, Mar. 21, 1961, Feb. 24-26, 1978.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,050 ft^3/s at 0800 May 25, gage height, 5.19 ft; minimum daily, 29 ft^3/s, Mar. 8-21, Apr. 1-6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	98	77	60	46	35	31	29	41	756	751	373	169
2	97	78	60	46	35	31	29	42	726	656	320	169
3	96	76	60	45	34	31	29	42	651	565	282	161
4	95	75	59	46	35	30	29	42	612	502	250	152
5	96	74	58	44	34	30	29	43	566	459	247	145
6	96	73	57	44	34	30	29	43	523	428	304	139
7	95	72	55	44	34	30	30	42	549	414	409	137
8	93	72	56	43	34	29	30	42	487	405	312	144
9	92	72	58	43	33	29	31	44	441	440	269	134
10	90	70	59	42	33	29	32	52	384	611	240	124
11	91	69	58	42	33	29	33	68	383	551	219	120
12	97	69	57	42	33	29	32	91	391	403	209	115
13	99	69	54	40	33	29	32	128	412	354	202	113
14	97	71	54	41	33	29	32	176	555	406	200	106
15	97	69	54	41	33	29	32	287	692	398	190	107
16	96	69	54	39	32	29	32	368	725	337	185	107
17	93	68	62	40	33	29	35	354	727	296	179	108
18	90	68	56	39	34	29	37	340	651	262	177	106
19	91	67	54	39	33	29	39	300	640	243	197	105
20	90	67	51	38	33	29	41	340	618	244	219	101
21	87	67	49	38	32	29	40	440	633	247	224	103
22	85	64	49	38	32	30	40	549	639	239	260	103
23	85	64	49	38	32	30	40	640	618	253	263	104
24	90	63	48	37	32	30	42	733	589	328	244	101
25	88	62	48	37	32	30	43	954	575	344	255	96
26	85	63	49	37	31	30	43	781	540	314	255	99
27	81	60	52	37	31	30	43	700	525	274	229	102
28	80	60	51	36	31	30	41	662	545	259	214	101
29	79	60	48	36	31	30	42	628	555	275	200	104
30	78	61	48	36	---	30	41	638	602	414	176	105
31	77	---	47	35	---	30	---	710	---	404	169	---
TOTAL	2804	2049	1674	1249	955	919	1057	10320	17310	12076	7472	3580
MEAN	90.5	68.3	54.0	40.3	32.9	29.6	35.2	333	577	390	241	119
MAX	99	78	62	46	35	31	43	954	756	751	409	169
MIN	77	60	47	35	31	29	29	41	383	239	169	96
AC-FT	5560	4060	3320	2480	1890	1820	2100	20470	34330	23950	14820	7100

CAL YR 1983 TOTAL 59454 MEAN 163 MAX 1160 MIN 27 AC-FT 117900
WTR YR 1984 TOTAL 61465 MEAN 168 MAX 954 MIN 29 AC-FT 121900

09047500 SNAKE RIVER NEAR MONTEZUMA, CO

LOCATION.--Lat 39°36'20", long 105°56'33", in NW¼ sec.19, T.5 S., R.76 W. (projected), Summit County, Hydrologic Unit 14010002, on right bank 200 ft downstream from North Fork and 4.5 mi northwest of Montezuma.

DRAINAGE AREA.--57.7 mi^2.

PERIOD OF RECORD.--July 1942 to September 1946, October 1951 to current year.

REVISED RECORDS.--WSP 2124: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 9,320 ft, from topographic map. Prior to Oct. 14, 1943, nonrecording gage at present site and datum.

REMARKS.--Records good except those for winter period, which are poor. Small diversions above station for irrigation and domestic use. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--37 years, 61.1 ft^3/s; 44,270 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,250 ft^3/s, June 10, 1952, gage height, 3.51 ft; maximum gage height, 3.88 ft, June 6, 1972; minimum discharge not determined.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 543 ft^3/s at 2100 June 15, gage height, 3.32 ft, only peak above base of 500 ft^3/s; minimum daily, 12 ft^3/s, Mar. 12-17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36	26	23	20	15	15	13	17	381	426	209	139
2	35	25	23	20	15	14	13	18	354	384	244	126
3	36	26	23	19	15	13	13	18	338	362	208	116
4	37	26	23	18	15	13	13	18	320	337	187	109
5	36	26	23	18	15	13	13	18	293	314	183	103
6	34	26	23	17	15	13	13	18	255	294	266	97
7	32	25	23	17	15	13	13	18	238	278	243	104
8	32	26	23	17	15	13	13	18	206	261	209	108
9	32	27	23	17	15	13	13	19	185	280	193	100
10	32	28	23	17	15	13	13	19	171	324	176	92
11	33	29	23	17	15	13	13	29	190	271	166	89
12	33	30	23	17	15	12	13	49	217	247	162	95
13	33	28	23	17	15	12	13	61	267	238	160	98
14	35	27	23	17	15	12	13	74	394	239	150	94
15	33	28	23	17	15	12	13	91	463	222	155	94
16	31	27	23	17	15	12	13	100	449	204	156	96
17	33	26	23	17	15	12	14	107	415	191	146	89
18	35	24	23	17	15	13	15	114	406	177	171	84
19	33	23	23	17	15	13	15	103	430	174	162	81
20	31	23	23	17	15	13	15	126	433	178	157	80
21	30	23	22	17	15	13	15	160	439	177	162	79
22	30	23	21	16	15	13	15	185	444	167	165	78
23	29	23	20	15	15	13	15	235	427	175	149	73
24	29	23	20	15	15	13	15	310	419	176	187	70
25	28	23	20	15	15	13	15	342	399	186	190	72
26	29	23	20	15	15	13	17	304	381	221	185	70
27	29	23	20	15	15	13	16	314	387	194	167	68
28	28	23	20	15	15	13	16	312	385	194	157	73
29	27	23	20	15	15	13	17	319	379	207	146	71
30	27	23	20	15	---	13	17	352	384	225	136	72
31	26	---	20	15	---	13	---	372	---	208	130	---
TOTAL	984	756	683	518	435	400	425	4240	10449	7531	5477	2720
MEAN	31.7	25.2	22.0	16.7	15.0	12.9	14.2	137	348	243	177	90.7
MAX	37	30	23	20	15	15	17	372	463	426	266	139
MIN	26	23	20	15	15	12	13	17	171	167	130	68
AC-FT	1950	1500	1350	1030	863	793	843	8410	20730	14940	10860	5400

CAL YR 1983	TOTAL	27625	MEAN	75.7	MAX	622	MIN	12	AC-FT	54790
WTR YR 1984	TOTAL	34618	MEAN	94.6	MAX	463	MIN	12	AC-FT	68660

NOTE.--NO GAGE-HEIGHT RECORD NOV. 20 TO APR. 23.

09047700 KEYSTONE GULCH NEAR DILLON, CO

LOCATION.--Lat 39°35'40", long 105°58'19", in NE¼NE¼ sec.26, T.5 S., R.77 W., Summit County, Hydrologic Unit 14010002, on right bank 0.7 mi upstream from mouth and 4.7 mi southeast of Dillon.

DRAINAGE AREA.--9.10 mi^2.

PERIOD OF RECORD.--October 1957 to current year.

REVISED RECORDS.--WSP 2124: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 9,350 ft, from topographic map.

REMARKS.--Records good except those for winter period, which are poor. No known diversion above station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--27 years, 5.98 ft^3/s; 4,330 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 118 ft^3/s, June 27, 1983, gage height, 3.01 ft, from rating curve extended abcve 65 ft^3/s; minimum not determined.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 85 ft^3/s at 1900 May 31, gage height, 2.71 ft, only peak above base of 35 ft^3/s; minimum daily, 1.8 ft^3/s, Mar. 1-3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.8	4.0	3.5	3.0	2.5	1.8	2.0	2.5	76	47	21	12
2	4.8	4.0	3.5	3.0	2.5	1.8	2.0	2.5	71	39	20	11
3	5.0	3.9	3.5	3.0	2.3	1.8	2.0	2.5	65	35	19	9.9
4	5.3	4.0	3.5	3.0	2.2	1.9	2.0	2.4	68	33	18	9.7
5	5.2	4.0	3.5	3.0	2.0	2.0	2.0	2.5	67	31	17	9.2
6	5.1	3.9	3.5	3.0	2.0	2.0	2.0	2.5	60	29	28	9.1
7	4.9	4.0	3.4	3.0	2.0	2.0	2.0	2.6	61	28	22	10
8	4.8	4.0	3.2	3.0	2.0	2.0	2.0	2.6	55	31	20	9.7
9	4.8	4.0	3.1	3.0	2.0	2.0	2.0	2.7	46	31	19	9.0
10	5.1	4.0	3.0	3.0	2.0	2.0	2.0	4.3	45	37	17	8.4
11	5.1	4.0	3.0	3.0	2.0	2.0	2.0	7.2	48	28	16	8.1
12	5.0	3.8	3.0	3.0	2.0	2.0	2.0	9.2	47	25	15	8.0
13	4.9	3.6	3.0	3.0	2.0	2.0	2.0	11	54	25	15	7.7
14	5.0	3.5	3.0	3.0	2.0	2.0	2.0	15	61	25	14	8.0
15	4.8	3.5	3.0	3.0	2.0	2.0	2.0	23	59	23	15	7.2
16	4.9	3.5	3.0	3.0	2.0	2.0	2.2	25	60	21	14	7.7
17	4.9	3.5	3.0	3.0	2.0	2.0	2.5	28	60	19	13	7.1
18	4.8	3.5	3.0	2.8	2.0	2.0	2.5	30	62	18	15	6.5
19	4.8	3.5	3.0	2.7	2.0	2.0	2.5	30	63	17	14	6.8
20	4.7	3.5	3.0	2.6	2.0	2.0	2.5	37	63	16	14	7.1
21	4.4	3.5	3.0	2.5	2.0	2.0	2.5	45	56	16	14	6.8
22	4.3	3.5	3.0	2.5	2.0	2.0	2.5	50	54	20	14	6.9
23	4.3	3.5	3.0	2.5	2.0	2.0	2.5	58	55	24	12	6.5
24	4.3	3.5	3.0	2.5	2.0	2.0	2.5	76	54	28	15	6.5
25	4.2	3.5	3.0	2.5	2.0	2.0	2.5	77	52	23	13	6.5
26	4.2	3.5	3.0	2.5	2.0	2.0	2.5	72	50	22	12	6.5
27	4.2	3.5	3.0	2.5	2.0	2.0	2.5	69	46	19	12	6.5
28	4.1	3.5	3.0	2.5	2.0	2.0	2.5	62	44	21	11	6.8
29	4.1	3.5	3.0	2.5	2.0	2.0	2.5	63	44	25	11	6.8
30	4.0	3.5	3.0	2.5	---	2.0	2.5	64	49	25	11	7.1
31	4.0	---	3.0	2.5	---	2.0	---	81	---	22	11	---
TOTAL	144.8	110.7	96.7	86.6	59.5	61.3	67.2	959.5	1695	803	482	239.1
MEAN	4.67	3.69	3.12	2.79	2.05	1.98	2.24	31.0	56.5	25.9	15.5	7.97
MAX	5.3	4.0	3.5	3.0	2.5	2.0	2.5	81	76	47	28	12
MIN	4.0	3.5	3.0	2.5	2.0	1.8	2.0	2.4	44	16	11	6.5
AC-FT	287	220	192	172	118	122	133	1900	3360	1590	956	474

CAL YR 1983	TOTAL	3625.2	MEAN	9.93	MAX	80	MIN	1.8	AC-FT	7190
WTR YR 1984	TOTAL	4805.4	MEAN	13.1	MAX	81	MIN	1.8	AC-FT	9530

NOTE.--NO GAGE-HEIGHT RECORD NOV. 14 TO MAY. 3.

09050100 TENMILE CREEK BELOW NORTH TENMILE CREEK, AT FRISCO, CO

LOCATION.--Lat 39°34'37", long 106°06'33", in SE¼NW¼ sec.34, T.5 S., R.78 W., Summit County, Hydrologic Unit 14010002, on right bank 220 ft upstream from bridge on U.S. Highway 6, 160 ft downstream from North Tenmile Creek, and 0.6 mi west of Frisco.

DRAINAGE AREA.--93.3 mi².

PERIOD OF RECORD.--October 1957 to current year. Prior to October 1971, published as "below North Fork, at Frisco."

GAGE.--Water-stage recorder. Altitude of gage is 9,100 ft, from topographic map. Prior to Apr. 21, 1981 at site 720 ft downstream at different datum.

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. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--27 years, 98.6 ft³/s; 71,440 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,910 ft³/s, June 16, 1965, gage height, 6.15 ft, from rating curve extended above 750 ft³/s; minimum daily, 7 ft³/s, Mar. 8, 14, 1960.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 700 ft³/s, and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
May 25	0100	947	4.17	July 10	0600	1,160	3.86
June 30	2330	*1,220	3.95				

Minimum daily discharge, 14 ft³/s, Feb. 25 to Mar. 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	58	58	37	22	22	14	47	73	710	963	324	235
2	57	58	33	22	22	14	44	74	609	826	264	213
3	59	58	30	22	22	15	48	74	582	762	254	190
4	61	57	33	22	22	15	53	74	576	670	235	175
5	61	57	34	22	22	16	50	74	560	609	222	165
6	61	57	35	22	22	18	50	74	548	576	355	151
7	59	56	35	22	22	21	50	72	543	560	301	160
8	58	61	36	22	22	23	52	73	490	592	251	165
9	59	58	36	21	22	25	53	84	459	684	225	149
10	61	53	36	19	20	27	53	96	451	852	208	140
11	65	49	30	18	18	28	57	115	521	604	190	144
12	64	43	30	17	16	29	63	144	565	521	180	131
13	64	42	30	17	15	36	56	180	670	490	185	125
14	69	37	30	17	15	46	54	254	859	548	177	119
15	66	47	30	17	15	39	54	328	915	481	183	115
16	59	41	30	17	15	43	57	355	955	433	175	121
17	46	39	30	17	15	46	65	351	852	376	180	115
18	46	39	31	17	15	45	72	359	859	332	205	104
19	44	40	30	17	15	44	76	328	867	308	202	99
20	44	44	30	17	15	44	78	398	833	305	293	98
21	44	39	30	18	15	41	74	510	883	301	308	98
22	44	37	28	19	15	42	73	554	915	278	351	99
23	43	35	26	20	15	45	78	604	883	264	282	96
24	43	34	24	20	15	47	82	710	899	289	328	86
25	41	34	22	21	14	46	80	729	852	293	367	86
26	42	34	22	22	14	46	76	614	788	312	324	88
27	42	34	22	22	14	47	74	598	774	275	282	88
28	46	34	22	22	14	46	73	548	774	308	258	85
29	54	34	22	22	14	47	73	587	833	363	235	82
30	58	34	22	22	---	48	73	670	971	437	216	74
31	59	---	22	22	---	47	---	716	---	393	213	---
TOTAL	1677	1343	908	617	502	1090	1888	10420	21996	15005	7773	3796
MEAN	54.1	44.8	29.3	19.9	17.3	35.2	62.9	336	733	484	251	127
MAX	69	61	37	22	22	48	82	729	971	963	367	235
MIN	41	34	22	17	14	14	44	72	451	264	175	74
AC-FT	3330	2660	1800	1220	996	2160	3740	20670	43630	29760	15420	7530

CAL YR 1983	TOTAL	58229	MEAN	160	MAX	1280	MIN	18	AC-FT	115500
WTR YR 1984	TOTAL	67015	MEAN	183	MAX	971	MIN	14	AC-FT	132900

NOTE.--NO GAGE-HEIGHT RECORD DEC. 29 TO JAN. 31.

09050700 BLUE RIVER BELOW DILLON, CO

LOCATION.--Lat 39°37'32", long 106°03'57", in SE¼SE¼ sec.12, T.5 S., R.78 W., Summit County, Hydrologic Unit 14010002, on right bank 0.3 mi downstream from Dillon Dam, 0.1 mi upstream from Straight Creek, and 1.1 mi west of Dillon.

DRAINAGE AREA.--335 mi².

PERIOD OF RECORD.--January 1960 to current year.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 8,760 ft, from topographic map.

REMARKS.--Records good. Flow regulated since Sept. 3, 1963, by Dillon Reservoir, 0.3 mi upstream (station 09050600). Natural flow of stream affected by transmountain diversions, transbasin diversions, and diversions above station for irrigation of about 400 acres of hay meadows. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--21 years (water years 1964-84), 207 ft³/s; 150,000 acre-ft/yr, since completion of Dillon Reservoir.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,010 ft³/s, May 25, 1984 gage height, 3.88 ft; maximum gage-height, 3.95 ft, June 22, 1983; no flow, Sept. 4 to Nov. 19, 1963.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,010 ft³/s at 0815 May 25, gage height, 3.88 ft; minimum daily, 9.4 ft³/s, Jan. 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	150	106	26	300	76	79	89	223	1890	1730	1300	874
2	154	123	19	197	87	63	89	186	1890	1410	1300	867
3	154	123	76	15	92	63	89	193	1880	1420	1300	867
4	154	123	112	15	101	65	89	201	1890	1420	1300	642
5	154	123	95	15	109	65	89	186	1890	1530	1300	445
6	154	129	26	16	119	65	89	175	1880	1550	1300	154
7	154	133	16	16	129	65	89	175	1890	1500	1300	331
8	154	133	27	17	140	67	92	175	1800	1510	1300	440
9	154	136	79	17	147	67	70	179	1510	1510	1300	440
10	154	136	89	17	147	67	55	179	1380	1750	1300	340
11	154	133	211	17	147	67	53	271	1410	1890	1300	227
12	154	133	179	17	147	79	106	502	1520	1720	1300	225
13	150	133	36	17	147	89	263	874	1590	1620	1300	380
14	150	129	60	17	147	89	318	951	1790	1620	1300	362
15	150	129	44	17	147	89	318	1060	1870	1620	888	331
16	150	129	106	15	154	103	184	1320	1880	1620	485	331
17	129	112	255	13	154	119	15	1630	1880	1620	485	143
18	58	101	255	9.4	157	119	15	1700	1880	1620	480	48
19	53	101	157	13	157	116	15	1710	1880	1450	480	51
20	161	101	18	13	157	116	15	1710	1880	1310	485	157
21	161	103	18	13	161	116	15	1710	1890	1310	480	300
22	161	103	16	12	161	116	15	1810	1890	1310	480	304
23	161	103	44	12	161	116	25	1880	1890	1310	480	304
24	147	103	183	12	161	116	106	1940	1890	1310	853	271
25	136	92	291	11	161	112	168	1920	1890	1310	1280	26
26	129	27	308	12	161	112	231	1870	1890	1300	1280	15
27	123	16	308	12	126	112	271	1880	1890	1300	1080	15
28	123	16	154	12	101	98	271	1880	1890	1300	881	56
29	123	16	20	12	101	89	271	1880	1890	1300	881	304
30	123	16	34	23	---	89	267	1880	1890	1300	881	89
31	123	---	211	56	---	89	---	1890	---	1300	881	---
TOTAL	4355	3061	3473	960.4	3955	2817	3782	34140	54380	45770	30960	9339
MEAN	140	102	112	31.0	136	90.9	126	1101	1813	1476	999	311
MAX	161	136	308	300	161	119	318	1940	1890	1890	1300	874
MIN	53	16	16	9.4	76	63	15	175	1380	1300	480	15
AC-FT	8640	6070	6890	1900	7840	5590	7500	67720	107900	90780	61410	18520

CAL YR 1983 TOTAL 148698 MEAN 407 MAX 1910 MIN 16 AC-FT 294900
WTR YR 1984 TOTAL 196992.4 MEAN 538 MAX 1940 MIN 9.4 AC-FT 390700

09052000 ROCK CREEK NEAR DILLON, CO

LOCATION.--Lat 39°43'23", long 106°07'41", in NE¼ sec.9, T.4 S., R.78 W., Summit County, Hydrologic Unit 14010002, 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 mi northwest of Dillon.

DRAINAGE AREA.--15.8 mi^2.

PERIOD OF RECORD.--July 1942 to September 1956, October 1966 to current year.

GAGE.--Water-stage recorder. Datum of gage is 8,502.52 ft, (Colorado Highway Department datum). Prior to Apr. 21, 1943, nonrecording gage, and Apr. 21, 1943, to Sept. 13, 1950, water-stage recorder, at site 500 ft downstream at datum 28.76 ft, lower.

REMARKS.--Records good except those for winter period, which are poor. A few small diversions for irrigation of hay meadows above and below station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--32 years, (water years 1943-56, 1967-84), 23.2 ft^3/s; 16,810 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 289 ft^3/s, June 10, 1973, gage height, 4.35 ft, from rating curve extended above 154 ft^3/s; maximum gage height, 4.36 ft, June 24, 1971; minimum daily discharge, 2.2 ft^3/s, Apr. 13, 17, 1945.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 160 ft^3/s, and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
May 24	2200	178	3.98	July 10	0700	* 218	4.12

Minimum daily discharge, 3.3 ft^3/s, May 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	8.3	5.5	5.4	5.0	4.5	4.5	4.5	148	151	72	46
2	10	8.1	5.5	5.2	5.0	4.5	4.5	4.1	118	130	67	48
3	11	7.9	5.5	5.0	5.0	4.5	4.5	3.3	99	123	59	38
4	12	7.6	5.5	5.0	5.0	4.5	4.5	3.7	101	113	53	33
5	12	7.6	5.5	5.0	4.5	4.5	4.5	5.2	93	106	53	28
6	11	7.6	5.5	5.0	4.5	4.5	4.5	5.4	87	101	58	28
7	11	7.3	5.5	5.0	4.5	4.5	4.5	6.0	88	101	55	30
8	10	7.8	5.5	5.0	4.5	4.5	4.5	7.0	70	103	51	33
9	9.9	7.8	5.5	5.0	4.5	4.5	4.5	9.1	63	104	46	30
10	11	7.8	5.5	5.0	4.5	4.5	4.5	15	58	168	41	29
11	12	7.8	5.5	5.0	4.5	4.5	4.7	21	67	113	39	27
12	12	7.8	5.5	5.0	4.5	4.5	4.9	29	82	92	45	26
13	11	7.8	5.5	5.0	4.5	4.5	5.0	41	94	92	51	28
14	12	7.8	5.5	5.0	4.5	4.5	5.0	57	129	124	47	24
15	11	7.8	5.5	5.0	4.5	4.5	5.0	75	146	101	42	23
16	11	7.8	5.5	5.0	4.5	4.5	5.0	91	141	88	43	27
17	10	7.8	5.5	5.0	4.5	4.5	5.2	83	119	80	45	27
18	11	7.5	5.5	5.0	4.5	4.5	5.4	81	102	70	50	24
19	10	7.3	5.5	5.0	4.5	4.5	5.6	74	113	72	44	21
20	9.8	7.2	5.5	5.0	4.5	4.5	5.8	82	124	77	53	19
21	9.7	5.4	5.5	5.0	4.5	4.5	6.0	96	123	87	60	19
22	9.3	5.5	5.5	5.0	4.5	4.5	6.2	110	129	79	59	20
23	9.2	5.4	5.5	5.0	4.5	4.5	6.4	119	123	73	49	18
24	9.1	5.4	5.5	5.0	4.5	4.5	6.6	146	120	82	46	18
25	8.6	5.4	5.5	5.0	4.5	4.5	6.8	160	114	81	66	19
26	8.5	4.9	5.5	5.0	4.5	4.5	7.4	110	112	82	57	19
27	8.4	4.9	5.5	5.0	4.5	4.5	7.5	111	110	72	47	18
28	8.3	5.2	5.5	5.0	4.5	4.5	5.8	102	116	79	40	19
29	8.2	5.4	5.5	5.0	4.5	4.5	4.7	107	127	83	40	18
30	8.2	5.5	5.5	5.0	---	4.5	4.6	124	142	85	37	18
31	8.2	---	5.5	5.0	---	4.5	---	127	---	78	34	---
TOTAL	313.4	207.4	170.5	155.6	132.5	139.5	158.6	2009.3	3258	2990	1549	775
MEAN	10.1	6.91	5.50	5.02	4.57	4.50	5.29	64.8	109	96.5	50.0	25.8
MAX	12	8.3	5.5	5.4	5.0	4.5	7.5	160	148	168	72	48
MIN	8.2	4.9	5.5	5.0	4.5	4.5	4.5	3.3	58	70	34	18
AC-FT	622	411	338	309	263	277	315	3990	6460	5930	3070	1540

CAL YR 1983	TOTAL	10125.3	MEAN	27.7	MAX	194	MIN	3.1	AC-FT	20080
WTR YR 1984	TOTAL	11858.8	MEAN	32.4	MAX	168	MIN	3.3	AC-FT	23520

NOTE.--NO GAGE HEIGHT RECORD NOV. 28 TO APR. 24.

09052400 BOULDER CREEK AT UPPER STATION, NEAR DILLON, CO

LOCATION.--Lat 39°43'41", long 106°10'22", in SW¼SW¼ sec.6, T.4 S., R.78W., Summit County, Hydrologic Unit 14010002, on left bank 1.2 mi downstream from Boulder Lake, 3.2 mi upstream from mouth, and 9.4 mi northwest of Dillon.

DRAINAGE AREA.--8.56 mi².

PERIOD OF RECORD.--October 1966 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 9,460 ft, from topographic map.

REMARKS.--Records good except those for winter period, which are poor. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--18 years, 17.2 ft³/s; 12,460 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 316 ft³/s, July 1, 1984, gage height, 3.42 ft; minimum daily, 0.80 ft³/s, Jan. 6, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 120 ft³/s, and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
June 16	0100	154	2.75	July 1	0030	*316	3.42

Minimum daily discharge, 2.0 ft³/s, Mar. 3-16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.7	4.8	4.5	3.5	2.8	2.3	2.5	3.5	126	181	53	37
2	5.7	4.8	4.5	3.5	2.6	2.1	2.5	3.5	101	143	48	35
3	6.1	4.6	4.5	3.5	2.5	2.0	2.5	3.5	81	131	39	26
4	6.5	4.4	4.5	3.5	2.5	2.0	2.5	3.5	82	122	36	22
5	6.3	4.4	4.5	3.5	2.5	2.0	2.5	3.5	73	114	37	19
6	6.3	4.4	4.5	3.5	2.5	2.0	2.5	3.5	64	112	41	18
7	6.3	4.2	4.5	3.5	2.5	2.0	2.5	3.5	61	115	36	22
8	6.3	4.8	4.5	3.5	2.5	2.0	2.5	3.5	46	115	34	22
9	6.1	4.7	4.5	3.5	2.5	2.0	2.5	4.0	37	126	28	20
10	6.5	4.5	4.5	3.5	2.5	2.0	2.5	5.0	33	175	24	18
11	7.1	4.5	4.5	3.5	2.5	2.0	2.5	6.0	40	106	22	16
12	6.8	4.5	4.5	3.5	2.5	2.0	2.5	7.0	57	78	32	20
13	6.5	4.5	4.5	3.5	2.5	2.0	2.5	9.0	73	80	41	19
14	6.8	4.5	4.5	3.5	2.5	2.0	2.5	11	114	126	40	17
15	6.8	4.5	4.5	3.5	2.5	2.0	2.5	14	127	87	39	16
16	6.3	4.5	4.5	3.5	2.5	2.0	2.7	18	131	71	44	20
17	6.3	4.5	4.5	3.4	2.5	2.2	2.9	23	110	66	43	19
18	6.3	4.5	4.5	3.2	2.5	2.3	3.2	30	90	55	40	16
19	6.1	4.5	4.5	3.0	2.5	2.5	3.5	39	99	58	40	14
20	5.7	4.5	4.5	3.0	2.5	2.5	3.5	50	107	71	52	13
21	5.7	4.5	4.5	3.0	2.5	2.5	3.5	68	119	86	56	14
22	5.4	4.5	4.5	3.0	2.5	2.5	3.5	76	127	73	52	15
23	5.4	4.5	4.5	3.0	2.5	2.5	3.5	86	122	64	43	14
24	5.4	4.5	4.5	3.0	2.5	2.5	3.5	114	119	67	44	12
25	5.2	4.5	4.5	3.0	2.5	2.5	3.5	115	112	61	55	14
26	5.2	4.5	4.5	3.0	2.5	2.5	3.5	80	110	60	44	13
27	5.0	4.5	4.5	3.0	2.5	2.5	3.5	78	119	64	36	12
28	5.0	4.5	4.5	3.0	2.5	2.5	3.5	78	132	67	33	13
29	5.0	4.5	4.0	3.0	2.5	2.5	3.5	88	146	56	30	12
30	4.8	4.5	3.8	3.0	---	2.5	3.5	99	173	60	26	11
31	4.8	---	3.5	3.0	---	2.5	---	107	---	55	26	---
TOTAL	183.4	135.6	137.3	101.6	72.9	69.4	88.3	1233.0	2931	2845	1214	539
MEAN	5.92	4.52	4.43	3.28	2.51	2.24	2.94	39.8	97.7	91.8	39.2	18.0
MAX	7.1	4.8	4.5	3.5	2.8	2.5	3.5	115	173	181	56	37
MIN	4.8	4.2	3.5	3.0	2.5	2.0	2.5	3.5	33	55	22	11
AC-FT	364	269	272	202	145	138	175	2450	5810	5640	2410	1070

CAL YR 1983	TOTAL	7861.2	MEAN	21.5	MAX	210	MIN	2.2	AC-FT	15590
WTR YR 1984	TOTAL	9550.5	MEAN	26.1	MAX	181	MIN	2.0	AC-FT	18940

NOTE.--NO GAGE-HEIGHT RECORD NOV. 9 TO MAY 16.

09052800 SLATE CREEK AT UPPER STATION, NEAR DILLON, CO

LOCATION.--Lat 39°45'47", long 106°11'31", in SW¼NW¼ sec.25, T.3 S., R.79 W., Summit County, Hydrologic Unit 14010002, on left bank 0.2 mi upstream from unnamed tributary, 2.7 mi upstream from mouth, and 12 mi northwest of Dillon.

DRAINAGE AREA.--14.2 mi².

PERIOD OF RECORD.--October 1966 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 9,040 ft, from topographic map.

REMARKS.--Records good except those for winter period, which are fair. No diversion above station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--18 years, 26.5 ft³/s; 19,200 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 485 ft³/s, Aug. 5, 1983, gage height, 6.14 ft, from rating curve extended above 170 ft³/s; maximum gage height, 6.56 ft, May 2, 1975 (backwater from beaver dam and ice); minimum daily discharge, 1.0 ft³/s, Mar. 14, 1974, Jan. 12, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 160 ft³/s, and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
May 25	0300	209	4.86	July 1	0100	*368	5.61

Minimum daily discharge, 3.1 ft³/s, Apr. 10-18, 21-23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.0	7.1	7.0	6.0	4.2	3.5	3.2	5.3	187	279	94	53
2	6.9	6.9	7.0	6.0	4.0	3.5	3.2	4.7	146	211	84	53
3	7.9	6.9	6.9	6.0	3.9	3.6	3.2	3.9	115	187	69	42
4	8.6	6.6	6.5	6.0	3.9	3.5	3.2	3.7	111	175	62	37
5	9.0	6.4	7.0	6.0	3.9	3.5	3.2	3.8	101	163	63	33
6	9.2	6.4	6.3	6.0	3.9	3.5	3.2	4.0	88	159	73	30
7	9.3	6.1	6.0	6.0	3.9	3.3	3.2	5.0	94	162	64	35
8	9.1	7.3	6.5	6.0	3.9	3.3	3.2	4.8	69	163	61	37
9	8.6	7.3	6.5	6.0	3.9	3.3	3.2	5.9	59	178	55	36
10	10	7.4	6.2	6.0	3.9	3.3	3.1	10	52	247	49	32
11	12	6.8	6.2	6.0	3.9	3.3	3.1	19	59	179	48	29
12	11	6.9	6.3	6.0	3.9	3.3	3.1	31	75	133	51	36
13	10	7.3	6.0	6.0	3.9	3.3	3.1	47	98	131	55	36
14	11	7.0	6.0	6.0	3.8	3.3	3.1	59	156	207	53	32
15	11	7.0	6.2	6.0	3.8	3.3	3.1	88	174	153	58	30
16	9.9	7.0	6.2	5.6	3.8	3.3	3.1	89	176	115	73	33
17	9.6	7.0	6.3	5.2	3.8	3.3	3.1	79	149	111	67	33
18	9.9	7.0	6.4	5.0	3.8	3.3	3.1	81	123	90	56	28
19	9.5	7.0	6.2	5.0	3.8	3.3	3.2	68	142	96	72	26
20	8.9	7.0	6.2	5.0	3.8	3.3	3.2	77	145	105	89	24
21	8.5	7.0	6.0	5.0	3.8	3.3	3.1	99	153	114	100	25
22	8.2	7.0	6.0	5.0	3.8	3.3	3.1	119	168	122	76	27
23	8.3	7.0	6.0	5.0	3.8	3.3	3.1	145	164	104	60	24
24	8.2	7.0	6.0	5.0	3.8	3.3	3.7	165	164	123	58	22
25	7.6	7.0	6.0	5.0	3.6	3.3	5.3	188	156	100	79	24
26	7.4	7.0	6.0	4.5	3.6	3.3	5.3	130	154	95	67	23
27	7.4	7.0	6.0	4.5	3.5	3.3	5.3	121	156	118	53	21
28	7.4	7.0	6.0	4.5	3.5	3.3	5.3	111	177	112	47	23
29	7.1	7.0	6.0	4.5	3.5	3.3	5.3	115	195	98	46	22
30	6.9	7.0	6.0	4.5	---	3.2	5.3	137	225	111	41	20
31	6.9	---	6.0	4.5	---	3.2	---	151	---	104	39	---
TOTAL	272.3	208.4	193.9	167.8	110.6	103.4	107.9	2170.1	4031	4445	1962	926
MEAN	8.78	6.95	6.25	5.41	3.81	3.34	3.60	70.0	134	143	63.3	30.9
MAX	12	7.4	7.0	6.0	4.2	3.6	5.3	188	225	279	100	53
MIN	6.9	6.1	6.0	4.5	3.5	3.2	3.1	3.7	52	90	39	20
AC-FT	540	413	385	333	219	205	214	4300	8000	8820	3890	1840

CAL YR 1983	TOTAL	12718.0	MEAN	34.8	MAX	292	MIN	2.7	AC-FT	25230
WTR YR 1984	TOTAL	14698.4	MEAN	40.2	MAX	279	MIN	3.1	AC-FT	29150

09054000 BLACK CREEK BELOW BLACK LAKE, NEAR DILLON, CO

LOCATION.--Lat 39°47'59", long 106°16'04", in SW¼SW¼ sec.8, T.3 S., R.79W., Summit County, Hydrologic Unit 14010002, on right bank 600 ft upstream from bridge, 0.3 mi downstream from Black Lake, 4.5 mi upstream from highwater line of Green Mountain Reservoir at elevation 7,950 ft, and 17 mi northwest of Dillon.

DRAINAGE AREA.--15.0 mi^2.

PERIOD OF RECORD.--July 1942 to September 1949, October 1966 to current year.

REVISED RECORDS.--WSP 2124: Drainage area, WDR CO-77-2: 1976.

GAGE.--Water-stage recorder. Altitude of gage is 8,750 ft, from topographic map. July 17, 1942, to May 27, 1943, nonrecording gage, and May 28, 1943, to Sept. 30, 1949, water-stage recorder at site 600 ft downstream at different datums.

REMARKS.--Records good except those for winter period, which are poor. No diversion above station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--25 years, 32.6 ft^3/s; 23,620 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 555 ft^3/s, June 25, 1983, gage height, 4.74 ft, from rating curve extended above 240 ft^3/s; minimum daily, 1.3 ft^3/s, Feb. 22, 1976, Jan. 10, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 160 ft^3/s, and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
June 1	0200	226	5.14	July 14	0800	275	5.18
June 30	2200	352	*5.64	July 24	0200	*358	5.48
July 10	0700	312	5.37				

Minimum daily discharge, 2.3 ft^3/s, Feb. 25 to Mar. 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.3	7.4	6.5	3.3	2.5	2.3	3.0	5.0	210	228	132	61
2	9.3	7.1	7.4	3.2	2.5	2.3	3.0	5.0	161	182	132	73
3	10	6.9	7.1	3.0	2.5	2.3	3.0	5.0	129	172	108	56
4	11	6.6	7.2	2.7	2.5	2.5	3.0	5.0	123	163	94	45
5	10	6.3	6.9	2.6	2.5	2.5	3.0	5.0	110	157	87	40
6	11	6.4	6.4	2.5	2.5	2.5	3.0	5.0	99	158	89	36
7	10	6.4	5.9	2.5	2.5	2.5	3.0	5.0	109	163	87	39
8	8.9	8.5	5.9	2.5	2.5	2.5	3.0	5.0	78	165	84	46
9	9.0	8.2	6.9	2.5	2.5	2.5	3.0	5.0	63	176	77	43
10	10	7.9	7.9	2.5	2.5	2.5	3.0	8.0	52	245	70	38
11	12	8.7	7.1	2.5	2.5	2.5	3.0	13	76	172	65	35
12	12	8.0	6.9	2.5	2.5	2.5	3.0	20	102	138	65	40
13	12	8.7	6.5	2.5	2.5	2.5	3.0	35	131	137	73	42
14	13	9.2	5.8	2.5	2.5	2.5	3.0	50	187	222	73	38
15	13	8.4	5.7	2.5	2.5	2.5	3.0	90	198	160	82	34
16	12	8.2	4.8	2.5	2.5	2.6	3.0	84	201	137	111	36
17	11	7.9	4.7	2.5	2.5	2.7	3.0	76	180	133	93	39
18	11	8.4	4.7	2.5	2.5	2.9	3.3	70	147	113	76	34
19	10	8.5	4.6	2.5	2.5	3.0	3.6	80	165	124	101	30
20	9.9	8.2	5.4	2.5	2.5	3.0	3.9	100	169	128	123	28
21	9.8	8.9	4.8	2.5	2.5	3.0	4.2	115	179	146	153	30
22	9.7	8.7	4.1	2.5	2.5	3.0	4.5	140	193	148	118	35
23	9.6	8.2	5.0	2.5	2.5	3.0	5.0	160	187	148	89	33
24	9.2	7.6	4.7	2.5	2.5	3.0	5.4	190	184	235	76	29
25	8.5	7.7	4.7	2.5	2.3	3.0	5.8	230	178	158	96	28
26	8.1	9.0	4.6	2.5	2.3	3.0	6.0	210	174	133	85	28
27	7.9	8.1	5.0	2.5	2.3	3.0	5.9	190	186	151	69	26
28	7.7	7.3	4.9	2.5	2.3	3.0	5.9	180	205	136	59	25
29	7.4	7.2	4.2	2.5	2.3	3.0	5.2	170	231	129	61	25
30	7.5	7.0	3.8	2.5	---	3.0	5.0	160	254	125	54	24
31	7.5	---	3.4	2.5	---	3.0	---	183	---	144	48	---
TOTAL	307.3	235.6	173.5	79.8	71.5	84.1	114.7	2599.0	4661	4926	2730	1116
MEAN	9.91	7.85	5.60	2.57	2.47	2.71	3.82	83.8	155	159	88.1	37.2
MAX	13	9.2	7.9	3.3	2.5	3.0	6.0	230	254	245	153	73
MIN	7.4	6.3	3.4	2.5	2.3	2.3	3.0	5.0	52	113	48	24
AC-FT	610	467	344	158	142	167	228	5160	9250	9770	5410	2210

CAL YR 1983	TOTAL	15636.2	MEAN	42.8	MAX	404	MIN	2.4	AC-FT	31010
WTR YR 1984	TOTAL	17098.5	MEAN	46.7	MAX	254	MIN	2.3	AC-FT	33910

NOTE.--NO GAGE-HEIGHT RECORD MAR. 8 TO APR. 26.

09055300 CATARACT CREEK NEAR KREMMLING, CO

LOCATION.--Lat 39°50'07", long 106°18'57", in SW¼NE¼ sec.35, T.2 S., R.80 W., Summit County, Hydrologic Unit 14010002, on right bank 70 ft downstream from lower Cataract Lake, 2.8 mi upstream from highwater line of Green Mountain Reservoir at elevation 7,950 ft, and 17 mi south of Kremmling.

DRAINAGE AREA.--12.0 mi^2.

PERIOD OF RECORD.--October 1966 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 8,605 ft, from topographic map.

REMARKS.--Records good except those for period of no gage-height record, which are poor. No diversion above station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--18 years, 20.5 ft^3/s; 14,850 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 353 ft^3/s, June 25, 1983, gage height, 5.20 ft, maximum gage height 5.43 ft, June 21, 1967; minimum daily discharge, 0.28, ft^3/s, Oct. 7, 1971.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 160 ft^3/s, and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
May 25	0600	235	4.68	July 10	1000	254	4.80
July 1	0400	*319	5.11	July 14	1100	169	4.31

Minimum daily discharge, 1.2 ft^3/s, Feb. 25, Mar. 1, 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.1	2.2	3.1	2.4	1.4	1.2	1.8	3.7	183	238	28	26
2	1.8	2.2	3.1	2.3	1.4	1.2	1.8	4.0	147	169	26	37
3	1.7	2.1	3.0	2.3	1.4	1.3	1.8	3.9	115	147	24	30
4	1.8	2.1	3.0	2.2	1.4	1.3	1.8	3.8	105	132	23	24
5	1.9	2.0	3.0	2.1	1.3	1.3	1.8	3.7	90	114	21	20
6	2.1	2.0	3.0	2.1	1.3	1.3	1.7	3.6	75	113	20	17
7	2.3	1.8	3.1	2.0	1.3	1.3	1.7	3.5	100	121	19	20
8	2.5	1.9	2.9	2.0	1.3	1.3	1.7	3.3	58	121	18	26
9	2.3	2.3	2.6	2.0	1.3	1.3	1.7	3.7	44	134	17	21
10	2.1	2.4	2.6	1.9	1.3	1.3	1.8	5.3	37	197	16	16
11	2.6	3.7	2.5	1.9	1.3	1.3	2.2	13	43	130	15	14
12	3.1	3.1	2.5	1.9	1.3	1.3	2.2	26	60	80	17	15
13	3.4	3.0	2.5	1.9	1.3	1.3	2.1	34	83	68	19	15
14	3.6	3.0	2.5	1.9	1.3	1.3	1.9	51	123	136	20	13
15	3.9	2.9	2.5	1.9	1.3	1.3	1.9	68	150	99	19	12
16	3.6	3.0	2.4	1.9	1.3	1.4	2.0	69	158	67	26	13
17	3.5	2.8	2.4	1.9	1.3	1.5	2.3	55	141	58	27	17
18	3.4	2.9	2.3	1.9	1.3	1.7	2.8	52	118	46	24	15
19	3.1	3.1	2.3	1.8	1.3	1.7	3.3	98	140	46	28	13
20	3.0	3.1	2.4	1.7	1.3	1.7	3.6	90	144	46	37	11
21	2.8	3.3	2.5	1.7	1.3	1.5	3.6	123	161	50	67	13
22	2.9	3.3	2.5	1.6	1.3	1.6	3.6	149	174	57	56	16
23	3.0	3.2	2.9	1.6	1.3	1.7	3.6	137	159	52	40	16
24	2.9	3.1	3.0	1.5	1.3	1.7	4.0	175	155	48	35	13
25	2.7	3.1	3.1	1.5	1.2	1.7	4.3	211	147	44	46	13
26	2.6	3.4	2.9	1.5	1.3	1.7	4.4	141	124	41	39	13
27	2.4	3.6	2.9	1.5	1.3	1.7	4.3	127	132	39	31	13
28	2.4	3.5	2.9	1.5	1.3	1.7	4.0	117	151	36	27	12
29	2.3	3.5	2.8	1.5	1.3	1.7	3.9	114	160	34	28	12
30	2.2	3.3	2.7	1.5	---	1.7	3.8	132	178	32	24	11
31	2.2	---	2.5	1.5	---	1.8	---	147	---	30	20	---
TOTAL	82.2	84.9	84.4	56.9	38.0	45.8	81.4	2167.5	3655	2725	857	507
MEAN	2.65	2.83	2.72	1.84	1.31	1.48	2.71	69.9	122	87.9	27.6	16.9
MAX	3.9	3.7	3.1	2.4	1.4	1.8	4.4	211	183	238	67	37
MIN	1.7	1.8	2.3	1.5	1.2	1.2	1.7	3.3	37	30	15	11
AC-FT	163	168	167	113	75	91	161	4300	7250	5410	1700	1010

CAL YR 1983	TOTAL	10359.1	MEAN	28.4	MAX	298	MIN	1.2	AC-FT	20550
WTR YR 1984	TOTAL	10385.1	MEAN	28.4	MAX	238	MIN	1.2	AC-FT	20600

RESERVOIRS IN BLUE RIVER BASIN

09050600 DILLON RESERVOIR.--Lat 39°37'14", long 106°03'53", in NE¼ sec.13,T.5 S., R.78 W., Summit County, Hydrologic Unit 14010002, in gatehouse at dam, 0.8 mi upstream from Straight Creek, about 1.3 mi southwest of Dillon, and 3.5 mi northeast of Frisco. DRAINAGE AREA, 335 mi². PERIOD OF RECORD, September 1963 to current year. GAGE, nonrecording gage read once daily. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Denver Board of Water Commissioners); gage readings have been reduced to elevations NGVD.

Reservoir is earth and rockfill 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 ft, invert of outlet valve, and 9,017.00 ft, crest of spillway. Dead storage, 3,270 acre-ft. Figures given represent usable contents. Reservoir stores water for transmountain diversion to South Platte River basin through Harold D. Roberts tunnel for municipal use by city of Denver. Records furnished by Denver Board of Water Commissioners.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 262,200 acre-ft, June 30, 1983, elevation, 9,019.46 ft; minimum since appreciable storage was attained in July 1964, 45,310 acre-ft, Apr. 20, 1965, elevation, 8,904.16 ft.

EXTREMES FOR CURRENT YEAR: Maximum contents, 252,800 acre-ft, July 9, elevation, 9,016.61 ft; minimum, 227,600 acre-ft, Sept. 5, elevation, 9,008.42 ft.

09057000 GREEN MOUNTAIN RESERVOIR.--Lat 39°52'42", long 106°19'45", in NE¼ sec.15, T.2 S., R.80 W., Summit County, Hydrologic Unit 14010002, in hoist house at right end of dam, 0.6 mi upstream from Elliott Creek, and 13 mi southeast of Kremmling. DRAINAGE AREA, 598 mi², includes 15.3 mi² of Elliott Creek above diversion for Elliott Creek feeder canal. PERIOD OF RECORD, November 1942 to current year. REVISED RECORDS, WSP 2124: Drainage area. GAGE, Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by U.S. Bureau of Reclamation); gage readings have been reduced to elevations NGVD.

Reservoir is formed by an earth and rockfill dam. Dam completed and storage began November 1942. Capacity, 146,900 acre-ft between elevations 7,800 ft, sill of outlet gate, and 7,950 ft, top of radial spillway gates. Dead storage, 7,760 acre-ft. Figures given represent usable contents. Reservoir is used for power development and storage for replacement of water diverted to South Platte River basin. Water released to fill decrees during late irrigation season when flow of Colorado River is deficient. Records furnished by U.S. Bureau of Reclamation.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 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.

EXTREMES FOR CURRENT YEAR: Maximum contents, 145,700 acre-ft, Aug. 27, elevation, 7,949.45 ft; minimum, 27,220 acre-ft, May 12, elevation, 7,860.94 ft.

MONTHEND ELEVATION IN FEET NGVD AND CONTENTS, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
	09050600	DILLON RESERVOIR		09057000	GREEN MOUNTAIN	RESERVOIR
Sept. 30.....	9,012.91	241,100	-	7,945.90	138,300	-
Oct. 31.....	9,013.01	241,400	+300	7,942.18	130,900	-7,400
Nov. 30.....	9,013.33	242,400	+1,000	7,936.69	120,300	-10,600
Dec. 31.....	9,013.09	241,700	-700	7,930.18	108,400	-11,900
CAL YR 1983..			-7,900			+2,000
Jan. 31.....	9,014.25	245,300	+3,600	7,918.55	89,380	-19,020
Feb. 29.....	9,012.85	240,900	-4,400	7,910.63	77,870	-11,510
Mar. 31.....	9,012.88	241,000	+100	7,892.79	55,640	-22,230
Apr. 30.....	9,012.99	241,300	+300	7,869.78	33,860	-21,780
May 31.....	9,013.02	241,400	+100	7,915.09	84,220	+50,360
June 30.....	9,014.91	247,300	+5,900	7,948.73	144,200	+59,980
July 31.....	9,012.44	239,700	-7,600	7,948.35	143,400	-800
Aug. 31.....	9,009.12	229,700	-10,000	7,948.89	144,500	+1,100
Sept. 30.....	9,009.71	231,400	+1,700	7,945.45	137,400	-7,100
WTR YR 1984..			-9,700			-900

09057500 BLUE RIVER BELOW GREEN MOUNTAIN RESERVOIR, CO

LOCATION.--Lat 39°52'49", long 106°20'00", in SW¼NE¼ sec.15, T.2 S., R.80 W., Summit County, Hydrologic Unit 14010002, on left bank 0.3 mi upstream from Elliott Creek, 0.3 mi downstream from Green Mountain Dam, and 13 mi southeast of Kremmling.

DRAINAGE AREA.--599 mi^2, includes 15.3 mi^2 of Elliott Creek above diversion for Elliott Creek feeder canal.

PERIOD OF RECORD.--October 1937 to current year. Prior to October 1943, published as Blue River below Green Mountain Reservoir, near Kremmling.

REVISED RECORDS.--WSP 2124: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 7,682.66 ft, National Geodetic Vertical Datum of 1929 (levels by U.S. Bureau of Reclamation). Prior to Oct. 1, 1951, water-stage recorder at site 3.7 mi downstream at different datum.

REMARKS.--Records good. Flow regulated by Green Mountain Reservoir since November 1942 (station 09057000). Diversions for irrigation of about 5,000 acres above station. Transmountain diversions above station (see elsewhere in this report). Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,000 ft^3/s, June 4, 1938, gage height, 5.93 ft, site and datum then in use, from rating curve extended above 3,000 ft^3/s; maximum gage height, 9.52 ft, July 11, 1983; minimum daily discharge (prior to construction of Green Mountain Reservoir), 80 ft^3/s, Feb. 18-24, 1938, Feb. 18, 19, 1940; no flow at times in 1943.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,460 ft^3/s at 1115 July 1, gage height, 10.22 ft; minimum daily, 310 ft^3/s, Sept. 21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	356	364	388	398	403	419	608	535	1660	3040	1950	1480
2	357	361	389	399	400	480	608	559	1640	2960	1960	1480
3	359	360	391	400	403	497	611	596	1620	2960	1960	1480
4	351	358	396	398	402	496	663	735	1610	2950	1960	1480
5	351	362	397	397	404	506	715	768	1580	2950	1950	1480
6	357	364	391	398	400	504	717	762	1580	2950	1950	1470
7	360	360	391	395	396	500	715	765	1560	2940	1960	1250
8	367	367	395	398	399	495	713	768	1530	2720	1960	988
9	362	360	400	396	400	494	714	765	1530	2470	1950	997
10	353	364	402	393	399	501	716	815	1510	2430	1900	893
11	356	364	396	393	401	499	600	976	1490	2930	1840	762
12	364	363	399	393	399	499	513	1160	1490	2920	1830	684
13	361	362	403	405	390	496	514	1440	1490	2940	1830	636
14	374	363	399	410	389	495	514	1520	1670	2940	1610	633
15	374	363	393	407	402	489	511	1560	2040	2940	1570	632
16	372	346	396	400	399	497	511	1580	2160	2780	1170	632
17	373	347	384	388	404	503	643	1600	2330	2560	988	635
18	376	369	392	393	398	499	718	1620	2520	2470	983	606
19	370	390	388	396	399	501	658	1630	2740	2270	986	460
20	371	392	396	403	399	505	606	1650	2650	2010	987	319
21	375	392	398	407	399	506	615	1670	2670	1940	985	310
22	373	397	387	405	398	512	621	1680	2690	1940	991	312
23	373	401	386	401	395	510	617	1700	2720	1940	988	314
24	373	394	404	399	398	511	550	1720	2740	2250	1220	315
25	373	390	390	402	400	511	514	1740	2760	2250	1480	312
26	367	389	387	404	404	509	511	1740	2780	2210	1490	314
27	362	389	395	405	409	573	511	1740	2780	2220	1490	313
28	363	393	393	398	401	606	514	1740	2810	2230	1480	313
29	364	394	397	403	399	617	514	1740	2820	2230	1550	311
30	366	388	400	402	---	614	512	1720	2840	2230	1500	312
31	365	---	398	402	---	611	---	1690	---	2050	1490	---
TOTAL	11318	11206	12221	12388	11589	15955	18047	40684	64010	78620	47958	22123
MEAN	365	374	394	400	400	515	602	1312	2134	2536	1547	737
MAX	376	401	404	410	409	617	718	1740	2840	3040	1960	1480
MIN	351	346	384	388	389	419	511	535	1490	1940	983	310
AC-FT	22450	22230	24240	24570	22990	31650	35800	80700	127000	155900	95120	43880

CAL YR 1983 TOTAL 271730 MEAN 744 MAX 2980 MIN 342 AC-FT 539000
WTR YR 1984 TOTAL 346119 MEAN 946 MAX 3040 MIN 310 AC-FT 686500

09058000 COLORADO RIVER NEAR KREMMLING, CO

LOCATION.--Lat 40°02'12", long 106°26'22", in NE¼SW¼ sec.23, T.1 N., R.81 W., Grand County, Hydrologic Unit 14010001, on right bank at upstream end of Gore Canyon, 3.0 mi southwest of Kremmling, and 3.8 mi downstream from Blue River.

DRAINAGE AREA.--2,382 mi².

PERIOD OF RECORD.--July 1904 to September 1918 (published as Grand River near Kremmling), October 1961 to September 1970, October 1971 to current year.

REVISED RECORDS.--WSP 2124: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 7,320 ft, from topographic map. See WSP 1313 for history of changes prior to Oct. 1, 1961.

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. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 21,500 ft³/s, June 7, 1912, gage height, 21.8 ft, datum then in use, from rating curve extended above 14,000 ft³/s; minimum observed, 166 ft³/s, Dec. 19, 1907.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 13,600 ft³/s, probably occurred May 26, gage height, 16.60 ft; minimum daily, 553 ft³/s, Feb. 21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	791	788	816	865	673	569	1880	1630	10100	7600	3150	2170
2	794	783	835	818	609	613	1860	1810	10400	9260	3000	2220
3	776	777	829	811	581	645	1830	1850	10000	9130	2820	2130
4	615	770	835	943	586	637	1990	1980	9290	7950	2800	2080
5	604	769	814	851	571	646	2070	2020	8560	7080	2700	2060
6	602	774	776	835	573	629	2060	2040	7910	6090	2700	2040
7	588	769	834	810	581	641	2020	2000	7790	5490	2850	1950
8	586	806	810	828	590	635	2020	1960	7170	5420	2900	1620
9	581	809	825	815	562	632	2010	2100	6030	5190	2700	1620
10	574	783	773	787	569	652	1930	2500	5260	5540	2600	1560
11	577	791	629	833	567	666	1880	3320	4860	6600	2500	1370
12	594	800	619	855	570	681	1670	4270	4600	5930	2450	1350
13	768	803	621	808	562	696	1640	5050	4540	4980	2450	1270
14	796	801	793	860	562	722	1580	6130	4670	4960	2360	1260
15	810	765	810	830	565	751	1600	6780	5550	4900	2270	1260
16	804	763	806	767	563	772	1640	7320	5990	4660	2000	1280
17	786	761	796	841	576	782	1760	7420	6500	4280	1740	1340
18	796	805	815	869	588	802	2020	7350	7140	4020	1720	1260
19	811	813	813	796	571	817	2030	7150	7660	3730	1700	1120
20	805	805	820	845	558	835	1970	6800	7140	3270	1780	912
21	801	819	783	829	553	867	1830	7230	7000	3080	1820	888
22	792	799	765	822	561	958	1780	8340	7200	3020	1810	917
23	784	786	761	866	572	1000	1830	9260	7420	2970	1780	917
24	776	792	772	857	574	1130	2000	10100	7620	3250	1890	904
25	775	809	809	820	564	1300	1960	11400	7630	3750	2270	921
26	778	818	875	829	566	1280	1910	12700	8330	3900	2230	931
27	773	796	883	833	573	1380	1760	11600	7830	3500	2240	900
28	776	777	838	837	563	1370	1670	10800	7220	3400	2230	915
29	777	796	702	833	559	1570	1660	10000	6850	3500	2230	908
30	778	796	846	815	---	1720	1630	9650	6540	3400	2140	906
31	776	---	958	816	---	1850	---	9630	---	3250	2110	---
TOTAL	22644	23723	24661	25824	16662	28248	55490	192190	214800	153100	71940	40979
MEAN	730	791	796	833	575	911	1850	6200	7160	4939	2321	1366
MAX	811	819	958	943	673	1850	2070	12700	10400	9260	3150	2220
MIN	574	761	619	767	553	569	1580	1630	4540	2970	1700	888
AC-FT	44910	47050	48920	51220	33050	56030	110100	381200	426100	303700	142700	81280

CAL YR 1983 TOTAL 666382 MEAN 1826 MAX 9890 MIN 510 AC-FT 1322000
WTR YR 1984 TOTAL 870261 MEAN 2378 MAX 12700 MIN 553 AC-FT 1726000

NOTE.--NO GAGE-HEIGHT RECORD MAY 25-27.

09058030 COLORADO RIVER NEAR RADIUM, COLORADO

LOCATION.--Lat 39°58'01", long 106°31'22", in NW¼NW¼ sec.24, T.1 S., R.82 W., Grand County, Hydrologic Unit 14010001, on left bank, 1.0 mi upstream from Blacktail Creek, 2.0 mi northeast of Radium, and 3.0 mi downstream from Canyon Creek.

DRAINAGE AREA.--2,412 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1981 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,910 ft, from topographic map.

REMARKS.--Records good, except those for periods of no gage-height record, which are poor. 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.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,800 ft³/s, probably occurred on May 26, 1984, gage height, 12.91 ft; minimum daily, 370 ft³/s, Dec. 23-25, 1981.

EXTREMES FOR CURRENT PERIOD.--Maximum discharge, 13,800 ft³/s probably occurred on May 26, gage height, 12.91 ft, (highwater mark in well); minimum daily, 600 ft³/s, Feb. 21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	836	854	882	966	850	630	1920	1710	10100	7220	3200	2190
2	840	850	908	878	700	670	1900	1860	10300	8530	3060	2220
3	840	847	898	850	630	690	1900	1930	10000	8560	2960	2150
4	656	840	908	962	630	670	2000	2040	9200	7710	2820	2090
5	644	836	878	934	630	670	2100	2100	8500	7090	2730	2060
6	644	843	854	916	630	670	2100	2090	7900	6300	2740	2040
7	635	840	874	898	630	680	2100	2020	7800	5710	2910	1970
8	635	871	878	912	630	680	2100	2000	7200	5630	2920	1650
9	629	878	898	912	630	680	2080	2090	6200	5390	2750	1640
10	623	850	850	868	630	690	2040	2510	5200	5710	2700	1580
11	623	857	680	880	630	700	1920	3400	4900	6640	2550	1400
12	635	871	668	900	630	720	1800	4380	4770	6090	2520	1380
13	808	874	668	900	630	740	1700	5110	4700	5240	2510	1300
14	857	871	847	900	630	770	1650	5990	4770	5230	2370	1300
15	871	836	878	900	630	790	1660	6540	5590	5190	2330	1290
16	868	832	878	900	630	800	1700	7170	6020	5010	2090	1300
17	854	826	864	900	630	820	1900	7300	6430	4590	1800	1360
18	860	874	885	900	630	830	2060	7120	6880	4270	1800	1300
19	882	882	885	900	630	850	2100	6880	7230	3950	1760	1150
20	871	871	871	900	630	870	2060	6560	6960	3470	1840	912
21	871	885	780	900	600	960	1950	6980	6810	3280	1880	882
22	860	868	773	900	620	1020	1860	8290	6910	3200	1870	908
23	854	854	776	900	620	1140	1920	9500	7110	3260	1840	908
24	847	860	812	900	620	1260	2000	10600	7270	3460	1920	894
25	847	878	874	900	620	1340	2000	12200	7280	3960	2280	912
26	850	890	970	900	620	1330	1950	13000	7810	4050	2250	921
27	836	868	966	900	620	1420	1890	11700	7490	3710	2250	885
28	843	847	890	900	620	1500	1770	10700	7010	3560	2250	903
29	840	860	762	900	620	1700	1740	10000	6750	3650	2240	894
30	847	864	854	900	---	1800	1720	9600	6510	3560	2160	894
31	843	---	966	900	---	1910	---	9800	---	3490	2130	---
TOTAL	24449	25777	26375	27976	18450	30000	57590	193170	211600	156710	73430	41283
MEAN	789	859	851	902	636	968	1920	6231	7053	5055	2369	1376
MAX	882	890	970	966	850	1910	2100	13000	10300	8560	3200	2220
MIN	623	826	668	850	600	630	1650	1710	4700	3200	1760	882
AC-FT	48490	51130	52310	55490	36600	59510	114200	383200	419700	310800	145600	81880

CAL YR 1983 TOTAL 681680 MEAN 1868 MAX 10300 MIN 520 AC-FT 1352000
WTR YR 1984 TOTAL 886810 MEAN 2423 MAX 13000 MIN 600 AC-FT 1759000

NOTE.--NO GAGE-HEIGHT RECORD JAN. 11 TO APR. 26, MAY 26 TO JUNE 11.

09058030 COLORADO RIVER NEAR RADIUM, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--August 1981 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	CALCIUM TOTAL RECOV-ERABLE (MG/L AS CA)
OCT 06...	1125	613	230	8.5	10.0	4.3	10.3	K9	29
NOV 16...	1100	816	198	8.3	3.0	2.3	11.0	<4	20
APR 26...	1050	1980	250	8.1	3.0	31	10.3	440	27
MAY 23...	1230	9500	143	7.8	9.5	60	9.3	360	20
JUN 26...	1900	7810	149	7.8	13.0	10	8.3	110	16
JUL 17...	1130	4780	175	7.9	13.5	8.0	8.4	K48	22
AUG 14...	1350	2500	175	8.2	14.5	5.7	8.6	K7	19
SEP 13...	1545	1280	181	8.4	14.0	6.3	8.5	K7	22

DATE	MAGNE-SIUM, TOTAL RECOV-ERABLE (MG/L AS MG)	SODIUM, TOTAL RECOV-ERABLE (MG/L AS NA)	POTAS-SIUM, TOTAL RECOV-ERABLE (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)
OCT 06...	5.2	9.7	1.8	73	<2.0	36	2.7	134	.18	222
NOV 16...	4.2	7.4	1.8	61	<.5	27	2.6	118	.16	260
APR 26...	8.0	12	2.4	70	<.5	53	2.8	169	.23	903
MAY 23...	4.7	5.3	2.5	24	<.5	20	19	114	.16	2920
JUN 26...	3.4	4.4	1.6	44	<.5	27	1.5	99	.13	2090
JUL 17...	4.4	5.0	1.9	49	<.5	31	1.7	112	.15	1450
AUG 14...	3.7	5.3	1.7	51	<.5	32	2.0	109	.15	736
SEP 13...	4.3	6.2	1.6	53	<.5	27	1.8	113	.15	391

DATE	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P)	CYANIDE TOTAL (MG/L AS CN)	ALGAL GROWTH POTEN-TIAL, BOTTLE TEST (MG/L)
OCT 06...	7	<.020	<.100	.70	--	.010	<.010	<.01	--
NOV 16...	12	.010	.100	.50	.60	.010	.010	<.01	--
APR 26...	56	.010	.200	.60	.80	.040	.030	<.01	5.5
MAY 23...	187	.010	.200	.60	.80	.160	.060	--	15
JUN 26...	15	<.010	<.100	.30	--	.040	.030	<.01	12
JUL 17...	22	.010	.100	.40	.50	.040	.040	<.01	--
AUG 14...	22	.020	.100	.70	.80	.030	.020	<.01	--
SEP 13...	17	.010	.200	<.20	--	.030	.020	<.01	3.2

K BASED ON NON-IDEAL COLONY COUNT.

09058030 COLORADO RIVER NEAR RADIUM, CO--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	ARSENIC TOTAL (UG/L AS AS)	BORON, TOTAL RECOV-ERABLE (UG/L AS B)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)
OCT							
06...	1	100	<1	<1	5	420	10
NOV							
16...	<1	40	<1	1	8	320	110
APR							
26...	1	40	<1	2	3	2000	100
MAY							
23...	1	80	<1	8	10	5300	170
JUN							
26...	<1	50	<1	6	5	1100	130
JUL							
17...	<1	40	<1	3	6	730	90
AUG							
14...	<1	30	<1	27	5	610	70
SEP							
13...	<1	40	<1	26	5	560	110

DATE	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)
OCT							
06...	<1	40	10	.2	5	<1	<1
NOV							
16...	3	40	20	<.1	6	<1	2
APR							
26...	8	80	30	.3	7	<1	<1
MAY							
23...	6	160	30	.2	17	<1	<1
JUN							
26...	<1	60	20	<.1	12	<1	<1
JUL							
17...	4	50	30	<.1	13	<1	<1
AUG							
14...	<1	50	20	<.1	55	<1	<1
SEP							
13...	4	50	20	.1	10	<1	<1

09058500 PINEY RIVER BELOW PINEY LAKE, NEAR MINTURN, CO

LOCATION.--Lat 39°42'29", long 106°25'34", Eagle County, Hydrologic Unit 14010001, on left bank 1.4 mi upstream from Dickson Creek, 2.0 mi downstream from Piney Lake, and 8.5 mi north of Minturn.

DRAINAGE AREA.--13.0 mi^2.

PERIOD OF RECORD.--October 1947 to September 1954, October 1963 to current year.

GAGE.--Water-stage recorder. Datum of gage is 9,145.25 ft, National Geodetic Vertical Datum of 1929 (levels by U.S. Bureau of Reclamation). Prior to October 1963, water-stage recorder at site 15 ft upstream at present datum.

REMARKS.--Records good except those for winter period, which are poor. No diversion above station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--28 years (1948-54, 1964-84), 25.0 ft^3/s; 18,110 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 449 ft^3/s, July 1, 1984, gage height, 4.76 ft; maximum gage height observed, 6.44 ft, Apr. 13, 1977; minimum not determined.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 150 ft^3/s, and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
May 25	0300	437	4.74	Aug. 21	0200	164	4.20
July 1	0500	*449	4.76				

Minimum daily discharge, 1.5 ft^3/s, Jan. 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.6	5.8	3.9	4.5	2.0	1.8	4.0	5.8	218	289	75	23
2	4.6	5.4	4.1	4.4	1.9	2.0	3.9	5.7	172	206	73	26
3	4.8	5.4	4.0	4.3	1.9	1.9	3.9	5.8	137	185	51	19
4	4.8	5.1	4.0	4.5	2.0	1.7	4.0	5.9	129	178	40	16
5	5.4	5.1	3.8	4.5	2.1	1.6	4.2	6.1	108	171	34	14
6	5.4	4.8	3.8	4.4	1.9	1.7	4.5	6.1	88	164	35	12
7	5.4	4.8	4.0	4.3	1.8	1.9	4.7	6.1	91	171	34	14
8	5.1	4.7	4.2	4.3	1.9	2.1	4.6	6.1	75	158	29	20
9	5.1	4.5	4.1	4.2	2.0	2.3	4.8	6.9	60	161	23	18
10	5.4	4.5	4.4	4.1	1.9	2.5	5.0	9.2	49	214	18	15
11	6.9	4.6	4.6	4.0	1.8	2.4	4.8	14	75	139	16	14
12	6.9	5.0	4.5	4.1	1.8	2.6	4.6	33	97	96	16	15
13	6.9	5.2	4.3	4.0	2.1	2.8	4.5	56	120	84	17	14
14	8.2	4.8	4.1	4.0	2.2	3.0	4.8	87	206	158	14	13
15	7.8	4.2	4.2	3.8	2.0	3.0	5.5	145	223	100	21	12
16	6.9	4.0	4.1	2.8	1.8	2.9	6.4	164	224	82	45	14
17	6.9	4.3	4.2	3.0	1.9	2.8	7.2	142	212	75	29	17
18	7.3	4.5	4.3	2.0	1.9	2.8	8.0	136	167	72	27	14
19	7.3	4.2	4.4	1.5	1.8	3.0	7.0	104	215	93	68	12
20	6.9	4.0	4.2	1.8	1.6	3.2	6.4	132	208	79	84	11
21	6.9	4.0	3.8	1.9	1.7	3.5	5.8	191	220	86	136	11
22	6.5	3.9	3.8	2.1	1.9	3.3	5.5	174	241	86	94	14
23	6.5	3.7	3.9	2.3	1.8	3.5	6.5	229	232	77	59	13
24	6.5	3.8	3.9	2.5	1.8	3.7	7.0	310	232	144	54	12
25	6.1	4.0	4.1	2.6	1.9	3.6	6.6	346	220	86	97	12
26	6.1	3.9	4.4	2.5	1.9	3.7	6.0	163	194	71	70	14
27	6.1	3.9	4.7	2.3	1.7	3.7	5.4	174	221	93	46	14
28	6.1	3.8	4.0	2.4	1.6	3.8	5.2	151	238	88	33	14
29	5.8	3.8	3.5	2.4	1.6	3.8	5.6	148	238	69	26	14
30	5.8	3.8	3.8	2.2	---	3.9	6.0	180	258	88	22	14
31	5.8	---	4.3	2.1	---	4.0	---	185	---	96	19	---
TOTAL	190.8	133.5	127.4	99.8	54.2	88.5	162.4	3327.7	5168	3859	1405	445
MEAN	6.15	4.45	4.11	3.22	1.87	2.85	5.41	107	172	124	45.3	14.8
MAX	8.2	5.8	4.7	4.5	2.2	4.0	8.0	346	258	289	136	26
MIN	4.6	3.7	3.5	1.5	1.6	1.6	3.9	5.7	49	69	14	11
AC-FT	378	265	253	198	108	176	322	6600	10250	7650	2790	883

CAL YR 1983 TOTAL 13728.3 MEAN 37.6 MAX 314 MIN 2.2 AC-FT 27230
WTR YR 1984 TOTAL 15061.3 MEAN 41.2 MAX 346 MIN 1.5 AC-FT 29870

NOTE.--NO GAGE-HEIGHT RECORD JAN. 4 TO MAY 2.

09058610 DICKSON CREEK NEAR VAIL, CO

LOCATION.--Lat 39°42'14", long 106°27'25", Eagle County, Hydrologic Unit 14010001, on right bank 0.6 mi upstream from Freeman Creek, 1.0 mi upstream from mouth, and 6 mi northwest of Vail.

DRAINAGE AREA.--3.41 mi^2.

PERIOD OF RECORD.--October 1971 to current year. Prior to October 1972, published as "near Minturn."

GAGE.--Water-stage recorder. Altitude of gage is 9,245 ft, from topographic map.

REMARKS.--Records fair except those below 1.0 ft^3/s, which are poor. Diversion by Willy N. ditch 75 ft above station for irrigation of hay meadows below station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--13 years, 2.33 ft^3/s; 1,690 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 48 ft^3/s, May 6, 1979, gage height, 2.75 ft; maximum gage height 4.89 ft, May 9, 1984 (backwater from ice); no flow at times some years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 46 ft^3/s at 1700 June 1, gage height, 3.22 ft, maximum gage height 4.89 ft, May 9, (backwater from ice); no flow on many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.04	.02	.00	.00	.00	.00	.00	.00	20	6.7	2.4	2.3
2	.04	.02	.00	.00	.00	.00	.00	.00	17	6.1	2.3	2.2
3	.04	.00	.00	.00	.00	.00	.00	.00	14	5.9	2.3	1.9
4	.04	.00	.00	.00	.00	.00	.00	.00	12	5.7	2.3	2.0
5	.02	.00	.00	.00	.00	.00	.00	.00	13	5.4	2.2	2.0
6	.02	.00	.00	.00	.00	.00	.00	.00	15	5.2	2.3	2.1
7	.00	.00	.00	.00	.00	.00	.00	.00	15	5.0	2.2	2.2
8	.00	.01	.00	.00	.00	.00	.00	.10	13	4.8	2.0	1.9
9	.00	.00	.00	.00	.00	.00	.00	1.0	11	5.0	2.1	1.8
10	.01	.00	.00	.00	.00	.00	.00	1.1	10	5.7	1.9	1.7
11	.00	.00	.00	.00	.00	.00	.00	1.1	11	4.4	1.9	1.9
12	.00	.00	.00	.00	.00	.00	.00	1.1	12	4.0	1.9	1.9
13	.00	.00	.00	.00	.00	.00	.00	1.2	14	4.2	2.0	1.7
14	.00	.00	.00	.00	.00	.00	.00	1.5	16	4.8	2.0	1.7
15	.00	.00	.00	.00	.00	.00	.00	1.7	19	3.8	1.9	1.7
16	.00	.00	.00	.00	.00	.00	.00	1.9	19	3.6	1.9	1.9
17	.00	.00	.00	.00	.00	.00	.00	1.9	17	3.4	1.9	1.9
18	.00	.00	.00	.00	.00	.00	.00	1.8	15	3.2	2.3	1.8
19	.00	.00	.00	.00	.00	.00	.00	1.8	14	3.1	2.3	1.8
20	.00	.00	.00	.00	.00	.00	.00	2.5	14	3.0	2.8	1.7
21	.00	.00	.00	.00	.00	.00	.00	3.6	13	2.8	2.3	1.9
22	.00	.00	.00	.00	.00	.00	.00	4.8	12	2.7	2.1	2.0
23	.00	.00	.00	.00	.00	.00	.00	6.9	11	3.0	2.0	1.9
24	.00	.00	.00	.00	.00	.00	.00	10	9.6	3.2	2.3	1.8
25	.00	.00	.00	.00	.00	.00	.00	17	9.3	2.9	2.3	1.9
26	.00	.00	.00	.00	.00	.00	.00	14	8.5	2.8	2.1	1.8
27	.00	.00	.00	.00	.00	.00	.00	12	7.8	2.6	2.0	1.7
28	.00	.00	.00	.00	.00	.00	.00	10	7.5	2.6	2.0	1.8
29	.01	.00	.00	.00	.00	.00	.00	9.6	7.2	2.5	1.9	1.7
30	.00	.00	.00	.00	---	.00	.00	11	7.2	2.5	1.9	1.7
31	.00	---	.00	.00	---	.00	---	15	---	2.4	2.1	---
TOTAL	.22	.05	.00	.00	.00	.00	.00	132.60	384.1	123.0	65.9	56.3
MEAN	.007	.002	.000	.000	.000	.000	.000	4.28	12.8	3.97	2.13	1.88
MAX	.04	.02	.00	.00	.00	.00	.00	17	20	6.7	2.8	2.3
MIN	.00	.00	.00	.00	.00	.00	.00	.00	7.2	2.4	1.9	1.7
AC-FT	.4	.10	.00	.00	.00	.00	.00	263	762	244	131	112

CAL YR 1983 TOTAL 633.23 MEAN 1.73 MAX 25 MIN .00 AC-FT 1260
WTR YR 1984 TOTAL 762.17 MEAN 2.08 MAX 20 MIN .00 AC-FT 1510

NOTE.--NO GAGE-HEIGHT RECORD DEC. 22 TO MAY 11.

09058700 FREEMAN CREEK NEAR MINTURN, CO

LOCATION.--Lat 39°41'54", long 106°26'42", Eagle County, Hydrologic Unit 14010001, on right bank 0.8 mi upstream from mouth and 7.5 mi north of Minturn.

DRAINAGE AREA.--2.94 mi².

PERIOD OF RECORD.--October 1964 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 9,335 ft, from topographic map.

REMARKS.--Records good except those for winter period, which are poor. No regulation or diversion above station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--20 years, 1.38 ft³/s; 1,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 82 ft³/s May 25, 1984, gage height, 2.21 ft; maximum gage height, 3.51 ft, May 18, 1973 (backwater from ice); no flow for some days some years.

EXTREMES FOR CURRENT YEAR.--Peak disoharge above base of 25 ft³/s, and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
May 25	1200	*82	2.21	June 15	0100	34	1.74

Minimum daily discharge, 0.05 ft³/s, Jan. 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.22	.19	.14	.09	.06	.06	.09	.20	50	4.7	1.4	.84
2	.15	.18	.15	.09	.07	.07	.09	.19	41	4.1	1.2	.85
3	.24	.18	.14	.08	.07	.07	.09	.18	35	3.6	.93	.60
4	.28	.18	.14	.09	.07	.06	.09	.17	30	3.1	.85	.50
5	.22	.15	.12	.09	.08	.06	.10	.16	24	2.7	.76	.45
6	.20	.16	.12	.09	.07	.06	.11	.16	22	2.5	.92	.36
7	.24	.16	.13	.09	.07	.06	.13	.15	27	2.2	.73	.84
8	.18	.22	.14	.09	.07	.07	.15	.20	19	1.9	.64	.73
9	.17	.18	.13	.09	.07	.07	.16	.35	16	2.1	.57	.59
10	.38	.16	.14	.09	.06	.07	.17	.80	15	3.9	.50	.41
11	.44	.16	.15	.08	.06	.08	.19	1.4	22	1.9	.45	.50
12	.39	.18	.14	.08	.06	.08	.17	1.9	23	1.6	.45	.77
13	.36	.18	.13	.08	.07	.08	.18	2.8	26	1.7	.43	.55
14	.40	.17	.12	.08	.07	.08	.20	5.8	28	2.7	.41	.45
15	.36	.15	.12	.08	.07	.09	.22	16	31	1.7	.48	.50
16	.34	.15	.12	.07	.06	.09	.25	17	29	1.4	.69	.84
17	.33	.17	.12	.07	.06	.08	.30	17	26	1.2	.45	.73
18	.45	.18	.12	.06	.06	.09	.35	15	20	1.1	.91	.59
19	.34	.18	.11	.05	.06	.09	.40	16	18	1.1	1.1	.73
20	.27	.18	.10	.06	.06	.09	.35	20	15	.96	1.8	.31
21	.25	.18	.09	.06	.06	.09	.35	23	13	.85	1.4	1.1
22	.23	.16	.10	.07	.06	.09	.35	25	11	.73	.93	.93
23	.19	.14	.10	.07	.06	.08	.30	28	9.6	.92	.78	.51
24	.20	.14	.10	.08	.06	.08	.35	47	9.2	1.4	1.3	.59
25	.19	.15	.11	.09	.06	.08	.35	63	8.2	1.1	1.4	1.1
26	.16	.15	.12	.08	.06	.08	.38	53	7.8	1.3	.93	.92
27	.17	.14	.13	.08	.06	.08	.35	45	7.0	1.5	.73	.78
28	.18	.14	.11	.08	.06	.09	.45	39	6.5	1.9	.64	1.2
29	.16	.13	.07	.07	.06	.09	.30	37	5.4	1.5	.57	.86
30	.17	.13	.09	.07	---	.10	.25	40	5.2	1.5	.45	.73
31	.18	---	.10	.06	---	.10	---	43	---	1.4	.41	---
TOTAL	8.04	4.92	3.70	2.41	1.86	2.46	7.22	558.46	599.9	60.26	25.21	20.86
MEAN	.26	.16	.12	.078	.064	.079	.24	18.0	20.0	1.94	.81	.70
MAX	.45	.22	.15	.09	.08	.10	.45	63	50	4.7	1.8	1.2
MIN	.15	.13	.07	.05	.06	.06	.09	.15	5.2	.73	.41	.31
AC-FT	16	9.8	7.3	4.8	3.7	4.9	14	1110	1190	120	50	41

CAL YR 1983 TOTAL 954.01 MEAN 2.61 MAX 33 MIN .07 AC-FT 1890
WTR YR 1984 TOTAL 1295.30 MEAN 3.54 MAX 63 MIN .05 AC-FT 2570

NOTE.--NO GAGE-HEIGHT RECORD NOV. 14 TO MAY 10.

09058800 EAST MEADOW CREEK NEAR MINTURN, CO

LOCATION.--Lat 39°43'54", long 106°25'34", Eagle County, Hydrologic Unit 14010001, on left bank 1.4 mi upstream from mouth and 10 mi north of Minturn.

DRAINAGE AREA.--3.61 mi^2.

PERIOD OF RECORD.--October 1964 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 9,455 ft, from topographic map.

REMARKS.--Records fair except those for November to June, which are poor. No regulation or diversion above station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--20 years, 4.50 ft^3/s; 3,260 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge recorded, 81 ft^3/s, June 30, 1984, gage height, 1.71 ft, but may have been higher during period of no gage height record May 11 to June 26, 1984; maximum gage height, 2.22 ft, May 12, 1970 (backwater from ice); minimum daily discharge, 0.32 ft^3/s, Jan. 7, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum discharge recorded, 81 ft^3/s at 2100 June 30, gage height, 1.71 ft, but may have been higher during period of no gage-height record, May 11 to June 26; minimum daily, 0.50 ft^3/s, Jan. 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.5	1.5	1.3	.96	.75	.54	1.3	1.3	23	41	7.9	5.7
2	1.5	1.4	1.3	.94	.70	.60	1.3	1.0	20	36	5.5	4.3
3	1.7	1.4	1.2	.90	.70	.60	1.3	1.0	19	32	4.6	3.5
4	1.9	1.3	1.2	.92	.65	.55	1.3	.98	17	29	3.9	3.3
5	2.0	1.3	1.2	.94	.65	.55	1.3	.98	15	26	3.9	3.0
6	1.7	1.2	1.2	.90	.65	.60	1.3	1.0	13	24	4.6	2.9
7	1.6	1.2	1.2	.88	.65	.65	1.3	1.0	11	24	3.9	3.5
8	1.5	1.3	1.2	.86	.65	.70	1.4	1.0	9.0	21	3.6	3.3
9	1.4	1.2	1.1	.84	.60	.78	1.4	1.0	8.0	21	3.5	2.8
10	1.6	1.2	1.2	.82	.60	.86	1.5	2.4	7.0	26	3.3	2.5
11	1.8	1.3	1.2	.82	.60	.90	1.5	4.6	8.0	19	3.0	2.5
12	1.8	1.4	1.2	.80	.60	.92	1.5	5.8	10	15	3.2	3.0
13	1.9	1.4	1.1	.78	.60	.96	1.5	8.0	12	15	3.2	2.6
14	1.8	1.4	1.1	.76	.65	1.0	1.6	11	15	18	3.2	2.5
15	1.7	1.4	1.1	.74	.60	1.0	1.7	17	25	13	3.4	2.4
16	1.6	1.5	1.1	.70	.60	1.0	1.9	16	27	10	4.6	3.3
17	1.7	1.7	1.1	.64	.62	1.0	2.2	15	22	9.2	3.3	3.2
18	1.9	2.0	1.1	.60	.62	.95	2.3	14	25	8.4	4.3	2.5
19	1.8	1.9	1.0	.50	.60	.95	2.2	12	30	8.0	4.3	2.4
20	1.8	1.8	.90	.60	.58	1.1	2.1	15	33	6.8	9.7	2.4
21	1.8	1.6	.84	.70	.54	1.1	2.0	18	35	6.4	8.9	2.8
22	1.7	1.5	.80	.72	.56	1.0	1.8	20	38	6.1	6.4	3.3
23	1.7	1.2	.84	.78	.56	1.0	1.9	23	38	6.4	4.6	2.8
24	1.6	1.3	.84	.84	.56	1.0	2.0	25	37	8.4	6.4	2.5
25	1.5	1.3	.90	.90	.58	1.2	2.1	28	36	7.0	6.8	3.5
26	1.5	1.3	1.0	.86	.56	1.2	2.0	24	36	6.4	5.7	3.0
27	1.4	1.3	1.1	.84	.54	1.2	2.0	22	39	5.7	4.6	3.2
28	1.4	1.3	.90	.80	.54	1.2	2.0	20	38	5.7	4.1	3.3
29	1.4	1.3	.70	.80	.54	1.2	1.7	21	40	5.7	4.1	3.3
30	1.4	1.2	.90	.80	---	1.2	1.5	22	46	6.1	3.9	3.3
31	1.5	---	1.0	.75	---	1.3	---	23	---	4.8	3.5	---
TOTAL	51.1	42.1	32.82	24.69	17.65	28.81	50.9	376.06	732.0	471.1	145.9	92.6
MEAN	1.65	1.40	1.06	.80	.61	.93	1.70	12.1	24.4	15.2	4.71	3.09
MAX	2.0	2.0	1.3	.96	.75	1.3	2.3	28	46	41	9.7	5.7
MIN	1.4	1.2	.70	.50	.54	.54	1.3	.98	7.0	4.8	3.0	2.4
AC-FT	101	84	65	49	35	57	101	746	1450	934	289	184

CAL YR 1983 TOTAL 2936.66 MEAN 8.05 MAX 81 MIN .70 AC-FT 5820
WTR YR 1984 TOTAL 2065.73 MEAN 5.64 MAX 46 MIN .50 AC-FT 4100

NOTE.--NO GAGE-HEIGHT RECORD NOV. 9 TO MAY 9; MAY 11 TO JUNE 26.

09059500 PINEY RIVER NEAR STATE BRIDGE, CO

LOCATION.--Lat 39°48'00", long 106°35'00", in sec.16, T.3 S., R.82 W., Eagle County, Hydrologic Unit 14010001, on left bank at downstream side of private bridge at Perry Olsen Ranch 1.2 mi downstream from Rock Creek, and 6.0 mi southeast of State Bridge.

DRAINAGE AREA.--86.2 mi^2.

PERIOD OF RECORD.--May 1944 to current year.

REVISED RECORDS.--WSP 2124: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 7,272.35 ft, National Geodetic Vertical Datum of 1929. Prior to July 29, 1944, nonrecording gage, and July 29, 1944, to Oct. 24, 1947, water-stage recorder, at datum 2.38 ft, higher.

REMARKS.--Records fair except those for periods of no gage-height record, which are poor. Diversions above station for irrigation of about 400 acres of hay meadows above and below station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--40 years, 76.4 ft^3/s; 55,350 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 1,300 ft^3/s, May 25, 1984 (occured during a period of no gage-height record); maximum recorded discharge, 1,220 ft^3/s, June 27, 1983, gage height, 5.82 ft, (from peak stage indicator), but may have been higher May 25, 1984; minimum daily, 1.9 ft^3/s, Sept. 1, 18, 19, 1954.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 520 ft^3/s, and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
May 25	unknown	a1,300	unknown	July 1	unknown	unknown	unknown

a-Maximum daily discharge.
Minimum daily discharge 8.5 ft^3/s, Jan. 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	30	19	25	11	12	19	35	900	650	150	77
2	24	30	20	25	11	12	19	35	800	560	140	77
3	26	28	21	25	11	11	19	38	710	500	130	61
4	27	25	21	25	11	11	20	37	660	450	95	54
5	27	25	20	25	12	10	20	35	600	425	85	51
6	28	24	20	25	11	11	22	35	500	400	80	44
7	28	23	20	25	11	12	23	35	450	370	80	46
8	28	23	20	25	11	13	22	35	400	370	85	52
9	28	23	21	25	12	13	24	40	350	400	78	49
10	30	24	22	25	11	14	25	50	300	450	72	44
11	34	25	23	25	11	13	24	60	350	330	68	43
12	34	27	22	25	11	14	23	80	400	300	62	45
13	34	28	22	24	13	15	22	120	450	320	58	43
14	36	25	21	24	15	15	22	300	520	350	64	41
15	36	22	21	24	13	15	25	500	550	250	60	39
16	35	22	20	20	12	14	30	700	550	200	94	46
17	35	22	21	17	12	14	35	600	500	170	77	49
18	35	21	22	10	12	14	40	520	450	160	74	44
19	36	20	22	8.5	11	15	35	450	540	150	107	40
20	34	20	21	9.5	10	16	33	550	560	156	128	35
21	33	20	19	11	11	17	31	660	600	150	168	37
22	33	20	19	11	11	17	30	600	560	150	137	39
23	33	19	20	12	10	18	33	900	540	144	96	39
24	33	20	20	13	10	19	35	1200	520	196	101	37
25	33	21	21	14	11	19	33	1300	500	165	143	38
26	32	19	22	13	11	19	30	700	475	153	111	43
27	30	18	23	13	10	19	30	750	465	156	85	42
28	30	18	20	13	11	19	33	650	450	159	71	43
29	30	18	19	13	11	19	35	650	520	139	67	44
30	30	18	21	12	---	19	35	750	580	136	63	41
31	30	---	23	11	---	20	---	800	---	140	61	---
TOTAL	965	678	646	573.0	328	469	827	13215	15750	8649	2890	1383
MEAN	31.1	22.6	20.8	18.5	11.3	15.1	27.6	426	525	279	93.2	46.1
MAX	36	30	23	25	15	20	40	1300	900	650	168	77
MIN	23	18	19	8.5	10	10	19	35	300	136	58	35
AC-FT	1910	1340	1280	1140	651	930	1640	26210	31240	17160	5730	2740

CAL YR 1983 TOTAL 46299.0

09060770 ROCK CREEK AT McCOY, CO

LOCATION.--Lat 39°54'44", long 106°43'30", in SE¼NE¼ sec.6, T.2 S., R.83 W., Eagle County, Hydrologic Unit 14010001, on right bank 1,900 ft downstream of bridge on State Highway 131 and 0.25 mi south of McCoy.

DRAINAGE AREA.--198 mi².

PERIOD OF RECORD.--October 1982 to September 1983 (measurements only) October 1983 to September 1984.

GAGE.--Water-stage recorder. Altitude of gage is 6,660 ft, from topographic map.

REMARKS.--Records good except those for winter period and period of no gage height record, which are fair. Diversions for irrigation of approximately 5,000 acres above station. Several observations of specific conductance and water temperature were obtained and published elsewhere in this report.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,760 ft³/s, May 16, 1984, gage height, 4.74 ft (outside high-water mark); minimum daily, 21 ft³/s, Feb. 20, 1984.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,760 ft³/s at 0100 May 16, gage height, 4.74 ft (outside high-water mark); minimum daily, 21 ft³/s, Feb. 20 1984.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34	30	29	35	26	27	33	102	682	93	76	87
2	34	31	29	31	26	28	32	115	565	85	72	58
3	35	28	29	30	26	29	32	112	458	78	64	50
4	36	27	28	31	27	28	33	128	434	70	56	48
5	33	26	26	33	26	26	34	129	380	63	58	44
6	32	26	24	31	27	25	35	131	414	60	67	43
7	32	26	23	31	28	28	37	134	731	58	66	40
8	31	28	27	33	27	29	38	142	621	55	57	42
9	31	27	28	35	27	29	40	180	542	59	48	41
10	31	27	29	32	28	30	41	281	418	81	47	38
11	32	30	31	30	29	29	41	414	355	66	44	40
12	33	32	30	30	27	29	40	585	308	57	42	41
13	33	31	30	29	28	30	40	797	287	55	42	46
14	36	27	29	29	30	31	39	860	272	79	41	41
15	39	25	29	28	29	31	42	968	258	73	41	38
16	40	30	29	26	28	30	44	1270	252	67	49	51
17	40	29	29	27	29	30	49	1090	263	62	56	59
18	38	31	29	28	29	30	60	936	222	60	58	46
19	40	25	26	27	24	30	77	780	197	61	61	40
20	38	29	27	26	21	30	93	842	178	65	79	40
21	34	31	26	26	28	32	97	922	166	92	86	45
22	33	28	26	26	30	32	104	848	139	79	68	58
23	32	26	27	25	26	32	118	929	124	71	63	55
24	31	27	28	24	26	33	140	1020	115	127	80	54
25	30	32	31	25	28	32	150	1180	110	83	75	55
26	29	32	36	25	27	34	123	942	111	72	68	56
27	29	29	40	25	26	32	107	824	103	67	58	53
28	29	28	36	26	26	31	100	720	96	72	55	48
29	28	29	30	25	26	34	100	626	87	73	52	46
30	28	29	33	25	---	33	98	590	90	71	47	44
31	28	---	37	26	---	33	---	546	---	80	54	---
TOTAL	1029	856	911	880	785	937	2017	19143	8978	2234	1830	1447
MEAN	33.2	28.5	29.4	28.4	27.1	30.2	67.2	618	299	72.1	59.0	48.2
MAX	40	32	40	35	30	34	150	1270	731	127	86	87
MIN	28	25	23	24	21	25	32	102	87	55	41	38
AC-FT	2040	1700	1810	1750	1560	1860	4000	37970	17810	4430	3630	2870

WTR YR 1984 TOTAL 41047 MEAN 112 MAX 1270 MIN 21 AC-FT 81420

NOTE.--NO GAGE-HEIGHT RECORD DEC. 21 TO JAN.25

09060950 BIG ALKALI CREEK BELOW CASTLE CREEK, NEAR BURNS, CO

LOCATION.--Lat 39°51'52", long 106°49'01", in NE¼SE¼ sec. 20, T.2 S., R.84 W., Eagle County, Hydrologic Unit 14010001, on left bank 1,200 ft below Castle Creek, 1.0 mi above mouth and 3.0 mi east of Burns, CO.

DRAINAGE AREA.--34.1 mi².

PERIOD OF RECORD.--October 1981 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 7,040 ft, from topographic map.

REMARKS.--Records good except those for period of no gage-height record and ice effect, which are poor. Water stored in Hurt Reservoir, approximate capacity, 100 acre-feet, for use in Catamount Creek Drainage. Diversion out of basin for irrigation of land along the Colorado River.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 168 ft³/s, May 24, 1984, gage height, 2.85 ft; minimum daily, 0.13 ft³/s, Oct. 2, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 168 ft³/s at 2200 May 24, gage height, 2.85 ft; minimum daily, 1.20 ft³/s, many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.5	1.7	1.6	1.6	1.2	1.3	2.2	4.4	72	23	37	44
2	1.6	1.7	1.6	1.6	1.2	1.4	1.8	5.2	64	16	6.7	37
3	1.8	1.6	1.5	1.6	1.2	1.5	1.8	5.0	56	11	6.0	7.1
4	1.9	1.6	1.5	1.6	1.2	1.4	1.8	5.2	52	9.6	5.6	4.6
5	1.9	1.6	1.4	1.6	1.2	1.3	2.2	5.0	51	9.0	7.1	4.4
6	1.9	1.6	1.3	1.6	1.2	1.3	2.8	4.8	62	12	7.5	3.9
7	1.9	1.6	1.6	1.6	1.3	1.3	3.1	3.7	108	12	6.0	3.7
8	1.9	2.4	1.4	1.6	1.3	1.5	4.1	3.3	76	11	5.0	3.7
9	2.1	1.8	1.4	1.6	1.3	1.5	3.3	6.3	67	12	4.4	4.8
10	2.2	1.8	1.4	1.6	1.3	1.7	3.3	14	53	16	3.9	3.7
11	2.2	1.9	1.4	1.6	1.3	1.6	3.0	32	49	11	3.7	9.6
12	2.2	2.1	1.4	1.6	1.3	1.4	2.1	35	46	8.6	4.1	39
13	2.1	1.8	1.3	1.6	1.4	1.7	2.3	66	45	7.9	3.7	47
14	2.3	1.7	1.4	1.6	1.4	2.3	2.2	39	45	12	4.4	21
15	2.6	1.2	1.6	1.6	1.4	2.4	2.6	49	42	10	4.4	13
16	2.4	1.3	1.6	1.4	1.3	2.2	3.7	89	40	9.0	13	7.0
17	2.2	1.3	1.5	1.4	1.3	1.7	5.6	88	33	8.2	10	5.0
18	2.4	1.3	1.5	1.3	1.3	1.7	7.1	86	33	7.9	5.2	3.3
19	2.6	1.3	1.5	1.3	1.3	1.7	8.6	82	29	7.1	20	3.1
20	2.6	1.2	1.5	1.3	1.2	1.8	5.2	95	22	7.1	50	3.1
21	2.6	1.2	1.5	1.3	1.3	2.4	3.7	102	21	6.3	5.0	7.9
22	2.4	1.2	1.4	1.2	1.3	2.3	3.3	106	36	6.3	5.0	40
23	2.3	1.4	1.4	1.2	1.3	2.3	6.3	110	33	6.0	5.0	12
24	2.2	1.6	1.5	1.2	1.3	2.7	7.9	130	35	9.6	44	26
25	2.1	1.6	1.5	1.2	1.3	2.6	8.6	116	33	5.2	32	18
26	1.9	1.6	1.6	1.3	1.3	2.4	4.6	90	31	13	7.5	13
27	1.8	1.6	1.6	1.2	1.3	2.3	3.3	88	30	7.9	7.1	8.6
28	1.7	1.6	1.5	1.2	1.3	2.2	2.8	77	27	9.0	5.2	11
29	1.7	1.5	1.3	1.3	1.3	2.1	2.7	72	26	21	4.8	14
30	1.7	1.6	1.4	1.2	---	2.3	3.3	70	23	16	4.4	8.6
31	1.7	---	1.4	1.2	---	2.3	---	67	---	34	4.6	---
TOTAL	64.4	47.4	45.5	44.2	37.3	58.6	115.3	1745.9	1340	354.7	332.3	427.1
MEAN	2.08	1.58	1.47	1.43	1.29	1.89	3.84	56.3	44.7	11.4	10.7	14.2
MAX	2.6	2.4	1.6	1.6	1.4	2.7	8.6	130	108	34	50	47
MIN	1.5	1.2	1.3	1.2	1.2	1.3	1.8	3.3	21	5.2	3.7	3.1
AC-FT	128	94	90	88	74	116	229	3460	2660	704	659	847

CAL YR 1983 TOTAL 3323.10 MEAN 9.10 MAX 76 MIN .75 AC-FT 6590
WTR YR 1984 TOTAL 4612.70 MEAN 12.6 MAX 130 MIN 1.2 AC-FT 9150

09063000 EAGLE RIVER AT REDCLIFF, CO

LOCATION.--Lat 39°30'30", long 106°21'58", in NW¼SW¼ sec.20, T.6 S., R.80 W., Eagle County, Hydrologic Unit 14010003, on left bank at Redcliff, 0.3 mi upstream from Turkey Creek.

DRAINAGE AREA.--70.0 mi².

PERIOD OF RECORD.--October 1910 to September 1925, May 1944 to current year. Monthly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WSP 2124: Drainage area. WRD Colo. 1972: 1971.

GAGE.--Water-stage recorder. Datum of gage is 8,653.79 ft, National Geodetic Vertical Datum of 1929 (levels by U.S. Bureau of Reclamation). Jan. 8, 1911, to Sept. 30, 1925, nonrecording gage at bridge 0.2 mi downstream at different datum. May 25, 1944, to Oct. 12, 1952, water-stage recorder at site 200 ft upstream at datum 1.46 ft, lower. Prior to May 6, 1982, at site 250 ft downstream at datum 5.00 ft, lower.

REMARKS.--Records good except those for winter period, which are fair. Transmountain diversions above station by Columbine, Ewing, and Wurtz ditches. Transbasin diversion above station from Robinson Reservoir, capacity, 2,520 acre-ft to Tenmile Creek for mining development. Small diversions for irrigation of 400 acres above station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--55 years (water years 1911-25, 1945-84), 48.6 ft³/s; 35,210 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 1,010 ft³/s, June 5, 1912, gage height, 4.0 ft, site and datum then in use, from rating curve extended above 500 ft³/s; maximum gage height recorded, 6.43 ft, May 24, 1984; minimum daily discharge, 1.0 ft³/s, Oct. 1, 5, 1917.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 846 ft³/s at 2100 May 24, gage height, 6.43 ft, only peak above base of 280 ft³/s; minimum daily, 6.6 ft³/s, Mar. 14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	22	13	13	13	9.6	7.7	22	498	246	58	51
2	19	20	13	13	13	9.2	7.2	21	493	218	54	48
3	21	17	12	11	12	9.6	8.4	23	479	199	51	44
4	25	15	12	11	12	10	9.3	25	466	185	49	43
5	24	13	10	13	13	10	9.5	28	445	168	47	41
6	23	12	12	12	12	10	9.6	32	419	155	59	40
7	22	10	13	12	12	9.6	10	35	424	142	54	40
8	22	14	14	12	12	9.0	10	39	402	141	50	41
9	22	14	14	12	12	9.4	9.8	49	388	150	47	38
10	25	14	13	13	12	9.7	9.8	68	380	170	45	36
11	29	14	13	13	12	9.0	11	107	392	133	43	36
12	29	14	13	13	11	8.4	12	141	402	119	41	35
13	28	14	13	13	10	8.3	12	167	422	111	44	34
14	30	13	12	13	10	6.6	13	234	447	120	41	32
15	32	13	12	13	10	9.0	14	362	450	106	43	30
16	28	13	13	13	10	8.5	14	393	444	97	42	36
17	29	14	13	13	11	10	17	406	425	89	40	32
18	30	13	13	12	9.9	8.4	21	407	403	82	40	30
19	29	13	12	12	10	8.0	21	411	385	77	43	30
20	27	13	11	13	9.8	7.8	21	464	369	72	49	32
21	26	13	10	13	10	7.8	19	510	356	70	57	30
22	26	13	11	13	9.7	7.6	19	555	347	66	60	31
23	26	13	10	13	9.0	7.5	19	591	329	63	49	30
24	24	14	12	13	9.4	7.3	22	696	311	61	60	29
25	24	14	13	13	10	7.2	25	669	292	61	59	29
26	22	13	14	13	9.7	7.6	27	600	276	64	57	30
27	23	12	13	12	9.6	7.4	27	552	262	60	52	30
28	24	12	10	11	9.6	7.2	28	525	249	58	50	30
29	24	12	12	12	9.6	7.2	23	511	238	58	49	30
30	24	12	13	13	---	7.2	22	521	247	65	47	30
31	22	---	13	13	---	7.4	---	489	---	62	48	---
TOTAL	778	413	382	389	313.3	261.5	478.3	9653	11440	3468	1528	1048
MEAN	25.1	13.8	12.3	12.5	10.8	8.44	15.9	311	381	112	49.3	34.9
MAX	32	22	14	13	13	10	28	696	498	246	60	51
MIN	19	10	10	11	9.0	6.6	7.2	21	238	58	40	29
AC-FT	1540	819	758	772	621	519	949	19150	22690	6880	3030	2080

CAL YR 1983 TOTAL 22226.6 MEAN 60.9 MAX 518 MIN 9.8 AC-FT 44090
WTR YR 1984 TOTAL 30152.1 MEAN 82.4 MAX 696 MIN 6.6 AC-FT 59810

09063200 WEARYMAN CREEK NEAR REDCLIFF, CO

LOCATION.--Lat 39°31'14", long 106°19'06", in SW¼SE¼ sec.15, T.6 S., R.80 W., Eagle County, Hydrologic Unit 14010003, on left bank 0.4 mi upstream from mouth and 2.5 mi east of Redcliff.

DRAINAGE AREA.--8.78 mi^2.

PERIOD OF RECORD.--October 1964 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 9,158 ft, from topographic map.

REMARKS.--Records fair except those for October through June, which are poor. No regulation or diversion above station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--20 years, 8.84 ft^3/s; 6,400 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 155 ft^3/s, June 20, 1983, gage height, 3.61 ft; minimum daily, 0.30 ft^3/s, Feb. 21, 1967.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 70 ft^3/s, and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
June 2	unknown	unknown	unknown	June 27	0500	120	288

Minimum Daily discharge, 0.80 ft^3/s, Jan. 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.2	2.8	1.7	1.3	1.5	1.3	1.8	1.6	105	74	25	15
2	5.3	2.7	1.7	1.4	1.5	1.4	1.7	1.5	110	71	24	14
3	5.1	2.7	1.7	1.4	1.4	1.3	1.7	1.4	100	69	24	13
4	4.6	2.7	1.6	1.4	1.4	1.3	1.7	1.4	95	67	24	13
5	4.8	2.6	1.5	1.4	1.4	1.2	1.8	1.4	80	60	24	12
6	4.8	2.4	1.6	1.4	1.3	1.3	1.8	1.4	70	52	24	12
7	5.0	2.5	1.6	1.4	1.4	1.4	1.8	1.4	64	51	23	12
8	4.8	2.6	1.7	1.4	1.4	1.5	1.9	1.5	60	45	21	12
9	4.5	2.1	1.6	1.4	1.4	1.6	1.9	1.9	52	45	20	11
10	4.5	2.0	1.7	1.4	1.5	1.6	2.0	2.5	45	54	20	11
11	4.5	2.0	1.7	1.4	1.4	1.6	2.0	4.0	45	58	18	11
12	4.7	2.1	1.7	1.4	1.4	1.6	2.0	6.0	50	64	17	10
13	4.2	2.2	1.6	1.4	1.4	1.6	2.0	10	60	60	17	9.6
14	4.3	2.1	1.5	1.4	1.4	1.7	2.0	20	70	56	16	9.1
15	3.9	2.0	1.5	1.3	1.4	1.7	2.0	25	90	49	15	9.1
16	3.9	1.9	1.5	1.2	1.3	1.7	2.1	33	100	42	14	9.1
17	4.0	2.0	1.5	1.1	1.3	1.6	2.1	33	105	37	13	8.6
18	4.1	2.1	1.5	1.0	1.3	1.6	2.2	32	110	33	13	8.2
19	4.1	2.2	1.4	.80	1.3	1.6	2.2	30	115	31	14	8.2
20	3.9	2.1	1.3	1.0	1.2	1.7	2.1	37	115	32	18	7.8
21	4.0	2.0	1.2	1.1	1.2	1.8	2.0	45	115	31	15	7.8
22	3.4	2.0	1.3	1.2	1.2	1.7	1.9	55	115	29	14	7.8
23	3.7	1.9	1.3	1.3	1.2	1.7	1.9	60	115	27	13	7.3
24	3.5	1.8	1.4	1.4	1.3	1.8	1.9	70	110	27	15	6.9
25	3.4	1.8	1.5	1.5	1.3	1.8	2.0	100	100	28	15	7.3
26	3.4	1.7	1.6	1.6	1.3	1.7	2.0	90	105	27	14	7.3
27	3.4	1.8	1.5	1.6	1.2	1.7	2.0	75	112	24	14	6.9
28	3.3	1.8	1.3	1.6	1.2	1.7	2.0	73	109	26	14	6.9
29	3.0	1.7	1.1	1.6	1.2	1.8	1.9	75	98	25	14	6.6
30	3.0	1.6	1.2	1.6	---	1.8	1.7	76	86	25	14	6.6
31	2.8	---	1.5	1.6	---	1.8	---	100	---	25	14	---
TOTAL	128.1	63.9	46.5	42.00	38.7	49.6	58.1	1065.0	2706	1344	540	287.1
MEAN	4.13	2.13	1.50	1.35	1.33	1.60	1.94	34.4	90.2	43.4	17.4	9.57
MAX	6.2	2.8	1.7	1.6	1.5	1.8	2.2	100	115	74	25	15
MIN	2.8	1.6	1.1	.80	1.2	1.2	1.7	1.4	45	24	13	6.6
AC-FT	254	127	92	83	77	98	115	2110	5370	2670	1070	569

CAL YR 1983 TOTAL 4791.80 MEAN 13.1 MAX 140 MIN 1.1 AC-FT 9500
WTR YR 1984 TOTAL 6369.00 MEAN 17.4 MAX 115 MIN .80 AC-FT 12630

NOTE.--NO GAGE-HEIGHT RECORD OCT. 6 TO MAY 3, MAY 5 TO JUNE 24.

09063400 TURKEY CREEK NEAR REDCLIFF, CO

LOCATION.--Lat 39°31'22", long 106°20'08", in NW¼SW¼ sec.16, T.6 S., R.80 W., Eagle County, Hydrologic Unit 14010003, on right bank 400 ft downstream from Lime Creek, 1.9 mi northeast of Redcliff, and 2.0 mi upstream from mouth.

DRAINAGE AREA.--23.9 mi².

PERIOD OF RECORD.--October 1963 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 8,918 ft, from topographic map.

REMARKS.--Records fair except those for winter period, which are poor. No diversion above station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--21 years, 22.9 ft³/s; 16,590 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 515 ft³/s, June 17, 1965, gage height, 3.03 ft, from rating curve extended above 230 ft³/s; maximum recorded gage height, 3.22 ft, June 24, 1983 (backwater from debris); minimum not determined.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 160 ft³/s, and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
June 2	2200	352	2.64	June 24	1700	*419	* 2.77

Minimum daily discharge, 2.0 ft³/s, Jan. 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.2	6.1	3.6	3.2	3.7	3.0	5.4	6.0	306	269	55	34
2	9.3	5.8	3.7	3.3	3.6	3.3	5.2	6.0	320	295	54	30
3	9.9	5.8	3.6	3.4	3.5	3.3	5.2	6.0	306	291	51	29
4	11	5.8	3.5	3.4	3.5	3.2	5.2	6.1	274	206	51	28
5	11	5.5	3.5	3.4	3.5	3.2	5.4	6.1	236	194	51	27
6	11	5.2	3.5	3.5	3.5	3.3	5.6	6.1	209	175	55	26
7	11	5.5	3.6	3.5	3.5	3.5	5.8	5.8	189	162	50	27
8	10	5.5	3.6	3.5	3.6	3.7	6.2	6.1	166	179	47	26
9	10	4.5	3.6	3.5	3.6	3.8	6.6	8.9	150	165	45	24
10	10	4.5	3.7	3.5	3.6	4.0	7.0	14	131	185	42	22
11	10	4.6	3.7	3.4	3.7	4.0	7.0	20	131	169	38	21
12	10	4.8	3.6	3.4	3.7	4.1	7.0	24	139	145	37	20
13	9.0	4.8	3.6	3.3	3.8	4.3	7.0	34	162	131	36	19
14	9.5	4.6	3.5	3.3	3.8	4.4	7.0	49	203	138	37	19
15	8.5	4.4	3.5	3.2	3.7	4.5	7.0	77	280	123	37	18
16	8.5	4.5	3.5	3.0	3.6	4.5	7.2	100	351	108	34	18
17	9.0	4.5	3.5	2.7	3.5	4.5	7.6	95	342	92	32	18
18	9.0	4.7	3.5	2.4	3.4	4.5	8.0	100	357	82	31	16
19	9.0	4.5	3.3	2.0	3.3	4.6	8.0	88	350	75	31	15
20	8.5	4.5	3.1	2.3	3.3	4.8	8.0	106	343	66	41	15
21	8.5	4.3	3.0	2.7	3.1	5.0	7.5	131	342	58	35	15
22	7.6	4.2	3.0	3.0	3.1	5.0	7.5	165	352	53	33	16
23	8.1	4.0	3.0	3.5	3.1	5.0	7.0	169	352	50	31	14
24	7.6	4.0	3.2	3.7	3.2	5.0	7.0	241	359	51	37	14
25	7.2	4.0	3.2	3.9	3.2	5.0	7.0	299	352	55	35	14
26	7.2	3.8	3.4	4.0	3.2	4.8	6.5	244	352	51	33	14
27	7.2	3.8	3.4	4.0	3.1	4.8	6.5	216	322	47	31	15
M8	7.2	3.5	3.0	4.0	3.0	5.0	6.0	215	279	50	30	14
29	6.5	3.5	2.7	4.0	3.0	5.2	6.0	223	278	47	31	13
30	6.5	3.5	2.8	3.9	---	5.4	6.0	219	287	55	30	12
31	6.1	---	3.0	3.8	---	5.4	---	295	---	54	31	---
TOTAL	273.1	138.7	104.4	103.7	99.4	134.1	198.4	3181.1	8220	3821	1212	593
MEAN	8.81	4.62	3.37	3.35	3.43	4.33	6.61	103	274	123	39.1	19.8
MAX	11	6.1	3.7	4.0	3.8	5.4	8.0	299	359	295	55	34
MIN	6.1	3.5	2.7	2.0	3.0	3.0	5.2	5.8	131	47	30	12
AC-FT	542	275	207	206	197	266	394	6310	16300	7580	2400	1180

CAL YR 1983 TOTAL 11275.7 MEAN 30.9 MAX 352 MIN 2.7 AC-FT 22370
WTR YR 1984 TOTAL 18078.9 MEAN 49.4 MAX 359 MIN 2.0 AC-FT 35860

NOTE.--NO GAGE-HEIGHT RECORD NOV. 15 TO M

09063900 MISSOURI CREEK NEAR GOLD PARK, CO

LOCATION.--Lat 39°23'25", long 106°28'10", Eagle County, Hydrologic Unit 14010003, on left bank 50 ft downstream from road culvert, 0.6 mi upstream from Fancy Creek, 2.2 mi southwest of Gold Park, and 10 mi southwest of Red Cliff.

DRAINAGE AREA.--6.42 mi^2.

PERIOD OF RECORD.--August 1972 to current year.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 9,980 ft, from topographic map.

REMARKS.--Records good except those for winter period, which are poor. Transmountain diversion above station to Arkansas River basin through Homestake tunnel. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--12 years, 7.97 ft^3/s; 5,770 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 300 ft^3/s, July 4, 1975, gage height, 3.19 ft, from rating curve extended above 35 ft^3/s; maximum gage height, 3.83 ft, July 30, 1983; minimum daily discharge, 0.24 ft^3/s, Feb. 12, 13, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 268 ft^3/s at 2000 June 30, gage height, 3.63 ft; minimum daily, 0.40 ft^3/s, Jan. 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.8	2.9	2.2	1.2	.70	.50	1.1	2.3	66	146	25	23
2	1.7	2.6	2.3	1.2	.65	.55	1.0	2.0	54	126	21	20
3	2.1	2.6	2.2	1.2	.65	.55	1.0	1.9	51	121	17	16
4	2.8	2.5	2.1	1.2	.65	.50	1.1	1.9	48	116	15	13
5	2.5	2.4	2.0	1.2	.65	.50	1.2	1.9	39	107	15	12
6	2.6	2.4	2.0	1.1	.60	.50	1.3	2.0	32	106	20	10
7	2.6	2.3	2.0	1.1	.60	.55	1.4	2.0	31	106	17	10
8	2.5	2.4	2.0	1.1	.60	.60	1.5	2.0	23	111	15	8.9
9	2.5	2.3	2.0	1.1	.60	.65	1.7	2.2	20	123	12	7.5
10	2.9	2.2	2.0	1.1	.60	.70	1.9	3.5	20	172	10	7.0
11	3.6	2.2	2.0	1.1	.60	.70	2.0	6.3	29	100	9.5	7.0
12	3.6	2.4	2.0	1.1	.60	.70	2.1	11	38	79	9.8	8.3
13	3.3	2.6	1.9	1.0	.65	.75	2.1	20	53	82	15	7.8
14	4.1	2.7	1.9	1.0	.65	.80	2.2	42	80	120	25	6.8
15	4.2	2.6	1.7	.90	.60	.80	2.4	59	90	82	27	7.0
16	4.2	2.5	1.7	.80	.60	.80	2.7	53	88	74	35	13
17	3.9	2.5	1.7	.80	.60	.80	3.0	45	63	64	34	10
18	4.1	3.0	1.5	.60	.60	.75	3.5	47	69	58	38	8.6
19	4.1	2.9	1.5	.40	.55	.75	3.7	36	103	59	35	7.8
20	4.1	2.7	1.4	.50	.55	.80	3.5	53	107	63	41	6.8
21	3.7	2.6	1.2	.60	.50	.90	3.3	73	119	66	38	7.3
22	3.9	2.4	1.2	.65	.50	.90	3.0	92	125	61	42	8.9
23	4.1	2.2	1.2	.70	.50	.90	3.0	109	118	57	31	7.5
24	3.9	2.3	1.2	.80	.50	1.0	3.2	125	119	53	47	6.6
25	3.9	2.5	1.2	.85	.50	1.0	3.4	123	109	37	45	7.5
26	3.7	2.5	1.3	.80	.50	1.0	3.5	74	112	26	36	8.0
27	3.6	2.4	1.5	.80	.50	1.0	3.5	58	123	25	27	8.0
28	3.4	2.3	1.2	.80	.50	1.0	4.0	56	130	27	25	7.5
29	3.1	2.2	.90	.75	.50	1.0	3.5	61	144	22	29	6.4
30	3.0	2.1	1.0	.70	---	1.1	2.5	65	168	24	23	5.6
31	2.9	---	1.2	.70	---	1.1	---	63	---	24	21	---
TOTAL	102.4	74.2	51.20	27.85	16.80	24.15	73.3	1293.0	2371	2437	800.3	283.8
MEAN	3.30	2.47	1.65	.90	.58	.78	2.44	41.7	79.0	78.6	25.8	9.46
MAX	4.2	3.0	2.3	1.2	.70	1.1	4.0	125	168	172	47	23
MIN	1.7	2.1	.90	.40	.50	.50	1.0	1.9	20	22	9.5	5.6
AC-FT	203	147	102	55	33	48	145	2560	4700	4830	1590	563

CAL YR 1983	TOTAL	3614.11	MEAN	9.90	MAX	74	MIN	.38	AC-FT	7170
WTR YR 1984	TOTAL	7555.00	MEAN	20.6	MAX	172	MIN	.40	AC-FT	14990

NOTE.--NO GAGE-HEIGHT RECORD NWV. 10 TO MAY. 3.

09064000 HOMESTAKE CREEK AT GOLD PARK, CO

LOCATION.--Lat 39°24'20", long 106°25'58", Eagle County, Hydrologic Unit 14010003, on left bank at Gold Park, 400 ft downstream from ford, at Gold Park Campground, 0.5 mi downstream from French Creek, and 8 mi southwest of Redcliff.

DRAINAGE AREA.--36.1 mi^2.

PERIOD OF RECORD.--October 1947 to September 1954, August 1972 to current year.

REVISED RECORDS.--WRD Colo. 1973: Drainage area at former site.

GAGE.--Water-stage recorder. Altitude of gage is 9,200 ft, from topographic map. Prior to Aug. 1, 1972, water-stage recorder at site 1,500 ft upstream at datum 9,245 ft, National Geodetic Vertical Datum of 1929 (river-profile survey).

REMARKS.--Records good except those for winter period, which are poor. Flow regulated by Homestake Lake, capacity, 44,360 acre-ft, since June 7, 1966. Transmountain diversion above station to Arkansas River basin through Homestake tunnel since June 6, 1967. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--7 years (water years 1948-54), 63.4 ft^3/s; 45,930 acre-ft/yr, prior to diversion through Homestake tunnel; 12 years (water years 1973-84), 28.4 ft^3/s; 20,580 acre-ft/yr, subsequent to diversion through Homestake tunnel.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,080 ft^3/s, June 13, 1953, gage height, 6.84 ft, site and datum then in use, from rating curve extended above 700 ft^3/s; minimum not determined.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 930 ft^3/s at 2200 June 30, gage height, 6.21 ft, from rating curve extended above 400 ft^3/s; minimum daily, 7.6 ft^3/s, Feb. 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	16	13	10	8.8	8.6	9.4	12	309	530	40	77
2	14	15	13	9.4	8.6	8.8	9.2	13	267	446	35	67
3	16	15	12	9.6	8.8	8.6	9.2	12	255	458	29	55
4	18	14	12	10	9.2	8.2	9.4	12	251	416	27	48
5	17	14	12	9.6	9.0	8.2	9.8	12	210	392	25	43
6	16	14	12	9.6	8.8	8.4	10	17	151	352	33	38
7	16	13	13	9.6	9.0	8.4	11	14	158	326	29	40
8	15	15	13	10	9.0	8.6	12	17	140	333	26	40
9	15	15	12	10	8.6	8.8	12	17	133	342	23	34
10	16	14	12	9.8	8.6	9.0	12	32	135	434	21	30
11	19	14	12	9.6	8.4	9.0	11	60	153	308	20	28
12	19	14	12	9.6	8.8	8.8	11	93	147	275	20	33
13	18	14	12	9.6	9.0	9.0	11	124	149	262	28	29
14	21	13	11	10	9.0	9.6	11	207	243	327	50	26
15	21	13	11	9.4	8.6	10	11	303	304	263	68	25
16	20	13	11	8.6	8.6	11	12	295	356	246	100	43
17	19	14	11	9.0	8.8	10	15	282	272	230	96	35
18	20	14	12	8.4	8.2	10	17	278	264	211	115	29
19	20	13	11	8.4	7.8	9.6	17	247	353	196	110	26
20	20	13	11	8.6	7.6	10	17	309	380	175	134	25
21	19	13	10	8.4	8.4	11	15	406	422	175	126	26
22	19	13	10	8.8	8.8	11	13	500	458	167	136	33
23	19	13	10	8.8	8.8	10	13	536	450	139	101	28
24	18	13	11	9.0	8.4	11	14	588	458	94	148	26
25	18	14	11	9.2	8.2	11	15	581	425	68	138	28
26	17	13	11	9.2	8.0	10	15	294	434	41	111	29
27	18	12	11	9.0	8.0	10	15	245	458	39	88	29
28	17	12	10	9.0	8.2	9.6	14	234	458	40	83	27
29	16	13	10	9.0	8.4	9.6	13	241	506	36	88	25
30	16	13	11	8.4	---	9.6	12	272	602	41	69	22
31	16	---	11	8.6	---	9.6	---	300	---	41	65	---
TOTAL	547	409	354	286.2	248.4	295.0	376.0	6553	9301	7403	2182	1044
MEAN	17.6	13.6	11.4	9.23	8.57	9.52	12.5	211	310	239	70.4	34.8
MAX	21	16	13	10	9.2	11	17	588	602	530	148	77
MIN	14	12	10	8.4	7.6	8.2	9.2	12	133	36	20	22
AC-FT	1080	811	702	568	493	585	746	13000	18450	14680	4330	2070

CAL YR 1983 TOTAL 14716.1 MEAN 40.3 MAX 372 MIN 3.8 AC-FT 29190
WTR YR 1984 TOTAL 28998.6 MEAN 79.2 MAX 602 MIN 7.6 AC-FT 57520

NOTE.--NO GAGE-HEIGHT RECORD NOV. 14 TO MAY 4.

09064500 HOMESTAKE CREEK NEAR REDCLIFF, CO

LOCATION.--Lat 39°28'24", long 106°22'02", in NE¼NE¼ sec.6, T.7 S., R.80 W., Eagle County, Hydrologic Unit 14010003, on right bank at downstream side of Forest Service road bridge, 2.4 mi south of Redcliff, and 3.0 mi upstream from mouth.

DRAINAGE AREA.--58.3 mi^2.

PERIOD OF RECORD.--October 1910 to September 1918, May 1944 to current year. Published as "at Redcliff" October 1910 to September 1916.

REVISED RECORDS.--WSP 2124: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 8,783 ft, National Geodetic Vertical Datum of 1929 (river-profile survey). See WSP 1713 or 1733 for history of changes prior to May 8, 1961.

REMARKS.--Records good except those for winter period, which are poor. Flow regulated by Homestake Lake (capacity, 44,360 acre-ft) since June 7, 1966. Transmountain diversions above station through Homestake tunnel (see elsewhere in this report) since June 6, 1967. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--30 years (water years 1911-18, 1945-66), 86.6 ft^3/s; 62,740 acre-ft/yr, prior to diversion through Homestake tunnel: 18 years (water years 1967-84), 42.5 ft^3/s; 30,790 acre-ft/yr, subsequent to diversion through Homestake tunnel.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 1,300 ft^3/s, June 24, 1918, gage height, 6.2 ft, site and datum then in use; minimum observed, 0.60 ft^3/s, Jan. 25, 1915 (discharge measurement).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 943 ft^3/s at 2400 May 24, gage height, 3.96 ft; minimum daily, 12 ft^3/s, Feb. 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	20	20	18	14	14	20	39	514	647	55	84
2	17	20	20	16	14	15	19	38	455	563	47	75
3	19	20	20	15	15	15	19	37	423	579	41	61
4	21	19	19	15	15	14	19	36	408	551	38	54
5	22	19	18	16	15	13	20	35	344	514	35	49
6	21	18	17	15	14	14	23	37	271	478	46	44
7	20	18	19	16	15	14	26	34	309	439	39	46
8	19	20	20	16	15	15	30	37	285	445	33	48
9	19	21	20	17	15	15	32	50	276	458	33	40
10	21	20	19	16	14	15	30	91	270	571	32	36
11	25	20	19	16	14	15	30	162	296	437	28	35
12	24	20	19	16	13	15	27	233	285	394	28	39
13	23	20	18	16	14	15	27	296	279	367	34	36
14	27	19	18	17	15	16	30	421	389	460	53	33
15	28	20	18	16	14	18	40	564	453	389	77	33
16	26	20	18	14	14	18	50	536	517	347	128	50
17	25	21	18	15	14	17	60	501	424	305	97	45
18	28	21	18	14	14	17	66	484	390	246	131	37
19	27	21	17	14	13	17	66	422	479	229	133	34
20	25	21	16	15	12	19	64	497	500	199	152	33
21	24	20	16	14	13	21	56	596	535	199	165	33
22	24	20	16	15	15	22	54	647	575	187	180	41
23	24	20	16	14	14	21	56	720	555	163	123	36
24	23	20	16	14	14	20	60	773	547	104	178	35
25	22	21	18	15	14	21	60	831	548	83	175	35
26	22	21	19	15	13	21	56	571	536	62	138	36
27	23	19	18	15	13	20	52	501	544	56	102	38
28	22	19	17	15	13	19	48	460	546	59	84	34
29	21	19	16	15	13	18	45	449	573	50	101	35
30	21	20	17	14	---	19	40	482	658	57	77	33
31	20	---	18	14	---	19	---	507	---	54	72	---
TOTAL	701	597	558	473	405	532	1225	11087	13184	9692	2655	1268
MEAN	22.6	19.9	18.0	15.3	14.0	17.2	40.8	358	439	313	85.6	42.3
MAX	28	21	20	18	15	22	66	831	658	647	180	84
MIN	17	18	16	14	12	13	19	34	270	50	28	33
AC-FT	1390	1180	1110	938	803	1060	2430	21990	26150	19220	5270	2520

CAL YR 1983	TOTAL	22095.8	MEAN	60.5	MAX 415	MIN 8.5	AC-FT	43830
WTR YR 1984	TOTAL	42377.0	MEAN	116	MAX 831	MIN 12	AC-FT	84050

NOTE.--NO GAGE-HEIGHT RECORD NOV. 15 TO MAY 2.

09065100 CROSS CREEK NEAR MINTURN, CO

LOCATION.--Lat 39°34'05", long 106°24'43", in SW¼SW¼ sec.36, T.5 S., R.81 W., Eagle County, Hydrologic Unit 14010003, on right bank 0.4 mi upstream from mouth and 1.5 mi southeast of Minturn.

DRAINAGE AREA.--33.5 mi².

PERIOD OF RECORD.--May 1956 to September 1963, October 1967 to current year.

REVISED RECORDS.--WDR-CO-81-2: 1980 (M).

GAGE.--Water-stage recorder. Altitude of gage is 7,992 ft, from topographic map. Prior to July 18, 1956, nonrecording gage at site 0.3 mi downstream at different datum.

REMARKS.--Records good except those for winter period, which are poor. Bolts ditch exports water from above station to tailings ponds and recreation lake along Eagle River. Diversion 0.2 mi above station for water supply of school and for municipal supply of Minturn. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--24 years, 53.0 ft³/s; 38,400 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 754 ft³/s, June 30, 1957, gage height, 5.45 ft; maximum gage height, 6.14 ft, Aug. 6, 1983, shifting control; minimum daily discharge, 0.1 ft³/s, Dec. 27-31, 1962, Jan. 6-8, 11-15, 1963.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 400 ft³/s, and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
May 25	0500	529	5.23	July 1	0300	*724	5.74

Minimum daily discharge, 2.5 ft³/s, Jan. 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	12	9.5	6.4	3.6	3.0	6.4	14	367	514	179	70
2	12	11	10	6.2	3.5	3.3	6.3	14	308	386	161	70
3	12	11	9.5	6.0	3.5	3.2	6.2	14	265	371	129	53
4	13	10	9.5	6.4	3.4	3.0	6.8	13	264	350	115	47
5	14	10	8.5	6.2	3.5	2.7	7.6	12	238	332	102	42
6	14	10	8.5	6.1	3.4	2.9	8.0	12	209	321	143	37
7	14	9.3	9.0	6.0	3.3	3.2	8.4	12	238	318	129	37
8	13	12	9.5	6.0	3.3	3.6	9.0	14	199	309	109	39
9	13	11	9.0	6.0	3.3	4.0	10	19	178	378	92	34
10	14	10	9.5	5.8	3.2	4.2	11	40	165	568	84	29
11	16	10	10	5.8	3.2	4.0	12	76	191	386	73	28
12	15	11	9.5	5.8	3.2	4.2	13	112	214	272	72	35
13	15	11	9.0	5.6	3.4	4.5	12	156	245	262	93	34
14	15	11	8.5	5.6	3.5	4.8	13	214	339	370	80	29
15	16	10	8.5	5.4	3.3	5.0	14	261	386	301	99	28
16	15	10	8.5	4.2	3.1	4.9	15	244	390	249	125	39
17	15	11	8.5	4.5	3.2	4.7	18	224	316	237	102	41
18	15	12	8.2	3.2	3.2	4.6	23	225	270	210	95	33
19	15	11	8.0	2.5	3.1	4.6	24	194	319	212	129	29
20	14	11	6.5	2.9	2.9	4.9	23	240	325	218	145	29
21	14	11	6.0	3.1	2.8	5.5	21	293	364	217	159	28
22	13	10	6.2	3.4	3.0	5.2	21	309	375	214	129	34
23	13	9.0	6.5	3.8	3.0	5.7	18	404	368	194	100	32
24	13	9.5	6.4	4.3	3.1	6.0	21	449	361	193	116	32
25	12	10	6.8	4.7	3.1	5.7	21	472	368	184	157	31
26	12	10	7.6	4.5	3.0	5.8	23	356	384	232	126	34
27	13	9.5	8.0	4.1	2.9	6.0	21	329	384	180	96	36
28	12	9.5	6.0	4.2	2.9	6.0	26	315	389	178	78	33
29	12	9.0	5.0	4.1	2.8	6.2	18	318	427	155	69	29
30	12	9.0	5.8	3.9	---	6.4	16	350	547	189	62	27
31	12	---	6.6	3.7	---	6.5	---	351	---	176	56	---
TOTAL	420	310.8	248.6	150.4	92.7	144.3	452.7	6056	9393	8676	3404	1099
MEAN	13.5	10.4	8.02	4.85	3.20	4.65	15.1	195	313	280	110	36.6
MAX	16	12	10	6.4	3.6	6.5	26	472	547	568	179	70
MIN	12	9.0	5.0	2.5	2.8	2.7	6.2	12	165	155	56	27
AC-FT	833	616	493	298	184	286	898	12010	18630	17210	6750	2180

CAL YR 1983 TOTAL 26811.8 MEAN 73.5 MAX 555 MIN 2.9 AC-FT 53180
WTR YR 1984 TOTAL 30447.5 MEAN 83.2 MAX 568 MIN 2.5 AC-FT 60390

09065500 GORE CREEK AT UPPER STATION, NEAR MINTURN, CO

LOCATION.--Lat 39°37'33", long 106°16'39", in NE¼NW¼ sec.18, T.5 S., R.79 W., Eagle County, Hydrologic Unit 14010003, on right bank 10 ft downstream from bridge pier on Interstate 70, 0.2 mi upstream from Black Gore Creek 4.4 mi east of Vail, and 8.4 mi northeast of Minturn.

DRAINAGE AREA.--14.3 mi².

PERIOD OF RECORD.--October 1947 to September 1956, October 1963 to current year.

REVISED RECORDS.--WSP 2124: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 8,600 ft, from topographic map. Oct. 1, 1947 to Sept. 30, 1956, Oct. 1, 1963 to Sept. 30, 1980, at various sites about 1200 ft upstream at different datums. See WRD-CO-80-2 for history of changes prior to Oct. 1, 1980.

REMARKS.--Records fair except those for winter period, which are poor. No diversion above station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--30 years, 30.2 ft³/s; 21,880 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, about 662 ft³/s, June 24, 1983, gage height, 2.60 ft, from rating curve extended above 140 ft³/s; maximum gage height, 6.65 ft, June 18, 1951, datum then in use; minimum daily discharge, 1.2 ft³/s, Mar. 5, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 200 ft³/s and maximum (*).

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
May 23	2100	286	2.27	July 10	0600	*430	2.46
June 22	2100	370	2.35				

Minimum daily discharge, 2.0 ft³/s, Jan. 12-22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.6	5.8	4.0	3.1	2.9	2.6	3.5	7.6	245	274	70	40
2	8.0	5.8	4.0	3.1	2.9	2.6	3.5	7.3	192	259	64	40
3	9.1	5.3	4.0	3.1	2.9	2.6	3.5	6.5	174	224	60	35
4	11	4.7	4.0	3.0	2.9	2.6	3.5	5.8	177	198	64	32
5	12	4.7	4.0	2.5	2.9	2.6	3.5	5.3	144	180	60	28
6	12	5.0	4.0	2.5	2.9	2.6	3.5	5.0	122	183	58	25
7	10	4.4	4.0	2.5	2.9	2.6	3.5	3.9	110	177	54	27
8	9.1	4.4	4.0	2.5	2.9	2.6	4.0	4.7	94	174	50	26
9	8.8	4.2	4.0	2.5	2.9	2.6	5.0	6.0	86	171	47	25
10	8.8	5.8	4.0	2.5	2.9	2.6	6.0	10	81	256	45	23
11	10	5.5	4.0	2.2	2.9	2.6	7.4	15	101	155	45	23
12	10	5.3	4.0	2.0	2.9	2.6	8.4	21	137	125	45	23
13	10	5.5	4.0	2.0	2.9	2.6	8.2	29	168	127	45	23
14	11	5.5	4.0	2.0	2.9	2.6	8.0	40	241	174	44	22
15	10	5.8	4.0	2.0	2.9	2.6	9.4	60	286	130	38	21
16	11	5.0	4.0	2.0	2.9	2.6	11	80	259	112	39	20
17	8.8	5.0	4.0	2.0	2.9	2.6	13	76	221	99	39	19
18	8.8	5.0	4.0	2.0	2.9	2.6	15	70	211	92	36	18
19	8.4	5.0	4.0	2.0	2.9	2.6	15	90	263	92	35	18
20	8.4	5.3	4.0	2.0	2.9	2.6	15	100	231	94	50	18
21	8.0	5.3	3.8	2.0	2.7	2.8	14	120	224	103	55	18
22	7.6	5.2	3.5	2.0	2.5	3.0	12	158	310	92	54	20
23	7.6	5.2	3.1	2.1	2.5	3.5	12	180	252	88	45	18
24	7.6	5.0	3.1	2.3	2.5	3.5	11	231	252	92	54	16
25	6.9	4.5	3.1	2.5	2.5	3.5	12	214	241	84	71	18
26	6.9	4.0	3.1	2.9	2.5	3.5	13	186	221	78	65	18
27	7.3	4.0	3.1	2.9	2.5	3.5	12	198	241	70	54	18
28	6.2	4.0	3.1	2.9	2.5	3.5	10	189	263	74	46	19
29	5.8	4.0	3.1	2.9	2.5	3.5	9.1	198	252	84	41	19
30	6.2	4.0	3.1	2.9	---	3.5	8.4	227	290	90	37	18
31	6.2	---	3.1	2.9	---	3.5	---	245	---	80	37	---
TOTAL	269.1	148.2	115.2	75.8	80.7	89.3	263.4	2789.1	6089	4231	1547	688
MEAN	8.68	4.94	3.72	2.45	2.78	2.88	8.78	90.0	203	136	49.9	22.9
MAX	12	5.8	4.0	3.1	2.9	3.5	15	245	310	274	71	40
MIN	5.8	4.0	3.1	2.0	2.5	2.6	3.5	3.9	81	70	35	16
AC-FT	534	294	228	150	160	177	522	5530	12080	8390	3070	1360

CAL YR 1983	TOTAL	17434.3	MEAN	47.8	MAX	455	MIN	3.0	AC-FT	34580
WTR YR 1984	TOTAL	16385.8	MEAN	44.8	MAX	310	MIN	2.0	AC-FT	32500

NOTE.--NO GAGE-HEIGHT RECORD FROM NOV. 22 TO APR. 25.

09066000 BLACK GORE CREEK NEAR MINTURN, CO

LOCATION.--Lat 39°35'47", long 106°15'52", Eagle County, Hydrologic Unit 14010003, on right bank 200 ft from U.S. Highway 6, 0.3 mi upstream from Timber Creek, 2.5 mi upstream from mouth, and 9 mi east of Minturn.

DRAINAGE AREA.--11.8 mi^2.

PERIOD OF RECORD.--October 1947 to September 1956, October 1963 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 9,150 ft, from topographic map. Prior to October 1963, at site 15 ft upstream, at present datum.

REMARKS.--Records good except those for winter period, which are poor. No diversion above station. Natural regulation by two small recreation lakes above station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--30 years, 17.3 ft^3/s; 12,530 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 365 ft^3/s, June 7, 1952, gage height, 5.42 ft; maximum gage height, 6.00 ft, Mar. 30, 1968 (backwater from ice); minimum daily discharge, 0.90 ft^3/s, Feb. 22, 1968, Jan. 30, 1970, Feb. 4 to Mar. 6, 1979.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 150 ft^3/s, and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
May 24	1600	*275	4.80	June 16	1800	233	4.54

Minimum daily discharge, 2.5 ft^3/s, Jan. 11-20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.6	7.1	5.4	2.9	3.2	4.6	7.0	7.0	206	106	31	18
2	8.9	7.1	5.4	2.9	3.2	5.0	7.0	6.4	188	99	28	16
3	9.4	6.9	5.4	2.9	3.2	5.0	7.0	6.0	181	92	26	14
4	10	6.9	5.4	2.9	3.2	5.0	7.0	5.4	170	84	25	13
5	9.4	6.9	5.4	2.9	3.2	5.0	7.0	5.0	147	78	25	12
6	8.7	6.9	5.4	2.9	3.5	5.0	7.0	4.5	130	74	31	12
7	8.7	6.9	5.4	2.9	3.7	5.0	7.0	4.2	132	67	28	15
8	8.7	7.4	5.4	2.9	4.0	5.0	7.0	6.0	109	78	24	14
9	8.7	7.4	5.4	2.8	4.0	5.0	7.0	8.0	99	84	24	12
10	9.4	7.9	5.4	2.7	4.0	5.0	8.0	11	98	74	22	12
11	9.7	7.6	5.4	2.5	4.0	5.0	9.0	15	104	66	20	12
12	11	7.4	5.4	2.5	4.0	5.0	9.0	20	117	58	19	13
13	10	7.4	5.4	2.5	4.0	5.0	9.0	27	141	64	18	12
14	11	7.6	5.4	2.5	4.0	5.0	9.0	35	186	56	17	11
15	10	8.7	5.4	2.5	4.0	5.0	9.0	50	192	50	16	12
16	9.2	7.9	5.4	2.5	4.0	5.0	9.0	62	199	47	15	12
17	9.2	7.4	5.4	2.5	4.0	5.0	9.0	76	184	42	17	12
18	9.7	7.6	5.4	2.5	4.0	5.0	9.0	72	184	38	18	11
19	9.2	7.9	5.0	2.5	4.0	5.0	9.0	74	179	35	18	11
20	8.9	8.9	4.5	2.5	4.0	5.0	9.0	101	173	32	28	11
21	8.7	8.1	4.0	2.9	4.1	5.0	9.0	122	177	33	23	11
22	8.7	11	3.7	3.2	4.1	5.0	10	136	173	31	21	12
23	8.4	12	3.5	3.2	4.1	5.0	11	170	164	29	18	10
24	8.1	11	3.1	3.2	4.1	5.0	12	208	158	31	23	10
25	8.1	8.7	2.9	3.2	4.1	5.0	12	206	145	31	25	12
26	7.9	8.0	2.9	3.2	4.1	5.0	11	184	134	30	22	10
27	7.6	7.0	2.9	3.2	4.1	5.0	10	184	128	29	18	10
28	7.4	6.0	2.9	3.2	4.1	5.4	9.4	177	120	37	17	11
29	7.4	5.4	2.9	3.2	4.1	5.8	8.6	175	117	36	15	10
30	7.6	5.4	2.9	3.2	---	6.2	8.0	195	118	45	15	9.8
31	7.4	---	2.9	3.2	---	7.0	---	201	---	35	15	---
TOTAL	275.7	232.4	141.3	88.6	112.1	159.0	262.0	2553.5	4553	1691	662	360.8
MEAN	8.89	7.75	4.56	2.86	3.87	5.13	8.73	82.4	152	54.5	21.4	12.0
MAX	11	12	5.4	3.2	4.1	7.0	12	208	206	106	31	18
MIN	7.4	5.4	2.9	2.5	3.2	4.6	7.0	4.2	98	29	15	9.8
AC-FT	547	461	280	176	222	315	520	5060	9030	3350	1310	716

CAL YR 1983	TOTAL	9079.8	MEAN	24.9	MAX	235	MIN	2.0	AC-FT	18010
WTR YR 1984	TOTAL	11091.4	MEAN	30.3	MAX	208	MIN	2.5	AC-FT	22000

NOTE.--NO GAGE-HEIGHT RECORD NOV. 26 TO MAY 16.

09066100 BIGHORN CREEK NEAR MINTURN, CO

LOCATION.--Lat 39°38'24", long 106°17'34", in N½ sec.12, T.5 S., R.80 W., Eagle County, Hydrologic Unit 14010003, on left bank 0.3 mi upstream from U.S. Highway 6, 0.4 mi upstream from mouth, 4.5 mi east of Vail, and 8.5 mi northeast of Minturn.

DRAINAGE AREA.--4.37 mi².

PERIOD OF RECORD.--October 1963 to current year.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 8,625 ft, from topographic map.

REMARKS.--Records good except those for period of no gage-height record, which are poor. No regulation or diversion above station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--21 years, 9.87 ft³/s; 7,150 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 225 ft³/s, June 10, 1973, gage height, 3.82 ft, from rating curve extended above 82 ft³/s; maximum gage height, 4.04 ft, June 26, 1983 (backwater from debris); minimum daily discharge determined, 0.10 ft³/s, Feb. 8, 1967, Jan. 30, 1970.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 50 ft³/s, and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
May 24	1930	*182	3.59	June 29	1845	144	3.50

Minimum daily discharge, 0.40 ft³/s Mar. 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.4	3.5	1.6	1.0	1.4	1.0	2.0	2.8	84	88	36	17
2	3.4	3.2	1.6	1.0	1.4	1.0	2.0	2.8	73	84	34	14
3	3.5	3.1	1.6	1.0	1.4	1.0	2.0	2.8	66	84	30	13
4	3.4	2.9	1.6	1.0	1.4	.80	2.0	2.6	64	78	27	12
5	3.7	2.9	1.6	1.0	1.4	.40	2.0	2.8	54	73	26	12
6	3.5	2.8	1.6	1.0	1.4	.60	2.3	2.6	47	71	29	12
7	3.4	2.6	1.6	1.0	1.4	.60	2.7	2.6	44	69	27	12
8	3.2	2.5	1.6	1.0	1.4	.60	3.0	2.9	37	69	25	11
9	3.2	2.5	1.6	1.0	1.4	.60	3.0	4.3	34	71	21	11
10	3.4	2.9	1.6	1.0	1.4	.60	3.0	8.1	32	91	19	11
11	3.5	2.8	1.6	1.0	1.4	.60	3.0	17	40	61	19	12
12	3.5	2.8	1.6	1.0	1.4	.60	3.0	31	50	50	20	11
13	3.7	2.8	1.6	1.0	1.4	.60	3.0	45	60	54	19	10
14	3.8	2.6	1.6	1.0	1.4	.60	3.0	56	80	66	17	10
15	3.8	2.8	1.6	.60	1.4	.60	3.0	67	82	48	20	11
16	3.7	2.9	1.6	.60	1.4	.60	3.0	67	86	47	18	10
17	3.5	2.9	1.6	.60	1.4	.60	3.2	64	69	42	17	9.6
18	4.0	2.9	1.6	.60	1.4	.80	3.5	62	64	39	17	9.6
19	3.7	2.9	1.6	.60	1.4	1.0	3.4	55	78	40	23	9.0
20	3.7	2.9	1.6	.60	1.0	1.4	3.2	69	76	41	24	8.5
21	3.7	2.5	1.4	.60	1.0	1.6	3.0	91	84	46	23	7.8
22	3.8	2.2	1.2	1.0	1.0	2.0	2.8	93	88	42	21	7.6
23	3.8	2.0	1.2	1.0	1.0	2.0	2.7	108	88	39	24	7.0
24	3.8	1.6	1.2	1.0	1.0	2.0	2.7	131	80	38	27	6.9
25	4.0	1.6	1.2	1.0	1.0	2.0	3.0	113	73	36	25	7.5
26	3.8	1.6	1.2	1.2	1.0	2.0	3.0	84	71	42	22	7.2
27	4.0	1.6	1.2	1.4	1.0	2.0	3.1	88	80	44	20	7.2
28	3.7	1.6	1.2	1.4	1.0	2.0	3.0	80	84	41	18	7.2
29	3.7	1.6	1.0	1.4	1.0	2.0	3.0	86	91	40	16	6.9
30	3.7	1.6	1.0	1.4	---	2.0	2.8	96	100	44	16	7.2
31	3.7	---	1.0	1.4	---	2.0	---	91	---	38	20	---
TOTAL	112.7	75.1	44.8	30.40	36.6	36.20	84.4	1628.3	2059	1716	700	298.2
MEAN	3.64	2.50	1.45	.98	1.26	1.17	2.81	52.5	68.6	55.4	22.6	9.94
MAX	4.0	3.5	1.6	1.4	1.4	2.0	3.5	131	100	91	36	17
MIN	3.2	1.6	1.0	.60	1.0	.40	2.0	2.6	32	36	16	6.9
AC-FT	224	149	89	60	73	72	167	3230	4080	3400	1390	591

CAL YR 1983	TOTAL	5784.4	MEAN	15.8	MAX	170	MIN	1.0	AC-FT	11470
WTR YR 1984	TOTAL	6821.70	MEAN	18.6	MAX	131	MIN	.40	AC-FT	13530

NOTE.--NO GAGE-HEIGHT RECORD NOV. 17 TO MAY 1.

09066150 PITKIN CREEK NEAR MINTURN, CO

LOCATION.--Lat 39°38'37", long 106°18'07", in SW¼SW¼ sec.1, T.5 S., R.80W., Eagle County, Hydrologic Unit 14010003, on left bank 100 ft downstream from Pitkin ditch headgate, 1,000 ft upstream from U.S. Highway 6, 1,200 ft upstream from mouth, 4.0 mi east of Vail, and 8 mi northeast of Minturn.

DRAINAGE AREA.--5.39 mi².

PERIOD OF RECORD.--Annual maximum and occasional low-flow measurements water years 1964-66. October 1966 to current year.

REVISED RECORDS.--WRD Colo. 1971: 1967-70.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 8,525 ft, from topographic map. Oct. 1, 1964, to Sept. 30, 1966, crest-stage gage at datum 0.98 ft, lower.

REMARKS.--Records fair except those for period of no gage-height record, which are poor. Diversions above station by Pitkin ditch for irrigation downstream. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--18 years, 12.1 ft³/s; 8,770 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 221 ft³/s, June 15, 1978, gage height, 2.55 ft; maximum gage height, 3.60 ft, June 21, 1983 (backwater from debris); minimum daily discharge, 0.24 ft³/s, Oct. 29 to Nov. 1, 1972.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 60 ft³/s, and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
May 25	0100	-	*2.75	July 1	2300	*149	2.63
May 30	0500	101	2.50	Aug. 24	2000	66	2.35

Minimum daily discharge, 0.40 ft³/s, Jan. 14-19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.9	3.9	2.2	2.0	.80	1.2	1.2	2.1	88	129	59	24
2	6.4	2.6	2.2	2.0	.80	1.2	1.2	2.1	88	133	50	21
3	6.4	2.5	2.2	2.0	.80	1.2	1.3	2.1	77	125	41	16
4	6.9	2.1	2.2	2.0	.80	1.2	1.2	2.1	74	125	36	13
5	7.4	2.1	2.2	2.0	.80	1.2	1.2	2.1	69	125	35	12
6	8.0	2.0	2.3	2.0	.80	1.2	1.5	2.1	56	122	35	10
7	8.0	2.0	2.4	2.0	.80	1.2	1.5	2.0	50	115	35	12
8	8.0	2.0	2.4	2.0	.80	1.2	1.5	2.0	40	118	30	13
9	8.0	2.1	2.4	2.0	.80	1.2	1.5	2.3	35	115	24	13
10	8.6	2.1	2.4	2.0	.80	1.2	1.5	3.3	31	125	22	11
11	9.3	2.1	2.4	1.8	1.0	1.2	1.5	5.4	38	118	21	10
12	8.6	2.1	2.4	1.2	1.2	1.2	1.6	11	52	105	21	12
13	9.3	2.0	2.4	.80	1.2	1.2	1.4	30	63	105	19	10
14	11	2.0	2.4	.40	1.2	1.1	1.5	40	85	122	22	10
15	11	2.1	2.4	.40	1.2	1.0	1.5	54	77	105	21	8.6
16	8.6	2.5	2.4	.40	1.2	.96	1.8	52	74	94	28	12
17	8.6	2.0	2.4	.40	1.2	.96	2.1	46	77	83	24	12
18	8.6	2.1	2.4	.40	1.2	.96	2.5	44	69	71	23	11
19	8.0	2.2	2.4	.40	1.2	.96	2.6	38	80	71	23	10
20	8.0	2.2	2.4	.60	1.2	.96	2.6	44	80	71	33	8.6
21	8.0	2.2	2.4	.80	1.2	.96	2.6	56	77	80	38	9.3
22	8.0	2.2	2.2	.80	1.2	1.0	2.6	59	94	71	36	9.3
23	8.6	2.2	2.0	.80	1.2	1.0	2.6	54	115	71	30	8.6
24	8.6	2.2	2.0	.80	1.2	1.0	2.6	58	118	71	38	8.0
25	7.4	2.2	2.0	.80	1.2	1.0	2.6	70	111	59	44	8.6
26	7.4	2.2	2.0	.80	1.2	1.1	2.6	88	108	66	35	8.6
27	6.9	2.2	2.0	.80	1.2	1.1	2.5	91	105	71	26	8.6
28	6.9	2.2	2.0	.80	1.2	1.1	2.5	88	105	66	23	9.3
29	6.9	2.2	2.0	.80	1.2	1.2	2.3	88	108	66	19	8.6
30	6.9	2.2	2.0	.80	---	1.2	2.1	94	129	69	16	8.6
31	6.4	---	2.0	.80	---	1.2	---	91	---	61	14	---
TOTAL	247.6	66.7	69.5	35.60	30.60	34.36	57.7	1223.6	2373	2928	921	336.7
MEAN	7.99	2.22	2.24	1.15	1.06	1.11	1.92	39.5	79.1	94.5	29.7	11.2
MAX	11	3.9	2.4	2.0	1.2	1.2	2.6	94	129	133	59	24
MIN	6.4	2.0	2.0	.40	.80	.96	1.2	2.0	31	59	14	8.0
AC-FT	491	132	138	71	61	68	114	2430	4710	5810	1830	668

CAL YR 1983	TOTAL	6289.1	MEAN	17.2	MAX	140	MIN	1.2	AC-FT	12470
WTR YR 1984	TOTAL	8324.36	MEAN	22.7	MAX	133	MIN	.40	AC-FT	16510

NOTE.--NO GAGE-HEIGHT RECORD NOV. 18 TO MAR. 13.

09066200 BOOTH CREEK NEAR MINTURN, CO

LOCATION.--Lat 39°38'54", long 106°19'21", at NE¼SE¼ of sec.3, T.5 S., R.80 W., Eagle County, Hydrologic Unit 14010003, on center bridge pier 100 ft upstream from U.S. Highway 6, 0.4 mi upstream from mouth, 3.0 mi northeast of Vail, and 7.0 mi northeast of Minturn.

DRAINAGE AREA.--6.03 mi^2.

PERIOD OF RECORD.--October 1964 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 8,325 ft, from topographic map. Prior to May 29, 1984, gage at site 2,000 ft upstream at different datum (gage destroyed by rock slide).

REMARKS.--Records fair except those for periods of no gage-height record, which are poor. No diversion or regulation above station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--20 years, 12.6 ft^3/s; 9,130 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 355 ft^3/s, June 15, 1978, gage height, 4.07 ft; maximum gage height, 4.62 ft, June 18, 1983 (baokwater from debris); minimum daily discharge, 0.20 ft^3/s, Feb. 8, 1967, Jan. 29, 1970, Feb. 10, 11, 1981.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 80 ft^3/s, and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
May 21	2200	162	3.48	June 30	2100	*210	3.54
June 16	2200	205	*3.57				

Minimum daily discharge, 1.0 ft^3/s, Jan. 11-17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.0	6.0	2.8	1.2	2.1	1.4	3.0	3.9	90	104	25	12
2	2.8	5.8	2.8	1.2	2.1	1.4	3.0	4.0	80	82	23	11
3	2.8	5.6	2.8	1.2	2.1	1.4	3.0	4.0	70	80	21	9.2
4	2.6	5.4	2.8	1.2	2.1	1.4	3.0	4.2	68	104	20	8.2
5	2.6	5.3	2.8	1.2	2.1	1.4	3.0	4.2	60	96	19	7.6
6	2.9	5.1	2.5	1.2	2.1	1.4	3.4	4.2	63	93	18	7.1
7	3.0	5.1	2.2	1.2	2.1	1.4	3.6	4.3	53	82	16	8.5
8	2.8	5.3	2.0	1.2	2.1	1.4	3.9	4.6	37	88	14	9.2
9	2.9	5.6	1.6	1.2	2.1	1.4	4.0	6.4	31	85	11	8.2
10	3.4	6.0	1.6	1.2	2.1	1.4	4.0	11	29	99	11	7.6
11	3.9	5.6	1.6	1.0	2.1	1.4	4.0	21	38	75	11	7.4
12	4.0	5.4	1.6	1.0	2.1	1.4	4.0	32	56	60	10	7.6
13	4.5	5.6	1.6	1.0	2.1	1.4	4.0	42	68	58	10	7.1
14	5.0	5.6	1.6	1.0	2.1	1.4	4.0	48	70	65	10	6.5
15	4.6	5.6	1.6	1.0	2.1	1.4	4.0	62	96	48	9.7	6.5
16	4.5	5.6	1.6	1.0	2.0	1.4	4.0	50	138	44	11	7.6
17	4.5	5.6	1.6	1.0	1.8	1.4	4.0	43	130	43	9.2	7.1
18	4.8	5.0	1.6	1.4	1.6	1.4	4.0	51	102	40	9.7	6.2
19	5.0	4.5	1.6	2.0	1.4	1.4	4.0	27	102	34	11	5.9
20	5.0	4.2	1.6	2.1	1.4	1.4	3.8	52	126	27	16	5.7
21	5.0	3.8	1.6	2.1	1.4	1.6	3.5	112	122	31	18	5.9
22	5.1	3.5	1.4	2.1	1.4	2.0	3.4	110	46	30	16	6.2
23	5.3	3.2	1.2	2.1	1.4	2.2	3.6	118	48	30	14	5.7
24	5.3	2.9	1.2	2.1	1.4	2.4	3.8	120	58	30	18	5.5
25	5.3	2.8	1.2	2.1	1.4	2.5	3.9	120	55	30	21	6.2
26	5.6	2.8	1.2	2.1	1.4	2.9	3.9	110	63	32	18	6.2
27	5.8	2.8	1.2	2.1	1.4	3.0	3.8	90	63	34	14	6.2
28	5.8	2.8	1.2	2.1	1.4	3.0	3.8	92	70	34	12	6.8
29	5.8	2.8	1.2	2.1	1.4	3.0	3.8	100	88	34	11	6.8
30	5.8	2.8	1.2	2.1	---	3.0	3.8	110	93	32	10	7.1
31	6.0	---	1.2	2.1	---	3.0	---	100	---	30	9.7	---
TOTAL	135.4	138.1	53.7	47.6	52.3	56.6	111.0	1660.8	2213	1754	447.3	218.8
MEAN	4.37	4.60	1.73	1.54	1.80	1.83	3.70	53.6	73.8	56.6	14.4	7.29
MAX	6.0	6.0	2.8	2.1	2.1	3.0	4.0	120	138	104	25	12
MIN	2.6	2.8	1.2	1.0	1.4	1.4	3.0	3.9	29	27	9.2	5.5
AC-FT	269	274	107	94	104	112	220	3290	4390	3480	887	434

CAL YR 1983	TOTAL	6603.0	MEAN	18.1	MAX	195	MIN	1.1	AC-FT	13100
WTR YR 1984	TOTAL	6888.6	MEAN	18.8	MAX	138	MIN	1.0	AC-FT	13660

NOTE.--NO GAGE-HEIGHT RECORD NOV. 15 TO APR. 18, JULY 15 TO AUG. 14.

09066300 MIDDLE CREEK NEAR MINTURN, CO

LOCATION.--Lat 39°38'45", long 106°22'54", in sec.6, T.5 S., R.80 W., Eagle County, Hydrologic Unit 14010003, on right bank 200 ft upstream from Interstate Highway 70, 0.2 mi upstream from mouth, and 5.0 mi northeast of Minturn.

DRAINAGE AREA.--5.97 mi^2.

PERIOD OF RECORD.--October 1964 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 8,200 ft, from topographic map. Prior to Oct. 1, 1977 at site 700 ft upstream, at different datum.

REMARKS.--Records good except those for period of no gage-height record, which are poor. No diversion or regulation above station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--20 years, 6.13 ft^3/s; 4,440 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 116 ft^3/s, June 20, 1974, gage height, 2.65 ft, datum then in use; maximum gage height, 3.28 ft, June 25, 1983; no flow at times most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 60 ft^3/s, and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
June 1	2230	70	2.70	June 30	2300	*75	2.85

Minimum daily discharge, 0.20 ft^3/s, Jan. 14-18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.2	2.4	1.4	.80	.40	.70	.66	2.1	65	63	15	9.1
2	3.3	2.2	1.4	.80	.40	.80	.66	2.1	62	58	14	8.6
3	3.8	2.1	1.4	.80	.40	.80	.60	2.0	58	55	12	7.6
4	4.2	2.0	1.4	.80	.40	.80	.60	2.0	54	53	12	7.1
5	4.4	2.1	1.0	.80	.40	.80	.66	2.1	50	52	11	6.6
6	4.4	2.4	.80	.80	.40	.80	.88	2.1	48	50	11	6.4
7	4.0	2.0	.80	.80	.40	.80	.77	2.0	45	47	11	7.3
8	3.8	2.0	.80	.80	.40	.80	.77	2.2	39	44	9.4	7.3
9	3.7	1.7	.80	.80	.40	.80	1.0	3.3	36	44	9.4	6.2
10	4.4	3.0	.80	.80	.40	.80	.97	5.5	34	48	9.1	5.8
11	4.4	2.8	.80	.60	.40	.80	.97	8.9	35	39	8.4	5.5
12	4.0	2.6	.80	.40	.60	.80	.88	12	37	34	8.6	6.0
13	3.8	2.6	.80	.30	.60	.90	.82	14	42	32	8.4	5.5
14	4.2	2.2	.80	.20	.60	.97	.77	16	52	35	7.6	5.1
15	3.8	2.6	.80	.20	.60	.82	.82	20	61	29	7.3	5.1
16	3.3	2.6	.80	.20	.60	.82	1.4	24	61	26	7.8	5.5
17	3.3	2.6	.80	.20	.60	.82	2.4	24	59	24	7.1	5.3
18	3.7	2.5	.80	.20	.60	.82	3.2	26	55	22	6.8	5.1
19	3.3	2.2	.80	.30	.60	.82	3.0	26	58	20	7.8	4.5
20	3.0	2.0	.80	.40	.60	.82	2.9	27	58	20	9.1	4.2
21	3.0	1.4	.80	.40	.60	.97	2.6	33	59	19	9.7	4.4
22	3.0	1.4	.80	.40	.60	1.2	2.4	36	65	16	8.9	4.5
23	3.0	1.4	.80	.40	.60	1.1	2.4	40	63	17	8.4	4.4
24	3.0	1.4	.80	.40	.60	.97	2.8	48	62	17	9.7	4.0
25	2.9	1.4	.80	.40	.60	1.0	2.6	63	59	17	10	4.4
26	2.5	1.4	.80	.40	.60	.97	2.2	60	55	16	9.4	4.4
27	2.8	1.4	.80	.40	.60	.88	2.0	60	52	16	8.9	4.2
28	2.6	1.4	.80	.40	.60	.82	2.1	55	51	16	8.9	4.4
29	2.5	1.4	.80	.40	.60	.82	2.0	53	56	16	8.9	4.2
30	2.5	1.4	.80	.40	---	.71	2.0	58	63	16	8.1	3.8
31	2.5	---	.80	.40	---	.71	---	62	---	16	8.1	---
TOTAL	106.3	60.6	27.40	15.40	15.20	26.44	47.83	791.3	1594	977	291.8	166.5
MEAN	3.43	2.02	.88	.50	.52	.85	1.59	25.5	53.1	31.5	9.41	5.55
MAX	4.4	3.0	1.4	.80	.60	1.2	3.2	63	65	63	15	9.1
MIN	2.5	1.4	.80	.20	.40	.70	.60	2.0	34	16	6.8	3.8
AC-FT	211	120	54	31	30	52	95	1570	3160	1940	579	330

CAL YR 1983	TOTAL	3215.15	MEAN	8.81	MAX	93	MIN	.32	AC-FT	6380
WTR YR 1984	TOTAL	4119.77	MEAN	11.3	MAX	65	MIN	.20	AC-FT	8170

NOTE.--NO GAGE-HEIGHT RECORD NOV. 18 TO MAR. 13.

09066400 RED SANDSTONE CREEK NEAR MINTURN, CO

LOCATION.--Lat 39°40'58", long 106°24'03", Eagle County, Hydrologic Unit 14010003, on left bank 150 ft upstream from road culvert, 1,400 ft upstream from Indian Creek, and 6.8 mi north of Minturn.

DRAINAGE AREA.--7.27 mi^2.

PERIOD OF RECORD.--October 1963 to current year.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 9,212 ft, from topographic map.

REMARKS.--Records fair except those for winter period which are poor. No regulation or diversion above station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--21 years, 9.37 ft^3/s; 6,790 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 215 ft^3/s, June 19, 1983, gage height, 4.66 ft; minimum daily, 0.20 ft^3/s, Jan. 30, 1970.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 70 ft^3/s, and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
May 30	1800	*180	4.62	June 13	2000	175	4.51

Minimum daily discharge, 0.90 ft^3/s, Feb. 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.2	3.2	2.5	1.4	1.3	1.1	1.2	2.6	152	56	11	9.8
2	3.2	3.0	2.5	1.5	1.2	1.2	1.1	2.6	137	51	9.6	8.1
3	3.8	3.0	2.4	1.6	1.0	1.2	1.1	2.4	122	46	8.4	7.0
4	4.2	2.9	2.3	1.7	1.1	1.1	1.1	2.1	109	42	8.0	6.5
5	4.1	2.9	2.1	1.6	1.1	1.0	1.2	2.1	86	37	7.6	6.1
6	3.7	2.9	1.9	1.5	1.1	1.1	1.4	2.0	72	33	8.1	5.6
7	3.5	2.9	2.1	1.6	1.1	1.1	1.5	1.9	62	31	7.2	7.3
8	3.4	2.5	2.3	1.7	1.1	1.2	1.7	2.0	42	29	6.8	6.4
9	3.2	3.0	2.3	1.7	1.1	1.2	2.1	3.7	38	28	6.7	5.6
10	4.2	3.4	2.3	1.6	1.1	1.2	1.9	6.6	32	36	6.3	5.0
11	4.6	3.2	2.2	1.7	1.1	1.2	2.0	11	38	25	6.1	5.0
12	4.4	3.0	2.2	1.6	1.1	1.2	1.7	16	45	21	6.8	5.7
13	4.4	3.0	2.2	1.6	1.1	1.2	1.6	21	71	20	6.9	5.1
14	4.6	3.1	2.1	1.7	1.1	1.3	1.8	27	106	25	6.1	5.0
15	4.0	2.8	2.1	1.6	1.1	1.4	2.0	29	103	19	6.7	4.9
16	3.8	2.8	2.0	1.4	1.1	1.5	2.7	24	103	17	8.0	5.7
17	4.0	2.8	2.1	1.4	1.2	1.4	3.3	22	92	14	5.9	5.7
18	4.6	2.9	2.0	1.4	1.1	1.3	3.7	21	87	13	11	4.9
19	4.4	2.7	2.0	1.3	1.0	1.3	3.5	19	87	12	10	4.6
20	4.0	2.6	1.9	1.4	.90	1.3	3.1	30	83	11	15	4.4
21	3.8	2.7	1.8	1.3	1.0	1.4	3.0	39	83	11	15	4.4
22	3.6	2.6	1.6	1.4	1.1	1.5	2.8	41	86	9.9	12	5.0
23	3.6	2.6	1.7	1.4	1.0	1.4	2.9	68	82	12	11	4.8
24	3.4	2.5	1.6	1.3	1.0	1.4	3.2	109	78	12	13	4.7
25	3.2	2.7	1.7	1.4	1.0	1.5	3.4	121	71	11	14	4.8
26	3.2	2.5	1.8	1.4	1.0	1.4	3.0	110	65	11	11	5.5
27	3.2	2.4	1.8	1.3	.95	1.3	2.8	116	61	11	10	5.2
28	3.0	2.3	1.7	1.4	1.0	1.2	2.6	109	57	11	9.4	4.8
29	3.0	2.4	1.5	1.4	1.0	1.2	2.5	114	55	11	8.9	4.8
30	3.0	2.4	1.3	1.3	---	1.2	2.4	139	59	13	8.0	4.8
31	3.2	---	1.3	1.3	---	1.2	---	144	---	10	7.4	---
TOTAL	115.5	83.7	61.3	45.9	31.05	39.2	68.3	1358.0	2364	688.9	281.9	167.2
MEAN	3.73	2.79	1.98	1.48	1.07	1.26	2.28	43.8	78.8	22.2	9.09	5.57
MAX	4.6	3.4	2.5	1.7	1.3	1.5	3.7	144	152	56	15	9.8
MIN	3.0	2.3	1.3	1.3	.90	1.0	1.1	1.9	32	9.9	5.9	4.4
AC-FT	229	166	122	91	62	78	135	2690	4690	1370	559	332

CAL YR 1983 TOTAL 5517.10 MEAN 15.1 MAX 164 MIN 1.1 AC-FT 10940
WTR YR 1984 TOTAL 5304.95 MEAN 14.5 MAX 152 MIN .90 AC-FT 10520

NOTE.--NO GAGE-HEIGHT RECORD NOV. 15 TO MAY 1.

09067000 BEAVER CREEK AT AVON, CO

LOCATION.--Lat 39°37'47", long 106°31'20", in NE¼SW¼ sec.12, T.5 S., R.82 W., Eagle County, Hydrologic Unit 14010003, on left bank at Avon, 550 ft upstream from U.S. Highways 6 and 24, and 700 ft upstream from mouth.

DRAINAGE AREA.--15.7 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--January to December 1911, January 1912 to September 1914 (gage heights and discharge measurements only), May 1974 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 7,453 ft, from topographic map. Prior to May 1, 1974, nonrecording gage near present site at different datum.

REMARKS.--Records good except those for winter period, which are fair. Diversions above station for irrigation above and below station. Slight natural regulation by several small lakes in headwaters.

AVERAGE DISCHARGE.--10 years (water years 1975-84), 13.7 ft^3/s; 9,930 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 249 ft^3/s, June 27, 1983, gage height, 3.46 ft; minimum daily, 0.55 ft^3/s, Sept. 10, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 80 ft^3/s, and maximum (*)

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
May 24	2000	160	2.98	June 30	2200	*186	3.06

Minimum daily discharge 2.7 ft^3/s, Feb. 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.7	4.3	6.1	4.1	3.7	3.4	4.2	4.4	112	143	42	15
2	5.9	4.2	5.9	3.9	3.8	3.4	4.2	5.8	97	122	42	13
3	7.5	4.6	5.0	4.2	3.7	3.3	4.2	4.7	80	114	38	11
4	6.8	4.9	4.8	4.1	3.6	3.0	4.7	4.1	77	103	36	10
5	6.2	4.7	4.2	4.3	3.7	2.8	4.7	4.2	71	90	34	11
6	5.9	4.1	4.4	4.3	3.4	3.0	4.9	4.1	63	80	37	12
7	5.4	3.8	5.4	4.3	3.6	3.2	5.7	4.2	87	73	34	13
8	5.6	6.4	5.0	4.2	3.6	3.4	6.3	4.1	58	66	30	13
9	5.4	4.4	4.7	4.2	3.5	3.3	5.5	6.3	49	72	27	12
10	6.7	5.3	4.5	4.1	3.4	3.3	6.1	12	43	116	26	11
11	6.7	5.8	4.6	4.1	3.6	3.4	6.3	19	47	70	23	9.8
12	5.9	6.2	4.8	4.0	3.4	3.3	5.1	26	51	57	22	8.8
13	5.7	6.2	4.8	4.0	3.3	3.8	4.4	35	60	65	25	7.7
14	6.4	5.6	5.6	3.9	3.6	3.9	3.6	47	75	84	22	6.8
15	5.9	6.0	5.9	4.0	3.5	4.0	4.2	61	97	64	21	7.4
16	5.4	5.8	5.6	4.0	3.4	3.9	5.5	61	102	55	23	13
17	5.4	6.0	5.8	4.0	3.3	3.6	7.6	58	95	47	21	13
18	7.0	6.4	5.7	4.0	3.2	3.6	9.0	54	88	42	22	11
19	5.4	5.5	5.8	4.0	3.2	3.8	8.0	53	93	39	26	9.5
20	5.0	5.8	4.5	4.0	2.7	3.8	5.9	63	99	41	35	8.9
21	4.7	6.3	4.2	4.0	3.4	4.2	4.7	69	108	47	24	9.3
22	4.7	5.2	4.5	4.0	3.4	4.4	4.7	80	114	37	22	11
23	4.6	5.8	5.1	3.9	3.3	4.0	6.2	92	112	38	20	9.3
24	4.7	5.7	5.2	3.8	3.2	4.5	6.6	118	112	43	26	8.9
25	4.5	7.1	5.1	3.7	3.2	4.2	5.7	133	113	41	26	11
26	4.4	6.2	5.0	4.0	3.2	4.2	5.1	107	111	44	20	11
27	4.5	5.8	5.0	4.0	3.3	4.0	4.4	96	108	34	15	11
28	4.4	6.1	5.5	3.9	3.2	3.9	4.1	87	106	32	17	10
29	4.3	6.1	4.4	3.9	3.3	4.0	3.9	81	119	32	13	9.3
30	4.3	5.8	4.0	3.8	---	4.0	4.0	87	146	33	13	9.0
31	4.3	---	4.1	3.8	---	4.0	---	91	---	34	12	---
TOTAL	169.3	166.1	155.2	124.5	98.7	114.6	159.5	1571.9	2693	1958	794	316.7
MEAN	5.46	5.54	5.01	4.02	3.40	3.70	5.32	50.7	89.8	63.2	25.6	10.6
MAX	7.5	7.1	6.1	4.3	3.8	4.5	9.0	133	146	143	42	15
MIN	4.3	3.8	4.0	3.7	2.7	2.8	3.6	4.1	43	32	12	6.8
AC-FT	336	329	308	247	196	227	316	3120	5340	3880	1570	628

CAL YR 1983 TOTAL 8238.2 MEAN 22.6 MAX 242 MIN 1.1 AC-FT 16340
WTR YR 1984 TOTAL 8321.5 MEAN 22.7 MAX 146 MIN 2.7 AC-FT 16510

09067000 BEAVER CREEK AT AVON, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--January 1975 to current year.

INSTRUMENTATION.--Turbidity recorder since September 1974.

REMARKS.--Prior to water year 1983, daily maximum and minimum turbidity data available in district office.

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)
OCT 12...	1500	5.3	265	8.3	7.0	10.4	130	40	7.4	2.4
NOV 08...	1000	6.7	317	8.1	3.5	11.2	160	48	8.9	2.7
DEC 08...	1400	4.8	340	8.2	1.0	11.8	180	54	11	3.1
JAN 26...	1100	3.9	390	8.1	.0	12.4	210	66	12	3.7
FEB 22...	1100	3.4	400	8.1	.0	12.4	210	63	13	3.7
APR 18...	1400	7.6	380	8.2	5.5	10.6	200	60	13	3.2
MAY 24...	1700	123	128	8.0	6.5	10.3	61	17	4.5	1.5
JUN 21...	1400	95	90	7.9	8.0	10.1	39	11	2.9	1.4
JUL 25...	1100	37	112	8.0	11.5	9.0	55	16	3.7	1.6
AUG 22...	1200	22	133	8.0	10.0	9.5	65	19	4.3	1.8
SEP 19...	1100	9.7	170	8.3	8.5	9.8	--	--	--	--

DATE	SODIUM AD-SORP-TION RATIO	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)
OCT 12...	.0	72	64	.90	173	.24	2.5	<.10	<.010
NOV 08...	.0	91	78	1.9	211	.29	3.8	.21	.020
DEC 08...	.1	88	82	1.4	235	.32	3.0	.16	<.010
JAN 26...	.1	100	110	2.2	300	.41	3.2	.21	.010
FEB 22...	.1	106	120	2.1	299	.41	2.7	1.3	.020
APR 18...	.1	117	97	3.2	265	.36	5.4	.63	.020
MAY 24...	.0	46	--	.60	88	.12	29	.18	.020
JUN 21...	.1	34	12	.50	59	.08	15	<.10	<.010
JUL 25...	.0	37	18	.60	71	.10	7.1	<.10	<.010
AUG 22...	.1	44	24	.80	80	.11	4.8	.11	.020
SEP 19...	--	54	29	--	--	--	--	--	--

09067000 BEAVER CREEK AT AVON, CO--Continued

TURBIDITY (NTU), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	1.0	1.0	---	---	---	---	---	---	---	---		
2	20	1.0	---	---	---	---	---	---	6.0	5.0		
3	15	1.0	---	---	---	---	---	---	8.0	6.0		
4	5.0	1.0	---	---	---	---	---	---	---	---		
5	4.0	1.0	---	---	---	---	---	---	---	---		
6	3.0	1.0	---	---	---	---	9.0	2.0	---	---		
7	20	1.0	---	---	---	---	6.0	1.0	---	---		
8	2.0	1.0	---	---	---	---	6.0	1.0	---	---		
9	8.0	1.0	---	---	15	2.0	7.0	1.0	---	---		
10	30	1.0	---	---	9.0	1.0	2.0	1.0	---	---		
11	40	1.0	---	---	---	---	---	---	---	---		
12	4.0	1.0	---	---	---	---	---	---	---	---		
13	---	---	---	---	---	---	---	---	---	---		
14	30	1.0	---	---	---	---	---	---	---	---		
15	---	---	---	---	---	---	---	---	---	---		
16	---	---	---	---	---	---	---	---	---	---		
17	---	---	---	---	---	---	---	---	---	---		
18	---	---	---	---	4.0	1.0	---	---	---	---		
19	40	10	---	---	3.0	1.0	---	---	---	---		
20	20	5.0	---	---	4.0	1.0	---	---	---	---		
21	40	2.0	25	2.0	5.0	1.0	---	---	---	---		
22	40	4.0	>100	1.0	6.0	1.0	---	---	---	---		
23	---	---	---	---	---	---	---	---	8.0	2.0		
24	---	---	9.0	1.0	---	---	---	---	---	---		
25	---	---	---	---	---	---	---	---	---	---		
26	40	1.0	---	---	---	---	---	---	---	---		
27	---	---	5.0	1.0	---	---	---	---	---	---		
28	---	---	6.0	1.0	---	---	---	---	---	---		
29	---	---	40	2.0	---	---	---	---	---	---		
30	---	---	70	4.0	---	---	---	---	---	---		
31	---	---	---	---	---	---	---	---	---	---		
MONTH	40	1.0	>100	1.0	15	1.0	9.0	1.0	8.0	2.0		

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	---	---	---	---								
2	---	---	>100	---								
3	---	---	35	15								
4	---	---	>100	---								
5	---	---	>100	---								
6	---	---	---	---								
7	---	---	---	---								
8	---	---	---	---								
9	---	---	>100	---								
10	---	---	>100	---								
11	---	---	>100	---								
12	---	---	---	---								
13	---	---	---	---								
14	---	---	---	---								
15	---	---	---	---								
16	---	---	---	---								
17	---	---	---	---								
18	---	---	---	---								
19	---	---	---	---								
20	60	2.0	---	---								
21	<100	2.0	---	---								
22	45	15	---	---								
23	>100	15	---	---								
24	45	20	---	---								
25	>100	5.0	---	---								
26	>100	20	---	---								
27	30	15	---	---								
28	>100	15	---	---								
29	>100	10	---	---								
30	---	---	---	---								
31	---	---	---	---								
MONTH	>100	2.0	>100	15								
YEAR	>100	1.0										

NOTE: NUMBER OF MISSING DAYS OF RECORD EXCEEDED 20% OF YEAR

09069000 EAGLE RIVER AT GYPSUM, CO

LOCATION.--Lat 39°39'00", long 106°57'06", Eagle County, Hydrologic Unit 14010003, at bridge at Gypsum, about 400 ft upstream from Gypsum Creek, about 520 ft upstream from bridge on U.S. Highways 6 and 24, and about 550 ft upstream from gaging station.

DRAINAGE AREA.--944 mi^2, at gaging station.

PERIOD OF RECORD.--April 1947 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: April 1947 to current year.
WATER TEMPERATURE: April 1949 to current year.

REMARKS.--Records of discharge are given for Eagle River below Gypsum (station 09070000), located 550 ft, downstream from Eagle River at Gypsum (station 09069000).

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum daily, 1,850 micromhos Aug. 6, 1949; minimum daily, 130 micromhos June 9, 10, 1976.
WATER TEMPERATURES: Maximum, 24°C Aug. 24, 1949; minimum, freezing point on many days during winter months.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum daily, 1,200 micromhos Mar. 21; minimum daily, 160 micromhos July 10.

WATER TEMPERATURES: Maximum daily, 17.0°C many days in Aug. and Sept; minimum daily, freezing point on many days during November to February.

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	NITRO-GEN DIS-SOLVED (MG/L AS N)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
OCT										
12...	1100	320	708	8.3	7.5	10.6	.47	310	91	19
APR										
17...	1400	322	755	8.3	12.5	8.9	1.1	300	84	21
MAY										
23...	1600	4810	196	7.9	9.0	10.0	--	95	28	6.0
AUG										
21...	1500	1410	484	8.0	14.0	8.8	.46	200	63	11

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)
OCT									
12...	38	1	1.9	133	180	54	.10	7.9	470
APR									
17...	45	1	2.4	129	190	58	.20	8.3	490
MAY									
23...	4.5	.2	1.1	59	34	3.2	<.10	7.1	120
AUG									
21...	13	.4	1.6	89	130	17	.10	7.1	300

DATE	SOLIDS, DIS-SOLVED (TONS PER DAY)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)
OCT									
12...	408	.64	.20	.17	.60	.30	.80	.030	<.010
APR									
17...	423	.66	.50	.49	1.0	.60	1.5	.460	.040
MAY									
23...	1550	.16	.20	.22	.30	<.20	.50	.130	.020
AUG									
21...	1130	.40	.20	.16	.50	.30	.70	.150	.010

09069000 EAGLE RIVER AT GYPSUM, CO.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	ANTIMONY, DISSOLVED (UG/L AS SB)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DISSOLVED (UG/L AS AS)	BARIUM, DISSOLVED (UG/L AS BA)	BERYLLIUM, DISSOLVED (UG/L AS BE)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)
OCT									
12...	1100	--	1	1	--	--	<1	<1	2
APR									
17...	1400	--	2	<1	--	--	2	<1	9
MAY									
23...	1600	<1	2	<1	38	2	<1	1	14
AUG									
21...	1500	<1	1	<1	40	<1	<1	1	13

DATE	CHROMIUM, DISSOLVED (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, DISSOLVED (UG/L AS CU)	IRON, DISSOLVED (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, DISSOLVED (UG/L AS PB)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY DISSOLVED (UG/L AS HG)
OCT									
12...	<1	9	2	17	2	3	74	<.1	<.1
APR									
17...	2	23	3	5	5	4	200	<.1	<.1
MAY									
23...	<1	21	4	160	79	<1	47	1.0	.2
AUG									
21...	<1	8	4	120	21	7	94	<.1	<.1

DATE	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	SILVER, DISSOLVED (UG/L AS AG)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, DISSOLVED (UG/L AS ZN)
OCT								
12...	--	--	<1	<1	--	--	80	20
APR								
17...	--	--	2	2	--	--	460	44
MAY								
23...	16	2	<10	<1	1	<1	320	29
AUG								
21...	28	5	<1	<1	<1	<1	120	28

09069000 EAGLE RIVER AT GYPSUM, CO.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	800	800	800	750	1000	1000	950	700	240	180	360	480
2	---	800	---	700	1000	1000	950	700	230	200	360	500
3	---	800	---	700	1000	1000	950	700	220	200	360	500
4	---	800	800	750	1000	1000	950	700	220	200	360	500
5	---	800	800	750	1000	1000	950	700	225	220	360	500
6	---	800	800	750	1000	1000	850	700	240	220	360	550
7	---	800	900	750	1000	950	850	700	260	220	400	580
8	---	800	800	700	1000	900	850	700	230	220	400	550
9	---	800	850	700	1000	900	850	700	235	200	420	600
10	800	800	900	900	1000	1050	850	---	230	160	460	620
11	---	800	850	800	1000	1050	850	---	240	180	460	650
12	750	800	800	1000	1000	950	800	340	260	180	500	650
13	---	800	700	950	1000	950	800	---	240	200	480	650
14	---	800	---	1000	1000	1000	750	300	220	200	480	650
15	---	800	700	1000	1000	1050	800	260	220	240	480	600
16	---	800	850	950	1000	1050	800	---	200	240	480	620
17	---	800	800	1000	1000	950	750	260	200	270	460	620
18	---	800	800	1000	1000	1000	750	240	200	---	480	600
19	700	800	750	1000	1000	1050	625	---	200	---	480	600
20	---	800	600	1000	1000	1100	---	---	200	---	480	600
21	750	800	700	950	1000	1200	---	220	210	---	500	620
22	---	800	700	1000	1000	1100	---	---	210	---	520	650
23	750	---	750	1000	1000	900	---	---	200	320	500	650
24	---	800	750	1000	1000	850	700	200	200	320	480	650
25	---	800	750	1000	1000	950	700	200	200	300	500	650
26	---	800	750	900	1000	900	750	---	200	320	460	650
27	---	800	750	1000	1000	900	750	---	200	300	460	650
28	---	800	700	1000	1000	850	750	220	200	300	480	620
29	---	800	750	900	950	900	800	220	180	320	500	600
30	800	800	750	1000	---	950	750	200	180	300	480	650
31	---	---	750	1000	---	900	---	200	---	300	460	---
MEAN	764	800	771	900	998	979	813	436	216	243	450	600

WTR YR 1984 MEAN 666 MAX 1200 MIN 160

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12.0	8.0	2.0	.0	.0	.0	7.0	10.0	7.0	12.0	15.0	16.0
2	---	8.0	---	.0	.0	.0	7.0	10.0	7.0	13.0	15.0	17.0
3	---	8.0	---	.0	.0	.0	7.0	10.0	8.0	12.0	15.0	17.0
4	---	8.0	.0	.0	.0	.0	8.0	10.0	8.0	12.0	15.0	17.0
5	---	8.0	.0	.0	.0	.0	8.0	10.0	8.0	13.0	15.0	17.0
6	---	8.0	.0	.0	.0	.0	10.0	10.0	7.0	13.0	15.0	17.0
7	---	6.0	.0	.0	.0	1.0	10.0	10.0	7.0	13.0	16.0	16.0
8	---	4.0	.0	.0	.0	1.0	10.0	10.0	8.0	13.0	16.0	16.0
9	---	4.0	.0	.0	.0	2.0	10.0	10.0	8.0	13.0	16.0	16.0
10	10.0	4.0	.0	.0	.0	4.0	10.0	---	9.0	14.0	16.0	16.0
11	---	3.0	.0	.0	.0	4.0	10.0	---	10.0	14.0	16.0	14.0
12	11.0	3.0	3.0	.0	.0	3.0	12.0	11.0	12.0	14.0	17.0	14.0
13	---	3.0	1.0	.0	.0	3.0	12.0	---	12.0	14.0	17.0	15.0
14	---	3.0	---	.0	.0	4.0	12.0	11.0	12.0	14.0	17.0	15.0
15	---	3.0	.0	.0	.0	4.0	11.0	9.0	12.0	14.0	17.0	16.0
16	---	3.0	.0	.0	.0	4.0	11.0	---	10.0	14.0	17.0	16.0
17	---	2.0	.0	.0	.0	4.0	12.0	10.0	10.0	14.0	16.0	16.0
18	---	2.0	.0	.0	.0	5.0	12.0	8.0	10.0	---	17.0	16.0
19	9.0	2.0	.0	.0	.0	6.0	9.0	---	10.0	---	17.0	16.0
20	---	2.0	.0	.0	.0	7.0	---	---	10.0	---	17.0	16.0
21	9.0	2.0	.0	.0	.0	9.0	---	9.0	9.0	---	17.0	15.0
22	---	2.0	.0	.0	.0	7.0	---	---	9.0	---	17.0	15.0
23	9.0	---	.0	.0	.0	6.0	---	---	10.0	16.0	17.0	14.0
24	---	.0	.0	.0	.0	5.0	10.0	10.0	9.0	16.0	17.0	14.0
25	---	.0	.0	.0	.0	7.0	6.0	9.0	9.0	16.0	17.0	14.0
26	---	.0	.0	.0	.0	7.0	6.0	---	10.0	15.0	16.0	13.0
27	---	.0	.0	.0	.0	7.0	5.0	---	10.0	16.0	16.0	13.0
28	---	.0	.0	.0	.0	6.0	5.0	10.0	10.0	16.0	16.0	12.0
29	---	.0	.0	.0	.0	7.0	4.0	10.0	10.0	16.0	17.0	12.0
30	8.0	.0	.0	.0	---	7.0	4.0	9.0	12.0	16.0	17.0	11.0
31	---	---	.0	.0	---	6.0	---	9.0	---	16.0	17.0	---
MEAN	9.5	3.5	.0	.0	.0	4.0	9.0	10.0	9.5	14.0	16.5	15.0

WTR YR 1984 MEAN 7.5 MAX 17.0 MIN .0

09070000 EAGLE RIVER BELOW GYPSUM, CO

LOCATION.--Lat 39°38'58", long 106°57'11", in SW¼NW¼ sec.5, T.5 S., R.85W., Eagle County, Hydrologic Unit 14010003, 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 mi^2.

PERIOD OF RECORD.--October 1946 to current year.

REVISED RECORDS.--WSP 2124: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 6,275 ft, from topographic map.

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. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--38 years, 579 ft^3/s; 419,500 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,020 ft^3/s, May 25, 1984, gage height, 9.46 ft; minimum daily, 110 ft^3/s, Feb. 21, 1955, Feb. 3, 1956, Dec. 26, 27, 1962.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 7,020 ft^3/s at 0700 May 25, gage height, 9.46 ft, only peak above base of 3,500 ft^3/s; minimum daily, 171 ft^3/s, Mar. 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	262	300	300	293	250	207	217	307	4930	4680	1440	956
2	261	295	303	237	240	197	210	363	4610	4080	1370	904
3	273	290	299	201	230	203	200	358	4220	3940	1230	782
4	288	285	301	263	230	189	190	337	4130	3710	1140	723
5	275	285	286	270	230	171	200	339	3960	3480	1080	691
6	274	276	243	246	230	188	227	335	3620	3310	1160	665
7	279	275	278	242	230	192	239	316	4030	3150	1180	641
8	273	336	297	240	231	186	258	310	3600	3010	1050	698
9	269	320	296	256	230	192	286	363	3500	3270	935	649
10	280	285	289	240	214	198	262	532	3300	4060	903	622
11	320	299	285	226	211	195	289	894	3200	3420	839	600
12	319	300	285	230	227	190	249	1400	3300	2710	807	623
13	318	310	282	240	208	194	249	1790	3500	2500	903	625
14	339	311	270	250	213	211	236	2360	4000	3060	871	592
15	354	277	275	260	207	233	247	3210	4560	2820	911	584
16	343	286	262	260	215	245	272	3590	4870	2400	1060	646
17	327	292	274	250	201	213	324	3350	4610	2230	1010	667
18	333	314	279	240	204	215	413	3480	4130	1970	960	602
19	340	301	275	220	211	207	428	2990	4330	1890	1130	564
20	322	295	267	210	191	210	417	3350	4350	1800	1240	541
21	326	306	210	200	189	220	347	4070	4390	1890	1370	542
22	312	282	200	200	217	238	316	4300	4640	1800	1330	569
23	307	278	225	210	206	220	330	4810	4500	1690	1190	551
24	304	274	209	220	220	222	397	5630	4420	1730	1280	522
25	296	300	253	240	199	240	430	6580	4380	1600	1400	533
26	286	307	331	250	194	214	387	5510	4190	1660	1310	543
27	280	284	312	270	198	216	345	4980	4100	1520	1160	554
28	285	279	286	270	189	205	306	4670	4020	1460	1030	540
29	280	297	235	270	199	202	319	4450	4100	1470	953	525
30	277	300	216	260	---	212	306	4610	4520	1480	887	497
31	289	---	302	260	---	217	---	4800	---	1510	837	---
TOTAL	9291	8839	8425	7524	6214	6442	8896	84384	124010	79300	33966	18751
MEAN	300	295	272	243	214	208	297	2722	4134	2558	1096	625
MAX	354	336	331	293	250	245	430	6580	4930	4680	1440	956
MIN	261	274	200	200	189	171	190	307	3200	1460	807	497
AC-FT	18430	17530	16710	14920	12330	12780	17650	167400	246000	157300	67370	37190

CAL YR 1983 TOTAL 305560 MEAN 837 MAX 6060 MIN 134 AC-FT 606100
WTR YR 1984 TOTAL 396042 MEAN 1082 MAX 6580 MIN 171 AC-FT 785500

09070500 COLORADO RIVER NEAR DOTSERO, CO

LOCATION.--Lat 39°38'38", long 107°04'38", in NW¼SE¼ sec.6, T.5 S., R.86 W., Eagle County, Hydrologic Unit 14010001, on left bank about 500 ft south of U.S. Highways 6 and 24, 1.5 mi west of Dotsero, and 1.5 mi downstream from Eagle River.

DRAINAGE AREA.--4,394 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1940 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,130 ft, from topographic map.

REMARKS.--Records good except those for winter period, which are fair. 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 Colorado State Engineer.

AVERAGE DISCHARGE.--44 years, 2,136 ft^3/s; 1,548,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 22,200 ft^3/s, May 25, 1984, gage height, 14.20 ft; minimum daily, 350 ft^3/s, Jan. 5, 1944.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 22,200 ft^3/s at 1530 May 25, gage height, 14.20 ft; minimum daily, 980 ft^3/s, Feb. 21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1340	1490	1500	1500	1200	1050	2430	2360	17700	12900	5370	3850
2	1380	1500	1540	1300	1180	1100	2410	2520	17700	13300	5170	3870
3	1400	1480	1540	1100	1060	1160	2370	2700	16700	13500	4810	3640
4	1390	1470	1540	1300	1120	1140	2370	2730	15900	12800	4550	3460
5	1220	1460	1490	1400	1120	1040	2560	2870	14900	11800	4370	3380
6	1200	1450	1350	1360	1100	1100	2640	2900	14000	11000	4450	3310
7	1190	1460	1500	1300	1080	1140	2640	2860	14800	10000	4530	3240
8	1170	1540	1600	1300	1090	1140	2620	2800	13800	9690	4460	3100
9	1160	1590	1540	1300	1090	1180	2690	2930	12400	9790	4230	2850
10	1160	1510	1520	1300	1100	1180	2590	3530	10900	10600	4100	2780
11	1210	1510	1420	1180	1100	1200	2590	4760	10200	10700	3920	2640
12	1230	1530	1280	1200	1120	1200	2380	6740	10100	10100	3830	2570
13	1270	1540	1260	1300	1100	1250	2250	8380	10100	8930	3870	2480
14	1510	1560	1250	1320	1160	1340	2190	10300	10900	9160	3850	2380
15	1570	1470	1450	1360	1120	1390	2180	12600	12200	9030	3700	2350
16	1560	1450	1360	1200	1080	1420	2250	14000	13400	8190	3790	2470
17	1530	1470	1470	1160	1100	1350	2380	13900	13500	7620	3470	2570
18	1530	1500	1520	1100	1100	1400	2730	14000	13200	6930	3300	2470
19	1560	1530	1490	1080	1060	1390	3000	12700	13600	6610	3430	2350
20	1550	1510	1470	1080	1000	1370	2960	12900	14000	6080	3670	2180
21	1540	1550	1150	1080	980	1410	2770	14100	13600	5810	3980	2020
22	1520	1510	1060	1140	1020	1520	2580	15200	13800	5680	3870	2100
23	1500	1410	1160	1200	1100	1540	2570	16700	13700	5410	3650	2110
24	1490	1380	1040	1300	1050	1600	2800	18400	13700	5790	3820	2040
25	1450	1540	1300	1380	1100	1780	3030	20800	13600	6140	4310	2040
26	1450	1550	1500	1420	1080	1840	2920	20800	13400	6370	4310	2080
27	1440	1500	1600	1400	1000	1860	2680	20000	13500	6030	4030	2080
28	1440	1460	1500	1340	1000	1880	2460	18300	12800	5670	3860	2030
29	1450	1480	1160	1340	1020	1940	2420	17100	12500	5670	3780	2030
30	1460	1490	1100	1300	---	2170	2390	17000	12600	5770	3680	2020
31	1460	---	1300	1280	---	2330	---	17100	---	5760	3550	---
TOTAL	43330	44890	42960	39320	31430	44410	76850	333980	403200	262830	125710	78490
MEAN	1398	1496	1386	1268	1084	1433	2562	10770	13440	8478	4055	2616
MAX	1570	1590	1600	1500	1200	2330	3030	20800	17700	13500	5370	3870
MIN	1160	1380	1040	1080	980	1040	2180	2360	10100	5410	3300	2020
AC-FT	85950	89040	85210	77990	62340	88090	152400	662400	799700	521300	249300	155700

CAL YR 1983 TOTAL 1207370 MEAN 3308 MAX 16800 MIN 740 AC-FT 2395000
WTR YR 1984 TOTAL 1527400 MEAN 4173 MAX 20800 MIN 980 AC-FT 3030000

09070500 COLORADO RIVER NEAR DOTSERO, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Partial record station May 1962 to February 1980, February 1980 to September 1984 (discontinued).

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: February 1980 to September 1984.
WATER TEMPERATURE: February 1980 to September 1984.

INSTRUMENTATION.--Water-quality monitor since February 1980.

REMARKS.--Daily maximum and minimum specific-conductance data available in district office.

COOPERATION.--Additional chemical-quality data are furnished by U.S. Bureau of Reclamation (noted by an asterick in the water year heading).

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 1,410 micromhos Sept. 12, 1981, minimum recorded, 145 micromhos June 1, 1984.
WATER TEMPERATURE: Maximum, 24.0°C Aug. 4, 1981; minimum; 0.0°C several days during winter period each year.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCT4NCE: Maximum, 1,170 micromhos Aug. 19; minimum recorded, 145 micromhos June 1.
WATER TEMPERATURE: Maximum 20.0°C Aug. 16-18; minimum, 0.0°C many days during winter period.

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO
OCT									
06...	1345	1160	530	12.0	190	58	12	24	.8
11...	1300	1220	495	10.0	190	57	12	24	.8
20...	1115	1570	420	8.5	180	52	11	20	.7
25...	1220	1450	474	7.0	180	53	11	20	.7
NOV									
04...	0800	1490	410	6.0	150	45	10	18	.7
09...	1000	1580	400	4.0	150	45	10	18	.7
14...	1440	1560	445	6.5	170	51	11	21	.7
22...	1300	1490	370	1.5	140	42	9.0	17	.6
DEC									
02...	1155	1530	370	2.0	150	44	9.0	18	.7
07...	1100	1420	398	.5	160	46	9.8	22	.8
15...	1300	1530	439	1.0	170	50	9.8	23	.8
22...	1020	1760	444	.0	160	46	9.8	24	.9
JAN									
27...	0800	1760	370	.0	120	36	7.2	25	1
FEB									
03...	0800	1220	425	.0	140	42	8.8	33	1
10...	1300	1250	505	.0	150	45	9.8	36	1
24...	0800	1120	508	.0	160	47	9.8	38	1
MAR									
08...	1100	1690	404	1.0	150	45	9.8	22	.8
15...	1100	1350	388	3.0	150	45	9.8	21	.8
22...	1150	1520	420	4.5	140	41	9.8	20	.8
29...	1100	1870	368	3.5	120	34	7.7	15	.6
APR									
05...	1430	2600	250	6.5	100	30	6.6	12	.5
09...	1150	2630	288	6.5	110	32	6.6	13	.6
20...	0800	2970	427	6.5	140	39	11	19	.7
27...	1000	2690	369	4.0	130	37	9.8	19	.7
MAY									
01...	1420	2430	410	9.0	160	44	12	21	.8
10...	0800	3590	348	9.5	140	40	9.6	16	.6
16...	0900	15000	210	8.5	110	34	5.8	6.9	.3
23...	1200	17400	178	10.0	86	27	4.6	5.2	.3
JUN									
01...	1300	13000	157	10.5	77	24	4.2	4.8	.2
13...	0800	10000	220	11.5	99	30	6.0	6.4	.3
19...	0900	15400	180	12.5	80	24	4.7	5.5	.3
29...	1200	13000	178	15.0	76	23	4.4	5.7	.3
JUL									
03...	1055	13200	184	15.0	70	21	4.0	5.2	.3
12...	0900	10400	194	15.0	82	25	4.9	6.8	.3
20...	0830	6480	294	--	110	34	6.4	10	.4
24...	0800	5720	280	15.5	130	40	6.8	11	.4
AUG									
03...	0850	4840	280	16.5	120	36	6.8	11	.5
10...	1300	4110	290	16.5	120	36	7.0	13	.5
17...	1230	4220	370	18.0	150	47	7.9	16	.6
21...	0800	4060	322	15.0	140	45	7.6	13	.5
29...	1110	3780	340	16.0	130	39	7.9	15	.6
SEP									
06...	1300	3400	328	15.0	120	36	6.8	14	.6
14...	0755	2400	385	14.5	150	45	8.7	18	.7
21...	0800	1930	433	14.0	160	47	9.8	20	.7
28...	1100	2020	395	10.5	150	45	8.7	18	.7

09070500 COLORADO RIVER NEAR DOTSERO, CO--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE, FET-LAB (MG/L AS HCO3)	CARBONATE, FET-LAB (MG/L AS CO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)	SOLIDS, DISSOLVED (TONS PER DAY)
OCT								
06...	2.0	120		110	32	310	.42	971
11...	2.0	140	.000	100	31	290	.39	955
20...	2.0	120	.000	98	26	270	.37	1140
25...	2.0	100	10	96	26	270	.37	1060
NOV								
04...	1.4	120	.000	74	23	230	.31	925
09...	1.6	120	.000	77	22	230	.31	981
14...	1.5	120	.000	86	27	260	.35	1100
22...	1.3	110	.000	68	23	210	.29	845
DEC								
02...	1.4	110	.000	70	23	220	.30	909
07...	2.0	120	.000	78	27	240	.33	917
15...	5.5	120	.000	84	25	250	.34	1030
22...	2.0	110	.000	85	30	250	.34	1190
JAN								
27...	2.0	96	.000	47	31	190	.26	903
FEB								
03...	2.0	110	.000	64	43	250	.34	823
10...	2.0	120	.000	69	47	270	.37	911
24...	2.3	120	.000	75	51	280	.38	847
MAR								
08...	1.6	110	.000	74	28	230	.31	1050
15...	2.0	110	.000	77	26	230	.31	838
22...	2.7	110	.000	74	24	220	.30	903
29...	1.6	87	.000	54	18	170	.23	858
APR								
05...	1.6	82	.000	45	14	150	.20	1050
09...	1.6	87	.000	46	12	160	.22	1140
20...	2.0	110	.000	74	13	210	.29	1680
27...	2.0	110	.000	66	13	200	.27	1450
MAY								
01...	1.6	110	.000	86	21	240	.33	1570
10...	2.0	110	.000	64	12	200	.27	1940
16...	2.3	110	.000	27	3.2	130	.18	5260
23...	1.5	87	.000	23	2.4	110	.15	5170
JUN								
01...	1.1	77	.000	19	2.4	90	.12	3160
13...	1.1	89	.000	34	4.2	130	.18	3510
19...	1.1	76	.000	26	3.1	100	.14	4160
29...	1.1	68	.000	28	3.5	100	.14	3510
JUL								
03...	1.1	67	.000	24	3.5	90	.12	3210
12...	1.5	70	.000	34	4.6	110	.15	3090
20...	1.5	82	.000	50	10	150	.20	2620
24...	1.5	97	.000	55	9.5	170	.23	2630
AUG								
03...	1.5	94	.000	52	10	160	.22	2090
10...	1.5	88	.000	56	13	170	.23	1890
17...	1.5	110	.000	67	18	210	.29	2390
21...	1.5	120	.000	59	13	200	.27	2190
29...	1.5	110	.000	60	17	190	.26	1940
SEP								
06...	1.5	93	.000	53	14	170	.23	1560
14...	1.9	110	.000	74	24	230	.31	1490
21...	2.3	120	.000	83	25	250	.34	1300
28...	1.9	120	.000	74	24	230	.31	1250

09070500 COLORADO RIVER NEAR DOTSERO, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	13.5	12.0	8.0	7.5	1.5	.0					---	---
2	13.5	12.0	8.0	7.0	3.0	1.5					---	---
3	13.0	11.5	8.0	6.5	3.0	1.5					---	---
4	12.5	11.0	7.5	6.0	2.5	2.0					---	---
5	14.0	11.5	7.0	5.5	2.0	.0					---	---
6	---	---	7.0	5.0	.5	.0					---	---
7	---	---	7.5	5.5	.5	.0					---	---
8	---	---	7.0	5.5	1.0	.0					---	---
9	---	---	5.0	3.5	1.5	.5					---	---
10	---	---	5.5	3.5	2.5	1.0					---	---
11	---	---	6.0	4.0	3.0	1.5					---	---
12	10.5	8.0	6.5	5.0	3.0	1.5					---	---
13	10.5	7.5	7.0	5.5	2.0	1.0					---	---
14	10.0	9.0	7.0	5.0	1.0	.0					---	---
15	10.0	8.0	4.5	3.5	1.0	.0					---	---
16	9.5	7.0	4.0	2.5	.5	.0					4.0	2.0
17	9.5	7.5	4.5	3.0	.5	.0					2.5	1.5
18	10.5	9.0	4.5	4.0	.5	.0					3.0	1.5
19	10.5	8.5	4.0	3.5	.5	.0					4.5	1.5
20	9.5	7.5	3.0	2.5	.5	.0					6.0	2.0
21	9.5	8.0	3.0	2.5	.5	.0					7.0	3.5
22	9.0	7.5	2.0	1.5	.5	.0					6.0	4.0
23	9.0	7.5	1.0	.0	.5	.0					5.5	2.5
24	8.5	7.5	.5	.0	.0	.0					6.5	4.0
25	8.0	6.5	.5	.0	.5	.0					5.5	3.5
26	8.0	6.0	1.0	.5	---	---					4.5	2.5
27	8.0	6.0	.5	.0	---	---					5.0	4.0
28	7.5	6.0	.5	.0	---	---					4.5	3.0
29	8.0	6.5	.5	.0	---	---					5.5	3.0
30	8.0	6.5	.5	.0	---	---					5.5	4.5
31	8.5	7.0	---	---	---	---					6.0	4.0
MONTH	14.0	6.0	8.0	.0	3.0	.0					7.0	1.5

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	6.0	5.0	9.0	7.0	14.5	10.0	---	---	18.0	16.5	17.5	15.5
2	5.5	4.5	9.5	8.0	13.0	9.0	---	---	18.0	16.0	16.5	14.5
3	5.5	4.5	9.0	7.0	11.5	10.0	---	---	18.5	16.0	17.0	14.0
4	6.5	4.5	8.5	7.5	11.5	10.0	---	---	19.0	16.0	17.0	14.5
5	7.5	5.5	---	---	11.5	10.0	---	---	18.5	16.0	17.0	14.5
6	7.0	6.0	---	---	11.0	8.5	---	---	18.0	16.5	16.5	15.0
7	8.0	5.5	---	---	9.5	7.0	---	---	18.0	15.5	15.5	13.5
8	8.0	5.5	---	---	9.0	8.0	---	---	19.0	16.0	14.0	11.5
9	7.5	6.0	---	---	9.5	8.5	---	---	19.0	16.0	15.5	12.5
10	7.0	5.0	---	---	10.5	9.0	---	---	19.0	16.0	16.0	14.0
11	7.0	5.0	---	---	11.5	10.5	---	---	19.5	16.0	15.0	13.5
12	6.0	4.0	---	---	12.5	11.0	---	---	19.0	17.0	15.5	13.5
13	7.5	5.0	---	---	13.0	12.0	---	---	18.5	16.5	16.0	13.5
14	8.0	5.0	---	---	---	---	---	---	18.5	16.5	16.5	14.5
15	8.5	6.0	---	---	---	---	---	---	19.0	16.5	16.5	14.0
16	9.5	7.0	---	---	---	---	---	---	20.0	17.0	15.0	13.5
17	10.0	8.0	---	---	---	---	---	---	20.0	17.5	14.5	12.5
18	10.0	8.5	10.0	7.5	---	---	---	---	20.0	18.5	15.0	12.5
19	9.5	7.5	10.0	7.0	---	---	---	---	19.0	17.0	15.5	13.5
20	8.0	6.0	12.5	7.0	---	---	---	---	18.5	16.5	16.0	13.5
21	6.0	5.0	12.5	9.0	16.0	13.0	---	---	16.5	15.0	15.5	14.0
22	7.0	4.5	13.5	9.5	16.5	13.5	---	---	17.0	15.0	15.0	13.0
23	8.5	6.0	12.0	6.0	19.0	14.5	---	---	17.0	15.5	14.0	12.0
24	9.0	8.0	13.0	9.0	19.5	16.0	---	---	17.0	15.5	13.5	12.0
25	8.5	7.5	---	---	19.0	16.0	17.5	15.5	16.5	15.0	12.5	10.5
26	7.0	5.5	---	---	---	---	17.5	16.0	17.0	14.5	12.0	10.0
27	5.5	4.0	14.0	7.5	---	---	17.0	15.5	17.5	15.0	12.0	9.5
28	4.5	3.5	13.5	10.0	---	---	17.5	16.0	17.5	15.5	11.5	10.5
29	7.0	4.0	14.5	11.0	---	---	17.5	15.5	18.5	16.0	10.5	8.0
30	8.0	5.5	15.0	12.0	---	---	17.5	16.0	18.5	15.5	10.0	7.5
31	---	---	14.5	11.0	---	---	18.0	16.0	18.0	16.0	---	---
MONTH	10.0	3.5	15.0	6.0	19.5	7.0	18.0	15.5	20.0	14.5	17.5	7.5
YEAR	20.0	.0										

NOTE: NUMBER OF MISSING DAYS OF RECORD EXCEEDED 20% OF YEAR

09070500 COLORADO RIVER NEAR DOTSERO, CO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	508	434	405			---	252	393	152	---	291	368
2	501	431	385			---	257	394	150	---	300	395
3	494	434	375			---	255	390	159	---	286	383
4	491	424	383			---	251	401	173	---	300	375
5	508	410	390			---	247	---	178	---	301	340
6	---	407	402			---	247	---	188	---	309	336
7	---	402	433			---	255	---	204	---	310	344
8	---	407	409			---	267	---	219	---	306	341
9	---	392	407			---	286	---	213	---	303	338
10	---	391	412			---	283	---	220	---	293	338
11	---	418	427			---	298	---	235	---	302	338
12	534	419	456			---	301	---	235	---	315	349
13	499	424	467			---	316	---	220	203	333	350
14	471	432	463			---	321	---	---	219	345	365
15	476	426	440			---	337	---	---	226	360	392
16	473	421	430			421	348	---	---	245	362	392
17	458	419	426			420	365	---	---	260	300	381
18	449	416	417			414	361	207	---	271	383	392
19	451	401	415			415	338	231	---	284	467	411
20	429	395	413			416	326	219	191	299	340	426
21	433	386	423			423	324	214	186	304	341	436
22	444	370	457			420	340	202	185	299	410	429
23	460	376	474			401	344	196	180	284	451	403
24	471	389	462			397	349	194	176	286	436	429
25	489	387	453			375	349	195	175	283	388	433
26	492	379	---			341	355	185	176	286	358	423
27	461	381	---			349	365	174	---	292	348	418
28	470	399	---			331	368	161	---	312	336	395
29	475	402	---			322	386	162	---	322	341	401
30	468	398	---			289	385	157	---	334	337	401
31	444	---	---			266	---	153	---	294	340	---
MEAN	474	406	425			375	316	235	191	279	342	384

WTR YR 1984 MEAN 351 MAX 534 MIN 150

09071100 COLORADO RIVER NEAR GLENWOOD SPRINGS,CO
(Irrigation Network Station)

LOCATION.--Lat 39°34'12", long 107°13'34", Garfield County, Hydrologic Unit 14010001,at Shoshone power plant, 6 mi upstream from Glenwood Springs,and 6.5 mi upstream from Roaring Fork River.

DRAINAGE AREA.--4,560 mi ,approximately.

PERIOD OF RECORD.--October 1941 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1941 to current year.
WATER TEMPERATURE: May 1949 to current year.

INSTRUMENTATION.--Water-quality monitor since January 1980.

REMARKS.--Discharge obtained by subtracting the flow in Roaring Fork River at Glenwood Springs (station 09085000) from the flow in the Colorado River below Glenwood Springs(station 09085100). Daily maximum and minimum specific-conductance data available in district office.

COOPERATION.--Additional chemical-quality data are furnished by U.S. Bureau of Reclamation (noted by an asterick in the water year heading).

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 2460 micromhos July 12, 1981, minimum recorded, 150 micromhos May 31, 1982.
WATER TEMPERATURE: Maximum, 25.5°C July 8, 1981; minimum; freezing point many days during winter period each year.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 1,060 micromhos Aug. 19; minimum recorded, 210 micromhos July 15.
WATER TEMPERATURE: Maximum 17.5°C Aug. 29-31; minimum, 0.0°C many days during winter period.

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)
OCT								
06...	1430	1430	680	11.0	210	61	13	61
13...	1140	1260	644	9.5	200	59	12	56
20...	1005	1580	520	8.5	170	50	9.8	44
25...	1140	1470	593	7.0	170	50	9.8	47
NOV								
04...	1030	1490	552	7.0	160	48	10	45
09...	1550	1580	558	4.5	170	50	11	42
15...	1625	1560	535	3.5	170	48	11	46
22...	1200	1490	530	2.0	160	46	10	43
DEC								
02...	1100	1530	530	2.0	150	45	10	44
06...	1510	1420	585	.5	160	46	9.8	53
15...	1215	1530	577	.5	140	44	8.1	46
22...	0900	1760	650	.0	160	47	9.8	62
30...	1110	1350	650	.0	160	49	9.8	64
JAN								
05...	1130	1000	550	.0	160	46	9.8	48
12...	1300	1240	618	.0	160	49	9.8	57
23...	1320	1320	619	.0	160	49	9.8	54
27...	0900	1760	502	.0	140	43	8.8	42
FEB								
03...	0900	1220	640	.0	180	53	11	58
10...	1240	1250	618	.5	170	50	11	59
16...	1030	1210	620	.0	170	51	11	64
24...	0900	1120	674	.0	180	52	11	64
MAR								
01...	1150	1050	693	.0	180	53	12	67
08...	1100	1690	582	1.0	140	38	9.8	55
15...	1300	1350	530	2.5	150	44	9.8	47
22...	1115	1520	588	5.0	160	46	9.8	47
29...	1055	1820	514	3.0	130	38	7.7	36
APR								
05...	1400	2600	334	6.0	100	31	6.6	28
09...	1115	2630	416	6.5	120	35	7.7	28
20...	0900	2970	388	7.5	150	40	11	30
27...	1100	2690	446	4.5	150	41	11	34
MAY								
01...	1335	2420	430	8.0	140	40	9.8	37
10...	0900	3590	410	10.5	150	41	11	28
16...	0800	15000	227	9.0	120	38	6.8	7.8
23...	1700	17400	198	10.5	93	29	5.1	6.2
JUN								
01...	1200	13000	180	9.5	88	27	4.7	5.9
13...	0730	10000	247	11.0	100	31	6.2	11
20...	1600	15400	205	12.5	89	27	5.1	7.5
29...	1300	13000	203	13.0	83	25	4.8	8.0
JUL								
12...	1600	10400	224	15.5	89	27	5.2	11
20...	0920	6480	315	15.5	110	34	6.3	17
27...	0730	5720	298	16.0	110	35	6.5	17
AUG								
03...	0800	4840	234	16.0	120	36	7.0	21
10...	1200	4110	364	16.5	120	37	7.1	24
13...	1305	4200	375	15.5	140	43	7.6	26
23...	1400	4060	385	16.0	130	40	8.1	28
29...	1020	3780	374	16.0	120	37	7.5	26

09071100 COLORADO RIVER NEAR GLENWOOD SPRINGS,CO--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)
SEP								
06...	1300	3400	410	15.0	130	38	7.6	26
14...	0843	2400	470	15.0	150	45	8.7	37
21...	0900	1930	560	16.0	160	49	9.8	45
28...	1200	2020	556	11.5	160	48	9.8	43

DATE	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE, FET-LAB (MG/L AS HCO3)	CAR-BONATE, FET-LAB (MG/L AS CO3)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)
OCT								
06...	2	2.7	130	.000	87	400	.54	1540
13...	2	2.3	140	.000	81	390	.53	1330
20...	2	2.0	110		62	320	.44	1370
25...	2	2.0	120	.000	67	330	.45	1310
NOV								
04...	2	1.8	120	.000	69	320	.44	1290
09...	1	2.0	130	.000	64	310	.42	1320
15...	2	1.9	120	.000	70	320	.44	1350
22...	2	1.6	120	.000	66	300	.41	1210
DEC								
02...	2	1.6	120	.000	66	300	.41	1240
06...	2	2.3	110	.000	75	320	.44	1220
15...	2	2.0	110	.000	67	290	.39	1200
22...	2	2.3	120	.000	89	350	.48	1660
30...	2	2.3	120	.000	91	360	.49	1310
JAN								
05...	2	2.3	110	.000	69	310	.42	837
12...	2	2.3	120	.000	81	330	.45	1100
23...	2	2.3	120	.000	77	330	.45	1180
27...	2	2.3	110	.000	56	270	.37	1280
FEB								
03...	2	2.3	120	.000	83	350	.48	1150
10...	2	2.3	120	.000	85	350	.48	1180
16...	2	2.7	100	.000	89	350	.48	1140
24...	2	2.3	120	.000	90	360	.49	1090
MAR								
01...	2	2.0	130	.000	92	380	.52	1080
08...	2	2.0	88		81	310	.42	1410
15...	2	2.0	110	.000	68	300	.41	1090
22...	2	2.0	110	.000	65	310	.42	1270
29...	1	1.6	96	.000	51	240	.33	1180
APR								
05...	1	1.6	83	.000	39	190	.26	1330
09...	1	2.0	90	.000	39	210	.29	1490
20...	1	2.3	100	.000	33	240	.33	1920
27...	1	2.0	110	.000	35	250	.34	1820
MAY								
01...	1	2.3	110	.000	41	250	.34	1630
10...	1	2.0	110	.000	29	240	.33	2330
16...	.3	2.0	120	.000	5.7	150	.20	6070
23...	.3	1.5	92	.000	4.6	130	.18	6110
JUN								
01...	.3	1.1	82	.000	4.9	110	.15	3860
13...	.5	1.5	89	.000	10	140	.19	3780
20...	.4	1.1	79	.000	7.7	120	.16	4990
29...	.4	1.1	70	.000	8.5	110	.15	3860
JUL								
12...	.5	1.1	71	.000	11	130	.18	3650
20...	.8	1.5	88	.000	21	170	.23	2970
27...	.7	1.5	91	.000	19	170	.23	2630
AUG								
03...	.9	1.5	91	.000	24	190	.26	2480
10...	1	1.5	91	.000	30	200	.27	2220
13...	1	3.1	100	.000	33	220	.30	2490
23...	1	1.5	110	.000	33	230	.31	2520
29...	1	1.9	92	.000	32	210	.29	2140
SEP								
06...	1	2.7	96	.000	37	220	.30	2020
14...	1	5.0	110	.000	53	280	.38	1810
21...	2	2.3	120	.000	65	320	.44	1670
28...	2	2.3	120	.000	61	310	.42	1690

09071100 COLORADO RIVER NEAR GLENWOOD SPRINGS,CO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	659	565	523	522	598	694	362	446		---	---	414
2	643	560	529	521	620	668	356	432		---	---	399
3	---	555	536	581	641	640	353	429		---	---	390
4	---	560	539	601	639	628	352	435		---	---	404
5	---	563	547	547	636	641	338	438		---	---	406
6	---	566	575	532	630	644	376	434		---	---	408
7	---	568	610	545	629	630	395	427		---	---	409
8	---	563	560	570	624	618	423	421		---	---	417
9	---	552	540	576	619	599	407	419		---	---	441
10	---	532	540	573	612	591	405	408		---	---	445
11	---	549	542	589	610	581	436	360		---	---	454
12	---	550	590	615	615	576	441	---		---	---	476
13	---	537	611	613	618	563	446	---		---	---	---
14	624	527	613	593	620	556	450	---		258	324	---
15	587	532	584	578	620	543	450	---		265	321	498
16	564	538	563	575	615	527	450	---		303	298	532
17	551	546	564	579	607	513	439	---		314	310	482
18	544	539	555	589	602	533	412	---		334	331	470
19	533	532	561	591	598	546	388	---		355	438	489
20	523	526	570	600	590	565	386	---		344	297	515
21	536	529	611	607	623	583	396	---		331	285	555
22	552	530	670	613	714	589	412	---		297	318	533
23	572	537	681	619	700	563	422	---		307	349	545
24	591	559	677	605	676	546	428	---		308	406	548
25	598	544	657	568	673	517	433	---		316	395	557
26	603	526	585	536	662	479	442	---		314	355	552
27	604	519	509	506	669	473	453	---		---	363	545
28	591	533	507	517	687	460	462	---		---	372	551
29	578	541	545	538	686	453	472	---		---	378	546
30	574	534	641	556	---	424	469	---		---	386	556
31	572	---	616	578	---	388	---	---		---	394	---
MEAN	580	544	579	572	636	559	415	423		311	351	483

WTR YR 1984 MEAN 516 MAX 714 MIN 258

09071100 COLORADO RIVER NEAR GLENWOOD SPRINGS,CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	15.5	11.0	8.0	7.0	1.5	.5	.0	.0	.0	.0	.0	.0
2	15.5	10.0	8.0	7.0	3.0	1.5	.0	.0	.0	.0	.0	.0
3	---	---	8.0	6.5	3.0	2.5	.0	.0	.0	.0	.0	.0
4	---	---	8.0	7.0	3.0	2.0	.0	.0	.0	.0	---	---
5	---	---	8.0	6.5	2.5	1.0	.0	.0	.0	.0	---	---
6	16.0	11.0	7.5	6.0	.5	.0	.0	.0	.0	.0	---	---
7	13.0	11.5	7.5	6.5	.0	.0	.0	.0	.0	.0	---	---
8	12.5	11.5	8.0	6.5	.0	.0	.0	.0	.0	.0	---	---
9	13.0	12.0	7.0	4.0	1.0	.0	.0	.0	.0	.0	---	---
10	13.0	11.0	4.5	3.5	2.0	1.0	.0	.0	.0	.0	---	---
11	11.0	10.0	4.5	4.0	2.5	1.5	.0	.0	.0	.0	---	---
12	10.5	9.0	5.5	5.0	2.5	2.0	.0	.0	.0	.0	---	---
13	12.0	9.5	6.0	5.0	2.5	1.5	.0	.0	.0	.0	3.0	1.5
14	11.5	10.0	6.0	5.0	1.5	.0	.0	.0	.0	.0	3.0	1.5
15	10.5	9.0	5.0	3.0	1.0	.5	.0	.0	.0	.0	4.0	2.0
16	10.0	8.0	3.5	2.5	.5	.0	.0	.0	.0	.0	4.0	2.0
17	9.5	8.0	4.0	2.5	.0	.0	.0	.0	.0	.0	3.5	1.5
18	10.0	9.0	4.5	3.0	.0	.0	.0	.0	.0	.0	2.5	1.5
19	10.0	8.5	4.0	3.0	.0	.0	.0	.0	.0	.0	4.0	1.5
20	10.0	8.5	3.0	2.5	.0	.0	.0	.0	.0	.0	5.0	2.0
21	10.0	8.0	2.5	2.0	.0	.0	.0	.0	.0	.0	6.5	4.0
22	10.0	8.0	2.5	1.5	.0	.0	.0	.0	.0	.0	6.5	4.5
23	10.0	8.5	1.5	.0	.0	.0	.0	.0	.0	.0	5.0	3.5
24	9.5	8.0	.5	.0	.0	.0	.0	.0	.0	.0	6.5	4.0
25	9.0	6.0	.5	.0	.0	.0	.0	.0	.0	.0	6.0	4.5
26	7.0	5.5	1.0	.5	.0	.0	.0	.0	.0	.0	4.5	2.5
27	7.0	5.5	1.0	.5	.0	.0	.0	.0	.0	.0	4.5	3.5
28	7.0	6.0	.5	.5	.0	.0	.0	.0	.0	.0	4.5	3.0
29	7.0	6.0	.5	.5	.0	.0	.0	.0	.0	.0	5.5	3.5
30	7.5	6.5	.5	.5	.0	.0	.0	.0	---	---	6.0	4.5
31	7.5	7.0	---	---	.0	.0	.0	.0	---	---	6.0	3.5
MONTH	16.0	5.5	8.0	.0	3.0	.0	.0	.0	.0	.0	6.5	.0

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	6.0	4.5	9.5	7.5					---	---	17.0	15.5
2	5.5	4.0	9.5	8.5					---	---	16.0	14.5
3	5.5	4.0	9.5	8.5					---	---	16.0	14.0
4	6.5	4.0	9.5	8.0					---	---	16.0	14.5
5	7.0	5.5	9.0	7.5					---	---	16.5	15.0
6	6.5	6.0	9.0	8.0					---	---	16.0	15.0
7	7.5	6.0	9.5	7.5					---	---	16.0	14.5
8	7.5	6.0	10.0	7.5					---	---	14.0	12.5
9	7.5	6.5	11.5	9.0					---	---	15.5	13.0
10	7.0	5.5	12.0	10.5					---	---	16.0	14.5
11	7.0	6.0	12.5	11.0					---	---	16.0	14.5
12	6.5	5.0	12.0	10.5					---	---	15.5	14.0
13	7.5	5.5	12.5	9.0					---	---	16.5	14.5
14	8.0	5.5	---	---					---	---	17.0	15.0
15	8.5	6.0	---	---					---	---	17.0	15.0
16	9.5	7.0	---	---					---	---	17.0	15.0
17	10.0	8.0	---	---					---	---	15.5	13.5
18	9.5	9.0	---	---					---	---	15.5	13.5
19	9.0	8.0	---	---					---	---	16.5	14.5
20	7.5	6.0	---	---					---	---	17.0	15.0
21	6.0	5.0	---	---					---	---	17.0	15.5
22	7.5	4.5	---	---					---	---	16.0	14.5
23	9.0	6.0	---	---					---	---	15.5	13.5
24	9.5	9.0	---	---					17.0	16.0	14.5	13.0
25	9.0	7.0	---	---					16.5	15.5	13.5	12.0
26	7.0	5.5	---	---					16.5	14.5	13.0	11.5
27	5.5	4.5	---	---					17.0	15.5	12.5	11.0
28	5.0	4.0	---	---					17.0	16.0	12.5	11.5
29	7.0	4.5	---	---					17.5	16.0	12.0	9.5
30	8.5	6.0	---	---					17.5	15.5	11.0	9.0
31	---	---	---	---					17.5	16.0	---	---
MONTH	10.0	4.0	12.5	7.5					17.5	14.5	17.0	9.0
YEAR	17.5	.0										

09071300 GRIZZLY CREEK NEAR GLENWOOD SPRINGS, CO

LOCATION.--Lat 39°43'00", long 107°18'35", in NE¼SW¼ sec.7, T.4 S., R.88 W., Garfield County, Hydrologic Unit 14010001, on left bank 0.5 mi west of Grizzly Cow Camp and 14 mi north of Glenwood Springs.

DRAINAGE AREA.--5.73 mi^2.

PERIOD OF RECORD.--September 1976 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 10,435 ft, from topographic map. Prior to Oct. 19, 1978, at site 600 ft upstream, at datum, 25.33 ft, higher.

REMARKS.--Records good except those for the winter period and those for the period of no gage-height record, May 12 to June 12, which are poor. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--8 years, 13.7 ft^3/s; 9,930 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 240 ft^3/s, June 25, 1983; maximum gage height observed, 8.63 ft, May 4, 1982 (backwater from ice); no flow many days most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge recorded, 152 ft^3/s at 0900 June 19, gage-height 4.37 ft, but may have been higher during period of no gage-height record May 12 to June 12; minimum daily, 0.31 ft^3/s, Apr. 10-16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.3	2.1	1.9	.90	.70	.54	.38	.34	80	106	4.5	8.6
2	2.6	2.0	2.0	.85	.70	.54	.38	.34	80	90	4.1	7.8
3	2.6	2.0	1.8	.80	.65	.54	.38	.34	70	73	4.1	7.0
4	2.5	2.0	1.7	.95	.65	.54	.34	.38	60	60	4.0	6.3
5	2.4	1.9	1.6	.95	.65	.49	.34	.38	55	49	4.0	5.9
6	2.4	1.9	1.6	.95	.65	.49	.34	.38	55	40	4.0	5.2
7	2.5	1.9	1.6	.90	.65	.49	.34	.38	50	33	3.9	5.0
8	2.3	2.0	1.6	.90	.65	.49	.34	.38	45	30	3.3	4.9
9	2.3	2.0	1.6	.90	.60	.49	.34	.38	42	33	3.2	4.5
10	2.3	2.2	1.6	.90	.60	.49	.31	.62	40	30	2.9	4.3
11	2.4	2.5	1.5	.85	.60	.49	.31	1.9	48	23	2.9	4.7
12	2.3	2.2	1.5	.90	.60	.49	.31	10	60	18	2.9	5.2
13	2.3	1.9	1.4	.90	.65	.49	.31	30	74	17	2.8	4.3
14	2.4	1.9	1.3	.90	.70	.49	.31	45	93	18	3.2	4.0
15	2.7	1.9	1.3	.85	.65	.49	.31	65	110	15	3.3	4.0
16	2.3	1.9	1.4	.75	.60	.49	.31	58	119	13	3.3	5.2
17	2.3	1.9	1.4	.80	.60	.45	.38	54	119	12	3.3	4.7
18	2.3	2.0	1.4	.55	.60	.45	.38	50	123	10	4.1	4.0
19	2.2	2.1	1.3	.40	.60	.42	.38	47	132	9.8	4.5	3.9
20	2.1	2.0	1.3	.50	.55	.42	.38	52	119	8.6	7.4	3.7
21	2.2	2.0	1.2	.60	.55	.42	.38	60	114	8.0	7.0	4.7
22	2.2	2.0	1.1	.65	.55	.42	.34	70	118	8.9	6.5	5.7
23	2.1	2.0	.69	.70	.58	.42	.34	80	119	7.5	6.1	5.0
24	2.0	2.0	.90	.75	.58	.42	.34	100	135	7.0	12	5.0
25	2.0	1.9	1.0	.80	.58	.42	.34	110	135	7.3	15	5.7
26	2.0	1.9	1.1	.75	.54	.42	.34	100	121	7.0	13	5.9
27	2.0	1.8	1.0	.70	.54	.38	.34	80	116	6.3	11	6.3
28	2.0	1.8	.80	.75	.54	.38	.34	70	119	6.1	9.5	6.3
29	2.0	1.8	.60	.75	.54	.38	.34	70	118	5.5	8.6	6.5
30	2.2	1.8	.80	.75	---	.38	.34	75	116	5.5	7.5	6.1
31	2.2	---	1.0	.70	---	.38	---	80	---	5.7	7.3	---
TOTAL	70.4	59.3	40.99	24.30	17.65	14.20	10.31	1311.82	2785	763.2	179.2	160.4
MEAN	2.27	1.98	1.32	.78	.61	.46	.34	42.3	92.8	24.6	5.78	5.35
MAX	2.7	2.5	2.0	.95	.70	.54	.38	110	135	106	15	8.6
MIN	2.0	1.8	.60	.40	.54	.38	.31	.34	40	5.5	2.8	3.7
AC-FT	140	118	81	48	35	28	20	2600	5520	1510	355	318

CAL YR 1983 TOTAL 6587.85 MEAN 18.0 MAX 240 MIN .48 AC-FT 13070
WTR YR 1984 TOTAL 5436.77 MEAN 14.9 MAX 135 MIN .31 AC-FT 10780

NOTE--NO GAGE-HEIGHT RECORD JAN. 7 TO FEB. 22, MAY 12 TO JUNE 12.

09072550 ROARING FORK RIVER ABOVE LOST MAN CREEK, NEAR ASPEN, CO

LOCATION.--Lat 39°07'13", long 106°37'27", Pitkin County, Hydrologic Unit 14010004, on right bank 300 ft, upstream from Lost Man campground, 600 ft, downstream from diversion dam, 1,000 ft, upstream from Lost Man Creek, and 12 mi southeast of Aspen.

DRAINAGE AREA.--9.10 mi^2.

PERIOD OF RECORD.--October 1980 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 10,520 ft, from topographic map.

REMARKS.--Records good except those for period of no gage-height record, which are poor. Diversions from Lost Man Creek via canal into diversion dam, 600 ft, upstream, which also diverts some of the Roaring Fork River, via tunnel, to Grizzly Reservoir on Lincoln Creek.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 258 ft^3/s, June 30, 1984, gage height, 3.46 ft; no flow many days each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 258 ft^3/s at 2100 June 30, gage height, 3.46 ft; no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.5	2.0	.00	.00	.00	.00	.36	1.9	150	153	100	42
2	2.4	2.0	.00	.00	.00	.00	.39	2.1	150	138	79	36
3	2.5	2.0	.00	.00	.00	.00	.43	2.3	140	138	68	30
4	2.5	.87	.00	.00	.00	.00	.46	2.3	140	128	69	25
5	2.4	.03	.00	.00	.00	.00	.50	2.3	143	126	68	22
6	2.3	.02	.00	.00	.00	.00	.54	2.6	145	118	76	16
7	2.3	2.8	.00	.00	.00	.00	.58	2.6	143	114	68	3.0
8	2.3	3.5	.00	.00	.00	.00	.62	2.7	130	106	60	3.0
9	2.3	2.3	.00	.00	.00	.00	.70	3.0	124	118	56	2.8
10	2.2	2.4	.00	.00	.00	.00	.80	3.5	114	126	49	4.2
11	2.2	2.5	.00	.00	.00	.00	.82	6.2	124	114	43	8.4
12	2.2	2.5	.00	.00	.00	.00	.82	9.2	168	90	37	4.2
13	2.1	2.4	.00	.00	.00	.00	.88	14	158	84	35	.92
14	2.1	1.2	.00	.00	.00	.00	.94	23	180	110	38	.91
15	2.1	.25	.00	.00	.00	.00	1.0	35	185	87	46	2.1
16	2.1	.00	.00	.00	.00	.00	1.1	52	155	104	58	3.3
17	2.1	.00	.00	.00	.00	.00	1.2	54	143	128	60	3.5
18	2.2	.00	.00	.00	.00	.00	1.3	50	140	114	80	3.4
19	2.2	.00	.00	.00	.00	.00	1.4	47	138	112	72	3.4
20	2.2	.00	.00	.00	.00	.02	1.3	56	140	110	74	3.4
21	2.2	.00	.00	.00	.00	.04	1.3	76	138	110	79	3.4
22	2.2	.00	.00	.00	.00	.06	1.3	100	135	102	91	3.4
23	2.2	.00	.00	.00	.00	.10	1.3	130	133	93	69	3.4
24	2.2	.00	.00	.00	.00	.14	1.4	140	133	94	73	3.4
25	2.1	.00	.00	.00	.00	.18	1.6	160	133	84	74	3.3
26	2.1	.00	.00	.00	.00	.21	1.5	170	138	82	68	3.3
27	2.1	.00	.00	.00	.00	.23	1.5	170	140	81	58	3.3
28	2.1	.00	.00	.00	.00	.26	1.6	150	140	75	51	3.3
29	2.1	.00	.00	.00	.00	.28	1.6	140	140	82	44	3.3
30	2.1	.00	.00	.00	---	.31	1.7	140	165	87	38	2.6
31	2.1	---	.00	.00	---	.33	---	150	---	79	36	---
TOTAL	68.7	26.77	.00	.00	.00	2.16	30.94	1897.7	4305	3287	1917	250.23
MEAN	2.22	.89	.000	.000	.000	.070	1.03	61.2	144	106	61.8	8.34
MAX	2.5	3.5	.00	.00	.00	.33	1.7	170	185	153	100	42
MIN	2.1	.00	.00	.00	.00	.00	.36	1.9	114	75	35	.91
AC-FT	136	53	.00	.00	.00	4.3	61	3760	8540	6520	3800	496

WTR YR 1984 TOTAL 11785.50 MEAN 32.2 MAX 185 MIN .00 AC-FT 23380

NOTE.--NO GAGE-HEIGHT RECORD NOV. 8 TO JUNE 4.

09073005 LINCOLN CREEK BELOW GRIZZLY RESERVOIR NEAR ASPEN, CO

LOCATION.--Lat 39°04'48", long 106°36'37", Pitkin County, Hydrologic Unit 14010004, on right bank 170 ft below centerline of Grizzly Reservoir Dam and 13.6 mi southeast of Aspen.

DRAINAGE AREA.--15.2 mi^2.

PERIOD OF RECORD.--October 1980 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 10,150 ft, from topographic map.

REMARKS.--Records good except those for period of no gage-height record, which are poor. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 319 ft^3/s, July 1, 1984; gage height, 3.16 ft, maximum gage height, 3.28 ft, Sept. 26, 1983; minimum daily discharge, 0.20 ft^3/s, Oct. 18, 20, 21, 1982.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 319 ft^3/s at 2300 July. 1, gage height, 3.16 ft; minimum daily, 0.52 ft^3/s, Nov. 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.0	3.8	2.8	2.5	2.5	2.6	2.3	2.4	226	316	3.4	4.6
2	3.3	2.6	2.8	2.6	2.6	2.6	2.2	2.5	222	312	3.5	4.5
3	3.3	1.7	2.9	2.7	2.6	2.5	2.3	2.5	224	305	3.5	4.7
4	3.5	.84	2.9	2.7	2.6	2.5	2.1	2.4	211	291	3.4	4.8
5	3.6	.60	2.8	2.7	2.6	2.5	2.2	2.5	178	277	3.4	4.7
6	3.9	.52	2.8	2.8	2.6	2.6	2.2	2.3	139	263	3.4	4.7
7	4.2	.62	2.8	2.8	2.7	2.6	2.2	2.3	128	256	3.3	4.6
8	4.5	2.2	2.8	2.8	2.7	2.4	2.3	2.1	107	249	3.2	4.5
9	4.6	2.8	2.8	2.8	2.7	2.3	2.3	1.9	97	263	3.1	4.4
10	4.6	2.8	2.8	2.8	2.6	2.3	2.3	2.1	93	298	3.1	4.3
11	4.6	2.9	2.8	2.5	2.7	2.1	2.3	2.1	111	295	2.7	4.4
12	4.5	2.9	2.8	2.5	2.6	2.1	2.4	2.2	140	193	2.3	4.6
13	4.3	2.8	2.8	2.5	2.6	2.1	2.3	2.2	168	130	2.3	5.3
14	4.2	2.7	2.8	2.5	2.6	2.2	2.3	2.2	196	161	2.4	5.3
15	4.2	2.7	2.8	2.5	2.7	2.2	2.2	32	211	196	2.4	9.0
16	4.2	2.8	2.8	2.4	2.5	2.2	1.8	82	235	193	2.5	10
17	4.2	2.9	2.8	2.4	2.5	2.3	1.6	100	242	181	2.8	10
18	4.1	2.9	2.8	2.3	2.4	2.4	1.7	101	223	150	2.8	11
19	4.2	2.8	2.7	2.3	2.5	2.3	1.9	102	235	134	2.6	11
20	4.3	2.9	2.6	2.3	2.6	2.2	1.8	105	229	123	2.5	10
21	4.3	2.7	2.6	2.4	2.7	2.0	1.6	119	234	3.6	2.6	10
22	4.3	2.6	2.6	2.5	2.7	2.1	1.7	175	243	3.4	2.8	11
23	4.2	2.6	2.7	2.6	2.6	2.1	1.9	214	248	3.2	2.7	10
24	4.2	2.8	2.7	2.5	2.8	2.2	1.9	160	254	2.9	2.9	11
25	4.2	2.8	2.7	2.6	2.8	2.2	2.0	151	273	2.8	3.7	11
26	4.2	2.7	2.8	2.6	2.7	2.2	1.9	152	278	3.0	4.2	11
27	4.0	2.7	2.8	2.6	2.8	2.1	2.1	214	283	3.0	4.8	11
28	4.0	2.7	2.7	2.5	2.6	2.1	2.2	241	280	3.1	4.8	11
29	4.0	2.8	2.5	2.5	2.6	2.1	2.2	232	275	3.1	4.6	10
30	3.9	2.8	2.5	2.5	---	2.2	2.5	232	288	3.1	4.5	8.3
31	3.9	---	2.5	2.5	---	2.3	---	235	---	3.2	4.6	---
TOTAL	126.5	73.98	85.0	79.2	76.2	70.6	62.7	2678.7	6271	4620.4	100.8	230.7
MEAN	4.08	2.47	2.74	2.55	2.63	2.28	2.09	86.4	209	149	3.25	7.69
MAX	4.6	3.8	2.9	2.8	2.8	2.6	2.5	241	288	316	4.8	11
MIN	3.0	.52	2.5	2.3	2.4	2.0	1.6	1.9	93	2.8	2.3	4.3
AC-FT	251	147	169	157	151	140	124	5310	12440	9160	200	458

CAL YR 1983 TOTAL 2468.04 MEAN 6.76 MAX 165 MIN .25 AC-FT 4900
WTR YR 1984 TOTAL 14475.78 MEAN 39.6 MAX 316 MIN .52 AC-FT 28710

NOTE.--NO GAGE-HEIGHT RECORD OCT. 12 TO FEB 15.

09073300 ROARING FORK RIVER ABOVE DIFFICULT CREEK NEAR ASPEN, CO

LOCATION.--Lat 39°08'28", long 106°46'25", Pitkin County, Hydrologic Unit 14010004, on left bank in the White River National Forest at Difficult Creek Campground, 0.45 mi above Difficult Creek tributary and 4.25 mi southeast of Aspen.

DRAINAGE AREA.--75.8 mi^2.

PERIOD OF RECORD.--October 1979 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 8,120 ft from topographic map.

REMARKS.--Records good except those for winter period, which are poor. Transmountain diversion 11 mi upstream through Twin Lakes Tunnel to Arkansas River basin since May 24, 1935 (8,760 acre-ft diverted, current year, furnished by Colorado Division of Water Resources). Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--5 years, 141 ft^3/s; 102,200 acre-ft/yr, including diversion by Twin Lakes tunnel.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,820 ft^3/s, July 1, 1984, gage height, 4.65 ft; minimum daily, 8.0 ft^3/s, Jan. 11, 1980.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,820 ft^3/s at 0130 July 1, gage height, 4.65 ft; minimum daily, 13 ft^3/s, Jan. 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAOC TO SB 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	32	27	19	19	16	16	17	22	1180	1360	214	98
2	31	25	19	18	16	16	17	22	1140	1220	179	86
3	32	24	19	16	15	16	16	21	1040	1160	158	79
4	31	22	18	17	16	15	16	21	874	1000	146	70
5	30	22	18	18	15	15	17	21	815	874	152	66
6	30	20	18	18	16	15	18	21	640	794	164	62
7	30	19	19	18	16	16	18	21	522	654	152	46
8	30	30	20	18	16	16	18	23	445	675	133	44
9	29	19	20	18	15	16	18	27	390	780	125	41
10	29	20	20	19	15	17	19	40	375	1050	118	40
11	28	22	19	18	16	17	18	64	450	822	108	47
12	28	22	19	17	14	16	18	98	577	570	98	48
13	28	22	19	17	16	16	17	149	787	455	92	36
14	32	19	19	18	15	16	18	259	990	546	92	36
15	32	20	19	18	15	17	21	395	1200	522	103	42
16	32	19	19	15	15	17	21	510	1170	500	123	58
17	33	17	21	15	16	16	25	500	1000	465	123	59
18	31	18	21	13	15	17	28	480	914	395	164	54
19	32	18	21	14	14	16	29	440	990	380	152	53
20	31	18	18	15	14	16	27	570	940	385	140	52
21	30	18	17	15	15	17	23	745	1070	255	149	53
22	30	18	17	15	17	18	23	858	1130	239	173	55
23	28	18	17	16	16	17	25	990	1140	221	133	55
24	28	18	17	16	15	17	26	1160	1110	211	140	54
25	29	20	18	16	15	18	26	1320	1150	191	146	54
26	28	20	19	17	15	17	24	1360	1080	185	140	54
27	29	20	18	16	15	17	24	1200	1180	182	123	53
28	29	20	17	16	14	16	23	1120	1200	173	110	52
29	27	19	17	16	16	16	23	1090	1240	179	103	52
30	28	19	18	16	---	16	22	1180	1430	194	90	49
31	28	---	19	16	---	17	---	1160	---	173	88	---
TOTAL	925	613	579	514	444	508	635	15887	28169	16810	4131	1648
MEAN	29.8	20.4	18.7	16.6	15.3	16.4	21.2	512	939	542	133	54.9
MAX	33	30	21	19	17	18	29	1360	1430	1360	214	98
MIN	27	17	17	13	14	15	16	21	375	173	88	36
AC-FT	1830	1220	1150	1020	881	1010	1260	31510	55870	33340	8190	3270

CAL YR 1983 TOTAL 30299.7 MEAN 83.0 MAX 992 MIN 9.7 AC-FT 60100
WTR YR 1984 TOTAL 70863.0 MEAN 194 MAX 1430 MIN 13 AC-FT 140600

NOTE.--NO GAGE-HEIGHT RECORD DEC. 21 TO APR. 4.

09073400 ROARING FORK RIVER NEAR ASPEN, CO

LOCATION.--Lat 39°10'48", long 106°48'05", Pitkin County, Hydrologic Unit 14010004, on right bank 25 ft upstream from private bridge, 115 ft upstream from Salvation ditch headgate, 1.0 mi southeast of Aspen, and 2.0 mi upstream from Hunter Creek

DRAINAGE AREA.--108 mi^2.

PERIOD OF RECORD.--October 1964 to current year.

GAGE.--Water-stage recorder. Datum of gage is 8,014.01 ft, National Geodetic Vertical Datum of 1929. Prior to Apr. 25, 1968, at site 85 ft upstream at datum 1.16 ft, higher.

REMARKS.--Records good except those for winter period, and period of no gage height record, which are poor. Transmountain diversion 14 mi upstream through Twin Lakes tunnel to Arkansas River basin since May 24, 1935 (8,760 acre-ft diverted, current year, furnished by Colorado Division of Water Resources). Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--20 years, 147 ft^3/s; 106,500 acre-ft/yr, including diversion by Twin Lakes tunnel.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,730 ft^3/s, June 30, 1984, gage height, 5.17 ft, but many have been higher during period of no-gage height record, June 30 to July 11, 1984; minimum daily, 12 ft^3/s, Nov. 28, 1976.

EXTREMES FOR CURRENT YEAR.--Maximum recorded discharge, 1,730 ft^3/s at 0500 June 30, gage height, 5.17 ft; but may have been higher during period of no gage-height record, June 30 to July 11; minimum daily, 25 ft^3/s, Feb. 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	49	42	41	36	31	27	30	50	1230	1500	294	141
2	45	42	40	34	28	28	28	50	1150	1400	260	128
3	44	43	40	35	29	28	26	51	1180	1300	229	113
4	45	42	39	37	29	27	27	50	1100	1100	215	104
5	46	43	38	37	29	27	30	51	920	1000	216	98
6	45	41	35	37	30	27	33	54	704	860	231	92
7	44	41	38	35	32	27	34	53	626	760	218	78
8	43	50	38	35	28	28	36	52	490	840	188	75
9	43	42	38	34	28	28	37	59	438	960	176	71
10	44	42	38	32	28	29	35	83	414	1200	167	68
11	47	47	38	33	28	29	38	124	456	860	152	75
12	46	46	37	33	27	28	34	186	554	728	144	83
13	44	46	35	34	28	29	35	253	720	526	136	63
14	50	44	37	33	28	28	33	361	1040	619	131	61
15	47	40	35	32	27	28	36	492	1160	624	141	68
16	45	41	34	30	27	29	41	551	1240	577	165	88
17	49	38	35	30	28	27	49	548	1070	550	141	88
18	47	41	37	30	29	28	56	548	902	491	214	64
19	48	40	37	30	28	26	58	498	1020	461	207	59
20	47	39	32	33	25	28	56	556	930	467	183	60
21	46	38	30	34	26	30	49	739	1220	372	198	63
22	47	37	31	34	28	31	47	878	1420	330	221	69
23	47	37	31	34	27	30	51	1150	1290	306	177	77
24	47	37	32	34	27	30	56	1220	1250	320	200	84
25	46	39	35	33	27	30	58	1320	1280	285	207	82
26	45	40	35	33	26	30	53	1370	1240	272	192	81
27	46	40	35	31	26	31	51	1220	1270	278	162	79
28	46	39	35	32	26	30	47	1130	1300	271	148	77
29	46	39	32	30	26	30	50	1090	1340	254	138	77
30	46	40	35	29	---	30	49	1190	1550	282	129	77
31	46	---	38	31	---	30	---	1200	---	256	139	---
TOTAL	1426	1236	1111	1025	806	888	1263	17177	30504	20049	5719	2443
MEAN	46.0	41.2	35.8	33.1	27.8	28.6	42.1	554	1017	647	184	81.4
MAX	50	50	41	37	32	31	58	1370	1550	1500	294	141
MIN	43	37	30	29	25	26	26	50	414	254	129	59
AC-FT	2830	2450	2200	2030	1600	1760	2510	34070	60500	39770	11340	4850

CAL YR 1983 TOTAL 45396 MEAN 124 MAX 1140 MIN 23 AC-FT 90040
WTR YR 1984 TOTAL 83647 MEAN 229 MAX 1550 MIN 25 AC-FT 165900

NOTE.--NO GAGE-HEIGHT RECORD JUNE 30 TO JULY 11.

09074000 HUNTER CREEK NEAR ASPEN, CO

LOCATION.--Lat 39°12'21", long 106°47'49", Pitkin County, Hydrologic Unit 14010004, on right bank 280 ft upstream from headgate of Red Mountain ditch, 1.5 mi upstream from mouth, and 1.5 mi northeast of Aspen.

DRAINAGE AREA.--41.1 mi^2.

PERIOD OF RECORD.--June 1950 to September 1956, September 1969 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 8,610 ft, from topographic map. Prior to Sept. 1, 1969, at site 220 ft downstream, at different datum.

REMARKS.--Records fair except those for winter period and period of no gage height record, which are poor. Transmountain diversion above station to Charles H. Boustead tunnel by feeder conduit. Several small diversions above station for irrigation of hay meadows above and below station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE (Corrected).--16 years (water years 1951-1956, 1970-1979), 50.7 ft^3/s; 36,730 acre-ft/yr, prior to diversion through Charles H. Boustead Tunnel; 5 years (water years 1980-84), 44.1 ft^3/s; 31,950 acre-ft/yr, subsequent to diversions through Charles H. Boustead Tunnel.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,010 ft^3/s, June 13, 1953, gage height, 7.02 ft, site and datum then in use, from rating curve extended above 580 ft^3/s; minimum not determined.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 798 ft^3/s at 2200 June 30, gage height, 2.49 ft; minimum daily, 4.2 ft^3/s, Jan. 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	20	10	6.0	5.8	6.0	5.2	11	311	459	71	57
2	18	19	10	5.8	5.6	6.0	5.1	12	281	397	69	58
3	18	18	9.4	5.8	5.6	6.0	5.2	12	253	384	66	55
4	20	17	9.0	6.0	6.0	5.8	5.2	12	231	344	67	51
5	24	18	8.2	6.0	5.8	5.8	5.6	12	272	320	67	46
6	21	18	7.8	6.0	5.8	5.8	6.0	11	194	296	66	41
7	21	16	8.0	6.0	5.8	6.0	7.0	11	216	266	64	40
8	19	18	8.0	6.2	5.6	6.2	7.8	12	195	276	63	42
9	18	15	7.8	6.2	5.6	6.2	8.0	14	186	379	61	39
10	19	15	7.4	6.0	5.8	6.1	7.2	25	189	390	61	34
11	22	15	7.2	6.0	5.6	6.2	7.2	41	198	262	56	35
12	21	14	7.0	6.0	6.0	6.0	7.0	83	211	206	50	38
13	25	14	7.2	6.2	6.0	6.3	7.1	150	240	203	50	37
14	30	14	7.0	6.4	5.8	5.4	7.2	217	310	293	54	35
15	31	14	7.0	6.0	5.6	5.4	7.9	266	363	218	74	34
16	29	13	7.0	5.4	5.6	5.4	9.2	267	382	195	72	38
17	32	14	7.0	5.0	6.0	5.4	12	212	248	132	70	46
18	31	13	6.8	4.2	6.0	5.3	14	165	276	65	74	36
19	30	13	6.6	4.8	5.8	4.9	14	160	315	65	72	35
20	28	13	6.2	5.6	5.6	5.0	14	185	282	81	68	33
21	26	12	5.8	5.6	6.2	5.2	15	192	343	85	65	35
22	27	12	6.0	5.8	6.8	5.0	14	228	352	65	62	48
23	26	12	6.0	5.8	6.6	5.2	12	254	299	64	60	42
24	25	12	6.0	5.6	6.2	5.0	13	293	300	70	78	38
25	24	12	6.2	6.0	6.2	4.3	14	352	272	63	83	36
26	23	10	6.2	6.0	6.0	5.0	14	320	298	65	76	39
27	22	10	6.0	5.8	5.8	4.9	14	313	433	74	65	37
28	22	10	5.6	5.8	5.8	5.0	14	288	452	69	63	33
29	20	10	5.6	5.8	5.8	5.2	12	297	474	65	61	30
30	20	10	6.0	5.8	---	5.2	12	318	519	72	54	27
31	20	---	6.2	5.8	---	5.4	---	312	---	83	55	---
TOTAL	731	421	220.2	179.4	170.8	170.6	295.9	5045	8895	6006	2017	1195
MEAN	23.6	14.0	7.10	5.79	5.89	5.50	9.86	163	297	194	65.1	39.8
MAX	32	20	10	6.4	6.8	6.3	15	352	519	459	83	58
MIN	18	10	5.6	4.2	5.6	4.3	5.1	11	186	63	50	27
AC-FT	1450	835	437	356	339	338	587	10010	17640	11910	4000	2370

CAL YR 1983 TOTAL 21094.4 MEAN 57.8 MAX 600 MIN 4.2 AC-FT 41840
WTR YR 1984 TOTAL 25346.9 MEAN 69.3 MAX 519 MIN 4.2 AC-FT 50280

NOTE.--NO GAGE-HEIGHT RECORD DEC. 29 TO JAN.31.

09074800 CASTLE CREEK ABOVE ASPEN, CO

LOCATION.--Lat 39°05'15", long 106°48'42", Pitkin County, Hydrologic Unit 14010004, on right bank 0.4 mi downstream from Forest Service bridge, 0.4 mi upstream from Sandy Creek, and 7 mi south of Aspen.

DRAINAGE AREA.--32.2 mi^2.

PERIOD OF RECORD.--September 1969 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 9,100 ft, from topographic map.

REMARKS.--Records good except those for winter period, which are fair. No diversion above station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--15 years, 42.4 ft^3/s; 30,720 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 559 ft^3/s, June 30, 1984, gage height, 3.64 ft; maximum gage height, 3.88 ft, June 23, 1970; minimum daily discharge, 6.0 ft^3/s, Jan. 7, 1982.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 200 ft^3/s, and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
May 3	0100	352	3.06	June 30	2300	*559	3.64

Minimum daily discharge, 7.9 ft^3/s, Mar. 15, Apr. 5, 6, 8, 9.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27	21	16	13	10	9.3	8.3	9.3	329	423	138	81
2	26	20	15	12	11	9.8	8.6	9.6	279	383	126	69
3	26	20	15	13	11	9.3	8.6	10	267	385	115	61
4	26	20	16	14	11	9.3	8.4	10	251	365	110	56
5	25	20	14	12	11	9.3	7.9	10	231	342	109	53
6	25	20	13	12	9.5	9.3	7.9	10	197	332	114	51
7	24	20	15	13	9.6	9.3	8.2	10	183	323	111	50
8	24	22	16	12	10	9.1	7.9	10	149	341	107	48
9	23	19	15	12	10	8.6	7.9	9.6	135	369	100	45
10	24	18	15	13	10	8.6	8.9	11	129	450	95	43
11	24	19	14	12	10	8.6	9.3	26	133	332	92	45
12	23	20	14	11	10	8.6	9.1	42	158	270	92	50
13	23	20	14	12	10	8.6	8.8	74	209	243	111	46
14	23	19	13	12	10	8.5	9.1	118	289	367	101	43
15	23	15	15	12	10	7.9	9.3	122	342	297	96	41
16	23	17	12	12	10	8.6	9.3	122	349	259	99	45
17	23	18	14	12	10	8.6	9.3	127	301	221	94	44
18	23	19	13	12	11	8.9	9.3	108	308	192	95	40
19	23	18	12	11	11	9.3	9.3	127	333	197	88	40
20	22	17	12	11	11	9.1	9.3	162	333	192	93	39
21	21	18	11	11	11	8.6	9.3	198	389	207	99	42
22	21	17	11	11	10	8.6	9.3	211	403	196	92	43
23	21	16	11	11	10	9.1	9.3	237	385	187	81	41
24	21	15	11	11	10	9.3	9.3	271	403	223	93	42
25	21	17	13	11	11	9.3	9.3	288	413	189	88	41
26	21	17	15	12	11	9.5	9.3	274	382	172	78	38
27	21	14	14	12	11	10	9.3	273	397	160	70	37
28	21	14	13	11	11	9.6	9.3	271	399	170	67	35
29	21	16	12	11	9.3	8.9	9.6	280	413	168	64	34
30	21	16	13	11	---	8.1	9.3	303	452	157	62	32
31	21	---	15	10	---	8.4	---	314	---	163	64	---
TOTAL	711	542	422	365	300.4	278.0	268.0	4047.5	8941	8275	2944	1375
MEAN	22.9	18.1	13.6	11.8	10.4	8.97	8.93	131	298	267	95.0	45.8
MAX	27	22	16	14	11	10	9.6	314	452	450	138	81
MIN	21	14	11	10	9.3	7.9	7.9	9.3	129	157	62	32
AC-FT	1410	1080	837	724	596	551	532	8030	17730	16410	5840	2730

CAL YR 1983	TOTAL	19389.5	MEAN	53.1	MAX	402	MIN	9.5	AC-FT	38460
WTR YR 1984	TOTAL	28468.9	MEAN	77.8	MAX	452	MIN	7.9	AC-FT	56470

09075700 MAROON CREEK ABOVE ASPEN, CO

LOCATION.--Lat 39°07'25", long 106°54'17", Pitkin County, Hydrologic Unit 14010004, on left bank 0.3 mi upstream from Silver Queen Forest Service campground, 1.2 mi downstream from confluence of East and West Maroon Creeks, and 7.2 mi southwest of Aspen.

DRAINAGE AREA.--35.4 mi^2.

PERIOD OF RECORD.--September 1969 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 8,720 ft, from topographic map.

REMARKS.--Records good except those for winter period and those for period of indefinite stage-discharge relationship, May 15-18, June 27 to July 23, which are poor. No diversion above station. Natural regulation by Maroon Lake. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--15 years, 66.0 ft^3/s; 47,820 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 836 ft^3/s, June 22, 1980, gage height, 3.39 ft, from rating curve extended above 350 ft^3/s; maximum gage height, 4.53 ft, Feb. 3, 1972 (backwater from ice); minimum daily discharge, 9.0 ft^3/s, Mar. 29, 1975.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 250 ft^3/s, and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
June 1	2100	480	3.21	June 30	UNKNOWN	*UNKNOWN	UNKNOWN

Minimum daily discharge, 17 ft^3/s, Jan. 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	52	39	31	26	26	23	26	50	419	460	238	123
2	52	39	31	25	26	25	24	52	440	440	221	112
3	52	38	31	26	26	22	24	52	416	420	178	106
4	52	38	31	26	26	23	24	54	379	395	165	101
5	51	38	31	26	26	22	26	58	330	375	162	98
6	51	37	30	25	26	21	29	60	297	365	162	95
7	50	37	30	25	26	22	29	58	259	360	158	97
8	50	38	30	25	26	23	33	56	216	375	154	94
9	48	37	29	25	26	22	38	62	203	400	154	90
10	48	36	30	24	25	22	32	80	192	470	151	90
11	48	36	29	25	25	21	37	96	194	430	144	89
12	48	36	29	25	25	20	31	110	200	385	144	94
13	48	36	29	24	25	20	35	130	218	340	148	89
14	49	36	29	25	26	21	33	150	263	450	140	88
15	48	35	29	25	25	22	37	185	289	420	148	87
16	47	35	28	21	24	22	45	160	304	385	144	87
17	46	34	29	19	26	20	48	140	314	360	137	87
18	46	35	28	17	26	22	52	120	348	340	134	84
19	45	34	28	19	23	21	54	103	358	320	134	81
20	45	34	29	20	23	21	54	117	360	310	130	79
21	44	34	28	21	24	22	52	153	387	300	130	83
22	43	33	28	22	24	23	50	179	435	295	131	85
23	43	33	28	21	23	23	52	222	454	290	128	83
24	43	32	27	22	24	23	56	287	473	324	130	84
25	42	33	27	24	25	25	60	337	520	310	128	82
26	41	32	27	24	22	25	56	365	432	291	126	80
27	41	32	27	24	22	25	54	374	440	278	120	81
28	41	32	27	25	22	24	50	387	450	278	119	80
29	40	32	24	25	23	24	52	399	480	265	114	79
30	40	31	26	23	---	25	50	409	520	248	109	78
31	40	---	27	25	---	25	---	399	---	248	111	---
TOTAL	1434	1052	887	729	716	699	1243	5404	10590	10927	4492	2686
MEAN	46.3	35.1	28.6	23.5	24.7	22.5	41.4	174	353	352	145	89.5
MAX	52	39	31	26	26	25	60	409	520	470	238	123
MIN	40	31	24	17	22	20	24	50	192	248	109	78
AC-FT	2840	2090	1760	1450	1420	1390	2470	10720	21010	21670	8910	5330

CAL YR 1983 TOTAL 31891 MEAN 87.4 MAX 570 MIN 17 AC-FT 63260
WTR YR 1984 TOTAL 40859 MEAN 112 MAX 520 MIN 17 AC-FT 81040

NOTE.--NO GAGE-HEIGHT RECORD JAN. 23 TO MAY 14.

09076520 OWL CREEK NEAR ASPEN, CO

LOCATION.--Lat 39°13'25", long 106°52'45", in NE¼SE¼ sec.33, T.9 S., R.85 W., Pitkin County, Hydrologic Unit 14010004, on left bank 1.2 mi upstream from mouth and 3.8 mi northwest of Aspen.

DRAINAGE AREA.--6.60 mi^2.

PERIOD OF RECORD.--October 1974 to current year.

GAGE.--Water-stage recorder with V-notch concrete control. Altitude of gage is 7,870 ft, from topographic map.

REMARKS.--Records fair except those for winter period, and those for period of no gage-height, which are poor. Several small diversions above station for irrigation of hay meadows. Water imported above station, at times, from West Willow Creek through Willow and Owl ditches. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--10 years, 2.88 ft^3/s; 2,090 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 90 ft^3/s, May 21, 1984, gage height, 2.39 ft; no flow, Feb. 9 to Mar. 6, Sept. 10, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 90 ft^3/s at 2100 May 21, gage height, 2.39 ft; minimum daily, 0.12 ft^3/s, Jan. 23-25, 31.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.74	.48	.30	.21	.13	.32	1.5	1.9	49	4.5	5.4	1.1
2	.74	.45	.30	.19	.14	.32	1.5	2.5	45	3.4	4.8	.95
3	.72	.45	.27	.18	.17	.45	1.5	2.5	40	3.3	4.5	.82
4	.72	.45	.27	.16	.20	.43	1.5	2.5	37	3.1	4.5	.68
5	.70	.45	.27	.16	.22	.32	1.5	2.5	38	2.5	3.4	.55
6	.70	.45	.25	.16	.23	.27	1.5	2.7	37	1.5	4.1	.48
7	.70	.45	.25	.18	.24	.43	1.5	3.5	46	1.2	4.5	.45
8	.70	.88	.25	.16	.28	.40	1.5	4.5	44	1.5	2.8	.45
9	.66	.75	.22	.15	.32	.38	1.5	6.0	43	2.1	2.4	.48
10	.64	.55	.22	.15	.35	.38	1.5	8.0	41	3.0	2.1	.45
11	.64	.68	.22	.15	.32	.38	1.5	12	44	2.0	1.9	.40
12	.62	.75	.21	.15	.27	.43	1.5	16	44	1.5	1.9	.38
13	.60	.68	.21	.15	.27	.43	1.5	22	43	1.3	1.9	.40
14	.88	.61	.22	.15	.30	.68	1.5	30	41	3.9	1.7	.40
15	1.1	.38	.21	.15	.30	1.2	1.5	35	39	3.3	1.5	.40
16	.95	.40	.27	.14	.25	1.2	1.7	45	37	3.0	1.6	.55
17	.75	.43	.35	.14	.25	1.1	1.7	54	34	3.8	1.5	.75
18	.82	.48	.30	.14	.30	1.2	1.7	64	30	5.4	.88	.48
19	.88	.38	.27	.14	.27	1.5	1.7	64	25	4.7	.95	.43
20	.68	.38	.22	.14	.21	1.5	1.7	68	20	5.9	2.1	.43
21	.61	.40	.22	.14	.18	1.3	1.7	72	16	6.8	1.9	.48
22	.61	.40	.21	.14	.21	1.7	1.7	82	13	5.2	1.5	.61
23	.61	.35	.19	.12	.21	1.6	1.7	77	11	5.2	1.3	.48
24	.55	.32	.19	.12	.21	1.5	1.7	73	7.5	5.9	1.8	.61
25	.48	.32	.19	.12	.27	1.5	1.7	78	6.1	5.9	2.2	.82
26	.48	.32	.19	.14	.32	1.5	1.7	73	4.3	6.4	1.7	.82
27	.48	.30	.19	.15	.25	1.5	1.7	64	3.0	5.9	1.3	.75
28	.55	.32	.19	.14	.25	1.5	1.7	59	2.8	5.2	1.1	.61
29	.55	.30	.18	.14	.27	1.5	1.7	52	2.9	5.0	.95	.61
30	.48	.27	.18	.14	---	1.5	1.7	49	3.9	4.8	.88	.55
31	.48	---	.19	.12	---	1.5	---	48	---	5.4	.82	---
TOTAL	20.82	13.83	7.20	4.62	7.19	29.92	48.0	1173.6	847.5	122.6	69.88	17.37
MEAN	.67	.46	.23	.15	.25	.97	1.60	37.9	28.2	3.95	2.25	.58
MAX	1.1	.88	.35	.21	.35	1.7	1.7	82	49	6.8	5.4	1.1
MIN	.48	.27	.18	.12	.13	.27	1.5	1.9	2.8	1.2	.82	.38
AC-FT	41	27	14	9.2	14	59	95	2330	1680	243	139	34

CAL YR 1983	TOTAL	1664.13	MEAN	4.56	MAX	53	MIN	.17	AC-FT	3300
WTR YR 1984	TOTAL	2362.53	MEAN	6.45	MAX	82	MIN	.12	AC-FT	4690

NOTE.--NO GAGE-HEIGHT RECORD MAR. 23 TO MAY 21.

09078600 FRYINGPAN RIVER NEAR THOMASVILLE, CO

LOCATION.--Lat 39°20'41", long 106°40'23", in NW¼NW¼ sec.21, T.8 S., R.83 W., Pitkin County, Hydrologic Unit 14010004, on right bank 400 ft upstream from private bridge, 400 ft downstream from North Fork, 1.6 mi southeast of Thomasville, and 1.7 mi northwest of Norrie.

DRAINAGE AREA.--134 mi^2.

PERIOD OF RECORD.--October 1975 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 8,210 ft, from topographic map.

REMARKS.--Records good except those for winter period, which are poor. Transmountain diversions above station to Arkansas River basin through Busk-Ivanhoe tunnel since June 1925 and Charles H. Boustead tunnel since May 16, 1972. Several observations of water temperature were obtained and are published elsewhere in this report.

COOPERATION.--Records collected and computed by Colorado Division of Water Resources and reviewed by Geological Survey.

AVERAGE DISCHARGE.--9 years, 96.0 ft^3/s; 69,550 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,330 ft^3/s, May 25, 1984, gage height, 4.23 ft; minimum daily, 10 ft^3/s, Nov. 28, 1976, Jan. 2, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,330 ft^3/s at 0100 May 25, gage height, 4.23 ft; minimum daily, 25 ft^3/s, Feb. 26, 27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	50	51	47	36	35	28	37	63	805	742	104	84
2	49	53	47	36	35	28	36	67	742	501	93	78
3	54	50	47	36	33	28	36	66	683	497	86	72
4	63	48	45	36	34	27	35	66	648	690	88	69
5	63	47	43	37	33	28	39	67	578	634	90	66
6	58	48	42	37	32	28	41	67	515	585	108	63
7	54	45	40	37	32	28	41	63	620	461	93	61
8	50	56	40	37	31	28	45	66	557	455	82	72
9	49	41	40	37	27	28	53	95	501	578	78	66
10	50	51	40	35	31	28	51	182	494	797	77	75
11	63	54	41	35	33	28	58	313	536	592	72	75
12	58	53	43	35	32	29	52	442	536	461	72	82
13	57	53	42	34	30	29	50	564	571	360	78	75
14	70	48	41	33	32	30	47	728	720	383	78	56
15	69	43	41	32	31	31	51	805	805	371	95	60
16	61	48	41	31	30	32	64	742	821	299	104	74
17	63	48	41	30	30	31	95	669	705	236	88	72
18	69	53	41	30	28	34	117	634	620	147	97	61
19	67	47	41	28	27	31	115	571	690	133	97	67
20	63	48	39	28	26	31	104	683	634	130	115	64
21	60	50	36	29	26	34	84	758	690	136	110	72
22	58	45	38	29	27	38	75	797	712	122	128	78
23	58	45	38	30	27	35	82	888	683	113	97	72
24	57	45	37	31	26	35	106	966	669	120	115	67
25	56	50	37	31	26	38	108	1120	662	110	120	69
26	54	49	38	32	25	37	90	913	557	113	115	74
27	54	45	38	31	25	38	69	845	494	110	93	74
28	54	47	38	31	26	35	69	805	474	108	88	70
29	54	47	36	31	28	36	70	781	508	106	88	67
30	53	45	35	32	---	35	66	829	648	99	78	66
31	53	---	35	34	---	36	---	797	---	99	77	---
TOTAL	1791	1453	1248	1021	858	982	1986	16452	18878	10288	2904	2101
MEAN	57.8	48.4	40.3	32.9	29.6	31.7	66.2	531	629	332	93.7	70.0
MAX	70	56	47	37	35	38	117	1120	821	797	128	84
MIN	49	41	35	28	25	27	35	63	474	99	72	56
AC-FT	3550	2880	2480	2030	1700	1950	3940	32630	37440	20410	5760	4170

CAL YR 1983	TOTAL	45325	MEAN 124	MAX	879	MIN 21	AC-FT	89900
WTR YR 1984	TOTAL	59962	MEAN 164	MAX	1120	MIN 25	AC-FT	118900

09080190 RUEDI RESERVOIR NEAR BASALT, CO

LOCATION.--Lat 39°21'50", long 106°49'05", in NW¼ sec.18, T.8 S., R.84 W., Pitkin County, Hydrologic Unit 14010004, in gatehouse of Ruedi Dam just upstream from Rocky Fork Creek and 13 mi east of Basalt.

DRAINAGE AREA.--223 mi².

PERIOD OF RECORD.--May 1968 to current year.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by U.S. Bureau of Reclamation); gage readings have been reduced to elevations NGVD.

REMARKS.--Reservoir is formed by an earthfill dam. Storage began in May 1968; dam completed July 16, 1968. Capacity, 102,300 acre-ft, 1969 survey, between elevations 7,540.00 ft, sill of auxiliary outlet, and 7,766.00 ft, crest of spillway. Dead storage below elevation 7,540.00 ft, 61 acre-ft. Figures given are total contents.

COOPERATION.--Records furnished by U.S. Bureau of Reclamation.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 103,900 acre-ft, July 15, 1973, elevation, 7,767.56 ft; minimum after first filling, 48,000 acre-ft, May 13, 1971, elevation, 7,698.03 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 101,000 acre-ft, Aug. 24, elevation, 7,765.01 ft; minimum, 49,000 acre-ft, May 10, elevation, 7,699.71 ft.

MONTHEND ELEVATION IN FEET NGVD AND CONTENTS, AT 2400, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

Date	Elevation	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	7,762.15	98,600	-
Oct. 31	7,757.10	93,700	-4,900
Nov. 30	7,751.52	88,600	-5,100
Dec. 31	7,744.28	82,200	-6,400
CAL YR 1983			-4,700
Jan. 31	7,734.54	74,000	-8,200
Feb. 29	7,724.37	66,100	-7,900
Mar. 31	7,713.20	58,000	-8,100
Apr. 30	7,703.80	51,700	-6,300
May 31	7,748.14	85,600	+33,900
June 30	7,763.34	99,700	+14,100
July 31	7,764.31	101,000	+1,300
Aug. 31	7,764.15	101,000	0
Sept. 30	7,763.89	100,000	-1,000
WTR YR 1984			+1,400

09080400 FRYINGPAN RIVER NEAR RUEDI, CO

LOCATION.--Lat 39°21'56", long 106°49'30", in SE¼SE¼ sec.12, T.8 S., R.85 W., Eagle County, Hydrologic Unit 14010004, on right bank 0.4 mi downstream from Rocky Fork Creek and Ruedi Dam, 1.5 mi west of former site of Ruedi, and 12.5 mi east of Basalt.

DRAINAGE AREA.--238 mi^2.

PERIOD OF RECORD.--October 1964 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 7,473.25 ft, National Geodetic Vertical Datum of 1929 (levels by U.S. Bureau of Reclamation). Prior to Nov. 7, 1970, at site 2.0 mi downstream at different datum.

REMARKS.--Records good except those for period of no gage-height record, which are fair. Diversions for irrigation of hay meadows above station. Transmountain diversions above station to Arkansas River basin through Busk-Ivanhoe tunnel since June 1925 and Charles H. Boustead tunnel since May 16, 1972 (see elsewhere in this report). Flow regulated by Ruedi Reservoir (station 09080190) since May 18, 1968. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--17 years (water years 1968-84), 184 ft^3/s; 133,300 acre-ft/yr, subsequent to completion of Ruedi Reservoir.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,690 ft^3/s, June 18, 1965, gage height, 5.16 ft, site and datum then in use; minimum daily, 16 ft^3/s, Feb. 2, 1968 (result of storage in Ruedi Reservoir); minimum daily prior to construction of Ruedi Reservoir, 28 ft^3/s, Mar. 4 ,1966.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,140 ft^3/s July 4, gage height, 3.57 ft; minimum daily, 64 ft^3/s, Sept. 18, 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	180	180	177	172	165	160	160	294	790	1040	250	140
2	180	180	177	172	165	160	160	294	981	1010	246	140
3	180	180	177	172	165	160	160	294	1030	1080	246	140
4	180	180	177	172	165	160	160	294	1020	1140	250	140
5	180	180	177	172	165	160	160	298	1010	1000	254	140
6	180	180	177	172	165	160	162	298	918	814	202	142
7	180	180	177	172	165	160	164	298	754	712	171	142
8	180	183	177	172	165	160	166	298	754	712	171	142
9	180	180	177	171	165	160	167	298	820	706	171	142
10	180	180	176	171	165	160	168	298	820	706	171	142
11	180	180	176	177	165	160	171	298	820	700	174	142
12	180	180	176	183	165	160	171	298	827	706	174	142
13	183	180	176	183	165	160	171	294	827	625	174	140
14	180	180	175	183	165	160	171	294	855	580	174	138
15	180	180	175	183	165	160	171	294	932	575	171	138
16	180	177	175	183	162	160	174	294	988	500	171	138
17	180	177	175	174	162	160	174	294	981	420	174	77
18	180	177	175	177	162	160	177	294	981	372	177	64
19	180	177	175	177	162	160	220	294	974	342	180	64
20	180	177	175	177	162	160	245	298	960	274	180	95
21	180	177	174	177	160	160	278	298	1020	238	183	125
22	180	177	174	174	160	160	286	298	1060	238	186	128
23	180	177	174	177	160	160	286	386	1070	238	216	128
24	180	178	174	180	157	160	286	390	1070	238	242	128
25	180	178	173	180	156	160	286	500	1050	238	246	128
26	180	178	173	180	155	160	286	742	1040	242	246	128
27	180	177	173	177	160	160	294	742	1040	242	282	128
28	180	177	173	177	160	160	294	748	1040	242	302	128
29	180	177	172	177	160	160	294	748	1040	242	302	128
30	180	177	172	177	---	160	294	742	1030	250	202	128
31	180	---	172	171	---	160	---	742	---	250	140	---
TOTAL	5583	5361	5426	5462	4713	4960	6356	12252	28502	16672	6428	3825
MEAN	180	179	175	176	163	160	212	395	950	538	207	128
MAX	183	183	177	183	165	160	294	748	1070	1140	302	142
MIN	180	177	172	171	155	160	160	294	754	238	140	64

CAL YR 1983 TOTAL 91238 MEAN 250 MAX 1390 MIN 60
WTR YR 1984 TOTAL 105540 MEAN 288 MAX 1140 MIN 64

NOTE.--NO GAGE-HEIGHT RECORD NOV. 23 TO JAN. 9, FEB. 21 TO APR. 9.

09081600 CRYSTAL RIVER ABOVE AVALANCHE CREEK, NEAR REDSTONE, CO

LOCATION.--Lat 39°13'56", long 107°13'36", in SE¼SW¼ sec.33, T.9 S., R.88 W., Pitkin County, Hydrologic Unit 14010004, on right bank 1.2 mi upstream from Avalanche Creek and 3.6 mi north of Redstone.

DRAINAGE AREA.--167 mi².

PERIOD OF RECORD.--October 1955 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,905 ft, from river-profile map.

REMARKS.--Reoords good. A few small diversions for irrigation above station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--29 years, 295 ft³/s; 213,700 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,180 ft³/s, June 25, 1983, gage height, 6.12 ft; minimum daily, 22 ft³/s, Dec. 5, 1955, Feb. 15, 1964, Jan 2, Feb. 17, 18, 1978.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,080 ft³/s at 2300 May 24, gage height, 5.39 ft, only peak above base of 2,000 ft³/s; minimum daily, 44 ft³/s, Feb. 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	119	86	79	68	58	57	72	155	1980	2160	484	286
2	111	85	79	53	57	58	69	179	1850	1930	434	251
3	118	83	76	55	55	59	67	172	1740	1880	380	210
4	115	80	75	67	60	52	67	171	1540	1800	346	191
5	111	79	69	62	57	48	77	186	1490	1670	333	189
6	109	78	60	60	57	54	84	201	1350	1570	355	188
7	109	76	71	62	59	56	90	178	1700	1540	341	164
8	107	110	76	64	58	57	109	191	1320	1570	324	167
9	107	87	74	68	55	59	127	257	1130	1730	295	167
10	111	85	74	62	57	59	111	432	1050	2010	275	170
11	118	85	72	65	56	61	112	617	1130	1540	259	170
12	111	84	71	64	51	58	99	795	1210	1260	262	211
13	106	86	71	63	58	59	96	1070	1390	1160	297	203
14	124	85	69	66	58	63	102	1410	1740	1800	269	196
15	120	77	69	63	56	67	122	1700	2060	1340	292	211
16	111	80	67	51	53	72	157	1670	2070	1160	311	190
17	110	78	70	55	57	64	217	1500	1740	1020	256	178
18	114	83	69	53	54	66	275	1380	1610	897	251	162
19	109	79	69	50	47	63	266	1270	1810	881	277	163
20	104	78	63	56	44	67	238	1480	1930	845	314	162
21	100	80	56	54	51	81	206	1750	2020	874	330	169
22	99	77	55	57	61	88	194	1930	2060	843	318	186
23	98	77	59	58	55	77	207	2210	1930	726	258	175
24	95	76	56	56	54	77	238	2480	1930	795	370	196
25	92	83	68	57	54	82	250	2470	1880	740	347	184
26	92	79	76	60	53	76	226	2130	1780	702	318	179
27	91	73	79	57	48	74	207	2030	1830	617	248	172
28	86	70	68	60	50	69	187	1960	1890	583	233	163
29	86	73	55	59	58	70	165	1930	2020	536	212	157
30	86	73	64	56	---	69	157	2010	2160	506	207	152
31	86	---	71	57	---	71	---	2010	---	511	200	---
TOTAL	3255	2425	2130	1838	1591	2033	4594	37924	51340	37196	9396	5562
MEAN	105	80.8	68.7	59.3	54.9	65.6	153	1223	1711	1200	303	185
MAX	124	110	79	68	61	88	275	2480	2160	2160	484	286
MIN	86	70	55	50	44	48	67	155	1050	506	200	152
AC-FT	6460	4810	4220	3650	3160	4030	9110	75220	101800	73780	18640	11030

CAL YR 1983 TOTAL 149321 MEAN 409 MAX 3500 MIN 44 AC-FT 296200
WTR YR 1984 TOTAL 159284 MEAN 435 MAX 2480 MIN 44 AC-FT 315900

09085000 ROARING FORK RIVER AT GLENWOOD SPRINGS, CO

LOCATION.--Lat 39°32'37", long 107°19'44", in SW¼SE¼ sec.9, T.6 S., R.89 W., Garfield County, Hydrologic Unit 14010004, on left bank at Glenwood Springs, 2,100 ft, upstream from mouth.

DRAINAGE AREA.--1,451 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1905 to September 1909, September 1910 to current year. Monthly discharge only for some periods, published in WSP 1313. Prior to October 1960, published as Roaring Fork at Glenwood Springs.

REVISED RECORDS.--WSP 2124: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 5,720.73 ft, National Geodetic Vertical Datum of 1929. Prior to Nov. 20, 1915, nonrecording gage on highway bridge 800 ft downstream, at different datum. Nov. 20, 1915, to Oct. 26, 1917, nonrecording gage at present site and datum.

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, Twin Lakes tunnel since 1935, and Charles H. Boustead tunnel since 1972. Natural flow of stream affected by storage in Ruedi Reservoir on Fryingpan River (station 09080190) since May 1968.

AVERAGE DISCHARGE.--65 years (water years 1906-9, 1911-71), 1,368 ft³/s; 991,100 acre-ft/yr prior to diversion through Charles H. Boustead tunnel; 13 years (water years 1972-84), 1,237 ft³/s, 896,200 acre-ft/yr, subsequent to diversions through Charles H. Boustead tunnel.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 19,000 ft³/s July 1, 1957, gage height, 8.65 ft; maximum gage height, 8.7 ft, June 14, 1921, from floodmarks; minimum discharge, 145 ft³/s, Jan. 21, 1935, gage height, 0.65 ft; minimum daily, 179 ft³/s, Jan. 21, 1935.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 10,400 ft³/s at 0600 July 1, gage height, 7.45 ft; minimum daily, 492 ft³/s, Feb. 28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	710	810	750	644	555	520	600	968	7670	9510	2540	1650
2	710	810	760	596	556	520	576	1140	7530	8570	2370	1630
3	730	800	760	600	545	536	560	1140	7140	8400	2200	1450
4	730	800	750	660	569	506	551	1140	6660	8130	2030	1370
5	740	790	720	634	577	506	567	1180	6380	7480	1960	1320
6	750	800	664	623	566	513	614	1210	5750	6890	2010	1270
7	760	790	720	620	568	536	627	1120	7140	6530	1900	1200
8	750	930	740	616	576	528	666	1100	5970	6410	1800	1220
9	765	861	720	622	552	544	751	1270	5570	7000	1710	1140
10	756	820	720	605	576	536	688	1720	5220	7960	1660	1080
11	803	825	718	620	584	544	737	2460	5330	6860	1570	1060
12	803	840	711	662	552	536	670	3260	5460	5810	1500	1140
13	787	840	712	627	568	536	667	4100	5880	5290	1590	1110
14	862	840	690	622	576	560	657	5110	6930	6070	1470	1020
15	899	770	700	616	568	600	708	6040	8080	5820	1500	1020
16	850	790	664	558	544	624	789	6360	8700	5170	1630	1120
17	834	780	672	576	576	576	931	6010	7890	4730	1520	1120
18	851	830	680	560	560	592	1140	5640	7190	4040	1590	976
19	871	775	672	560	528	568	1170	4980	7790	3830	1670	942
20	864	770	664	600	506	552	1140	5460	7820	3650	1750	928
21	837	782	616	600	520	584	1040	6200	8340	3530	1830	1000
22	834	746	640	620	560	632	972	6680	8920	3440	1790	1100
23	850	736	664	620	536	584	976	7280	8540	3130	1670	1060
24	824	723	691	648	513	576	1120	8030	8560	3380	2030	1110
25	829	792	706	632	528	616	1270	8630	8620	3250	2110	1110
26	820	789	700	617	513	586	1140	8300	8050	3130	1990	1080
27	824	769	692	576	499	594	1030	7890	8330	3000	1850	1070
28	800	742	657	578	492	561	963	7620	8370	2890	1790	1150
29	790	766	576	568	520	568	975	7300	8550	2750	1720	1050
30	810	740	608	553	---	576	968	7530	9100	2650	1640	1040
31	810	---	672	557	---	583	---	7670	---	2600	1450	---
TOTAL	24853	23856	21409	18790	15883	17393	25263	144538	221480	161900	55840	34536
MEAN	802	795	691	606	548	561	842	4663	7383	5223	1801	1151
MAX	899	930	760	662	584	632	1270	8630	9100	9510	2540	1650
MIN	710	723	576	553	492	506	551	968	5220	2600	1450	928
AC-FT	49300	47320	42460	37270	31500	34500	50110	286700	439300	321100	110800	68500

CAL YR 1983 TOTAL 603099 MEAN 1652 MAX 11200 MIN 376 AC-FT 1196000
WTR YR 1984 TOTAL 765741 MEAN 2092 MAX 9510 MIN 492 AC-FT 1519000

09085000 ROARING FORK RIVER AT GLENWOOD SPRINGS, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 1958 to August 1961, May 1962 to September 1967, January 1970 to May 1972, January 1980 to September 1984 (discontinued).

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: May 1962 to September 1967, January 1980 to September 1984.
WATER TEMPERATURE: May 1962 to May 1967, January 1980 to September 1984.

INSTRUMENTATION.--Water-quality monitor since January 1980.

REMARKS.--Daily maximum and minimum specific-conductance data available in district office.

COOPERATION.--Chemical-quality data are furnished by U.S. Bureau of Reclamation.

EXTREMES FOR PERIOD OF RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 1,160 micromhos, July 12, 1981; minimum, 132 micromhos, July 9, 1983.
WATER TEMPERATURES: Maximum, 23.0°C, Aug. 3, 1981; minimum, freezing point on many days during winter months each year.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 856 micromhos, Oct. 6; minimum, 154 micromhos, July 14.
WATER TEMPERATURES: Maximum recorded, 19.5°C, Aug. 1, 2, 7; minimum, 0.0°C, many days during winter months.

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO
OCT									
07...	1110	815	572	10.5	260	80	14	23	.6
13...	0800	780	585	8.0	250	78	13	22	.6
20...	1240	850	510	8.0	250	77	13	21	.6
25...	1110	815	585	7.5	250	79	14	22	.6
NOV									
04...	1130	1030	562	7.5	250	76	14	21	.6
10...	0930	842	574	4.5	250	78	14	20	.6
14...	1345	860	545	.0	240	75	13	19	.6
22...	1130	780	558	3.0	240	76	13	19	.6
DEC									
02...	1020	815	545	4.0	240	73	13	18	.5
06...	1400	716	552	.0	240	76	13	22	.6
15...	1000	693	546	2.0	230	72	13	21	.6
22...	1215	797	597	.0	240	74	13	25	.7
30...	1255	599	560	.0	240	76	13	23	.7
JAN									
04...	1300	626	525	1.0	230	74	12	19	.6
12...	1200	662	528	.0	220	69	12	19	.6
25...	1225	653	556	.0	230	74	12	20	.6
27...	1000	550	558	.0	220	69	12	19	.6
FEB									
03...	0945	574	588	.0	230	74	12	20	.6
10...	1140	566	546	.5	240	74	13	20	.6
16...	1105	534	536	.0	250	77	13	27	.8
24...	1000	510	538	.0	240	74	13	20	.6
MAR									
01...	1055	534	609	2.0	210	64	13	20	.6
08...	1200	518	524	3.5	210	63	12	20	.6
15...	1330	599	504	7.5	220	70	12	18	.5
22...	1250	662	620	5.0	250	75	15	21	.6
29...	1300	574	578	5.5	240	74	13	19	.6
APR									
05...	1300	574	511	7.5	240	74	13	19	.6
09...	1245	786	549	6.5	240	74	14	18	.5
20...	1000	1090	405	6.5	200	59	12	13	.4
27...	1200	1010	445	5.0	200	60	12	14	.4
MAY									
01...	1300	1190	460	9.0	210	63	13	15	.5
10...	1045	1560	378	8.0	170	51	10	10	.3
17...	0730	7170	214	5.0	110	35	5.7	3.9	.2
23...	1730	9200	208	10.5	99	31	4.9	4.3	.2
JUN									
01...	1100	7750	196	7.5	96	31	4.6	3.6	.2
05...	1250	6170	237	7.5	100	32	5.2	4.3	.2
15...	0800	8000	190	9.0	96	31	4.7	3.4	.2
21...	0800	8980	185	8.5	97	31	4.7	3.6	.2
29...	1400	8300	206	10.5	110	33	6.3	5.7	.2
JUL									
03...	1210	8390	200	9.5	91	29	4.4	3.4	.2
11...	1600	6430	204	12.5	95	30	4.7	3.9	.2
20...	1045	3700	294	13.0	120	38	6.3	8.2	.3
27...	1000	3020	377	13.0	160	50	9.8	10	.4
AUG									
03...	1030	2190	365	16.0	160	50	8.6	10	.4
10...	1100	1630	425	13.5	180	57	9.7	13	.4
17...	1400	1460	425	16.5	190	58	9.8	13	.4
23...	1500	1570	438	15.0	190	59	9.8	12	.4
29...	0945	1710	445	14.0	190	59	10	13	.4
SEP									
06...	1140	1240	506	13.5	210	66	11	15	.5
14...	0925	1020	505	12.0	220	69	12	18	.5
20...	1500	904	545	15.0	230	70	13	18	.5
28...	1200	1010	520	10.5	220	69	12	20	.6

09085000 ROARING FORK RIVER AT GLENWOOD SPRINGS, CO.--continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE, FET-LAB (MG/L AS HCO3)	CARBONATE, FET-LAB (MG/L AS CO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)	SOLIDS, DISSOLVED (TONS PER DAY)
OCT								
07...	1.6	180	.000	130	31	370	.50	814
13...	1.6	180	.000	130	30	360	.49	758
20...	1.2	140	12	130	27	350	.48	803
25...	2.0	150		130	27	360	.49	792
NOV								
04...	1.1	170	.000	130	26	350	.48	973
10...	1.1	170	.000	130	26	350	.48	796
14...	1.3	160	.000	120	25	340	.46	789
22...	.90	170	.000	120	25	340	.46	716
DEC								
02...	1.0	180	.000	120	23	330	.45	726
06...	2.3	160	.000	130	26	340	.46	657
15...	3.9	150	.000	120	23	330	.45	617
22...	6.6	150	.000	130	26	340	.46	732
30...	4.7	160	.000	120	25	340	.46	550
JAN								
04...	1.2	150	.000	120	22	320	.44	541
12...	1.2	140	.000	120	22	310	.42	554
25...	1.6	150	.000	120	23	320	.44	564
27...	1.2	140	.000	110	22	310	.42	460
FEB								
03...	1.2	150	.000	120	22	320	.44	496
10...	1.2	150	.000	130	23	330	.45	504
16...	5.1	150	.000	130	23	340	.46	490
24...	1.6	150	.000	130	23	330	.45	454
MAR								
01...	1.2	140	.000	130	24	320	.44	461
08...	1.2	120		130	23	310	.42	434
15...	1.2	150	.000	130	22	320	.44	518
22...	1.6	160	.000	140	22	360	.49	643
29...	1.2	150	.000	130	23	330	.45	511
APR								
05...	1.2	150	.000	130	21	330	.45	511
09...	1.6	150	.000	120	18	330	.45	700
20...	1.6	140	.000	95	11	260	.35	765
27...	1.2	140	.000	99	12	270	.37	736
MAY								
01...	2.0	140	.000	110	12	280	.38	900
10...	1.6	130	.000	74	7.8	220	.30	927
17...	1.2	100	.000	29	2.5	130	.18	2520
23...	1.1	94	.000	30	2.4	120	.16	2980
JUN								
01...	.70	79	.000	31	2.1	110	.15	2300
05...	.70	85	.000	37	2.8	120	.16	2000
15...	.70	88	.000	29	2.1	120	.16	2590
21...	1.1	87	.000	29	2.4	120	.16	2910
29...	.70	95	.000	35	3.5	130	.18	2910
JUL								
03...	.70	77	.000	29	2.8	110	.15	2490
11...	.70	76	.000	33	3.5	110	.15	1910
20...	1.1	94	.000	48	8.8	160	.22	1600
27...	1.1	120	.000	73	9.5	210	.29	1710
AUG								
03...	1.1	120	.000	69	11	210	.29	1240
10...	1.1	130	.000	81	15	240	.33	1060
17...	1.5	130	.000	83	15	250	.34	985
23...	1.1	140	.000	86	14	250	.34	1060
29...	1.5	140	.000	85	14	250	.34	1150
SEP								
06...	1.1	150	.000	100	20	290	.39	971
14...	1.5	160	.000	110	22	310	.42	854
20...	1.5	170	.000	110	23	320	.44	781
28...	7.4	160	.000	110	23	320	.44	873

09085000 ROARING FORK RIVER AT GLENWOOD SPRINGS, CO--continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	582	555	537	525	596	592	574	451	199	212	359	470
2	577	558	539	538	584	583	571	448	207	211	362	458
3	569	558	530	561	580	569	569	442	215	210	370	475
4	649	558	523	527	571	561	566	442	229	208	385	486
5	696	544	517	526	562	555	560	440	237	214	393	495
6	762	544	535	529	549	543	560	441	246	218	396	508
7	647	549	540	528	539	533	564	447	250	221	403	519
8	609	545	528	510	529	536	560	444	262	224	411	518
9	599	545	529	506	536	532	547	423	265	219	420	523
10	588	575	531	499	546	533	541	373	265	207	430	528
11	572	572	530	520	544	526	538	315	252	210	441	533
12	---	560	536	520	546	520	537	295	238	224	444	522
13	529	552	541	533	551	523	534	268	223	239	430	512
14	574	556	545	531	545	519	531	245	200	221	434	531
15	566	569	544	528	546	521	521	216	185	230	435	536
16	577	570	557	549	546	546	507	215	185	245	423	520
17	579	565	562	563	546	566	478	213	193	252	428	516
18	582	558	560	579	539	577	445	225	203	278	426	536
19	577	557	567	603	540	596	437	241	197	287	426	544
20	577	565	574	590	549	616	438	233	197	302	429	547
21	583	559	597	591	549	631	447	219	197	315	418	534
22	584	561	589	588	537	618	458	215	198	325	418	519
23	582	565	574	562	531	622	458	209	204	342	429	518
24	587	569	582	---	532	620	435	208	208	345	418	513
25	588	553	575	---	540	595	416	206	211	353	411	506
26	577	541	548	503	553	592	428	205	219	368	422	509
27	559	544	544	550	569	590	444	207	218	374	437	517
28	557	549	556	561	585	585	449	205	---	372	437	524
29	555	540	590	568	599	568	446	205	---	373	444	521
30	552	539	559	582	---	583	443	201	217	370	453	522
31	556	---	525	597	---	572	---	198	---	365	481	---
MEAN	590	556	550	547	553	568	500	293	219	275	420	515

WTR YR 1984 MEAN 466 MAX 762 MIN 185

09085000 ROARING FORK RIVER AT GLENWOOD SPRINGS, CO--continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	12.5	10.5	9.5	7.5	4.5	2.5	2.5	.5	1.0	.0	5.0	1.0
2	12.5	10.0	9.0	7.0	5.0	3.5	.5	.0	1.5	.0	6.5	2.5
3	10.5	9.0	10.0	6.5	4.5	3.0	.0	.0	1.5	.0	6.5	4.0
4	13.0	9.0	9.5	6.5	4.0	2.5	1.5	.0	2.0	.0	3.5	1.0
5	13.0	8.5	8.5	6.5	2.0	.5	1.5	.0	2.0	.0	3.5	.0
6	14.0	10.0	9.0	6.0	.5	.0	1.5	.0	2.0	.0	4.5	.0
7	13.0	9.5	9.0	6.0	2.5	.5	1.5	.0	2.5	.0	5.5	1.0
8	13.5	9.5	8.5	5.5	3.0	1.5	1.5	.0	4.0	1.0	6.0	1.0
9	13.0	11.0	6.0	4.0	4.0	1.5	1.5	.0	2.5	.0	5.0	2.5
10	12.0	10.0	7.0	4.5	4.5	3.0	.5	.0	3.5	.0	8.0	3.5
11	11.5	9.0	7.5	5.0	5.0	3.5	.0	.0	3.5	1.0	6.5	4.0
12	---	---	8.0	6.5	4.5	3.0	.0	.0	2.5	.0	6.0	3.5
13	11.5	8.0	8.0	6.0	4.0	2.5	.0	.0	4.0	1.5	8.5	4.0
14	11.0	9.0	7.0	5.0	2.5	.5	1.5	.0	4.5	3.0	7.0	4.5
15	10.0	7.5	5.5	3.0	3.0	1.5	1.0	.0	4.0	1.0	8.5	5.0
16	10.5	7.0	5.5	3.0	2.0	.5	.0	.0	3.5	.0	7.5	5.0
17	10.0	7.0	6.5	3.5	2.5	1.0	.0	.0	3.5	1.5	6.0	3.0
18	11.0	9.0	6.0	4.5	4.0	2.0	.0	.0	3.5	.5	6.5	4.0
19	11.0	7.5	5.5	3.5	3.0	1.5	.0	.0	3.0	.0	8.0	2.5
20	10.5	7.0	5.0	3.0	2.5	.0	.0	.0	2.0	.0	8.5	3.5
21	10.5	7.0	5.0	4.0	.0	.0	.0	.0	2.5	.0	9.5	4.0
22	10.5	7.0	3.5	2.0	.0	.0	.0	.0	3.0	.0	7.5	4.5
23	10.5	7.0	2.0	1.0	.0	.0	.0	.0	3.5	.5	8.5	3.5
24	9.5	7.0	2.5	1.0	.0	.0	.0	.0	3.5	.0	8.5	4.0
25	10.0	6.5	4.0	2.5	1.5	.0	.5	.0	4.0	1.5	8.0	4.5
26	10.0	6.5	4.0	1.5	3.0	1.0	2.5	.5	4.0	.5	6.5	2.5
27	10.0	6.5	2.5	.5	3.0	1.5	1.0	.0	3.0	.0	7.0	4.5
28	10.0	6.5	3.0	.5	2.5	.0	2.5	.0	3.5	.0	8.0	3.0
29	10.0	7.0	2.5	1.5	.0	.0	2.0	.0	4.5	.0	8.0	4.5
30	9.5	7.0	3.5	1.0	.0	.0	1.5	.0	---	---	7.5	5.0
31	10.0	8.0	---	---	1.5	.0	1.5	.0	---	---	8.5	4.0
MONTH	14.0	6.5	10.0	.5	5.0	.0	2.5	.0	4.5	.0	9.5	.0
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	7.5	4.5	10.0	7.0	9.0	7.0	13.0	8.0	19.5	15.5	16.5	15.0
2	7.0	2.5	9.0	7.0	10.5	5.5	13.5	9.0	19.5	15.5	17.0	12.5
3	7.5	3.0	9.0	5.5	10.5	6.5	13.5	9.0	18.5	15.5	16.5	12.5
4	9.0	3.0	8.5	7.0	9.5	7.0	13.5	9.5	19.0	15.0	17.0	12.5
5	9.5	4.5	8.5	6.0	9.5	7.5	14.5	9.5	18.0	15.0	17.0	12.5
6	9.5	6.5	9.5	6.5	8.0	6.0	15.0	10.0	17.5	15.0	15.5	13.0
7	11.5	6.5	10.5	5.0	7.5	4.0	15.0	11.0	19.5	14.5	14.5	12.0
8	11.5	6.0	11.5	5.5	8.0	5.5	14.5	11.5	18.5	14.0	14.5	10.0
9	9.5	5.5	12.0	7.0	9.0	5.5	14.5	12.0	18.0	14.5	16.0	11.0
10	10.0	4.5	12.5	7.0	12.0	6.0	16.5	12.5	17.0	13.0	16.0	11.5
11	9.0	6.5	12.0	7.5	12.0	8.0	15.5	12.5	18.0	13.0	14.5	12.0
12	8.0	3.5	11.5	6.5	12.5	8.0	14.5	12.0	17.5	14.0	16.0	12.5
13	10.0	5.5	11.0	6.0	13.0	8.0	14.0	11.0	17.0	13.5	16.0	13.0
14	10.5	4.5	11.5	5.5	13.0	8.0	13.0	11.5	18.0	13.5	16.0	12.0
15	11.0	5.0	9.5	6.0	11.5	8.5	14.0	10.5	17.5	13.5	15.0	12.0
16	11.5	6.0	10.0	5.5	10.5	7.5	16.0	11.0	17.0	13.5	13.5	12.0
17	11.5	6.5	11.0	5.0	11.5	7.5	15.5	11.0	18.0	14.0	15.5	11.0
18	10.5	7.5	9.0	5.5	12.0	8.0	16.5	11.5	17.0	14.5	16.0	11.5
19	9.5	6.5	11.5	5.5	12.0	8.0	17.0	12.5	17.0	14.0	15.5	12.0
20	7.5	4.5	11.5	6.0	12.0	9.0	16.5	13.0	16.0	14.5	16.0	12.5
21	7.0	3.0	10.5	6.0	13.0	8.5	18.0	13.5	14.5	13.0	15.0	12.5
22	10.0	4.0	11.5	6.5	12.5	8.0	16.5	13.5	16.0	13.0	14.5	11.5
23	11.0	5.5	11.5	6.0	12.5	8.0	18.0	13.0	15.5	13.5	14.5	11.0
24	11.0	8.0	11.0	6.5	13.0	8.5	16.5	13.5	16.5	13.5	15.0	11.5
25	8.5	5.5	11.0	6.5	12.0	9.0	16.5	13.5	15.5	13.0	13.5	10.0
26	5.0	3.0	11.0	6.0	12.0	8.5	17.5	13.5	17.0	12.5	11.5	10.0
27	7.0	2.5	11.0	6.0	13.0	8.5	16.5	13.0	18.0	13.5	13.5	9.5
28	5.0	3.0	11.0	5.5	---	---	17.0	13.5	18.0	14.0	12.0	10.0
29	7.0	3.5	11.5	6.0	---	---	17.5	13.5	18.0	14.0	11.0	7.5
30	9.0	5.5	11.0	6.5	12.0	9.0	18.5	14.0	17.5	13.5	11.0	7.0
31	---	---	9.5	6.5	---	---	19.0	15.0	18.5	14.5	---	---
MONTH	11.5	2.5	12.5	5.0	13.0	4.0	19.0	8.0	19.5	12.5	17.0	7.0
YEAR	19.5	.0										

09085100 COLORADO RIVER BELOW GLENWOOD SPRINGS, CO

LOCATION.--Lat 39°33'18", long 107°20'13", in NW¼NW¼ sec.9, T.6 S., R.89W., Garfield County, Hydrologic Unit 14010005, on left bank 0.6 mi downstream from Roaring Fork River and 1.0 mi northwest of Post Office in Glenwood Springs.

DRAINAGE AREA.--6,013 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1966 to current year.

GAGE.--Water-stage recorder. Datum of gage is 5,700.75 ft, Colorado State Highway Department datum.

REMARKS.--Records good. Natural flow of stream affected by transmountain diversions, storage reservoirs, power development, and diversions for irrigation of 110,000 acres.

AVERAGE DISCHARGE.--18 years, 3,520 ft³/s; 2,550,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 31,500 ft³/s, May 25, 1984, gage height, 12.49 ft; minimum daily, 870 ft³/s, Feb. 11, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 31,500 ft³/s at 2400 May 25, gage height, 12.49 ft; minimum daily, 1,520 ft³/s, Feb. 21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2110	2320	2320	2330	1860	1620	3220	3540	25800	21400	7930	5410
2	2140	2330	2330	2110	1810	1680	3200	3840	25900	21000	7550	5520
3	2220	2300	2340	1720	1630	1760	3110	4090	24500	21100	7110	5090
4	2250	2300	2320	1990	1710	1730	3080	4090	23000	20300	6720	4820
5	2070	2290	2270	2130	1720	1600	3320	4260	21600	18900	6490	4670
6	2020	2270	2040	2100	1680	1680	3450	4340	20000	17500	6580	4560
7	2020	2260	2060	2010	1640	1760	3490	4230	21800	16100	6610	4420
8	1970	2490	2360	1980	1670	1750	3500	4150	20100	15400	6470	4330
9	1960	2520	2330	1980	1670	1810	3670	4370	18300	15900	6160	4020
10	1980	2380	2280	1970	1700	1800	3520	5290	16400	17400	5950	3890
11	2030	2370	2240	1800	1710	1860	3540	7140	15800	17100	5720	3760
12	2080	2380	2040	1820	1680	1790	3300	9690	15800	15300	5500	3710
13	2080	2420	1990	1940	1700	1850	3100	11900	16200	13600	5700	3620
14	2350	2440	1920	2040	1760	1920	3060	14500	17900	14400	5520	3400
15	2520	2290	2150	2080	1730	2060	3060	18100	20000	14100	5410	3350
16	2470	2390	2060	1890	1650	2140	3240	19900	21600	12600	5620	3530
17	2430	2130	2120	1780	1700	1960	3520	19700	21200	11900	5240	3680
18	2450	2350	2220	1710	1700	2080	4020	19500	20300	10700	5030	3470
19	2490	2350	2230	1620	1620	2050	4380	17700	21200	10200	5260	3270
20	2480	2310	2200	1650	1530	2030	4320	18300	21600	9560	5540	3100
21	2410	2380	1760	1640	1520	2100	4070	20300	21600	9140	5980	2960
22	2420	2290	1640	1750	1580	2260	3810	22000	22200	8930	5800	3070
23	2400	2180	1760	1840	1650	2240	3790	24300	21800	8380	5470	3050
24	2370	2110	1620	1950	1610	2280	4100	26800	21500	8850	5870	3010
25	2320	2310	1850	2070	1670	2520	4500	30200	21500	9060	6310	3020
26	2260	2380	2320	2200	1640	2580	4310	30200	20900	9220	6330	3020
27	2290	2290	2530	2150	1550	2570	4000	28600	21100	8910	5920	3020
28	2330	2220	2350	2050	1560	2600	3710	26500	20600	8400	5660	2940
29	2230	2250	1720	2060	1620	2590	3630	24900	20300	8300	5500	2900
30	2290	2250	1650	2000	---	2870	3580	24900	20700	8330	5320	2870
31	2290	---	2050	1940	---	3070	---	25200	---	8280	4970	---
TOTAL	69730	69550	65070	60300	48270	64610	108600	482530	621200	410260	185240	111480
MEAN	2249	2318	2099	1945	1664	2084	3620	15570	20710	13230	5975	3716
MAX	2520	2520	2530	2330	1860	3070	4500	30200	25900	21400	7930	5520
MIN	1960	2110	1620	1620	1520	1600	3060	3540	15800	8280	4970	2870
AC-FT	138300	138000	129100	119600	95740	128200	215400	957100	1232000	813800	367400	221100

CAL YR 1983 TOTAL 1827010 MEAN 5006 MAX 26900 MIN 1290 AC-FT 3624000
WTR YR 1984 TOTAL 2296840 MEAN 6276 MAX 30200 MIN 1520 AC-FT 4556000

09085100 COLORADO RIVER BELOW GLENWOOD SPRINGS, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--January 1980 to September 1984 (discontinued).

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: January 1980 to September 1984.
WATER TEMPERATURE: January 1980 to September 1984.

INSTRUMENTATION.--Water-quality monitor since January 1980.

REMARKS.--Water-quality monitor located 2.1 mi below gaging station, and records considered equivalent. Daily maximum and minimum specific-conductance data available in district office.

COOPERATION.--Chemical-quality data are furnished by U.S. Bureau of Reclamation.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 1,670 micromhos Dec. 24, 1981; minimum, 179 micromhos May 26, 30 1984.
WATER TEMPERATURES: Maximum, 22.5°C Aug. 4, 1981; minumum, 0.0°C many days during winter period each year.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 1,080 micromhos Feb. 4, 19, 28; minimum, 179 micromhos May 26, 30.
WATER TEMPERATURES: Maximum, 20.5°C Aug. 18; minimum, 0.0°C many days during winter months.

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO
OCT									
06...	1600	2300	948	14.0	240	73	14	120	3
14...	0800	2180	950	10.0	230	70	13	110	3
20...	0910	3530	815	8.0	210	65	12	94	3
25...	1015	2640	860	7.5	210	64	12	97	3
NOV									
02...	1515	2600	870	9.0	200	62	12	96	3
10...	1020	2200	870	5.0	210	63	12	91	3
14...	1250	2710	865	6.5	210	63	12	94	3
22...	1030	2580	850	3.0	200	61	12	97	3
DEC									
02...	0730	2300	860	3.0	200	61	12	94	3
06...	1430	2030	902	1.0	200	61	12	100	3
15...	1420	2050	917	2.0	200	62	12	100	3
22...	1330	1560	1030	.0	210	63	12	130	4
30...	1405	1950	971	.0	200	61	12	120	4
JAN									
04...	1500	1770	992	1.5	210	65	12	120	4
12...	1045	1900	942	.0	200	61	12	110	4
23...	1120	1970	914	.0	210	63	12	110	4
27...	1200	2310	820	.0	190	56	11	95	3
FEB									
03...	1100	1790	1060	.0	220	66	13	120	4
10...	1040	1820	995	.5	220	65	13	120	4
16...	1230	1750	1100	.0	210	63	13	130	4
24...	1100	1630	1040	1.0	220	65	13	130	4
MAR									
01...	1000	1680	966	.5	220	65	13	120	4
08...	1300	2210	930	3.0	180	53	12	110	4
15...	1400	2060	860	5.5	190	57	12	98	3
22...	1020	2330	861	5.5	180	54	12	94	3
29...	1000	2600	766	4.0	170	51	9.8	80	3
APR									
05...	1050	3230	576	6.5	140	43	8.8	65	2
09...	1125	3720	609	6.5	150	45	8.8	62	2
20...	1100	4270	542	7.5	170	49	12	56	2
27...	1400	3700	629	6.0	170	50	12	62	2
MAY									
01...	1220	3510	720	9.0	170	51	11	66	2
10...	1200	5250	542	11.0	160	47	11	45	2
17...	0900	21000	255	8.0	120	36	6.6	12	.5
23...	1900	24500	265	11.0	96	30	5.1	11	.5
JUN									
01...	1000	26100	215	9.0	95	30	4.8	9.8	.5
05...	1350	21700	247	9.0	92	28	5.2	12	.6
15...	0840	20300	238	10.5	100	31	5.4	13	.6
21...	0900	25200	180	11.0	95	30	5.2	12	.6
28...	1700	21100	242	13.0	89	28	4.8	13	.6
JUL									
03...	1255	21800	234	14.0	83	26	4.4	12	.6
11...	1400	17700	252	14.0	96	30	5.2	16	.8
20...	1200	10200	400	14.5	120	36	6.5	28	1
26...	1500	9170	396	17.0	140	44	7.5	30	1
AUG									
03...	1335	7100	510	--	140	43	8.1	40	2
10...	1000	5950	530	16.0	150	45	8.7	46	2
17...	1440	5060	455	18.0	150	46	8.7	53	2
23...	1600	5480	564	17.0	160	48	9.7	52	2
29...	0845	5600	556	15.5	150	47	8.7	45	2
SEP									
06...	1100	4690	618	15.5	160	48	8.7	54	2
14...	1010	3950	700	15.0	170	54	9.8	73	2
20...	1600	3120	820	16.5	220	65	13	94	3
28...	1300	2970	803	12.0	190	58	11	81	3

09085100 COLORADO RIVER BELOW GLENWOOD SPRINGS, CO--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE, FET-LAB (MG/L AS HCO3)	CARBONATE, FET-LAB (MG/L AS CO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)	SOLIDS, DISSOLVED (TONS PER DAY)
OCT								
06...	3.5	160	.000	120	190	600	.82	3730
14...	3.1	160	.000	120	170	560	.76	3300
20...	3.1	150	.000	110	140	500	.68	4770
25...	3.5	150	.000	120	150	510	.69	3640
NOV								
02...	3.0	150	.000	100	140	490	.67	3440
10...	2.9	150	.000	100	130	480	.65	2850
14...	2.9	140	.000	100	130	480	.65	3510
22...	2.8	140	.000	100	130	470	.64	3270
DEC								
02...	2.8	140	.000	98	130	470	.64	2920
06...	4.7	140	.000	100	150	500	.68	2740
15...	3.5	140	.000	110	150	500	.68	2770
22...	9.8	130	.000	110	170	550	.75	2320
30...	4.3	140	.000	100	170	530	.72	2790
JAN								
04...	3.5	140	.000	110	170	550	.75	2630
12...	3.9	140	.000	100	170	520	.71	2660
23...	3.9	140	.000	100	170	530	.72	2820
27...	3.1	130	.000	89	140	450	.61	2810
FEB								
03...	3.9	140	.000	110	170	550	.75	2660
10...	3.9	140	.000	110	170	550	.75	2700
16...	3.9	140	.000	100	180	560	.76	2650
24...	3.9	150	.000	110	170	560	.76	2460
MAR								
01...	3.5	140	.000	120	170	560	.76	2540
08...	3.1	120	.000	110	160	510	.69	3040
15...	3.1	130	.000	100	150	480	.65	2670
22...	3.1	120	.000	110	140	460	.63	2890
29...	2.7	120	.000	89	120	410	.56	2880
APR								
05...	2.3	110	.000	74	94	340	.46	2970
09...	2.3	110	.000	74	84	330	.45	3310
20...	3.5	120	.000	85	74	340	.46	3920
27...	3.1	130	.000	90	79	360	.49	3600
MAY								
01...	2.7	120	.000	88	92	370	.50	3510
10...	2.7	130	.000	74	63	310	.42	4390
17...	2.0	110	.000	33	12	160	.22	9070
23...	1.5	71	12	27	11	130	.18	8600
JUN								
01...	1.1	93	.000	26	11	130	.18	9160
05...	1.5	81	.000	29	13	130	.18	7620
15...	1.1	89	.000	31	14	140	.19	7670
21...	1.1	86	.000	30	12	130	.18	8850
28...	1.1	82	.000	31	14	130	.18	7410
JUL								
03...	1.1	76	.000	28	13	120	.16	7060
11...	1.1	82	.000	36	15	140	.19	6690
20...	1.5	94	.000	50	38	210	.29	5780
26...	1.9	110	.000	58	39	240	.33	5940
AUG								
03...	1.9	110	.000	62	53	260	.35	4980
10...	2.3	110	.000	68	66	290	.39	4660
17...	2.3	110	.000	69	77	310	.42	4240
23...	2.3	120	.000	76	73	320	.44	4730
29...	1.9	110	.000	69	69	300	.41	4540
SEP								
06...	2.3	120	.000	78	78	330	.45	4180
14...	3.5	130	.000	91	110	400	.54	4270
20...	5.8	150	.000	110	130	490	.67	4130
28...	4.6	140	.000	99	120	440	.60	3530

09085100 COLORADO RIVER BELOW GLENWOOD SPRINGS, CO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	996	868	864	871	989	955	659	660	215	237	454	577
2	980	874	857	888	1000	906	665	634	216	233	463	586
3	964	896	844	963	1060	869	668	611	233	226	470	598
4	956	902	844	965	1070	850	667	620	247	221	479	608
5	996	911	853	898	1060	865	637	607	253	216	489	616
6	1020	917	900	889	1050	849	624	598	245	214	500	623
7	1020	923	926	904	1040	812	620	606	239	216	509	621
8	1030	882	859	921	1030	877	620	606	237	216	518	626
9	1030	855	852	927	1020	901	614	599	243	212	527	621
10	900	868	865	919	997	871	632	530	246	223	537	617
11	---	874	870	978	1000	---	644	453	252	255	545	616
12	---	867	925	946	1010	---	645	372	248	258	552	616
13	---	850	953	927	1030	---	690	283	244	274	557	611
14	883	883	996	897	1050	---	696	259	242	291	560	604
15	844	889	919	868	1040	---	703	253	240	303	562	593
16	840	880	917	881	1050	843	685	241	237	320	569	586
17	846	877	916	895	1030	863	661	251	242	341	556	585
18	843	847	889	931	1050	873	605	243	246	361	546	577
19	832	848	888	957	1040	878	549	256	252	385	551	563
20	819	858	889	957	1040	901	559	264	244	404	561	---
21	834	854	908	958	1050	902	577	258	238	406	571	---
22	835	860	997	935	1060	869	615	273	241	396	575	---
23	845	881	1030	907	1040	875	621	238	239	385	571	---
24	850	912	1020	888	1040	860	600	258	242	388	563	---
25	860	880	1010	866	999	811	572	257	245	396	573	---
26	866	849	902	838	991	767	597	218	246	398	573	---
27	858	859	820	822	1020	770	625	192	246	407	562	---
28	871	881	826	849	1030	758	648	190	249	416	556	---
29	890	882	923	873	1000	757	653	191	246	426	553	---
30	878	880	1000	899	---	714	657	189	240	437	561	---
31	877	---	959	936	---	671	---	207	---	446	565	---
MEAN	902	877	910	908	1030	841	634	368	242	320	540	602

WTR YR 1984 MEAN 679 MAX 1070 MIN 189

09085100 COLORADO RIVER BELOW GLENWOOD SPRINGS, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	13.5	12.0	9.5	8.5	3.0	2.0	1.0	.5	1.0	.0	3.0	.5
2	12.5	11.5	9.0	8.0	4.0	3.0	.5	.0	1.0	.0	4.0	1.5
3	11.5	10.5	9.0	7.5	4.5	3.5	.5	.0	1.0	.0	3.5	2.0
4	12.0	10.0	9.0	7.0	4.0	3.0	1.0	.0	1.5	.0	2.0	.0
5	13.0	10.0	8.0	7.0	3.0	1.5	1.0	.0	1.5	.0	2.5	.0
6	13.5	12.0	8.5	7.0	1.5	1.0	1.0	.0	1.5	.0	3.0	.0
7	13.0	11.5	8.5	7.0	2.0	1.0	1.0	.0	1.5	.0	4.0	.0
8	13.0	11.0	8.0	6.5	2.0	1.5	1.0	.0	2.0	1.0	4.0	.5
9	13.5	12.0	6.0	5.0	2.5	1.5	1.0	.0	1.5	.5	3.0	1.5
10	12.0	9.5	6.0	4.5	3.5	2.5	.5	.0	1.5	.5	4.5	1.5
11	---	---	6.5	5.5	4.0	3.0	.5	.0	2.0	1.0	---	---
12	---	---	7.0	6.0	4.5	3.5	.5	.0	1.5	.5	---	---
13	---	---	7.5	6.5	3.5	2.5	.5	.0	2.0	1.0	---	---
14	10.5	9.5	7.0	6.0	2.5	1.5	1.0	.5	2.5	2.0	---	---
15	10.0	8.5	6.0	5.0	2.0	1.0	1.0	.0	2.0	1.0	5.5	4.5
16	10.0	8.0	5.0	4.0	1.5	1.0	.0	.0	2.0	.5	5.0	.0
17	9.5	8.0	5.5	4.0	1.5	.5	.5	.0	2.0	1.5	3.5	3.0
18	10.5	9.0	5.5	5.0	2.0	1.0	.0	.0	2.0	1.0	4.5	3.0
19	10.5	9.0	5.5	4.5	1.5	1.0	.0	.0	2.0	1.0	5.0	2.5
20	9.5	8.0	4.5	4.0	1.5	.0	.5	.0	1.5	.5	6.5	4.0
21	9.5	8.0	4.5	4.0	.0	.0	.5	.0	1.5	.5	7.5	5.0
22	9.5	8.0	4.0	2.5	.0	.0	.5	.0	2.0	.5	6.5	5.0
23	9.5	8.0	2.5	1.5	.5	.0	.5	.0	2.0	1.0	6.5	4.5
24	9.0	8.0	2.0	1.5	.0	.0	.5	.0	2.0	.5	7.5	5.0
25	9.0	8.5	2.5	2.0	.5	.0	1.0	.0	2.5	1.0	7.0	5.0
26	9.0	7.0	2.5	2.0	1.5	.5	1.5	.0	2.5	.5	5.0	3.5
27	9.0	7.0	2.0	1.5	1.5	1.0	1.0	.0	2.0	.0	5.5	4.5
28	8.5	7.5	2.5	1.0	1.0	.0	1.0	.5	2.5	.0	6.0	4.0
29	9.0	7.5	2.0	1.5	.0	.0	1.0	.0	3.0	.5	6.0	4.5
30	9.5	8.0	2.5	1.0	.5	.0	1.0	.0	---	---	6.5	5.5
31	9.5	8.5	---	---	.5	.0	1.0	.0	---	---	6.5	4.5
MONTH	13.5	7.0	9.5	1.0	4.5	.0	1.5	.0	3.0	.0	7.5	.0
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	6.5	5.0	10.0	8.0	---	---	15.5	13.0	18.0	17.0	18.0	15.5
2	6.0	4.5	10.0	8.5	---	---	16.0	13.5	18.0	16.5	18.0	16.0
3	6.0	5.0	10.0	8.5	---	---	16.0	14.0	18.5	16.5	17.5	15.0
4	7.5	4.5	9.5	9.0	---	---	16.0	13.5	17.5	16.0	16.5	13.5
5	7.5	6.0	9.0	8.5	---	---	16.0	13.5	17.5	15.5	18.0	13.5
6	7.5	6.0	10.0	8.5	---	---	16.5	14.0	17.5	16.0	17.0	15.0
7	8.5	6.5	10.5	8.0	---	---	16.0	14.0	17.5	15.5	16.5	14.0
8	9.0	7.0	11.0	8.5	---	---	15.5	14.0	18.0	16.0	17.5	13.0
9	8.5	6.5	12.5	9.5	---	---	15.0	14.0	18.0	16.5	18.0	13.5
10	8.0	6.0	13.0	11.0	---	---	16.0	13.5	18.5	15.5	16.5	13.5
11	8.0	6.5	13.0	11.5	---	---	18.0	13.5	18.5	17.0	17.5	14.0
12	6.5	5.5	12.5	10.5	---	---	---	---	17.5	16.5	---	---
13	8.0	6.0	11.0	9.0	---	---	---	---	17.0	16.0	---	---
14	9.0	6.5	11.5	9.0	---	---	---	---	19.0	15.5	---	---
15	9.5	7.0	10.5	9.0	---	---	---	---	18.5	15.5	---	---
16	10.5	7.5	10.0	8.5	---	---	---	---	17.5	16.5	15.5	12.0
17	11.0	8.0	10.5	8.0	---	---	---	---	20.0	17.0	17.5	11.5
18	11.0	9.0	10.0	8.0	---	---	---	---	20.5	18.0	---	---
19	10.0	8.5	10.5	8.0	---	---	---	---	19.0	16.5	---	---
20	8.5	6.0	11.0	8.5	---	---	---	---	19.5	16.5	---	---
21	6.5	5.0	11.0	9.0	---	---	---	---	17.5	16.0	---	---
22	8.0	5.0	11.0	9.0	---	---	---	---	17.5	16.5	---	---
23	9.5	7.0	11.5	9.0	---	---	---	---	17.5	15.5	---	---
24	11.0	9.0	11.5	9.5	---	---	---	---	17.0	15.0	---	---
25	9.5	7.0	11.0	9.5	---	---	---	---	16.5	14.0	---	---
26	7.0	5.5	11.0	8.5	---	---	---	---	16.5	14.5	---	---
27	6.5	4.5	---	---	---	---	17.5	16.0	17.0	15.5	---	---
28	5.5	4.5	---	---	18.0	10.5	17.5	16.0	17.0	15.5	---	---
29	7.0	5.0	---	---	16.0	13.5	17.5	16.0	17.5	15.5	---	---
30	8.5	7.0	---	---	15.5	14.0	18.0	16.5	18.0	16.0	---	---
31	---	---	---	---	---	---	18.0	16.5	18.5	16.5	---	---
MONTH	11.0	4.5	13.0	8.0	18.0	10.5	18.0	13.0	20.5	14.0	18.0	11.5
YEAR	20.5	.0										

09085200 CANYON CREEK ABOVE NEW CASTLE, CO

LOCATION.--(revised)Lat 39°36'19", long 107°26'52", in NW¼NW¼ sec.24, T.5 S., R.90 W., Garfield County, Hydrologic Unit 14010005, on right bank 200 ft upstream from diversion headgate, 0.4 mi upstream from East Canyon Creek, and 5.0 mi northeast of New Castle.

DRAINAGE AREA.--23.8 mi^2.

PERIOD OF RECORD.--March 1969 to current year.

REVISED RECORDS.--WRD Colo. 1973: 1972(M).

GAGE.--Water-stage recorder. Altitude of gage is 6,060 ft, from topographic map.

REMARKS.--Records good except those for winter period, which are fair. A few small diversions for irrigation of hay meadows above station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--15 years, 52.6 ft^3/s; 38,110 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 966 ft^3/s, June 19, 1983, gage height, 5.78 ft, (from floodmarks) site then in use; maximum gage height 7.60 ft, May 24, 1984 (due to shift control); minimum daily, 2.6 ft^3/s, Jan. 2, 1979.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 350 ft^3/s, and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
May 24	1800	*660	7.60	June 19	0100	490	7.55

Minimum daily discharge, 10 ft^3/s, Mar. 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	18	17	16	14	12	13	20	502	258	33	41
2	17	18	16	15	13	12	13	23	531	233	31	35
3	18	18	16	14	13	12	12	22	460	216	30	32
4	18	19	15	15	13	12	12	21	429	193	29	30
5	18	19	15	15	13	10	13	22	410	162	29	28
6	19	18	16	15	13	11	13	21	370	140	29	27
7	19	18	17	15	13	12	13	21	345	128	25	26
8	19	20	18	15	13	12	14	21	283	121	23	25
9	19	18	17	15	13	12	16	25	217	119	23	23
10	18	18	17	15	13	12	15	36	184	115	22	22
11	19	17	17	15	13	12	15	66	204	99	21	24
12	19	17	18	15	13	12	14	110	245	85	20	25
13	19	17	18	15	13	12	14	150	296	83	19	22
14	20	17	18	15	13	12	14	199	352	81	19	22
15	19	16	18	15	13	12	15	236	399	75	19	21
16	19	17	17	12	12	13	17	231	426	67	20	26
17	20	17	17	14	13	12	20	224	401	62	19	24
18	20	17	16	13	12	12	26	225	401	56	18	22
19	18	16	17	12	11	12	35	215	430	53	20	21
20	18	17	16	12	11	12	29	247	398	52	37	20
21	18	16	13	13	12	13	25	279	382	48	34	22
22	18	16	12	13	13	13	25	317	354	46	32	28
23	18	15	13	14	12	13	24	411	342	44	31	25
24	18	16	16	14	12	13	26	513	346	44	39	24
25	16	17	15	14	12	13	29	440	306	52	48	24
26	18	17	15	14	12	13	28	412	289	46	45	24
27	18	16	16	14	11	13	24	457	289	42	41	24
28	18	16	17	13	12	12	20	428	300	41	38	24
29	18	16	12	13	12	13	21	429	300	38	36	23
30	18	16	16	13	---	13	21	471	282	36	34	22
31	18	---	18	14	---	13	---	491	---	36	35	---
TOTAL	569	513	499	437	363	380	576	6783	10473	2871	899	756
MEAN	18.4	17.1	16.1	14.1	12.5	12.3	19.2	219	349	92.6	29.0	25.2
MAX	20	20	18	16	14	13	35	513	531	258	48	41
MIN	16	15	12	12	11	10	12	20	184	36	18	20
AC-FT	1130	1020	990	867	720	754	1140	13450	20770	5690	1780	1500

CAL YR 1983 TOTAL 26920 MEAN 73.8 MAX 860 MIN 10 AC-FT 53400
WTR YR 1984 TOTAL 25119 MEAN 68.6 MAX 531 MIN 10 AC-FT 49820

09089500 WEST DIVIDE CREEK NEAR RAVEN, CO

LOCATION.--Lat 39°19'52", long 107°34'46", in NE¼SW¼ sec.29, T.8 S., R.91 W., Mesa County, Hydrologic Unit 14010005, on left bank 10 ft, downstream from private road bridge, 0.8 mi upstream from Brook Creek, 8 mi south of Raven, and 16 mi south of Silt.

DRAINAGE AREA.--64.6 mi^2.

PERIOD OF RECORD.--October 1955 to current year.

REVISED RECORDS.--WSP 2124: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 7,050 ft, from topographic map.

REMARKS.--Records good except those for winter period, which are poor. Natural flow of stream affected by water imported from Thompson Creek (Roaring Fork basin), Muddy Creek (Muddy Creek basin), and Buzzard Creek (Plateau Creek basin). Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--29 years, 34.6 ft^3/s; 25,070 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1410 ft^3/s, May 14, 1984, gage height, 5.83 ft, from rating curve extended above 670 ft^3/s; no flow at times in most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 160 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
May 14	2100	*1,410	5.83	July 9	1900	247	4.10

Minimum daily discharge, 1.5 ft^3/s, Dec. 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.2	4.8	6.0	3.5	2.9	3.0	6.3	48	500	93	39	10
2	6.7	4.6	6.0	3.4	2.8	3.6	7.7	76	405	84	24	11
3	7.5	4.3	5.8	3.7	2.9	4.7	11	72	360	78	19	9.2
4	7.4	4.2	5.6	3.9	3.0	4.5	8.6	102	330	68	17	8.7
5	6.7	4.3	5.6	4.0	2.9	3.5	7.2	106	306	58	15	7.6
6	6.6	4.2	5.0	3.9	2.8	3.2	12	110	289	55	21	6.8
7	6.0	4.1	5.6	3.9	2.8	3.4	12	123	475	57	24	6.2
8	5.6	8.8	5.8	4.0	2.7	3.9	17	160	380	95	15	6.6
9	5.6	7.8	6.0	4.2	2.8	4.2	28	254	380	136	12	6.5
10	6.0	7.8	6.0	3.8	2.6	3.6	22	412	346	150	11	6.0
11	6.3	7.8	5.8	3.8	3.0	3.4	23	592	346	88	10	5.7
12	5.5	7.8	5.8	3.9	2.5	3.4	18	750	318	70	10	12
13	5.2	7.6	5.4	3.9	2.2	2.8	14	859	322	81	9.9	10
14	11	7.4	5.4	3.6	2.4	3.3	14	932	326	129	9.2	8.4
15	9.0	6.0	5.4	3.4	2.6	4.2	19	841	330	123	8.7	7.4
16	8.4	6.0	5.2	3.6	2.4	4.5	29	717	275	94	11	12
17	9.0	6.0	4.5	3.7	2.8	3.2	50	681	240	72	9.8	14
18	9.6	5.9	3.1	3.6	2.8	5.4	83	682	206	59	8.9	9.0
19	9.0	6.0	2.4	3.6	2.4	4.6	96	642	198	56	12	7.4
20	6.8	6.0	1.5	3.7	2.0	3.6	71	627	188	47	20	7.4
21	5.9	6.0	2.8	3.7	1.9	10	47	668	176	43	17	8.5
22	5.8	5.6	3.0	3.7	2.2	11	35	653	162	48	15	12
23	5.4	3.7	2.9	3.8	2.5	12	42	653	146	39	12	9.0
24	5.2	4.8	3.1	3.7	2.2	12	78	674	135	56	36	8.4
25	4.8	6.0	3.3	3.4	2.4	9.3	68	650	129	61	20	9.6
26	4.8	5.8	3.5	3.3	2.4	17	63	578	122	52	17	9.3
27	4.8	5.6	3.4	3.3	2.0	10	45	536	109	60	13	9.3
28	4.8	5.6	3.2	3.0	1.9	12	35	512	101	45	10	7.6
29	4.3	5.8	3.2	2.8	2.1	9.7	34	485	98	57	8.9	7.1
30	4.6	6.0	3.5	2.8	---	6.7	34	512	99	50	8.3	6.5
31	4.7	---	3.7	2.8	---	7.9	---	512	---	32	7.6	---
TOTAL	200.2	176.3	137.5	111.4	72.9	193.6	1029.8	15219	7797	2236	471.3	259.2
MEAN	6.46	5.88	4.44	3.59	2.51	6.25	34.3	491	260	72.1	15.2	8.64
MAX	11	8.8	6.0	4.2	3.0	17	96	932	500	150	39	14
MIN	4.3	3.7	1.5	2.8	1.9	2.8	6.3	48	98	32	7.6	5.7
AC-FT	397	350	273	221	145	384	2040	30190	15470	4440	935	514

CAL YR 1983 TOTAL 25549.1 MEAN 70.0 MAX 760 MIN 1.5 AC-FT 50680
WTR YR 1984 TOTAL 27904.2 MEAN 76.2 MAX 932 MIN 1.5 AC-FT 55350

09093000 PARACHUTE CREEK NEAR PARACHUTE, CO

LOCATION.--Lat 39°34'26", long 108°06'39", in SE¼NE¼ sec.36, T.5 S., R.96 W., Garfield County, Hydrologic Unit 14010006, on left bank 0.70 mi upstream from Gardner Gulch, 0.20 mi downstream from confluence of West and East Forks, and 8.5 mi north of Parachute.

DRAINAGE AREA.--141 mi^2.

PERIOD OF RECORD.--Streamflow records, October 1948 to September 1954, October 1964 to September 1970, April 1975 to current year. Prior to October 1979, published as near Grand Valley. Water-quality data available, November 1974 to October 1981.

GAGE.--Water-stage recorder. Altitude of gage is 5,795 ft, from topographic map. Prior to Apr. 1, 1975, at sites 0.05 mi downstream, at different datums.

REMARKS.--Records fair except those for period of no gage-height record, 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.

AVERAGE DISCHARGE.--21 years (water years 1949-54, 1965-70, 1976-84), 27.1 ft^3/s; 19,630 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,310 ft^3/s, Aug. 19, 1977, gage height, 6.11 ft, from highwater mark, from rating curve extended above 150 ft^3/s, on basis of slope-area measurements at gage heights 4.25 ft, and 6.11 ft; no flow Dec. 2, 1948, many days 1964-67 and 1976-77.

EXTREMES FOR CURRENT YEAR.--Maximum discharge recorded, 340 ft^3/s at 1700 May 9, gage height, 3.40 ft, peak above base of 150 ft^3/s, a higher peak on May 17 occured after gage was destroyed, discharge and gage height unknown; minimum daily, 3.8 ft^3/s, Jan. 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	10	6.3	6.9	5.8	6.9	9.6	98	204	103	53	35
2	18	10	6.9	6.9	6.0	6.9	9.0	110	191	95	51	32
3	17	10	6.9	6.9	6.0	6.9	9.0	121	185	95	50	30
4	16	10	6.9	6.9	6.0	6.9	8.7	144	200	94	50	30
5	14	11	6.9	6.3	6.3	6.9	9.6	184	208	94	47	30
6	14	11	6.6	6.0	6.3	6.6	10	212	203	92	57	31
7	13	11	6.6	6.1	6.3	6.6	10	230	350	90	56	30
8	13	14	6.6	6.2	6.3	6.8	11	250	630	86	53	30
9	13	11	5.5	6.0	6.0	6.9	16	285	570	85	51	29
10	13	11	5.4	5.6	6.0	7.2	15	300	510	85	48	28
11	13	11	5.4	5.6	6.0	7.2	18	340	470	82	47	27
12	13	11	5.6	5.5	6.0	7.2	16	380	420	81	45	27
13	12	11	5.8	5.5	6.0	6.9	20	980	390	79	43	26
14	17	11	6.0	5.6	6.3	6.9	21	1400	347	86	43	26
15	15	9.0	6.3	5.5	6.3	7.2	26	1500	318	85	43	25
16	14	9.0	6.4	5.4	6.3	7.5	35	1600	292	82	43	25
17	14	9.6	6.6	5.3	6.3	7.5	50	1700	266	77	43	25
18	13	9.0	6.9	3.8	6.3	7.2	79	1500	240	76	42	24
19	13	8.7	7.3	4.0	6.6	7.5	112	1000	218	73	45	23
20	13	9.0	7.4	4.3	6.6	7.2	104	870	198	70	46	24
21	13	9.8	7.6	4.7	6.6	7.8	86	690	185	67	40	23
22	12	8.2	7.8	4.6	6.9	8.1	77	585	170	64	38	24
23	12	7.6	7.6	4.6	6.6	8.4	104	512	153	62	35	22
24	11	7.2	7.4	5.0	6.9	8.1	104	458	141	60	35	22
25	11	7.3	7.4	5.3	6.9	8.4	130	425	130	59	35	22
26	11	7.2	7.4	5.4	6.9	8.4	132	360	123	58	34	22
27	11	7.0	7.6	5.6	6.9	8.4	118	320	118	57	32	22
28	11	6.9	7.4	5.7	6.9	8.1	110	285	115	54	31	21
29	10	6.6	7.2	5.9	6.9	8.4	98	252	105	53	31	21
30	11	6.6	7.0	6.0	---	9.0	95	217	105	58	30	21
31	10	---	7.0	5.9	---	8.7	---	203	---	57	29	---
TOTAL	406	281.7	209.7	173.0	185.2	232.7	1642.9	17511	7755	2359	1326	777
MEAN	13.1	9.39	6.76	5.58	6.39	7.51	54.8	565	259	76.1	42.8	25.9
MAX	18	14	7.8	6.9	6.9	9.0	132	1700	630	103	57	35
MIN	10	6.6	5.4	3.8	5.8	6.6	8.7	98	105	53	29	21
AC-FT	805	559	416	343	367	462	3260	34730	15380	4680	2630	1540

CAL YR 1983	TOTAL	33267.0	MEAN 91.1	MAX 1300	MIN 4.4	AC-FT	65990	
WTR YR 1984	TOTAL	32859.2	MEAN 89.8	MAX 1700	MIN 3.8	AC-FT	65180	

09093700 COLORADO RIVER NEAR DE BEQUE, CO

LOCATION.--Lat 39°21'45", long 108°09'07", in NE¼SW¼ sec.7, T.8 S., R.96 W., Mesa County, Hydrologic Unit 14010006, on left bank 3.0 mi downstream from Alkali Creek and 3.8 mi northeast of De Beque.

DRAINAGE AREA.--7,370 mi².

PERIOD OF RECORD.--Streamflow records, October 1966 to current year. Water-quality data available, August 1973 to September 1982. Sediment data available, October 1974 to September 1976.

GAGE.--Water-stage recorder. Altitude of gage is 4,940 ft, from topographic map.

REMARKS.--Records good except those for period of no gage-height record, which are fair. Natural flow of stream affected by transmountain diversions, storage reservoirs, power development, and diversions for irrigation of about 158,000 acres. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--18 years, 3,858 ft³/s; 2,795,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 38,200 ft³/s, May 26, 1984, gage height, 14.83 ft; minimum daily, 914 ft³/s, Dec. 22, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 38,200 ft³/s at 1230 May 26, gage height, 14.83 ft; minimum daily, 1,700 ft³/s, Jan. 19., Feb. 21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2390	2500	2500	2400	1910	1870	3250	4000	32000	23800	8730	5780
2	2370	2510	2530	2500	1900	1890	3280	4360	32300	23500	8310	6120
3	2480	2500	2540	2250	1750	1950	3180	4850	30600	23400	7790	5740
4	2510	2470	2540	2050	1800	1980	3120	4820	29000	22800	7380	5260
5	2440	2470	2510	2350	1800	1890	3260	5090	27500	21500	6990	5090
6	2300	2440	2370	2450	1800	1850	3480	5300	26000	20000	6940	4940
7	2290	2440	2220	2400	1810	1950	3550	5210	28500	18500	6990	4800
8	2260	2680	2440	2400	1850	1970	3610	5090	26700	17400	6840	4730
9	2220	2800	2540	2350	1900	2000	3790	5400	24400	17800	6600	4450
10	2260	2610	2480	2400	1950	2040	3750	6480	21900	18900	6310	4210
11	2290	2540	2470	2350	1900	2060	3710	8650	20700	19800	6070	4100
12	2340	2550	2370	2200	1900	2090	3570	11700	20400	17700	5780	3980
13	2300	2580	2250	2200	1900	2060	3370	14900	20300	15900	5830	3940
14	2580	2600	2220	2300	1920	2130	3280	18200	21600	15400	5810	3700
15	2680	2550	2260	2400	1920	2290	3260	22800	23800	16500	5640	3590
16	2680	2580	2390	2350	1870	2460	3430	25900	25700	14600	5780	3700
17	2660	2470	2290	2150	1830	2360	3710	26400	25800	13500	5710	3920
18	2640	2480	2410	2100	1890	2320	4250	25900	24700	12200	5230	3840
19	2640	2540	2440	1700	1820	2290	4990	24000	24900	11300	5470	3610
20	2680	2530	2430	1750	1790	2290	5020	23700	25600	10700	6190	3450
21	2640	2550	2220	1710	1700	2290	4620	25400	25500	10100	6480	3300
22	2620	2570	1940	1850	1770	2430	4250	27000	25700	9830	6340	3320
23	2610	2440	1920	1900	1800	2470	4120	29000	25500	9270	6050	3400
24	2570	2330	2000	2050	1810	2470	4470	31300	25000	9440	6050	3350
25	2540	2410	1980	2150	1820	2600	5400	34600	24800	9920	6650	3320
26	2510	2430	2390	2300	1860	2780	5180	37400	24100	9920	6960	3320
27	2460	2510	2820	2250	1820	2680	4710	36300	24000	9830	6530	3350
28	2480	2440	2610	2150	1780	2740	4290	34300	23600	9200	6220	3330
29	2510	2440	2250	2100	1820	2740	4080	32000	23100	8960	6020	3260
30	2480	2460	1970	2050	---	2860	4020	31300	23300	9090	5810	3250
31	2500	---	2080	2050	---	3090	---	31600	---	8960	5520	---
TOTAL	76930	75420	72380	67610	53390	70890	118000	602950	757000	459720	199020	122150
MEAN	2482	2514	2335	2181	1841	2287	3933	19450	25230	14830	6420	4072
MAX	2680	2800	2820	2500	1950	3090	5400	37400	32300	23800	8730	6120
MIN	2220	2330	1920	1700	1700	1850	3120	4000	20300	8960	5230	3250
AC-FT	152600	149600	143600	134100	105900	140600	234100	1196000	1502000	911900	394800	242300

CAL YR 1983 TOTAL 2153010 MEAN 5899 MAX 32000 MIN 1300 AC-FT 4270000
WTR YR 1984 TOTAL 2675460 MEAN 7310 MAX 37400 MIN 1700 AC-FT 5307000

NOTE.--NO GAGE-HEIGHT RECORD JAN. 1 TO FEB. 14.

09095500 COLORADO RIVER NEAR CAMEO, CO

LOCATION.--Lat 39°14'20", long 108°16'00", in SW¼SW¼ sec.30, T.9 S., R.97 W., Mesa County, Hydrologic Unit 14010006, on left bank 100 ft north of U.S. Highways 6 and 24, 0.5 mi upstream from Jackson Canyon, 5.9 mi upstream from Grand Valley project diversion dam, and 7 mi northeast of Cameo.

DRAINAGE AREA.--8,050 mi^2, approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1933 to current year.

REVISED RECORDS.--WRD Colo. 1973: 1970.

GAGE.--Water-stage recorder. Datum of gage is 4,813.73 ft, National Geodetic Vertical Datum of 1929. Prior to Oct. 10, 1934, nonrecording gage on river and water-stage recorder on Highline Canal, about 10 mi downstream at different datum. Oct. 10, 1934, to Feb. 27, 1958, water-stage recorder at site 3.0 mi downstream at datum 22.55 ft, lower.

REMARKS.--Records fair except those for winter period and those for period of no gage-height record or periods of indefinite stage-discharge relationship, which are poor. Natural flow of stream affected by transmountain diversions, storage reservoirs, power development, and diversion for irrigation of about 160,000 acres.

AVERAGE DISCHARGE.--51 years, 3,900 ft^3/s; 2,826,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 39,300 ft^3/s, May 26, 1984, gage height, 14.36 ft, minimum daily, 700 ft^3/s, Dec. 29, 1939.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 39,300 ft^3/s at 1200 May 26, gage height, 14.36 ft, minimum daily, 1,700 ft^3/s, Jan. 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2350	2540	2460	2520	2000	2270	3540	4260	32500	24800	9470	5820
2	2330	2560	2580	2540	2000	2310	3590	4590	32700	25200	8560	6200
3	2400	2540	2580	2290	1900	2390	3500	4990	30800	24100	7880	5920
4	2440	2520	2600	2110	1950	2400	3450	4990	29000	23500	7390	5630
5	2420	2480	2560	2400	2000	2310	3520	5240	27700	22200	6990	5320
6	2290	2480	2440	2500	2000	2220	3700	5450	26300	20500	6960	5190
7	2290	2460	2290	2440	2000	2350	3800	5450	29200	18900	7020	5020
8	2270	2720	2420	2420	2050	2400	3820	5270	27500	17700	6880	4940
9	2220	2760	2560	2390	2200	2460	4000	5500	24800	18200	6660	4700
10	2240	2620	2520	2420	2440	2540	3980	6570	22100	19000	6460	4450
11	2290	2540	2520	2370	2480	2540	3960	9220	21100	20200	6160	4300
12	2330	2540	2480	2170	2520	2580	3890	13200	20600	18200	6110	4200
13	2330	2560	2330	2200	2370	2580	3600	17700	20700	16500	5970	4150
14	2620	2600	2290	2330	2400	2620	3510	21200	22100	16100	5970	3900
15	2680	2560	2310	2420	2390	2830	3510	25200	24200	17300	5740	3800
16	2680	2420	2440	2330	2310	2930	3630	28000	26500	15500	5840	3900
17	2660	2520	2330	2110	2260	2850	3890	28500	26500	14300	6060	4100
18	2640	2500	2460	2060	2290	2780	4360	27500	25800	12900	5580	4000
19	2640	2600	2500	1700	2240	2720	5040	25500	25500	11600	5690	3800
20	2700	2550	2480	1850	2170	2700	5120	24500	26100	11200	6410	3600
21	2680	2580	2370	1800	2100	2680	4860	26000	25900	10500	6630	3500
22	2640	2600	2080	1900	2150	2850	4520	27800	26100	10400	6540	3550
23	2640	2500	1990	2000	2180	2890	4360	29500	26200	9910	6240	3600
24	2620	2400	2080	2150	2200	2850	4620	31900	26200	9810	6400	3550
25	2600	2400	2040	2300	2200	2930	5450	35200	26000	10500	6700	3550
26	2580	2560	2390	2400	2260	3110	5370	38000	25700	10600	7190	3410
27	2540	2520	2720	2350	2220	3090	4740	36900	24900	10600	6740	3530
28	2540	2460	2720	2200	2150	3090	4540	34800	24600	9910	6240	3510
29	2560	2440	2480	2200	2220	3090	4320	32500	24000	9570	6080	3530
30	2520	2460	1980	2150	---	3180	4260	31500	23500	9630	5690	3460
31	2560	---	2180	2100	---	3450	---	32200	---	9570	5450	---
TOTAL	77300	75990	74180	69120	63650	83990	124450	629130	774800	478900	203700	128130
MEAN	2494	2533	2393	2230	2195	2709	4148	20290	25830	15450	6571	4271
MAX	2700	2760	2720	2540	2520	3450	5450	38000	32700	25200	9470	6200
MIN	2220	2400	1980	1700	1900	2220	3450	4260	20600	9570	5450	3410
AC-FT	153300	150700	147100	137100	126200	166600	246800	1248000	1537000	949900	404000	254100

CAL YR 1983 TOTAL 2225390 MEAN 6097 MAX 33500 MIN 1370 AC-FT 4414000
WTR YR 1984 TOTAL 2783340 MEAN 7605 MAX 38000 MIN 1700 AC-FT 5521000

09095500 COLORADO RIVER NEAR CAMEO, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1933 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: December 1935 to current year.
WATER TEMPERATURES: April 1949 to current year.

INSTRUMENTATION.--Water-quality monitor since October 1982.

REMARKS.--Daily maximum and minimum specific-conductance data available in district office.

COOPERATION.--Chemical-quality data furnished by Bureau of Reclamation.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum daily, 1,970 micromhos Jan. 19, 1940; minimum daily, 230 micromhos June 2, 3, 1984.
WATER TEMPERATURES: Maximum, 24°C Aug. 16, 1962; minimum, freezing point on many days during winter months.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 1,160 micromhos Feb. 23; minimum, 230 micromhos June 2, 3.
WATER TEMPERATURES: Maximum, 21.5°C several days during July and August; minimum, freezing point many days during winter months.

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)
OCT										
26...	1335	2590	920	8.4	8.5	9.8	240	67	18	98
NOV										
17...	1405	2580	920	8.4	4.5	10.4	230	65	17	98
DEC										
15...	1200	2130	995	8.4	2.0	11.4	240	68	18	120
JAN										
06...	1305	2580	940	8.2	.0	12.1	230	66	15	110
APR										
11...	1300	4010	662	8.2	9.0	9.2	180	49	13	67
25...	1000	5580	606	8.0	10.5	8.7	190	52	15	65
MAY										
07...	1305	5460	626	8.0	9.0	9.3	210	55	18	65
24...	1300	32000	270	7.7	13.0	8.4	110	30	8.0	20
JUN										
06...	1000	26400	260	--	10.0	--	100	30	7.0	20
20...	1020	25800	280	--	13.0	--	100	29	7.0	15
JUL										
09...	1330	17300	325	7.8	16.0	8.1	100	30	6.9	21
AUG										
09...	0930	6560	520	7.8	18.5	7.9	160	46	11	47
SEP										
06...	1000	4860	657	7.6	17.0	7.8	180	52	13	60

09095500 COLORADO RIVER NEAR CAMEO, CO--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE, FET-LAB (MG/L AS HCO3)	CAR-BONATE, FET-LAB (MG/L AS CO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)
OCT									
26...	3	2.4	170	.000	140	130	530	.72	3710
NOV									
17...	3	2.4	170	.000	130	130	530	.72	3690
DEC									
15...	3	3.1	170	.000	140	160	600	.82	3450
JAN									
06...	3	2.7	170	.000	130	140	540	.73	3760
APR									
11...	2	2.0	140	.000	110	79	380	.52	4110
25...	2	3.5	150	.000	98	69	380	.52	5730
MAY									
07...	2	5.5	160	.000	110	62	390	.53	5750
24...	.9	1.6	120	.000	33	11	160	.22	13800
JUN									
06...	.9	1.1	100	.000	37	13	160	.22	11400
20...	.7	1.5	100	.000	37	11	150	.20	10400
JUL									
09...	.9	1.5	94	.000	42	23	170	.23	7940
AUG									
09...	2	2.3	120	.000	79	58	300	.41	5310
SEP									
06...	2	4.6	130	.000	98	77	370	.50	4860

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT					
04...	1230	2440	102	672	--
14...	1200	2620	3880	27400	--
21...	1045	2680	47	340	--
26...	1330	2590	36	252	--
NOV					
04...	1530	2520	26	177	--
10...	1500	2580	101	704	--
17...	1400	2370	64	410	--
23...	1200	2400	31	201	--
DEC					
01...	1100	2420	22	144	--
09...	1200	2560	31	214	--
15...	1200	2130	29	167	--
20...	1200	2480	28	187	--
JAN					
06...	1300	2580	182	1270	--
FEB					
15...	1400	2400	490	3180	--
24...	1400	2130	30	173	--
MAR					
08...	1400	2420	104	680	--
APR					
06...	1100	3730	243	2450	--
11...	1300	4010	408	4420	--
20...	1430	5200	903	12700	--
25...	1215	5580	1030	15500	95
MAY					
03...	0945	4990	1540	20700	92
07...	1300	5460	980	14400	88
16...	1200	27300	4210	310000	82
24...	1200	32000	1320	114000	81
JUN					
01...	1130	30600	574	47400	73
06...	0955	26400	486	34600	23
11...	1330	20000	859	46400	55
20...	1015	25800	471	32800	52
27...	0910	23900	317	20500	54
JUL					
03...	0925	23600	282	18000	59
09...	1130	17300	331	15500	52
18...	1100	12800	243	8400	58
24...	1250	9720	205	5380	57
AUG					
01...	1230	9470	498	12700	84
09...	1055	6560	175	3100	78
15...	1050	5690	168	2580	71
23...	0850	6300	206	3500	81
28...	1250	6160	132	2200	74
SEP					
06...	1130	4860	69	905	84
12...	1050	4200	37	420	81
19...	1145	3800	55	564	83
26...	1100	3360	124	1120	89

09095500 COLORADO RIVER NEAR CAMEO, CO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1030	932	913	---	---	1090	739	708	254	271	480	636
2	1040	929	893	---	---	1080	709	725	247	267	538	622
3	1040	928	907	---	---	1080	687	685	246	267	534	614
4	1020	927	893	---	---	1070	690	650	246	269	539	627
5	1010	933	895	---	---	1060	701	651	251	275	643	651
6	1010	947	897	---	---	1070	672	629	267	291	556	---
7	---	956	924	---	---	1090	648	623	340	304	527	---
8	---	947	973	918	---	1030	646	639	326	319	519	---
9	---	914	923	918	---	970	652	645	338	325	524	---
10	---	882	896	869	---	963	651	617	346	322	546	---
11	---	895	902	866	---	961	669	548	352	310	565	---
12	---	910	898	907	---	969	683	474	352	329	582	---
13	---	911	932	---	---	965	676	387	349	346	604	740
14	---	907	968	---	---	979	713	366	332	369	609	737
15	990	930	997	---	---	1000	716	384	310	356	607	769
16	970	935	938	---	1030	937	718	366	295	375	596	793
17	938	900	916	---	1040	928	702	355	292	388	588	799
18	913	948	940	---	1060	955	666	346	300	395	609	778
19	894	911	912	---	1040	968	612	339	299	392	638	782
20	879	910	902	---	1060	959	588	336	297	387	690	803
21	858	909	863	---	1070	963	603	326	295	392	603	828
22	870	913	810	---	1100	954	625	307	286	385	574	855
23	884	918	853	---	1130	932	648	287	279	391	588	856
24	902	938	882	---	1080	913	634	292	278	451	607	844
25	920	960	915	---	1080	905	604	295	276	465	610	849
26	919	945	974	---	1080	869	589	292	277	466	574	852
27	926	909	905	---	1070	829	625	275	275	454	553	862
28	931	904	---	---	1080	811	653	274	274	451	565	864
29	932	917	---	---	1100	803	681	273	274	449	581	872
30	938	925	---	---	---	795	696	271	272	451	592	885
31	933	---	---	---	---	779	---	266	---	459	602	---
MEAN	946	923	912	896	1070	957	663	440	294	367	579	779

WTR YR 1984 MEAN 695 MAX 1130 MIN 246

09095500 COLORADO RIVER NEAR CAMEO, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	15.0	14.0	11.5	9.0	2.0	1.0	.0	.0	.0	.0	4.5	2.0
2	14.5	13.5	10.5	9.5	3.5	1.5	.0	.0	.0	.0	5.5	2.5
3	13.5	12.5	10.0	8.0	3.5	2.5	.0	.0	.0	.0	6.0	4.0
4	14.0	11.5	10.0	7.5	4.0	3.0	.0	.0	.0	.0	5.0	3.0
5	15.0	11.5	9.0	7.5	2.5	1.5	.0	.0	.0	.0	4.0	1.0
6	15.0	12.0	9.0	7.0	1.5	.5	.0	.0	.0	.0	4.5	1.5
7	---	---	9.5	7.0	.5	.5	.0	.0	.0	.0	5.0	2.0
8	---	---	9.0	7.0	.5	.5	.0	.0	.0	.0	5.5	2.0
9	---	---	7.0	5.5	1.5	.5	.0	.0	.0	.0	6.0	3.0
10	---	---	7.0	5.5	2.5	1.5	.0	.0	.0	.0	6.5	3.5
11	---	---	6.5	5.0	3.0	2.0	.0	.0	.0	.0	6.5	4.5
12	---	---	7.0	6.0	4.0	2.5	.0	.0	.0	.0	6.5	4.5
13	---	---	8.5	6.5	3.5	2.5	.0	.0	.0	.0	8.0	4.5
14	---	---	8.0	6.5	2.5	2.0	.0	.0	2.0	1.0	6.5	5.5
15	11.5	9.5	6.5	5.0	3.0	2.0	.0	.0	3.0	2.0	7.5	5.5
16	11.5	9.0	6.0	4.5	2.0	.5	.0	.0	3.0	1.0	8.0	6.0
17	11.5	9.0	5.0	4.0	2.0	1.0	.0	.0	3.0	2.0	6.5	5.0
18	12.5	10.0	5.5	4.5	2.0	1.5	.0	.0	3.0	1.0	5.5	4.5
19	11.5	10.0	5.0	4.0	2.0	1.5	.0	.0	3.0	.5	7.5	3.5
20	11.5	9.0	4.5	3.5	1.5	.5	.0	.0	2.5	.5	9.0	5.0
21	11.5	9.0	4.0	3.0	.5	.5	.0	.0	3.0	.5	10.0	6.0
22	11.5	9.0	3.0	2.5	.5	.5	.0	.0	3.0	1.0	8.0	7.0
23	11.5	9.0	2.5	1.0	.5	.0	.0	.0	3.0	1.0	9.0	6.0
24	11.5	9.0	2.0	.5	.0	.0	.0	.0	2.5	1.0	10.0	6.5
25	11.0	8.5	1.5	1.0	.0	.0	.0	.0	2.5	1.0	9.5	7.5
26	11.0	8.5	2.0	1.0	.0	.0	.0	.0	4.0	1.5	8.0	6.5
27	10.5	8.5	1.5	.5	.0	.0	.0	.0	3.5	1.0	8.0	6.0
28	10.5	8.0	2.0	1.0	.0	.0	.0	.0	4.0	1.0	8.5	5.0
29	10.5	8.5	2.0	1.0	.0	.0	.0	.0	4.5	1.5	9.0	6.5
30	10.0	8.5	2.0	1.0	.0	.0	.0	.0	---	---	8.5	6.5
31	11.0	9.0	---	---	.0	.0	.0	.0	---	---	8.5	6.0
MONTH	15.0	8.0	11.5	.5	4.0	.0	.0	.0	4.5	.0	10.0	1.0

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	8.5	7.0	11.5	9.0	13.5	12.5	16.0	14.5	21.5	19.0	20.0	18.5
2	7.5	6.5	10.5	10.0	13.5	11.5	17.5	14.5	21.5	19.0	19.0	17.5
3	8.0	5.5	11.5	9.0	13.0	12.0	17.5	15.5	21.5	19.0	18.5	16.5
4	9.0	6.0	11.5	10.0	13.0	11.5	17.5	15.5	21.0	18.5	18.5	16.5
5	10.0	7.0	11.0	9.5	12.0	11.0	18.0	15.5	20.5	19.0	19.0	17.0
6	9.5	8.5	11.0	9.5	11.0	10.0	18.0	15.5	20.5	18.5	---	---
7	11.0	8.5	11.5	9.0	10.5	9.5	18.5	16.0	21.0	18.5	---	---
8	11.5	9.5	12.0	9.5	10.5	9.0	18.0	16.0	21.0	18.5	---	---
9	10.5	8.5	13.0	10.5	13.0	10.0	18.0	16.0	21.0	19.0	---	---
10	10.0	7.5	14.0	11.5	14.5	11.5	18.5	16.0	21.0	18.5	---	---
11	10.5	8.5	14.5	12.5	16.0	13.5	18.5	16.0	21.0	18.5	---	---
12	10.0	7.5	14.5	12.5	17.0	14.5	18.5	16.0	20.5	19.0	---	---
13	10.5	7.5	13.5	12.0	17.0	15.0	18.5	16.5	20.5	19.0	20.0	17.5
14	11.0	8.0	13.5	11.5	17.0	15.0	19.0	17.0	20.0	18.0	19.5	17.5
15	11.5	8.5	12.5	12.0	16.5	15.0	18.0	16.0	20.0	18.5	20.0	18.0
16	12.5	9.5	13.0	11.0	15.5	13.5	19.0	16.0	20.5	18.5	18.5	17.5
17	13.0	10.0	13.0	10.5	15.0	12.5	20.0	17.0	20.5	18.5	19.0	16.5
18	13.5	11.5	12.5	11.5	15.0	13.0	20.0	17.0	21.0	19.5	19.5	17.5
19	12.5	9.5	13.0	10.5	14.5	13.0	20.5	17.0	20.0	19.0	20.0	17.5
20	9.5	8.5	14.0	11.5	15.0	13.0	21.0	18.0	20.0	18.5	19.5	17.5
21	9.5	7.5	13.5	12.5	15.0	13.0	21.0	18.0	18.5	17.0	19.5	18.0
22	10.0	7.0	14.0	12.0	15.0	13.0	20.5	18.5	19.0	16.5	19.0	17.0
23	11.0	8.0	14.5	12.5	15.0	13.0	20.5	18.0	19.0	17.5	18.0	17.0
24	12.0	10.5	14.5	13.0	15.5	13.5	21.5	19.0	19.5	18.0	17.5	15.0
25	11.5	8.0	15.0	13.5	14.5	13.5	21.0	18.5	19.0	17.5	15.0	13.5
26	8.0	7.0	15.0	13.0	14.5	12.5	20.5	18.5	19.5	17.0	14.5	13.0
27	8.5	6.0	15.5	13.5	15.5	13.0	20.5	18.5	20.0	17.5	15.0	12.0
28	7.5	6.5	15.5	14.0	16.0	14.0	21.0	18.5	21.0	18.5	14.0	12.5
29	8.0	5.5	16.0	14.0	17.0	14.5	21.0	18.5	21.0	19.0	13.0	10.5
30	10.0	7.5	17.0	15.0	16.0	15.0	21.5	18.5	20.5	18.5	12.0	10.0
31	---	---	16.0	13.5	---	---	21.5	18.5	20.5	18.5	---	---
MONTH	13.5	5.5	17.0	9.0	17.0	9.0	21.5	14.5	21.5	16.5	20.0	10.0
YEAR	21.5	.0										

09095526 GOVERNMENT HIGHLINE CANAL AT 16 ROAD, NEAR LOMA, CO

LOCATION.--Lat 39°15'27" long 108°45'30", in NE¼SE¼ sec.12, T.2 N., R.3 W., Ute Meridian, Mesa County, Hydrologic Unit 14010005, on right bank 792 ft downstream from county bridge on 16 Road, 0.4 mi north of Q Road, and 5.1 mi northeast of Loma.

PERIOD OF RECORD.--October 1975 to current year.

GAGE.--Water-stage recorder and Marsh-McBirney velocity meter. Altitude of gage is 4,740 ft, from topographic map. Oct. 1975 to Mar. 30, 1976, nonrecording gage 792 ft upstream, at different datum, Mar. 31, 1976 to Apr. 1, 1981, gage at site 200 ft upstream, at different datum.

REMARKS.--Records fair except those for period of no gage height record, which are poor. Government Highline Canal diverts water from the Colorado River in SE¼NW¼ sec.13, T.10 S., R.98 W. Water flowing past this gage is used for irrigation in Reed Wash and Salt Creek basins. Surplus flows are wasted into Reed Wash and Highline Lake. Entire flow is regulated by diversion gates. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 387 ft^3/s June. 16, 1983; no flow for part of each year.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	283	244	.00	.00	.00	.00	.00	185	315	283	284	286
2	280	190	.00	.00	.00	.00	.00	192	333	290	260	285
3	292	140	.00	.00	.00	.00	.00	187	337	290	236	286
4	285	89	.00	.00	.00	.00	.00	179	348	311	258	269
5	256	32	.00	.00	.00	.00	.00	202	348	288	288	238
6	243	23	.00	.00	.00	.00	.00	205	333	272	315	246
7	249	.00	.00	.00	.00	.00	.00	198	370	281	310	262
8	248	.00	.00	.00	.00	.00	.00	191	365	284	294	272
9	235	.00	.00	.00	.00	.00	.00	200	349	316	271	280
10	237	.00	.00	.00	.00	.00	.00	204	331	342	269	304
11	240	.00	.00	.00	.00	.00	.00	213	319	333	266	318
12	236	.00	.00	.00	.00	.00	.00	224	299	310	270	330
13	246	.00	.00	.00	.00	.00	.00	233	284	306	282	316
14	250	.00	.00	.00	.00	.00	.00	233	266	318	283	312
15	252	.00	.00	.00	.00	.00	.00	223	245	324	276	305
16	252	.00	.00	.00	.00	.00	37	245	250	320	272	316
17	250	.00	.00	.00	.00	.00	121	267	258	286	279	330
18	256	.00	.00	.00	.00	.00	93	272	270	287	304	340
19	246	.00	.00	.00	.00	.00	120	283	262	283	331	341
20	239	.00	.00	.00	.00	.00	145	282	257	288	365	327
21	232	.00	.00	.00	.00	.00	165	280	275	286	365	319
22	236	.00	.00	.00	.00	.00	167	282	276	283	346	312
23	247	.00	.00	.00	.00	.00	160	281	281	293	325	303
24	240	.00	.00	.00	.00	.00	163	276	281	297	322	301
25	233	.00	.00	.00	.00	.00	196	280	270	299	323	302
26	243	.00	.00	.00	.00	.00	227	273	270	310	327	300
27	243	.00	.00	.00	.00	.00	219	290	272	306	321	318
28	243	.00	.00	.00	.00	.00	203	301	265	308	322	298
29	248	.00	.00	.00	.00	.00	206	296	270	304	309	268
30	243	.00	.00	.00	---	.00	197	296	266	305	292	259
31	239	---	.00	.00	---	.00	---	304	---	289	276	---
TOTAL	7722	718.00	.00	.00	.00	.00	2419.00	7577	8865	9292	9241	8943
MEAN	249	23.9	.000	.000	.000	.000	80.6	244	296	300	298	298
MAX	292	244	.00	.00	.00	.00	227	304	370	342	365	341
MIN	232	.00	.00	.00	.00	.00	.00	179	245	272	236	238
AC-FT	15320	1420	.00	.00	.00	.00	4800	15030	17580	18430	18330	17740

CAL YR 1983	TOTAL	60367.00	MEAN	165	MAX 302	MIN .00	AC-FT	119700
WTR YR 1984	TOTAL	54777.00	MEAN	150	MAX 370	MIN .00	AC-FT	108700

NOTE.--NO GAGE-HEIGHT RECORD JUNE 12 TO JULY 12.

090955285 GOVERNMENT HIGHLINE CANAL ABOVE CAMP NO. 7 SPILLWAY, NEAR MACK, CO

LOCATION.--Lat 39°16'21", long 108°49'56", NE¼SE¼ sec. 5, T.2 N., R.3W., Mesa County, Hydrologic Unit 14010005, on left bank, 72 ft, upstream from Camp 7 spillway, 84 ft, downstream from Lateral 48 outlet, and 4.5 mi northeast of Mack.

PERIOD OF RECORD.--October 1982 to current year.

GAGE.--Water-stage recorder and Marsh-McBirney velocity meter. Altitude of gage is 4,720 ft, from topographic map.

REMARKS.--Records good. Government Highline Canal diverts water from the Colorado River in SE¼NW¼ sec. 13, T.10 S., R.98 W. Water flowing past this gage is used for irrigation in Salt Creek basin. Surplus flows are wasted into Highline Lake. Entire flow is regulated by diversion gates. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 373 ft^3/s June 8, 1984; no flow for part of each year.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	241	206	.00	.00	.00	.00	.00	170	244	211	255	204
2	245	164	.00	.00	.00	.00	.00	177	256	222	225	214
3	241	114	.00	.00	.00	.00	.00	172	271	207	182	217
4	249	81	.00	.00	.00	.00	.00	160	282	212	172	206
5	235	66	.00	.00	.00	.00	.00	176	292	192	186	179
6	230	10	.00	.00	.00	.00	.00	184	293	160	199	162
7	240	.00	.00	.00	.00	.00	.00	180	339	163	207	169
8	236	.00	.00	.00	.00	.00	.00	154	373	186	212	214
9	234	.00	.00	.00	.00	.00	.00	155	360	184	204	228
10	239	.00	.00	.00	.00	.00	.00	144	345	193	184	293
11	243	.00	.00	.00	.00	.00	.00	172	332	211	175	259
12	232	.00	.00	.00	.00	.00	.00	215	304	203	180	284
13	228	.00	.00	.00	.00	.00	.00	191	279	206	176	272
14	231	.00	.00	.00	.00	.00	.00	168	260	228	166	251
15	245	.00	.00	.00	.00	.00	.00	154	231	247	163	248
16	245	.00	.00	.00	.00	.00	20	173	233	243	163	220
17	240	.00	.00	.00	.00	.00	100	169	241	203	166	187
18	245	.00	.00	.00	.00	.00	98	179	246	211	178	200
19	230	.00	.00	.00	.00	.00	118	172	225	194	224	202
20	220	.00	.00	.00	.00	.00	130	165	219	190	265	192
21	230	.00	.00	.00	.00	.00	152	164	212	184	290	215
22	220	.00	.00	.00	.00	.00	152	146	206	189	291	244
23	230	.00	.00	.00	.00	.00	144	165	190	213	283	234
24	215	.00	.00	.00	.00	.00	142	176	184	239	270	236
25	200	.00	.00	.00	.00	.00	166	184	175	248	259	251
26	199	.00	.00	.00	.00	.00	206	186	158	281	257	247
27	197	.00	.00	.00	.00	.00	204	203	145	290	246	258
28	194	.00	.00	.00	.00	.00	192	222	149	283	228	246
29	191	.00	.00	.00	.00	.00	190	228	166	273	182	232
30	181	.00	.00	.00	---	.00	187	230	190	279	195	225
31	188	---	.00	.00	---	.00	---	244	---	270	199	---
TOTAL	6994	641.00	.00	.00	.00	.00	2201.00	5578	7400	6815	6582	6789
MEAN	226	21.4	.000	.000	.000	.000	73.4	180	247	220	212	226
MAX	249	206	.00	.00	.00	.00	206	244	373	290	291	293
MIN	181	.00	.00	.00	.00	.00	.00	144	145	160	163	162
AC-FT	13870	1270	.00	.00	.00	.00	4370	11060	14680	13520	13060	13470

CAL YR 1983 TOTAL 44909.00 MEAN 123 MAX 334 MIN .00 AC-FT 89080
WTR YR 1984 TOTAL 43000.00 MEAN 117 MAX 373 MIN .00 AC-FT 85290

09106104 KIEFER EXTENSION GRAND VALLEY CANAL NEAR FRUITA, CO

LOCATION.--Lat 39°13'31", long 108°46'28", in SW¼SW¼ sec.24, T.2 N., R.3 W., Ute Meridian, Mesa County, Hydrologic Unit 14010005, on right bank 300 ft upstream from small timber bridge, 1,050 ft upstream from Golden Hill Canal headgate, 1,100 ft north of O Road, and 5.0 mi north of Fruita.

PERIOD OF RECORD.--October 1975 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 4,595 ft, from topographic map.

REMARKS.--Records good. Grand Valley Canal diverts water from Colorado River in SE¼NE¼ sec.3, T.1 S., R.2 E. Water flowing past this gage is used for irrigation in Reed Wash basin. Entire flow is regulated by diversion gates. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 153 ft^3/s, Sept. 22, 1980, Aug. 28, 1982; no flow for part of each year.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	129	129	.00	.00	.00	.00	.00	114	136	138	137	139
2	132	132	.00	.00	.00	.00	.00	121	137	139	134	139
3	129	140	.00	.00	.00	.00	.00	120	134	139	133	143
4	128	136	.00	.00	.00	.00	.00	114	131	139	128	144
5	131	128	.00	.00	.00	.00	.00	112	132	139	127	148
6	135	127	.00	.00	.00	.00	.00	114	133	140	130	148
7	133	117	.00	.00	.00	.00	.00	116	141	136	130	148
8	133	20	5.7	.00	.00	.00	.00	117	141	133	129	147
9	135	.00	71	.00	.00	.00	.00	117	142	133	133	145
10	132	.00	70	.00	.00	.00	.00	114	139	132	137	141
11	130	.00	20	.00	.00	.00	.00	114	136	135	135	141
12	128	.00	.00	.00	.00	.00	55	118	143	136	134	147
13	131	.00	33	.00	.00	.00	110	118	139	132	133	146
14	130	.00	70	.00	.00	.00	113	124	138	132	134	146
15	130	.00	60	.00	.00	.00	110	126	133	136	133	147
16	126	.00	20	.00	.00	.00	109	129	134	137	133	148
17	126	.00	.00	.00	.00	.00	110	129	135	137	129	148
18	128	.00	.00	.00	.00	.00	110	130	136	136	130	150
19	129	.00	.00	.00	.00	.00	115	130	136	136	131	148
20	132	.00	.00	.00	.00	.00	117	130	136	136	135	150
21	127	.00	.00	.00	.00	.00	112	131	136	135	136	149
22	124	.00	.00	.00	.00	.00	110	132	136	127	136	148
23	126	.00	.00	.00	.00	.00	110	132	136	133	136	148
24	128	.00	.00	.00	.00	.00	111	132	136	133	137	149
25	129	.00	.00	.00	.00	.00	115	133	137	136	138	147
26	125	.00	.00	.00	.00	.00	121	133	138	138	138	146
27	123	.00	.00	.00	.00	.00	120	133	138	134	137	143
28	127	.00	.00	.00	.00	.00	120	134	138	132	140	141
29	129	.00	.00	.00	.00	.00	120	135	138	134	142	141
30	129	.00	.00	.00	---	.00	118	135	138	138	139	141
31	130	---	.00	.00	---	.00	---	135	---	138	138	---
TOTAL	4004	929.00	349.70	.00	.00	.00	2106.00	3872	4103	4199	4162	4366
MEAN	129	31.0	11.3	.000	.000	.000	70.2	125	137	135	134	146
MAX	135	140	71	.00	.00	.00	121	135	143	140	142	150
MIN	123	.00	.00	.00	.00	.00	.00	112	131	127	127	139
AC-FT	7940	1840	694	.00	.00	.00	4180	7680	8140	8330	8260	8660

CAL YR 1983 TOTAL 28422.70 MEAN 77.9 MAX 150 MIN .00 AC-FT 56380
WTR YR 1984 TOTAL 28090.70 MEAN 76.8 MAX 150 MIN .00 AC-FT 55720

09106108 KIEFER EXTENSION GRAND VALLEY CANAL NEAR LOMA, CO

LOCATION.--Lat 39°13'40", long 108°49'06", in NW¼SE¼ sec.21, T.2 N., R.3 W., Ute Meridian, Mesa County, Hydrologic Unit 14010005, on left bank 600 ft south of '0' Road, 1,800 ft west of 13 Road, and 2.5 mi north of Loma.

PERIOD OF RECORD.--October 1975 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 4,585 ft, from topographic map.

REMARKS.--Records good. Grand Valley Canal diverts water from Colorado River in SE¼NE¼ sec.3, T.1 S., R.2 E. Water flowing past this gage is used for irrigation in lower Reed Wash basin. Surplus flows are wasted into Reed Wash. Entire flow regulated by diversion gages. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 88 ft^3/s, June 7, 8, July 25 1982; no flow part of each year.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	68	66	.00	.00	.00	.00	.00	49	70	77	71	71
2	67	66	.00	.00	.00	.00	.00	53	72	76	72	71
3	67	66	.00	.00	.00	.00	.00	54	73	72	72	72
4	68	66	.00	.00	.00	.00	.00	52	75	74	74	73
5	68	64	.00	.00	.00	.00	.00	51	75	75	74	77
6	66	60	.00	.00	.00	.00	.00	52	72	73	78	77
7	66	58	.00	.00	.00	.00	.00	53	65	72	71	74
8	65	15	4.0	.00	.00	.00	.00	47	62	73	74	73
9	63	.00	60	.00	.00	.00	.00	54	63	76	75	74
10	62	.00	40	.00	.00	.00	.00	60	63	79	77	73
11	61	.00	15	.00	.00	.00	.00	59	63	80	74	74
12	61	.00	.00	.00	.00	.00	12	61	64	81	75	77
13	61	.00	15	.00	.00	.00	40	62	64	78	73	74
14	61	.00	40	.00	.00	.00	46	65	65	78	76	71
15	62	.00	30	.00	.00	.00	45	63	61	79	75	72
16	62	.00	5.0	.00	.00	.00	42	66	64	79	73	71
17	61	.00	.00	.00	.00	.00	43	65	63	81	72	72
18	64	.00	.00	.00	.00	.00	46	63	61	80	75	75
19	65	.00	.00	.00	.00	.00	46	65	60	77	78	73
20	65	.00	.00	.00	.00	.00	47	64	63	77	80	66
21	65	.00	.00	.00	.00	.00	47	66	66	75	75	64
22	65	.00	.00	.00	.00	.00	49	66	68	78	71	71
23	65	.00	.00	.00	.00	.00	51	65	68	80	72	70
24	66	.00	.00	.00	.00	.00	50	65	69	78	73	67
25	66	.00	.00	.00	.00	.00	53	64	74	78	71	68
26	66	.00	.00	.00	.00	.00	54	67	76	81	71	68
27	65	.00	.00	.00	.00	.00	52	67	76	73	71	69
28	65	.00	.00	.00	.00	.00	52	70	76	72	71	68
29	65	.00	.00	.00	---	.00	52	69	76	73	72	69
30	65	.00	.00	.00	---	.00	51	72	77	73	72	69
31	65	---	.00	.00	---	.00	---	71	---	70	71	---
TOTAL	2001	461.00	209.00	.00	.00	.00	878.00	1900	2044	2368	2279	2143
MEAN	64.5	15.4	6.74	.00	.00	.00	29.3	61.3	68.1	76.4	73.5	71.4
MAX	68	66	60	.00	.00	.00	54	72	77	81	80	77
MIN	61	.00	.00	.00	.00	.00	.00	47	60	70	71	64
AC-FT	3970	914	415	.00	.00	.00	1740	3770	4050	4700	4520	4250

CAL YR 1983	TOTAL	15489.00	MEAN 42.4	MAX 87	MIN .00	AC-FT	30720	
WTR YR 1984	TOTAL	14283.00	MEAN 39.1	MAX 81	MIN .00	AC-FT	28330	

09108500 TAYLOR PARK RESERVOIR AT TAYLOR PARK, CO

LOCATION.--Lat 38°49'07", long 106°36'24", Gunnison County, Hydrologic Unit 14020001, at dam on Taylor River just downstream from Taylor Park, 16 mi northeast of Almont.

DRAINAGE AREA.--254 mi^2.

PERIOD OF RECORD.--October 1937 to current year. Prior to October 1938, published in WSP 1313.

REVISED RECORDS.-- WSP 1089: 1940(M), 1942(M), 1945-46. WSP 1924: Drainage area.

GAGE.--Nonrecording gage read once daily. Datum of gage is 9,187 ft, National Geodetic Vertical Datum of 1929 (levels by U.S. Bureau of Reclamation); gage readings have been reduced to elevations NGVD.

REMARKS.--Reservoir is formed by an earth and rockfill dam. Dam completed by U. S. Bureau of Reclamation in September 1937. Capacity of reservoir, 106,200 acre-ft between elevations 9,187 ft, bottom of outlet gates, and 9,330 ft, crest of spillway. No dead storage. Water used for irrigation in Uncompahgre Valley. Figures given are usable contents.

COOPERATION.--Records furnished by Uncompahgre Valley Water Users Association.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 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.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 108,000 acre-ft, July 11, elevation, 9,331.00 ft; minimum 32,400 acre-ft, May 10, elevation, 9,279.50 ft.

MONTHEND ELEVATION IN FEET NGVD AND CONTENTS, AT 1800, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

Date	Elevation	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	9,316.40	80,500	-
Oct. 31	9,309.10	68,500	-12,000
Nov. 30	9,307.60	66,100	-2,400
Dec. 31	9,306.20	64,000	-2,100
CAL YR 1983			-7,700
Jan. 31	9,304.80	61,900	-5,600
Feb. 29	9,301.80	57,600	-1,300
Mar. 31	9,293.70	47,100	-9,200
Apr. 30	9,280.90	33,600	-22,700
May 31	9,312.00	73,100	+62,200
June 30	9,330.70	108,000	+34,900
July 31	9,330.60	108,000	0
Aug. 31	9,328.00	102,000	-6,000
Sept. 30	9,321.40	89,500	-12,500
WTR YR 1984			+23,300

09109000 TAYLOR RIVER BELOW TAYLOR PARK RESERVOIR, CO

LOCATION.--Lat 38°49'06", long 106°36'31", Gunnison County, Hydrologic Unit 14020001, on left bank 1,000 ft downstream from Taylor Park Reservoir Dam, 3.4 mi upstream from Lottis Creek, and 17 mi northeast of Almont.

DRAINAGE AREA.--254 mi^2.

PERIOD OF RECORD.--June 1929 to September 1934 (monthly discharges only, published in WSP 1313), October 1938 to current year.

REVISED RECORDS.--WSP 1924: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 9,169.67 ft, National Geodetic Vertical Datum of 1929 (levels by U.S. Bureau of Reclamation). Prior to Nov. 11, 1952, at site 1,600 ft downstream, at datum 1.00 ft, lower. Oct. 15, 1946, to May 4, 1952, supplementary nonrecording gage just downstream from reservoir outlet at different sites and datums used during winter months.

REMARKS.--Records good, except those for winter period, which are poor. Flow regulated by Taylor Park Reservoir (station 09108500) since 1937. One small diversion for irrigation from Willow Creek above reservoir. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--5 years (water years 1930-34), 156 ft^3/s; 113,000 acre-ft/yr: 46 years (water years 1939-84), 194 ft^3/s; 140,600 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,270 ft^3/s, July 1, 1957, gage height, 7.56 ft; no flow May 1 to July 3, 1940, May 7-22, 1942, May 5-21, 1943.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,510 ft^3/s at 1030 July. 1, gage height, 6.63 ft, from peak-stage indicator; minimum daily, 50 ft^3/s, Jan. 21-24.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	380	145	140	140	100	200	300	260	71	1430	598	272
2	389	145	140	140	100	200	300	210	70	1340	629	228
3	392	148	140	140	100	200	300	160	69	1200	527	200
4	384	155	140	140	100	200	300	160	70	1100	460	198
5	374	134	140	140	100	200	300	160	111	899	434	200
6	377	123	140	140	100	200	300	160	229	850	428	212
7	377	125	140	140	100	200	300	160	330	863	409	209
8	377	126	140	140	100	200	300	160	370	847	402	215
9	377	126	140	140	100	200	300	160	380	846	397	220
10	380	127	140	140	100	200	300	150	390	766	396	216
11	380	125	140	140	100	200	300	150	398	796	392	211
12	380	128	140	140	100	200	300	140	394	762	392	210
13	384	124	140	140	100	200	300	140	408	709	389	210
14	394	126	140	140	100	200	300	140	407	717	392	252
15	380	126	140	140	100	200	300	141	400	774	392	301
16	370	126	140	140	120	210	340	143	499	741	400	334
17	370	127	140	140	140	230	350	144	548	668	404	377
18	346	128	140	140	140	250	350	146	593	612	404	436
19	304	129	140	140	140	250	350	149	653	575	402	512
20	252	140	140	100	140	250	350	152	685	561	398	560
21	238	140	140	50	170	250	350	156	698	536	398	608
22	240	140	140	50	200	250	350	156	739	518	398	648
23	242	140	140	50	200	250	350	157	955	479	391	680
24	202	140	140	50	200	250	350	108	1100	486	402	748
25	156	140	140	60	200	250	350	64	1160	501	394	770
26	142	140	140	100	200	250	350	65	1330	496	391	766
27	142	140	140	100	200	250	350	66	1370	464	402	774
28	144	140	140	100	200	250	350	67	1250	457	398	761
29	144	140	140	100	200	250	350	69	1240	455	391	766
30	146	140	140	100	---	280	310	70	1290	453	352	756
31	152	---	140	100	---	300	---	71	---	441	316	---
TOTAL	9315	4033	4340	3620	3950	7020	9700	4234	18207	22342	12878	12850
MEAN	300	134	140	117	136	226	323	137	607	721	415	428
MAX	394	155	140	140	200	300	350	260	1370	1430	629	774
MIN	142	123	140	50	100	200	300	64	69	441	316	198
AC-FT	18480	8000	8610	7180	7830	13920	19240	8400	36110	44320	25540	25490

CAL YR 1983 TOTAL 86767 MEAN 238 MAX 481 MIN 36 AC-FT 172100
WTR YR 1984 TOTAL 112489 MEAN 307 MAX 1430 MIN 50 AC-FT 223100

NOTE.--NO GAGE-HEIGHT RECORD NOV. 20 TO MAY. 14.

09110000 TAYLOR RIVER AT ALMONT, CO

LOCATION.--Lat 38°39'52", long 106°50'41", in NW¼SE¼ sec.22, T.51 N., R.1 E., Gunnison County, Hydrologic Unit 14020001, 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 mi^2.

PERIOD OF RECORD.--July 1910 to current year. Monthly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WSP 1213: 1911. WSP 1924: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 8,010.76 ft, National Geodetic Vertical Datum of 1929. Prior to Apr. 16, 1922, nonrecording gage at same site and datum.

REMARKS.--Records good except those for winter period and those for period of indefinite stage-discharge relationship Nov. 10 to Dec. 12, which are poor. Flow partly regulated since September 1937 by Taylor Park Reservoir (station 09108500), 24 mi above station. Diversions for irrigation of about 360 acres above station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--74 years, 336 ft^3/s; 243,400 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 3,760 ft^3/s, June 9, 1920, gage height, 5.00 ft, from rating curve extended above 2,300 ft^3/s; maximum gage height, 5.32 ft, July 1, 1957; minimum discharge observed before storage began in Taylor Park Reservoir, 50 ft^3/s for several days in August 1913, gage height, 1.2 ft; minimum daily discharge, subsequent to completion of Taylor Park Dam, 24 ft^3/s, Mar. 12, 1938.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,640 ft^3/s at 1300 June 26, gage height, 4.73 ft; minimum daily, 128 ft^3/s, Jan. 22-24.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	478	179	215	220	178	275	390	357	1500	2160	815	398
2	471	184	215	215	175	285	390	328	1280	1910	902	335
3	469	179	215	215	175	295	390	296	1160	1700	794	288
4	464	187	215	220	175	282	390	298	1040	1540	732	281
5	426	193	215	228	175	275	390	316	1000	1300	707	273
6	415	179	215	230	175	275	410	321	1060	1160	697	281
7	410	179	215	230	175	275	430	318	1450	1180	677	284
8	399	190	215	230	175	275	420	325	1280	1160	656	288
9	384	173	215	225	175	275	420	351	1220	1160	662	296
10	369	173	215	220	175	275	425	434	1150	1130	666	307
11	365	176	215	218	175	290	420	516	1160	1090	644	312
12	369	188	215	220	175	280	400	621	1160	1030	624	304
13	366	190	215	225	180	275	410	738	1230	993	632	296
14	380	190	215	220	182	278	420	858	1360	993	632	316
15	379	189	215	218	175	280	445	895	1480	1050	631	368
16	367	189	215	215	198	290	500	867	1650	1020	642	398
17	413	199	220	215	215	315	520	876	1600	965	648	439
18	401	200	230	215	213	320	500	865	1540	903	642	500
19	355	200	230	182	215	322	460	810	1640	865	636	608
20	292	209	223	160	230	345	450	922	1610	847	624	654
21	255	208	219	138	245	355	455	1080	1580	809	648	726
22	251	191	218	128	275	350	455	1270	1580	798	690	774
23	248	190	217	128	275	348	460	1430	1800	745	648	798
24	216	191	218	128	275	350	470	1550	2020	747	660	845
25	171	200	220	140	275	340	440	1690	2180	767	648	873
26	150	200	230	160	275	330	432	1630	2440	775	636	880
27	150	192	230	175	275	325	443	1540	2250	730	624	887
28	155	200	222	180	275	325	445	1440	1940	734	614	873
29	157	200	222	178	275	330	454	1370	1820	752	597	873
30	163	210	222	178	---	480	423	1380	1900	751	525	866
31	170	---	222	178	---	485	---	1380	---	745	448	---
TOTAL	10058	5728	6783	6032	6156	9800	13057	27072	46080	32509	20401	15621
MEAN	324	191	219	195	212	316	435	873	1536	1049	658	521
MAX	478	210	230	230	275	485	520	1690	2440	2160	902	887
MIN	150	173	215	128	175	275	390	296	1000	730	448	273
AC-FT	19950	11360	13450	11960	12210	19440	25900	53700	91400	64480	40470	30980

CAL YR 1983 TOTAL 133860 MEAN 367 MAX 953 MIN 130 AC-FT 265500
WTR YR 1984 TOTAL 199297 MEAN 545 MAX 2440 MIN 128 AC-FT 395300

NOTE.--NO GAGE-HEIGHT RECORD DEC. 13 TO APR. 25.

09112500 EAST RIVER AT ALMONT, CO

LOCATION.--Lat 38°39'52", long 106°50'51", in NW¼SE¼ sec.22, T.51 N., R.1 E., Gunnison County, Hydrologic Unit 14020001, 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 mi².

PERIOD OF RECORD.--April to October 1905, July 1910 to September 1922, October 1934 to current year. Monthly discharges only for some periods, published in WSP 1313.

REVISED RECORDS.--WSP 1313: 1911. WSP 1733: 1952. WSP 1924: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 8,006.29 ft, National Geodetic Vertical Datum of 1929. Apr. 16 to Sept. 30, 1905, and July 27, 1910, to Apr. 30, 1922, nonrecording 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.

REMARKS.--Records good except those for winter period, which are fair. Diversions for irrigation of about 7,400 acres above station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--62 years (water years 1911-22, 1935-84), 535 ft³/s; 245,600 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 6,500 ft³/s, June 15, 1921, gage height, 6.6 ft, site and datum then in use, from rating curve extended above 3,000 ft³/s; minimum daily, 19 ft³/s, Aug. 13, 1913.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,030 ft³/s at 0330 May 26, gage height, 8.03 ft, from peak-stage indicator, only peak above base of 1,600 ft³/s; minimum daily, 53 ft³/s, Jan. 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	117	92	98	67	70	62	63	145	3150	2350	635	301
2	115	93	97	64	70	66	61	154	2950	2100	620	289
3	111	92	95	66	70	60	60	153	2760	2010	600	259
4	113	90	96	68	70	61	60	161	2510	1880	570	240
5	110	87	87	70	70	59	64	177	2320	1730	570	229
6	108	87	86	72	70	58	70	186	2070	1600	567	219
7	107	88	88	72	70	60	72	185	2440	1550	542	212
8	106	88	92	72	70	62	78	180	2050	1520	527	209
9	102	82	93	70	70	61	88	205	1780	1700	492	202
10	99	83	94	70	68	61	77	293	1520	2030	453	193
11	97	92	94	68	68	59	86	485	1460	1650	411	181
12	95	95	94	70	68	57	74	756	1510	1400	375	187
13	93	102	95	72	68	57	83	1120	1730	1260	374	187
14	101	97	88	70	70	58	78	1490	2140	1580	339	178
15	103	82	85	68	68	59	88	1720	2650	1450	356	172
16	100	90	75	60	66	59	96	1760	2850	1250	377	178
17	100	92	90	57	70	55	114	1840	2520	1140	341	190
18	98	101	86	53	70	58	142	1940	2240	1010	368	178
19	98	92	85	56	64	56	148	1690	2340	948	350	172
20	98	95	80	58	64	56	148	1980	2280	924	340	169
21	98	95	72	60	66	58	135	2320	2380	894	381	175
22	97	91	80	62	66	60	130	2670	2440	870	388	209
23	95	103	79	60	64	60	137	3020	2360	792	346	193
24	95	104	77	63	66	61	160	3450	2340	846	340	190
25	94	102	80	66	67	63	181	3700	2390	864	346	181
26	90	96	81	66	61	62	164	3680	2350	816	338	169
27	89	96	82	66	60	62	158	3430	2340	738	312	172
28	89	88	73	68	60	60	144	3230	2260	690	289	169
29	89	95	63	68	62	60	153	3080	2210	672	278	165
30	87	102	64	66	---	62	144	3100	2300	645	263	162
31	88	---	67	68	---	62	---	3120	---	645	263	---
TOTAL	3082	2792	2616	2036	1946	1854	3256	51420	68640	39554	12751	5930
MEAN	99.4	93.1	84.4	65.7	67.1	59.8	109	1659	2288	1276	411	198
MAX	117	104	98	72	70	66	181	3700	3150	2350	635	301
MIN	87	82	63	53	60	55	60	145	1460	645	263	162
AC-FT	6110	5540	5190	4040	3860	3680	6460	102000	136100	78460	25290	11760

CAL YR 1983 TOTAL 137318 MEAN 376 MAX 2490 MIN 56 AC-FT 272400
WTR YR 1984 TOTAL 195877 MEAN 535 MAX 3700 MIN 53 AC-FT 388500

09114500 GUNNISON RIVER NEAR GUNNISON, CO

LOCATION.--Lat 38°32'31", long 106°56'57", in NW¼NW¼ sec.2, T.49 N., R.1 W., Gunnison County, Hydrologic Unit 14020002, on right bank 0.7 mi downstream from Antelope Creek and 1.2 mi west of Gunnison.

DRAINAGE AREA.--1,012 mi^2.

PERIOD OF RECORD.--October 1910 to December 1928, October 1944 to current year. Monthly discharges only for some periods, published in WSP 1313.

REVISED RECORDS.--WSP 1313: 1911, 1916.

GAGE.--Water-stage recorder. Altitude of gage is 7,655 ft, from topographic map. Nov. 25, 1910, to Dec.31, 1928, nonrecording gages (supplementary water-stage recorder Apr. 28, 1916, to June 17, 1918) at bridge about 0.6 mi downstream at various datums. Oct. 1, 1944, to July 28, 1970, water-stage recorder at sites 0.4 mi upstream at different datum.

REMARKS.--Records good except those for winter period and those for period of no gage-height record, which are poor. Flow regulated by Taylor Park Reservoir (station 09108500), 37 mi above station. Diversions for irrigation of about 22,000 acres above station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--58 years (water years 1911-28, 1945-84), 762 ft^3/s; 552,100 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 11,400 ft^3/s, June 13, 1918, gage height, 4.05 ft, site and datum then in use, from rating curve extended above 5,000 ft^3/s; minimum daily, 80 ft^3/s, Dec. 27, 1962.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 7,570 ft^3/s at 0800 May 25, gage height, 5.42 ft; minimum daily, 220 ft^3/s, Jan. 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	549	290	405	365	285	355	480	726	5460	4780	1510	910
2	541	300	410	355	285	360	480	726	5090	4290	1620	861
3	532	290	410	360	285	350	480	699	4720	4020	1470	771
4	541	300	415	360	280	350	475	726	4320	3720	1350	717
5	532	305	400	360	280	345	475	780	3960	3420	1340	681
6	532	290	405	360	280	345	481	825	3680	3080	1380	663
7	524	295	410	360	280	345	498	798	4440	2960	1310	645
8	532	305	415	360	280	345	532	789	3980	2900	1260	627
9	524	274	420	355	275	340	575	910	3560	3100	1240	592
10	541	268	425	355	275	340	549	1180	3120	3480	1200	575
11	549	294	425	355	270	335	592	1600	2940	3020	1170	558
12	541	294	425	355	270	335	566	2180	2780	2550	1110	549
13	541	308	430	355	270	335	600	2880	3180	2330	1160	541
14	566	308	420	350	270	335	618	3590	3760	2630	1160	541
15	566	268	366	350	270	335	663	3960	4420	2690	1170	583
16	558	301	358	340	290	345	726	3940	4830	2310	1180	609
17	558	301	410	330	315	355	852	4020	4590	2080	1160	645
18	558	329	405	325	315	380	940	4190	4080	1960	1200	663
19	524	308	400	330	305	375	950	3660	4150	2060	1230	717
20	473	329	390	280	305	375	930	3980	4170	2040	1170	735
21	430	329	380	225	340	370	861	4550	4250	1960	1230	780
22	422	310	390	225	370	375	816	5030	4340	1910	1310	852
23	439	320	390	220	365	375	852	5760	4380	1750	1230	861
24	430	310	385	225	370	370	930	6070	4480	1720	1250	900
25	366	320	385	240	365	370	930	6830	4630	1780	1240	920
26	336	325	390	285	360	370	870	6700	4720	1750	1180	920
27	320	300	385	285	360	370	834	6170	4670	1580	1120	940
28	310	305	375	285	355	365	789	5740	4460	1480	1080	950
29	300	305	360	285	355	360	816	5280	4340	1480	1040	950
30	295	365	360	280	---	425	780	5280	4480	1500	960	950
31	285	---	365	285	---	485	---	5300	---	1510	920	---
TOTAL	14715	9146	12309	9800	8925	11215	20940	104869	125980	77840	37950	22206
MEAN	475	305	397	316	308	362	698	3383	4199	2511	1224	740
MAX	566	365	430	365	370	485	950	6830	5460	4780	1620	950
MIN	285	268	358	220	270	335	475	699	2780	1480	920	541
AC-FT	29190	18140	24410	19440	17700	22240	41530	208000	249900	154400	75270	44050

CAL YR 1983	TOTAL	312390	MEAN	856	MAX	3840	MIN 210	AC-FT 619600
WTR YR 1984	TOTAL	455895	MEAN	1246	MAX	6830	MIN 220	AC-FT 904300

NOTE.--NO GAGE-HEIGHT RECORD, DEC. 17 TO APR. 5.

09118450 COCHETOPA CREEK BELOW ROCK CREEK, NEAR PARLIN, CO

LOCATION.--Lat 38°20'08", long 106°46'18", in SW¼NE¼ sec.17, T.47 N., R.2 E. Saguache County, Hydrologic Unit 14020003, on left bank 0.75 mi downstream from Rock Creek and 12 mi southeast of Parlin.

DRAINAGE AREA.--334 mi^2.

PERIOD OF RECORD.--October 1981 to Current year.

GAGE.--Water-stage recorder. Altitude of gage is 8,470 ft, from topographic map.

REMARKS.--Records good except those for winter period, which are poor. Diversions for irrigation of hay meadows above station. Transmountain diversion by Tarbell ditch exports water above station to Saguache Creek, since 1913. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,120 ft^3/s, May 23, 1984, gage height, 4.49 ft; minimum daily, 8.4 ft^3/s, Feb. 7, 1982.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,120 ft^3/s at 1500 May 23, gage height, 4.49 ft; minimum daily, 27 ft^3/s, Feb. 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	45	32	43	35	36	32	38	73	515	155	145	152
2	45	33	44	34	36	33	42	82	495	136	134	142
3	43	33	42	34	36	34	44	82	424	126	130	130
4	41	33	41	37	37	30	38	96	412	116	126	122
5	41	32	38	39	36	28	42	124	384	110	130	114
6	41	33	35	37	36	30	39	100	344	98	162	110
7	41	40	39	39	36	32	38	80	328	96	148	106
8	41	50	42	40	34	33	42	73	288	96	138	100
9	41	43	42	42	34	33	45	92	227	120	145	96
10	41	43	42	39	33	34	42	132	178	150	136	94
11	41	43	41	39	32	34	43	175	150	126	122	94
12	41	43	41	39	31	34	40	221	152	97	132	92
13	37	43	40	40	32	35	43	280	145	91	175	86
14	36	42	40	38	32	36	47	348	170	94	128	86
15	36	41	40	36	30	37	53	424	192	102	113	84
16	35	41	40	33	31	38	65	495	230	100	114	82
17	36	41	41	34	32	38	88	485	252	90	110	82
18	36	42	40	33	30	36	145	525	210	85	110	79
19	36	41	39	31	28	36	168	530	192	72	114	74
20	36	41	37	33	27	42	118	520	188	69	126	72
21	35	40	36	35	30	42	76	677	190	70	148	72
22	34	40	36	36	34	39	72	810	195	66	145	72
23	34	40	36	36	33	39	98	954	192	62	165	70
24	34	41	36	36	30	41	132	946	180	65	172	72
25	33	43	37	37	30	40	124	803	182	74	208	68
26	31	40	40	38	29	39	72	761	190	72	190	65
27	31	38	38	37	28	41	53	698	160	70	178	66
28	34	37	36	38	29	40	51	635	150	72	170	64
29	35	38	35	37	30	44	53	564	142	68	158	64
30	32	40	37	36	---	39	54	525	140	73	150	60
31	32	---	39	36	---	38	---	500	---	120	148	---
TOTAL	1155	1187	1213	1134	932	1127	2005	12810	7197	2941	4470	2670
MEAN	37.3	39.6	39.1	36.6	32.1	36.4	66.8	413	240	94.9	144	89.0
MAX	45	50	44	42	37	44	168	954	515	155	208	152
MIN	31	32	35	31	27	28	38	73	140	62	110	60
AC-FT	2290	2350	2410	2250	1850	2240	3980	25410	14280	5830	8870	5300

CAL YR 1983 TOTAL 23241 MEAN 63.7 MAX 342 MIN 12 AC-FT 46100
WTR YR 1984 TOTAL 38841 MEAN 106 MAX 954 MIN 27 AC-FT 77040

NOTE.--NO GAGE HEIGHT RECORD NOV. 2 TO DEC. 13.

09119000 TOMICHI CREEK AT GUNNISON, CO

LOCATION.--Lat 38°31'18", long 106°56'25". in NE¼SW¼ sec.11, T.49 N., R.1 W., Gunnison County, Hydrologic Unit 14020003, on right bank 300 ft downstream from highway bridge, 1.8 mi southwest of Post Office in Gunnison, and 2.0 mi upstream from mouth.

DRAINAGE AREA.--1,061 mi^2.

PERIOD OF RECORD.--November and December 1910 (gage heights and discharge measurements only), October 1937 to current year. Monthly discharges only for some periods, published i "SP 1313. Published as "near Gunnison" 1910.

REVISED RECORDS.--WSP 2124: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 7,628.58 ft, National Geodetic Vertical Datum of 1929. Nov. 25 to Dec. 24, 1910, nonrecording 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.

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. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--47 years (water years 1938-84), 173 ft^3/s; 125,300 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,620 ft^3/s, May 23, 1984, gage height, 5.49 ft; minimum daily, 2.6 ft^3/s, Sept. 30, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,620 ft^3/s at 2200 May 23, gage height, 5.49 ft; minimum daily, 80 ft^3/s, Feb. 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	121	128	120	110	105	95	135	435	2990	731	441	416
2	127	129	125	110	105	100	115	555	2950	698	418	398
3	128	132	135	100	105	110	115	594	2510	636	367	338
4	122	129	130	90	105	95	160	694	2290	588	344	308
5	122	127	125	100	105	90	200	752	2120	546	362	289
6	122	127	120	110	105	90	240	808	1970	507	393	268
7	120	125	110	110	105	85	270	732	1970	476	430	253
8	118	125	110	115	105	85	310	628	1920	472	393	245
9	117	125	115	115	105	90	330	627	1740	492	375	233
10	116	112	115	115	105	90	300	744	1480	551	381	222
11	113	132	115	110	105	100	360	945	1230	536	330	213
12	114	149	115	110	95	95	340	1330	1100	470	297	215
13	115	156	115	100	100	100	400	1810	1030	429	345	210
14	117	156	115	110	105	105	440	2240	1080	433	335	204
15	119	117	110	105	95	110	480	2660	1220	444	302	197
16	117	121	110	105	90	115	560	2600	1390	419	299	206
17	118	148	110	95	95	120	700	2400	1580	404	291	213
18	119	169	115	90	90	105	800	2350	1520	372	297	194
19	127	152	120	90	85	110	720	2340	1310	379	313	187
20	132	135	120	100	80	120	670	2240	1220	367	329	179
21	132	145	110	90	85	130	640	2260	1180	363	373	194
22	131	147	105	90	90	150	620	2570	1130	363	412	206
23	126	138	100	85	90	110	650	3870	1070	338	405	194
24	124	137	100	90	90	100	700	3910	1000	315	424	185
25	124	140	105	95	90	130	750	3770	952	342	459	177
26	123	145	105	95	90	110	653	4040	1070	348	498	144
27	122	130	115	95	90	110	508	3820	1040	326	459	176
28	119	120	120	95	90	105	437	3540	868	338	415	200
29	125	120	105	95	95	115	418	3260	770	371	381	162
30	126	115	100	90	---	115	401	2960	722	344	355	123
31	124	---	105	100	---	115	---	2780	---	428	356	---
TOTAL	3780	4031	3520	3110	2800	3300	13422	64264	44422	13826	11579	6749
MEAN	122	134	114	100	96.6	106	447	2073	1481	446	374	225
MAX	132	169	135	115	105	150	800	4040	2990	731	498	416
MIN	113	112	100	85	80	85	115	435	722	315	291	123
AC-FT	7500	8000	6980	6170	5550	6550	26620	127500	88110	27420	22970	13390

CAL YR 1983 TOTAL 96616 MEAN 265 MAX 1470 MIN 40 AC-FT 191600
WTR YR 1984 TOTAL 174803 MEAN 478 MAX 4040 MIN 80 AC-FT 346700

NOTE.--NO GAGE-HEIGHT RECORD NOV. 25 TO APR. 25.

09123400 LAKE FORK BELOW MILL GULCH, NEAR LAKE CITY, CO

LOCATION.--Lat 37°54'23", long 107°23'03", Hinsdale County, Hydrologic Unit 14020002, on left bank 2,000 ft downstream from Mill Gulch, 1,000 ft upstream from Bent Creek and 8.5 mi southwest of Lake City.

DRAINAGE AREA.--57.5 mi^2.

PERIOD OF RECORD.--October 1981 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 9,400 ft, from topographic map.

REMARKS.--Records good except those for winter period, which are poor. No regulation or diversions above station. Several observations of water temperat re and specific conductance were obtained and are published elsewhere in this report.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,380 ft^3/s, May 23, 1984, gage height, 6.72 ft; maximum gage height, 8.47 ft, Apr. 8, 1982 (backwater from ice); minimum daily discharge, 6.5 ft^3/s, Mar. 22, 1982.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 500 ft^3/s, and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
May 23	2200	*1,380	6.72	June 15	2400	884	6.21

Minimum daily discharge, 6.2 ft^3/s, Jan. 23, Feb. 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34	20	9.5	8.0	7.0	7.0	11	32	615	483	179	124
2	31	19	10	7.8	7.0	7.2	10	32	560	499	155	104
3	29	18	9.8	7.0	6.8	7.4	11	30	482	518	143	94
4	29	17	9.4	7.8	6.8	7.2	11	31	403	458	132	86
5	28	17	9.2	8.4	7.0	6.8	11	31	400	463	134	81
6	29	16	8.8	8.4	7.0	6.7	11	30	328	420	155	74
7	29	16	8.6	8.6	7.0	6.6	11	30	300	418	139	71
8	29	17	8.8	8.6	7.0	6.6	11	30	255	406	126	67
9	29	12	9.0	8.6	7.0	7.0	12	36	225	398	144	62
10	29	13	9.0	8.2	6.8	7.4	11	54	225	402	121	58
11	29	15	8.8	8.2	6.6	7.8	11	108	287	365	110	57
12	29	15	9.0	8.0	6.8	7.4	9.6	194	363	314	104	55
13	28	14	9.0	8.4	7.0	7.8	11	276	469	290	98	50
14	29	14	8.6	8.0	7.2	8.2	14	392	622	302	99	48
15	27	11	8.6	7.9	7.0	9.0	18	380	699	304	110	51
16	26	10	8.4	7.5	6.6	9.5	26	301	671	277	106	73
17	26	10	8.6	6.8	7.0	10	42	297	528	252	105	73
18	26	11	8.8	6.8	6.8	12	52	320	536	220	129	64
19	26	9.6	8.8	6.6	6.4	10	48	298	540	238	216	61
20	25	10	8.5	7.0	6.2	10	43	375	543	308	187	61
21	25	10	8.2	6.4	6.4	13	38	560	499	266	167	66
22	24	9.6	7.7	6.3	6.6	15	33	713	514	234	143	68
23	23	9.4	7.6	6.2	6.6	13	37	797	575	209	147	66
24	23	9.2	7.8	6.6	6.6	12	43	811	565	198	209	70
25	22	10	8.2	6.8	6.6	13	48	783	505	224	183	65
26	22	9.5	8.4	6.8	6.6	11	44	727	528	197	161	62
27	21	9.2	8.6	6.8	6.6	11	40	699	629	174	139	63
28	21	9.2	8.2	7.0	6.7	10	37	734	519	158	124	60
29	21	8.8	7.8	6.8	6.8	11	34	762	493	182	110	57
30	20	9.2	8.0	6.6	---	11	33	713	504	213	102	54
31	20	---	8.2	7.0	---	11	---	629	---	182	98	---
TOTAL	809	378.7	267.9	229.9	196.5	292.6	771.6	11205	14382	9572	4275	2045
MEAN	26.1	12.6	8.64	7.42	6.78	9.44	25.7	361	479	309	138	68.2
MAX	34	20	10	8.6	7.2	15	52	811	699	518	216	124
MIN	20	8.8	7.6	6.2	6.2	6.6	9.6	30	225	158	98	48
AC-FT	1600	751	531	456	390	580	1530	22230	28530	18990	8480	4060

CAL YR 1983	TOTAL	28810.8	MEAN	78.9	MAX 567	MIN 6.6	AC-FT	57150
WTR YR 1984	TOTAL	44425.2	MEAN	121	MAX 811	MIN 6.2	AC-FT	88120

09124500 LAKE FORK AT GATEVIEW, CO

LOCATION.--Lat 38°17'56", long 107°13'46", in SE¼NE¼ sec.29, T.47 N., R.3 W., Gunnison County, Hydrologic Unit 14020002, on left bank at old village of Gateview, 25 ft downstream from private bridge, 0.2 mi upstream from Indian Creek, and 6.3 mi upstream from waterline of Blue Mesa Reservoir, at elevation 7,519 ft.

DRAINAGE AREA.--334 mi^2.

PERIOD OF RECORD.--October 1937 to current year. Monthly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WSP 2124: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 7,827.66 ft, National Geodetic Vertical 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.

REMARKS.--Records good except those for winter period and those for period of no gage-height record, which are poor. Diversions for irrigation of about 1,600 acres above station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--47 years, 238 ft^3/s, 172,400 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,720 ft^3/s, July 10, 1983, gage height, 4.18 ft; minimum daily, 22 ft^3/s, Jan. 21, 1976.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1400 ft^3/s, and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
May 26	0500	*2,380	3.85	June 27	0400	1,900	3.67

Minimum daily discharge, 54 ft^3/s, Feb. 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	114	76	76	72	62	62	100	160	2030	1540	613	415
2	114	77	82	70	62	62	90	160	1890	1570	570	370
3	113	77	80	64	62	68	90	160	1710	1550	525	325
4	108	75	78	70	62	62	98	210	1510	1450	496	300
5	105	72	76	76	62	60	130	240	1390	1350	481	280
6	103	71	75	76	62	60	150	210	1290	1300	516	270
7	103	71	75	78	62	58	160	210	1170	1290	487	260
8	106	75	77	78	62	58	190	210	1020	1260	449	250
9	104	68	77	78	62	62	190	310	891	1220	451	230
10	101	68	77	74	62	64	150	400	807	1180	422	220
11	101	76	77	74	62	70	190	525	842	1170	380	210
12	101	78	79	70	60	66	150	718	980	1020	369	205
13	98	78	79	76	62	70	170	976	1180	961	350	193
14	97	78	77	70	64	76	200	1260	1520	974	323	185
15	98	64	76	70	60	80	220	1510	1760	952	329	191
16	94	72	76	64	58	88	300	1370	1790	930	320	226
17	94	72	78	60	62	96	390	1330	1520	876	350	254
18	94	73	80	60	60	100	430	1350	1450	806	450	231
19	91	71	80	58	56	88	330	1210	1470	744	600	222
20	90	71	76	64	54	92	260	1330	1540	888	520	222
21	89	79	72	58	56	120	210	1630	1610	854	455	220
22	86	72	68	58	58	130	190	1860	1670	818	450	228
23	85	76	68	56	58	110	230	2080	1600	723	505	228
24	84	72	70	60	58	100	270	2040	1610	675	620	249
25	83	79	74	60	58	110	290	2160	1630	680	540	177
26	81	76	76	60	58	96	210	2020	1620	696	455	123
27	80	72	80	60	60	94	190	2070	1780	638	380	124
28	79	71	74	62	60	92	170	2020	1750	596	345	118
29	77	68	70	62	60	98	170	1950	1660	587	335	114
30	76	72	72	60	---	98	160	2020	1710	670	315	108
31	76	---	72	62	---	94	---	2040	---	650	305	---
TOTAL	2925	2200	2347	2060	1744	2584	6078	35739	44400	30618	13706	6748
MEAN	94.4	73.3	75.7	66.5	60.1	83.4	203	1153	1480	988	442	225
MAX	114	79	82	78	64	130	430	2160	2030	1570	620	415
MIN	76	64	68	56	54	58	90	160	807	587	305	108
AC-FT	5800	4360	4660	4090	3460	5130	12060	70890	88070	60730	27190	13380

CAL YR 1983 TOTAL 108653 MEAN 298 MAX 1740 MIN 41 AC-FT 215500
WTR YR 1984 TOTAL 151149 MEAN 413 MAX 2160 MIN 54 AC-FT 299800

NOTE.--NO GAGE-HEIGHT RECORD DEC. 9 TO MAY. 10.

09126000 CIMARRON RIVER NEAR CIMARRON, CO

LOCATION.--Lat 38°15'36", long 107°32'43", in NW¼NE¼ sec.8, T.46 N., R.6 W., Gunnison County, Hydrologic Unit 14020002, on right bank 100 ft upstream from Forest Service bridge, 0.6 mi upstream from headgate on Cimarron ditch, 2.1 mi downstream from Silver Jack Dam, and 13 mi south of Cimarron.

DRAINAGE AREA.--66.6 mi^2.

PERIOD OF RECORD.--October 1954 to current year. Prior to October 1965, published as Cimarron Creek near Cimarron.

REVISED RECORDS.--WSP 2124: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 8,631.48 ft, National Geodetic Vertical Datum of 1929. Prior to Oct. 12, 1972, at site 0.2 mi downstream at different datum.

REMARKS.--Records fair except those for period of indefinite stage-discharge relationship Nov. 12 to Dec. 27, and those for period of no gage-height record, which are poor. Diversion above station through Owl Creek ditch into Uncompahgre River basin. Flow regulated by Silver Jack Dam, 2.1 mi upstream since Dec. 23, 1970, total capacity, 13,520 acre-ft. Several observations of specific conduotance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--16 years (water years 1955-70), 88.6 ft^3/s; 64,190 acre-ft/yr, prior to completion of Silver Jack Dam: 14 years (water years 1971-84), 98.2 ft^3/s; 71,150 acre-ft/yr, subsequent to completion of Silver Jack Dam.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,790 ft^3/s, June 28, 1957, gage height, 8.32 ft, site and datum then in use; no flow Dec. 24, 1970, to Jan. 9, 1971 (result of storage in Silver Jack Dam); minimum daily prior to construction of Silver Jack Dam, 8.0 ft^3/s, Dec. 27, 28, 1962, Jan. 13, 1963; minimum daily, 4.4 ft^3/s, Apr. 20, 21, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,430 ft^3/s at 0300 May 26, gage height, 5.69 ft, minimum daily, 8.5 ft^3/s, Jan 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	84	30	27	15	14	14	43	1110	793	204	125
2	28	84	32	27	16	14	15	43	978	789	147	124
3	18	83	31	26	16	16	13	45	864	778	144	124
4	19	82	30	26	16	13	13	45	793	720	143	123
5	71	81	29	26	16	14	13	46	744	667	146	122
6	73	81	27	26	16	13	15	49	618	639	147	122
7	73	64	27	25	16	13	18	51	541	637	144	122
8	73	58	28	25	16	14	19	50	460	579	142	122
9	72	57	28	24	16	15	22	49	430	557	144	122
10	85	57	28	20	16	14	27	57	410	615	143	117
11	94	33	28	16	16	14	22	71	440	548	142	113
12	94	33	29	15	15	13	26	100	569	454	140	113
13	94	33	29	16	15	12	20	120	744	408	139	113
14	96	32	27	17	15	12	25	150	920	393	141	113
15	94	29	27	16	17	12	22	230	996	413	141	114
16	94	30	27	14	15	13	27	270	1000	403	141	118
17	93	30	27	10	14	13	31	290	888	378	145	113
18	93	32	28	9.5	16	11	36	310	832	355	148	110
19	93	29	28	8.5	16	12	41	330	816	326	148	109
20	91	32	27	9.5	13	11	43	300	880	264	149	109
21	91	32	26	10	12	11	43	400	944	306	151	110
22	89	30	24	11	13	12	40	550	937	312	153	109
23	89	30	24	12	14	13	39	700	904	293	154	109
24	89	29	25	11	13	13	40	900	880	282	154	113
25	88	32	26	12	14	14	45	1150	872	283	153	115
26	87	31	27	13	15	15	49	1270	856	285	151	115
27	87	29	29	13	13	14	46	1180	920	280	137	115
28	87	29	27	13	13	14	45	1120	880	279	126	115
29	86	28	28	14	13	13	43	1070	864	291	126	115
30	86	29	28	15	---	13	45	1050	880	280	126	113
31	84	---	27	14	---	14	---	1010	---	276	124	---
TOTAL	2439	1343	858	521.5	431	409	897	13049	23970	13883	4493	3477
MEAN	78.7	44.8	27.7	16.8	14.9	13.2	29.9	421	799	448	145	116
MAX	96	84	32	27	17	16	49	1270	1110	793	204	125
MIN	18	28	24	8.5	12	11	13	43	410	264	124	109
AC-FT	4840	2660	1700	1030	855	811	1780	25880	47540	27540	8910	6900

CAL YR 1983 TOTAL 58724.0 MEAN 161 MAX 1060 MIN 10 AC-FT 116500
WTR YR 1984 TOTAL 65770.5 MEAN 180 MAX 1270 MIN 8.5 AC-FT 130500

NOTE.--NO GAGE-HEIGHT RECORD JAN. 11 TO MAY 25.

09128000 GUNNISON RIVER BELOW GUNNISON TUNNEL, CO

LOCATION.--Lat 38°31'45", long 107°38'54", in NE¼NW¼ sec.10, T.49 N., R.7 W., Montrose County, Hydrologic Unit 14020002, on left bank 0.4 mi downstream from east portal of Gunnison tunnel, 4.7 mi downstream from Crystal Creek, and 12 mi northeast of Montrose.

DRAINAGE AREA.--3,965 mi².

PERIOD OF RECORD.--October 1903 to current year. 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.

REVISED RECORDS.--WSP 1313: 1906(M). WSP 1733: 1918-19, 1948. WSP 2124: Drainage area. WDR CO-77-2: 1926, 1941.

GAGE.--Water-stage recorder. Datum of gage is 6,526.06 ft, National Geodetic Vertical Datum of 1929. Apr. 9, 1905, to Aug. 20, 1915, nonrecording 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, nonrecording 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 present site at datum 1.0 ft, higher.

REMARKS.--Records good. Natural flow of stream affected by transmountain diversions, transbasin diversion through Gunnison tunnel for irrigation of about 75,000 acres in Uncompahgre Valley (see table below for figures of diversion), Taylor Park Reservoir (station 09108500), Blue Mesa Reservoir (station 09124600), Morrow Point Reservoir (station 09125400), Crystal Reservoir (station 09127600), diversions for irrigation of about 63,000 acres, and return flow from irrigated areas. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

COOPERATION.--Diversions, in acre-feet, through Gunnison tunnel; furnished by Uncompahgre Valley Water Users Association.

AVERAGE DISCHARGE.--81 years, 1,383 ft³/s; 1,002,000 acre-ft/yr, unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 19,000 ft³/s, June 15, 1921, gage height, about 15.8 ft, present datum, from rating curve extended above 14,000 ft³/s; no flow Sept. 25, 26, 1936, Oct. 8, 1949, Sept. 5, 6, 15, 16, 1950.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 10,400 ft³/s at 0400 June 27, gage height, 11.18 ft; minimum daily, 301 ft³/s, Nov. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1240	301	1820	1880	2450	2930	3120	2080	8530	9530	2310	1850
2	1250	576	1830	1840	2450	2940	3030	2050	8340	8900	2620	2650
3	1240	578	1830	1810	2470	2920	2990	2050	6490	8790	2720	3440
4	1280	581	1810	1790	2490	2920	2990	2010	7120	8860	1670	2780
5	1310	584	1820	1920	2500	2990	2980	2020	6640	8860	2860	1970
6	1380	587	1830	2040	2740	3120	2970	2020	7660	8040	2300	1490
7	1510	596	1820	2070	2860	3150	2960	2180	7440	6290	2320	1420
8	1310	596	1810	2100	2840	3100	2970	2430	7620	5210	1780	1410
9	1310	864	1820	2300	2880	3110	2820	2580	6830	4490	1450	1390
10	1300	1730	1820	2470	2890	3120	2560	2580	6720	4850	1690	1310
11	1230	1760	1820	2460	2880	3110	2390	2580	6640	4330	1810	1150
12	967	1740	1790	2380	2880	3120	2370	2590	6320	3840	1390	1160
13	1270	1740	1770	2440	2830	3140	2220	2970	6320	4090	1770	1150
14	1270	1740	1790	2470	2860	3100	1970	3450	6740	4550	1440	1160
15	1270	1720	1820	2450	2880	3130	1960	3680	7400	3850	1730	1110
16	1270	1720	1830	2460	2900	3120	1980	3960	7700	3630	1270	1120
17	1250	1690	1820	2450	2910	3130	1980	3980	7790	3820	1430	1180
18	1250	1690	1810	2460	2880	3130	1980	4190	7410	3560	1200	1140
19	1240	1810	1830	2440	2870	3130	1960	4220	7320	3320	1170	1210
20	1260	1750	1830	2440	2900	3120	1970	4470	8220	3250	1210	1250
21	1260	1740	1820	2420	2910	3120	1960	3680	8870	3220	1420	1280
22	1260	1740	1830	2440	2930	3060	1950	4770	9100	3230	1450	1280
23	1250	1730	1770	2440	2900	2730	1950	5620	9700	3220	1480	1280
24	1240	1750	1830	2430	2890	2750	2110	6680	9580	2760	1350	1280
25	1260	1750	1840	2460	2900	3050	2280	7820	9760	1920	1390	1270
26	1260	1730	1830	2480	2900	3140	2240	8400	9420	1740	1480	1270
27	1260	1730	1720	2480	2860	3150	2200	9170	10100	1940	1540	1270
28	1260	1750	1890	2470	2900	3140	2190	8910	9540	2520	2180	1310
29	1260	1830	1890	2480	2910	3140	2180	8520	9740	2760	2370	1350
30	1400	1820	1860	2470	---	3160	2160	8430	9550	2090	1700	1340
31	985	---	1890	2480	---	3140	---	8340	---	2360	1740	---
TOTAL	39102	41923	56490	71720	81460	95110	71390	138430	240610	139820	54240	44270
MEAN	1261	1397	1822	2314	2809	3068	2380	4465	8020	4510	1750	1476
MAX	1510	1830	1890	2480	2930	3160	3120	9170	10100	9530	2860	3440
MIN	967	301	1720	1790	2450	2730	1950	2010	6320	1740	1170	1110
AC-FT	77560	83150	112000	142300	161600	188700	141600	274600	477200	277300	107600	87810
a	27230	0	0	0	0	0	14260	32690	37880	46490	57140	49930

CAL YR 1983 TOTAL 692373 MEAN 1897 MAX 10600 MIN 301 AC-FT 1373000
WTR YR 1984 TOTAL 1074565 MEAN 2936 MAX 10100 MIN 301 AC-FT 2131000

a DIVERSIONS, IN ACRE-FEET, THROUGH GUNNISON TUNNEL, FURNISHED BY UNCOMPAHGRE VALLEY WATER USERS ASSOCIATION.

09128500 SMITH FORK NEAR CRAWFORD, CO

LOCATION.--Lat 38°43'40", long 107°30'22", in SW¼SE¼ sec.24, T.15 S., R.91 W., Delta County, Hydrologic Unit 14020002, on left bank 20 ft upstream from Forest Service bridge, 0.4 mi upstream from Second Creek, 6 mi northeast of Crawford, and 6.5 mi upstream from Iron Creek.

DRAINAGE AREA.--42.8 mi².

PERIOD OF RECORD.--October 1935 to current year. Monthly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WSP 1313: 1941. WDR CO-83-2: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 7,091 ft, from topographic map. Prior to Nov. 16, 1938, nonrecording gage at present site and datum.

REMARKS.--Records good except those for winter period, which are poor. Diversions for irrigation of a few small hay meadows above station. Saddle Mountain ditch diverts water above station for irrigation of about 800 acres below. One small ditch diverts water from Virginia Creek to Iron Creek drainage. Head and Ferrier ditch imports water from Curecanti Creek drainage. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--49 years, 42.0 ft³/s; 30,430 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,300 ft³/s, May 17, 1984, gage height, 9.23 ft; minimum daily discharge determined, 1.8 ft³/s, July 30, 31, Aug. 1, 1963, Sept. 5, 6, 1978.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 260 ft³/s, and maximum (*):

Date	Time	Disoharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
May 17	2400	*3,300	9.23	May 25	1045	895	5.50

Minimum daily discharge, 6.0 ft³/s, Feb. 8 to Mar. 17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.2	7.5	7.0	7.0	7.0	6.0	12	57	441	132	13	15
2	8.8	7.5	7.3	7.0	7.0	6.0	14	79	444	120	12	13
3	9.3	7.5	7.0	7.0	7.0	6.0	16	81	405	116	12	12
4	8.2	7.3	7.0	7.0	7.0	6.0	18	97	388	106	11	12
5	8.0	7.0	7.3	7.0	7.0	6.0	22	118	372	98	12	11
6	8.2	6.2	7.4	7.0	6.6	6.0	24	115	390	89	12	11
7	9.5	6.0	7.7	7.0	6.4	6.0	24	102	388	84	11	11
8	9.5	9.8	7.5	7.0	6.0	6.0	36	112	395	73	9.3	11
9	9.5	8.2	7.3	7.0	6.0	6.0	44	142	365	73	8.8	11
10	9.3	8.0	7.3	7.0	6.0	6.0	36	182	328	75	8.8	10
11	9.3	7.7	7.0	7.0	6.0	6.0	38	314	315	69	8.1	10
12	9.0	9.0	7.3	7.0	6.0	6.0	32	571	325	68	7.7	9.7
13	9.0	9.3	7.3	7.0	6.0	6.0	32	762	342	64	7.4	8.8
14	9.3	8.5	7.5	7.0	6.0	6.0	36	672	365	64	7.0	8.4
15	9.3	7.5	7.3	7.0	6.0	6.0	52	843	375	64	7.0	8.8
16	9.0	7.7	8.0	7.0	6.0	6.0	67	480	365	58	7.7	8.8
17	8.8	7.5	7.3	7.0	6.0	6.0	54	1690	330	57	8.8	8.8
18	9.0	7.5	7.3	7.0	6.0	7.0	54	1540	308	51	9.3	8.1
19	9.0	8.0	7.3	7.0	6.0	8.0	52	1300	298	46	8.4	7.4
20	9.0	8.0	7.3	7.0	6.0	9.0	44	900	285	42	18	7.4
21	8.8	8.0	7.3	7.0	6.0	11	34	450	271	38	23	11
22	8.5	6.8	7.3	7.0	6.0	12	34	477	253	34	22	11
23	8.2	6.8	7.3	7.0	6.0	14	46	489	231	30	20	9.7
24	7.7	6.8	7.3	7.0	6.0	14	70	495	215	28	28	9.3
25	7.5	7.3	7.3	7.0	6.0	14	72	703	201	27	24	9.3
26	7.5	7.3	7.3	7.0	6.0	14	59	540	180	26	20	10
27	7.5	7.3	7.3	7.0	6.0	13	51	549	163	23	19	12
28	7.3	7.7	7.3	7.0	6.0	12	47	510	150	19	17	10
29	7.3	7.3	7.3	7.0	6.0	11	46	453	140	17	16	9.7
30	7.3	7.0	7.3	7.0	---	11	49	438	142	16	14	10
31	7.5	---	7.3	7.0	---	11	---	432	---	14	14	---
TOTAL	264.3	228.0	226.7	217.0	180.0	263.0	1215	15693	9170	1821	416.3	305.2
MEAN	8.53	7.60	7.31	7.00	6.21	8.48	40.5	506	306	58.7	13.4	10.2
MAX	9.5	9.8	8.0	7.0	7.0	14	72	1690	444	132	28	15
MIN	7.3	6.0	7.0	7.0	6.0	6.0	12	57	140	14	7.0	7.4
AC-FT	524	452	450	430	357	522	2410	31130	18190	3610	826	605

CAL YR 1983	TOTAL	27724.7	MEAN	76.0	MAX	672	MIN	5.4	AC-FT	54990
WTR YR 1984	TOTAL	29999.5	MEAN	82.0	MAX	1690	MIN	6.0	AC-FT	59500

NOTE.--NO GAGE-HEIGHT RECORD JAN. 1-31, FEB. 12 TO APR. 5.

09129600 SMITH FORK NEAR LAZEAR, CO

LOCATION.--Lat 38°42'27", long 107°42'35", in SE¼NE¼ sec.31, T.15 S., R.9 2 W., Delta County, Hydrologic Unit 14020002, on left bank 25 ft downstream from bridge, 1.8 mi upstream from Diamond Joe Gulch, and 6.4 mi southeast of Lazear.

DRAINAGE AREA.--166 mi^2.

PERIOD OF RECORD.--June 1976 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 5,830 ft, from topographic map.

REMARKS.--Records fair except those for winter period, and those for periods of no gage-height record which are poor. Natural flow of stream affected by reservoirs, diversions into basin, diversions for irrigation, and return flow from irrigated areas. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--8 years, 33.7 ft^3/s; 24,420 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,000 ft^3/s, May 18, 1984, gage height, 9.28 ft, from high-water mark; minimum daily, 0.10 ft^3/s, Aug. 12-14, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,000 ft^3/s, May 18, gage height, 9.28 ft, from high-water mark; minimum daily, 2.0 ft^3/s, Feb. 9 to Mar. 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.8	4.2	4.3	3.0	2.5	2.0	10	102	525	98	3.0	8.9
2	2.7	4.3	4.3	3.0	2.5	2.0	10	110	526	90	3.2	9.5
3	2.7	4.3	4.3	3.0	2.5	2.0	10	118	456	83	4.1	9.6
4	3.3	4.3	4.3	3.0	2.5	2.0	9.5	132	429	78	3.4	8.4
5	3.6	4.3	4.3	3.0	2.4	2.0	8.8	182	402	76	3.7	9.0
6	4.4	4.3	4.1	3.0	2.3	2.0	10	230	381	71	4.2	8.7
7	4.4	4.3	3.9	3.0	2.1	2.1	17	203	419	60	4.7	7.2
8	4.4	4.5	3.9	3.0	2.1	2.1	20	212	375	60	3.2	7.1
9	4.2	4.1	3.9	3.0	2.0	2.1	23	269	366	60	3.5	6.8
10	4.2	4.1	3.9	3.0	2.0	2.1	41	388	332	63	3.4	6.3
11	4.2	4.1	3.9	3.0	2.0	2.2	38	470	316	56	3.2	5.7
12	4.1	4.2	3.6	3.0	2.0	2.3	34	580	325	48	3.3	5.7
13	4.1	4.3	3.3	3.0	2.0	2.3	32	740	339	43	3.4	5.3
14	4.1	4.3	3.1	3.0	2.0	2.3	31	900	355	49	3.4	5.3
15	4.1	4.3	3.1	3.0	2.0	2.6	32	1000	360	48	3.3	5.6
16	4.1	4.3	3.1	3.0	2.0	3.1	64	1200	330	42	3.0	7.2
17	4.1	4.3	3.1	3.0	2.0	3.6	122	1500	310	39	14	7.2
18	4.1	4.3	3.1	3.0	2.0	3.6	176	2000	295	32	11	11
19	4.2	4.3	3.1	3.0	2.0	3.6	191	1500	280	23	4.4	9.0
20	4.3	4.3	3.1	2.8	2.0	3.6	188	1000	260	14	7.5	8.1
21	4.3	4.3	3.1	2.6	2.0	3.4	150	640	230	12	4.2	5.3
22	4.3	4.4	3.1	2.5	2.0	4.1	135	580	212	11	3.7	8.6
23	4.3	4.6	3.1	2.5	2.0	6.7	132	620	190	9.5	3.6	6.6
24	4.3	4.6	3.1	2.5	2.0	8.2	182	740	170	8.5	10	4.7
25	4.2	4.4	3.1	2.5	2.0	12	197	830	140	8.2	7.0	4.9
26	4.1	4.3	3.0	2.5	2.0	12	185	720	124	8.4	3.8	4.7
27	4.1	4.3	3.0	2.5	2.0	12	152	640	110	6.8	6.2	4.4
28	4.1	4.4	3.0	2.5	2.0	11	132	580	102	7.2	7.1	3.1
29	4.1	4.3	3.0	2.5	2.0	11	120	540	104	8.3	8.9	2.8
30	4.1	4.3	3.0	2.5	---	11	100	531	102	9.3	8.7	3.8
31	4.1	---	3.0	2.5	---	10	---	524	---	5.6	8.7	---
TOTAL	124.1	129.3	107.2	87.4	60.9	151.0	2552.3	19781	8865	1227.8	164.8	200.5
MEAN	4.00	4.31	3.46	2.82	2.10	4.87	85.1	638	296	39.6	5.32	6.68
MAX	4.4	4.6	4.3	3.0	2.5	12	197	2000	526	98	14	11
MIN	2.7	4.1	3.0	2.5	2.0	2.0	8.8	102	102	5.6	3.0	2.8
AC-FT	246	256	213	173	121	300	5060	39240	17580	2440	327	398

CAL YR 1983 TOTAL 24462.1 MEAN 67.0 MAX 619 MIN 1.9 AC-FT 48520
WTR YR 1984 TOTAL 33451.3 MEAN 91.4 MAX 2000 MIN 2.0 AC-FT 66350

NOTE.--NO GAGE-HEIGHT RECORD MAY 15-29.

09132500 NORTH FORK GUNNISON RIVER NEAR SOMERSET, CO

LOCATION.--Lat 38°55'33", long 107°26'01", in SE¼SW¼ sec.10, T.13 S., R.90 W., Gunnison County, Hydrologic Unit 14020004, on left bank 2.3 mi east of Somerset and 4.8 mi upstream from Hubbard Creek.

DRAINAGE AREA.--526 mi².

PERIOD OF RECORD.--October 1933 to current year. Monthly discharge only for some periods, published in WSP 1313. Water-quality data available, October 1977 to September 1982. Sediment data available, November 1978 to September 1982.

REVISED RECORDS.--WSP 2124: Drainage area. WDR CO-77-2: 1976.

GAGE.--Water-stage recorder. Altitude of gage is 6,280 ft, from topographic map. Prior to Oct. 1,1982, at various sites 0.8 mi downstream, at different datums. See WDR CO-81-2, for history of changes.

REMARKS.--Records good except those for winter period and period of no gage height, 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 storage in Paonia Reservoir, capacity, 18,300 acre-ft, since February 1962. See table below for contents of Paonia Reservoir.

COOPERATION.--Monthend contents, in acre-feet, in Paonia Reservoir; furnished by U.S. Bureau of Reclamation.

AVERAGE DISCHARGE.--51 years, 450 ft³/s; 326,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,220 ft³/s, May 24, 1984, gage height, 8.20 ft, from outside highwater mark; minimum daily, 17 ft³/s, Nov. 10, 1950.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 9,220 ft³/s at 0130 May 24, gage height, 8.20 ft; minimum daily, 28 ft³/s, Jan. 16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	255	58	78	46	48	47	217	656	4980	2310	429	277
2	253	58	78	45	48	49	205	892	4580	1940	399	246
3	259	55	81	44	48	52	195	1000	4180	1930	333	220
4	252	52	80	46	48	50	193	1060	3760	1700	297	216
5	246	48	76	48	48	50	210	1150	3700	1560	289	227
6	247	48	72	47	48	49	252	1280	3580	1400	310	220
7	241	45	72	47	47	49	348	1280	5640	1400	296	233
8	238	87	72	46	47	49	616	1300	4120	1500	263	248
9	235	68	72	46	47	52	606	1610	3560	1600	248	251
10	245	55	72	45	46	56	342	2200	3010	1700	249	233
11	250	58	70	46	45	60	364	2890	2880	1400	250	224
12	246	63	68	44	45	56	362	3550	2940	1200	328	227
13	246	77	69	46	47	60	387	4150	3110	1100	327	233
14	256	69	64	43	48	62	428	4590	3210	1300	295	239
15	146	46	64	40	46	66	507	4830	3400	1200	302	235
16	62	53	60	28	46	70	747	4550	3330	1000	327	242
17	60	52	62	37	47	74	1010	4790	3180	900	301	241
18	60	65	62	37	46	70	1250	5270	2850	820	296	236
19	60	57	63	39	43	60	1350	4590	2820	800	281	235
20	58	53	56	39	42	69	1010	5130	2670	780	292	230
21	58	59	37	38	42	139	653	6190	2750	780	298	235
22	55	54	47	38	44	342	512	6450	2580	720	276	255
23	52	53	47	39	44	290	725	6900	2420	660	258	243
24	52	72	47	39	44	115	1130	7080	2530	680	346	254
25	52	95	48	40	44	141	1440	6920	2510	680	299	240
26	50	85	48	41	44	113	1320	6240	2390	600	283	230
27	48	83	46	42	44	97	790	6270	2280	546	265	249
28	50	84	46	43	45	284	591	5660	2180	484	250	241
29	60	80	47	43	45	433	635	5280	2120	436	252	254
30	58	80	48	43	---	431	632	5140	2190	424	256	252
31	60	---	48	45	---	322	---	4900	---	464	249	---
TOTAL	4510	1912	1900	1310	1326	3857	19027	123798	95450	34014	9144	7166
MEAN	145	63.7	61.3	42.3	45.7	124	634	3993	3182	1097	295	239
MAX	259	95	81	48	48	433	1440	7080	5640	2310	429	277
MIN	48	45	37	28	42	47	193	656	2120	424	248	216
AC-FT	8950	3790	3770	2600	2630	7650	37740	245600	189300	67470	18140	14210
a	5730	7990	8950	3110	3640	2230	1620	18600	18500	18500	16400	11500

CAL YR 1983 TOTAL 279009 MEAN 764 MAX 5310 MIN 36 AC-FT 553400
WTR YR 1984 TOTAL 303414 MEAN 829 MAX 7080 MIN 28 AC-FT 601800

a MONTHEND CONTENTS, IN ACRE-FEET, IN PAONIA RESERVOIR, FURNISHED BY U. S. BUREAU OF RECLAMATION.

09135900 LEROUX CREEK AT HOTCHKISS, CO

LOCATION.--Lat 38°47'53", long 107°43'53", in NW¼NE¼ sec.36, T.14 S., R.9 3 W., Delta County, Hydrologic Unit 14020004, on left bank at upstream side of culvert, 0.3 mi west of Hotchkiss city limits, and 0.5 mi upstream from mouth.

DRAINAGE AREA.--66.7 mi^2.

PERIOD OF RECORD.--June 1976 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 5,315 ft, from topographic map.

REMARKS.--Records good except those for winter period and those for period of no gage-height record, which are poor. Natural flow of stream is affected by diversions above station for irrigation and by return flow from irrigated area above station. Mostly return flow after June. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--8 years, 32.4 ft^3/s; 23,470 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,880 ft^3/s, June 7, 1984, gage height, 11.82 ft; minimum daily, 0.55 ft^3/s, July 10, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,880 ft^3/s at 1000 June 7, gage height, 11.82 ft; minimum daily, 3.1 ft^3/s, July 27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.6	11	11	10	12	9.9	9.9	33	383	4.5	4.0	8.8
2	8.6	11	11	10	12	9.9	8.6	50	302	4.0	3.4	9.2
3	8.6	11	11	10	12	9.9	7.5	48	238	4.0	3.7	8.8
4	9.9	11	11	10	13	9.2	7.5	52	170	4.2	4.5	9.6
5	12	11	11	10	12	8.6	8.6	79	292	3.7	3.7	9.6
6	11	11	11	10	12	8.6	9.6	104	303	3.7	3.7	7.1
7	11	11	11	10	12	8.6	9.9	85	1110	4.0	3.7	7.1
8	12	11	11	10	12	9.2	16	98	601	4.0	3.7	7.1
9	13	11	10	10	12	8.6	20	143	417	4.0	3.7	7.5
10	14	11	10	10	13	8.2	16	234	316	4.5	3.7	7.1
11	16	11	10	10	14	8.6	18	289	263	4.5	4.0	8.8
12	16	11	10	10	12	9.2	18	353	215	4.2	4.5	10
13	16	11	10	11	11	8.9	22	336	217	4.0	4.5	10
14	16	11	10	10	12	8.9	30	341	212	5.1	4.5	10
15	16	11	10	11	12	8.9	43	324	194	4.5	5.1	12
16	16	11	10	9.2	12	9.6	64	524	173	4.8	5.4	11
17	16	11	10	9.9	12	9.6	97	466	140	4.2	5.9	11
18	16	11	10	10	11	9.2	139	423	101	4.5	5.9	10
19	16	11	10	11	9.6	8.2	113	396	71	4.5	5.1	9.6
20	16	11	10	12	10	9.2	68	485	67	4.2	4.5	9.6
21	16	11	10	11	11	12	50	518	58	4.2	4.8	10
22	16	11	10	11	11	14	45	582	44	4.5	5.9	10
23	16	11	10	12	11	8.9	70	588	25	4.5	7.5	10
24	16	11	10	11	9.9	8.9	108	653	41	5.1	8.4	9.6
25	16	11	10	11	10	10	113	652	12	4.0	8.4	9.6
26	16	11	10	11	9.9	9.6	68	502	9.2	3.4	8.8	9.6
27	16	11	10	11	9.6	9.2	50	460	6.6	3.1	10	16
28	16	11	10	11	9.6	7.9	40	385	5.6	3.2	10	22
29	15	11	10	12	9.9	8.6	35	351	5.1	3.4	9.2	15
30	13	11	10	12	---	9.2	32	334	4.5	3.4	8.4	13
31	12	---	10	12	---	9.6	---	295	---	3.7	7.9	---
TOTAL	436.7	330	318	329.1	329.5	288.9	1336.6	10183	5996.0	127.6	176.5	308.7
MEAN	14.1	11.0	10.3	10.6	11.4	9.32	44.6	328	200	4.12	5.69	10.3
MAX	16	11	11	12	14	14	139	653	1110	5.1	10	22
MIN	8.6	11	10	9.2	9.6	7.9	7.5	33	4.5	3.1	3.4	7.1
AC-FT	866	655	631	653	654	573	2650	20200	11890	253	350	612

CAL YR 1983 TOTAL 15664.0 MEAN 42.9 MAX 445 MIN 4.4 AC-FT 31070
WTR YR 1984 TOTAL 20160.6 MEAN 55.1 MAX 1110 MIN 3.1 AC-FT 39990

NOTE.--NO GAGE-HEIGHT RECORD OCT. 12 TO JAN. 12.

09136200 GUNNISON RIVER NEAR LAZEAR, CO

LOCATION.--Lat 38°46'59", long 107°50'14", in NE¼NE¼ sec.1, T.15 S., R.94 W., Delta County, Hydrologic Unit 14020005, on left bank 300 ft downstream from North Fork Gunnison River and 3.0 mi west of Lazear.

DRAINAGE AREA.--5,241 mi².

PERIOD OF RECORD.--May 1962 to current year.

REVISED RECORDS.--WSP 2124: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 5,090 ft, from topographic map.

REMARKS.--Records good. Natural flow of stream affected by transmountain and transbasin diversions, storage reservoirs, power development, and diversions for irrigation of about 150,000 acres, part of which is in the Uncompahgre River basin. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--7 years, 2,157 ft³/s; 1,563,000 acre-ft/yr, since completion of Crystal Dam.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 19,800 ft³/s, June 7, 1984, gage height, 8.57 ft, Maximum stage indicator; minimum daily, 115 ft³/s, Oct. 6, 1963.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 19,800 ft³/s at 1430 June 7, gage height, 8.57 ft; minimum daily, 556 ft³/s, Nov. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1520	556	2090	2180	2450	2980	3190	2860	14200	11200	2750	1930
2	1540	720	2130	2100	2450	3000	3110	3140	13600	10500	2710	2700
3	1530	804	2130	2060	2500	3050	3040	3240	11600	10100	2990	3690
4	1580	809	2130	2220	2530	2990	3020	3340	11100	10200	2070	3230
5	1600	806	2090	2290	2550	2950	3020	3520	10700	9980	2870	2490
6	1590	805	2070	2450	2690	3000	3090	3840	11800	9230	2540	1560
7	1900	812	2070	2470	2920	3120	3100	3800	16000	7920	2500	1440
8	1580	917	2100	2510	2920	3140	3360	4000	13900	6770	2190	1460
9	1580	888	2090	2600	2920	3110	3580	4700	12200	6190	1520	1430
10	1580	1940	2120	2820	2950	3120	2970	5510	10800	6590	1650	1550
11	1560	2010	2100	2810	2940	3180	2850	6350	10400	6050	1860	1220
12	1230	2010	2040	2750	2930	3140	2810	8180	10000	5040	1520	1200
13	1560	2020	1980	2770	2900	3150	2860	9700	10000	5070	1730	1200
14	1590	2020	1970	2790	2930	3150	2620	11000	10500	6360	1510	1200
15	1620	1980	2030	2510	2960	3150	2740	12100	11200	5350	1680	1250
16	1540	1980	2020	2460	2940	3210	3030	11500	11400	4710	1540	1260
17	1480	1950	2010	2450	2990	3170	3380	11000	11100	4730	1380	1290
18	1490	2040	2010	2450	2960	3160	3560	12000	10200	4560	1600	1270
19	1480	2110	2000	2420	2910	3120	3650	10600	9910	4050	1230	1270
20	1500	2050	2010	2420	2910	3110	3280	11700	10500	3860	1280	1330
21	1520	2020	1960	2430	2920	3130	2890	12700	11100	3800	1520	1380
22	1500	2020	1970	2430	2960	3260	2680	13200	11000	3820	1530	1410
23	1490	1990	1970	2460	2930	3370	2860	15000	11500	3780	1540	1400
24	1470	2000	1980	2470	2940	2800	3560	15800	11400	3590	1650	1420
25	1490	2060	2060	2490	2970	2850	4050	17200	11500	2420	1560	1400
26	1520	2040	2120	2500	2960	3170	3740	16200	11200	2230	1640	1410
27	1520	2000	1980	2510	2920	3170	3240	16200	11600	2210	1630	1430
28	1500	1980	2060	2480	2920	3150	2930	15400	11300	2870	1980	1450
29	1480	2090	2060	2480	2960	3340	2930	14500	11200	3010	2710	1500
30	1480	2090	2060	2450	---	3340	2880	14200	11300	2650	2000	1500
31	1720	---	2220	2470	---	3330	---	13900	---	2470	1860	---
TOTAL	47740	49517	63630	76700	82730	96910	94020	306380	344210	171310	58740	48270
MEAN	1540	1651	2053	2474	2853	3126	3134	9883	11470	5526	1895	1609
MAX	1900	2110	2220	2820	2990	3370	4050	17200	16000	11200	2990	3690
MIN	1230	556	1960	2060	2450	2800	2620	2860	9910	2210	1230	1200
AC-FT	94690	98220	126200	152100	164100	192200	186500	607700	682700	339800	116500	95740

CAL YR 1983 TOTAL 1090245 MEAN 2987 MAX 16600 MIN 556 AC-FT 2163000
WTR YR 1984 TOTAL 1440157 MEAN 3935 MAX 17200 MIN 556 AC-FT 2857000

09137050 CURRANT CREEK NEAR READ, CO

LOCATION.--Lat 38°47'05", long 107°56'18", in SW¼SE¼ sec.31, T.14 S., R.94 W., Delta County, Hydrologic Unit 14020005, on right bank 0.2 mi downstream from Dry Creek, 0.4 mi upstream from mouth, 0.7 mi northeast of Austin, and 2.4 mi northeast of Read.

DRAINAGE AREA.--56.9 mi^2.

PERIOD OF RECORD.--May 1976 to current year.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 5,035 ft, from topographic map.

REMARKS.--Records good except those for winter period, which are poor. Natural flow of stream affected by diversions for irrigation and return flow from irrigated areas. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--8 years, 11.7 ft^3/s; 8,480 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 644 ft^3/s, June 7, 1984, gage height, 5.73 ft, no flow, Aug. 2, 4, 5, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 644 ft^3/s at 1700 June 7, gage height, 5.73 ft, minimum daily, 0.19 ft^3/s, July 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.8	13	18	17	14	14	14	24	31	3.2	.68	4.5
2	7.6	12	20	16	14	14	14	32	27	3.5	.68	4.4
3	8.8	12	19	14	14	14	14	39	15	2.8	.61	4.2
4	9.7	12	20	16	14	14	14	42	17	2.2	.62	3.7
5	10	13	18	16	14	14	14	47	45	2.1	.62	3.9
6	11	14	15	16	14	14	19	79	88	1.8	.69	5.3
7	12	15	17	16	14	14	20	57	338	1.2	.69	3.0
8	11	22	17	16	14	14	29	55	234	.86	.68	4.2
9	10	19	17	16	14	14	40	91	138	1.2	.52	5.5
10	12	16	18	15	14	14	24	145	92	.90	.53	5.1
11	12	17	17	15	14	14	29	168	76	.19	.59	5.6
12	11	17	18	15	14	14	29	195	64	.26	.76	6.5
13	11	18	17	15	14	14	28	168	54	.28	1.1	7.3
14	13	17	16	16	14	14	32	193	46	.61	1.0	6.6
15	15	15	17	15	14	14	42	224	47	1.3	1.1	6.5
16	14	15	17	13	14	14	69	228	44	1.3	1.1	9.1
17	13	15	17	14	14	14	104	114	33	.89	1.1	8.9
18	13	21	17	14	14	14	126	94	6.3	.76	1.2	8.0
19	13	18	18	14	14	14	110	28	1.4	1.1	1.0	9.6
20	14	17	17	14	14	14	49	69	3.9	2.0	1.2	11
21	14	18	14	14	14	14	35	80	9.3	1.1	1.5	13
22	14	17	16	14	14	14	31	73	8.9	.62	1.7	15
23	14	16	16	14	14	14	40	94	4.2	.80	1.9	14
24	14	15	16	14	14	14	75	83	4.9	.43	3.7	14
25	13	20	19	14	14	14	98	87	5.1	.38	4.7	14
26	13	20	23	14	14	14	48	70	7.1	.59	4.8	15
27	13	18	21	14	14	14	35	61	6.8	.90	3.3	15
28	12	17	18	14	14	14	28	54	4.8	1.1	3.5	16
29	12	18	16	14	14	14	28	40	3.5	.74	4.1	15
30	12	18	18	14	---	14	24	30	3.0	.87	4.0	15
31	13	---	17	14	---	14	---	22	---	.77	4.0	---
TOTAL	370.9	495	544	457	406	434	1262	2786	1458.2	36.75	53.67	268.9
MEAN	12.0	16.5	17.5	14.7	14.0	14.0	42.1	89.9	48.6	1.19	1.73	8.96
MAX	15	22	23	17	14	14	126	228	338	3.5	4.8	16
MIN	5.8	12	14	13	14	14	14	22	1.4	.19	.52	3.0
AC-FT	736	982	1080	906	805	861	2500	5530	2890	73	106	533

CAL YR 1983	TOTAL	9015.64	MEAN	24.7	MAX	244	MIN	.30	AC-FT	17880
WTR YR 1984	TOTAL	8572.42	MEAN	23.4	MAX	338	MIN	.19	AC-FT	17000

NOTE.--NO GAGE-HEIGHT RECORD JAN. 16 TO APR. 5.

09143000 SURFACE CREEK NEAR CEDAREDGE, CO

LOCATION.--Lat 38°59'05", long 107°51'13", in NW¼NW¼ sec.25, T.12 S., R.94 W., Delta County, Hydrologic Unit 14020005, on left bank 5 ft downstream from private bridge, 1.4 mi downstream from Caesar Creek, and 7.0 mi northeast of Cedaredge.

DRAINAGE AREA.--27.4 mi^2.

PERIOD OF RECORD.--July 1939 to current year. Monthly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WDR CO-83-2: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 8,261 ft, from topographic map.

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. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--45 years, 42.4 ft^3/s; 30,720 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 824 ft^3/s, June 7, 1984, gage height, 3.67 ft, from rating curve extended above 310 ft^3/s; maximum gage height, 5.10 ft, Apr. 13, 1958 (ice jam); minimum daily discharge, 0.80 ft^3/s, Jan. 15, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 824 ft^3/s at 0730 June 7, gage height, 3.67 ft; minimum daily, 4.3 ft^3/s, Nov. 6, 7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26	6.0	5.8	5.0	5.0	5.5	6.2	18	346	119	98	56
2	24	5.0	6.2	5.5	5.0	5.2	7.0	21	312	112	76	50
3	23	4.8	6.5	6.0	5.0	5.0	6.8	23	304	123	70	49
4	20	4.8	7.0	6.2	5.0	5.0	7.6	28	276	112	74	38
5	18	4.8	7.9	6.5	5.0	5.1	8.0	30	312	112	74	38
6	12	4.3	7.6	6.0	5.0	5.2	8.0	38	312	108	74	73
7	11	4.3	6.8	5.5	5.0	5.0	8.2	38	444	117	76	77
8	10	6.2	6.2	5.2	5.0	5.2	8.4	54	276	116	78	74
9	10	7.9	5.8	5.0	5.0	5.0	8.6	78	224	116	96	73
10	10	6.8	5.5	5.5	5.0	5.0	8.8	116	198	92	98	70
11	16	5.8	5.2	5.5	5.0	5.0	8.8	189	195	80	94	52
12	16	5.2	5.0	5.5	5.0	5.0	8.8	228	189	86	96	53
13	14	5.5	5.0	5.8	4.8	5.0	8.8	245	201	84	96	49
14	16	5.0	5.0	6.2	4.8	5.0	9.5	294	207	84	92	49
15	14	6.5	5.2	6.2	4.8	5.0	11	343	201	82	92	41
16	13	7.3	5.2	5.8	4.8	5.5	18	329	198	77	94	44
17	14	6.8	5.0	5.8	4.8	5.2	30	322	180	94	94	42
18	15	5.8	5.0	5.8	4.8	5.5	42	308	177	96	74	24
19	14	6.0	5.2	5.8	4.9	5.5	43	301	165	96	68	24
20	14	6.3	6.0	5.8	5.0	6.0	31	346	162	94	76	28
21	15	6.6	5.9	5.5	5.5	6.2	24	394	153	86	69	31
22	23	6.8	5.8	5.5	5.5	6.4	22	386	153	84	66	30
23	22	7.2	5.8	5.5	5.2	6.7	28	378	153	82	71	25
24	21	7.5	6.2	5.2	5.2	7.0	41	386	145	66	78	25
25	13	7.9	6.8	5.2	5.2	7.6	45	378	148	66	64	23
26	12	8.5	7.0	5.2	5.0	7.0	31	366	142	89	62	23
27	12	7.3	6.5	5.2	5.0	6.5	28	350	130	94	62	21
28	12	6.8	5.8	5.0	5.5	6.6	26	343	121	89	57	19
29	12	6.5	6.2	5.0	5.5	6.8	21	329	119	88	56	18
30	12	6.0	5.8	5.0	---	6.5	18	329	125	88	54	17
31	12	---	5.5	5.0	---	6.5	---	322	---	99	56	---
TOTAL	476	186.2	184.4	171.9	146.3	177.7	572.5	7310	6268	2931	2385	1236
MEAN	15.4	6.21	5.95	5.55	5.04	5.73	19.1	236	209	94.5	76.9	41.2
MAX	26	8.5	7.9	6.5	5.5	7.6	45	394	444	123	98	77
MIN	10	4.3	5.0	5.0	4.8	5.0	6.2	18	119	66	54	17
AC-FT	944	369	366	341	290	352	1140	14500	12430	5810	4730	2450

CAL YR 1983	TOTAL	26897.6	MEAN	73.7	MAX	480	MIN	4.3	AC-FT	53350	
WTR YR 1984	TOTAL	22045.0	MEAN	60.2	MAX	444	MIN	4.3	AC-FT	43730	

09143500 SURFACE CREEK AT CEDAREDGE, CO

LOCATION.--Lat 38°54'06", long 107°55'14", in SW¼SE¼ sec.20, T.13 S., R.94 W., Delta County, Hydrologic Unit 14020005, on left bank at Cedaredge, 700 ft east of State Highway 65, and 8.5 mi upstream from mouth.

DRAINAGE AREA.--39.0 mi^2.

PERIOD OF RECORD.--October 1916 to current year. Monthly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WDR-CO-83-2: Drainage area.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 6,220 ft, from topographic map. Prior to June 8, 1917, nonrecording gage at present site at datum 0.50 ft, higher.

REMARKS.--Records good except those for winter period, and those for period of no gage-height record, 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. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--68 years, 27.9 ft^3/s; 20,210 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,190 ft^3/s, May 13, 1941, gage height, 2.50 ft, from rating curve extended above 640 ft^3/s; no flow, Sept. 25, 1939, and practically no flow at times in some winters.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 862 ft^3/s at 0615 June 7, gage height, 3.44 ft; minimum daily, 3.0 ft^3/s, Jan. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	8.9	5.5	3.0	7.8	7.8	10	26	269	72	59	23
2	15	6.4	5.8	3.2	7.8	7.8	10	35	233	66	42	22
3	16	4.7	5.5	3.4	7.8	8.0	10	36	209	72	36	21
4	16	4.2	5.8	3.4	7.8	8.5	9.8	45	180	68	36	20
5	16	4.2	6.0	3.6	7.8	9.0	9.5	53	221	64	35	19
6	11	4.4	6.0	4.2	7.8	9.0	9.2	59	248	64	35	29
7	9.8	4.4	6.0	5.0	7.8	9.0	8.9	57	520	69	33	30
8	9.4	8.5	6.1	5.8	7.8	9.0	13	78	367	68	32	29
9	10	5.2	7.2	6.4	7.8	9.0	14	115	299	70	37	27
10	10	6.9	5.2	6.4	7.8	9.0	10	178	275	61	36	26
11	11	6.6	5.0	6.4	7.8	9.0	11	272	194	53	39	25
12	9.4	6.4	5.0	6.4	7.8	9.0	11	331	165	49	38	28
13	9.4	6.4	5.2	6.4	7.8	9.0	12	327	170	47	37	23
14	11	6.1	6.1	6.4	7.8	9.0	16	363	178	52	42	22
15	11	3.7	5.8	6.4	7.8	9.0	24	391	170	55	43	23
16	10	5.5	5.6	6.6	7.8	9.0	36	404	162	50	46	25
17	11	5.2	5.2	6.8	7.8	9.0	50	355	140	46	47	26
18	14	6.9	5.2	7.2	7.8	9.0	70	335	119	42	35	16
19	14	6.6	5.5	7.4	7.8	9.0	63	295	105	41	30	12
20	14	6.6	6.9	7.8	7.8	9.0	43	347	86	38	33	12
21	14	6.6	7.0	7.8	7.8	9.0	33	367	83	36	29	14
22	11	6.6	7.2	7.8	7.8	9.0	30	371	80	35	26	15
23	8.9	6.6	6.9	7.8	7.8	9.0	41	367	76	31	27	14
24	8.5	6.8	6.6	7.8	7.8	9.0	63	367	74	26	36	13
25	9.8	6.9	6.6	7.8	7.8	9.0	63	375	64	32	29	14
26	11	6.9	6.6	7.8	7.8	9.2	43	335	62	46	26	15
27	8.1	7.0	6.1	7.8	7.8	9.4	35	315	51	50	23	17
28	8.1	7.0	5.5	7.8	7.8	9.8	29	283	53	50	26	15
29	10	6.1	5.5	7.8	7.8	10	27	260	59	48	27	13
30	12	5.5	5.2	7.8	---	10	25	248	70	47	22	13
31	12	---	3.9	7.8	---	10	---	248	---	57	19	---
TOTAL	361.4	183.8	181.7	198.0	226.2	279.5	829.4	7638	4982	1605	1061	601
MEAN	11.7	6.13	5.86	6.39	7.80	9.02	27.6	246	166	51.8	34.2	20.0
MAX	20	8.9	7.2	7.8	7.8	10	70	404	520	72	59	30
MIN	8.1	3.7	3.9	3.0	7.8	7.8	8.9	26	51	26	19	12
AC-FT	717	365	360	393	449	554	1650	15150	9880	3180	2100	1190

CAL YR 1983 TOTAL 22340.2 MEAN 61.2 MAX 510 MIN 3.7 AC-FT 44310
WTR YR 1984 TOTAL 18147.0 MEAN 49.6 MAX 520 MIN 3.0 AC-FT 35990

NOTE.--NO GAGE-HEIGHT RECORD JAN. 11 TO APR. 6.

09144200 TONGUE CREEK AT CORY, CO

LOCATION.--Lat 38°47'16", long 107°59'41", in SE¼SE¼ sec.34, T.14 S., R.95 W., Delta County, Hydrologic Unit 14020005, on left bank at downstream side of bridge, 500 ft upstream from North Delta canal headgate, 0.5 mi west of Cory, and 1.0 mi upstream from mouth.

DRAINAGE AREA.--197 mi^2.

PERIOD OF RECORD.--October 1957 to September 1968, May 1976 to current year.

REVISED RECORDS.--WSP 2124: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 5,030 ft, from topographic map.

REMARKS.--Records good, except those for period of no gage-height record, which are poor. Natural flow of stream affected by many small storage reservoirs, diversions for irrigation, and return flow from irrigated areas. Diversions to and from nearby streams. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--19 years (water years 1958-68, 1977-84), 38.9 ft^3/s; 28,180 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,130 ft^3/s, June 7, 1984, gage height, 6.77 ft, from maximum stage indicator; minimum daily, 0.35 ft^3/s, July 22, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,130 ft^3/s at 2130 June 7, gage height, 6.77 ft; minimum daily, 15 ft^3/s, July 12-14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	81	64	80	67	40	54	60	48	570	50	20	43
2	75	61	84	64	40	56	56	74	515	50	20	43
3	81	58	82	62	40	58	54	77	466	40	20	41
4	69	55	86	69	40	61	52	73	424	30	20	39
5	66	54	80	65	45	57	60	68	498	30	22	37
6	66	53	70	64	45	50	81	106	596	30	40	35
7	68	55	76	63	45	54	75	84	929	30	36	35
8	68	78	78	62	50	55	118	76	1030	20	29	36
9	68	64	75	60	51	59	145	143	800	20	31	35
10	69	63	76	57	56	66	70	237	600	20	28	36
11	66	63	74	60	55	72	92	315	400	20	28	37
12	65	66	74	57	52	72	75	433	300	15	28	39
13	63	69	73	56	55	71	86	522	200	15	30	38
14	75	68	72	50	67	75	101	503	150	15	35	39
15	77	63	75	45	71	72	130	606	150	20	36	42
16	70	64	66	45	64	75	174	637	150	30	37	45
17	68	63	66	40	69	76	214	532	100	30	40	44
18	74	78	65	35	66	71	244	400	80	30	40	40
19	69	67	66	35	58	60	203	300	50	40	40	36
20	66	71	68	35	59	51	113	400	50	40	40	38
21	64	73	53	35	59	74	80	450	80	40	40	42
22	66	70	64	35	69	93	67	450	80	30	39	51
23	67	62	65	35	60	61	71	500	60	30	40	44
24	64	63	65	40	57	59	132	500	60	31	60	50
25	61	80	75	45	55	80	146	450	60	58	63	48
26	63	85	87	50	58	65	80	400	70	70	65	50
27	63	80	82	50	53	63	62	350	70	59	57	53
28	62	75	76	45	48	57	58	350	50	52	46	51
29	65	80	64	40	48	57	57	350	50	52	44	51
30	67	80	76	40	---	62	49	300	50	46	40	53
31	66	---	70	40	---	66	---	400	---	20	42	---
TOTAL	2112	2025	2263	1546	1575	2002	3005	10134	8688	1063	1156	1271
MEAN	68.1	67.5	73.0	49.9	54.3	64.6	100	327	290	34.3	37.3	42.4
MAX	81	85	87	69	71	93	244	637	1030	70	65	53
MIN	61	53	53	35	40	50	49	48	50	15	20	35

CAL YR 1983	TOTAL	57853	MEAN	159	MAX	770	MIN	32
WTR YR 1984	TOTAL	36840	MEAN	101	MAX	1030	MIN	15

NOTE.--NO GAGE-HEIGHT RECORD JUNE 9 TO JULY 23.

09144250 GUNNISON RIVER AT DELTA, CO

LOCATION.--Lat 38°45'01", long 108°04'06", in SE¼NE¼ sec.13, T.15 S., R.96 W., Delta County, Hydrologic Unit 14020005, on left bank near upstream side of U.S. Highway 50 bridge at north edge of Delta.

DRAINAGE AREA.--5,628 mi².

PERIOD OF RECORD.--May 1976 to current year. Gage-height records collected at this site 1912-77 (flood seasons only) are in reports of the National Weather Service.

GAGE.--Water-stage recorder. Datum of gage is 4,919.97 ft, National Weather Service Datum (levels by National Weather Service). Prior to May 1976 nonrecording gage at present site and datum.

REMARKS.--Records good. Natural flow of stream affected by transmountain and transbasin diversions, storage reservoirs, power developments, and many diversions for irrigation. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--8 years, 2,256 ft³/s; 1,634,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 25,500 ft³/s, June 7, 1984, gage height, 13.15 ft; minimum daily, 208 ft³/s, Aug. 11, 1977.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum gage height observed, 13.5 ft, June 6, 1957, from National Weather Service wire-weight gage at present datum, (discharge not determined).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 25,500 ft³/s at 1900 June 7, gage-height, 13.15 ft; minimum daily, 801 ft³/s, Nov. 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1830	835	2370	2640	2990	3460	3770	3320	16000	12400	3670	2650
2	1880	801	2410	2570	3000	3490	3660	3540	15900	11700	3580	3370
3	1880	945	2410	2480	3010	3550	3580	3820	13500	11200	3770	4390
4	1850	944	2420	2650	3020	3490	3530	3880	13000	11400	3140	4020
5	1890	946	2370	2720	3040	3440	3560	4050	12900	11200	3380	3440
6	1910	937	2320	2900	3140	3460	3700	4600	14800	10600	3530	2280
7	2240	955	2340	2930	3410	3620	3800	4430	20300	9200	3340	2090
8	1910	1120	2370	2960	3410	3650	4000	4570	18300	7860	3240	2130
9	1970	1130	2370	3020	3420	3640	4500	5370	15100	7180	2440	2120
10	1960	1930	2400	3310	3470	3640	3700	6570	13400	7430	2330	2250
11	1910	2240	2370	3300	3480	3730	3530	8060	12600	7180	2550	1810
12	1550	2240	2380	3260	3430	3690	3340	9420	12300	6040	2450	1780
13	1870	2250	2330	3260	3430	3680	3340	10500	12100	5790	2430	1730
14	1910	2250	2320	3340	3490	3700	3060	11900	12500	7230	2460	1680
15	1950	2220	2390	3050	3510	3670	3180	13400	12900	6390	2440	1720
16	1920	2210	2350	2940	3450	3760	3500	13100	13200	5730	2490	1930
17	1860	2170	2360	2950	3510	3710	4100	12800	13000	5520	2080	1920
18	1850	2280	2370	2920	3460	3690	4640	14400	12000	5620	2570	1870
19	1830	2350	2370	2920	3390	3620	4860	11700	11600	4920	2060	1780
20	1840	2320	2400	2980	3390	3610	4170	12700	12200	4700	2130	1900
21	1850	2270	2320	2980	3410	3670	3580	13900	12800	4650	2370	1980
22	1840	2260	2330	2980	3460	3870	3240	13600	12700	4650	2450	2080
23	1840	2210	2350	3040	3440	3950	3340	16300	13400	4600	2420	2030
24	1800	2230	2340	3050	3420	3370	4270	17100	12900	4500	2640	2040
25	1790	2320	2470	3080	3450	3430	5040	19200	13000	3350	2500	1980
26	1820	2330	2580	3100	3440	3750	4670	18500	12700	3310	2630	1980
27	1830	2260	2530	3050	3400	3750	3960	18500	13000	3030	2540	2050
28	1810	2260	2390	3030	3390	3660	3420	17400	12900	3610	2600	2030
29	1790	2400	2440	3050	3450	3920	3450	16200	12200	3750	3450	2120
30	1760	2390	2480	3010	---	3980	3330	15700	12400	3690	3070	2110
31	2140	---	2640	3020	---	3980	---	15300	---	3260	2570	---
TOTAL	58080	56003	74290	92490	97310	113630	113820	343830	405600	201690	85320	67260
MEAN	1874	1867	2396	2984	3356	3665	3794	11090	13520	6506	2752	2242
MAX	2240	2400	2640	3340	3510	3980	5040	19200	20300	12400	3770	4390
MIN	1550	801	2320	2480	2990	3370	3060	3320	11600	3030	2060	1680
AC-FT	115200	111100	147400	183500	193000	225400	225800	682000	804500	400100	169200	133400

CAL YR 1983 TOTAL 1231413 MEAN 3374 MAX 18000 MIN 801 AC-FT 2443000
WTR YR 1984 TOTAL 1709323 MEAN 4670 MAX 20300 MIN 801 AC-FT 3390000

09146200 UNCOMPAHGRE RIVER NEAR RIDGWAY, CO

LOCATION.--Lat 38°11'02", long 107°44'43", in SW¼NE¼ sec.4, T.45 N., R.8 W., Ouray County, Hydrologic Unit 14020006, on right bank 15 ft upstream from bridge, 0.2 mi downstream from Dry Creek, 0.5 mi upstream from Dallas Creek, and 2.3 mi north of Ridgway.

DRAINAGE AREA.--149 mi².

PERIOD OF RECORD.--October 1958 to current year.

REVISED RECORDS.--WSP 2124: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 6,877.58 ft, National Geodetic Vertical Datum of 1929 (levels by U.S. Bureau of Reclamation).

REMARKS.--Records good. 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. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--26 years, 164 ft³/s; 118,800 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,100 ft³/s, June 24, 1983, gage height, 5.73 ft; from rating curve extended above 1,800 ft³/s; minimum daily, 26 ft³/s, Jan. 13, 1963.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,000 ft³/s, and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
May 14	2230	1,450	4.89	June 15	2400	1,210	4.68
May 24	2300	*1,970	5.48	June 26	2400	1,560	5.08

Minimum daily discharge, 44 ft³/s, Jan. 23, Feb. 19, 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	132	70	67	58	50	49	81	128	1280	1030	336	276
2	114	68	71	56	50	50	72	130	1070	999	322	243
3	108	68	70	50	50	55	72	130	944	950	297	220
4	101	67	68	55	50	51	77	167	812	890	294	200
5	94	67	67	60	50	49	98	195	758	806	276	188
6	94	65	61	60	50	47	118	172	565	764	346	176
7	96	65	61	61	50	47	124	167	645	716	294	169
8	96	77	63	61	50	47	150	167	545	630	270	161
9	92	72	63	61	50	49	152	234	502	630	258	152
10	91	74	64	58	50	50	122	332	478	722	249	147
11	91	75	63	59	50	55	154	462	585	630	243	141
12	88	75	64	56	48	52	120	575	704	510	291	134
13	84	74	64	60	49	54	132	690	863	482	252	130
14	89	71	61	56	51	59	150	877	1020	478	243	124
15	84	64	61	56	47	65	172	1060	1100	506	252	124
16	80	68	60	54	46	68	222	848	1060	486	306	200
17	81	68	61	48	50	75	297	782	896	450	300	174
18	81	75	63	48	48	80	343	734	848	394	366	145
19	80	65	63	46	44	70	294	555	836	378	312	139
20	78	74	61	50	44	72	225	740	920	414	322	143
21	78	74	59	46	46	88	183	1010	1060	398	386	147
22	77	67	54	46	47	105	154	1120	1070	394	332	139
23	77	67	54	44	46	88	167	1370	992	378	329	141
24	78	65	56	48	46	83	208	1630	978	438	354	145
25	78	71	59	48	47	88	231	1580	1040	422	354	134
26	78	68	61	48	46	78	174	1540	1180	370	315	134
27	78	65	64	48	46	77	150	1410	1300	406	288	136
28	77	65	59	49	47	74	134	1290	1170	362	264	128
29	77	63	55	49	48	77	139	1220	1080	366	255	126
30	75	65	56	48	---	78	132	1260	1120	406	228	118
31	72	---	58	50	---	77	---	1150	---	378	218	---
TOTAL	2699	2072	1911	1637	1396	2057	4847	23725	27421	17183	9152	4734
MEAN	87.1	69.1	61.6	52.8	48.1	66.4	162	765	914	554	295	158
MAX	132	77	71	61	51	105	343	1630	1300	1030	386	276
MIN	72	63	54	44	44	47	72	128	478	362	218	118
AC-FT	5350	4110	3790	3250	2770	4080	9610	47060	54390	34080	18150	9390

CAL YR 1983 TOTAL 88304 MEAN 242 MAX 1740 MIN 36 AC-FT 175200
WTR YR 1984 TOTAL 98834 MEAN 270 MAX 1630 MIN 44 AC-FT 196000

09147000 DALLAS CREEK NEAR RIDGWAY, CO

LOCATION.--Lat 38°10'40", long 107°45'28", on line between sec.4 and 5, T.4 5 N., R.8 W., Ouray County, Hydrologic Unit 14020006, on right bank 25 ft downstream from county bridge, 1.5 mi upstream from mouth, and 15 mi northwest of Ridgway.

DRAINAGE AREA.--96.2 mi^2.

PERIOD OF RECORD.--March 1922 to October 1927, October 1955 to September 1971, October 1979 to current year.

REVISED RECORDS.--WSP 1924: 1960: Drainage area.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 6,980 ft, from topographic map. Mar. 1, 1922 to Oct. 31, 1927, nonrecording gage at different datum.

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 ditch imports water from Leopard Creek (Dolores River basin) to drainage above station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--26 years, 39.9 ft^3/s; 28,910 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 1,120 ft^3/s, Aug. 15, 1923, gage height, 4.40 ft, datum then in use, from rating curve extended above 160 ft^3/s; maximum gage height, 6.13 ft, July 21, 1983; minimum daily discharge, 0.21 ft^3/s, June 19, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 680 ft^3/s at 2100 May 10, gage height, 6.40 ft; minimum daily, 17 ft^3/s, Jan. 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31	26	26	20	24	20	28	100	248	230	133	115
2	31	25	26	20	23	21	26	117	228	202	129	110
3	29	25	24	20	22	21	26	131	208	190	121	104
4	31	26	24	19	22	20	36	205	180	188	115	98
5	32	24	24	22	22	19	47	278	162	168	108	90
6	31	23	22	22	22	19	80	269	149	160	115	79
7	31	24	22	22	21	19	84	245	192	155	110	74
8	32	22	22	22	20	19	108	251	168	155	106	72
9	31	20	22	22	21	19	86	314	147	180	100	68
10	31	21	23	22	20	20	67	396	117	210	92	64
11	31	21	24	22	20	21	97	415	108	198	84	61
12	30	20	23	20	19	20	61	364	108	178	85	56
13	30	20	23	22	20	20	80	308	115	175	82	56
14	30	19	24	22	20	22	86	317	131	188	70	54
15	30	23	23	22	19	26	103	305	147	200	68	55
16	29	24	22	20	19	27	129	299	162	188	78	98
17	29	24	22	20	20	27	157	260	155	172	80	102
18	28	21	22	19	21	28	205	239	147	160	125	84
19	28	24	22	18	20	25	208	215	147	147	110	70
20	30	25	21	17	19	26	175	215	151	153	182	67
21	29	24	20	18	19	32	117	218	168	151	198	70
22	28	24	19	19	20	47	110	222	175	151	188	70
23	26	24	18	18	20	35	139	228	175	145	180	61
24	26	24	19	18	20	28	230	236	172	168	218	68
25	27	26	20	19	20	32	242	228	180	149	168	62
26	27	24	20	19	20	28	147	233	208	145	145	66
27	27	24	20	20	20	28	112	218	210	147	131	67
28	27	24	21	20	20	26	97	225	222	135	121	62
29	27	22	20	21	20	28	98	228	218	139	115	62
30	27	24	19	21	---	28	102	233	242	151	110	58
31	27	---	20	23	---	26	---	205	---	151	104	---
TOTAL	903	697	677	629	593	777	3283	7717	5140	5229	3771	2223
MEAN	29.1	23.2	21.8	20.3	20.4	25.1	109	249	171	169	122	74.1
MAX	32	26	26	23	24	47	242	415	248	230	218	115
MIN	26	19	18	17	19	19	26	100	108	135	68	54
AC-FT	1790	1380	1340	1250	1180	1540	6510	15310	10200	10370	7480	4410

CAL YR 1983 TOTAL 25463 MEAN 69.8 MAX 448 MIN 14 AC-FT 50510
WTR YR 1984 TOTAL 31639 MEAN 86.4 MAX 415 MIN 17 AC-FT 62760

09147500 UNCOMPAHGRE RIVER AT COLONA, CO

LOCATION.--Lat 38°19'53", long 107°46'44", in NW¼NW¼ sec.17, T.47 N., R.8 W., Ouray County. Hydrologic Unit 14020006, on right bank 15 ft downstream from county highway crossing, 0.2 mi north of Colona, and 1.0 mi upstream from Beaton Creek.

DRAINAGE AREA.--443 mi^2.

PERIOD OF RECORD.--April 1903 to November 1905, April to June 1906 (gage heights and discharge measurements only), October 1912 to current year. Monthly discharge only for some periods. published in WSP 1313. Published as "near Colona" 1904-6, 1922-34.

REVISED RECORDS.--WSP 1313: 1904. WSP 2124: Drainage area.

GAGE.--Water-stage recorder Datum of gage is 6,318.80 ft, National Geodetic Vertical Datum of 1929. See WSP 1713 or 1733 for history of changes prior to Sept. 30, 1949.

REMARKS.--Records fair except those for periods of indefinite stage discharge relationship. June 7-12, Aug. 13 to Sept. 4, Sept 7-9, 16-21, 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 Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--74 years (water years 1904-5, 1913-84), 269 ft^3/s; 194,900 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 4,080 ft^3/s, June 13, 14, 1921; minimum daily, 12 ft^3/s, Sept. 19, 1956, May 7, 1967.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,900 ft^3/s at 0030 May 25, gage height, 5.54 ft; minimum daily, 72 ft^3/s, Feb. 19, 20.

DISCHARGE, IN CUBIC FEET PER SECOND. WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	150	109	120	104	94	85	175	396	2890	1950	642	460
2	135	107	130	92	96	90	145	455	2680	1890	610	410
3	130	107	125	85	92	93	130	470	2280	1820	568	390
4	123	105	120	100	96	89	138	682	2120	1680	534	380
5	121	102	115	107	94	82	205	900	2030	1550	512	331
6	119	102	110	104	90	77	323	740	1800	1460	592	299
7	119	102	110	105	89	78	343	680	2000	1390	534	270
8	119	117	115	104	86	84	396	780	1600	1320	495	260
9	117	117	115	100	81	87	432	900	1300	1320	460	250
10	115	117	115	90	85	92	295	1510	1150	1520	440	233
11	109	117	115	96	82	96	418	1710	1300	1420	404	219
12	107	117	120	99	75	93	291	1790	1500	1150	422	208
13	109	117	113	89	86	94	331	1730	1710	1050	390	199
14	115	115	109	100	86	105	382	2120	1960	1060	370	190
15	117	99	107	93	84	135	485	2470	2110	1140	400	187
16	111	105	98	84	78	148	649	2460	2100	1050	480	310
17	111	109	109	84	86	148	893	2360	1720	974	480	270
18	111	128	109	80	82	162	1120	2060	1590	855	540	230
19	111	115	109	90	72	130	1070	1780	1570	775	490	210
20	111	132	105	86	72	128	825	2030	1790	810	520	220
21	111	135	98	82	82	172	592	2400	2050	768	600	230
22	109	113	99	86	85	254	512	2570	1980	740	540	222
23	105	113	96	87	78	175	623	2570	1840	662	500	202
24	109	111	102	101	84	155	909	2910	1780	734	540	222
25	111	128	105	102	84	175	982	3360	1800	714	540	205
26	111	121	107	93	81	142	649	3290	2060	682	520	202
27	107	117	115	92	80	148	500	3360	2080	682	470	202
28	105	120	101	90	85	130	427	3090	2110	642	440	190
29	105	115	77	90	85	138	404	2800	2220	675	390	187
30	105	120	102	93	---	148	400	2820	2320	720	370	181
31	107	---	109	94	---	142	---	2720	--	720	400	---
TOTAL	3545	3432	3380	2902	2450	3875	15044	59913	57440	33923	15193	7569
MEAN	114	114	109	93.6	84.5	125	501	1933	1915	1094	490	252
MAX	150	135	130	107	96	254	1120	3360	2890	1950	642	460
MIN	105	99	77	80	72	77	130	396	1150	642	370	181
AC-FT	7030	6810	6700	5760	4860	7690	29840	118800	113900	67290	30140	15010

CAL YR 1983 TOTAL 169190 MEAN 464 MAX 2980 MIN 64 AC-FT 335600
WTR YR 1984 TOTAL 208666 MEAN 570 MAX 3360 MIN 72 AC-FT 413900

09149500 UNCOMPAHGRE RIVER AT DELTA, CO

LOCATION.--Lat 38°44'31", long 108°04'49", in SW¼SW¼ sec.13, T.15 S., R.96 W., Delta County, Hydrologic Unit 14020006, on right bank 525 ft downstream from 5th Street Bridge at west edge of Delta and 1.1 mi upstream from mouth.

DRAINAGE AREA.--1,129 mi².

PERIOD OF RECORD.--April 1903 to October 1931 (no winter records in most years) September 1938 to current year. Monthly discharge only for some periods, published in WSP 1313. Published as "near Delta" 1907-24.

REVISED RECORDS.--WSP 1243: 1904. WSP 2124: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 4,926.49 ft, National Geodetic Vertical Datum of 1929. Feb. 18, 1960, to Mar. 26, 1963, water-stage recorder at site 750 ft upstream at datum 3.43 ft, higher. Mar. 27, 1963, to May 12, 1965, water-stage recorder at site 1,050 ft upstream at datum 6.08 ft, higher. See WSP 1733 or 1924 for history of changes prior to Feb 18, 1960.

REMARKS.--Records fair. Natural flow of stream affected by water diverted from Gunnison River (see record of diversion through Gunnison tunnel published with station 09128000) and other adjacent basins, diversions for irrigation of about 90,000 acres above station, and return flow from irrigated areas. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--48 years (water years 1908, 1921, 1939-84), 291 ft³/s; 210,800 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge 5,800 ft³/s, May 15, 1984, gage height, 8.85 ft, from rating curve extended above 3,400 ft³/s; no flow at times in 1908; minimum daily determined since beginning of diversion through Gunnison tunnel. 7 ft³/s, July 10-15, 17, 21, 24-28, 1910.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,800 ft³/s at 0800 May 15, gage height, 8.85 ft; minimum daily, 120 ft³/s, Jan. 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	468	286	250	183	126	164	133	613	2170	1750	785	414
2	477	281	253	171	126	170	145	898	2300	1570	767	486
3	519	247	263	158	126	185	168	1130	1860	1480	741	426
4	537	224	271	154	124	164	161	1510	1510	1330	696	372
5	517	205	256	170	125	149	146	2180	1350	1190	644	344
6	499	189	209	169	126	145	198	2690	1570	1030	658	283
7	441	166	197	169	128	143	274	2360	1850	896	634	261
8	388	202	240	146	131	149	303	1920	2470	878	516	278
9	431	244	242	159	131	160	439	2280	1960	833	460	283
10	418	209	250	150	138	170	288	2990	1680	811	408	310
11	400	205	241	143	144	207	365	3290	1460	884	378	327
12	464	220	234	152	130	214	340	3520	1480	697	344	327
13	507	214	221	150	130	200	207	4000	1640	530	312	325
14	512	207	210	150	171	217	321	3800	1900	547	290	338
15	515	198	207	149	181	293	555	4520	2070	664	269	343
16	508	203	194	137	151	316	777	3610	2120	639	261	754
17	507	213	194	150	150	279	1150	3070	2030	542	289	678
18	493	251	204	140	140	293	1720	2570	1750	437	340	613
19	493	259	202	130	133	284	2140	1690	1570	332	430	624
20	490	242	196	140	122	252	1700	1730	1550	381	460	609
21	489	251	166	130	122	253	853	2420	1680	437	1060	599
22	485	247	178	130	137	339	590	2730	1700	423	797	599
23	485	227	191	120	144	348	608	3050	1610	450	724	558
24	485	216	185	135	136	251	1160	3080	1530	417	810	561
25	481	232	200	135	144	217	1860	3080	1570	582	1200	566
26	487	240	208	135	143	244	1210	3090	1670	754	948	556
27	500	203	210	139	140	217	876	2650	1760	641	740	568
28	513	198	197	134	140	179	694	2380	1730	648	620	557
29	534	197	152	131	147	163	615	2060	1660	673	530	580
30	531	243	170	127	---	129	597	2020	1680	719	430	578
31	477	---	177	127	---	131	---	1860	---	762	402	---
TOTAL	15051	6719	6568	4513	3986	6625	20593	78791	52880	23927	17943	14117
MEAN	486	224	212	146	137	214	686	2542	1763	772	579	471
MAX	537	286	271	183	181	348	2140	4520	2470	1750	1200	754
MIN	388	166	152	120	122	129	133	613	1350	332	261	261
AC-FT	29850	13330	13030	8950	7910	13140	40850	156300	104900	47460	35590	28000

CAL YR 1983 TOTAL 190177 MEAN 521 MAX 2550 MIN 101 AC-FT 377200
WTR YR 1984 TOTAL 251713 MEAN 688 MAX 4520 MIN 120 AC-FT 499300

09151500 ESCALANTE CREEK NEAR DELTA, CO

LOCATION.--Lat 38°45'24", long 108°15'34", in E½ sec.8, T.15 S., R.97 W., Sixth Principal Meridian, Delta County, Hydrologic Unit 14020005, on left bank just upstream from county bridge, 0.2 mi upstream from mouth, and 10.5 mi west of Delta.

DRAINAGE AREA.--2^ mi².

PERIOD OF RECORD.--April 1922 to September 1923, May 1976 to current.

REVISED RECORDS.--WSP 1313: 1923 (monthly runoff).

GAGE.--Water-stage recorder. Altitude of gage is 4,810 ft, from topographic map. Prior to September 1923, nonrecording gage at different datum operated by State Engineer of Colorado.

REMARKS.--Records fair, except those for winter period, stage discharge relation indefinite, or no gage-height record, which are poor. Diversions above station for irrigation. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--8 years, 56.9 ft³/s; 41,220 acre-ft/yr. The figures published in the reports for water years 1981-83, are in error. The correct figures are, 5 years, 48.9 ft³/s; 35,430 acre-ft/yr; 6 years, 51.1 ft³/s; 37,020 acre-ft/yr; 7 years, 57.2 ft³/s; 41,440 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,050 ft³/s, July 24, 1977, gage height, 8.54 ft, from floodmarks, from rating curve extended above 320 ft³/s, on basis of slope-area measurement of peak flow; no flow, June 23-25, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, unknown, time unknown, June 7, maximum gage height, 7.28 ft, June 7, (backwater from Gunnison River); minimum daily discharge, 1.4 ft³/s, July 10.

EXTREMES FOR 1979 WATER YEAR.--Maximum discharge, 1,050 ft³/s at 0300 May 25, gage height, 6.18 ft; minimum daily, 0.18 ft³/s, Sept. 24.

REVISIONS.--Revised figures of discharge for the water year 1979, superseding those published in the report for 1979 are given herein.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.31	7.6	9.9	9.2	10	13	18	503	444	30	3.6	3.5
2	.29	7.2	13	8.8	9.8	16	16	571	422	28	2.9	3.2
3	.25	8.0	10	8.4	9.7	13	15	349	410	28	2.9	3.1
4	.25	11	13	10	9.8	10	15	280	405	29	3.3	3.3
5	.27	11	11	11	9.3	11	15	382	373	30	3.5	3.8
6	.29	11	10	10	9.3	14	15	539	373	31	3.5	4.0
7	.32	10	9.8	9.8	9.4	16	18	528	363	32	4.0	4.0
8	.45	9.8	9.1	9.9	9.8	24	22	305	457	33	4.8	4.1
9	.66	9.8	8.1	10	9.9	19	25	224	396	33	5.3	4.3
10	.62	9.4	7.8	11	9.9	14	34	176	324	36	5.4	4.4
11	.51	9.0	8.1	11	10	14	31	153	274	30	5.4	3.9
12	.53	29	8.3	10	11	16	26	134	251	23	6.0	3.6
13	.58	18	7.8	9.9	12	17	25	159	232	18	5.5	3.4
14	.68	13	7.5	11	12	18	27	198	207	14	6.2	3.5
15	.80	12	8.5	11	11	19	35	296	183	11	6.6	3.4
16	1.0	10	9.0	11	11	19	61	421	159	8.3	6.6	3.2
17	1.3	9.4	9.9	11	11	18	105	476	136	6.2	6.7	2.8
18	1.7	8.4	10	10	12	15	162	619	102	4.9	7.0	2.8
19	1.7	8.9	10	11	12	14	214	810	92	3.6	7.1	2.3
20	1.4	9.4	10	11	12	17	196	836	77	2.7	8.0	2.1
21	1.3	9.6	11	11	11	29	206	800	63	3.0	6.6	.59
22	1.9	9.8	11	10	11	19	257	769	53	3.0	5.6	.48
23	4.3	9.4	10	10	11	15	343	825	47	3.0	5.4	.32
24	3.7	9.5	10	11	10	15	422	792	43	3.0	5.9	.18
25	2.3	11	9.7	11	11	15	361	812	38	2.9	5.4	.31
26	1.8	10	9.8	11	11	16	327	762	34	2.3	4.5	1.4
27	2.4	9.4	10	11	11	17	320	816	28	2.5	3.8	1.9
28	2.1	7.2	11	10	11	20	361	755	26	4.9	3.5	1.9
29	2.0	9.4	11	10	---	21	433	723	25	4.9	3.3	1.7
30	2.4	10	10	9.8	---	17	440	685	26	4.7	3.6	1.9
31	4.5	---	9.6	9.8	---	20	---	533	---	4.7	3.2	---
TOTAL	42.61	317.2	303.9	319.6	297.9	521	4545	16231	6063	470.6	155.1	79.38
MEAN	1.37	10.6	9.80	10.3	10.6	16.8	152	524	202	15.2	5.00	2.65
MAX	4.5	29	13	11	12	29	440	836	457	36	8.0	4.4
MIN	.25	7.2	7.5	8.4	9.3	10	15	134	25	2.3	2.9	.18
AC-FT	85	629	603	634	591	1030	9020	32190	12030	933	308	157

CAL YR 1978 TOTAL 16049.76 MEAN 44.0 MAX 603 MIN .24 AC-FT 31830
WTR YR 1979 TOTAL 29346.29 MEAN 80.4 MAX 836 MIN .18 AC-FT 58210

NOTE.--NO GAGE-HEIGHT RECORD OCT. 1-31.

09151500 ESCALANTE CREEK NEAR DELTA, CO--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34	6.0	10	14	15	18	30	162	95	8.0	16	10
2	22	5.5	11	13	18	18	28	184	100	8.0	20	11
3	22	5.5	11	10	19	23	27	248	54	7.6	17	11
4	19	5.0	10	16	20	18	26	286	50	7.0	13	10
5	17	5.0	9.5	20	21	15	28	350	80	5.7	12	10
6	14	4.5	8.5	20	22	16	34	401	140	3.9	13	11
7	13	4.5	8.5	22	22	16	37	320	400	3.2	12	11
8	12	7.0	9.0	22	23	18	42	319	360	1.6	10	10
9	12	6.5	9.0	24	21	20	63	365	230	1.6	9.8	9.5
10	12	8.0	9.0	22	22	23	50	440	198	1.4	10	10
11	10	8.0	9.0	20	21	27	71	526	143	1.5	9.6	11
12	9.5	8.0	9.5	19	18	22	58	559	124	1.5	9.4	10
13	8.5	8.0	9.5	18	19	23	68	595	111	1.6	11	10
14	9.5	7.5	8.5	17	22	28	84	598	102	34	16	11
15	8.5	7.0	8.5	16	21	28	108	560	96	8.9	11	15
16	8.0	8.0	8.5	15	18	28	156	500	90	6.0	11	23
17	8.5	8.0	9.0	13	23	25	228	464	86	4.1	10	17
18	8.5	9.5	9.5	13	18	24	314	400	78	2.6	9.5	18
19	8.5	8.5	10	8.0	16	21	302	317	68	2.5	9.0	19
20	8.0	11	9.5	11	14	22	195	308	55	3.7	10	20
21	8.0	11	9.0	13	16	25	138	270	33	8.9	15	17
22	7.5	9.5	8.5	12	18	28	138	230	27	6.7	13	16
23	7.5	9.5	8.5	11	17	28	164	250	23	7.6	12	15
24	8.0	9.0	9.0	14	17	27	232	280	22	12	12	14
25	8.0	11	10	14	18	31	281	300	20	11	11	13
26	8.0	10	12	13	17	32	204	200	19	17	11	12
27	8.0	9.0	13	13	15	30	164	150	18	14	10	13
28	7.5	9.0	12	14	15	28	138	110	11	13	10	14
29	7.5	8.5	11	13	17	28	134	99	8.9	12	11	14
30	7.0	9.0	12	15	---	29	142	84	8.9	11	11	14
31	6.5	---	14	18	---	31	---	76	---	10	10	---
TOTAL	348.0	236.5	306.0	483.0	543	750	3684	9951	2850.8	237.6	365.3	399.5
MEAN	11.2	7.88	9.87	15.6	18.7	24.2	123	321	95.0	7.66	11.8	13.3
MAX	34	11	14	24	23	32	314	598	400	34	20	23
MIN	6.5	4.5	8.5	8.0	14	15	26	76	8.9	1.4	9.0	9.5
AC-FT	690	469	607	958	1080	1490	7310	19740	5650	471	725	792

CAL YR 1983 TOTAL 33291.6 MEAN 91.2 MAX 958 MIN 1.6 AC-FT 66030
WTR YR 1984 TOTAL 20154.7 MEAN 55.1 MAX 598 MIN 1.4 AC-FT 39980

NOTE.--NO GAGE-HEIGHT RECORD OCT. 11 TO JAN. 11.

09152500 GUNNISON RIVER NEAR GRAND JUNCTION, CO

LOCATION.--Lat 38°59'00", long 108°27'00", in NE¼SW¼ of sec.14, T.2 S., R .1 E., Ute Meridian, Mesa County, Hydrologic Unit 14020005, on right bank 180 ft upstream from bridge on State Highway 141, 0.4 mi downstream from Whitewater Creek, 0.5 mi south of Whitewater, and 8 mi southeast of Grand Junction.

DRAINAGE AREA.--7,928 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1894 to December 1895 (gage heights only), October 1896 to September 1899, October 1901 to October 1906, October 1916 to current year. Monthly discharge only for some periods, published in WSP 1313. Published as "at Whitewater" 1901-6.

REVISED RECORDS.--WSP 509: Drainage area at former site. WSP 2124: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 4,628.12 ft, National Geodetic Vertical Datum of 1929. See WSP 1733 or 1924 for history of changes prior to October 1959.

REMARKS.--Records good. Records show flow that enters Colorado River from Gunnison River basin except for about 60 ft^3/s 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.

AVERAGE DISCHARGE.--76 years (water years 1897-99, 1902-06, 1917-84), 2,579 ft^3/s; 1,868,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 35,700 ft^3/s, May 23, 1920, gage height, 14.95 ft, site and datum then in use, from rating curve extended above 22,000 ft^3/s; minimum daily, 106 ft^3/s, July 20, 1934.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 26,200 ft^3/s at 0700 June 8, gage height, 14.55 ft; minimum daily, 1,150 ft^3/s, Nov. 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2580	1920	2670	2820	2980	3400	3770	4060	17900	12800	4010	2740
2	2580	1150	2710	2750	2960	3520	3680	4220	18600	12200	3760	3060
3	2600	1380	2740	2610	2960	3500	3580	4870	16400	11400	3980	4000
4	2580	1370	2750	2690	2980	3470	3550	5140	14100	11600	3770	4000
5	2580	1380	2680	2800	3000	3360	3550	5860	13300	11300	3050	3550
6	2570	1380	2570	2980	3000	3350	3550	6940	15800	10600	3950	2690
7	2670	1370	2570	3050	3290	3440	3560	6800	17500	9260	3480	2270
8	2470	1580	2650	3060	3350	3530	3660	6520	23200	8060	3340	2300
9	2470	1830	2640	3080	3300	3550	4150	7260	17900	7240	2680	2330
10	2470	1920	2670	3280	3380	3550	3580	8840	15600	7000	2330	2370
11	2440	2610	2640	3350	3410	3640	3290	11200	14000	7480	2550	2300
12	2320	2650	2640	3340	3350	3690	3320	13200	13400	6180	2510	2140
13	2160	2640	2580	3260	3350	3630	3280	14500	13200	5520	2250	2110
14	2460	2640	2570	3360	3460	3640	3280	16000	13400	6600	2580	2110
15	2540	2620	2600	3220	3560	3690	3520	18000	14000	6690	2270	2180
16	2530	2570	2610	3000	3420	3790	4010	18400	14600	5910	2530	2920
17	2460	2540	2600	2980	3470	3770	4980	17400	14500	5530	2270	2940
18	2410	2690	2600	2980	3420	3710	6100	17000	13300	5390	2500	2760
19	2410	2750	2600	2900	3340	3660	7120	15500	12300	4810	2330	2620
20	2400	2720	2620	2900	3300	3600	6200	15000	12500	4530	2470	2640
21	2410	2670	2510	2920	3300	3600	4920	16300	13100	4540	2900	2740
22	2400	2650	2500	2920	3360	3820	4130	16200	13100	4470	2980	2820
23	2390	2570	2580	3040	3380	3980	4010	18200	13200	4620	2980	2710
24	2370	2550	2530	3060	3340	3580	4980	19600	13000	4420	3230	2670
25	2360	2610	2640	2960	3360	3410	6460	21500	13000	3850	3360	2620
26	2370	2720	2760	3040	3350	3690	6310	22400	13200	3690	3360	2620
27	2390	2550	2760	3020	3340	3720	5230	21500	13000	3340	3140	2710
28	2400	2540	2620	3000	3290	3660	4400	20200	13200	3560	2980	2650
29	2390	2610	2570	3000	3350	3740	4220	19200	12600	3900	3300	2680
30	2370	2690	2620	2990	---	3840	4060	18200	12700	4060	3290	2690
31	2610	---	2720	2980	---	3920	---	17900	---	3550	2680	---
TOTAL	76160	67870	81520	93340	95350	112450	130450	427910	435600	204100	92810	80940
MEAN	2457	2262	2630	3011	3288	3627	4348	13800	14520	6584	2994	2698
MAX	2670	2750	2760	3360	3560	3980	7120	22400	23200	12800	4010	4000
MIN	2160	1150	2500	2610	2960	3350	3280	4060	12300	3340	2250	2110
AC-FT	151100	134600	161700	185100	189100	223000	258700	848800	864000	404800	184100	160500

CAL YR 1983	TOTAL	1578080	MEAN	4324	MAX	20200	MIN	1150	AC-FT	3130000
WTR YR 1984	TOTAL	1898500	MEAN	5187	MAX	23200	MIN	1150	AC-FT	3766000

09152500 GUNNISON RIVER NEAR GRAND JUNCTION, CO--Continued
(Irrigation network station)
(National stream-quality accounting network station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1931 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: November 1935 to September 1974, September 1975 to current year.
WATER TEMPERATURES: April 1949 to September 1974, September 1975 to current year.

INSTRUMENTATION.--Water-quality monitor since September 1975

REMARKS.--Daily maximum and minimum specific-conductance data available in district office.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 3,000 micromhos several days during July and September 1974; minimum, 194 micromhos June 6,1979.;
WATER TEMPERATURE: Maximum, 30.0°C Aug. 13, 1958; minimum, freezing point on many days during winter months most years.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum,1,080 micromhos Sept.3; minimum,271 micromhos May 29,30.
WATER TEMPERATURES: Maximum, 23.5°C Aug.17; minimum, freezing point many days during Jan.

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)
OCT										
05...	1300	2540	978	8.4	13.0	37	8.6	K81	K210	400
DEC										
13...	1400	2560	738	8.5	5.0	4.0	10.5	--	400	310
APR										
10...	1400	3520	550	8.3	6.5	310	10.3	--	--	220
MAY										
30...	1400	18000	276	8.1	12.0	110	8.7	1100	430	110
JUL										
19...	1400	4770	530	8.2	18.0	45	7.5	410	490	210
SEP										
12...	0900	2130	998	8.4	17.0	21	7.6	K220	440	420

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)
OCT										
05...	100	36	57	1	3.4	156	360	8.3	.40	14
DEC										
13...	77	29	50	1	2.7	131	280	6.9	.30	13
APR										
10...	54	20	32	1	2.6	118	170	5.6	.30	12
MAY										
30...	30	7.8	12	.5	1.9	71	69	3.6	.30	14
JUL										
19...	55	18	29	.9	2.6	96	180	4.8	.30	15
SEP										
12...	110	34	58	1	3.3	152	380	8.2	.50	15

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)
OCT										
05...	732	670	1.0	5020	1.1	.040	1.1	.090	.020	<.010
DEC										
13...	430	540	.58	2970	1.4	.070	.60	.010	<.010	.030
APR										
10...	340	370	.46	3230	.49	.130	1.5	.450	.020	.030
MAY										
30...	196	180	.27	9530	.31	.030	1.5	.450	.040	.020
JUL										
19...	368	360	.50	4740	.45	.110	.60	.120	.010	.020
SEP										
12...	740	700	1.0	4260	1.4	.050	.30	.050	<.010	<.010

K BASED ON NON-IDEAL COLONY COUNT

09152500 GUNNISON RIVER NEAR GRAND JUNCTION, CO--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC DISSOLVED (UG/L AS AS)	BARIUM, DISSOLVED (UG/L AS BA)	BERYLLIUM, DISSOLVED (UG/L AS BE)	CADMIUM DISSOLVED (UG/L AS CD)	COBALT, DISSOLVED (UG/L AS CO)	COPPER, DISSOLVED (UG/L AS CU)	IRON, DISSOLVED (UG/L AS FE)	LEAD, DISSOLVED (UG/L AS PB)
OCT 05...	1300	20	1	43	<.5	<1	2	3	12	2
APR 10...	1400	40	<1	76	.7	<1	<1	5	38	<1
JUL 19...	1400	20	<1	45	2	1	<1	2	36	<1
SEP 12...	0900	10	<1	47	<1	1	<1	2	13	5

DATE	LITHIUM DISSOLVED (UG/L AS LI)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY DISSOLVED (UG/L AS HG)	MOLYBDENUM, DISSOLVED (UG/L AS MO)	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, DISSOLVED (UG/L AS AG)	STRONTIUM, DISSOLVED (UG/L AS SR)	VANADIUM, DISSOLVED (UG/L AS V)	ZINC, DISSOLVED (UG/L AS ZN)
OCT 05...	65	9	<.1	2	3	10	<1	1100	2	8
APR 10...	31	16	<.1	1	3	4	<1	510	1	24
JUL 19...	39	10	<.1	2	<1	5	<1	540	2	5
SEP 12...	62	10	.1	<1	<1	8	<1	1200	1	8

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT 05...	1230	2540	132	905	--
NOV 21...	1300	2590	39	273	--
DEC 13...	1400	2560	23	159	--
JAN 30...	1400	2930	32	253	--
APR 10...	1500	3520	708	6730	--
MAY 30...	1400	18000	1470	71400	--
JUL 19...	1405	4770	189	2430	--
AUG 09...	1200	2870	130	1010	--
SEP 07...	1400	2200	67	398	87

09152500 GUNNISON RIVER NEAR GRAND JUNCTION, CO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	965	889	769	674	558		---	---	282	369	723	914
2	966	880	776	656	556		---	---	282	373	726	967
3	979	874	791	645	558		---	---	284	380	738	1010
4	986	872	794	632	557		---	---	287	382	742	903
5	993	873	793	636	556		---	---	289	383	747	885
6	979	873	775	638	551		---	---	290	395	770	894
7	954	875	739	629	537		---	---	299	409	721	914
8	937	876	753	634	519		---	---	320	479	730	955
9	936	879	754	632	521		---	---	315	516	756	936
10	933	878	744	625	---		---	437	322	517	794	931
11	922	876	745	593	---		607	423	331	518	834	911
12	912	870	740	572	---		608	408	338	503	803	963
13	---	866	739	570	---		605	379	343	514	730	995
14	---	862	735	560	---		601	358	343	524	746	984
15	---	864	727	556	---		617	365	341	534	760	977
16	983	859	722	558	---		616	366	337	543	775	953
17	962	854	711	551	---		589	362	340	551	791	988
18	951	848	716	560	---		550	358	346	560	807	---
19	945	843	716	550	---		501	351	346	558	819	---
20	944	837	715	501	---		547	347	341	563	---	---
21	938	838	697	524	---		553	340	337	573	888	---
22	936	851	666	535	---		568	332	342	575	871	---
23	934	816	700	525	---		598	327	345	---	886	---
24	931	796	703	524	---		548	318	343	---	929	---
25	930	792	682	550	---		478	309	337	---	---	---
26	926	816	693	560	---		471	290	343	687	971	---
27	921	818	775	560	---		474	289	342	739	---	---
28	917	784	785	562	---		492	286	344	813	---	---
29	910	783	750	576	---		496	280	355	771	---	---
30	904	769	668	567	---		---	276	351	740	923	---
31	895	---	691	563	---		---	283	---	720	903	---
MEAN	942	847	734	581	546		554	340	327	542	803	946

WTR YR 1984 MEAN 655 MAX 1010 MIN 276

NOTE: NUMBER OF MISSING DAYS OF RECORD EXCEEDED 20% OF YEAR

09152500 GUNNISON RIVER NEAR GRAND JUNCTION, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	15.0	13.5	13.0	11.5	5.5	4.5	3.5	2.5	2.0	1.0	5.0	4.0
2	14.0	13.0	12.5	11.0	6.0	5.5	3.5	2.0	2.0	.5	5.0	3.5
3	13.5	12.0	12.0	10.5	5.5	5.5	2.0	1.0	2.0	1.0	6.0	5.0
4	14.0	11.5	11.5	10.0	5.5	5.0	2.0	.5	2.5	1.0	5.0	3.5
5	14.5	12.5	11.5	10.0	5.0	3.0	2.5	1.0	2.5	1.5	4.0	2.5
6	15.5	13.0	11.5	10.0	3.0	2.0	2.5	1.5	3.0	1.5	---	---
7	15.0	14.0	11.5	10.0	4.0	2.0	2.5	1.5	2.5	2.0	---	---
8	15.0	13.0	11.0	9.0	4.5	3.5	2.5	1.5	3.5	2.0	---	---
9	16.0	14.0	8.5	7.0	4.5	3.5	2.5	1.5	3.5	2.5	---	---
10	16.0	14.5	8.0	6.5	5.5	4.0	2.0	1.0	4.0	2.5	---	---
11	15.0	13.5	8.5	7.0	5.5	4.5	1.5	1.0	4.0	3.0	---	---
12	14.0	12.5	9.5	8.5	6.0	4.5	1.5	.5	3.5	2.5	---	---
13	13.0	11.0	10.0	9.0	5.0	4.5	1.5	1.0	4.5	3.0	---	---
14	13.0	12.0	10.0	9.0	4.5	4.0	1.5	.5	5.0	3.5	---	---
15	13.0	11.5	9.0	7.5	4.5	3.5	2.0	1.0	3.5	3.0	---	---
16	13.0	11.0	8.0	7.0	4.5	3.5	1.0	.0	4.0	3.0	---	---
17	12.5	10.5	8.0	6.5	4.5	4.0	.0	.0	4.0	3.0	---	---
18	13.5	11.5	8.5	7.5	5.0	4.0	.0	.0	3.5	2.5	---	---
19	13.0	11.5	7.5	6.5	5.0	4.5	.0	.0	3.5	3.0	---	---
20	12.0	10.5	8.0	7.0	4.5	3.0	.0	.0	3.5	2.0	---	---
21	12.0	10.0	7.0	6.5	3.0	1.5	.0	.0	3.5	2.5	---	---
22	12.5	10.5	6.0	5.5	2.5	1.0	.0	.0	4.0	3.0	---	---
23	12.5	10.5	5.0	4.5	2.5	2.0	.0	.0	3.0	2.5	---	---
24	12.5	10.5	5.0	4.0	2.5	1.5	.5	.0	3.5	2.5	---	---
25	12.0	10.0	6.0	4.5	2.5	2.0	1.0	.0	4.0	3.0	---	---
26	12.0	10.0	6.0	4.0	4.0	2.5	2.0	.5	4.0	2.5	---	---
27	12.0	10.0	3.5	3.0	4.5	3.5	2.0	1.0	4.0	2.5	---	---
28	12.0	10.0	4.5	3.0	4.0	1.5	2.0	1.0	4.5	3.0	---	---
29	12.5	10.5	4.5	3.5	1.5	.5	2.0	1.0	5.0	3.5	---	---
30	11.5	10.5	5.0	4.0	2.0	.5	2.0	1.0	---	---	---	---
31	12.0	10.5	---	---	3.0	2.0	2.0	1.0	---	---	---	---
MONTH	16.0	10.0	13.0	3.0	6.0	.5	3.5	.0	5.0	.5	6.0	2.5
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	---	---	10.0	9.0	12.0	11.0	15.5	14.0	20.5	20.0	20.0	18.5
2	---	---	10.5	9.5	12.5	11.0	16.0	15.0	21.0	19.5	19.5	17.5
3	---	---	10.5	9.0	12.5	12.0	16.0	15.0	20.5	19.0	18.5	17.5
4	---	---	11.0	10.0	12.5	11.5	16.0	15.0	20.0	18.5	18.0	17.0
5	---	---	11.0	10.0	12.0	10.5	16.0	15.0	20.5	18.5	18.5	17.0
6	---	---	11.0	10.0	10.5	9.5	16.0	15.0	19.5	18.0	19.5	17.0
7	---	---	10.0	9.0	10.5	9.5	16.5	16.0	20.5	18.0	18.5	17.0
8	---	---	10.0	9.0	10.0	9.5	16.5	15.5	20.5	18.5	18.5	15.5
9	---	---	11.0	10.0	11.0	9.0	16.5	16.0	22.0	18.5	19.5	16.0
10	---	---	11.5	10.5	12.0	11.0	17.5	16.5	22.5	19.0	19.5	16.5
11	8.5	6.5	12.0	11.0	12.5	12.0	17.5	17.0	22.0	19.5	19.0	17.0
12	7.5	6.5	12.5	10.5	13.5	12.5	18.0	17.0	22.0	19.0	19.5	17.0
13	9.0	6.5	12.5	11.0	14.0	13.0	17.5	17.0	22.5	19.0	20.0	17.5
14	9.5	7.5	12.0	11.0	14.0	13.5	17.0	16.5	22.5	20.0	20.0	17.0
15	10.0	7.5	12.0	10.0	14.5	14.0	17.0	16.5	22.5	19.5	20.0	17.0
16	10.5	8.5	11.5	10.0	14.5	13.0	19.0	17.5	22.5	20.0	18.0	17.0
17	10.5	9.5	11.5	10.0	14.0	12.5	19.0	18.0	23.5	20.0	18.5	16.0
18	11.0	9.5	12.0	10.5	14.5	13.5	19.0	17.5	23.0	20.0	19.0	16.5
19	10.5	8.5	11.5	10.0	14.5	13.5	19.5	18.0	23.0	20.0	19.5	17.0
20	8.5	8.0	12.0	11.0	14.5	13.5	20.0	18.5	22.0	20.5	19.0	17.5
21	8.5	7.5	12.5	11.0	14.5	13.5	20.0	18.5	20.5	19.0	18.5	17.0
22	9.5	7.5	12.5	11.0	14.5	13.5	20.0	18.0	21.0	18.0	17.5	16.0
23	11.0	9.0	12.5	11.0	14.5	13.5	18.5	18.0	20.5	19.5	18.0	16.0
24	11.5	10.0	12.5	11.5	14.5	13.5	20.0	18.0	19.5	18.5	18.0	15.5
25	10.5	7.5	12.5	11.0	15.0	14.0	21.0	18.5	19.5	19.0	15.5	13.5
26	7.5	5.5	12.5	11.0	15.0	13.5	20.5	19.0	20.0	18.0	14.0	13.0
27	6.5	5.5	12.5	11.0	15.5	14.0	20.5	19.5	21.0	18.5	15.0	12.5
28	6.5	5.5	12.5	11.0	15.5	14.0	21.0	18.5	21.5	19.0	16.0	14.0
29	7.5	5.0	13.0	11.5	15.5	15.0	20.5	19.5	20.5	19.0	14.5	12.5
30	9.5	7.5	13.0	11.5	15.5	14.5	20.5	19.5	20.5	18.5	14.0	12.0
31	---	---	12.5	11.5	---	---	21.5	19.0	21.0	18.5	---	---
MONTH	11.5	5.0	13.0	9.0	15.5	9.0	21.5	14.0	23.5	18.0	20.0	12.0
YEAR	23.5	.0										

09153290 REED WASH NEAR MACK, CO

LOCATION.--Lat 39°12'41", long 108°48'11", in SE¼SW¼ sec.27, T.2 N., R.3 W., Ute Meridian, Mesa County, Hydrologic Unit 14010005, on right bank 250 ft upstream from unnamed tributary, 0.4 mi downstream from Peck and Beede Wash, and 3.5 mi east of Mack

DRAINAGE AREA.--15.7 mi^2.

PERIOD OF RECORD.--October 1975 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 4,505 ft, from topographic map.

REMARKS.--Records fair except those for periods of no gage-height record, which are poor. Flow is mostly return flow and waste water from irrigated lands under Government Highline and Grand Valley Canals. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--9 years 49.1 ft^3/s; 35,570 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 390 ft^3/s, July 23, 1983, gage height, unknown, maximum recorded gage height, 6.09 ft, July 24, 1979; minimum daily discharge, 2.0 ft^3/s, Jan. 31, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 226 ft^3/s, July 30. gage height, 5.56 ft. from highwater mark; minimum daily, 3.2 ft^3/s, Jan. 18, 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	75	78	8.0	7.5	4.6	4.6	4.5	70	65	64	70	65
2	86	75	8.0	7.0	4.6	4.5	4.5	77	65	71	68	70
3	71	72	8.0	6.5	5.2	5.3	4.4	70	57	64	68	80
4	72	70	8.0	6.0	5.2	4.9	4.4	68	57	64	68	101
5	75	72	7.8	6.0	4.4	4.4	4.5	68	67	62	70	99
6	71	70	7.4	5.8	4.9	4.6	4.4	65	63	63	87	95
7	72	68	7.4	5.6	4.9	4.7	4.5	65	100	69	88	90
8	72	28	7.8	5.4	5.4	4.9	4.6	66	80	69	76	90
9	71	14	53	5.4	5.4	5.0	4.5	70	75	70	77	85
10	73	11	14	5.2	5.4	5.6	4.3	46	69	65	79	85
11	74	11	8.3	4.4	5.4	5.8	4.3	43	70	62	85	85
12	75	11	7.7	4.1	5.7	5.6	38	48	70	62	75	68
13	73	11	49	4.4	6.6	5.6	102	57	67	70	70	66
14	74	11	96	5.7	9.3	6.7	85	68	65	70	69	69
15	74	10	83	5.2	4.6	6.4	81	63	60	71	60	73
16	76	10	62	5.2	4.3	5.2	79	71	61	65	60	71
17	76	10	31	4.6	4.1	4.4	78	71	61	62	55	65
18	75	10	12	3.2	4.0	4.4	76	60	63	62	55	69
19	75	10	15	3.2	4.1	4.1	75	60	62	65	50	71
20	74	9.9	11	3.5	3.8	4.2	73	57	65	65	50	83
21	76	10	11	3.8	4.1	4.4	71	60	71	68	50	84
22	79	14	10	4.4	4.6	4.6	69	57	81	70	44	81
23	78	14	10	4.9	4.6	4.6	68	64	77	70	45	88
24	78	13	10	5.2	4.6	4.1	66	65	75	75	49	88
25	77	9.4	10	5.2	4.6	3.8	66	59	84	70	52	80
26	80	9.2	10	5.2	4.6	3.8	68	56	80	68	54	77
27	80	8.4	9.8	4.9	4.5	3.8	68	56	79	68	56	74
28	78	8.1	9.6	4.3	4.3	3.8	68	62	72	65	58	73
29	79	8.0	9.6	4.9	4.4	4.0	69	60	64	62	60	77
30	79	8.0	9.2	4.4	---	4.0	70	59	67	120	60	82
31	78	---	8.8	4.6	---	4.0	---	66	---	80	65	---
TOTAL	2346	764.0	612.4	155.7	142.2	145.8	1418.9	1927	2092	2131	1973	2384
MEAN	75.7	25.5	19.8	5.02	4.90	4.70	47.3	62.2	69.7	68.7	63.6	79.5
MAX	86	78	96	7.5	9.3	6.7	102	77	100	120	88	101
MIN	71	8.0	7.4	3.2	3.8	3.8	4.3	43	57	62	44	65
AC-FT	4650	1520	1210	309	282	289	2810	3820	4150	4230	3910	4730

CAL YR 1983 TOTAL 16356.6 MEAN 44.8 MAX 110 MIN 2.4 AC-FT 32440
WTR YR 1984 TOTAL 16092.0 MEAN 44.0 MAX 120 MIN 3.2 AC-FT 31920

NOTE.--NO GAGE-HEIGHT RECORD OCT. 4 TO NOV. 10, AUG. 11 TO SEPT. 11

09163500 COLORADO RIVER NEAR COLORADO-UTAH STATE LINE

LOCATION.--Lat 39°07'45", long 109°01'36", in SE¼NW¼ sec.5, T.11 S., R.104 W., Mesa County, Hydrologic Unit 14010005, on right bank 0.7 mi downstream from MoDonald Creek, 12 mi southwest of Maok, Colo., and 1.5 mi upstream from Colorado-Utah State line.

DRAINAGE AREA.--17,843 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1951 to current year.

REVISED RECORDS.--WRD Colo. 1974: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 4,325 ft, from topographic map. May 1951, to October 1979, water-stage recorder at site 5.7 mi upstream at different datum.

REMARKS.--Records good. Natural flow of stream affected by transmountain diversions, storage reservoirs, power development, and diversions for irrigation. (Records include all return flow from irrigated areas).

AVERAGE DISCHARGE.--33 years, 6,133 ft³/s; 4,443,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 69,800 ft³/s, May 27, 1984, gage height, 16.12 ft, (from highwater mark); minimum daily, 960 ft³/s, Sept. 7, 1956.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 69,800 ft³/s at 0800 May 27, gage height, 16.12 ft, (from highwater mark); minimum daily, 3,370 ft³/s, Jan. 21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4790	5440	5270	5030	5200	5470	7470	8800	53100	39300	12900	8030
2	5100	4280	5330	5400	5000	5520	7360	9130	54600	39300	12400	8270
3	5000	4110	5440	5310	5100	5720	7200	10700	52400	37400	12000	8660
4	4850	4150	5710	4960	4900	5800	6990	10800	46700	36800	11500	8920
5	4790	4150	5700	4840	5100	5660	6900	11600	43900	35400	10000	8500
6	4790	4160	5470	5400	5300	5270	7270	13400	43700	33100	10900	7990
7	4800	4170	5250	5680	5600	5410	7610	13600	48300	30100	10600	7110
8	4800	4750	4970	5640	6000	5720	7930	13000	56300	26900	10400	6780
9	4800	5600	5160	5690	6710	5810	8500	13400	49700	25600	9740	6780
10	4820	5210	5590	5760	5910	5920	9080	15900	42200	25800	8820	6460
11	4820	5520	5550	5880	5490	6130	7950	20300	37200	28100	8560	6550
12	4840	5700	5450	5650	5540	6280	7810	25700	35900	26100	8430	6330
13	4730	5740	5160	5350	5590	6130	7470	31900	36800	23200	7930	6250
14	5320	5770	5000	5340	5680	6170	7090	38500	37700	22000	8140	6200
15	5600	5720	5120	5950	6040	6490	7010	44400	41000	24500	7890	6010
16	5720	5620	5190	5640	5820	6790	7420	51600	44300	22900	7960	6140
17	5570	5620	5360	5160	5630	6860	8460	53400	45900	20600	8070	7070
18	5560	5600	5270	4930	5660	6590	10400	52000	43400	18600	7640	6790
19	5520	5790	5360	4000	5600	6410	12800	50600	40100	16400	8100	6550
20	5510	5660	5450	3480	5420	6300	13100	45000	40600	15300	9520	6330
21	5550	5630	5370	3370	5350	6250	11300	47400	41200	14600	9830	6260
22	5570	5710	5020	3790	5320	6640	9520	51200	41200	14200	10200	6310
23	5470	5620	4840	3800	5390	6870	8630	53600	40700	14200	9740	6290
24	5380	5340	4860	4400	5380	6760	9390	58400	40400	13600	9590	6190
25	5290	5260	4830	5100	5360	6210	12200	64200	39600	14300	10300	6110
26	5260	5270	5110	4800	5390	6560	13700	68200	39800	13600	10900	6000
27	5260	5380	5630	4700	5380	6910	11800	68300	39200	13600	10600	6120
28	5110	5420	5860	4600	5330	6770	10200	64600	40000	13200	9820	6090
29	5170	5320	5340	4700	5340	6720	9090	59300	39500	13100	9480	5960
30	5150	5350	4760	4900	---	6880	8870	54500	38200	13500	9430	5960
31	5230	---	4700	5200	---	7300	---	53200	---	12900	8540	---
TOTAL	160170	157060	163120	154450	159530	194320	270520	1176630	1293600	698200	299930	203010
MEAN	5167	5235	5262	4982	5501	6268	9017	37960	43120	22520	9675	6767
MAX	5720	5790	5860	5950	6710	7300	13700	68300	56300	39300	12900	8920
MIN	4730	4110	4700	3370	4900	5270	6900	8800	35900	12900	7640	5960
AC-FT	317700	311500	323500	306400	316400	385400	536600	2334000	2566000	1385000	594900	402700

CAL YR 1983 TOTAL 4053390 MEAN 11110 MAX 60200 MIN 3220 AC-FT 8040000
WTR YR 1984 TOTAL 4930540 MEAN 13470 MAX 68300 MIN 3370 AC-FT 9780000

09163500 COLORADO RIVER NEAR COLORADO-UTAH STATE LINE--Continued
(National stream-quality accounting network station)

PERIOD OF RECORD.--October 1979 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1979 to current year.
WATER TEMPERATURES: October 1979 to current year.

INSTRUMENTATION.--Water-quality monitor since October 1979.

REMARKS.--Water-quality data collection was moved 5.5 miles upstream to this site from previous site 09163530. Water-quality records for this site are considered to be equivalent to data obtained at old site. Daily maximum and minimum specific-conductance data available in district office.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 1,940 micromhos Aug. 13, 1981; minimum, 279 micromhos June 3, 1984.
WATER TEMPERATURE: Maximum, 27.0°C Aug. 7-9, 1981; minimum, freezing point on many days during December 1980 to February 1981, January and February 1982.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 1,190 micromhos Sept.18; minimum, 279 micromhos June 3.
WATER TEMPERATURES: Maximum, 24.5°C July 24-26 and Aug.18; minimum, 1.5°C on many days during January, February,and March.

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)
NOV										
01...	1200	5550	1040	7.7	11.0	5.1	9.1	K97	K170	380
DEC										
06...	1330	5420	930	7.8	2.5	33	11.3	140	K600	330
APR										
18...	1130	10200	660	7.6	12.5	360	8.7	330	820	220
MAY										
15...	1230	40300	390	8.1	14.0	240	8.5	730	--	160
JUL										
10...	1300	25500	400	7.6	20.5	70	7.4	320	670	150
SEP										
07...	1100	6980	848	7.7	17.5	50	7.9	--	--	290

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)
NOV										
01...	96	33	86	2	3.7	158	300	72	.40	11
DEC										
06...	83	29	84	2	3.4	148	270	66	.30	12
APR										
18...	54	21	57	2	3.0	131	170	41	.30	11
MAY										
15...	41	13	30	1	2.7	110	83	13	.30	5.4
JUL										
10...	43	11	24	.9	1.7	83	90	16	.20	9.4
SEP										
07...	76	24	66	2	3.4	134	220	55	.40	12

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)
NOV									
01...	720	700	10800	.64	.050	1.5	.090	.030	.010
DEC									
06...	661	640	9670	1.4	.110	.70	.030	.020	.050
APR									
18...	450	440	12400	.64	.100	4.0	1.60	.040	.020
MAY									
15...	271	250	29500	.82	.090	1.4	2.50	.030	.030
JUL									
10...	247	250	17000	.40	.030	.50	.150	.010	.020
SEP									
07...	559	540	10500	.94	.020	.40	.160	.020	.030

09163500 COLORADO RIVER NEAR COLORADO-UTAH STATE LINE--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC DISSOLVED (UG/L AS AS)	BARIUM, DISSOLVED (UG/L AS BA)	BERYLLIUM, DISSOLVED (UG/L AS BE)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, DISSOLVED (UG/L AS CR)	COBALT, DISSOLVED (UG/L AS CO)	COPPER, DISSOLVED (UG/L AS CU)	IRON, DISSOLVED (UG/L AS FE)	LEAD, DISSOLVED (UG/L AS PB)
NOV											
01...	1200	80	<1	55	<.5	<1	<1	1	2	18	6
APR											
18...	1130	40	<1	66	1	<1	<1	<1	2	41	2
JUL											
10...	1300	30	<1	50	<1	<1	<1	<1	3	36	6
SEP											
07...	1100	20	1	67	<1	<1	1	<1	5	15	<1

DATE	LITHIUM DISSOLVED (UG/L AS LI)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY DISSOLVED (UG/L AS HG)	MOLYBDENUM, DISSOLVED (UG/L AS MO)	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, DISSOLVED (UG/L AS AG)	STRONTIUM, DISSOLVED (UG/L AS SR)	VANADIUM, DISSOLVED (UG/L AS V)	ZINC, DISSOLVED (UG/L AS ZN)
NOV										
01...	49	13	<.1	3	2	7	<1	1000	7	14
APR										
18...	27	4	.1	6	<1	3	<1	570	2	39
JUL										
10...	15	9	1.0	7	<1	1	<1	350	5	3
SEP										
07...	15	7	<.1	9	22	4	<1	810	1	<3

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT					
12...	1410	4820	116	1510	74
DEC					
06...	1245	5420	67	980	93
APR					
11...	1230	8390	503	11400	43
MAY					
15...	1130	40300	4060	441000	84
JUN					
04...	1215	38000	1240	127000	55
AUG					
08...	1315	9560	1350	34800	73

09163500 COLORADO RIVER NEAR COLORADO-UTAH STATE LINE--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	1010	926	---	733	832	752	741	289	308	---	830
2	---	934	937	---	715	845	751	740	290	308	---	853
3	---	922	928	---	751	843	734	720	287	309	---	849
4	---	984	937	---	727	847	712	699	288	308	---	784
5	---	957	922	---	736	867	731	670	292	311	---	762
6	---	906	943	---	758	831	750	658	304	322	---	808
7	---	892	938	---	848	812	729	641	340	335	---	840
8	---	863	925	---	822	811	745	638	360	360	---	889
9	---	837	---	---	819	807	737	623	360	381	703	914
10	---	813	---	---	831	807	719	591	359	393	725	929
11	---	839	---	---	830	812	698	546	366	381	764	950
12	---	789	---	---	843	814	669	505	368	374	788	962
13	959	748	---	---	838	839	708	464	367	403	790	984
14	893	745	---	843	837	835	690	434	358	437	805	1020
15	861	749	---	812	867	834	716	412	335	453	817	1010
16	834	757	---	837	890	842	720	411	320	447	820	1030
17	821	773	---	789	884	845	696	379	311	475	820	1030
18	825	847	---	696	868	833	650	368	314	484	817	1110
19	837	768	---	714	882	812	591	359	321	506	894	1040
20	851	777	---	875	863	820	564	369	317	537	968	1020
21	867	772	---	849	853	807	583	342	305	556	918	1030
22	879	766	---	711	850	812	653	316	291	570	863	1040
23	895	769	---	523	856	809	686	307	301	580	836	1050
24	913	785	---	518	867	794	713	304	301	600	842	1060
25	929	814	---	492	867	780	653	305	302	613	833	1050
26	951	873	---	493	840	825	616	306	300	643	851	1040
27	970	891	---	495	843	826	628	299	307	---	809	1030
28	991	910	---	517	833	784	672	294	302	---	806	1030
29	1010	908	---	584	828	769	715	294	308	---	816	1040
30	1030	924	---	714	---	755	729	294	308	---	799	1040
31	1050	---	---	763	---	743	---	291	---	---	792	---
MEAN	914	844	932	679	827	816	690	462	319	438	821	967

WTR YR 1984 MEAN 707 MAX 1190 MIN 324

09163500 COLORADO RIVER NEAR COLORADO-UTAH STATE LINE--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	---	---	13.0	12.0	3.5	2.5	---	---	2.0	1.5	1.5	1.5
2	---	---	13.0	12.0	4.0	3.5	---	---	2.0	1.5	2.0	1.5
3	---	---	12.5	11.5	5.0	4.0	---	---	2.0	1.5	2.5	1.5
4	---	---	12.0	11.0	4.5	4.0	---	---	2.0	1.5	2.0	1.5
5	---	---	11.5	11.0	4.0	3.0	---	---	2.0	2.0	2.0	1.5
6	---	---	11.5	10.5	3.0	2.5	---	---	2.5	2.0	1.5	1.5
7	---	---	11.5	10.5	3.0	2.0	---	---	3.0	2.0	1.5	1.5
8	---	---	11.0	9.5	3.0	2.5	---	---	3.5	3.0	3.0	1.5
9	---	---	9.0	8.5	---	---	---	---	4.0	3.0	2.0	1.5
10	---	---	8.0	7.5	---	---	---	---	4.0	3.5	3.0	1.5
11	---	---	8.0	7.0	---	---	---	---	5.0	4.0	4.5	1.5
12	---	---	8.5	7.5	---	---	---	---	4.5	3.5	6.0	1.5
13	14.0	12.5	9.5	8.0	---	---	---	---	5.0	4.0	7.5	1.5
14	13.5	13.0	9.5	9.0	---	---	2.0	2.0	6.0	5.0	7.5	5.0
15	13.0	11.5	8.5	8.0	---	---	2.0	1.5	5.5	5.0	9.5	5.0
16	12.5	11.5	8.0	7.0	---	---	2.0	2.0	5.5	4.0	9.0	5.0
17	12.0	11.0	7.0	6.0	---	---	2.0	2.0	5.5	5.0	9.0	4.0
18	13.0	12.0	7.5	7.0	---	---	2.0	2.0	5.5	3.0	8.0	4.0
19	13.0	11.5	7.0	6.0	---	---	2.0	2.0	4.5	1.5	7.5	2.5
20	12.5	11.5	7.0	6.5	---	---	2.0	2.0	4.0	1.5	8.0	4.5
21	12.5	11.0	7.0	6.5	---	---	2.0	2.0	3.5	1.5	8.0	1.5
22	12.5	11.0	6.0	5.0	---	---	2.0	1.5	4.5	1.5	8.5	3.5
23	12.5	11.0	5.0	4.0	---	---	2.0	1.5	4.0	1.5	7.0	3.0
24	12.5	11.5	4.0	3.5	---	---	2.0	1.5	4.5	1.5	9.0	1.5
25	12.5	11.0	4.0	3.5	---	---	2.0	1.5	5.0	1.5	9.5	6.0
26	12.5	11.0	4.0	3.0	---	---	2.0	1.5	4.0	1.5	8.5	5.0
27	12.5	11.0	3.5	3.0	---	---	2.0	1.5	3.5	1.5	8.0	4.0
28	12.0	11.0	3.0	2.0	---	---	2.0	1.5	3.0	1.5	8.0	3.0
29	12.5	11.0	3.0	2.5	---	---	2.0	1.5	2.0	1.5	9.0	5.0
30	12.5	11.5	3.5	2.5	---	---	2.0	1.5	---	---	9.5	6.5
31	13.0	11.5	---	---	---	---	2.0	1.5	---	---	9.0	6.0
MONTH	14.0	11.0	13.0	2.0	5.0	2.0	2.0	1.5	6.0	1.5	9.5	1.5
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	8.0	5.5	13.5	12.0	16.0	15.5	20.5	18.5	---	---	19.5	18.0
2	9.0	6.0	14.0	12.5	16.0	15.0	21.5	19.5	---	---	18.5	17.5
3	9.5	6.0	14.0	12.5	17.0	15.0	21.0	20.0	---	---	18.0	16.5
4	9.5	3.5	14.0	13.0	16.0	15.0	21.5	19.5	---	---	17.5	15.5
5	10.5	6.5	15.0	13.0	16.0	14.0	21.0	19.0	---	---	17.5	16.0
6	10.5	8.0	14.5	13.0	14.5	12.5	20.5	19.5	---	---	17.5	16.0
7	12.0	6.5	14.5	12.5	14.5	12.5	21.5	20.0	---	---	18.5	16.0
8	11.5	8.0	14.5	12.0	14.0	12.0	21.0	20.5	---	---	19.0	16.5
9	11.0	7.5	15.5	13.0	13.5	12.0	21.5	20.0	21.5	18.5	18.5	17.0
10	10.0	6.0	16.0	13.5	15.0	12.0	22.0	20.5	22.0	18.0	19.5	18.0
11	10.0	6.5	17.0	14.5	16.5	13.5	21.5	20.0	23.5	19.5	19.5	17.5
12	7.5	6.0	17.0	15.0	17.5	16.0	21.5	20.0	23.0	20.0	19.0	17.0
13	8.0	6.5	16.5	14.5	18.5	16.5	21.0	20.5	22.0	20.0	19.5	18.0
14	9.0	7.0	15.5	14.0	18.0	13.0	22.0	20.5	22.0	20.0	20.0	18.5
15	9.5	7.5	14.5	13.5	20.0	15.5	21.0	20.0	24.0	20.0	20.5	18.5
16	10.0	8.0	14.5	13.0	19.0	14.5	22.0	20.0	22.5	20.0	19.5	18.0
17	10.5	8.5	15.5	13.0	19.0	15.0	22.5	20.5	23.5	19.5	19.0	17.0
18	13.5	9.5	15.5	14.0	19.0	15.0	22.5	21.0	24.5	19.5	19.5	18.0
19	13.0	11.0	16.0	13.5	19.0	15.0	23.0	21.0	24.0	19.5	20.0	18.0
20	10.5	9.5	16.5	14.5	18.0	15.0	23.5	21.5	23.5	19.0	19.5	18.0
21	10.5	9.0	16.5	15.0	18.5	15.0	24.0	22.0	21.0	18.5	19.5	17.5
22	11.0	8.5	17.0	15.0	18.5	15.5	23.5	22.0	20.5	17.5	18.5	17.0
23	12.0	9.5	16.0	15.0	19.0	15.0	23.5	21.5	20.5	17.5	18.0	16.5
24	15.5	11.5	16.0	15.0	19.5	17.5	24.5	21.5	21.5	17.5	17.5	16.0
25	15.0	12.0	16.5	15.5	20.0	17.5	24.5	23.0	20.0	17.0	16.5	15.0
26	12.0	9.5	16.5	15.0	20.0	17.5	24.5	22.5	20.0	18.5	15.5	13.5
27	10.5	8.5	16.0	14.5	20.0	17.0	---	---	20.5	18.0	14.5	12.5
28	10.5	9.5	16.5	14.5	20.0	16.5	---	---	20.0	18.0	16.5	13.5
29	10.5	9.0	16.5	15.0	20.5	17.5	---	---	22.5	18.5	15.5	14.0
30	12.5	10.0	16.5	15.5	20.0	19.0	---	---	20.5	19.0	14.5	13.0
31	---	---	16.5	16.0	---	---	---	---	20.0	18.5	---	---
MONTH	15.5	3.5	17.0	12.0	20.5	12.0	24.5	18.5	24.5	17.0	20.5	12.5
YEAR	24.5	1.5										

09163570 HAY PRESS CREEK ABOVE FRUITA RESERVOIR NO. 3, NEAR GLADE PARK, CO

LOCATION.--Lat 38°51'03", long 108°46'56", in NE¼SW¼ sec.10, T.14 S., R.102 W., Mesa County, Hydrologic Unit 14030001, on right bank, 10 mi southwest of Glade Park Post Office

DRAINAGE AREA.--0.77 mi².

PERIOD OF RECORD.--April 1983 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 8,885 ft, from topographic map. April 1, 1983 to August 23, 1983, water-stage recorder at site 100 ft upstream, at datum 5 ft, higher.

REMARKS.--Records fair except those for winter period and period of no gage-height record, which are poor. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 26 ft³/s, May 14, 1984, gage height, 1.20 ft, from rating curve extended above 4.7 ft³/s; minimum daily, 0.04 ft³/s, Jan. 18, 19, 1984.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 5.0 ft³/s, and maximum (*).

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
May 14	1700	*26	1.20	June 7	1730	5.0	0.94

Minimum daily discharge, 0.04 ft³/s, Jan. 18, 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.15	.11	.10	.06	.06	.09	.14	.33	1.4	.35	.14	.07
2	.24	.11	.10	.06	.06	.09	.14	.39	1.0	.32	.15	.07
3	.15	.10	.09	.06	.07	.09	.15	.43	.92	.30	.16	.06
4	.12	.10	.09	.06	.07	.08	.16	.43	.76	.32	.20	.06
5	.11	.10	.08	.06	.07	.08	.17	.47	1.4	.35	.11	.05
6	.11	.10	.08	.06	.07	.08	.16	.56	1.7	.30	.11	.05
7	.12	.10	.09	.06	.07	.09	.16	.56	3.9	.30	.10	.06
8	.11	.10	.08	.06	.07	.10	.17	.62	1.8	.27	.11	.05
9	.14	.10	.09	.06	.07	.10	.16	.92	1.7	.30	.11	.06
10	.12	.11	.09	.07	.07	.10	.16	1.2	1.4	.27	.11	.06
11	.11	.10	.09	.06	.07	.10	.15	2.3	1.2	.22	.11	.06
12	.11	.10	.09	.06	.07	.10	.16	3.6	1.2	.18	.10	.05
13	.11	.11	.08	.06	.08	.11	.17	4.8	1.3	.18	.11	.05
14	.12	.11	.08	.07	.08	.11	.19	9.2	1.3	.18	.17	.06
15	.12	.10	.07	.06	.08	.11	.21	7.9	1.2	.16	.20	.06
16	.12	.10	.07	.05	.08	.11	.24	4.8	1.1	.15	.15	.06
17	.14	.10	.08	.05	.08	.10	.27	4.2	1.1	.14	.14	.06
18	.14	.10	.08	.04	.07	.10	.28	4.2	1.0	.12	.10	.06
19	.14	.10	.07	.04	.07	.11	.26	3.6	1.0	.11	.10	.07
20	.15	.10	.06	.05	.08	.12	.23	4.2	.82	.11	.11	.06
21	.12	.10	.06	.05	.08	.12	.24	4.6	.70	.14	.08	.06
22	.12	.09	.06	.05	.07	.11	.25	4.8	.70	.14	.08	.07
23	.12	.10	.06	.05	.07	.12	.29	5.0	.62	.14	.08	.07
24	.12	.09	.06	.06	.08	.13	.33	4.5	.56	.12	.07	.08
25	.12	.10	.07	.06	.08	.12	.35	4.2	.51	.15	.07	.08
26	.11	.09	.07	.06	.08	.12	.33	3.2	.47	.15	.06	.08
27	.11	.09	.07	.06	.08	.12	.30	2.6	.32	.20	.07	.08
28	.12	.09	.06	.06	.08	.13	.30	2.0	.32	.15	.07	.09
29	.12	.09	.06	.06	.08	.14	.31	1.8	.32	.16	.07	.09
30	.11	.09	.06	.06	---	.13	.32	1.5	.32	.18	.07	.10
31	.11	---	.06	.06	---	.14	---	1.5	---	.16	.06	---
TOTAL	3.91	2.98	2.35	1.78	2.14	3.35	6.75	90.41	32.04	6.32	3.37	1.98
MEAN	.13	.099	.076	.057	.074	.11	.23	2.92	1.07	.20	.11	.066
MAX	.24	.11	.10	.07	.08	.14	.35	9.2	3.9	.35	.20	.10
MIN	.11	.09	.06	.04	.06	.08	.14	.33	.32	.11	.06	.05
AC-FT	7.8	5.9	4.7	3.5	4.2	6.6	13	179	64	13	6.7	3.9

WTR YR 1984 TOTAL 157.38 MEAN .43 MAX 9.2 MIN .04 AC-FT 312

NOTE.--NO GAGE-HEIGHT RECORD NOV. 20 TO MAY 1.

TRANSMOUNTAIN DIVERSIONS FROM COLORADO RIVER BASIN IN COLORADO

There are 24 tunnels or ditches, all of which are equipped with water-stage recorders and Parshall flumes or sharp-crested weirs. Records furnished by Colorado Division of Water Resources. The locations and diversions of 6 selected diversions are given in the following list.

09010000 Grand River ditch diverts water from tributaries of Colorado River to La Poudre Pass Creek (tributary to Cache la Poudre River) in NW¼ 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.
REVISIONS (WATER YEARS).--WSP 1313: 1912-27.

09013000 Alva B. Adams tunnel diverts water from Grand Lake and Shadow Mountain Lake in NW¼ 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.

09021500 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.

09042000 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 SE¼ 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 SW¼NE¼ sec.2, T.8 S., R.78 W., left bank of Bemrose Creek in SW¼SW¼ sec.6, T.8 S., R.77 W., and intercepting intermediate tributaries, transport
diversions to north portal of the tunnel.

09050590 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 SW¼SW¼ 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.

09063700 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.9, 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.

DIVERSIONS, IN ACRE-FEET, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

Diversion	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
TO PLATTE RIVER BASIN												
09010000	0	0	0	0	0	0	0	0	3,530	9,130	3,960	1,000
Water year 17,620												
09013000	9,760	15,110	26,930	11,930	18,490	21,130	5,550	2,470	12,580	31,190	24,860	15,510
Water year 195,510												
09021500	5.5	0	0	0	0	0	0	0	274	647	159	37
Water year 1,120												
09050590	0	0	0	0	0	0	0	0	0	0	0	0
Water year 0												
TO ARKANSAS RIVER BASIN												
09042000	1,870	0	0	0	0	0	0	960	1,680	721	742	1,310
Water year 7,280												
09063700	0	738	0	0	0	2,740	0	1,690	3,130	4,230	12,680	2,710
Water year 27,920												

TRANSMOUNTAIN DIVERSIONS NO LONGER PUBLISHED

Following is a list of Transmountain Diversions no longer being published in this report. Diversions, in acre-feet, for these sites are available from the State of Colorado, Division of Water Resources.

TO PLATTE RIVER BASIN		TO ARKANSAS RIVER BASIN		TO RIO GRANDE BASIN	
09012000	Eureka ditch	09061500	Columbine ditch	09118200	Tarbell ditch
09022500	Moffat Water tunnel	09062000	Ewing ditch	09121000	Tabor ditch
				09341000	Treasure Pass ditch
09046000	Boreas Pass ditch	09062500	Wurtz ditch	09347000	Don LaFont ditches 1&2
09047300	Vidler tunnel	09073000	Twin Lakes tunnel	09348000	Williams Cr-Squaw Pass ditch
		09077160	Chas. H. Boustead tunnel	09351000	Pine River-Weminuche Pass ditch
		09077500	Busk-Ivanhoe tunnel	09351500	Weminuche Pass ditch
		09115000	Larkspur ditch		

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 floodflow 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 three tables. The first is a table of discharge measurements at low-flow partial-record stations; the second is a table of annual maximum stage and discharge at crest-stage stations; and the third is a table containing discharge measurements made at miscellaneous sites for both low flow and high flow are given in a fourth 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 simulataneous 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 1984

Station no.	Station name	Location	Drainage area (mi^2)	Period of record	Date	Discharge (ft^3/s)
*09058900	Moniger Creek near Minturn, CO	Lat 39°43'37", long 106°28'50", in Eagle County, on left bank 1.5 mi upstream from mouth, 7.5 mi north of Minturn.	0.76	1965-84	10-05-83	0.13
					8-15-84	.20
					9-12-84	.30

*Also a crest-stage partial-record station.

CREST-STAGE PARTIAL-RECORD STATIONS

The following table contains annual maximum discharge 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.

ANNUAL MAXIMUM DISCHARGE AT CREST-STAGE PARTIAL-RECORD STATIONS DURING WATER YEAR 1984

Station no.	Station name	Location	Drainage area (mi²)	Non-contributing	Period of record	Date	Gage height (feet)	Discharge (ft^3/s)
			PINEY RIVER BASIN					
*09058900	Moniger Creek near Minturn, CO	Lat 39°43'37", long 106°28'50", in Eagle County, on left bank 1.5 mi upstream from mouth, 7.5 mi north of Minturn.	0.76	-	1965-84	9-12-84	1.11	0.30 (observed)
			COLORADO RIVER BASIN					
09061450	Sweetwater Creek at mouth near Dotsero, CO	Lat 39°43'20", long 107°02'22", in NW¼NE¼ sec.9, T.4 S., R.86 W., Eagle County, 5.3 mi north of Dotsero.	105	-	1979-84	unknown	9.16	530
09091100	Mamm Creek near Silt, CO	Lat 39°43'54", long 107°42'48", in NW¼NW¼ sec.18, T.6 S., R.92 W., Garfield County, 3.3 mi southeast of Silt.	63.3	-	1979-84	6-6-84	11.92	430
			GUNNISON RIVER BASIN					
09149450	Dry Creek near Olathe, CO	Lat 39°33'19", long 108°02'43", SW¼NE¼ sec. 36, T.50 N., R.11 W., Montrose County, 4.9 mi southwest of Olathe.	102	-	1979-84	unknown	3.90	700

*Also a low-flow partial-record station.

STATION NUMBER	STATION NAME	LAT-I-TUDE	LONG-I-TUDE	SEQ. NO.	DATE OF SAMPLE	TIME
393029106224701	EAGLE RIVER BELOW HOMESTAKE CREEK AT REDCLIFF	39 30 29	106 22 47	01	83-10-26	1420
	EAGLE RIVER BELOW HOMESTAKE CREEK AT REDCLIFF				84-04-12	1000
393057106232301	PETERSON CREEK AT MOUTH	39 30 57	106 23 23	01	83-10-26	0905
	PETERSON CREEK AT MOUTH				84-04-11	1040
393123106234501	EAGLE RIVER ABOVE BELDEN MINE	39 31 23	106 23 45	01	83-10-26	1115
	EAGLE RIVER ABOVE BELDEN MINE				84-04-11	1140
393128106233801	MINE DRAINAGE ABOVE BELDEN MINE	39 31 28	106 23 38	01	83-10-26	1230
	MINE DRAINAGE ABOVE BELDEN MINE				84-04-11	1000
393133106234201	ROASTER PILE RUNOFF NEAR BELDEN POWER PLANT	39 31 33	106 23 42	01	83-10-26	0945
393139106234401	BELDEN MINE EFFLUENT	39 31 39	106 23 44	01	83-10-26	1005
	BELDEN MINE EFFLUENT				84-04-11	1100
393125106241601	FALL CREEK ABOVE POWER PLANT DIVERSION	39 31 25	106 24 16	01	83-10-26	1030
393137106240001	FALL CREEK AT MOUTH	39 31 37	106 24 00	01	84-04-11	1200
393139106240101	EAGLE RIVER BELOW FALL CREEK	39 31 39	106 24 01	01	83-10-26	1200
	EAGLE RIVER BELOW FALL CREEK				84-04-11	1430
393157106235501	ROCK CREEK AT MOUTH	39 31 57	106 23 55	01	83-10-26	1345
	ROCK CREEK AT MOUTH				84-04-11	1415
393233106241401	BISHOP GULCH AT MOUTH	39 32 33	106 24 14	01	83-10-26	0910
	BISHOP GULCH AT MOUTH				84-04-11	0934
393245106241501	EAGLE RIVER BELOW BISHOP GULCH	39 32 45	106 24 15	01	83-10-26	1015
	EAGLE RIVER BELOW BISHOP GULCH				84-04-11	1036
393336106235701	EAGLE RIVER ABOVE TWO ELK CREEK	39 33 36	106 23 57	01	83-10-26	1515
	EAGLE RIVER ABOVE TWO ELK CREEK				84-04-12	0831
393353106240301	TWO ELK CREEK AT MOUTH	39 33 53	106 24 03	01	83-10-26	1100
	TWO ELK CREEK AT MOUTH				84-04-11	1234
393411106242001	EAGLE RIVER ABOVE CROSS CREEK	39 34 11	106 24 20	01	84-04-12	1030
09065100	CROSS CREEK NEAR MINTURN, CO.	39 34 05	106 24 45	00	83-10-26	1515
	CROSS CREEK NEAR MINTURN, CO.				84-04-12	1200
393358106243601	CROSS CREEK TAILINGS PILE DISCHARGE	39 33 58	106 24 36	01	83-10-27	0900
	CROSS CREEK TAILINGS PILE DISCHARGE				84-04-11	1620
393358106243401	CROSS CREEK TAILINGS PILE SEEP	39 33 58	106 24 34	01	83-10-27	0900
	CROSS CREEK TAILINGS PILE SEEP				84-04-11	1615
393413106242301	CROSS CREEK AT MOUTH	39 34 13	106 24 23	01	83-10-26	1435
	CROSS CREEK AT MOUTH				84-04-12	0900
393443106245201	UNNAMED TRIBUTARY EAGLE R.ABOVE MINTURN	39 34 43	106 24 52	01	84-04-11	1328
393454106252201	EAGLE RIVER ABOVE MINTURN	39 34 54	106 25 22	01	83-10-26	1300
	EAGLE RIVER ABOVE MINTURN				84-04-11	1430
393454106252301	MARTIN CREEK AT MOUTH	39 34 54	106 25 23	01	83-10-26	1400
	MARTIN CREEK AT MOUTH				84-04-11	1501
393543106260001	GROUSE CREEK AT MOUTH	39 35 43	106 26 00	01	83-10-27	0930
393543106260001	GROUSE CREEK AT MOUTH	39 35 43	106 26 00	01	84-04-11	1610
393548106255201	GAME CREEK AT MOUTH	39 35 48	106 25 52	01	83-10-27	0830
	GAME CREEK AT MOUTH				84-04-11	1540
393649106263201	GORE CREEK NEAR DOWDS JUNCTION	39 36 49	106 26 32	01	83-10-27	1015
	GORE CREEK NEAR DOWDS JUNCTION				84-04-12	0955
393638106271401	EAGLE RIVER BELOW GORE CREEK	39 36 38	106 27 14	01	83-10-27	0830
	EAGLE RIVER BELOW GORE CREEK				84-04-12	1150

STATION NUMBER	DATE OF SAMPLE	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)
393029106224701	83-10-26	46	150	7.3	7.5	83	20	8.0	2.2	6.5	148
	84-04-12	40	142	8.6	.0	--	--	--	--	--	83
393057106232301	83-10-26	1.1	41	7.7	.5	--	--	--	--	--	38
	84-04-11	1.0	50	6.9	1.5	--	--	--	--	--	36
393123106234501	83-10-26	47	140	7.8	2.5	71	17	6.8	2.2	6.4	80
	84-04-11	52	150	7.0	1.0	--	--	--	--	--	91
393128106233801	83-10-26	.03	3920	2.9	3.5	--	--	--	--	--	3200
	84-04-11	.02	630	6.6	.0	--	--	--	--	--	653
393133106234201	83-10-26	.02	1840	3.0	.5	--	--	--	--	--	1120
393139106234401	83-10-26	.54	2150	7.7	19.0	--	--	--	--	--	2370
	84-04-11	.41	2220	7.5	14.5	--	--	--	--	--	--
393125106241601	83-10-26	3.6	48	6.8	.0	--	--	--	--	--	29
393137106240001	84-04-11	1.5	43	6.9	.0	--	--	--	--	--	53
393139106240101	83-10-26	41	165	7.7	5.0	78	19	7.5	2.2	4.3	106
	84-04-11	57	225	7.6	.5	--	--	--	--	--	144
393157106235501	83-10-26	.13	950	7.5	7.5	--	--	--	--	--	809
	84-04-11	1.3	548	7.2	2.0	--	--	--	--	--	397
393233106241401	83-10-26	.03	44	8.8	1.0	--	--	--	--	--	32
	84-04-11	E.05	82	8.2	1.5	--	--	--	--	--	62
393245106241501	83-10-26	52	210	7.7	1.5	77	19	7.2	2.2	6.3	101
	84-04-11	63	211	7.7	.5	--	--	--	--	--	130
393336106235701	83-10-26	58	180	7.6	6.5	89	21	8.9	2.2	6.0	114
	84-04-12	44	310	8.3	.5	--	--	--	--	--	196
393353106240301	83-10-26	5.2	<50	8.3	2.5	--	--	--	--	--	178
	84-04-11	4.3	309	7.8	1.5	--	--	--	--	--	177
393411106242001	84-04-12	33	343	7.1	1.0	--	--	--	--	--	225
09065100	83-10-26	11	50	8.3	6.0	--	--	--	--	--	19
	84-04-12	14	53	8.3	.0	--	--	--	--	--	47
393358106243601	83-10-27	.50	2650	6.0	4.0	--	--	--	--	--	3140
	84-04-11	.73	2030	6.7	2.0	--	--	--	--	--	1910
393358106243401	83-10-27	.02	4500	3.2	5.5	--	--	--	--	--	5480
	84-04-11	.02	5700	4.6	.0	--	--	--	--	--	7120
393413106242301	83-10-26	14	126	7.7	7.0	--	--	--	--	--	141
	84-04-12	11	308	6.9	1.5	--	--	--	--	--	231
393443106245201	84-04-11	<.01	560	8.3	1.5	--	--	--	--	--	405
393454106252201	83-10-26	68	273	7.9	5.5	120	28	11	2.4	5.9	142
	84-04-11	95	283	8.4	3.5	--	--	--	--	--	187
393454106252301	83-10-26	.13	304	7.9	3.5	--	--	--	--	--	162
	84-04-11	E1.0	230	8.1	1.5	--	--	--	--	--	244
393543106260001	83-10-27	1.3	58	8.4	.5	--	--	--	--	--	33
393543106260001	84-04-11	3.4	67	8.7	1.5	--	--	--	--	--	50
393548106255201	83-10-27	.88	550	8.4	1.5	--	--	--	--	--	384
	84-04-11	2.7	495	8.3	2.5	--	--	--	--	--	349
393649106263201	83-10-27	39	304	8.1	2.0	--	--	--	--	--	177
	84-04-12	29	360	8.2	1.5	--	--	--	--	--	222
393638106271401	83-10-27	124	270	8.4	2.0	120	33	9.1	3.1	5.8	139
	84-04-12	99	342	7.7	1.5	160	42	14	5.2	7.0	231

STATION NUMBER	DATE OF SAMPLE	BARIUM, DIS-SOLVED (UG/L AS BA)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	CADMIUM DIS-SOLVED (UG/L AS CD)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)	LITHIUM DIS-SOLVED (UG/L AS LI)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)
393029106224701	83-10-26	54	<.5	2	<3	60	380	1600	<10	8	20
	84-04-12	--	--	--	--	--	420	120	--	--	30
393057106232301	83-10-26	--	--	--	--	--	140	60	--	--	10
	84-04-11	--	--	--	--	--	490	60	--	--	20
393123106234501	83-10-26	51	<.5	<1	<3	<10	370	100	<10	6	30
	84-04-11	--	--	--	--	--	630	180	--	--	380
393128106233801	83-10-26	--	--	--	--	--	28000	27000	--	--	15000
	84-04-11	--	--	--	--	--	9000	40	--	--	1000
393133106234201	83-10-26	--	--	--	--	--	110000	110000	--	--	39000
393139106234401	83-10-26	--	--	--	--	--	270	250	--	--	1400
	84-04-11	--	--	--	--	--	140	50	--	--	3000
393125106241601	83-10-26	--	--	--	--	--	250	170	--	--	10
393137106240001	84-04-11	--	--	--	--	--	200	--	--	--	10
393139106240101	83-10-26	32	<.5	<1	<3	<10	710	200	<10	5	190
	84-04-11	--	--	--	--	--	2800	250	--	--	920
393157106235501	83-10-26	--	--	--	--	--	1500	150	--	--	2800
	84-04-11	--	--	--	--	--	11000	100	--	--	2700
393233106241401	83-10-26	--	--	--	--	--	190	40	--	--	20
	84-04-11	--	--	--	--	--	200	30	--	--	20
393245106241501	83-10-26	43	<.5	2	<3	<10	500	250	<10	5	160
	84-04-11	--	--	--	--	--	3300	80	--	--	1100
393336106235701	83-10-26	45	<.5	1	<3	<10	1900	370	<10	7	710
	84-04-12	--	--	--	--	--	5800	1700	--	--	3000
393353106240301	83-10-26	--	--	--	--	--	90	20	--	--	10
	84-04-11	--	--	--	--	--	40	40	--	--	<10
393411106242001	84-04-12	--	--	--	--	--	5900	540	--	--	3500
09065100	83-10-26	--	--	--	--	--	270	110	--	--	10
	84-04-12	--	--	--	--	--	370	290	--	--	50
393358106243601	83-10-27	--	--	--	--	--	220	80	--	--	2100
	84-04-11	--	--	--	--	--	21000	11000	--	--	27000
393358106243401	83-10-27	--	--	--	--	--	150000	130000	--	--	260000
	84-04-11	--	--	--	--	--	290000	270000	--	--	380000
393413106242301	83-10-26	--	--	--	--	--	320	170	--	--	700
	84-04-12	--	--	--	--	--	820	350	--	--	3500
393443106245201	84-04-11	--	--	--	--	--	1100	20	--	--	30
393454106252201	83-10-26	50	<.5	1	<3	<10	1200	140	<10	6	910
	84-04-11	--	--	--	--	--	4000	30	--	--	2200
393454106252301	83-10-26	--	--	--	--	--	1300	90	--	--	20
	84-04-11	--	--	--	--	--	25000	50	--	--	580
393543106260001	83-10-27	--	--	--	--	--	260	50	--	--	30
393543106260001	84-04-11	--	--	--	--	--	250	60	--	--	10
393548106255201	83-10-27	--	--	--	--	--	90	50	--	--	50
	84-04-11	--	--	--	--	--	120	40	--	--	20
393649106263201	83-10-27	--	--	--	--	--	130	40	--	--	20
	84-04-12	--	--	--	--	--	240	40	--	--	50
393638106271401	83-10-27	58	<.5	<1	<3	<10	780	140	<10	11	490
	84-04-12	77	<.5	2	<3	<10	2400	34	30	7	1600

STATION NUMBER	DATE OF SAMPLE	MANGANESE, DISSOLVED (UG/L AS MN)	MOLYBDENUM, DISSOLVED (UG/L AS MO)	STRONTIUM, DISSOLVED (UG/L AS SR)	VANADIUM, DISSOLVED (UG/L AS V)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, DISSOLVED (UG/L AS ZN)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY)
393029106224701	83-10-26	98	<10	78	<6	50	180	--	--
	84-04-12	20	--	--	--	20	--	25	2.7
393057106232301	83-10-26	<10	--	--	--	30	--	--	--
	84-04-11	<10	--	--	--	20	--	6	.02
393123106234501	83-10-26	15	<10	74	<6	40	12	--	--
	84-04-11	350	--	--	--	310	--	6	.84
393128106233801	83-10-26	15000	--	--	--	28000	--	--	--
	84-04-11	760	--	--	--	13000	--	340	.02
393133106234201	83-10-26	37000	--	--	--	48000	--	--	--
393139106234401	83-10-26	1300	--	--	--	350	--	--	--
	84-04-11	2800	--	--	--	480	--	--	--
393125106241601	83-10-26	10	--	--	--	20	--	--	--
393137106240001	84-04-11	20	--	--	--	50	--	6	.02
393139106240101	83-10-26	120	<10	50	<6	320	150	--	--
	84-04-11	930	--	--	--	1900	--	28	4.3
393157106235501	83-10-26	3700	--	--	--	18000	--	--	--
	84-04-11	2100	--	--	--	20000	--	55	.19
393233106241401	83-10-26	10	--	--	--	40	--	--	--
	84-04-11	10	--	--	--	30	--	30	--
393245106241501	83-10-26	130	<10	79	<6	330	210	--	--
	84-04-11	1100	--	--	--	2600	--	17	2.9
393336106235701	83-10-26	680	<10	72	<6	620	400	--	--
	84-04-12	3300	--	--	--	4300	--	18	2.1
393353106240301	83-10-26	10	--	--	--	20	--	--	--
	84-04-11	10	--	--	--	<10	--	6	.07
393411106242001	84-04-12	3600	--	--	--	4700	--	43	3.8
09065100	83-10-26	30	--	--	--	30	--	--	--
	84-04-12	230	--	--	--	60	--	6	.23
393358106243601	83-10-27	1900	--	--	--	500	--	--	--
	84-04-11	23000	--	--	--	7200	--	48	.09
393358106243401	83-10-27	260000	--	--	--	61000	--	--	--
	84-04-11	360000	--	--	--	110000	--	138	.00
393413106242301	83-10-26	620	--	--	--	140	--	--	--
	84-04-12	3400	--	--	--	860	--	4	.12
393443106245201	84-04-11	<10	--	--	--	50	--	39	--
393454106252201	83-10-26	770	<10	83	<6	470	230	--	--
	84-04-11	2300	--	--	--	2400	--	17	4.4
393454106252301	83-10-26	60	--	--	--	40	--	--	--
	84-04-11	<10	--	--	--	140	--	549	--
393543106260001	83-10-27	10	--	--	--	110	--	--	--
393543106260001	84-04-11	<10	--	--	--	10	--	15	.14
393548106255201	83-10-27	20	--	--	--	60	--	--	--
	84-04-11	10	--	--	--	20	--	10	.07
393649106263201	83-10-27	40	--	--	--	20	--	--	--
	84-04-12	100	--	--	--	30	--	7	.55
393638106271401	83-10-27	480	<10	130	<6	280	190	--	--
	84-04-12	1500	<10	180	<6	1600	910	13	3.5

09010500 - COLORADO R BELOW BAKER GULCH, NR GRAND LAKE, CO. (LAT 40 19 33 LONG 105 51 22)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)
OCT , 1983				
06...	1050	31	70	6.5
FEB , 1984				
08...	1135	11	80	.5
MAR				
21...	1405	4.9	84	.5
APR				
20...	0945	16	76	.5
MAY , 1984				
22...	1215	472	51	7.0
JUN				
20...	1410	570	40	12.0
JUL				
19...	1655	115	60	15.5
AUG				
21...	0930	86	67	8.5

09011000 - COLORADO RIVER NEAR GRAND LAKE, CO. (LAT 40 13 08 LONG 105 51 25)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)
OCT , 1983				
06...	1415	42	82	11.0
NOV				
08...	1045	42	72	2.5
DEC				
20...	1525	27	80	.5
FEB , 1984				
08...	0955	19	61	.5
MAR				
21...	0925	17	84	.5
APR , 1984				
25...	1530	42	76	2.0
MAY				
22...	1540	677	47	8.0
JUN				
20...	1635	641	39	12.0
JUL				
19...	1400	47	60	15.0
AUG				
21...	1205	137	65	11.5

09019500 - COLORADO RIVER NEAR GRANBY, CO. (LAT 40 07 15 LONG 105 54 00)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)
OCT , 1983				
07...	1030	28	72	9.0
MAR , 1984				
21...	1745	114	55	5.5
APR				
04...	1115	967	--	.5
25...	1230	490	55	5.5
MAY				
22...	1820	513	58	6.0
JUN , 1984				
20...	1120	804	60	10.0
JUL				
19...	1145	271	55	17.5
AUG				
21...	1405	28	80	12.0

09024000 - FRASER RIVER NEAR WINTER PARK, CO. (LAT 39 54 00 LONG 105 46 34)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)
OCT , 1983				
05...	1250	8.9	80	10.0
NOV				
09...	0950	7.4	62	.0
DEC				
19...	1205	9.4	75	1.0
FEB , 1984				
06...	1100	6.8	100	.5
MAR				
20...	1140	6.8	108	2.0
APR , 1984				
24...	1235	9.2	120	3.5
MAY				
21...	1215	150	46	4.0
JUN				
19...	1440	285	36	7.0
JUL				
17...	1145	63	51	8.5
AUG				
23...	1215	25	68	9.0

09025000 - VASQUEZ CREEK NEAR WINTER PARK, CO. (LAT 39 55 13 LONG 105 47 05)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)
OCT , 1983				
05...	1400	4.7	48	4.0
NOV				
08...	1700	5.6	41	.5
DEC				
19...	1510	2.5	35	.5
FEB , 1984				
06...	1415	3.3	66	.5
MAR				
22...	1445	2.2	54	.5
APR , 1984				
19...	1145	4.6	64	1.5
MAY				
24...	1210	180	39	4.5
JUN				
19...	1320	206	27	6.0
JUL				
18...	0835	41	30	6.0
AUG				
23...	1020	9.8	50	9.0

09025400 - ELK CREEK NEAR FRASER, CO. (LAT 39 55 09 LONG 105 49 31)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)
OCT , 1983				
05...	1605	.40	64	12.0
NOV				
07...	1535	.20	60	6.5
FEB , 1984				
08...	1425	.47	63	.5
MAR				
22...	1220	.52	59	.5
MAY				
23...	1710	--	35	6.0
JUN , 1984				
01...	1530	69	36	6.5
18...	1400	36	31	8.5
JUL				
18...	1050	4.2	46	10.5
AUG				
22...	1220	4.2	58	10.5

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)
09026500 - ST. LOUIS CREEK NEAR FRASER, CO. (LAT 39 54 36 LONG 105 52 40)									
OCT , 1983					MAY , 1984				
04...	1730	19	80	7.0	21...	1530	106	78	4.0
NOV					JUN				
07...	1715	9.0	90	4.0	21...	1710	282	58	10.0
FEB , 1984					JUL				
08...	1730	7.0	87	.5	18...	1315	32	90	11.0
MAR					AUG				
20...	1725	9.0	87	.5	22...	1030	23	83	9.0
APR									
19...	1505	7.4	92	1.5					
09032000 - RANCH CREEK NEAR FRASER, CO. (LAT 39 57 00 LONG 105 45 54)									
OCT , 1983					MAY , 1984				
04...	1300	4.1	48	6.0	23...	1450	148	39	6.0
NOV					JUN				
07...	1345	3.3	52	4.0	21...	1420	214	28	10.0
FEB , 1984					JUL				
06...	1710	3.7	50	.5	17...	1815	32	36	10.5
MAR					AUG				
20...	1325	2.3	58	1.5	22...	1710	6.9	50	11.5
APR									
19...	1715	3.3	61	1.0					
09032100 - CABIN CREEK NEAR FRASER, CO. (LAT 39 59 09 LONG 105 44 40)									
OCT , 1983					JUL , 1984				
04...	1155	2.1	45	3.0	17...	1540	20	36	10.0
NOV					18...	1500	18	34	11.0
07...	1115	1.9	47	3.0	24...	1200	14	35	9.0
MAY , 1984					AUG				
02...	1345	1.2	46	.5	22...	1505	8.2	41	11.5
JUN									
01...	1315	65	26	2.5					
18...	1620	66	28	7.0					
09034250 - COLORADO RIVER AT WINDY GAP, NEAR GRANBY, CO. (LAT 40 06 30 LONG 106 00 13)									
OCT , 1983					MAY , 1984				
06...	1720	104	130	14.5	23...	1130	3720	82	7.0
NOV					JUL				
08...	1325	126	132	3.0	18...	2100	725	92	10.5
MAR , 1984					AUG				
22...	0945	257	100	1.5	21...	1615	326	130	15.5
APR									
03...	1800	1260	70	1.0					
25...	1820	802	105	5.0					
09034900 - BOBTAIL CREEK NEAR JONES PASS, CO. (LAT 39 45 37 LONG 105 54 21)									
NOV , 1983					JUN , 1984				
10...	1215	3.5	60	.0	14...	1215	74	36	3.5
DEC					JUL				
29...	1300	.84	56	.0	03...	1230	69	35	7.5
FEB , 1984					AUG				
16...	1220	1.1	<50	.0	01...	1340	31	38	6.0
MAR					SEP				
14...	1215	1.1	<50	.0	05...	1620	9.8	<50	13.0
MAY									
03...	1320	1.6	70	.5					
09035500 - WILLIAMS FORK BELOW STEELMAN CREEK, CO. (LAT 39 46 44 LONG 105 55 40)									
NOV , 1983					JUN , 1984				
10...	1220	1.2	65	.0	14...	1200	186	--	4.0
DEC					JUL				
29...	1420	.77	120	.0	03...	1130	207	33	6.5
MAR , 1984					AUG				
15...	1310	2.4	67	.0	01...	1115	70	43	6.0
MAY									
03...	1305	3.3	68	.5					

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)
09035700 - WILLIAMS FORK ABOVE DARLING CREEK, NR LEAL, CO. (LAT 39 47 22 LONG 106 01 18)				
OCT , 1983				
07...	0950	13	63	4.0
NOV				
07...	1130	9.3	50	2.0
DEC				
22...	1030	14	60	.0
FEB , 1984				
01...	1400	6.3	60	.0
MAR				
06...	1615	7.0	45	.0
APR				
17...	1200	11	50	.0
MAY , 1984				
16...	0930	132	45	2.0
JUN				
07...	1350	211	42	3.5
26...	1330	379	33	7.0
JUL				
26...	1130	116	42	9.0
AUG				
29...	1330	80	45	8.0
09035800 - DARLING CREEK NEAR LEAL, CO. (LAT 39 48 17 LONG 106 01 11)				
OCT , 1983				
07...	1245	4.5	55	4.0
NOV				
07...	1630	3.7	45	.5
DEC				
22...	1330	3.4	75	.0
FEB , 1984				
01...	1600	2.3	85	.0
MAR				
06...	1220	2.3	75	.5
APR				
19...	1750	2.7	60	.5
MAY , 1984				
16...	1700	17	60	3.0
JUN				
07...	1530	54	50	3.0
28...	1540	109	42	7.0
JUL				
26...	1215	22	40	5.0
AUG				
29...	1215	15	50	4.5
09035900 - SOUTH FORK OF WILLIAMS FORK NEAR LEAL, CO. (LAT 39 47 44 LONG 106 01 49)				
OCT , 1983				
07...	1100	17	60	3.5
NOV				
07...	1300	14	85	.5
DEC				
22...	1155	11	70	.0
FEB , 1984				
01...	1520	8.6	75	.0
MAR				
06...	1410	8.6	60	.5
APR				
18...	1600	14	60	2.0
MAY , 1984				
16...	1400	87	60	2.5
JUN				
07...	1200	183	50	3.0
26...	1530	260	46	6.5
JUL				
25...	1620	81	55	8.0
AUG				
29...	1600	55	65	10.0
09036000 - WILLIAMS FORK NEAR LEAL, CO. (LAT 39 49 53 LONG 106 03 15)				
OCT , 1983				
07...	1410	49	70	9.0
NOV				
08...	1130	40	65	1.5
MAR , 1984				
08...	1140	21	85	2.5
APR				
19...	1710	38	150	1.0
MAY , 1984				
16...	1830	323	55	3.5
JUN				
07...	1045	624	50	2.5
28...	1320	874	46	8.0
JUL				
26...	1840	267	55	11.0
09037500 - WILLIAMS FORK NEAR PARSHALL, CO. (LAT 40 00 01 LONG 106 10 45)				
OCT , 1983				
06...	1500	73	75	11.0
NOV				
08...	1515	68	90	2.0
FEB , 1984				
03...	1335	48	90	.0
APR				
19...	1435	89	180	1.5
MAY				
17...	1230	718	60	6.0
JUN , 1984				
06...	1020	873	49	5.0
27...	1325	1010	110	4.5
JUL				
27...	1030	298	65	11.0
AUG				
23...	1445	219	80	14.0
09038500 - WILLIAMS FORK BELOW WILLIAMS FORK RESERVOIR, CO. (LAT 40 02 07 LONG 106 12 17)				
OCT , 1983				
06...	1120	15	110	9.0
NOV				
15...	1300	247	110	8.0
JAN , 1984				
31...	1220	276	106	2.5
MAR				
07...	1440	15	130	2.5
JUN , 1984				
06...	1225	575	85	7.0
27...	1515	933	70	10.5
JUL				
27...	1340	332	82	13.0
AUG				
23...	1330	228	85	10.0

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)
09039000 - TROUBLESOME CREEK NEAR PEARMONT, CO. (LAT 40 13 03 LONG 106 18 45)									
OCT , 1983					MAY , 1984				
05...	1800	12	110	8.0	15...	1200	208	120	2.0
NOV					JUN				
09...	0950	11	95	1.0	06...	1700	196	60	6.0
DEC					JUL				
20...	1600	14	70	.0	18...	1015	36	83	10.0
FEB , 1984					AUG				
03...	1530	16	90	.0	22...	1410	31	<50	16.0
MAR									
07...	1140	12	95	.0					
09041500 - MUDDY CREEK AT KREMMLING, CO. (LAT 40 03 37 LONG 106 23 51)									
OCT , 1983					APR , 1984				
06...	1810	22	940	11.5	27...	1330	101	870	2.0
NOV					MAY				
16...	0950	12	1020	1.0	22...	1300	1490	230	11.5
DEC					JUN				
20...	1600	22	792	.0	26...	1600	172	510	16.0
JAN , 1984					JUL				
30...	1600	26	710	.0	18...	1150	109	883	19.0
FEB					AUG				
21...	1600	17	790	.0	15...	1140	32	1020	17.0
MAR					SEP				
27...	1730	28	890	.5	13...	1800	30	900	16.0
09046490 - BLUE RIVER AT BLUE RIVER, CO. (LAT 39 27 21 LONG 106 01 52)									
OCT , 1983					MAR , 1984				
03...	1710	26	60	7.0	01...	1545	7.7	180	1.5
DEC					21...	0950	6.1	120	1.0
15...	1155	118	160	3.0	APR				
15...	1545	2.3	160	3.0	25...	1020	12	180	1.0
FEB , 1984					JUN				
07...	1320	8.8	90	1.5	07...	0930	212	130	8.0
09046600 - BLUE RIVER NEAR DILLON, CO. (LAT 39 32 55 LONG 106 02 19)									
OCT , 1983					MAY , 1984				
06...	1050	97	120	10.0	21...	1105	416	220	6.0
NOV					30...	1155	592	180	8.0
09...	1300	70	150	3.0	JUN				
DEC					07...	1200	566	75	6.0
15...	1000	55	200	2.0	JUL				
FEB , 1984					03...	0930	593	120	8.0
07...	1050	34	85	2.0	AUG				
MAR					07...	1245	419	140	8.0
21...	1255	29	130	2.0	SEP				
APR					17...	1310	107	200	8.0
25...	1315	43	120	1.0					
09047500 - SNAKE RIVER NEAR MONTEZUMA, CO. (LAT 39 36 20 LONG 105 56 33)									
OCT , 1983					APR , 1984				
03...	1130	35	92	3.5	24...	1540	15	120	1.0
NOV					MAY				
07...	1055	24	92	1.0	29...	1400	285	62	7.0
DEC					JUL				
19...	1200	22	100	.0	09...	1330	260	51	9.0
FEB , 1984					AUG				
01...	1200	16	90	.0	13...	1020	184	65	6.5
MAR					SEP				
13...	1205	13	125	.0	12...	1120	96	90	8.0
09047700 - KEYSTONE GULCH NEAR DILLON, CO. (LAT 39 35 40 LONG 105 58 19)									
OCT , 1983					MAY , 1984				
03...	1210	4.9	75	4.0	29...	1600	65	55	7.0
NOV					JUN				
07...	1325	5.3	75	2.0	28...	1345	41	54	8.5
DEC					JUL				
19...	1325	3.0	77	.0	09...	1445	27	58	9.0
FEB , 1984					AUG				
01...	1310	2.7	72	.0	13...	1145	15	68	8.0
MAR					SEP				
13...	1410	2.2	82	.0	14...	1320	8.4	75	9.0
MAY									
03...	1105	2.3	85	.5					

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)
09050100 - TENMILE CREEK BL NORTH TENMILE C, AT FRISCO, CO. (LAT 39 34 37 LONG 106 06 33)				
OCT , 1983				
06...	1415	63	650	7.0
NOV				
09...	1605	54	1200	2.0
DEC				
14...	1040	34	120	1.0
JAN , 1984				
31...	1010	22	120	.0
MAR				
01...	1055	13	110	.0
21...	1520	45	80	.0
APR				
25...	1550	78	80	.0
MAY , 1984				
21...	1600	446	85	6.0
30...	1010	584	200	8.0
JUN				
07...	1340	542	180	6.0
JUL				
02...	1410	772	80	9.0
AUG				
13...	0945	177	120	6.0
SEP				
17...	1625	117	85	8.0
09050700 - BLUE RIVER BELOW DILLON, CO. (LAT 39 37 32 LONG 106 03 57)				
OCT , 1983				
06...	0945	152	200	10.0
NOV				
09...	1415	143	200	8.0
DEC				
13...	1455	16	180	1.5
FEB , 1984				
01...	1015	87	160	4.0
APR				
25...	1640	208	220	1.5
MAY , 1984				
30...	1640	1810	200	5.0
JUL				
11...	1615	1960	130	7.0
AUG				
13...	1015	1300	130	8.0
SEP				
17...	1450	45	85	7.0
09052000 - ROCK CREEK NEAR DILLON, CO. (LAT 39 43 23 LONG 106 07 41)				
OCT , 1983				
03...	1610	11	55	5.0
NOV				
07...	1555	7.5	57	3.0
DEC				
19...	1655	--	60	.0
FEB , 1984				
01...	1615	5.2	58	.0
MAR				
13...	1650	4.2	62	.0
APR , 1984				
24...	1800	7.3	68	1.0
MAY				
29...	1900	121	48	6.0
JUN				
20...	1600	105	40	8.0
JUL				
10...	0845	200	38	10.5
AUG				
15...	1350	44	36	10.5
09052400 - BOULDER CREEK AT UPPER STATION, NEAR DILLON, CO. (LAT 39 43 41 LONG 106 10 22)				
OCT , 1983				
05...	1020	6.5	48	2.0
NOV				
09...	1050	4.3	50	.0
DEC				
20...	1015	4.4	55	.0
FEB , 1984				
03...	1440	2.4	58	.0
MAR				
15...	1505	2.0	65	.0
MAY				
01...	1500	3.8	65	.0
MAY , 1984				
30...	1100	92	39	3.0
JUN				
27...	1825	104	37	8.0
JUL				
10...	1735	173	35	10.0
AUG				
13...	1455	42	32	11.0
SEP				
12...	1600	21	40	12.0
09052800 - SLATE CREEK AT UPPER STATION, NEAR DILLON, CO. (LAT 39 45 47 LONG 106 11 31)				
OCT , 1983				
05...	1420	8.9	48	7.0
NOV				
09...	1440	8.5	52	.5
DEC				
20...	1700	6.1	50	.0
FEB , 1984				
02...	1430	3.8	46	.0
MAR				
14...	1700	2.6	90	.0
MAY , 1984				
02...	1525	4.5	73	.5
31...	1430	139	41	6.0
JUN				
20...	1045	142	29	8.0
JUL				
11...	1200	181	20	10.5
AUG				
15...	1110	57	28	11.5

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)
09054000 - BLACK CREEK BELOW BLACK LAKE, NEAR DILLON, CO. (LAT 39 47 59 LONG 106 16 04)				
OCT , 1983				
04...	1545	11	26	11.0
NOV				
08...	1610	9.7	28	5.0
DEC				
21...	1430	5.5	31	.5
FEB , 1984				
02...	1055	2.5	34	.0
MAR				
14...	1115	2.5	39	.5
APR				
26...	1200	6.3	43	1.0
MAY , 1984				
30...	1500	155	34	6.0
JUN				
05...	1445	104	40	6.0
27...	1530	166	24	7.0
JUL				
19...	1445	124	50	8.0
AUG				
14...	1425	76	20	12.0
09055300 - CATARACT CREEK NEAR KREMMLING, CO. (LAT 39 50 07 LONG 106 18 57)				
OCT , 1983				
04...	1035	1.7	38	9.0
NOV				
08...	1030	1.8	40	5.0
DEC				
21...	1030	2.4	58	.5
FEB , 1984				
03...	1000	1.4	60	.5
MAR				
15...	1040	1.3	62	.5
MAY				
01...	1045	3.7	80	1.0
MAY , 1984				
31...	0930	151	43	6.0
JUN				
19...	1615	134	40	8.0
JUL				
10...	0930	233	37	10.0
AUG				
14...	1055	21	41	11.0
SEP				
13...	1550	15	46	14.5
09057500 - BLUE RIVER BELOW GREEN MOUNTAIN RESERVOIR, CO. (LAT 39 52 49 LONG 106 20 00)				
OCT , 1983				
04...	1250	330	155	13.0
NOV				
08...	1230	384	160	9.0
DEC				
20...	1200	394	160	3.0
FEB , 1984				
03...	1240	403	165	2.5
MAR				
15...	1330	481	175	2.0
APR , 1984				
25...	1315	506	200	2.5
MAY				
30...	1830	1630	185	6.5
JUN				
19...	1330	2860	170	9.0
JUL				
10...	1150	2650	160	11.0
SEP				
14...	0900	616	150	11.0
09058000 - COLORADO RIVER NEAR KREMMLING, CO. (LAT 40 02 12 LONG 106 26 22)				
OCT , 1983				
07...	1115	587	226	10.0
NOV				
15...	1600	753	188	4.0
DEC				
20...	1420	808	180	.5
MAR , 1984				
27...	1525	1430	160	1.5
APR , 1984				
27...	1145	1770	240	3.0
AUG				
14...	1240	2540	180	15.5
SEP				
14...	1515	1210	189	14.5
09058500 - PINEY RIVER BELOW PINEY LAKE, NEAR MINTURN, CO. (LAT 39 42 29 LONG 106 25 38)				
OCT , 1983				
05...	1515	5.4	58	11.0
NOV				
15...	1240	11	--	.5
JAN , 1984				
04...	1300	4.5	--	.5
FEB				
14...	1455	1.8	70	.0
MAY				
02...	1605	5.7	--	.0
JUN , 1984				
04...	1515	124	40	4.0
27...	1305	213	28	8.0
JUL				
18...	1655	73	29	7.0
AUG				
16...	1055	53	41	17.0
SEP				
13...	1055	15	57	8.0
09058610 - DICKSON CREEK NEAR VAIL, CO. (LAT 39 42 14 LONG 106 27 25)				
OCT , 1983				
05...	1100	.03	360	6.0
JUN , 1984				
05...	1155	9.0	200	4.0
27...	1605	8.4	260	15.0
JUL				
18...	0930	3.4	200	7.5
AUG , 1984				
15...	1300	1.9	360	14.0
SEP				
12...	1240	2.1	350	7.5

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)
09058700 - FREEMAN CREEK NEAR MINTURN, CO. (LAT 39 41 55 LONG 106 26 41)				
OCT , 1983				
05...	1145	.21	230	5.5
MAY , 1984				
01...	1040	.21	--	.0
JUN				
05...	0935	22	110	4.5
27...	1500	7.1	--	15.0
JUL , 1984				
18...	1150	1.3	200	15.5
AUG				
15...	1200	.48	--	12.0
SEP				
12...	1110	.83	220	9.5
09058800 - EAST MEADOW CREEK NEAR MINTURN CO. (LAT 39 43 54 LONG 106 25 36)				
OCT , 1983				
05...	1355	1.7	3	3.0
NOV				
15...	1045	1.9	--	.0
MAY , 1984				
02...	1130	1.1	118	.5
JUN				
27...	1025	35	42	4.5
JUL , 1984				
18...	1430	8.3	46	7.0
AUG				
15...	1515	2.6	60	14.0
SEP				
13...	1320	481	130	13.5
09059500 - PINEY RIVER NEAR STATE BRIDGE, CO. (LAT 39 48 00 LONG 106 35 00)				
OCT , 1983				
06...	1030	28	320	6.0
APR , 1984				
13...	1210	23	--	4.0
MAY				
24...	1515	1130	168	8.0
JUN				
21...	1430	544	130	13.0
28...	1615	481	130	13.5
JUL , 1984				
19...	1635	149	200	15.5
AUG				
16...	1540	94	190	18.0
SEP				
13...	1115	41	305	6.0
09060770 - ROCK CREEK AT MCCOY, CO. (LAT 39 54 44 LONG 106 43 30)				
NOV , 1983				
03...	1000	29	312	5.0
DEC				
08...	1030	32	330	.5
JAN , 1984				
22...	1100	34	338	.0
26...	1400	25	328	.5
FEB				
22...	1300	42	344	.0
APR				
19...	1620	80	338	7.0
MAY				
09...	1010	134	461	5.0
16...	1400	931	195	8.0
MAY , 1984				
24...	1200	1080	155	10.0
JUN				
07...	1400	753	254	5.0
21...	1200	185	214	14.0
29...	1100	85	258	14.5
JUL				
25...	1400	70	294	19.5
AUG				
22...	1400	65	332	16.5
SEP				
19...	1400	39	--	16.5
09060950 - BIG ALKALI CREEK BELOW CASTLE CR NEAR BURNS, CO. (LAT 39 51 52 LONG 106 49 01)				
OCT , 1983				
06...	1230	1.9	1000	9.0
NOV				
03...	1200	1.6	950	6.0
DEC				
07...	1500	1.4	880	.5
JAN , 1984				
26...	1500	1.2	910	.0
FEB				
22...	1500	1.3	915	.0
APR				
19...	1000	5.5	810	3.0
MAY				
16...	1600	83	398	10.5
21...	1600	87	435	13.0
MAY , 1984				
24...	1900	145	302	11.0
JUN				
14...	1400	46	480	13.5
21...	0900	27	638	8.5
JUL				
25...	1500	4.9	920	18.0
AUG				
23...	1000	4.9	930	18.0
SEP				
19...	1700	3.1	--	14.0
09063000 - EAGLE RIVER AT RED CLIFF, CO. (LAT 39 30 34 LONG 106 22 00)				
OCT , 1983				
04...	1400	23	200	8.0
NOV				
08...	1500	18	187	3.0
JAN , 1984				
05...	1405	13	--	.0
FEB				
02...	1200	13	208	.0
MAY				
02...	1055	21	155	2.0
22...	1625	531	146	9.0
JUN , 1984				
14...	1200	434	134	8.0
25...	1745	287	140	9.0
JUL				
19...	0900	79	190	8.0
AUG				
16...	0825	43	200	9.0
SEP				
14...	1110	33	206	8.0

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)
09063200 - WEARYMAN CREEK NEAR RED CLIFF, CO. (LAT 39 31 14 LONG 106 19 06)				
OCT , 1983				
04...	1410	4.4	280	3.0
NOV				
15...	1000	2.1	290	.0
FEB , 1984				
15...	1515	1.4	227	.0
MAY				
03...	1340	1.5	330	1.0
JUN				
25...	1430	114	110	5.0
JUN , 1984				
28...	0835	104	220	4.5
JUL				
17...	1515	38	220	7.0
AUG				
14...	1410	14	260	7.0
SEP				
11...	1515	11	240	7.0
09063400 - TURKEY CREEK NEAR RED CLIFF, CO. (LAT 39 31 22 LONG 106 20 15)				
OCT , 1983				
04...	1550	11	260	5.0
NOV				
15...	1105	4.4	280	.0
FEB , 1984				
15...	1600	3.7	268	.0
MAY				
03...	1450	6.0	268	1.0
22...	1425	157	220	4.5
JUN , 1984				
07...	1510	190	200	4.5
25...	1600	323	180	5.0
JUL				
17...	1700	86	185	8.5
AUG				
14...	1345	34	250	8.5
SEP				
11...	1635	22	205	8.0
09063900 - MISSOURI CREEK NEAR GOLD PARK, CO. (LAT 39 23 25 LONG 106 28 10)				
OCT , 1983				
04...	1015	2.3	34	1.0
NOV				
15...	1250	2.6	<50	.0
MAY , 1984				
04...	1040	1.9	55	.0
JUN				
26...	0930	94	20	2.5
26...	1030	101	--	2.5
JUL , 1984				
17...	0900	60	20	5.5
AUG				
14...	0945	24	21	9.0
SEP				
11...	0930	7.2	40	8.0
09064000 - HOMESTAKE CREEK AT GOLD PARK, CO. (LAT 39 24 20 LONG 106 25 58)				
OCT , 1983				
04...	1150	16	34	6.0
NOV				
15...	1410	22	<50	.0
MAY , 1984				
04...	1030	12	60	1.0
22...	1025	398	32	7.0
JUN				
07...	1025	157	38	2.0
JUN , 1984				
26...	1255	377	19	8.5
JUL				
17...	1115	267	18	7.0
AUG				
14...	1055	44	25	10.0
SEP				
11...	1135	29	30	9.0
09064500 - HOMESTAKE CREEK NEAR RED CLIFF, CO. (LAT 39 28 24 LONG 106 22 02)				
OCT , 1983				
04...	1245	20	40	7.5
NOV				
15...	1510	42	<50	.0
FEB , 1984				
02...	1000	14	40	.0
MAY				
02...	1235	38	<50	2.0
22...	1250	553	42	8.5
JUN , 1984				
07...	1215	288	34	2.0
26...	1450	494	24	9.5
JUL				
17...	1330	320	22	9.5
AUG				
14...	1220	51	32	13.0
SEP				
11...	1315	35	39	9.5
09065100 - CROSS CREEK NEAR MINTURN, CO. (LAT 39 34 05 LONG 106 24 45)				
OCT , 1983				
04...	1630	14	42	9.0
26...	1615	1620	--	6.0
NOV				
08...	1400	13	37	2.5
JAN , 1984				
06...	1200	6.1	--	.0
FEB				
02...	1500	3.5	40	.0
APR				
12...	1200	14	53	.0
MAY				
02...	0815	14	40	2.0
MAY , 1984				
23...	0945	382	33	6.0
JUN				
05...	1650	235	30	6.5
26...	1640	351	18	9.5
JUL				
19...	1030	221	25	13.0
AUG				
13...	1620	95	32	13.0
SEP				
12...	1530	38	57	7.0

09065500 - GORE CREEK AT UPPER STATION, NEAR MINTURN, CO. (LAT 39 37 40 LONG 106 16 24)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)
OCT , 1983				
04...	1010	10	<50	7.0
DEC				
13...	0820	4.0	<50	1.0
JAN , 1984				
31...	1515	2.8	<50	.0
MAR				
12...	1410	2.6	<50	.0
APR				
26...	0945	13	<50	1.0
MAY				
22...	0950	106	80	8.0
JUN , 1984				
13...	1255	148	75	8.0
JUL				
02...	1550	230	100	7.0
AUG				
13...	1415	45	<50	7.0
SEP				
14...	0900	22	50	7.0
18...	0900	22	50	7.0

09066000 - BLACK GORE CREEK NEAR MINTURN, CO. (LAT 39 35 47 LONG 106 15 52)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)
OCT , 1983				
04...	1245	10	80	7.0
NOV				
02...	1600	7.0	140	7.0
DEC				
13...	1110	5.3	<50	.5
JAN , 1984				
31...	1310	3.3	85	.0
MAR				
12...	1110	5.0	<50	.0
APR				
18...	1050	9.0	150	1.0
MAY , 1984				
31...	1120	190	200	6.0
JUN				
13...	1510	128	80	7.0
JUL				
19...	0950	35	60	7.0
AUG				
13...	1300	18	80	6.0
SEP				
18...	1205	12	60	7.0

09066100 - BIGHORN CREEK NEAR MINTURN, CO. (LAT 39 38 24 LONG 106 17 34)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)
OCT , 1983				
04...	1525	3.7	<50	6.0
DEC				
14...	1415	1.5	<50	1.0
JAN , 1984				
31...	1650	1.3	<50	.0
MAR				
13...	0910	.74	<50	.0
APR				
26...	1125	2.9	<50	1.0
MAY , 1984				
22...	1225	89	60	8.0
JUN				
18...	1110	56	60	6.0
JUL				
11...	1040	55	<50	7.0
AUG				
13...	1545	16	60	5.0
SEP				
18...	1510	9.5	<50	7.0

09066150 - PITKIN CREEK NEAR MINTURN, CO. (LAT 39 38 37 LONG 106 18 07)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)
OCT , 1983				
05...	1010	6.9	<50	8.0
NOV				
01...	1430	6.0	--	6.0
DEC				
14...	1245	2.5	<50	.0
FEB , 1984				
01...	1325	.68	<50	.0
MAR				
13...	1230	1.2	<50	.0
APR				
26...	1310	2.7	<50	1.0
MAY , 1984				
22...	1455	51	60	5.0
JUN				
18...	1215	63	80	6.0
JUL				
11...	1305	56	<50	7.0
AUG				
14...	1050	17	60	7.0
SEP				
19...	1030	9.7	50	7.0

09066200 - BOOTH CREEK NEAR MINTURN, CO. (LAT 39 39 02 LONG 106 19 16)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)
OCT , 1983				
05...	1515	2.4	<50	6.0
NOV				
02...	1355	6.1	160	6.0
DEC				
14...	1600	1.3	<50	.5
FEB , 1984				
01...	1500	2.1	<50	.0
MAR				
13...	1620	1.2	<50	.0
APR				
18...	1320	4.5	120	1.0
MAY , 1984				
23...	1110	90	80	6.0
JUN				
04...	1425	67	<50	8.0
13...	1110	58	120	7.0
18...	1420	82	80	6.0
JUL				
02...	1740	84	80	8.0
11...	1440	65	60	7.0
19...	1240	27	60	9.0

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)
09066300 - MIDDLE CREEK NEAR MINTURN, CO. (LAT 39 38 50 LONG 106 22 48)				
OCT , 1983				
05...	1305	3.9	160	8.0
NOV				
01...	1145	2.5	160	1.0
DEC				
15...	1220	.82	<50	.5
FEB , 1984				
01...	1630	.44	<50	.0
MAR				
13...	1505	.99	<50	.0
APR				
26...	1535	2.4	<50	1.0
MAY , 1984				
23...	1440	40	<50	6.0
JUN				
18...	1545	52	60	6.0
JUL				
11...	1605	37	60	7.0
AUG				
14...	1320	8.2	<50	7.0
SEP				
19...	1510	4.5	<50	8.0
09066400 - RED SANDSTONE CREEK NEAR MINTURN, CO. (LAT 39 40 58 LONG 106 24 03)				
OCT , 1983				
05...	1730	3.7	100	5.5
JAN , 1984				
04...	1100	1.7	--	.5
FEB				
14...	1130	1.1	86	.5
APR				
30...	1130	2.5	104	1.5
MAY				
25...	1140	108	55	2.0
JUN , 1984				
05...	1505	85	54	4.0
28...	1110	54	58	7.0
JUL				
19...	1230	12	66	9.0
AUG				
16...	1125	7.4	81	9.0
SEP				
14...	1310	4.9	94	8.0
09070000 - EAGLE RIVER BELOW GYPSUM, CO. (LAT 39 38 58 LONG 106 57 11)				
OCT , 1983				
12...	0800	320	708	7.5
NOV				
09...	1400	308	692	4.5
DEC				
07...	0800	259	890	.5
JAN , 1984				
25...	1100	239	870	1.0
FEB				
23...	0830	219	935	.0
APR , 1984				
17...	1500	322	755	12.5
JUN				
08...	1000	3580	273	5.0
20...	1500	4580	198	10.5
JUL				
24...	1230	1700	290	14.0
SEP				
18...	0800	590	586	10.5
09071300 - GRIZZLY CREEK NEAR GLENWOOD SPRINGS, CO. (LAT 39 43 04 LONG 107 18 51)				
OCT , 1983				
03...	1410	2.5	--	5.0
FEB , 1984				
23...	1200	.60	300	.0
JUN				
13...	1030	65	210	2.0
JUL				
03...	1015	72	226	5.5
JUL , 1984				
16...	1500	13	260	15.0
AUG				
17...	1020	3.4	260	10.5
SEP				
10...	1450	4.5	290	12.0
09072550 - ROARING FORK RIVER AB LOST MAN C, NEAR ASPEN CO. (LAT 39 07 13 LONG 106 37 27)				
OCT , 1983				
12...	0945	2.3	35	2.0
19...	1205	--	32	1.0
NOV				
08...	0840	--	55	2.0
08...	0845	4.5	55	2.0
MAY , 1984				
23...	0935	137	<50	1.0
JUN , 1984				
04...	1635	175	<50	4.0
26...	1610	135	54	5.0
JUL				
24...	1330	86	<50	10.5
AUG				
23...	1410	70	33	8.5
09073005 - LINCOLN CREEK BL GRIZZLY RESERVOIR, NR ASPEN CO. (LAT 39 04 48 LONG 106 36 57)				
OCT , 1983				
12...	1125	4.6	70	5.0
NOV				
08...	1050	.82	120	3.0
FEB , 1984				
15...	1205	2.8	86	.5
MAY				
23...	1410	217	52	8.5
JUN , 1984				
06...	1355	144	--	2.0
JUL				
24...	1500	3.0	<50	9.0
AUG				
23...	1400	2.7	75	7.5

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)
09073300 - ROARING FORK RIVER AB DIFFICULT C NR ASPEN, CO. (LAT 39 08 28 LONG 106 46 25)				
OCT , 1983				
12...	1520	28	60	7.0
NOV				
08...	1255	27	--	2.0
JAN , 1984				
30...	1600	16	81	.5
APR				
10...	1110	18	86	.0
MAY , 1984				
22...	1740	826	64	5.0
JUN				
26...	1350	906	100	7.0
JUL				
24...	1140	206	250	11.0
AUG				
23...	1220	128	48	10.0
09073400 - ROARING FORK RIVER NEAR ASPEN, CO. (LAT 39 10 48 LONG 106 48 05)				
OCT , 1983				
12...	1335	46	75	7.0
NOV				
08...	1435	52	125	3.0
DEC				
14...	0935	39	78	.0
JAN , 1984				
31...	1345	45	85	.0
APR				
10...	1255	35	86	5.5
MAY , 1984				
22...	1540	820	60	7.5
JUN				
05...	0955	948	140	8.0
26...	1135	1270	150	6.5
JUL				
24...	0910	337	45	10.5
AUG				
22...	1610	221	54	13.5
09074000 - HUNTER CREEK NEAR ASPEN, CO. (LAT 39 12 21 LONG 106 47 49)				
OCT , 1983				
13...	1120	24	65	4.0
NOV				
08...	1540	18	70	2.0
DEC				
14...	1450	6.0	<50	.0
JAN , 1984				
31...	1510	5.9	--	.0
APR				
10...	1435	7.2	104	3.0
MAY , 1984				
22...	1330	182	78	7.0
JUN				
26...	0905	221	70	5.0
JUL				
24...	1710	65	70	10.0
AUG				
23...	1030	59	51	10.0
09074800 - CASTLE CREEK ABOVE ASPEN, CO. (LAT 39 05 15 LONG 106 48 42)				
OCT , 1983				
13...	0855	24	343	3.0
NOV				
07...	1510	20	--	3.0
DEC				
14...	1425	21	<50	.0
JAN , 1984				
31...	1155	19	441	.5
APR				
10...	0850	9.2	416	.0
MAY , 1984				
21...	1530	150	309	8.0
JUN				
25...	1620	372	--	6.0
JUL				
23...	1700	137	237	11.0
AUG				
22...	1420	86	179	10.0
09075700 - MAROON CREEK ABOVE ASPEN, CO. (LAT 39 07 25 LONG 106 54 17)				
OCT , 1983				
12...	1655	48	515	7.0
NOV				
07...	1640	38	--	2.0
JAN , 1984				
30...	1100	22	<50	2.0
MAY				
22...	1050	170	<50	3.0
JUN , 1984				
25...	1430	478	278	6.0
JUL				
23...	1515	300	270	9.0
AUG				
22...	1245	135	370	8.0
09076520 - OWL CREEK NEAR ASPEN, CO. (LAT 39 13 25 LONG 106 52 45)				
OCT , 1983				
13...	1323	55	540	7.0
NOV				
09...	0850	.60	555	.5
DEC				
14...	1605	.24	525	.0
JAN , 1984				
31...	1635	.14	598	1.0
MAY				
21...	1320	71	204	9.0
JUN , 1984				
04...	1315	36	135	8.5
25...	1245	6.0	319	11.0
JUL				
23...	1315	5.4	315	16.0
AUG				
23...	0830	1.4	503	10.0

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)
09080400	- FRYINGPAN RIVER NEAR RUEDI, CO. (LAT 39 21 56 LONG 106 49 30)			
OCT , 1983				
13...	1615	193	210	10.0
NOV				
07...	1310	182	--	8.0
DEC				
13...	1445	185	224	5.0
JAN , 1984				
31...	0950	172	312	2.0
APR				
10...	1700	168	288	4.5
MAY , 1984				
23...	1400	376	216	9.0
JUN				
27...	1015	1140	204	7.0
JUL				
25...	0940	242	242	10.5
AUG				
24...	0940	241	240	8.5
09081600	- CRYSTAL RIVER AB AVALANCHE C, NEAR REDSTONE, CO. (LAT 39 13 56 LONG 107 13 36)			
OCT , 1983				
14...	1015	128	463	7.0
NOV				
09...	1130	78	440	4.0
DEC				
13...	1145	70	577	2.0
FEB , 1984				
01...	0950	52	714	1.5
APR				
11...	1030	113	557	4.5
MAY , 1984				
23...	1730	2140	173	9.0
JUN				
27...	1320	1730	170	10.0
JUL				
25...	1200	681	224	11.0
AUG				
29...	1200	214	469	12.5
09085000	- ROARING FORK RIVER AT GLENWOOD SPRINGS, CO. (LAT 39 32 37 LONG 107 19 44)			
OCT , 1983				
07...	1050	791	572	10.5
07...	1110	815	572	10.5
13...	0800	780	585	8.0
20...	1240	850	510	8.0
25...	1110	815	585	7.5
NOV				
04...	1130	1030	562	7.5
09...	1350	863	585	6.0
10...	0930	842	574	4.5
14...	1345	860	545	.0
22...	1130	780	558	3.0
DEC				
02...	1020	815	545	4.0
06...	1400	716	552	.0
15...	1000	693	546	2.0
15...	1115	693	546	2.0
22...	1215	797	597	.0
30...	1255	599	560	.0
JAN , 1984				
04...	1300	626	525	1.0
12...	1200	662	528	.0
25...	1225	653	556	.0
27...	1000	550	558	.0
FEB , 1984				
01...	1200	579	609	.0
03...	0945	574	588	.0
10...	1140	566	546	.5
16...	1105	534	536	.0
24...	1000	510	538	.0
MAR				
01...	1055	534	609	2.0
08...	1200	518	524	3.5
15...	1330	599	504	7.5
22...	1250	662	620	5.0
29...	1300	574	578	5.5
APR				
05...	1300	574	511	7.5
09...	1245	786	549	6.5
09...	1400	786	546	6.0
20...	1000	1090	405	6.5
27...	1200	1010	445	5.0
MAY				
01...	1300	1190	460	9.0
10...	1045	1560	378	8.0
17...	0730	7170	214	5.0
23...	1730	9200	208	10.5
24...	1030	8050	214	7.0
09085000	- ROARING FORK RIVER AT GLENWOOD SPRINGS, CO. (LAT 39 32 37 LONG 107 19 44)			
JUN , 1984				
01...	1100	7750	196	7.5
05...	1250	6170	237	7.5
15...	0800	8000	190	9.0
21...	0800	8980	185	8.5
27...	1705	7830	288	11.5
29...	1400	8300	206	10.5
JUL				
03...	1210	8390	200	9.5
11...	1600	6430	204	12.5
20...	1045	3700	294	13.0
25...	1505	3060	309	15.5
27...	1000	3020	377	13.0
AUG , 1984				
03...	1030	2190	365	16.0
10...	1100	1630	425	13.5
17...	1400	1460	425	16.5
23...	1500	1570	438	15.0
24...	1235	2150	464	15.0
29...	0945	1710	445	14.0
SEP				
06...	1140	1240	506	13.5
14...	0925	1020	505	12.0
20...	1500	904	545	15.0
28...	1200	1010	520	10.5

09085100 - COLORADO RIVER BELOW GLENWOOD SPRINGS, CO. (LAT 39 33 18 LONG 107 20 13)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)
OCT , 1983				
06...	1600	2300	948	14.0
14...	0800	2180	950	10.0
20...	0910	3530	815	8.0
25...	1015	2640	860	7.5
NOV				
02...	1515	2600	870	9.0
10...	1020	2200	870	5.0
14...	1250	2710	865	6.5
22...	1030	2580	850	3.0
DEC				
02...	0730	2300	860	3.0
06...	1430	2030	902	1.0
15...	1420	2050	917	2.0
22...	1330	1560	1030	.0
30...	1405	1950	971	.0
JAN , 1984				
04...	1500	1770	992	1.5
12...	1045	1900	942	.0
23...	1120	1970	914	.0
27...	1200	2310	820	.0
FEB				
03...	1100	1790	1060	.0
10...	1040	1820	995	.5
16...	1230	1750	1100	.0
24...	1100	1630	1040	1.0
MAR , 1984				
01...	1000	1680	966	.5
08...	1300	2210	930	3.0
15...	1400	2060	860	5.5
22...	1020	2330	861	5.5
29...	1000	2600	766	4.0
APR				
05...	1050	3230	576	6.5
09...	1125	3720	609	6.5
20...	1100	4270	542	7.5
27...	1400	3700	629	6.0
MAY				
01...	1220	3510	720	9.0
10...	1200	5250	542	11.0
17...	0900	21000	255	8.0
23...	1900	24500	265	11.0
JUN				
01...	1000	26100	215	9.0
05...	1350	21700	247	9.0
15...	0840	20300	238	10.5
21...	0900	25200	180	11.0
28...	1700	21100	242	13.0
JUL				
03...	1255	21800	234	14.0

09085100 - COLORADO RIVER BELOW GLENWOOD SPRINGS, CO. (LAT 39 33 18 LONG 107 20 13)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)
JUL , 1984				
11...	1400	17700	252	14.0
20...	1200	10200	400	14.5
26...	1500	9170	396	17.0
AUG				
03...	1335	7100	510	--
10...	1000	5950	530	16.0
17...	1440	5060	455	18.0
23...	1600	5480	564	17.0
AUG , 1984				
29...	0845	5600	556	15.5
SEP				
06...	1100	4690	618	15.5
14...	1010	3950	700	15.0
20...	1600	3120	820	16.5
28...	1300	2970	803	12.0

09085200 - CANYON CREEK ABOVE NEW CASTLE, CO. (LAT 39 36 19 LONG 107 24 21)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)
OCT , 1983				
06...	1535	19	364	11.5
NOV				
02...	1400	18	394	10.0
DEC				
05...	1500	16	350	3.0
07...	0840	17	355	2.5
JAN , 1984				
25...	1500	14	--	4.5
FEB				
23...	1500	11	352	5.0
APR				
20...	1200	28	255	5.5
MAY				
08...	1435	24	299	11.5
17...	1100	214	--	5.5
MAY , 1984				
25...	1630	416	198	8.5
JUN				
19...	1700	378	210	12.0
28...	1600	302	208	12.0
JUL				
13...	1200	85	252	13.5
26...	1000	44	274	12.0
AUG				
24...	0900	41	290	12.0
SEP				
20...	0800	21	300	10.5

09089500 - WEST DIVIDE CREEK NEAR RAVEN, CO. (LAT 39 19 52 LONG 107 34 46)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)
OCT , 1983				
06...	1125	6.3	459	10.5
NOV				
02...	1200	4.9	462	5.0
DEC				
16...	1100	5.5	--	.5
JAN , 1984				
23...	1300	3.9	--	.5
MAY				
04...	1400	98	--	5.0
21...	1530	669	--	7.5
JUN , 1984				
15...	1200	306	222	8.0
19...	1200	200	171	11.0
28...	1200	100	282	11.0
JUL				
13...	1500	78	322	15.5
26...	1400	44	310	16.5
SEP				
20...	1200	7.5	--	13.5

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)
09093000 - PARACHUTE CREEK NEAR PARACHUTE CO. (LAT 39 34 01 LONG 108 06 37)				
OCT , 1983				
24...	1400	12	860	8.5
NOV				
10...	1300	9.9	875	7.5
DEC				
09...	0900	5.8	928	4.0
JAN , 1984				
24...	1100	5.0	1040	4.5
FEB				
06...	1100	6.2	1000	4.5
APR				
09...	1300	16	842	6.5
MAY				
01...	1240	95	707	8.5
14...	1205	1220	375	11.0
22...	1200	591	505	12.0
MAY , 1984				
29...	1235	262	--	15.0
JUN				
13...	1310	399	560	13.0
22...	1315	180	202	12.0
28...	1415	114	727	14.5
JUL				
05...	0910	93	880	15.0
11...	1255	84	830	16.0
27...	1200	59	780	13.5
AUG				
07...	1150	56	710	14.0
SEP				
05...	1200	32	832	13.5
09093700 - COLORADO RIVER NEAR DE BEQUE, CO. (LAT 39 21 45 LONG 108 09 07)				
OCT , 1983				
28...	0930	2490	905	8.0
NOV				
16...	1000	2420	890	4.5
DEC				
14...	1000	2200	960	2.0
FEB , 1984				
14...	1300	1900	788	3.5
MAY				
01...	1050	3950	677	10.0
17...	0820	26600	300	10.0
25...	1255	34400	270	14.0
MAY , 1984				
26...	1210	38300	290	10.5
JUN				
13...	0835	20200	370	12.0
JUL				
11...	0930	19900	300	16.0
AUG				
07...	0815	7010	495	17.0
SEP				
05...	1020	5090	625	16.5
09095526 - GOVERNMENT HIGHLINE CA AT 16 ROAD, NR LOMA, CO. (LAT 39 15 25 LONG 108 45 22)				
OCT , 1983				
03...	1300	317	1030	15.5
14...	0940	257	1050	12.5
31...	1215	252	927	11.0
NOV				
03...	1045	133	927	10.5
06...	0920	30	927	9.0
APR , 1984				
19...	0955	115	700	14.0
MAY				
08...	0845	193	626	10.5
JUN , 1984				
12...	0755	290	340	14.0
JUL				
12...	1000	311	300	19.0
AUG				
14...	0955	281	570	21.5
SEP				
10...	1000	323	680	20.0
090955285 - GOV'T HIGHLINE CA AB CAMP #7 SPILL, NR MACK, CO. (LAT 39 16 21 LONG 108 49 56)				
OCT , 1983				
11...	1135	243	1120	15.5
31...	1420	196	937	11.5
NOV				
03...	1240	104	937	11.0
04...	1030	104	917	10.0
APR , 1984				
19...	1150	143	725	15.0
20...	1015	178	720	13.0
MAY				
08...	1045	162	636	11.0
JUN , 1984				
12...	0950	309	340	15.0
JUL				
12...	1145	200	300	20.0
AUG				
14...	1055	160	565	22.0
SEP				
10...	1225	237	680	21.0
09106104 - KIEFER EXTENSION GRAND VALLEY CA NR FRUITA, CO. (LAT 39 13 31 LONG 108 46 28)				
OCT , 1983				
04...	0910	128	980	14.5
DEC				
09...	0955	85	705	.5
APR , 1984				
12...	1310	91	750	10.0
16...	1250	112	770	14.0
MAY				
09...	0900	117	630	10.5
JUN , 1984				
12...	1315	145	360	16.0
JUL				
13...	1040	130	350	21.0
AUG				
06...	1135	133	550	23.0
SEP				
11...	0810	139	731	18.0

09106108 - KIEFER EXTENSION GRAND VALLEY CANAL NR LOMA, CO. (LAT 39 13 40 LONG 108 49 06)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)
APR , 1984				
12...	1550	28	875	10.0
16...	1100	42	780	14.0
MAY				
09...	1020	54	640	11.0
JUN				
12...	1210	64	360	16.0
JUL , 1984				
13...	1010	82	350	20.5
AUG				
06...	1120	76	550	22.0
SEP				
11...	1015	72	730	18.0

09109000 - TAYLOR RIVER BELOW TAYLOR PARK RESERVOIR, CO. (LAT 38 49 06 LONG 106 36 31)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)
OCT , 1983				
04...	1540	378	88	10.5
05...	1610	--	80	9.5
NOV				
08...	1140	125	130	5.0
09...	1350	--	80	4.5
DEC				
13...	1155	139	85	3.0
14...	1350	--	90	4.0
JAN , 1984				
24...	1135	50	85	3.0
APR				
03...	1155	297	85	2.5
MAY , 1984				
08...	1435	160	95	3.0
14...	1605	141	95	4.5
JUN				
12...	1305	383	--	7.0
28...	1345	1200	85	7.5
JUL				
17...	1305	671	65	17.5
AUG				
14...	1320	389	55	10.0
SEP				
11...	1150	210	70	10.5

09110000 - TAYLOR RIVER AT ALMONT, CO. (LAT 38 39 52 LONG 106 50 41)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)
OCT , 1983				
04...	1340	479	100	10.5
05...	1410	--	130	9.0
NOV				
09...	1225	--	120	3.5
DEC				
13...	1405	216	130	1.0
14...	1155	--	85	.0
APR , 1984				
03...	0915	456	100	2.0
25...	1150	431	--	4.0
MAY				
08...	0940	302	105	3.0
MAY , 1984				
24...	1010	1510	75	6.0
JUN				
12...	1005	1160	--	7.5
28...	1550	1820	85	14.0
JUL				
17...	1020	972	75	15.0
AUG				
14...	1045	623	95	11.5
SEP				
11...	0935	311	115	10.0

09112500 - EAST RIVER AT ALMONT CO. (LAT 38 39 52 LONG 106 50 50)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)
OCT , 1983				
04...	1200	114	316	9.0
NOV				
08...	0905	86	310	6.0
DEC				
14...	0845	90	275	.0
JAN , 1984				
24...	0955	63	140	.0
APR				
03...	0810	57	275	1.0
MAY				
08...	0825	179	290	4.0
MAY , 1984				
24...	0835	3620	150	6.0
26...	1350	3480	145	9.5
JUN				
12...	0825	1510	--	6.5
JUL				
17...	0855	1190	205	9.0
AUG				
14...	0830	335	250	11.5
SEP				
11...	0810	183	290	11.0

09114500 - GUNNISON RIVER NEAR GUNNISON, CO. (LAT 38 32 31 LONG 106 56 57)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)
OCT , 1983				
05...	1440	540	170	10.5
NOV				
08...	1515	283	212	6.0
DEC				
14...	1155	358	120	.0
JAN , 1984				
24...	1445	203	235	.0
APR				
05...	0845	436	150	2.0
MAY				
10...	0840	1090	180	6.5
MAY , 1984				
23...	1720	5690	145	12.5
26...	1115	7070	120	8.0
JUN				
13...	1510	3250	--	13.5
JUL				
19...	0830	2160	165	13.0
AUG				
16...	0820	1210	180	13.0
SEP				
13...	0800	547	165	10.5

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)
09118450 - COCHETOPA CREEK BELOW ROCK CREEK NR PARLIN, CO. (LAT 38 20 08 LONG 106 46 18)									
OCT , 1983					MAY , 1984				
04...	0910	43	222	5.0	24...	1325	874	130	14.0
05...	0930	--	135	4.0	JUN				
NOV					11...	1550	166	155	19.0
02...	0945	35	222	3.0	JUL				
09...	0920	--	145	.5	17...	1545	85	230	20.5
DEC					AUG				
13...	0850	49	150	.0	15...	1450	118	130	17.5
14...	0920	--	200	.0	SEP				
APR , 1984					11...	1450	92	125	14.5
04...	1540	51	165	.0					
MAY									
09...	1300	94	170	10.5					
16...	1050	483	150	10.0					
09119000 - TOMICHI CREEK AT GUNNISON, CO. (LAT 38 31 18 LONG 106 56 25)									
OCT , 1983					MAY , 1984				
04...	1045	125	291	8.5	24...	1535	3830	170	20.0
NOV					JUN				
08...	1350	125	263	5.0	12...	1600	1110	215	20.0
DEC					JUL				
14...	1020	114	190	.0	18...	1430	377	280	22.5
FEB , 1984					AUG				
01...	0925	104	--	.0	14...	1540	332	190	18.5
APR					SEP				
03...	1420	115	235	3.5	12...	1430	217	205	15.0
25...	1555	740	300	5.5					
MAY									
09...	1530	650	285	13.5					
16...	1335	2700	190	16.0					
09123400 - LAKE FORK BELOW MILL GULCH NEAR LAKE CITY, CO. (LAT 37 54 23 LONG 107 23 03)									
OCT , 1983					JUN , 1984				
05...	1135	27	140	5.0	13...	0935	414	65	8.0
NOV					JUL				
02...	1415	19	110	6.0	18...	0920	224	70	8.0
JAN , 1984					AUG				
25...	1000	15	120	.0	15...	0930	115	80	11.5
APR					SEP				
04...	1020	12	130	1.5	12...	0925	56	105	8.5
MAY									
09...	0950	33	105	5.5					
23...	1225	675	65	8.0					
09124500 - LAKE FORK AT GATEVIEW, CO. (LAT 38 17 56 LONG 107 13 46)									
OCT , 1983					MAY , 1984				
05...	0945	105	160	6.0	23...	1500	2030	95	13.5
NOV					JUN				
09...	0945	72	182	.5	13...	1235	1170	95	12.0
DEC					JUL				
14...	1415	77	150	.0	18...	1210	804	85	15.5
APR , 1984					AUG				
04...	1230	105	190	.0	15...	1205	334	125	17.0
26...	0940	236	204	.5	SEP				
MAY					12...	1215	204	140	15.0
10...	1105	331	160	9.5					
09126000 - CIMARRON RIVER NEAR CIMARRON, CO. (LAT 38 15 45 LONG 107 32 39)									
OCT , 1983					JUN , 1984				
06...	1020	75	125	10.0	14...	0940	926	--	8.0
NOV					JUL				
07...	1445	57	98	8.0	19...	1140	317	60	13.0
JAN , 1984					AUG				
31...	1125	14	100	.0	16...	1155	147	70	14.5
APR					SEP				
05...	1400	13	140	3.5	13...	1055	115	85	15.0
MAY									
25...	0935	1120	75	5.0					

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)
09128000 - GUNNISON RIVER BELOW GUNNISON TUNNEL, CO. (LAT 38 31 45 LONG 107 38 54)									
OCT , 1983					JUN , 1984				
06...	1405	1240	192	13.5	15...	0845	6920	135	13.5
NOV					JUL				
01...	1445	203	184	11.5	20...	0925	3230	190	13.5
JAN , 1984					AUG				
26...	1130	2570	180	3.0	17...	0910	1180	215	13.0
APR					SEP				
06...	0940	2900	240	4.0	14...	0955	1140	140	14.0
MAY									
11...	0945	2540	235	7.0					
09128500 - SMITH FORK NEAR CRAWFORD, CO. (LAT 38 43 40 LONG 107 30 22)									
OCT , 1983					MAY , 1984				
12...	1125	9.2	--	7.0	25...	1215	831	110	7.0
NOV					JUN				
08...	0855	9.7	205	6.0	07...	1520	430	120	5.0
DEC					28...	1325	147	130	11.5
12...	1525	7.7	160	1.0	AUG				
FEB , 1984					29...	1425	16	247	18.5
02...	1240	9.2	185	.0					
09129600 - SMITH FORK NEAR LAZEAR, CO. (LAT 38 42 27 LONG 107 42 35)									
OCT , 1983					MAY , 1984				
12...	1255	4.2	2650	14.0	25...	1450	859	--	9.0
NOV					JUN				
08...	1030	5.0	2700	9.0	28...	1500	105	682	11.5
FEB , 1984					JUL				
02...	1055	2.6	3500	.0	19...	1415	29	1630	24.5
APR					AUG				
12...	0905	39	1060	3.5	27...	1445	8.5	4340	24.5
MAY									
15...	1205	1010	416	9.0					
09132500 - NORTH FORK GUNNISON RIVER NEAR SOMERSET, CO. (LAT 38 55 45 LONG 107 26 53)									
OCT , 1983					MAY , 1984				
12...	0920	244	220	9.0	26...	1525	5420	120	9.5
NOV					JUN				
08...	1315	101	195	6.0	12...	1430	2820	189	10.5
DEC					28...	1055	2200	153	10.0
13...	0945	68	180	.5	JUL				
FEB , 1984					26...	1045	563	140	15.0
02...	1520	54	170	.0	AUG				
APR					28...	1410	254	217	16.0
11...	1235	377	173	4.5					
09135900 - LEROUX CREEK AT HOTCHKISS, CO. (LAT 38 47 53 LONG 107 43 53)									
FEB , 1984					JUN , 1984				
03...	0900	12	1100	.5	29...	1310	4.9	1360	20.0
APR					JUL				
12...	1040	17	861	5.5	19...	1305	4.3	1260	20.0
MAY					AUG				
16...	1235	403	201	7.0	27...	1300	10	2360	16.0
JUN					SEP				
07...	1150	1670	247	6.5	11...	1430	11	1210	17.0
12...	1155	214	258	10.0					
09136200 - GUNNISON RIVER NEAR LAZEAR, CO. (LAT 38 46 59 LONG 107 50 14)									
OCT , 1983					MAY , 1984				
28...	1255	1500	930	12.0	17...	1255	10400	288	9.0
NOV					26...	1520	15600	--	14.0
09...	1135	897	870	7.5	JUN				
DEC					29...	1150	11600	309	12.0
12...	1235	2040	497	5.5	JUL				
FEB , 1984					19...	1140	4100	250	16.0
03...	1130	2510	518	1.0	31...	1115	2140	--	14.0
APR					AUG				
12...	1305	2780	551	6.0	30...	1140	1760	1780	17.0

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)
09137050 - CURRANT CREEK NEAR READ, CO. (LAT 38 47 05 LONG 107 56 18)				
OCT , 1983				
12...	1555	11	3500	13.0
NOV				
07...	1410	15	2650	9.0
DEC				
16...	0820	16	2780	1.0
JAN , 1984				
26...	1410	15	2880	.0
APR				
05...	1550	14	2680	11.5
MAY , 1984				
15...	1040	242	470	9.5
JUN				
27...	0930	6.9	2680	15.5
JUL				
19...	1515	1.1	3910	26.0
AUG				
16...	1450	.94	4530	26.0
SEP				
14...	1230	7.4	3240	18.0
09143000 - SURFACE CREEK NEAR CEDAREDGE, CO. (LAT 38 59 05 LONG 107 51 13)				
OCT , 1983				
13...	0840	14	140	2.0
NOV				
08...	1540	5.5	160	.0
FEB , 1984				
02...	1040	5.6	130	.0
APR				
09...	1135	9.8	135	.5
MAY				
15...	1240	278	75	7.5
MAY , 1984				
31...	0845	316	60	7.0
JUL				
23...	1225	82	70	16.5
AUG				
20...	1235	71	75	16.5
SEP				
17...	1215	44	75	13.0
09143500 - SURFACE CREEK AT CEDAREDGE, CO. (LAT 38 54 06 LONG 107 55 14)				
OCT , 1983				
13...	1010	9.2	150	7.0
NOV				
09...	0900	3.1	195	1.0
DEC				
19...	1240	5.6	150	.0
FEB , 1984				
02...	1315	7.9	204	.0
APR				
09...	1320	14	173	5.0
MAY				
15...	1535	334	76	9.0
MAY , 1984				
31...	1040	219	68	8.0
JUN				
26...	1400	61	68	13.0
JUL				
23...	1410	29	85	20.0
AUG				
20...	1440	30	68	21.5
SEP				
17...	1430	24	81	16.5
09144200 - TONGUE CREEK AT CORY, CO. (LAT 38 47 16 LONG 107 59 41)				
OCT , 1983				
13...	1155	66	1050	12.0
NOV				
07...	1540	55	1470	10.0
DEC				
16...	0935	56	1080	1.5
JAN , 1984				
26...	1505	--	--	.0
APR				
10...	0925	70	680	4.5
MAY				
17...	1700	498	365	15.0
JUN , 1984				
01...	0835	556	345	10.5
26...	1600	67	875	21.0
JUL				
23...	1625	31	1620	24.0
AUG				
20...	1615	42	1420	23.5
SEP				
17...	1515	42	1420	20.5
09144250 - GUNNISON RIVER AT DELTA, CO. (LAT 38 45 01 LONG 108 04 06)				
OCT , 1983				
13...	1320	1900	1050	12.0
NOV				
09...	1300	1100	1350	8.0
DEC				
16...	1025	2350	470	4.5
JAN , 1984				
27...	0900	3040	430	1.5
APR				
11...	0850	3480	520	6.5
MAY				
18...	0815	15400	250	8.0
MAY , 1984				
25...	1425	19400	384	15.0
JUN				
22...	1145	12400	325	13.5
JUL				
24...	0725	4440	560	16.0
AUG				
21...	1025	2470	905	18.0
SEP				
18...	1110	1850	1000	17.0

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)
09146200 - UNCOMPAHGRE RIVER NEAR RIDGWAY, CO. (LAT 38 11 02 LONG 107 44 43)									
OCT , 1983					MAY , 1984				
03...	1250	102	653	9.0	31...	0710	1250	--	6.5
NOV					JUN				
01...	1215	71	790	12.0	11...	1030	587	352	9.0
DEC					27...	1345	1110	226	13.0
07...	1210	62	779	3.0	JUL				
JAN , 1984					23...	1440	351	--	17.0
10...	1130	61	768	.0	AUG				
FEB					14...	1200	233	445	17.0
13...	1000	47	776	4.0	SEP				
APR					13...	1315	132	392	15.0
05...	0850	85	1010	4.0					
30...	1055	120	784	7.0					
09147000 - DALLAS CREEK NEAR RIDGWAY, CO. (LAT 38 10 40 LONG 107 45 28)									
OCT , 1983					MAY , 1984				
03...	1150	28	479	6.0	15...	1740	288	314	11.0
NOV					JUN				
01...	1055	26	495	7.0	11...	1135	113	415	11.0
DEC					27...	1445	209	282	14.0
07...	1110	27	528	.5	JUL				
JAN , 1984					23...	1300	141	342	15.0
10...	1035	11	873	.0	AUG				
FEB					14...	1200	77	421	14.5
13...	1040	22	--	.5	SEP				
APR					13...	1410	60	402	13.0
05...	1120	33	808	4.0					
30...	1200	89	534	6.0					
09147500 - UNCOMPAHGRE RIVER AT COLONA, CO. (LAT 38 19 53 LONG 107 46 44)									
OCT , 1983					MAY , 1984				
03...	1430	135	714	10.0	10...	1555	1130	395	18.0
NOV					17...	0920	2220	225	6.5
07...	1300	108	780	7.0	JUN				
DEC					14...	1305	1980	--	13.0
12...	1145	118	605	3.0	26...	1100	2050	190	10.5
JAN , 1984					JUL				
23...	1235	91	750	1.0	16...	1455	1050	275	20.0
APR					AUG				
02...	1350	140	1000	4.0	13...	1405	390	415	19.5
09149500 - UNCOMPAHGRE RIVER AT DELTA, CO. (LAT 38 44 31 LONG 108 04 49)									
OCT , 1983					MAY , 1984				
11...	1630	404	1130	15.5	25...	1330	3290	560	15.5
NOV					JUN				
07...	1235	164	2000	10.0	01...	1045	2330	560	13.5
DEC					15...	1300	2050	550	17.0
15...	1540	208	1620	5.0	JUL				
JAN , 1984					20...	1150	357	1160	22.5
27...	0815	134	1500	.0	AUG				
APR					17...	1155	289	1520	22.0
10...	1110	320	1180	7.0	SEP				
MAY					13...	1435	331	1460	23.0
17...	1405	3450	570	14.5					
09151500 - ESCALANTE CREEK NEAR DELTA, CO. (LAT 38 45 24 LONG 108 15 34)									
OCT , 1983					MAY , 1984				
11...	1125	10	530	14.0	18...	1340	437	260	13.0
JAN , 1984					JUN				
11...	1410	22	525	.5	21...	1355	32	375	23.0
27...	1255	13	420	.0	27...	1300	20	440	23.0
APR					JUL				
10...	1305	47	365	9.5	24...	1140	9.9	450	23.5
MAY									
07...	1455	317	145	10.5					

09153290 - REED WASH NEAR MACK, CO. (LAT 39 12 41 LONG 108 48 11)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)
OCT , 1983				
04...	1335	70	1680	17.5
NOV				
10...	1405	11	3770	11.0
DEC				
13...	1105	6.3	3910	8.0
JAN , 1984				
10...	1110	5.4	4080	2.0
FEB				
21...	0915	3.9	4080	2.0
APR				
16...	1325	76	920	16.0
MAY , 1984				
02...	0905	77	980	11.0
08...	1325	65	990	15.0
JUN				
12...	1235	75	950	16.0
JUL				
13...	0800	79	1130	19.0
AUG				
06...	1010	87	1300	19.0
SEP				
11...	0950	85	1530	17.0

09163570 - HAY PRESS C AB FRUITA RES #3, NR GLADE PARK, CO. (LAT 38 51 03 LONG 108 46 56)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)
OCT , 1983				
14...	1210	.14	100	9.0
NOV				
10...	1000	.11	110	1.0
JAN , 1984				
30...	1150	.32	125	.0
APR				
10...	1115	.16	110	.0
MAY				
01...	1010	.34	90	.5
15...	0905	5.3	--	1.0
15...	1310	9.7	--	1.0
15...	1715	9.7	--	1.0
17...	1125	3.6	100	4.0
17...	1410	6.9	80	3.5
21...	1110	3.5	110	4.5
21...	1415	4.8	110	6.0
23...	1120	3.9	90	5.0
23...	1540	5.9	90	6.0
29...	1110	1.6	75	8.0
31...	0945	1.5	80	6.5
JUN				
08...	1015	1.9	80	6.0
13...	1015	--	55	9.0
14...	0945	.58	50	8.5
14...	1025	1.6	50	9.0
18...	1315	1.2	50	14.0
27...	1100	.40	50	13.0
JUL				
20...	1210	.11	130	17.5
AUG				
01...	1130	.12	50	16.0
SEP				
05...	1210	.05	65	14.0

09078600 - FRYINGPAN RIVER NEAR THOMASVILLE, CO. (LAT 39 20 41 LONG 106 40 23)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)
OCT , 1983				
14...	1345	4.5	72	
27...	1225	3.0	53	
NOV				
16...	1355	.0	59	
DEC				
01...	1600	.0	48	
22...	1220	.5	41	
JAN , 1984				
13...	1505	.5	36	
24...	1600	.0	34	
FEB				
28...	1350	.0	26	
MAR , 1984				
21...	1335	.0	41	
APR				
25...	1355	1.5	110	
MAY				
11...	1650	4.0	307	
JUL				
19...	1435	15.0	132	
AUG				
03...	1340	14.5	90	
24...	1235	12.5	119	
SEP				
06...	1150	11.5	67	

DELTA COUNTY

384234108085101 SC15-96-32BAD1. State of Colorado. Drilled domestic water-table well in Dakota Group. Diameter, 6 in. Depth, 230 ft. MP, 0.3 ft above lsd. Altitude of land surface, 4,960 ft. Records available: 1976, 1978-81.

1984 (flowing)

GRAND COUNTY

400248105560301 SB 1-76-18DBC. W. F. Linke. Drilled recreation water-table well in Middle Park Formation. Diameter, 6 in. Depth, 603 ft. MP, 6.0 ft above lsd. Altitude of land surface, 8,075 ft. Records available: 1973-81, 1984

Highest water level, 3.4 ft below lsd, Aug. 28, 1974; lowest water level, 76.25 ft below lsd, Aug. 11, 1977.

July 8, 1984 4.34 ft

October 1, 1978

FACTORS FOR CONVERTING INCH-POUND UNITS TO INTERNATIONAL SYSTEM UNITS (SI)

The following factors may be used to convert the inch-pound units published herein to the International System of Units (SI). This report contains both the inch-pound and SI unit equivalents in the station manuscript descriptions.

Multiply inch-pound units	By	To obtain SI units
	Length	
inches (in)	2.54×10^{1}	millimeters (mm)
	2.54×10^{-2}	meters (m)
feet (ft)	3.048×10^{-1}	meters (m)
miles (mi)	1.609×10^{0}	kilometers (km)
	Area	
acres	4.047×10^{3}	square meters (m^2)
	4.047×10^{-1}	square hectometers (hm^2)
	4.047×10^{-3}	square kilometers (km^2)
square miles (mi^2)	2.590×10^{0}	square kilometers (km^2)
	Volume	
gallons (gal)	3.785×10^{0}	liters (L)
	3.785×10^{0}	cubic decimeters (dm^3)
	3.785×10^{-3}	cubic meters (m^3)
million gallons	3.785×10^{3}	cubic meters (m^3)
	3.785×10^{-3}	cubic hectometers (hm^3)
cubic feet (ft^3)	2.832×10^{1}	cubic decimeters (dm^3)
	2.832×10^{-2}	cubic meters (m^3)
cfs-days	2.447×10^{3}	cubic meters (m^3)
	2.447×10^{-3}	cubic hectometers (hm^3)
acre-feet (acre-ft)	1.233×10^{3}	cubic meters (m^3)
	1.233×10^{-3}	cubic hectometers (hm^3)
	1.233×10^{-6}	cubic kilometers (km^3)
	Flow	
cubic feet per second (ft^3/s)	2.832×10^{1}	liters per second (L/s)
	2.832×10^{1}	cubic decimeters per second (dm^3/s)
	2.832×10^{-2}	cubic meters per second (m^3/s)
gallons per minute (gal/min)	6.309×10^{-2}	liters per second (L/s)
	6.309×10^{-2}	cubic decimeters per second (dm^3/s)
	6.309×10^{-5}	cubic meters per second (m^3/s)
million gallons per day	4.381×10^{1}	cubic decimeters per second (dm^3/s)
	4.381×10^{-2}	cubic meters per second (m^3/s)
	Mass	
tons (short)	9.072×10^{-1}	megagrams (Mg) or metric tons

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